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Link-Belt® Bearings.

Across industry, the name “Link-Belt” is recognized as a symbol for a superior line of bearings.

Today, the Link-Belt Bearing Division’s principal product line consists of cylindrical roller bearings; ball bearings and ball bearing units, self-aligning spherical roller bearings and spherical roller bearing units; babbitt and bronze sleeve bearing units and takeups. All in a wide range of sizes suitable for practically all industrial requirements.

Mere completeness, however, does not, by itself, make any line of bearings superior. What counts is the performance of each individual bearing type. And, in that respect, Link-Belt bearings offer a true competitive edge.

Every Link-Belt bearing incorporates the benefits of years of continuous research and development. Benefits that directly translate to superior quality in every aspect of judging a bearing. Rugged, advanced design. Quality materials. Accurate workmanship. The most modern of manufacturing facilities and techniques. Plus, application expertise that can come only from years of close working relationships with industries of all kinds.

Wherever shafts turn, Link-Belt bearings help transmit power with efficiency and reliability that industry after industry depends on. There can be no greater assurance of superior quality performance in your application.

A wide network of stock-carrying distributors maintain immediately available quantities of Link-Belt bearings in a wide variety of types. To give you superior performance, when and where you need it.

In turn, vast Link-Belt warehouse inventories support distributor stocks, allowing for overnight delivery in many cases.

Further supplementing these efforts, strategically located Sales Offices provide for direct, in-depth consultation. Each is staffed with knowledgeable customer service representatives, area managers, and product specialists, who are able to aid in matters from the simplest application questions to developing complete power transmission systems for specific applications.

The industry's most efficient order processing system.

To facilitate prompt, efficient service and order processing, Link-Bearing Division, Rexnord Corp. customers get quick, upto-the-minute “on-line” response to new orders, order status, and inventory availability, anywhere in the world … all with a simple phone call to their nearest Link-Belt Bearing Division Service Center.

The minute an order is entered, the inventory is instantly reserved. The system even stores predetermined shipping instructions for individual customers, saving phone times and eliminating the possibility of an error.

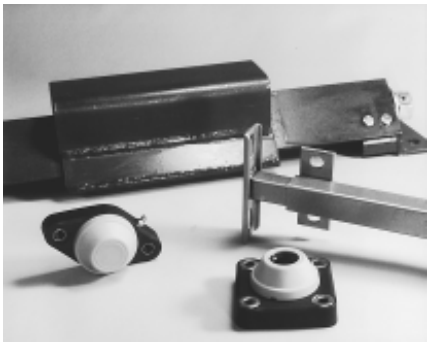
The result: Link-Belt order processing is faster, easier, and more accurate than any other power transmission equipment manufacturer’s system.

New Products

Corrosion resistant polyamide or polypropylene housings with auxiliary seals. See pages B-13 and B-14.

T-frame protected screw takeup frames for pillow block mounting. Available in mild or 304 stainless steel. See pages B-57 and B-58.

LHD heavy duty welded steel takeup frames with protected screws. See pages C-15, D-22 and E-25.



Engineering Support Software

Developed by engineers at Link-Belt Bearing Division, **AutoLINK**™ Version 1.0 is a general purpose bearing analysis program that calculates reaction loads on two bearing shaft systems based on data supplied by the user. Loads from belts, gears, chain drives or other predetermined loads are calculated. The program then either selects bearings for an application of analyzes pre-selected bearings. It can analyze up to three externally applied loads and provide analysis for up to five different shaft arrangements and multiple shaft diameters. The final output provides lubrication, installation and service instructions for the calculated bearing selection.

A similar program call **FANBAN**™ is also available to help simplify fan and blower bearing selection and system analysis.

For more information on these valuable time-saving programs, contact your Rexnord Representative or the Link-Belt Engineering Department.

With **Cad-Cat**® software, you'll avoid the need for redrawing Rex and Link-Belt components from scratch. And enjoy new levels of speed, accuracy and efficiency throughout the design process. Compatible with AutoCad® software **CadCat** creates CAD drawings on-line and at your fingertips.

CadCat electronic catalogs are available for the following Rexnord product lines: Link-Belt Bearings, Link-Belt Model R Speed Reducers, Rex Bearings, Rex Omega Couplings and Rex Planetgear Speed Reducers.

For more information on CadCat call: 1-414-643-3021.

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Ball Bearings, Ball Bearing Units and Takeups

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Ball Bearing Units and Takeups

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Collar Mounted Ball Bearings, Spring Locking Ball Bearings, Round, Square and Hex Bore Ball Bearings

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Series 200
Ball Bearing Units and Takeups

Series 200 standard duty ball bearing units provide a versatility of application arrangements for carrying shafts with radial or combination radial and thrust loads. They are designed for general purpose industrial machinery, conveyors, chain and belt drives, fans and blowers, power transmission, and many other applications.

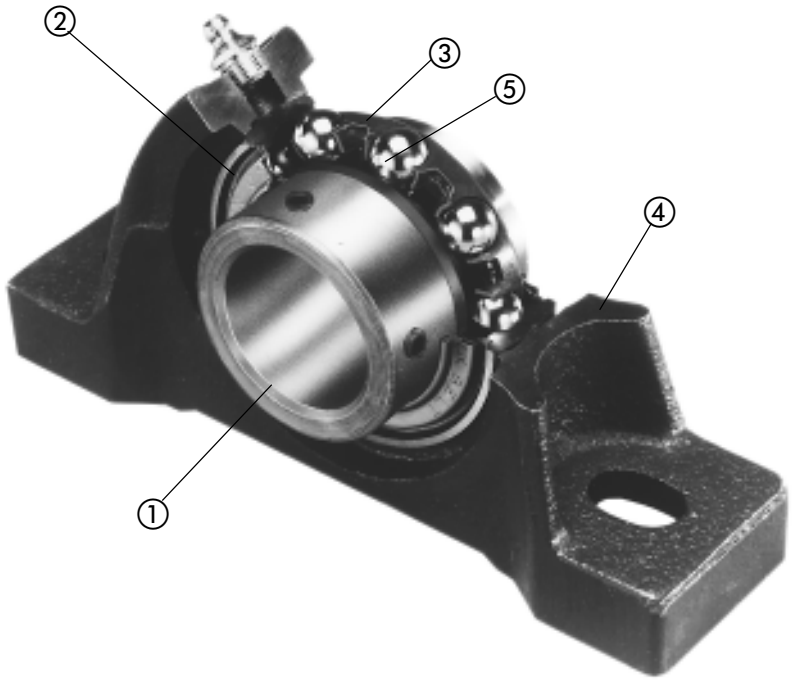
① Extended or wide inner ring for moderate or high stability and load support.

② Choice of spring locking or spring locking collar with set screws or eccentric cam locking collar to lock inner ring securely to shaft.

③ Choice of Steel-Clad Type H labyrinth seal Type N single lip seal or Type E3 triple lip seal. W200 series has Type U or Type E single lip seal. S200 Series has Type E single lip seal.

④ Compact one-piece housing provides excellent mounting support.

⑤ Alignable precision deep groove ball bearing manufactured of quality alloy bearing steel provides high capacity and long life.



Wide and Extended Inner Ring Ball Bearings, Spring Locking

Precision alignable ball bearings of deep groove construction for high capacity and high precision applications. Spring locking collar or set screw locking securely locks the bearing to the shaft. The U200 wide inner ring furnishes increased shaft support and accommodates wider seals for extra lubricant capacity.

Wide and Extended Inner Ring Ball Bearings, Eccentric Cam Locking Collars

Precision alignable ball bearings of deep groove construction. Eccentric cam locking collars hold the bearings securely to the shaft and further tightens with bearing rotation. The Y200 wide inner ring provides increased shaft support and accommodates wide seals for extra lubricant capacity.

Steel-Clad Seals

TYPE H SEAL

TYPE N SEAL

TYPE E3 SEAL

TYPE E SEAL

All bearing type seals are crimped tightly in the bearing outer rings with steel members and cannot be blown out during relubrication.

Type N lip seals have the same contoured external trash guard for maximum lip protection and a full land riding lip for grease retention and dirt exclusion. The Type N seal rides on a precision ground surface of the bearing inner ring for smooth operation and tightness.

Type H multi-labyrinth seal with contoured external trash guard is an excellent all purpose low friction seal for grease lubrication.

Type E3 triple lip seal is a tight high torque seal for ultimate dirt exclusion. It has an external trash guard to protect the precision die molded lip members.

Type E molded lip seal with external trash guard for maximum lip protection and a full land riding lip for grease retention and dirt exclusion.

One-piece Housings

Rugged one-piece precision machined housings of many types provide a versatility of mounting arrangement and facilitate installation. All mounting surfaces are fully machined and all housings provide for easy bearing relubrication. Grease flows through the fitting into a machined grease groove and through the lubricant holes of the outer ring directly into the bearing chamber between the seals. Pillow blocks have slotted bolt holes with ample space provided for drilling dowel pin holes. Flanged units have drilled mounting holes. Takeup units have machined slots for accurate adjustment.

Standard Duty Ball Bearing Units
Series 3-200, 200

Pillow Blocks, Cast Iron

P3-U200N, PL3-U200N, PH3-U200N, PT3-U200N, PL3-Y200N, P3-Y200N

Alignable pillow blocks for shaft sizes ½" through 4" *(17-100 mm)*. Open or closed end, and standard, high or low backing dimension. Available with type H, type N, type E3, seals for grease lubrication.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-21 and B-22, B-25 and B-26, and B-30 and B-31.
Additional information on page B-75.

Flanged Units, 2, 3, and 4-bolt

FX3-U200N, FX3-Y200N, F3-U200N, F3-Y200N, FB3-U200N

Alignable 2-bolt units for shaft sizes ½" through 2 3/16" *(17-55 mm)*; 3-bolt units for shaft sizes ⅞" through 1 7/16" *(25-85 mm)*; 4-bolt units for shaft sizes ½" through 3½" *(17-85 mm)*. Open or closed end, drilled bolt holes, and machined mounting surfaces. Furnished with eccentric cam or spring locking. Available with type H, type N or type E3, seals for grease lubrication.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-32 through B-34, B-37 and B-38.
Additional information on page B-75.

Flanged Cartridge Units

FC3-Y200N, FC3-U200N

Alignable units for shaft sizes ⅞" through 4" *(25-100 mm)*. Open or closed end, drilled bolt holes, and machined mounting surfaces. Available with type H, type N, type E3 seals for grease lubrication.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-41 and B-42.
Additional information on page B-75.

Takeup Units

T3-U200N, TH3-U200N

Alignable units for takeup applications with shaft sizes ½" through 2 7/16" *(17-55 mm)* with narrow or wide slots. Open or closed end and without frames, guides, or adjusting screws. Furnished with type N seals for grease lubrication.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-51 and B-53.
Additional information on page B-75.

Takeups, Steel Frames

Adjustable type takeups for conveyors and elevators. Spring locking. Furnished with type N lip seals for grease lubrication.

TAS3-U200N

Conveyor takeup with formed steel frame for moderate service. Bearing bores are perpendicular to the base of the frame. Shaft sizes 15⁄16" through 2 3⁄16" *(25-55 mm)*.

TDS3-U200N

Conveyor takeup with removable top welded steel frame, for moderate to heavy service. Bearing bores are parallel to the base of the frame. Shaft sizes 1 15⁄16" through 3 15⁄16" *(50-100 mm)*.

NT3-U200N

Conveyor takeup with welded steel channel frame for moderate service. Bearing bores are parallel to the base of the frame. Shaft sizes 15⁄16" through 1 15⁄16" *(25-50 mm)*.

LC

Universal takeup frames for mounting with all pillow blocks.

TP, TSP, TPT, TSPT

Universal T-frame takeup for mounting with pillow blocks or tapped base pillow blocks. T-frames are mild steel (TP, TPT) or AISI 304 stainless steel (TSP, TSPT). Also available with quick release feature for pillow block mounting and AISI 304 stainless steel frame.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-55 through B-60.
Additional information on page B-75.

Screw Conveyor Units

Double ball bearing trough end units and hanger bearing units.

FF200N

Four bolt square trough end flanged units for shaft sizes 1½" through 3 7⁄16", and spring locking mounting. Two ball bearings for taking screw thrust and external chain or belt loads.

HM3-U200E3, HM3-U200N

Alignable hanger bearing units, relubricatable, or spring locking, with type E3 triple lip seals or type N lip seals. Units made to fit square tubing with separate internal grease pipe for extra rigid mounting. Available for shaft sizes 1½" through 3 7⁄16".

Load ratings on pages B-11 and B-12.
Dimensions on pages B-61 and B-62.
Additional information on page B-75.

Replacement Bearings

UG200NL, YG200NL

Wide inner ring deep groove single row ball bearings for shaft sizes ½" through 4". (UG200 bearings are available with standard metric bores for shafting) *(17 mm through 100 mm)*. Furnished with eccentric cam or spring locking or spring locking collar. Available with type N, type H, type E3 seals for grease lubrication.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-64 and B-66.
Additional information on page B-77.

Intermediate Ball Bearing Units
Series 200

Pillow Blocks, Cast Iron

P3-W200E, PL3-W200E, P3-S200E, PL3-S200E, PT3-S200E

Alignable pillow blocks for shaft sizes ½" through 1 15⁄16", standard or low backing dimension. Available with type E seal. Relubricatable.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-23 and B-24, B-27 and B-28, and B-30.
Additional information on page B-76.

Pillow Blocks, Formed Steel

PS-W200E, PS-Y200N, PS-U200N

Alignable pillow blocks for shaft sizes ½" through 1 7⁄16". Standard backing dimension. Non-relubricatable. W200 series available with type E seals, U200 and Y200 series available with type N single lip or type E3 triple lip seal.

Load ratings on pages B-11 and B-12.
Dimensions on page B-29.
Additional information on page B-76.

Flanged Units, 2, 3, and 4-bolt

FX3-W200E, FX3-S200E, F3-W200E, F3-S200E, FB3-S200E

Alignable flanged units for shaft sizes ½" through 1 15⁄16", two, three, or four bolt mounting. Available with type E seal. Relubricatable.

Load ratings on pages B-11 and B-12.
Dimensions on pagesB-32, B-35 and B-36, and B-39 and B-40.
Additional information on page B-76.

Flanged Units, High-test Iron

FX-U200N, FX-UG200N, FXR-U200N, FXR-UG200N
FX-Y200N, FX-YG200N, FXR-Y200N, FXR-YG200N
F-U200N, F-UG200N, FR-U200N, FR-UG200N
F-Y200N, F-YG200N, FR-Y200N, FR-YG200N

Alignable flanged units for shaft sizes ½" through 2", two, three, or four bolt mounting. W200 series available with type E seal, S200 series available with type E seal, U200 and Y200 series available with type N single lip or type E3 triple lip seals. Optional relubrication feature.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-43 through B-46.
Additional information on page B-76.

Takeup Units

T3-S200E, TH3-S200E

Alignable units for takeup applications with shaft sizes ¾" through 1 15⁄16" with narrow or wide slots. Opened or closed end and without frames, guides, or adjusting screws. Furnished with type E seals for grease lubrication.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-52 and B-54.
Additional information on page B-76.

Replacement Bearings

U200NL, UG200NL
W200EL, WG200EL
Y200NL, YG200NL
SG200EL

Extended and wide inner ring deep groove ball bearings for shaft sizes ½" through 2 7⁄16". Furnished with eccentric cam collar or spring locking. Type E3 triple lip seal optional for series U200 and Y200.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-63 through B-69.
Additional information on page B-77.

Flanged Housings, 2-piece Formed Steel

MST, MSTR, MS, MSC, GMSA-GMSB

MST compact 2-bolt mounting for bearings of ½" through 1¼" shaft diameter and basic 204 through 206 of the round, square and hex bore series.

Dimensions on page B-50

MSTR-3 bolt triangular mounting for bearings of ¾" through 1¼" shaft diameter and basic 204 through 206 of the round, square and hex bore series.

Dimensions on page B-48.

MS or MSC 3 or 4-bolt round mounting for bearings of ½" through 2 3⁄16" shaft diameter and basic 204 through 211 of the round, square and hex bore series.

Dimensions on page B-47.

GMSA-GMSB 3 or 4-bolt round mounting of the relubricatable type for ⅞" through 2 3⁄16" shaft diameter or basic 205 through 211 of the round, square and hex bore series.

Dimensions on page B-49.
Load ratings on pages B-43 through B-46.
Additional information on page B-76.

Series 200
Collar Mounted Ball Bearings
Spring Locking Ball Bearing
Round, Square and Hex Bore Ball Bearings

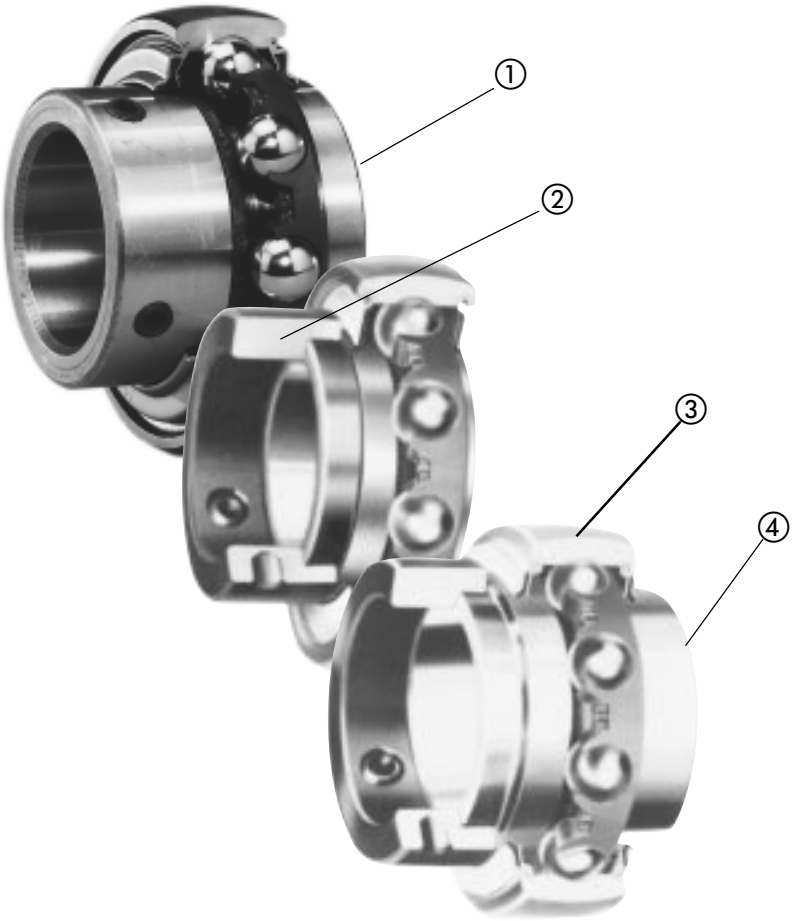
Series U200, S200, W200, Y200 collar mounted or spring locking ball bearings, and round, square and hex bore ball bearings provide economic and versatile arrangements for supporting shafts, especially with the 2-piece formed steel flanged housings. These product lines are designed for light industrial applications, agricultural machinery, lawn and garden equipment, recreational vehicles and other applications.

① Precision deep groove ball bearings or quality alloy bearing steel provide high capacity and long life.

② Choice of spring locking collar with set screws or spring locking or eccentric cam locking collar to fasten inner ring securely to shaft.

③ Optional features such as spherical or cylindrical O.D.'s, relubricatable or non-relubricatable.

④ Extended or wide inner rings to meet diverse application requirements.



Wide Inner Ring Ball Bearings, Spring Locking

Series U200, UG200, UB200, UBG200

Ball bearing with wide inner rings provide mounting stability by distributing the load over a large shaft area. Spring locking design provides a secure grip of the bearing to the shaft. The extra inner ring width accommodates wider seals for increased lubricant capacity. Seals are crimped tightly in the bearing outer rings. Type N lip seals, type H labyrinth seals and type E3 triple lip seals can be furnished.

Extended Inner Ring Ball Bearings, Spring Locking

Series SG200

Compact ball bearing with extended inner rings for space savings. Set screw locking, properly torqued, holds bearing securely to the shaft. Carbonized inner rings to resist fracture. Type E molded contact seal protects bearing from dirt. Steel outer member protects against fiber wrappage.

Extended Inner Ring Ball Bearings, Eccentric Cam Locking Collars

Series W200, WG200, WB200, WBG200

Compact ball bearings with extended inner rings for space savings. Eccentric cam locking collar holds bearing securely to the shaft. Shaft rotation further tightens collar. Type E molded contact seal protects bearing from dirt. Steel outer member protects against fiber wrappage.

Wide Inner Ring Ball Bearings, Eccentric Cam Locking Collars

Series Y200, YG200, YB200, YBG200

Ball bearings with wide inner rings provide mounting stability by distributing the load over a large shaft area. Eccentric cam locking collar design provides a secure grip of the bearing to the shaft. Shaft rotation further tightens collar. The extra inner ring width accommodates wider seals for increased lubricant capacity.

Type N lip seals, type H labyrinth seals and type E3 triple lip seals can be furnished.

Ball Bearings, Round Bore

Relubricatable or non-relubricatable for shaft sizes ⅞" through 2 3⁄16". Spherical or cylindrical outside diameters.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-71 and B-72.
Additional information on page B-77.

Ball Bearings, Square Bore

Relubricatable or non-relubricatable for shaft sizes ⅞" through 1½". Spherical or cylindrical outside diameters.

Load ratings on pages B-11 and B-12.
Dimensions on pages B-73 and B-74.
Additional information on page B-77.

Ball Bearings, Hex Bore

Non-relubricatable ball bearings for ⅝" through 1⅝" shaft size. Factory filled with grease. Spherical or cylindrical outside diameters.

Load ratings on pages B-11 and B-12.
Dimensions on page B-70.
Additional information on page B-77.

Ball Bearings and Ball Bearing Units

To select a bearing, determine the applied radial load, the applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA Standards STD 9-1990. Ratings are based on fatigue life. The Rating Life or fatigue life at 90% reliability is the usual basis for bearing selection.

Series U200, Y200, and hex, square and round bore bearings have wide inner rings for load support; however, the S200 and W200 series are extended on one side only for compactness and low cost. In combination with its companion line of economically designed housings, this series is applicable to light or moderate duty requirements.Where non-relubricatable bearings are used, bearing life is often limited by grease life, which is in turn affected by operating conditions. Also, economically designed housings must be applied within proportionate load limits.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

For radial load applications only, Table 4, page B-12, can be used to select a bearing or to determine life expectancy.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial–8 hour shift	2,000	10	20,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a ball bearing.

a For radial load only:
$P = F_r$

required $C = \left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a ball bearing from Table 3, page B-11 with a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads when $\frac{F_a}{F_r}$ is 0.19 or less:
$P = F_r$

required $C = \left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a ball bearing from Table 3, page B-11 with a basic load rating C equal to or greater than the required C.

c For combined radial and thrust loads when $\frac{F_a}{F_r}$ is greater than 0.19, use the following trial method:

Maximum $P = .56F_r + 2.30F_a$

Maximum required $C = \left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a trial ball bearing with a basic load rating C from Table 3, page B-11, approximately equal to the maximum required C.

With this trial bearing calculate: $\frac{F_a}{Nd^2}$

Determine X and Y from Table 2.
Calculate P for the trial bearing.
$P = XF_r + YF_a$

required $C = \left(\frac{C}{P}\right) P$ for the trial bearing using $\left(\frac{C}{P}\right)$ from Step 2.

Consult Table 3, page B-11, basic load rating. If a smaller bearing meets or nearly meets the required C, its life expectancy can be calculated.

Note: If the load P is greater than .25C for series U200, Y200, hex, square, and round bore bearings or greater than .15C for series S200 and W200, consult Link-Belt Bearing Division, Rexnord Corp.

Ball Bearings and Ball Bearing Units

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{1/3}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^3 \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	2.08	2.62	3.30	3.77	4.15	4.47	4.75	5.01	5.23
4000	2.29	2.88	3.63	4.15	4.57	4.92	5.23	5.51	5.76
5000	2.46	3.10	3.91	4.47	4.92	5.30	5.64	5.93	6.20
6000	2.62	3.30	4.15	4.75	5.23	5.64	5.99	6.30	6.59
8000	2.88	3.63	4.57	5.23	5.76	6.20	6.59	6.94	7.25
10000	3.10	3.91	4.92	5.64	6.20	6.68	7.10	7.47	7.81
12000	3.30	4.15	5.23	5.99	6.59	7.10	7.54	7.94	8.30
14000	3.47	4.37	5.51	6.30	6.94	7.47	7.94	8.36	8.74
16000	3.63	4.57	5.76	6.59	7.25	7.81	8.30	8.74	9.14
18000	3.77	4.75	5.99	6.86	7.54	8.13	8.63	9.09	9.50
20000	3.91	4.92	6.20	7.10	7.81	8.42	8.94	9.41	9.84
25000	4.21	5.30	6.68	7.65	8.42	9.07	9.63	10.1	10.6
30000	4.47	5.64	7.10	8.13	8.94	9.63	10.2	10.8	11.3
35000	4.71	5.93	7.47	8.55	9.41	10.1	10.8	11.3	11.9
40000	4.92	6.20	7.81	8.94	9.84	10.6	11.3	11.9	12.4
45000	5.12	6.45	8.13	9.30	10.2	11.0	11.7	12.3	12.9
50000	5.30	6.68	8.42	9.63	10.6	11.4	12.1	12.8	13.4
60000	5.64	7.10	8.94	10.2	11.3	12.1	12.9	13.6	14.2
70000	5.93	7.47	9.41	10.8	11.9	12.8	13.6	14.3	14.9
80000	6.20	7.81	9.84	11.3	12.4	13.4	14.2	14.9	15.6
90000	6.45	8.13	10.2	11.7	12.9	13.9	14.8	15.5	16.2
100000	6.68	8.42	10.6	12.1	13.4	14.4	15.3	16.1	16.8
150000	7.65	9.63	12.1	13.9	15.3	16.5	17.5	18.4	19.3
200000	8.42	10.6	13.4	15.3	16.8	18.1	19.3	20.3	21.2
	Speed, n								
	900	1000	1200	1500	1800	2400	3600	6000	10000
3000	5.44	5.64	5.99	6.45	6.86	7.54	8.63	10.2	12.1
4000	5.99	6.20	6.59	7.10	7.54	8.30	9.50	11.3	13.4
5000	6.45	6.68	7.10	7.65	8.13	8.94	10.2	12.1	14.4
6000	6.86	7.10	7.54	8.13	8.63	9.50	10.9	12.9	15.3
8000	7.54	7.81	8.30	8.94	9.50	10.5	12.0	14.2	16.8
10000	8.13	8.42	8.94	9.63	10.2	11.3	12.9	15.3	18.1
12000	8.63	8.94	9.50	10.2	10.9	12.0	13.7	16.2	19.3
14000	9.09	9.41	10.0	10.8	11.4	12.6	14.4	17.1	20.3
16000	9.50	9.84	10.5	11.3	12.0	13.2	15.1	17.9	21.2
18000	9.88	10.2	10.9	11.7	12.4	13.7	15.7	18.6	22.0
20000	10.2	10.6	11.3	12.1	12.9	14.2	16.2	19.3	22.8
25000	11.0	11.4	12.1	13.1	13.9	15.3	17.5	20.7	24.6
30000	11.7	12.1	12.9	13.9	14.8	16.2	18.6	22.0	26.1
35000	12.3	12.8	13.6	14.6	15.5	17.1	19.6	23.2	27.5
40000	12.9	13.4	14.2	15.3	16.2	17.9	20.5	24.3	28.7
45000	13.4	13.9	14.8	15.9	16.9	18.6	21.3	25.2	29.9
50000	13.9	14.4	15.3	16.5	17.5	19.3	22.0	26.1	31.0
60000	14.8	15.3	16.2	17.5	18.6	20.5	23.4	27.8	32.9
70000	15.5	16.1	17.1	18.4	19.6	21.5	24.6	29.2	34.6
80000	16.2	16.8	17.9	19.3	20.5	22.5	25.8	30.5	36.2
90000	16.9	17.5	18.6	20.0	21.3	23.4	26.8	31.8	37.7
100000	17.5	18.1	19.3	20.7	22.0	24.3	27.8	32.9	39.0
150000	20.0	20.7	22.0	23.7	25.2	27.8	31.8	37.7	44.6
200000	22.0	22.8	24.3	26.1	27.8	30.5	35.0	41.4	49.1

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:
$P = F_r$

b For combined radial and thrust load:
$P = XF_r + YF_a$ using X and Y from Table 2 below.

Step 2 Calculate the ratio of basic load rating C to the equivalent radial load.

$$\frac{C}{P}$$

Step 3 Approximate the bearing life from Table 1.

Table 2 • X and Y factors for ball bearings

$\frac{F_a}{Nd^2}$	e	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
25	.19	1.0	0	.56	2.30
37.5	.21	1.0	0	.56	2.15
50	.22	1.0	0	.56	1.99
75	.24	1.0	0	.56	1.85
100	.26	1.0	0	.56	1.71
125	.27	1.0	0	.56	1.63
150	.28	1.0	0	.56	1.56
200	.30	1.0	0	.56	1.45
300	.34	1.0	0	.56	1.31
500	.38	1.0	0	.56	1.15
750	.42	1.0	0	.56	1.04
1000	.44	1.0	0	.56	1.00

For values between those in the table linear interpolation can be used.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L_{ñ} = a_1 a_2 a_3 L_{10}$$

where $L_{ñ}$ = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below −40°F (−40°C) or above 275°F (135°C), or misalignment greater than 0.0005 radians. For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Ball Bearings and Ball Bearing Units

Table 3 • Load ratings, speed limits and ball data

Bearing Size Number		C_o Static load rating		C Static load rating		Approximate speed limit RPM ●				d Ball diameter	N Number of balls	Nd^2
S200 U200 W200 Y200	Hex Square Round	*newtons*	pounds	*newtons*	pounds	Felt seals	N & E seals‡	H seals	E3 seals	inches		
2B08 210 211 *2M17*	. . .	*4 940*	1110	*8 100*	1820	. . .	9000	12000	. . .	19/64	7	.617
212 *2M20*	204	*6 590*	1480	*9 830*	2210	. . .	7500	10000	. . .	5/16	8	.781
214 215 216 *2M25*	205	*7 830*	1760	*10 810*	2430	. . .	6800	9600	1000	5/16	9	.879
218 219 2E20 *2M30*	206	*11 300*	2530	*15 030*	3380	. . .	5600	8000	. . .	3/8	9	1.27
220 222 223 *2M35*	207	*15 300*	3440	*19 880*	4470	. . .	4800	6850	700	7/16	9	1.72
224 *2M40*	208	*19 900*	4460	*25 100*	5640	. . .	4500	6000	650	1/2	9	2.25
226 227 228 *2M45*	209	*20 400*	4590	*25 220*	5670	. . .	4000	5330	600	1/2	9	2.25
231 2E32 *2M50*	210	*23 200*	5220	*27 090*	6090	. . .	3600	4800	550	1/2	10	2.50
232 235 *2M55*	211	*29 200*	6570	*33 540*	7540	. . .	3200	4360	500	9/16	10	3.16
236 238 239 *2M60*	. . .	*36 000*	8080	*40 520*	9110	. . .	3000	4000	. . .	5/8	10	3.91
240 243 *2M65*	. . .	*40 100*	9010	*44 220*	9940	3690	3850	. . .	. . .	21/32	10	4.31
244 247 2E48 *2M75*	. . .	*49 200*	11100	*51 600*	11600	3200	3300	. . .	. . .	11/16	11	5.20
255 2E56 *2M85*	. . .	*63 600*	14300	*64 500*	14500	2800	2950	. . .	. . .	25/32	11	6.71
263 2E64 *2M100*	. . .	*92 900*	20900	*94 300*	21200	2400	2500	. . .	. . .	1	10	10.0

If the load P is greater than .15C for S200 and W200 or .25C all others, consult Link-Belt Bearing Division, Rexnord Corp.

● Based on grease lubrication and moderate load.

‡ N & E seals operation at higher speeds up to H seal speed limit is allowable providing the lip seal friction does not result in operating temperatures over 225°F (107°C).

Additional information, page B-75.

Ball Bearings and Ball Bearing Units

Table 4 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

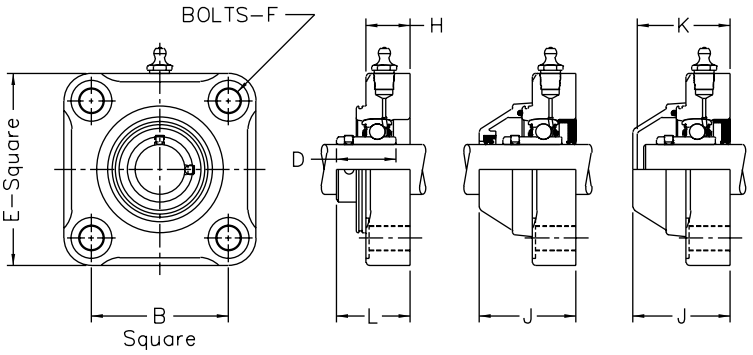
Bearing Size Number S200 U200 W200 Y200	Hex Square Round	L_{10} Minimum life, hours	Radial load ratings, pounds — Speed, RPM																				
			50	100	200	300	400	500	600	700	800	900	1000	1200	1500	1800	2000	2500	3000	3500	4000	5000
2B08 210 211 *2M17*	...	3000	...	...	...	...	444	413	387	367	353	338	327	309	287	269	262	243	229	218	209	194
		8000	...	...	404	353	320	298	382	267	256	245	236	223	209	196	191	176	166	158	152	141
		20000	...	373	298	260	238	222	209	198	189	182	176	166	154	146	141	131	123	118	113	105
		40000	374	298	238	209	189	176	166	158	152	146	141	133	124	116	113	105	94	89	86	79
		100000	271	215	171	149	136	126	119	113	108	104	100	94	87	82	79	74	69	66	63	58
212 *2M20*	204	3000	...	...	...	...	538	500	469	445	427	409	396	374	348	325	317	295	277	264	253	235
		8000	...	...	489	427	387	361	341	323	310	297	286	270	253	237	230	213	201	191	183	170
		20000	...	451	361	314	288	268	253	239	228	220	213	201	186	176	170	158	149	142	136	126
		40000	454	361	288	253	228	213	201	191	183	176	170	160	149	140	136	127	119	114	109	96
		100000	331	263	209	182	166	154	145	137	131	126	122	115	107	100	97	90	85	80	77	71
214 215 216 *2M25*	205	3000	...	...	...	...	591	549	515	489	469	450	435	411	382	357	348	323	304	298	277	258
		8000	...	...	537	469	425	396	374	355	340	326	314	297	277	260	253	234	220	210	201	186
		20000	...	496	396	345	316	294	277	263	250	242	234	220	205	193	187	173	163	155	149	138
		40000	498	396	316	277	250	234	220	209	201	193	186	176	163	154	149	139	131	124	119	111
		100000	364	289	229	200	182	169	159	151	144	139	134	126	117	110	106	99	93	88	84	78
218 219 2E20 *2M30*	206	3000	...	...	...	...	820	762	715	678	651	624	603	569	529	495	482	448	421	400	384	357
		8000	...	...	745	651	590	549	519	492	471	451	434	411	384	360	350	323	304	290	277	257
		20000	...	688	549	378	438	407	384	363	346	335	323	304	282	267	258	239	225	214	205	191
		40000	691	549	438	384	346	323	304	289	277	266	257	243	225	212	206	191	180	171	164	152
		100000	505	401	318	278	252	234	221	209	200	193	186	175	162	153	148	137	129	123	117	109
220 222 223 *2M35*	207	3000	...	...	...	...	1080	1000	944	895	859	823	796	751	698	653	635	591	555	526	506	470
		8000	...	...	984	859	778	725	684	649	622	595	573	541	506	474	461	426	401	381	365	338
		20000	...	908	725	631	577	537	506	479	456	441	426	401	372	351	339	314	296	282	270	250
		40000	912	759	577	506	456	426	401	380	365	351	338	319	296	279	271	251	236	224	216	200
		100000	668	530	421	367	334	310	292	277	265	255	246	231	215	202	195	181	171	162	155	144
224 *2M40*	208	3000	...	...	...	...	1220	1130	1060	1000	968	927	897	847	786	736	716	665	625	595	569	529
		8000	...	...	1100	968	877	816	771	731	701	670	645	610	569	534	519	479	451	429	411	381
		20000	...	1020	816	711	650	605	569	539	514	496	479	451	419	395	382	354	333	317	304	282
		40000	1020	816	650	569	514	480	452	428	411	395	380	359	334	313	304	282	266	252	242	225
		100000	752	597	474	414	376	349	328	312	298	287	277	261	242	228	220	204	192	182	174	162
226 227 228 *2M45*	209	3000	...	...	...	...	1370	1270	1190	1130	1080	1040	1000	952	884	827	804	748	702	668	640	596
		8000	...	...	1240	1080	986	918	867	821	787	753	725	685	640	600	583	539	507	482	462	428
		20000	...	1150	918	799	731	680	640	606	578	558	539	507	471	444	429	397	374	356	341	316
		40000	1150	918	731	640	578	539	507	481	461	443	427	404	375	352	342	317	298	283	272	252
		100000	847	672	534	466	423	393	370	351	336	323	312	294	273	256	248	230	216	205	197	182
231 2E32 *2M50*	210	3000	...	...	...	...	1470	1360	1280	1210	1160	1110	1080	1020	949	888	864	803	754	718	687	
		8000	...	...	1330	1160	1050	985	931	882	845	809	778	736	687	644	626	578	544	518	496	
		20000	...	1230	985	858	785	730	687	651	620	599	578	544	505	476	461	426	401	382	366	
		40000	1240	985	785	687	620	579	545	517	495	476	459	433	402	378	367	340	320	304	292	
		100000	909	722	573	500	455	422	397	377	361	347	335	315	293	275	266	247	232	221	211	
232 235 *2M55*	211	3000	...	...	...	...	1820	1690	1580	1500	1440	1380	1340	1260	1170	1090	1060	993	932	887	849	
		8000	...	...	1650	1440	1300	1210	1150	1090	1040	1000	963	910	849	797	774	715	672	640	613	
		20000	...	1520	1210	1060	970	902	849	804	767	740	715	672	624	589	569	527	496	472	452	
		40000	1530	1210	970	849	767	715	673	638	612	588	567	535	497	466	453	420	395	375	360	
		100000	1126	894	710	620	563	523	492	467	447	430	415	391	363	341	329	306	288	273	261	
			E3 SEALS																			
			U SEALS																			
236 238 239 *2M60*	...	3000	...	...	...	...	2200	2040	1910	1810	1740	1670	1610	1520	1410	1320	1290	1190	1120	1070		
		8000	...	...	2000	1740	1580	1470	1390	1310	1260	1200	1160	1090	1020	962	934	862	811	772		
		20000	...	1840	1470	1280	1170	1080	1020	971	925	893	862	811	753	710	686	635	598	569		
		40000	1850	1470	1170	1020	925	863	812	770	738	709	684	645	599	563	546	506	476	452		
		100000	1360	1079	857	748	680	631	594	564	540	519	501	471	438	412	398	369	347	330		
			N & E SEALS																			
			H SEALS																			
240 243 *2M65*	...	3000	...	...	...	...	2400	2230	2090	1980	1900	1820	1760	1660	1540	1440	1400	1300	1220	1160		
		8000	...	...	2180	1900	1720	1600	1510	1430	1370	1310	1260	1190	1110	1040	1010	940	885	842		
		20000	...	2010	1600	1390	1270	1180	1110	1050	1000	974	940	885	821	774	749	693	652	620		
		40000	2020	1600	1270	1110	1000	941	886	840	805	773	746	704	653	613	595	552	519	493		
		100000	1485	1178	935	817	742	689	649	616	589	567	547	515	478	450	434	403	379	360		
244 247 2E48 *2M75*	...	3000	...	...	...	...	2880	2600	2440	2310	2220	2120	2050	1940	1800	1680	1640	1520	1430			
		8000	...	...	2540	2220	2010	1870	1760	1670	1600	1530	1470	1390	1300	1220	1180	1090	1030			
		20000	...	2340	1870	1620	1490	1380	1300	1230	1170	1130	1090	1030	957	903	873	808	760			
		40000	2360	1870	1490	1300	1170	1090	1030	979	939	902	869	820	761	715	694	643	605			
		100000	1732	1375	1091	953	866	804	756	719	687	661	638	600	557	524	506	470	442			
255 2E56 *2M85*	...	3000	...	...	...	...	3500	3250	3050	2890	2770	2650	2570	2420	2250	2100	2050	1900				
		8000	...	...	3180	2770	2510	2340	2200	2090	2000	1910	1840	1740	1620	1520	1480	1360				
		20000	...	2930	2340	2030	1860	1730	1620	1540	1470	1410	1360	1280	1190	1120	1090	1000				
		40000	2940	2340	1860	1620	1470	1370	1290	1220	1170	1120	1080	1020	950	892	866	803				
		100000	2166	1719	1365	1192	1083	1005	946	899	860	827	798	751	697	656	633	588				
263 2E64 *2M100*		3000	...	...	...	...	5110	4750	4450	4220	4050	3880	3750	3540	3290	3070	2990					
		8000	...	...	4640	4050	3670	3410	3220	3050	2930	2800	2690	2540	2370	2230	2160					
		20000	...	4280	3410	2970	2710	2520	2370	2250	2140	2070	2000	1880	1740	1640	1590					
		40000	4300	3410	2710	2370	2140	2000	1880	1780	1710	1640	1580	1490	1380	1300	1260					
		100000	3168	2514	1996	1743	1584	1470	1384	1314	1257	1209	1167	1098	1019	959	926					

Operation in the high speed shaded areas requires frequent relubrication.
Heavy lines define recommended speed ranges of bearing and seal variations.
If the load P is greater than .15C for S200 and W200 or .25C all others, consult Link-Belt Bearing Division, Rexnord Corp.

Corrosion Resistant

Klean-Gard™ Flanged Unit
KF-S200, KLF-S200

Reinforced Polyamide or Polypropylene Housing
4-bolt Mounting
Alignable
Spring Locking
Stainless Steel Bushing and Washers
Prelubricated with Food Grade Grease
Relubricatable
Inner & Outer Rings with Black Oxide Coating



Basic Unit KF-S200

Open Unit With Auxiliary Seals KF-S200D

Closed Unit With End Cap and Seal KF-S200DC

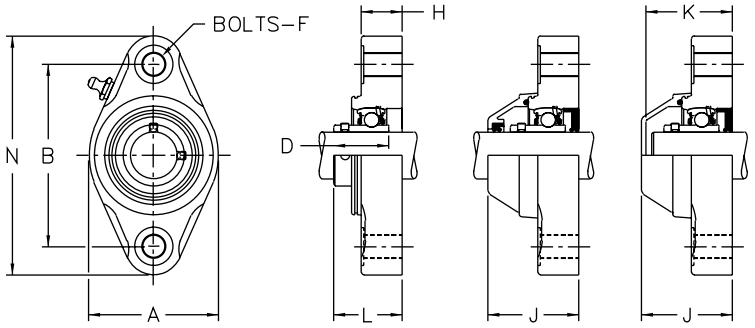
Dimensions (inches/*mm*)

Shaft Diameter		Flanged Unit Number		B	D	E	F Bolts	H	J	K	L	Replacement Bearing Number
mm	inches	Polyamide	Polypropylene▲									
	1	**KF-S216**	KLF-S216	2.756	1 3/16	3 55/64	3/8	7/8	1 61/64	1 7/8	1 15/32	SG216ELK82/99A
25		*KF-S2M25*	*KLF-S2M25*	*70*	*30.17*	*98*	*10*	*22.5*	*49.5*	*47.5*	*37.3*	*SG2M25ELK82/99A*
	1 3/16	**KF-S219**	KLF-S219	3.268	1 11/32	4 21/64	3/8	1 1/64	2 11/64	2 3/32	1 3/4	SG219ELK82/99A
	1 1/4	**KF-S2E20**	KLF-S2E20									SG2E20ELK82/99A
30		*KF-S2M30*	*KLF-S2M30*	*83*	*34.13*	*110*	*10*	*26*	*55*	*53*	*44.2*	*SG2M30ELK82/99A*
	1 1/4	KF-S220	KLF-S220									SG220ELK82/99A
	1 3/8	KF-S222	KLF-S222	3.622	1 9/16	4 23/32	3/8	1 1/64	2 21/64	2 1/4	1 7/8	SG222ELK82/99A
	1 7/16	**KF-S223**	KLF-S223									SG223ELK82/99A
35		*KF-S2M35*	*KLF-S2M35*	*92*	*39.67*	*120*	*10*	*26*	*59*	*57*	*47.7*	*SG2M35ELK82/99A*
	1 1/2	**KF-S224**	KLF-S224	4.016	1 11/16	5 5/32	3/8	1 3/16	2 37/64	2 15/32	2 1/16	SG224ELK82/99A
40		*KF-S2M40*	*KLF-S2M40*	*102*	*42.87*	*131*	*10*	*30*	*65.5*	*62.5*	*52.4*	*SG2M40ELK82/99A*

Corrosion Resistant

Klean-Gard™ Flanged Units
KFX-S200, KLFX-S200

Reinforced Polyamide or Polypropylene Housing
2-bolt Mounting
Alignable
Spring Locking
Stainless Steel Bushing and Washers
Prelubricated with Food Grade Grease
Relubricatable
Inner & Outer Rings with Black Oxide Coating



Basic Unit KFX-S200

Open Unit With Auxiliary Seals KFX-S200D

Closed Unit With End Cap and Seal KFX-S200DC

Dimensions (inches/*mm*)

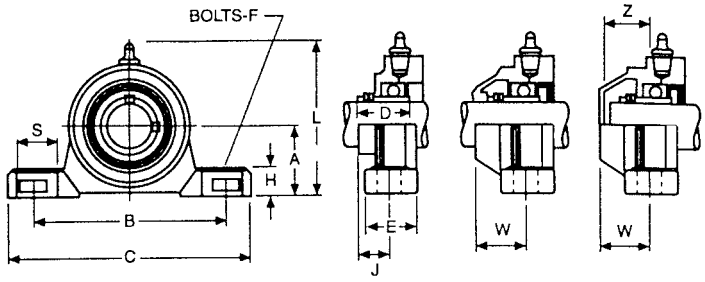
Shaft Diameter		Flanged Unit Number		A	B	D	F Bolts	H	J	K	L	N	Replacement Bearing Number
mm	inches	Polyamide	Polypropylene▲										
	3/4	**KFX-S212**	KLFX-S212	2 7/16	3.543	1 1/8	3/8	51/64	1 13/16	1 11/16	1 23/64	4 9/16	SG212ELK82/99A
20		*KFX-S2M20*	*KLFX-S2M20*	*62*	*90*	*28.58*	*10*	*20*	*46*	*43*	*34.3*	*116*	*SG2M20ELK82/99A*
	1	**KFX-S216**	KLFX-S216	2 13/16	3.898	1 3/16	3/8	7/8	1 61/64	1 7/8	1 15/32	5 1/8	SG216ELK82/99A
25		*KFX-S2M25*	*KLFX-S2M25*	*71*	*99*	*30.17*	*10*	*22.5*	*49.5*	*47.5*	*37.3*	*130*	*SG2M25ELK82/99A*
	1 3/16	**KFX-S219**	KLFX-S219	3 11/32	4.606	1 11/32	3/8	1 1/64	2 11/64	2 3/32	1 3/4	5 53/64	SG219ELK82/99A
	1 1/4	**KFX-S2E20**	KLFX-S2E20										SG2E20ELK82/99A
30		*KFX-S2M30*	*KLFX-S2M30*	*85*	*117*	*34.13*	*10*	*26*	*55*	*53*	*44.2*	*148*	*SG2M30ELK82/99A*
	1 1/4	**KFX-S220**	KLFX-S220										SG220ELK82/99A
	1 3/8	**KFX-S222**	KLFX-S222	3 21/32	5.118	1 9/16	3/8	1 1/64	2 21/64	2 1/4	1 7/8	6 3/8	SG222ELK82/99A
	1 7/16	**KFX-S223**	KLFX-S223										SG223ELK82/99A
35		*KFX-S2M35*	*KLFX-S2M35*	*93*	*130*	*39.67*	*10*	*26*	*59*	*57*	*47.7*	*162*	*SG2M35ELK82/99A*
	1 1/2	**KFX-S224**	KLFX-S224	4 1/64	5.672	1 11/16	3/8	1 3/16	2 37/64	2 15/32	2 1/16	6 59/64	SG224ELK82/99A
40		*KFX-S2M40*	*KLFX-S2M40*	*102*	*144*	*42.87*	*10*	*30*	*65.5*	*62.5*	*52.4*	*176*	*SG2M40ELK82/99A*

See footnotes and Housing Load Ratings on facing page.

Corrosion Resistant

Klean-Gard™ Pillow Block
KP-S200, KLP-S200

Reinforced Polyamide or Polypropylene Housing
Alignable
Spring Locking
Stainless Steel Bushing and Washers
Prelubricated with Food Grade Grease
Relubricatable
Inner & Outer Rings with Black Oxide Coating



Basic Unit KP-S200

Open Unit With Auxiliary Seals KP-S200D

Closed Unit With End Cap and Seal KP-S200DC

Dimensions (inches/*mm*)

Shaft Diameter		Pillow Block Number		A	B	C	D	E	F Bolts	H	J	L	S	W	Z	Replacement Bearing Number
mm	inches	Polyamide	Polypropylene▲													
	¾	**KP-S212**	KLP-S212	1 5/16	3 25/32	5 1/32	1 1/8	1 3/16	3/8	43/64	3/4	3 1/32	7/8	1 7/32	1 1/8	SG212ELK82/99A
20		*KP-S2M20*	*KLP-S2M20*	*33.3*	*96.0*	*128.0*	*28.58*	*30*	*10*	*17*	*19*	*77*	*22.0*	*30.8*	*28.8*	*SG2M20ELK82/99A*
	1	**KP-S216**	KLP-S216	1 7/16	4 11/64	5 31/64	1 3/16	1 23/64	3/8	43/64	13/16	3 11/32	7/8	1 9/32	1 13/64	SG216ELK82/99A
25		*KP-S2M25*	*KLP-S2M25*	*36.5*	*106.0*	*140.0*	*30.17*	*34.5*	*10*	*17*	*20.6*	*85*	*22.0*	*32.7*	*30.7*	*SG2M25ELK82/99A*
	1 3/16	**KP-S219**	KLP-S219													SG219ELK82/99A
	1¼	**KP-S2E20**	KLP-S2E20	1 11/16	4 49/64	6 27/64	1 11/32	1 27/64	½	25/32	61/64	3 55/64	15/16	1⅜	1 19/64	SG2E20ELK82/99A
30		*KP-S2M30*	*KLP-S2M30*	*42.9*	*121.0*	*163.0*	*34.13*	*36*	*12*	*20*	*24.2*	*98*	*24.0*	*35*	*33*	*SG2M30ELK82/99A*
	1¼	KP-S220	KLP-S220													SG220ELK82/99A
	1⅜	KP-S222	KLP-S222	1⅞	4 31/32	6 37/64	1 9/16	1 33/64	½	25/32	1 7/64	4¼	15/16	1 9/16	1 15/32	SG222ELK82/99A
	1 7/16	**KP-S223**	KLP-S223													SG223ELK82/99A
35		*KP-S2M35*	*KLP-S2M35*	*47.6*	*126.0*	*167.0*	*39.67*	*38.6*	*12*	*20*	*28.2*	*108*	*24.0*	*39.5*	*37.5*	*SG2M35ELK82/99A*
	1½	**KP-S224**	KLP-S224	2	5 11/32	7 9/32	1 11/16	1 33/64	½	25/32	1 13/64	4 13/32	15/16	1 41/64	1 9/16	SG224ELK82/99A
40		*KP-S2M40*	*KLP-S2M40*	*50.8*	*136*	*185.0*	*42.87*	*38.6*	*12*	*20*	*30.6*	*112*	*24.0*	*41.6*	*39.6*	*SG2M40ELK82/99A*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, Rp ⅛ parallel thread per ISO 7/1 latest revision. Note: ⅛" PT external thread will not fit.
▲ Furnished with Viton seals and o-ring and AISI 316 stainless steel bushings and washers.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Load ratings for bearings and housings

Shaft Diameter		Bearing Load Ratings*		Maximum Recommended Equivalent Radial Load *	Maximum Recommended Axial Load (1)
mm	inches	Dynamic C	Static C_0	P_E	F_a
	¾	2210 lb	1480 lb	332 lb	175 lb
20		9830 N	6590 N	1475 N	778 N
	1	2430 lb	1760 lb	365 lb	175 lb
25		10810 N	7830 N	1622 N	778 N
	1 3/16	3380 lb	2530 lb	507 lb	330 lb
	1¼	15030 N	11300 N	2254 N	1468 N
30					
	1¼				
	1⅜	4470 lb	3440 lb	670 lb	330 lb
	1 7/16	19880 N	15300 N	2982 N	1468 N
35					
	1½	5640 lb	4460 lb	846 lb	500 lb
40		25100 N	19900 N	3765 N	2224 N

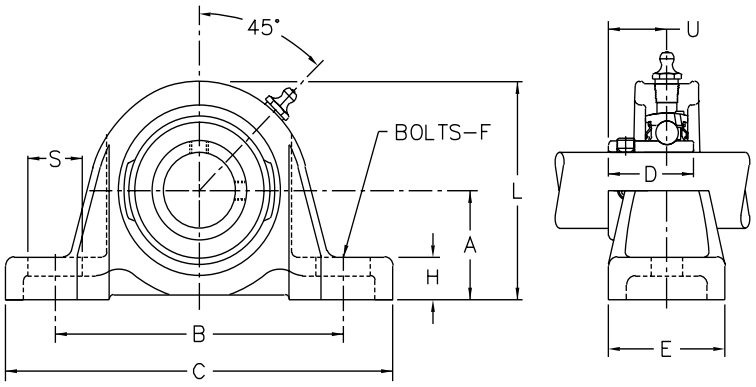
* If actual bearing load exceeds maximum recommended equivalent radial load or impact loading will occur, consult Link-Belt Bearing Division, Rexnord Corporation. Housing should not be used under tension loads. For this reason, pillow blocks are designed to withstand loads directed into the base. Polymide and Polypropylene housing strength exceeds maximum recommended equivalent radial load. (1) Values based on set screw holding capacity for properly tightened set screws. These values may be used in design, as a safety factor has been applied.

Corrosion Resistant

Dura-Klean™ Pillow Blocks

WP3-S200E

Cast Iron Housing with Non-Porous Nylon Coating
Standard Backing
Alignable
Spring Locking
Prelubricated with Food Grade Grease
Relubricable
Inner & Outer Rings with Black Oxide Coating



Dimensions (inches/*mm*)

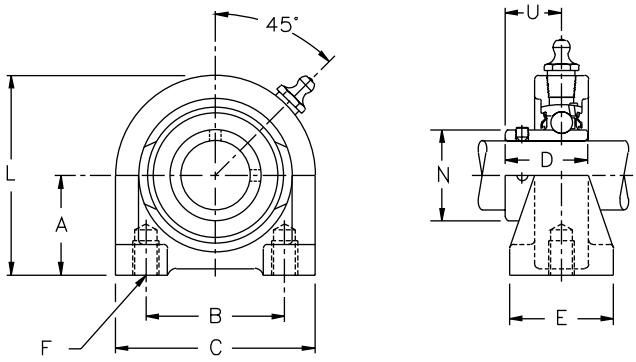
Shaft Diameter		Pillow block number	A †	B	C	D	E	F Bolts	H	L	S	U	Unit Wt. (lbs./kg)	Replacement bearing no.
mm	inches													
	¾	**WP3-S212E**	1 5/16	3⅞	5⅛	1⅛	1½	⅜	½	2 19/32	1 1/16	¾	1.5	SG212ELK82/99A
20		*WP3-S2M20E*	*33.34*	*98.4*	*130.2*	*28.58*	*38.1*	*10*	*12.7*	*65.9*	*17.5*	*19.0*	*.68*	*SG2M20ELK82/99A*
	⅞	WP3-S214E											1.7	SG214ELK82/99A
	15/16	WP3-S215E	1 7/16	4	5⅜	1 3/16	1⅝	⅜	9/16	2⅞	1 1/16	1 3/16	1.6	SG215ELK82/99A
	1	**WP3-S216E**											1.6	SG216ELK82/99A
25		*WP3-S2M25E*	*36.51*	*101.6*	*136.5*	*30.17*	*41.3*	*10*	*14.3*	*73.0*	*17.5*	*20.6*	*.73*	SG2M25ELK82/99A
	1⅛	WP3-S218E											2.6	SG218ELK82/99A
	1 3/16	**WP3-S219E**	1 11/16	4⅝	6 5/16	1 11/32	1¾	½	1 1/16	3 5/16	1 5/16	1 61/64	2.6	SG219ELK82/99A
	1¼	**WP3-S2E20E**											2.6	SG2E20ELK82/99A
30		*WP3-S2M30E*	*42.86*	*117.5*	*160.3*	*34.13*	*44.4*	*12*	*17.5*	*84.1*	*23.8*	*24.2*	*1.18*	SG2M30ELK82/99A
	1¼	**WP3-S220E**											3.4	SG220ELK82/99A
	1⅜	WP3-S222E	1⅞	4 15/16	6⅜	1 9/16	1⅞	½	1 3/16	3 11/16	1 3/16	1 7/64	3.4	SG222ELK82/99A
	1 7/16	**WP3-S223E**											3.3	SG223ELK82/99A
35		*WP3-S2M35E*	*47.62*	*125.4*	*161.9*	*39.67*	*47.6*	*12*	*20.6*	*93.7*	*20.6*	*28.2*	*1.50*	SG2M35ELK82/99A
	1½	**WP3-S224E**	2	5⅜	7 1/16	1 11/16	1⅞	½	1 3/16	4	1 5/16	1 13/64	4.4	SG224ELK82/99A
40		*WP3-S2M40E*	*50.80*	*136.5*	*179.4*	*42.87*	*47.6*	*12*	*20.6*	*101.6*	*23.8*	*30.6*	*2.00*	*SG2M40ELK82/99A*
	1⅝	WP3-S226E											5.1	SG226ELK82/99A
	1 11/16	WP3-S227E	2⅛	⅝	7¼	1 49/64	2	½	1 3/16	4 5/16	⅞	1 15/64	5.0	SG227ELK82/99A
	1¾	**WP3-S228E**											4.9	SG228ELK82/99A
			53.98	*142.9*	*184.2*	*44.85*	*50.8*	*12*	*20.6*	*109.5*	*22.2*	*31.4*	*2.22*	
	1 15/16	**WP3-S231E**	2¼ *57.15*	6 3/16 *157.2*	7⅞ *200.0*	1 51/64 *45.64*	2⅛ *54.0*	⅝ *16*	⅞ *22.2*	4½ *114.3*	1 5/16 *23.8*	1 17/64 *32.1*	5.8 *2.63*	SG231ELK82/99A

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
†Tolerance, +.000" –.010" *(+0.00 mm –0.25 mm)*.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Corrosion Resistant

Dura-Klean™ Pillow Blocks
WPT3-S200E

Cast Iron Housing with Non-Porous Nylon Coating
Standard Backing
Tapped Base
Alignable
Spring Locking
Prelubricated with Food Grade Grease
Relubricable
Inner & Outer Rings with Black Oxide Coating



Dimensions (inches/*mm*)

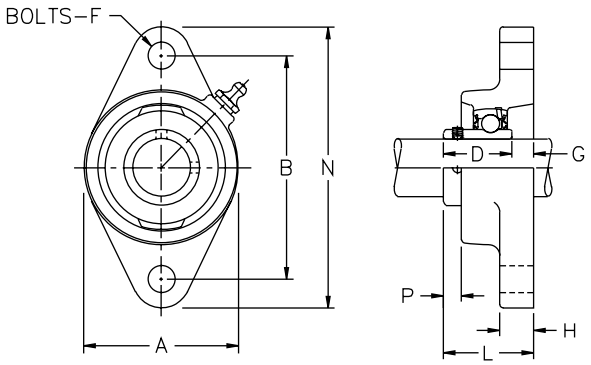
Shaft Diameter		Pillow block number	A †	B	C	D	E	F		L	N	U	Unit wt. (lbs./kg)	Bearing no.
mm	inches							Tap	Min. Depth					
	¾	**WPT3-S212E**	1 5/16	2	2 7/8	1 1/8	1 1/2	3/8-16	1/2	2 19/32	1 1/8	¾	1.0	SG212ELK82/99A
20		*WPT3-S2M20E*	*33.34*	*50.80*	*73.0*	*28.58*	*38.1*	–	*12.7*	*65.9*	*28.6*	*19.0*	*.45*	*SG2M20ELK82/99A*
	⅞	WPT3-S214E											1.3	SG214ELK82/99A
	15/16	WPT3-S215E	1 7/16	2	2 7/8	1 3/16	1 1/2	3/8-16	1/2	2 7/8	1 5/16	13/16	1.3	SG215ELK82/99A
	1	**WPT3-S216E**											1.2	SG216ELK82/99A
25		*WPT3-S2M25E*	*36.51*	*50.80*	*73.0*	*30.17*	*38.1*	–	*12.7*	*73.0*	*33.3*	*20.6*	*.54*	*SG2M25ELK82/99A*
	1⅛	WPT3-S218E											2.3	SG218ELK82/99A
	1 3/16	**WPT3-S219E**	1 11/16	3	4	1 11/32	1 1/2	⅞-14	⅝	3 5/16	1 19/32	61/64	2.3	SG219ELK82/99A
	1¼	**WPT3-S2E20E**											2.2	SG2E20ELK82/99A
30		*WPT3-S2M30E*	*42.86*	*76.20*	*101.6*	*34.13*	*38.1*	–	*15.9*	*84.1*	*40.5*	*24.2*	*1.00*	SG2M30ELK82/99A
	1¼	**WPT3-S220E**											3.1	SG220ELK82/99A
	1⅜	WPT3-S222E	1⅞	3¼	4 13/32	1 9/16	1⅞	½-13	¾	3 11/16	1 27/32	1 7/64	3.1	SG222ELK82/99A
	1 7/16	**WPT3-S223E**											3.0	SG223ELK82/99A
35		*WPT3-S2M35E*	*47.62*	*82.55*	*111.9*	*39.67*	*47.6*	–	*19.0*	*93.7*	*46.9*	*28.2*	*1.36*	SG2M35ELK82/99A
	1 15/16	**WPT3-S231E**	2¼	4	5 7/16	1 11/16	2	⅝-11	⅞	4½	2 15/32	1 13/64	5.3	SG231ELK82/99A
			57.15	*101.60*	*138.1*	*42.87*	*50.8*	–	*22.2*	*114.3*	*62.7*	*30.6*	*2.36*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
† Tolerance, +.000" –.010" *(+0.00 mm –0.25 mm)*.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Corrosion Resistant

Dura-Klean™ Flanged Units
WFX3-S200E

Cast Iron Housing with Non-Porous Nylon Coating
2-bolt Mounting
Alignable
Prelubricated with Food Grade Grease
Relubricable
Inner & Outer Rings with Black Oxide Coating



Dimensions (inches/*mm*)

Shaft Diameter		Flanged unit number	A	B	D	F Bolts	G	H	L	N	P	Unit wt. (lbs./kg)	Replacement bearing no.
mm	inches												
	¾	**WFX3-S212E**	2 7/16	3 17/32	1 1/8	3/8	23/64	9/16	1 31/64	4 13/32	9/32	1.1	SG212ELK82/99A
20		*WFX3-S2M20E*	*61.9*	*89.69*	*28.58*	*10*	*9.1*	*14.3*	*37.7*	*111.9*	*7.1*	*.50*	*SG2M20ELK82/99A*
	⅞	WFX3-S214E										1.5	SG214ELK82/99A
	15/16	WFX3-S215E	2 11/16	3 57/64	1 3/16	7/16	3/8	19/32	1 9/16	4 29/32	5/16	1.5	SG215ELK82/99A
	1	**WFX3-S216E**										1.4	SG216ELK82/99A
25		*WFX3-S2M25E*	*68.3*	*98.82*	*30.17*	*10*	*9.5*	*15.1*	*39.7*	*124.6*	*7.9*	*.64*	*SG2M25ELK82/99A*
	1⅛	WFX3-S218E										2.2	SG218ELK82/99A
	1 3/16	**WFX3-S219E**	3 3/16	4 19/32	1 11/32	7/16	25/64	19/32	1 47/64	5 19/32	27/64	2.1	SG219ELK82/99A
	1¼	**WFX3-S2E20E**										2.1	SG2E20ELK82/99A
30		*WFX3-S2M30E*	*81.0*	*116.68*	*34.13*	*10*	*9.9*	*15.1*	*44.0*	*142.1*	*10.7*	*.95*	*SG2M30ELK82/99A*
	1¼	**WFX3-S220E**										2.8	SG220ELK82/99A
	1⅜	WFX3-S222E	3⅝	5⅛	1 9/16	½	23/64	⅝	1 59/64	6⅛	33/64	2.7	SG222ELK82/99A
	1 7/16	**WFX3-S223E**										2.6	SG223ELK82/99A
35		*WFX3-S2M35E*	*92.1*	*130.18*	*39.69*	*12*	*9.1*	*15.9*	*48.8*	*155.6*	*13.1*	*1.18*	*SG2M35ELK82/99A*
	1½	**WFX3-S224E**	4	5 21/32	1 11/16	½	27/64	⅝	2 7/64	6 25/32	17/32	3.8	SG224ELK82/99A
40		*WFX3-S2M40E*	*101.6*	*143.67*	*42.87*	*12*	*10.7*	*15.9*	*53.6*	*172.2*	*1.5*	*1.73*	*SG2M40ELK82/99A*
	1⅝	WFX3-S226E										4.4	SG226ELK82/99A
	1 11/16	WFX3-S227E	4¼	5 27/32	1 49/64	½	3/8	⅝	2 9/64	7 3/32	35/64	4.4	SG227ELK82/99A
	1¾	**WFX3-S228E**										4.3	SG228ELK82/99A
			108.0	*148.43*	*44.85*	*12*	*9.5*	*15.9*	*54.4*	*180.2*	*13.9*	*1.95*	
	1 15/16	**WFX3-S231E**	4 9/16	6 3/16	1 51/64	9/16	19/32	¾	2 25/64	7 7/16	35/64	5.6	SG231ELK82/99A
			115.9	*157.16*	*45.64*	*14*	*15.1*	*19.0*	*60.7*	*188.9*	*13.9*	*2.54*	

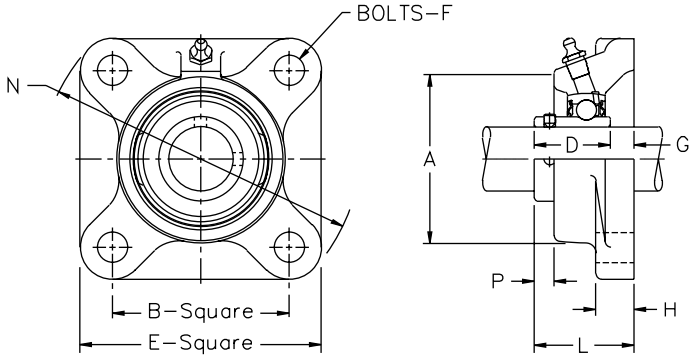
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Corrosion Resistant

Dura-Klean™ Flanged Units

WF3-S200E

Cast Iron Housing with Non-Porous Nylon Coating
4-bolt Mounting
Alignable
Spring Locking
Prelubricated with Food Grade Grease
Relubricable
Inner & Outer Rings with Black Oxide Coating



Dimensions (inches/*mm*)

Shaft Diameter		Flanged unit number	A	B	D	E	F Bolts	G	H	L	N	P	Unit wt. (lbs./kg)	Replacement bearing no.
mm	inches													
	¾	**WF3-S212E**	2 7/16	2 1/2	1 1/8	3 3/8	3/8	23/64	9/16	1 31/64	4 13/32	9/32	1.6	SG212ELK82/99A
20		*WF3-S2M20E*	*61.9*	*63.50*	*28.58*	*85.7*	*10*	*9.1*	*14.3*	*37.7*	*111.9*	*7.1*	*.73*	*SG2M20ELK82/99A*
	⅞	WF3-S214E											2.0	SG214ELK82/99A
	15/16	WF3-S215E	2 11/16	2¾	1 3/16	3¾	7/16	3/8	19/32	1 9/16	4 29/32	5/16	1.9	SG215ELK82/99A
	1	**WF3-S216E**											1.9	SG216ELK82/99A
25		*WF3-S2M25E*	*68.3*	*69.85*	*30.17*	*95.2*	*10*	*9.5*	*15.1*	*39.7*	*124.6*	*7.9*	*.86*	*SG2M25ELK82/99A*
	1⅛	WF3-S218E											2.7	SG218ELK82/99A
	1 3/16	**WF3-S219E**	3 3/16	3¼	1 11/32	4¼	7/16	25/64	19/32	1 47/64	5 19/32	27/64	2.6	SG219ELK82/99A
	1¼	**WF3-S2E20E**											2.6	SG2E20ELK82/99A
30		*WF3-S2M30E*	*81.0*	*82.55*	*34.13*	*108.0*	*10*	*9.9*	*15.1*	*44.0*	*142.1*	*10.7*	*1.18*	*SG2M30ELK82/99A*
	1¼	**WF3-S220E**											3.5	SG220ELK82/99A
	1⅜	WF3-S222E	3⅝	3⅝	1 9/16	4⅝	½	23/64	⅝	1 59/64	6⅛	37/64	3.4	SG222ELK82/99A
	1 7/16	**WF3-S223E**											3.3	SG223ELK82/99A
35		*WF3-S2M35E*	*92.1*	*92.08*	*39.67*	*117.5*	*12*	*9.1*	*15.9*	*48.8*	*155.6*	*14.7*	*1.50*	*SG2M35ELK82/99A*
	1½	**WF3-S224E**	4	4	1 11/16	5⅛	½	27/64	⅝	2 7/64	6 25/32	17/32	4.7	SG224ELK82/99A
40		*WF3-S2M40E*	*101.6*	*101.60*	*42.87*	*130.2*	*12*	*10.7*	*15.9*	*53.6*	*172.2*	*13.5*	*2.13*	*SG2M40ELK82/99A*
	1⅝	WF3-S226E											5.4	SG226ELK82/99A
	1 11/16	WF3-S227E	4¼	4⅛	1 49/64	5⅜	½	3/8	⅝	2 9/64	7 3/32	35/64	5.4	SG227ELK82/99A
	1¾	**WF3-S228E**											5.3	SG228ELK82/99A
			108.0	*104.78*	*44.85*	*136.5*	*12*	*9.5*	*15.9*	*54.4*	*180.2*	*13.9*	*2.41*	
	1 15/16	**WF3-S231E**	4½	4⅜	1 51/64	5⅝	½	½	2 13/16	2 19/64	7 7/16	9/16	6.2	SG231ELK82/99A
			114.3	*111.12*	*45.64*	*142.9*	*12*	*12.7*	*19.0*	*58.3*	*188.9*	*14.3*	*2.81*	

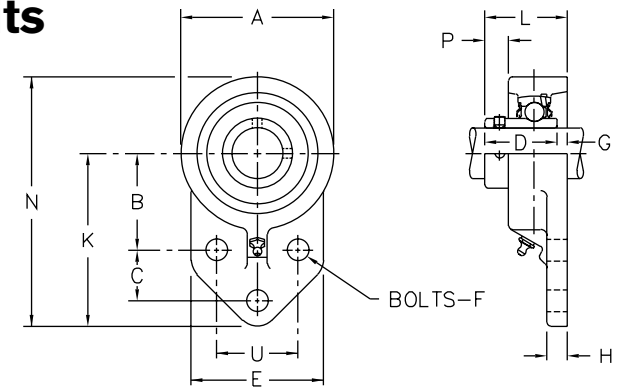
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Corrosion Resistant

Dura-Klean™ Flanged Bracket Units

WFB3-S200E

Cast Iron Housing with Non-Porous Nylon Coating
3-bolt Mounting
Alignable
Spring Locking
Prelubricated with Food Grade Grease
Relubricable
Inner & Outer Rings with Black Oxide Coating



Dimensions (inches/*mm*)

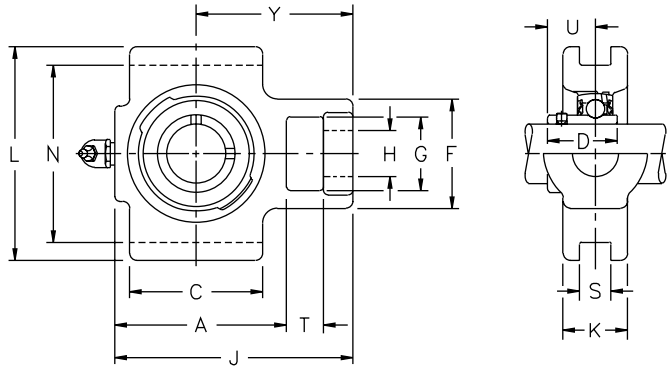
Shaft Diameter		Flanged unit numbers	A	B	C	D	E	F Bolts	G	H	K	L	N	P	U	Unit wt. (lbs./kg)	Bearing no.
mm	inches																
	¾	**WFB3-S212E**	2½	1 11/16	⅞	1⅛	2⅜	⅜	7/32	5/18	3	1 11/32	4¼	11/32	1½	1.2	SG212ELK82/99A
20		*WFB3-S2M20E*	*63.5*	*42.9*	*22.2*	*28.58*	*60.3*	*10*	*1.6*	*7.9*	*76.2*	*34.1*	*108.0*	*8.7*	*38.1*	*.54*	*SG2M20ELK82/99A*
	⅞	WFB3-S214E														1.7	SG214ELK82/99A
	15/16	WFB3-S215E	2¾	1 13/16	1⅛	1 3/16	2½	⅜	9/32	⅜	3⅜	1 29/64	4¾	5/16	1⅝	1.7	SG215ELK82/99A
	1	**WFB3-S216E**														1.6	SG216ELK82/99A
25		*WFB3-S2M25E*	*69.8*	*46.0*	*28.6*	*30.17*	*63.5*	*10*	*2.4*	*9.5*	*85.7*	*38.9*	*120.6*	*7.5*	*41.3*	*0.72*	*SG2M25ELK82/99A*
	1⅛	WFB3-S218E														2.2	SG218ELK82/99A
	1 3/16	**WFB3-S219E**	3¼	2 1/16	1¼	1 11/32	2¾	⅜	9/32	⅜	3¾	1⅝	5⅜	⅜	1⅞	2.2	SG219ELK82/99A
	1¼	**WFB3-S2E20E**														2.1	SG2E20ELK82/99A
30		*WFB3-S2M30E*	*82.6*	*52.3*	*31.8*	*34.13*	*69.8*	*10*	*1.6*	*9.5*	*95.2*	*43.7*	*136.5*	*9.5*	*47.6*	*0.95*	*SG2M30ELK82/99A*
	1¼	**WFB3-S220E**														3.2	SG220ELK82/99A
	1⅜	WFB3-S222E	3¾	2⅜	1¼	1 9/16	3¼	½	23/64	½	4¼	1 59/64	6⅛	31/64	2	3.2	SG222ELK82/99A
	1 7/16	**WFB3-S223E**														3.1	SG223ELK82/99A
35		*WFB3-S2M35E*	*95.2*	*60.3*	*31.8*	*39.67*	*82.6*	*12*	*4.0*	*12.7*	*108.0*	*48.8*	*155.6*	*12.3*	*50.8*	*1.41*	*SG2M35ELK82/99A*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ¼"-28 UNF.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Corrosion Resistant

Dura-Klean™ Takeup Units

Cast Iron Housing with Non-Porous Nylon Coating
Wide Slot Design
Alignable
Spring Locking
Prelubricated with Food Grade Grease
Relubricable
Inner & Outer Rings with Black Oxide Coating



Dimensions (inches/*mm*)

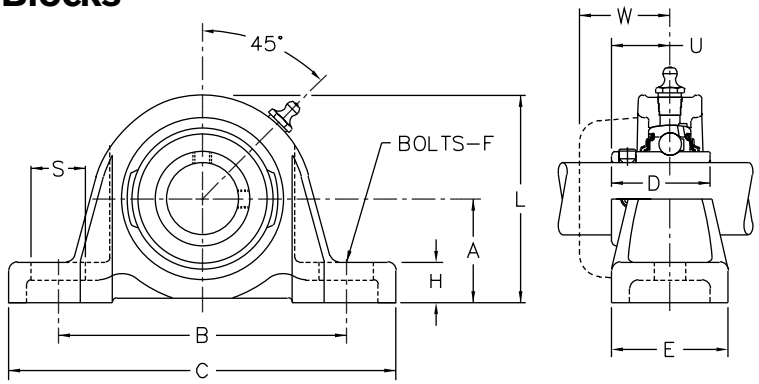
Shaft Diameter		Takeup unit number	A	C	D	F	G	H	J	K	L	N +.000" -.015" *(+0.00 -0.38)*	S +.005" -.015" *(+.013 -0.38)*	T	U	Y	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals																
	¾	**WTH3-S212E**	2 27/32	2 1/4	1 1/8	1 7/8	1 1/4	¾	3 31/32	1 1/16	3 5/8	3.000	.531	5/8	¾	2 21/32	2.4	SG212ELK82/99A
20		WTH3-S2M20E	*72.2*	*57.2*	*28.58*	*47.6*	*31.8*	*19.0*	*100.8*	*27.0*	*92.1*	*76.20*	*13.49*	*15.9*	*19.0*	*67.5*	*1.1*	*SG2M20ELK82/99A*
	7/8	WTH3-S214E	2 29/32	2 1/4	1 3/16	1 27/32	1 1/4	¾	4 1/32	1 3/32	3 5/8	3.000	.531	5/8	13/16	2 21/32	2.7	SG214ELK82/99A
	15/16	WTH3-S215E	*73.8*	*57.2*	*30.17*	*46.8*	*31.8*	*19.0*	*102.4*	*27.8*	*92.1*	*76.20*	*13.49*	*15.9*	*20.6*	*67.5*		SG215ELK82/99A
	1	**WTH3-S216E**																SG216ELK82/99A
25		WTH3-S2M25E															*1.2*	*SG2M25ELK82/99A*
	1 1/8	WTH3-S218E	3 11/32	2 1/2	1 11/32	2 3/16	1 7/16	7/8	4 15/32	1 3/32	4 1/8	3.500	.531	5/8	61/64	2 27/32	3.2	SG218ELK82/99A
	1 3/4	**WTH3-S219E**	*84.9*	*63.5*	*34.13*	*55.6*	*36.5*	*22.2*	*113.5*	*27.8*	*104.8*	*88.90*	*13.49*	*15.9*	*24.2*	*72.2*		SG219ELK82/99A
	1 1/4	**WTH3-S2E20E**															*1.5*	SG2E20ELK82/99A
30		WTH3-S2M30E																*SG2M30ELK82/99A*
	1 1/4	**WTH3-S220E**	3 11/16	2 3/4	1 9/16	2 5/16	1 7/16	7/8	4 13/16	1 3/16	4 1/8	3.500	.531	5/8	1 7/64	2 31/32	4.0	SG220ELK82/99A
	1 3/8	WTH3-S222E	*93.7*	*69.8*	*39.67*	*58.7*	*36.5*	*22.2*	*122.2*	*30.2*	*104.8*	*88.90*	*13.49*	*15.9*	*28.2*	*75.4*		SG222ELK82/99A
	1 7/16	**WTH3-S223E**															*1.8*	SG223ELK82/99A
35		WTH3-S2M35E																*SG2M35ELK82/99A*
	1 1/2	**WTH3-S224E**	4 3/16	3 1/4	1 11/16	2 27/32	1 15/16	1 1/8	5 9/16	1 5/16	4 3/4	3.969	.688	¾	1 13/64	3 15/32	5.3	SG224ELK82/99A
40		WTH3-S2M40E	*106.4*	*82.6*	*42.87*	*72.2*	*49.2*	*28.6*	*141.3*	*33.3*	*120.6*	*100.81*	*17.48*	*19.0*	*30.6*	*88.6*	*2.4*	*SG2M40ELK82/99A*
	1 5/8	WTH3-S226E	4 3/16	3 1/4	1 49/64	2 7/8	1 15/16	1 1/8	5 9/16	1 3/8	4 3/4	3.969	.688	¾	1 15/64	3 15/32	5.3	SG226ELK82/99A
	1 11/16	WTH3-S227E	*106.4*	*82.6*	*44.85*	*73.0*	*49.2*	*28.6*	*141.3*	*34.9*	*120.6*	*100.81*	*17.48*	*19.0*	*31.4*	*88.6*		SG227ELK82/99A
	1 3/4	**WTH3-S228E**															*2.4*	SG228ELK82/99A
	1 15/16	**WTH3-S231E**	4 9/16	3 3/8	1 51/64	2 7/8	1 15/16	1 1/8	5 15/16	1 43/64	4 3/4	3.969	.688	¾	1 17/64	3 19/32	6.6	SG231ELK82/99A
			115.9	*85.7*	*45.64*	*73.0*	*49.2*	*28.6*	*150.8*	*42.5*	*120.6*	*100.81*	*17.48*	*19.0*	*32.1*	*91.3*	*3.0*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Pillow Blocks

P3-U200N

Cast Iron Housing
Standard Backing Height
Alignable
Spring Locking
Relubricatable
Wide Inner Ring
Available in Nickel Plate □



Dimensions (inches/*mm*)

Shaft Diameter		Pillow block number ■	A †	B	C	D	E	F Bolts	H	L	M Collar O.D.	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip Seals														
	½	**P3-U2B08N**													1.1	UG2B08NL
	⅝	**P3-U210N**	1 3/16	3 1/2	4 5/8	1 3/32	1 1/2	3/8	1/2	2 11/32	. . .	3/4	41/64	1 13/64	1.0	UG210NL
	11/16	P3-U211N													1.0	UG211NL
17		*P3-U2M17N*	*30.16*	*88.9*	*117.5*	*27.78*	*38.1*	*10*	*12.7*	*59.5*	*. . .*	*19.0*	*16.3*	*30.6*	*0.5*	*UG2M17NL*
	¾	**P3-U212N**	1 5/16	3 7/8	5 1/8	1 9/32	1 1/2	3/8	1/2	2 19/32	. . .	11/16	3/4	1 19/64	1.7	UG212NL
20		*P3-U2M20N*	*33.34*	*98.4*	*130.2*	*32.54*	*38.1*	*10*	*12.7*	*65.9*	*. . .*	*17.5*	*19.0*	*32.9*	*0.8*	*UG2M20NL*
	7/8	**P3-U214N**△													1.9	UG214NL
	15/16	**P3-U215N**△	1 7/16	4	5 3/8	1 23/64	1 5/8	3/8	9/16	2 7/8	. . .	11/16	51/64	1 9/32	1.9	UG215NL
	1	**P3-U216N**△													1.8	UG216NL
25		*P3-U2M25N*	*36.51*	*101.6*	*136.5*	*34.53*	*41.3*	*10*	*14.3*	*73.0*	*. . .*	*17.5*	*20.2*	*32.5*	*0.9*	*UG2M25NL*
	1 1/8	**P3-U218N**													2.8	UG218NL
	1 3/16	**P3-U219N**	1 11/16	4 5/8	6 5/16	1 9/16	1 3/4	1/2	11/16	3 5/16	. . .	15/16	61/64	1 29/64	2.7	UG219NL
	1 1/4	**P3-U2E20N**													2.7	UG2E20NL
30		*P3-U2M30N*	*42.86*	*117.5*	*160.3*	*39.69*	*44.4*	*12*	*17.5*	*84.1*	*. . .*	*23.8*	*24.2*	*36.9*	*1.2*	*UG2M30NL*
	1 1/4	**P3-U220N**△													3.8	UG220NL
	1 3/8	**P3-U222N**△	1 7/8	4 15/16	6 3/8	1 49/64	1 7/8	1/2	13/16	3 11/16	. . .	13/16	1 7/64	1 35/64	3.7	UG222NL
	1 7/16	**P3-U223N**△													3.7	UG223NL
35		*P3-U2M35N*	*47.62*	*125.4*	*161.9*	*44.85*	*47.6*	*12*	*20.6*	*93.7*	*. . .*	*20.6*	*28.2*	*39.3*	*1.7*	*UG2M35NL*
	1 1/2	**P3-U224N**△	2	5 3/8	7 1/16	1 29/32	1 7/8	1/2	13/16	4	. . .	15/16	1 11/64	1 41/64	4.7	UG224NL
40		*P3-U2M40N*△	*50.80*	*136.5*	*179.4*	*48.42*	*47.6*	*12*	*20.6*	*101.6*	*. . .*	*23.8*	*29.8*	*41.7*	*2.1*	*UG2M40NL*
	1 5/8	**P3-U226N**△													5.4	UG226NL
	1 11/16	**P3-U227N**△	2 1/8	5 5/8	7 1/4	2 1/32	2	1/2	13/16	4 5/16	. . .	7/8	1 15/64	1 21/32	5.4	UG227NL
	1 3/4	**P3-U228N**△													5.3	UG228NL
45		*P3-U2M45N*	*53.98*	*142.9*	*184.2*	*51.59*	*50.8*	*12*	*20.6*	*109.5*	*. . .*	*22.2*	*31.4*	*42.1*	*2.3*	*UG2M45NL*
	1 15/16	**P3-U231N**△	2 1/4	6 3/16	7 7/8	2 3/32	2 1/8	5/8	7/8	4 1/2	. . .	15/16	1 17/64	1 25/32	6.1	UG231NL
	2	P3-U2E32N△													6.0	UG2E32NL
50		*P3-U2M50N*	*57.15*	*157.2*	*200.0*	*53.18*	*54.0*	*16*	*22.2*	*114.3*	*. . .*	*23.8*	*32.1*	*45.2*	*2.6*	*UG2M50NL*
	2	**P3-U232N**△	2 1/2	6 3/4	9 1/16	2 1/4	2 3/8	5/8	1	5	. . .	1 5/16	1 13/32	2 1/64	7.8	UG232NL
	2 3/16	**P3-U235N**△													7.7	UG235NL
55		*P3-U2M55N*	*63.50*	*171.4*	*230.2*	*57.15*	*60.3*	*16*	*25.4*	*127.0*	*. . .*	*33.3*	*35.7*	*51.2*	*3.5*	*UG2M55NL*
	2 1/4	**P3-U236N**													11.5	UG236NL
	2 3/8	P3-U238N	2 11/16	7 1/2	9 1/2	2 1/2	2 1/2	5/8	1 1/8	5 3/8	. . .	1 1/16	1 9/16	2 7/64	11.4	UG238NL
	2 7/16	**P3-U239N**													11.3	UG239NL
60		*P3-U2M60N*	*68.26*	*190.5*	*241.3*	*63.50*	*63.5*	*16*	*28.6*	*136.5*	*. . .*	*27.0*	*39.7*	*53.6*	*5.1*	*UG2M60NL*
	2 1/2	P3-U240N	3	8 1/8	10 1/2	2 11/16	2 7/8	3/4	1 5/16	6	4 3/16	1 3/16	1 11/16	2 1/16	16.2	UG240NL
	2 11/16	P3-U243N													15.6	UG243NL
65		*P3-U2M65N*	*76.20*	*206.4*	*266.7*	*68.26*	*73.0*	*20*	*33.3*	*152.4*	*106.4*	*30.2*	*42.9*	*52.4*	*6.8*	*UG2M65NL*
	2 3/4	P3-U244N													20.0	UG244NL
	2 15/16	P3-U247N	3 1/4	8 7/8	11 3/4	2 7/8	3 1/4	3/4	1 3/8	6 1/2	4 5/8	1 5/16	1 13/16	2 7/32	19.3	UG247NL
	3	P3-U2E48N													19.0	UG2E48NL
75		*P3-U2M75N*	*82.55*	*225.4*	*298.4*	*73.02*	*82.6*	*20*	*34.9*	*165.1*	*117.5*	*33.3*	*46.0*	*56.4*	*8.7*	*UG2M75NL*
	3 7/16	P3-U255N	3 3/4	10	13	3 9/16	3 1/2	7/8	1 5/8	7 7/16	5 3/16	1 5/8	2 1/8	2 1/2	29.0	UG255NL
	3 1/2	P3-U2E56N													28.5	UG2E56NL
85		*P3-U2M85N*	*95.25*	*254.0*	*330.2*	*90.49*	*88.9*	*24*	*41.3*	*188.9*	*131.8*	*41.3*	*54.0*	*63.5*	*13.2*	*UG2M85NL*
	3 15/16	P3-U263N	4 7/16	11 7/8	15 1/4	4 1/4	4 1/4	7/8	1 13/16	8 7/8	5 15/16	1 7/8	2 37/64	3 1/64	50.4	UG263NL
	4	P3-U2E64N													49.9	UG2E64NL
100		*P3-U2M100N*	*112.71*	*301.6*	*387.4*	*107.95*	*108.0*	*24*	*46.0*	*225.4*	*150.8*	*47.6*	*65.5*	*76.6*	*22.9*	*UG2M100NL*

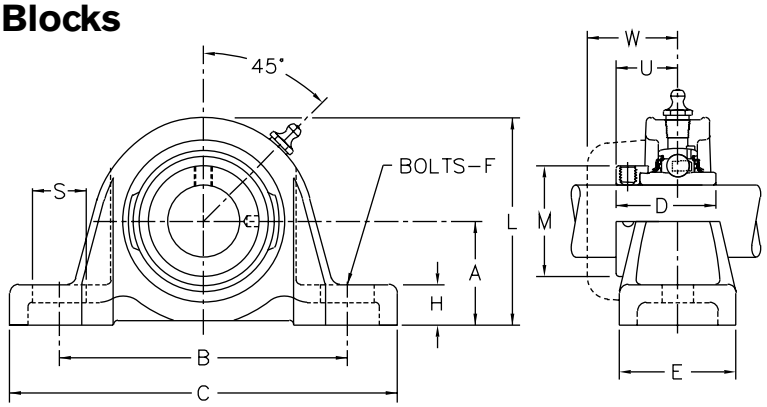
Bold face items are normally available from stock; please consult for availability of non-stock items.
Shaft sizes over 2 7/16" have collars.
Lubrication fitting tap size: for 1 1/16" *(17 mm)* and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
□ Nickel plated housings available through size 239; add Suffix K75, i.e. P3-U2B08NK75.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm)*.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Pillow Blocks

P3-Y200N

Cast Iron Housing
Standard Backing Height
Alignable
Eccentric Cam Locking Collar
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

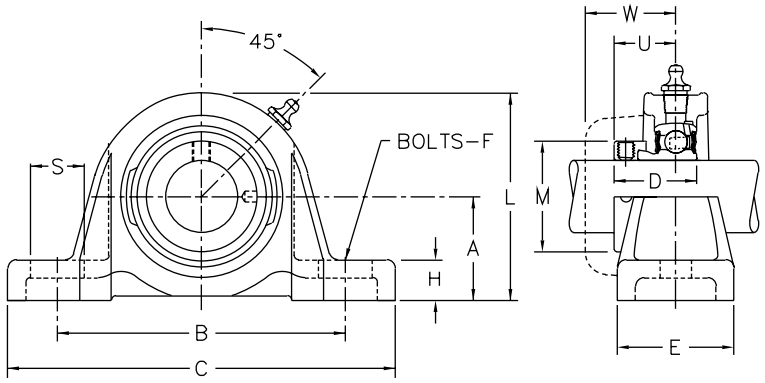
Shaft Diameter	Pillow block number ■	A †	B	C	D	E	F Bolts	H	L	M	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
inches	Lip Seals														
½	**P3-Y2B08N**	1 3/16	3½	4⅝	1 15/32	1½	⅜	½	2 11/32	1⅛	¾	59/64	1 13/64	1.1	YG2B08NL
⅝	**P3-Y210N**	*30.16*	*88.9*	*117.5*	*37.31*	*38.1*	*10*	*12.7*	*59.5*	*28.6*	*19.0*	*23.4*	*30.6*	*.50*	YG210NL
11/16	P3-Y211N														YG211NL
¾	**P3-Y212N**	1 5/16	3⅞	5⅛	1 23/32	1½	⅜	½	2 19/32	1 5/16	11/16	1 3/64	1 19/64	1.8	YG212NL
		33.34	*98.4*	*130.2*	*43.66*	*38.1*	*10*	*12.7*	*65.9*	*33.3*	*17.5*	*26.6*	*32.9*	*.82*	
⅞	**P3-Y214N**△	1 7/16	4	5⅜	1¾	1⅝	⅜	9/16	2⅞	1½	11/16	1 1/16	1 9/32	2.0	YG214NL
15/16	**P3-Y215N**△	*36.51*	*101.6*	*136.5*	*44.45*	*41.3*	*10*	*14.3*	*73.0*	*38.1*	*17.5*	*27.0*	*32.5*	*.91*	YG215NL
1	**P3-Y216N**△														YG216NL
1⅛	**P3-Y218N**	1 11/16	4⅝	6 5/16	1 29/32	1¾	½	1 1/16	3 5/16	1¾	15/16	1 3/16	1 29/64	2.8	YG218NL
1 3/16	**P3-Y219N**	*42.86*	*117.5*	*160.3*	*48.42*	*44.4*	*12*	*17.5*	*84.1*	*44.4*	*23.8*	*30.2*	*36.9*	*1.27*	YG219NL
1¼	**P3-Y2E20N**														YG2E20NL
1¼	**P3-Y220N**△	1⅞	4 15/16	6⅜	2 1/64	1⅞	½	13/16	3 11/16	2 3/16	13/16	1 9/32	1 35/64	4.0	YG220NL
1⅜	**P3-Y222N**△	*47.62*	*125.4*	*161.9*	*51.20*	*47.6*	*12*	*20.6*	*93.7*	*55.6*	*20.6*	*32.5*	*39.3*	*1.82*	YG222NL
1 7/16	**P3-Y223N**△														YG223NL
1½	**P3-Y224N**△	2	5⅜	7 1/16	2 7/32	1⅞	½	13/16	4	2⅜	15/16	1⅜	1 41/64	5.0	YG224NL
		50.80	*136.5*	*179.4*	*56.36*	*47.6*	*12*	*20.6*	*101.6*	*60.3*	*23.8*	*34.9*	*41.7*	*2.27*	
1⅝	**P3-Y226N**△	2⅛	5⅝	7¼	2 7/32	2	½	13/16	4 5/16	2½	⅞	1⅜	1 21/32	5.7	YG226NL
1 11/16	**P3-Y227N**△	*53.98*	*142.9*	*184.2*	*56.36*	*50.8*	*12*	*20.6*	*109.5*	*63.5*	*22.2*	*34.9*	*42.1*	*2.59*	YG227NL
1¾	**P3-Y228N**△														YG228NL
1 15/16	**P3-Y231N**△	2¼	6 3/16	7⅞	2 15/32	2⅛	⅝	⅞	4½	2¾	15/16	1½	1 25/32	6.4	YG231NL
2	P3-Y2E32N△	*57.15*	*157.2*	*200.0*	*62.71*	*54.0*	*16*	*22.2*	*114.3*	*69.8*	*23.8*	*38.1*	*45.2*	*2.91*	YG2E32NL
2	**P3-Y232N**△	2½	6¾	9 1/16	2 13/16	2⅜	⅝	1	5	3	1 5/16	1 23/32	2 1/64	8.4	YG232NL
2 3/16	**P3-Y235N**△	*63.50*	*171.4*	*230.2*	*71.44*	*60.3*	*16*	*25.4*	*127.0*	*76.2*	*33.3*	*43.6*	*51.2*	*3.81*	YG235NL
2¼	**P3-Y236N**	2 11/16	7½	9½	3 1/16	2½	⅝	1⅛	5⅜	3 5/16	1 1/16	1 27/32	2 7/64	11.6	YG236NL
2⅜	P3-Y238N	*68.26*	*190.5*	*241.3*	*77.79*	*63.5*	*16*	*28.6*	*136.5*	*84.1*	*27.0*	*46.8*	*53.6*	*5.27*	YG238NL
2 7/16	**P3-Y239N**														YG239NL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
† Tolerance, +.000" –.010" *(+0.00 mm –0.25 mm)*.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Pillow Blocks

P3-W200E

Cast Iron Housing
Standard Backing Height
Alignable
Eccentric Cam Locking Collar
Relubricable
Extended Inner Ring



Dimensions (inches/*mm*)

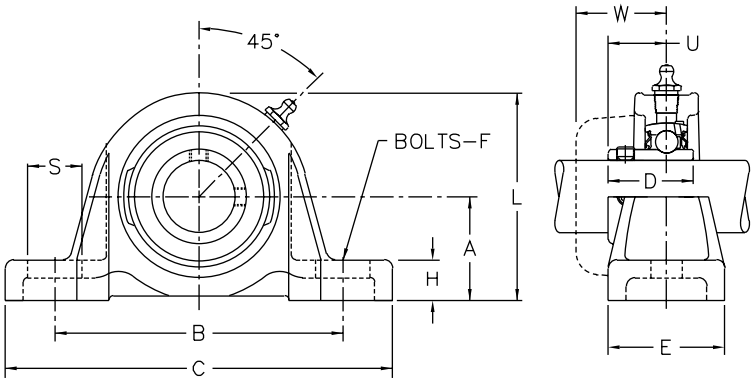
Shaft Diameter inches	Pillow block number	A †	B	C	D	E	F Bolts	H	L	M	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
½ ⅝	**P3-W2B08E** **P3-W210E**	1 3/16	3½	4 5/8	1⅛	1½	⅜	½	2 11/32	1⅛	¾	⅞	1 13/64	.9 *.41*	WG2B08EL WG210EL
¾	**P3-W212E**	1 5/16 *33.34*	3⅞ *98.4*	5⅛ *130.2*	1 7/32 *30.96*	1½ *38.1*	⅜ *10*	½ *12.7*	2 19/32 *65.9*	1 5/16 *33.3*	11/16 *17.5*	59/64 *23.4*	1 19/64 *32.9*	1.6 *.73*	WG212EL
⅞ 15/16 1	**P3-W214E** **P3-W215E** **P3-W216E**	1 7/16 *36.51*	4 *101.6*	5⅜ *136.5*	1 7/32 *30.96*	1⅝ *41.3*	⅜ *10*	9/16 *14.3*	2⅞ *73.0*	1½ *38.1*	11/16 *17.5*	59/64 *23.4*	1 9/32 *32.5*	1.8 *0.82*	WG214EL WG215EL WG216EL
1⅛ 1 3/16 1¼	**P3-W218E** **P3-W219E** **P3-W2E20E**	1 11/16 *42.86*	4⅝ *117.5*	6 5/16 *160.3*	1 13/32 *35.72*	1¾ *44.4*	½ *12*	11/16 *17.5*	3 5/16 *84.1*	1¾ *44.4*	15/16 *23.8*	1 3/64 *26.6*	1 29/64 *36.9*	2.5 *1.14*	WG218EL WG219EL WG2E20EL
1¼ 1⅜ 1 7/16	**P3-W220E** **P3-W222E** **P3-W223E**	1⅞ *47.62*	4 15/16 *125.4*	6⅜ *161.9*	1 17/32 *38.89*	1⅞ *47.6*	½ *12*	13/16 *20.6*	3 11/16 *93.7*	2 3/16 *55.6*	13/16 *20.6*	1 5/32 *29.4*	1 35/64 *39.3*	3.7 *1.68*	WG220EL WG222EL WG223EL
1½	**P3-W224E**	2 *50.80*	5⅜ *136.5*	7 1/16 *179.4*	1 23/32 *43.66*	1⅞ *47.6*	½ *12*	13/16 *20.6*	4 *101.6*	2⅜ *60.3*	15/16 *23.8*	1 9/32 *32.5*	1 41/64 *41.7*	4.6 *2.09*	WG224EL
1⅝ 1 11/16 1¾	**P3-W226E** **P3-W227E** **P3-W228E**	2⅛ *53.98*	5⅝ *142.9*	7¼ *184.2*	1 23/32 *43.66*	2 *50.8*	½ *12*	13/16 *20.6*	4 5/16 *109.5*	2½ *63.5*	⅞ *22.2*	1 9/32 *32.5*	1 21/32 *42.1*	5.0 *2.27*	WG226EL WG227EL WG228EL
1 15/16 2	**P3-W231E** P3-W2E32E	2¼ *57.15*	6 3/16 *157.2*	7⅞ *200.0*	1 23/32 *43.66*	2⅛ *54.0*	⅝ *16*	⅞ *22.2*	4½ *114.3*	2¾ *69.8*	15/16 *23.8*	1 9/32 *32.5*	1 25/32 *45.2*	5.5 *2.5*	WG231EL WG2E32EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
† Tolerance, +.000" –.010" *(+0.00 mm –0.25 mm).*
◆ Width dimension for closed end unit
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Pillow Blocks

P3-S200E

Cast Iron Housing
Standard Backing Height
Alignable
Spring Locking
Relubricatable
Extended Inner Ring
Available in Nickel Plate □
Available in DURA-KLEAN ■



Dimensions (inches/*mm*)

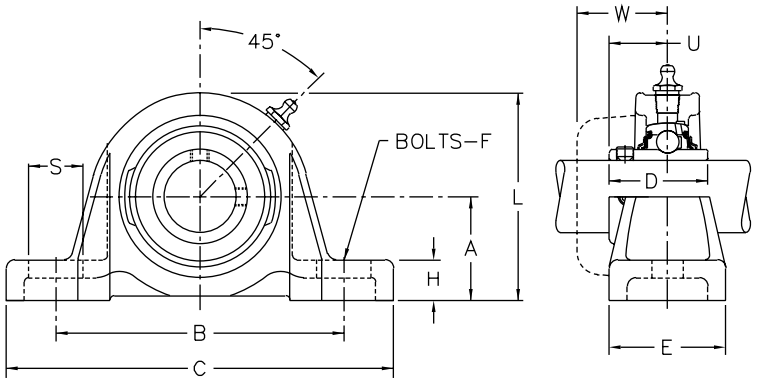
Shaft Diameter inches	Pillow block number	A †	B	C	D	E	F Bolts	H	L	S	U	W ◆	Unit wt. (lbs./kg)	Replacement bearing no.
¾	**P3-S212E**	1 5/16 *33.34*	3 7/8 *98.4*	5 1/8 *130.2*	1 1/8 *28.58*	1 1/2 *38.1*	3/8 *10*	1/2 *12.7*	2 19/32 *65.9*	11/16 *17.5*	¾ *19.0*	1 19/64 *32.9*	1.5 *.68*	SG212EL
⅞	**P3-S214E**												1.7	SG214EL
15/16	**P3-S215E**	1 7/16	4	5 3/8	1 3/16	1 5/8	3/8	9/16	2 7/8	11/16	13/16	1 9/32	1.6	SG215EL
1	**P3-S216E**												1.6	SG216EL
		36.51	*101.6*	*136.5*	*30.17*	*41.3*	*10*	*14.3*	*73.0*	*17.5*	*20.6*	*32.5*	*.73*	
1 1/8	**P3-S218E**												2.6	SG218EL
1 3/16	**P3-S219E**	1 11/16	4 5/8	6 5/16	1 11/32	1 3/4	1/2	11/16	3 5/16	15/16	61/64	1 29/64	2.6	SG219EL
1 ¼	**P3-S2E20E**												2.6	SG2E20EL
		42.86	*117.5*	*160.3*	*34.13*	*44.4*	*12*	*17.5*	*84.1*	*23.8*	*24.2*	*36.9*	*1.18*	
1 ¼	**P3-S220E**												3.4	SG220EL
1 3/8	**P3-S222E**	1 7/8	4 15/16	6 3/8	1 9/16	1 7/8	1/2	13/16	3 11/16	13/16	1 7/64	1 35/64	3.4	SG222EL
1 7/16	**P3-S223E**												3.3	SG223EL
		47.62	*125.4*	*161.9*	*39.67*	*47.6*	*12*	*20.6*	*93.7*	*20.6*	*28.2*	*39.3*	*1.50*	
1 ½	**P3-S224E**	2 *50.80*	5 3/8 *136.5*	7 1/16 *179.4*	1 11/16 *42.87*	1 7/8 *47.6*	1/2 *12*	13/16 *20.6*	4 *101.6*	15/16 *23.8*	1 13/64 *30.6*	1 41/64 *41.7*	4.4 *2.00*	SG224EL
1 5/8	**P3-S226E**												5.1	SG226EL
1 11/16	**P3-S227E**	2 1/8	5 5/8	7 ¼	1 49/64	2	1/2	13/16	4 5/16	⅞	1 15/64	1 21/32	5.0	SG227EL
1 ¾	**P3-S228E**												4.9	SG228EL
		53.98	*142.9*	*184.2*	*44.85*	*50.8*	*12*	*20.6*	*109.5*	*22.2*	*31.4*	*42.1*	*2.22*	
1 15/16	**P3-S231E**	2 ¼ *57.15*	6 3/16 *157.2*	7 ⅞ *200.0*	1 51/64 *45.64*	2 1/8 *54.0*	5/8 *16*	⅞ *22.2*	4 ½ *114.3*	15/16 *23.8*	1 17/64 *32.1*	1 25/32 *45.2*	5.8 *2.63*	SG231EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
■ DURA-KLEAN coated housings available; add prefix W, i.e. WP3-S212E.
□ Nickel plated housings available; add Suffix K75, i.e. P3-S212EK75.
Nickel plated units are furnished prelubricated with food grade grease and black oxide coated inner and outer rings.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Pillow Blocks

PL3-U200N

Cast Iron Housing
Low Backing Height
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

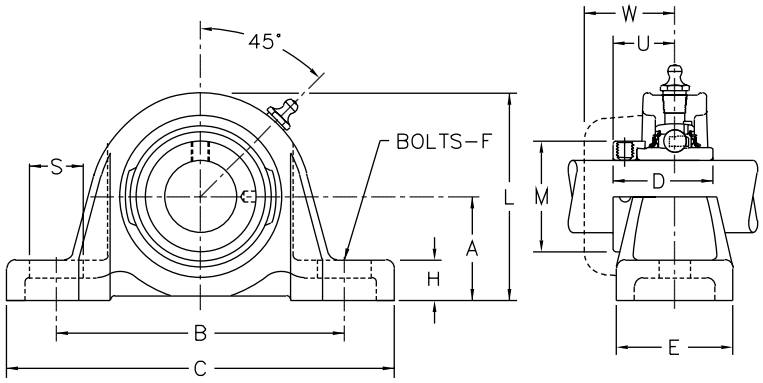
Shaft Diameter		Pillow block number ■	A †	B	C	D	E	F Bolts	H	L	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals													
	½	**PL3-U2B08N**	1 1/16	3 1/2	4 3/4	1 3/32	1 3/8	3/8	1/2	2 1/8	9/16	41/64	1 13/64	1.0	UG2B08NL
	5/8	**PL3-U210N**												.9	UG210NL
	11/16	PL3-U211N												.9	UG211NL
17		*PL3-U2M17N*	*26.99*	*88.9*	*120.6*	*27.78*	*34.9*	*10*	*12.7*	*54.0*	*14.3*	*16.3*	*30.6*	*0.4*	*UG2M17NL*
	¾	**PL3-U212N**	1 1/4	3 7/8	5 1/8	1 9/32	1 1/2	3/8	7/16	2 17/32	11/16	¾	1 19/64	1.6	UG212NL
20		*PL3-U2M20N*	*31.75*	*98.4*	*130.2*	*32.54*	*38.1*	*10*	*11.1*	*64.3*	*17.5*	*19.0*	*32.9*	*0.8*	*UG2M20NL*
	7/8	**PL3-U214N**△	1 5/16	4 1/8	5 1/2	1 23/64	1 3/4	3/8	5/8	2 11/16	9/16	51/64	1 9/32	1.8	UG214NL
	15/16	**PL3-U215N**△												1.8	UG215NL
	1	**PL3-U216N**△												1.7	UG216NL
25		*PL3-U2M25N*	*33.34*	*104.8*	*139.7*	*34.53*	*44.4*	*10*	*15.9*	*68.3*	*14.3*	*20.2*	*32.5*	*0.9*	*UG2M25NL*
	1 1/8	**PL3-U218N**	1 9/16	4 3/4	6 5/16	1 9/16	1 7/8	1/2	11/16	3 5/32	3/4	61/64	1 29/64	2.6	UG218NL
	1 3/16	**PL3-U219N**												2.5	UG219NL
	1 1/4	**PL3-U2E20N**												2.5	UG2E20NL
30		*PL3-U2M30N*	*39.69*	*120.6*	*160.3*	*39.69*	*47.6*	*12*	*17.5*	*80.2*	*19.0*	*24.2*	*36.9*	*1.1*	*UG2M30NL*
	1 1/4	**PL3-U220N**△	1 13/16	4 15/16	6 3/8	1 49/64	1 7/8	1/2	3/4	3 5/8	13/16	1 7/64	1 35/64	3.6	UG220NL
	1 3/8	**PL3-U222N**△												3.5	UG222NL
	1 7/16	**PL3-U223N**△												3.5	UG223NL
35		*PL3-U2M35N*	*46.04*	*125.4*	*161.9*	*44.85*	*47.6*	*12*	*19.0*	*92.1*	*20.6*	*28.2*	*39.3*	*1.6*	*UG2M35NL*
	1 1/2	**PL3-U224N**△	1 15/16	5 3/8	7 1/16	1 29/32	1 7/8	1/2	3/4	3 15/16	15/16	1 11/64	1 41/64	4.5	UG224NL
40		*PL3-U2M40N*	*49.21*	*136.5*	*179.4*	*48.42*	*47.6*	*12*	*19.0*	*100.0*	*23.8*	*29.8*	*41.7*	*2.0*	*UG2M40NL*
	1 5/8	**PL3-U226N**△	2 1/16	5 5/8	7 1/4	2 1/32	2	1/2	3/4	4 1/4	7/8	1 15/64	1 21/32	5.2	UG226NL
	1 11/16	**PL3-U227N**△												5.2	UG227NL
	1 3/4	**PL3-U228N**△												5.1	UG228NL
45		*PL3-U2M45N*	*52.39*	*142.9*	*184.2*	*51.59*	*50.8*	*12*	*19.0*	*108.0*	*22.2*	*31.4*	*42.1*	*2.2*	*UG2M45NL*
	1 15/16	**PL3-U231N**△	2 3/16	6 3/16	7 7/8	2 3/32	2 1/8	5/8	13/16	4 7/16	15/16	1 17/64	1 25/32	5.9	UG231NL
	2	PL3-U2E32N△												5.8	UG2E32NL
50		*PL3-U2M50N*	*55.56*	*157.2*	*200.0*	*53.18*	*54.0*	*16*	*20.6*	*112.7*	*23.8*	*32.1*	*45.2*	*2.5*	*UG2M50NL*
	2	**PL3-U232N**△	2 7/16	6 3/4	9 1/16	2 1/4	2 3/8	5/8	15/16	4 15/16	1 5/16	1 13/32	2 1/64	7.4	UG232NL
	2 3/16	**PL3-U235N**△												7.3	UG235NL
55		*PLE-U2M55N*	*61.91*	*171.4*	*230.2*	*57.15*	*60.3*	*16*	*23.8*	*125.4*	*33.3*	*35.7*	*51.2*	*3.2*	*UG2M55NL*
	2 1/4	**PL3-U236N**	2 11/16	7 1/2	9 1/2	2 1/2	2 1/2	5/8	1 1/8	5 3/8	1 1/16	1 9/16	2 7/64	11.0	UG236NL
	2 3/8	PL3-U238N												11.0	UG238NL
	2 7/16	**PL3-U239N**												10.9	UG239NL
60		*PL3-U2M60N*	*68.26*	*190.5*	*241.3*	*63.50*	*63.5*	*16*	*28.6*	*136.5*	*27.0*	*39.7*	*53.6*	*4.9*	*UG2M60NL*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" (17 mm) and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm)*.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Pillow Blocks

PL3-Y200N

Cast Iron Housing
Low Backing Height
Alignable
Eccentric Cam Locking Collar
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

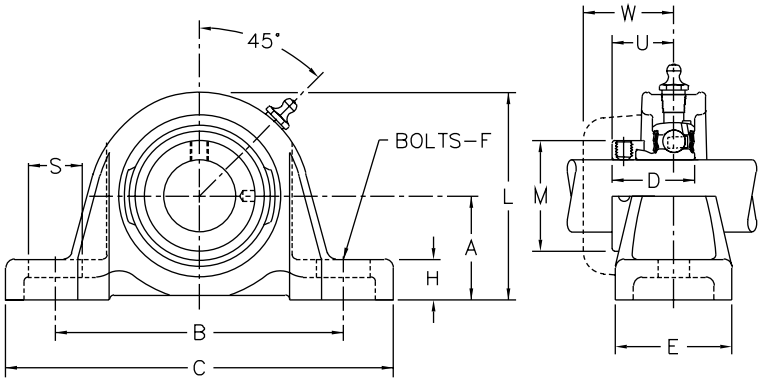
Shaft Diameter	Pillow block number ■		A †	B	C	D	E	F Bolts	H	L	M	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
inches	Lip seals															
½ ⅝ 11/16	**PL3-Y2B08N** **PL3-Y210N** PL3-Y211N	}	1 1/16 *26.99*	3 1/2 *88.9*	4 3/4 *120.6*	1 15/32 *37.31*	1 3/8 *34.9*	3/8 *10*	1/2 *12.7*	2 1/8 *54.0*	1 1/8 *28.6*	9/16 *14.3*	59/64 *23.4*	1 13/64 *30.6*	1.0 *0.4*	YG2B08NL YG210NL YG211NL
¾	**PL3-Y212N**		1 1/4 *31.75*	3 7/8 *98.4*	5 1/8 *130.2*	1 23/32 *43.66*	1 1/2 *38.1*	3/8 *10*	7/16 *11.1*	2 17/32 *64.3*	1 5/16 *33.3*	11/16 *17.5*	1 3/64 *26.6*	1 19/64 *32.9*	1.7 *0.8*	YG212NL
⅞ 15/16 1	**PL3-Y214N**△ **PL3-Y215N**△ **PL3-Y216N**△	}	1 5/16 *33.34*	4 1/8 *104.8*	5 1/2 *139.7*	1 3/4 *44.45*	1 3/4 *44.4*	3/8 *10*	5/8 *15.9*	2 11/16 *68.3*	1 1/2 *38.1*	9/16 *14.3*	1 1/16 *27.0*	1 9/32 *32.5*	1.9 *0.9*	YG214NL YG215NL YG216NL
1 1/8 1 3/16 1 1/4	**PL3-Y218N** **PL3-Y219N** **PL3-Y2E20N**	}	1 9/16 *39.69*	4 3/4 *120.6*	6 5/16 *160.3*	1 29/32 *48.42*	1 7/8 *47.6*	1/2 *12*	11/16 *17.5*	3 5/32 *80.2*	1 3/4 *44.4*	3/4 *19.0*	1 3/16 *30.2*	1 29/64 *36.9*	2.6 *1.2*	YG218NL YG219NL YG2E20NL
1 1/4 1 3/8 1 7/16	**PL3-Y220N**△ **PL3-Y222N**△ **PL3-Y223N**△	}	1 13/16 *46.04*	4 15/16 *125.4*	6 3/8 *161.9*	2 1/64 *51.20*	1 7/8 *47.6*	1/2 *12*	3/4 *19.0*	3 5/8 *92.1*	2 3/16 *55.6*	13/16 *20.6*	1 9/32 *32.5*	1 35/64 *39.3*	3.8 *1.7*	YG220NL YG222NL YG223NL
1 1/2	**PL3-Y224N**△		1 15/16 *49.21*	5 3/8 *136.5*	7 1/16 *179.4*	2 7/32 *56.36*	1 7/8 *47.6*	1/2 *12*	3/4 *19.0*	3 15/16 *100.0*	2 3/8 *60.3*	15/16 *23.8*	1 3/8 *34.9*	1 41/64 *41.7*	4.8 *2.1*	YG224NL
1 5/8 1 11/16 1 3/4	**PL3-Y226N**△ **PL3-Y227N**△ **PL3-Y228N**△	}	2 1/16 *52.39*	5 5/8 *142.9*	7 1/4 *184.2*	2 7/32 *56.36*	2 *50.8*	1/2 *12*	3/4 *19.0*	4 1/4 *108.0*	2 1/2 *63.5*	7/8 *22.2*	1 3/8 *34.9*	1 21/32 *42.1*	5.5 *2.4*	YG226NL YG227NL YG228NL
1 15/16 2	**PL3-Y231N**△ PL3-Y2E32N△	}	2 3/16 *55.56*	6 3/16 *157.2*	7 7/8 *200.0*	2 15/32 *62.71*	2 1/8 *54.0*	5/8 *16*	13/16 *20.6*	4 7/16 *112.7*	2 3/4 *69.8*	15/16 *23.8*	1 1/2 *38.1*	1 25/32 *45.2*	6.2 *2.7*	YG231NL YG2E32NL
2 2 3/16	**PL3-Y232N**△ **PL3-Y235N**△	}	2 7/16 *61.91*	6 3/4 *171.4*	9 1/16 *230.2*	2 13/16 *71.44*	2 3/8 *60.3*	5/8 *16*	15/16 *23.8*	4 15/16 *125.4*	3 *76.2*	1 5/16 *33.3*	1 23/32 *43.6*	2 1/64 *51.2*	8.0 *3.5*	YG232NL YG235NL
2 1/4 2 3/8 2 7/16	**PL3-Y236N** PL3-Y238N **PL3-Y239N**	}	2 11/16 *68.26*	7 1/2 *190.5*	9 1/2 *241.3*	3 1/16 *77.79*	2 1/2 *63.5*	5/8 *16*	1 1/8 *28.6*	5 3/8 *136.5*	3 5/16 *84.1*	1 1/16 *27.0*	1 27/32 *46.8*	2 7/64 *53.6*	11.6 *5.3*	YG236NL YG238NL YG239NL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm)*.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Pillow Blocks

PL3-W200E

Cast Iron Housing
Low Backing Height
Alignable
Eccentric Cam Locking Collar
Relubricatable
Extended Inner Ring



Dimensions (inches/*mm*)

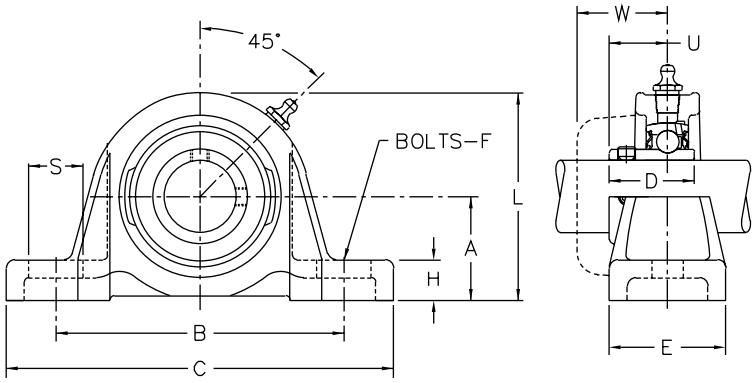
Shaft Diameter inches	Pillow block number	A †	B	C	D	E	F Bolts	H	L	M	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
½ ⅝	**PL3-W2B08E** **PL3-W210E**	1 1/16	3 1/2	4 3/4	1 1/8	1 3/8	3/8	1/2	2 1/8	1 1/8	9/16	7/8	1 13/64	.9	WG2B08EL WG210EL
¾	**PL3-W212E**	1 1/4 *31.75*	3 7/8 98.*4*	5 1/8 *130.2*	1 7/32 *30.96*	1 1/2 *38.1*	3/8 *10*	7/16 *11.1*	2 17/32 *64.3*	1 5/16 *33.3*	11/16 *17.5*	59/64 *23.4*	1 19/64 *32.9*	1.6 *0.7*	WG212EL
7/8 15/16 1	**PL3-W214E** **PL3-W215E** **PL3-W216E**	1 5/16 *33.34*	4 1/8 *104.8*	5 1/2 *139.7*	1 7/32 *30.96*	1 3/4 *44.4*	3/8 *10*	5/8 *15.9*	2 11/16 *68.3*	1 1/2 *38.1*	9/16 *14.3*	59/64 *23.4*	1 9/32 *32.5*	1.8 *0.8*	WG214EL WG215EL WG216EL
1 1/8 1 3/16 1 1/4	**PL3-W218E** **PL3-W219E** **PL3-W2E20E**	1 9/16 *39.69*	4 3/4 *120.6*	6 5/16 *160.3*	1 13/32 *35.72*	1 7/8 *47.6*	1/2 *12*	11/16 *17.5*	3 5/32 *80.2*	1 3/4 *44.4*	3/4 *19.0*	1 3/64 *26.6*	1 29/64 *36.9*	2.5 *1.1*	WG218EL WG219EL WG2E20EL
1 1/4 1 3/8 1 7/16	**PL3-W220E** **PL3-W222E** **PL3-W223E**	1 13/16 *46.04*	4 15/16 *125.4*	6 3/8 *161.9*	1 17/32 *38.89*	1 7/8 *47.6*	1/2 *12*	3/4 *19.0*	3 5/8 *92.1*	2 3/16 *55.6*	13/16 *20.6*	1 5/32 *29.4*	1 35/64 *39.3*	3.7 *1.7*	WG220EL WG222EL WG223EL
1 1/2	**PL3-W224E**	1 15/16 *49.21*	5 3/8 *136.5*	7 1/16 *179.4*	1 23/32 *43.66*	1 7/8 *47.6*	1/2 *12*	3/4 *19.0*	3 15/16 *100.0*	2 3/8 *60.3*	15/16 *23.8*	1 9/32 *32.5*	1 41/64 *41.7*	4.6 *2.1*	WG224EL
1 5/8 1 11/16 1 3/4	**PL3-W226E** **PL3-W227E** **PL3-W228E**	2 1/16 *52.39*	5 5/8 *142.9*	7 1/4 *184.2*	1 23/32 *43.66*	2 *50.8*	1/2 *12*	3/4 *19.0*	4 1/4 *108.0*	2 1/2 *63.5*	7/8 *22.2*	1 9/32 *32.5*	1 21/32 *42.1*	5.0 *2.3*	WG226EL WG227EL WG228EL
1 15/16 2	**PL3-W231E** PL3-W2E32E	2 3/16 *55.56*	6 3/16 *157.2*	7 7/8 *200.0*	1 23/32 *43.66*	2 1/8 *54.0*	5/8 *16*	13/16 *20.6*	4 7/16 *112.7*	2 3/4 *69.8*	15/16 *33.3*	1 9/32 *32.5*	1 25/32 *45.2*	5.5 *2.5*	WG231EL WG2E32EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm).*
◆ Width dimensions for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Pillow Blocks

PL3-S200E

Cast Iron Housing
Low Backing Height
Alignable
Spring Locking
Relubricatable
Extended Inner Ring
Available in Nickel Plate □



Dimensions (inches/*mm*)

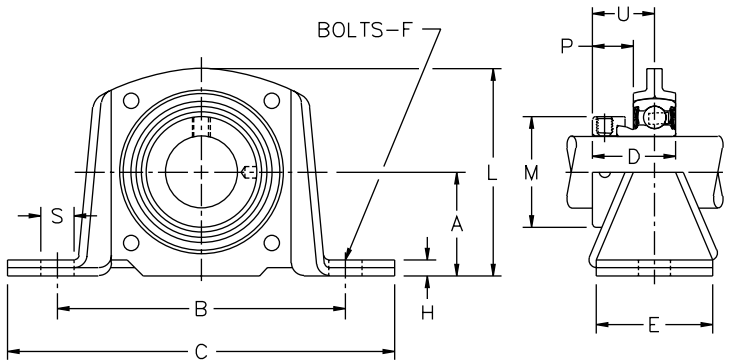
Shaft Diameter inches	Pillow block number	A †	B	C	D	E	F Bolts	H	L	S	U	W ◆	Unit wt. (lbs./kg)	Replacement bearing no.
¾	**PL3-S212E**	1¼ *31.75*	3⅞ *98.4*	5⅛ *130.2*	1⅛ *28.58*	1½ *38.1*	⅜ *10*	7/16 *11.1*	2 17/32 *64.3*	11/16 *17.5*	¾ *19.0*	1 19/64 *32.9*	1.4 *.64*	SG212EL
⅞	PL3-S214E												1.9	SG214EL
15/16	PL3-S215E	1 5/16	4⅛	5½	1 3/16	1¾	⅜	⅝	2 11/16	9/16	13/16	1 9/32	1.8	SG215EL
1	**PL3-S216E**												1.8	SG216EL
		33.34	*104.8*	*139.7*	*30.17*	*44.4*	*10*	*15.9*	*68.3*	*14.3*	*20.6*	*32.5*	*.82*	
1⅛	PL3-S218E												2.6	SG218EL
1 3/16	**PL3-S219E**	1 9/16	4¾	6 5/16	1 11/32	1⅞	½	1 1/16	3 5/32	¾	61/64	1 29/64	2.6	SG219EL
1¼	**PL3-S2E20E**												2.5	SG2E20EL
		39.69	*120.6*	*160.3*	*34.13*	*47.6*	*12*	*17.5*	*80.2*	*19.0*	*24.2*	*36.9*	*1.14*	
1¼	**PL3-S220E**												3.4	SG220EL
1⅜	PL3-S222E	1 13/16	4 15/16	6⅜	1 9/16	1⅞	½	¾	3⅝	13/16	1 7/64	1 35/64	3.3	SG222EL
1 7/16	**PL3-S223E**												3.3	SG223EL
		46.04	*125.4*	*161.9*	*39.67*	*47.6*	*12*	*19.0*	*92.1*	*20.6*	*28.2*	*39.3*	*1.50*	
1½	**PL3-S224E**	1 15/16 *49.21*	5⅜ *136.5*	7 1/16 *179.4*	1 11/16 *42.87*	1⅞ *47.6*	½ *12*	¾ *19.0*	3 15/16 *100.0*	15/16 *23.8*	1 13/64 *30.6*	1 41/64 *41.7*	4.2 *1.91*	SG224EL
1⅝	PL3-S226E												5.1	SG226EL
1 11/16	**PL3-S227E**	2 1/16	5⅝	7¼	1 49/64	2	½	¾	4¼	⅞	1 15/64	1 21/32	5.0	SG227EL
1¾	**PL3-S228E**												5.0	SG228EL
		52.39	*142.9*	*184.2*	*44.85*	*50.8*	*12*	*19.0*	*108.0*	*22.2*	*31.4*	*42.1*	*2.27*	
1 15/16	**PL3-S231E**	2 3/16 *55.56*	6 3/16 *157.2*	7⅞ *200.0*	1 51/64 *45.64*	2⅛ *54.0*	⅝ *16*	13/16 *20.6*	4 7/16 *112.7*	15/16 *23.8*	1 17/64 *32.1*	1 25/32 *45.2*	5.7 *2.59*	SG231EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
□ Nickel plated housings available add Suffix K75, i.e. PL3-S212EK75.
Nickel plated units are furnished prelubricated with food grade grease and black oxide coated inner and outer rings.
† Tolerance, +.000" –.010" (*+0.00 mm −0.25 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Pillow Blocks

PS-W200E, PS-Y200N

Formed Steel Housing
Standard Backing Height
Alignable
Eccentric Cam Locking Collar
Non-relubricatable
Extended and Wide Inner Ring



Dimensions (inches/*mm*)

Shaft Diameter inches	Pillow block number		A	B	C	D		E	F Bolts	H	L	M	S	U		Radial load rating of housing lbs/ *newtons*	Unit wt. (lbs./kg.)	
	Extended Inner Ring	Wide Inner Ring				W200	Y200							W200	Y200		Extended inner ring	Wide inner ring
½	PS-W2B08E	PS-Y2B08N	1 3/16	3½	4⅝	1⅛	1 15/32	1 1/16	⅜	7/32	2 11/32	1⅛	33/64	⅞	59/64	600	.7	.9
⅝	PS-W210E	PS-Y210N	*30.2*	*88.9*	*117.5*	*28.58*	*37.31*	*27.0*	*10*	*5.6*	*59.5*	*28.6*	*13.1*	*22.2*	*23.4*	*2 670*	*0.3*	*0.4*
11/16	– – – – – –	PS-Y211N																
¾	**PS-W212E**	PS-Y212N	1 5/16	3⅞	5⅛	1 7/32	1 23/32	1⅛	⅜	7/32	2⅝	1 5/16	9/16	59/64	1 3/64	700	.9	1.1
			33.3	*98.4*	*130.2*	*30.96*	*43.66*	*28.6*	*10*	*5.6*	*66.7*	*33.3*	*14.3*	*23.4*	*26.6*	*3 110*	*0.4*	*0.5*
⅞	PS-W214E	PS-Y214N	1 7/16	4 1/16	5⅜	1 7/32	1¾	1 7/32	⅜	7/32	2 55/64	1½	½	59/64	1 1/16	800	1.1	1.3
15/16	PS-W215E	PS-Y215N	*36.5*	*103.2*	*136.5*	*30.96*	*44.45*	*31.0*	*10*	*5.6*	*72.6*	*38.1*	*12.7*	*23.4*	*27.0*	*3 560*	*0.5*	*0.6*
1	**PS-W216E**	PS-Y216N																
1⅛	PS-W218E	PS-Y218N	1 11/16	4 49/64	6 5/16	1 13/32	1 29/32	1 7/16	½	5/16	3 5/16	1¾	49/64	1 3/64	1 3/16	985	1.7	2.0
1 3/16	**PS-W219E**	PS-Y219N	*42.9*	*121.0*	*160.3*	*35.72*	*48.42*	*36.5*	*12*	*7.9*	*84.1*	*44.4*	*19.4*	*26.6*	*30.2*	*4 380*	*0.8*	*0.9*
1¼	**PS-W2E20E**	PS-Y2E20N																
1¼	PS-W220E	PS-Y220N	1⅞	5 5/64	6 15/16	1 7/32	2 1/64	1⅝	½	5/16	3¾	2 3/16	49/64	1 5/32	1 9/32	1300	2.4	2.7
1⅜	PS-W222E	PS-Y222N	*47.6*	*129.0*	*176.2*	*38.89*	*51.20*	*41.3*	*12*	*7.9*	*95.2*	*55.6*	*19.4*	*29.4*	*32.5*	*5 780*	*1.1*	*1.2*
1 7/16	**PS-W223E**	PS-Y223N																

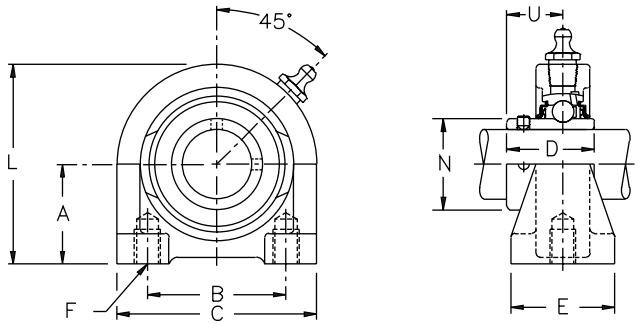
Bold face items are normally available from stock; please consult for availability of non-stock items.
Also available with U200N wide inner ring. Replace "Y" with "U"; i.e. PS-U2B08N. For dimensions D and U, see page B-30.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Pillow Blocks

PT3-U200N

Cast Iron Housing
Standard Backing Height
Tapped Base
Alignable

Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

Shaft Diameter	Pillow block number ■	A †	B	C	D	E	F Tap	F Min. Depth	L	N	U	Unit wt. (lbs./kg)	Bearing no.
¾	**PT3-U212N**	1 5/16 *33.34*	2 *50.80*	2 7/8 *73.0*	1 9/32 *32.54*	1 1/2 *38.1*	3/8-16 –	1/2 *12.7*	2 19/32 *65.9*	1 1/8 *28.6*	3/4 *19.0*	1.2 *.54*	UG212NL
7/8	**PT3-U214N△**											1.5	UG214NL
15/16	**PT3-U215N△**	1 7/16	2	2 7/8	1 23/64	1 1/2	3/8-16	1/2	2 7/8	1 5/16	51/64	1.4	UG215NL
1	**PT3-U216N△**											1.4	UG216NL
		36.51	*50.80*	*73.0*	*34.53*	*38.1*	–	*12.7*	*73.0*	*33.3*	*20.2*	*.64*	
1 1/8	**PT3-U218N**											2.5	UG218NL
1 3/16	**PT3-U219N**	1 11/16	3	4	1 9/16	1 1/2	7/16-14	5/8	3 5/16	1 19/32	61/64	2.5	UG219NL
1 1/4	**PT3-U2E20N**											2.4	UG2E20NL
		42.86	*76.20*	*101.6*	*39.69*	*38.1*	–	*15.9*	*84.1*	*40.5*	*24.2*	*1.09*	
1 1/4	**PT3-U220N△**											3.5	UG220NL
1 3/8	**PT3-U222N△**	1 7/8	3 1/4	4 13/32	1 49/64	2	1/2-13	3/4	3 11/16	1 27/32	1 7/64	3.4	UG222NL
1 7/16	**PT3-U223N△**											3.3	UG223NL
		47.62	*82.55*	*111.9*	*44.85*	*50.8*	–	*19.0*	*93.7*	*46.9*	*28.2*	*1.50*	
1 11/16	**PT3-U227N**	2 1/8	3 3/4	5	2 1/32	2	1/2-13	7/8	4 1/4	2 9/32	1 15/64	4.9	UG227NL
1 3/4	**PT3-U228N**	*53.98*	*95.25*	*127.0*	*51.59*	*50.8*	*M12x1.75*	*22.2*	*108.0*	*57.94*	*31.4*	*2.27*	UG228NL
1 15/16	**PT3-U231N△**	2 1/4	4	5 7/16	2 3/32	2	5/8-11	7/8	4 1/2	2 15/32	1 17/64	5.6	UG231NL
2	**PT3-U2E32N△**											5.5	UG2E32NL
		57.15	*101.60*	*138.1*	*48.42*	*50.8*	–	*22.2*	*114.3*	*62.7*	*32.1*	*2.50*	

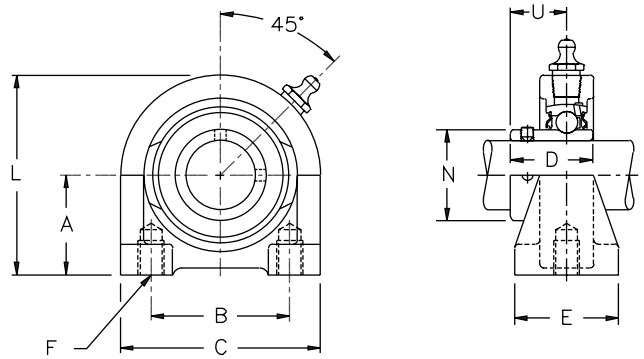
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, 1/8" PT.
■ N lip seals standard. H labyrinth seals available.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm)*.
△ Available with E3 triple lip seals.

Intermediate Ball Bearing Pillow Blocks

PT3-S200E

Cast Iron Housing
Standard Backing Height
Alignable

Spring Locking
Relubricatable
Extended Inner Ring
Available in Nickel Plate□
Available in DURA-KLEAN



Dimensions (inches/*mm*)

Shaft Diameter inches	Pillow block number	A †	B	C	D	E	F Tap	F Min. Depth	L	N	U	Unit Wt. (lbs./kg)	Bearing no.
¾	**PT3-S212E**	1 5/16 *33.34*	2 *50.80*	2 7/8 *73.0*	1 1/8 *28.58*	1 1/2 *38.1*	3/8-16 –	1/2 *12.7*	2 19/32 *65.9*	1 1/8 *28.6*	3/4 *19.0*	1.0 *.45*	SG212EL
7/8	**PT3-S214E**											1.3	SG214EL
15/16	**PT3-S215E**	1 7/16	2	2 7/8	1 3/16	1 1/2	3/8-16	1/2	2 7/8	1 5/16	13/16	1.3	SG215EL
1	**PT3-S216E**											1.2	SG216EL
		36.51	*50.80*	*73.0*	*30.17*	*38.1*	–	*12.7*	*73.0*	*33.3*	*20.6*	*.54*	
1 1/8	**PT3-S218E**											2.3	SG218EL
1 3/16	**PT3-S219E**	1 11/16	3	4	1 11/32	1 1/2	7/16-14	5/8	3 5/16	1 19/32	61/64	2.3	SG219EL
1 1/4	**PT3-S2E20E**											2.2	SG2E20EL
		42.86	*76.20*	*101.6*	*34.13*	*38.1*	–	*15.9*	*84.1*	*40.5*	*24.2*	*1.00*	
1 1/4	**PT3-S220E**											3.1	SG220EL
1 3/8	**PT3-S222E**	1 7/8	3 1/4	4 13/32	1 9/16	1 7/8	1/2-13	3/4	3 11/16	1 27/32	1 7/64	3.1	SG222EL
1 7/16	**PT3-S223E**											3.0	SG223EL
		47.62	*82.55*	*111.9*	*39.67*	*47.6*	–	*19.0*	*93.7*	*46.9*	*28.2*	*1.36*	
1 11/16	**PT3-S227E**	2 1/8	3 3/4	5	1 49/64	2	1/2-13	7/8	4 1/4	2 9/32	1 15/64	4.8	SG227EL
1 3/4	**PT3-S228E**	*53.98*	*95.25*	*127.0*	*44.85*	*50.8*	–	*22.2*	*108.0*	*57.94*	*31.4*	*2.18*	SG228EL
1 15/16	**PT3-S231E**	2 1/4 *57.15*	4 *101.60*	5 7/16 *138.1*	1 11/16 *42.87*	2 *50.8*	5/8-11 –	7/8 *22.2*	4 1/2 *114.3*	2 15/32 *62.7*	1 13/64 *30.6*	5.3 *2.36*	SG231EL

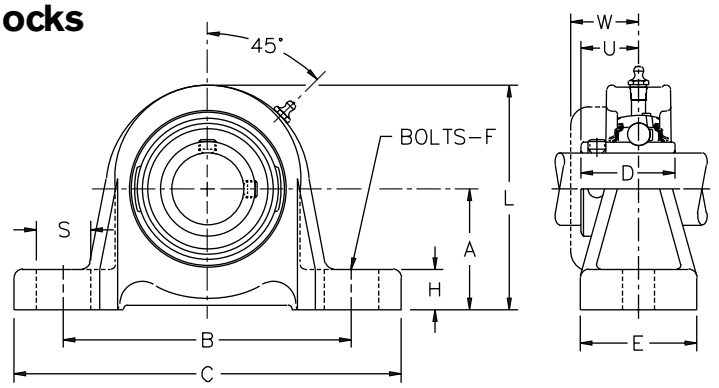
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, 1/8" PT.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm).*
□ Nickel plated housings available add Suffix K75, i.e. PL3-S212EK75. Nickel plated units are furnished prelubricated with food grade grease and black oxide coated inner and outer rings.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Pillow Blocks

PH3-U200N

Cast Iron Housing
High Backing Height
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

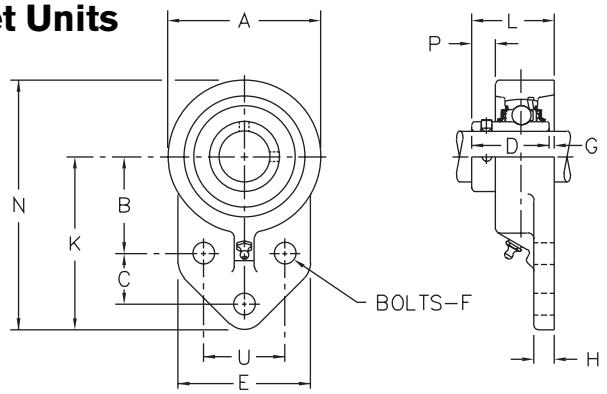
Shaft Diameter		Pillow block number ■	A †	B	C	D	E	F Bolts	H	L	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals													
	1⅛	PH3-U218N												3.8	UG218NL
	1³⁄₁₆	**PH3-U219N**	2	5½	7	1⁹⁄₁₆	1¹⁵⁄₁₆	½	1¹⁄₁₆	3⅝	⅞	6¹⁄₆₄	1²⁵⁄₆₄	3.7	UG219NL
	1¼	**PH3-U2E20N**												3.7	UG2E20NL
30		*PH3-U2M30N*	*50.80*	*139.7*	*177.8*	*39.69*	*49.2*	*12*	*17.5*	*92.1*	*22.2*	*24.2*	*36.9*	*1.6*	*UG2M30NL*
	1¼	PH3-U220N												4.8	UG220NL
	1⅜	PH3-U222N	2⅜	6¼	8¼	1⁴⁹⁄₆₄	2½	⅝	¾	4¼	1¼	1⁷⁄₆₄	1³⁵⁄₆₄	4.7	UG222NL
	1⁷⁄₁₆	**PH3-U223N**												4.7	UG223NL
35		*PH3-U2M35N*	*60.32*	*158.8*	*209.6*	*44.85*	*63.5*	*16*	*19.0*	*108.0*	*31.8*	*28.2*	*39.3*	*2.2*	*UG2M35NL*
	1⅝	PH3-U226N												7.9	UG226NL
	1¹¹⁄₁₆	PH3-U227N	2⅜	6⅝	8¼	2¹⁄₃₂	2⅜	⅝	¾	4⁹⁄₁₆	¹⁵⁄₁₆	1¹⁵⁄₆₄	1²¹⁄₃₂	7.9	UG227NL
	1¾	**PH3-U228N**												7.8	UG228NL
45		*PH3-U2M45N*	*60.32*	*168.3*	*209.6*	*51.59*	*60.3*	*16*	*19.0*	*115.9*	*23.8*	*31.4*	*42.1*	*3.5*	*UG2M45NL*
	1¹⁵⁄₁₆	PH3-U231N	2¾	8¹⁄₁₆	10⅛	2³⁄₃₂	2⅝	⅝	⅞	5	1¼	1¹⁷⁄₆₄	1⁵³⁄₆₄	9.5	UG231NL
50		*PH3-U2M50N*	*69.85*	*204.8*	*257.2*	*53.18*	*66.7*	*16*	*22.2*	*127.0*	*31.8*	*32.1*	*46.4*	*4.2*	*UG2M50NL*
	2	PH3-U232N	3⅛	8⅞	11⅜	2¼	3	⅝	⅞	5⅝	1⅛	1¹³⁄₃₂	2¹⁄₆₄	13.2	UG232NL
	2³⁄₁₆	PH3-U235N												13.1	UG235NL
55		*PH3-U2M55N*	*79.38*	*225.4*	*288.9*	*57.15*	*76.2*	*16*	*22.2*	*142.9*	*28.6*	*35.7*	*51.2*	*5.9*	*UG2M55NL*
	2¼	PH3-U236N												14.4	UG236NL
	2⅜	PH3-U238N	3⅛	8⅞	11⅜	2½	3	¾	⅞	5⅞	1¼	1⁹⁄₁₆	2⁷⁄₆₄	14.4	UG238NL
	2⁷⁄₁₆	PH3-U239N												14.3	UG239NL
60		*PH3-U2M60N*	*79.38*	*225.4*	*288.9*	*63.50*	*76.2*	*20*	*22.2*	*149.2*	*31.8*	*39.7*	*53.6*	*6.5*	*UG2M60NL*

Please consult for availability.
Lubrication fitting tap size, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
† Tolerance, +.000" –.010" *(+0.00 mm −0.25 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Flanged Bracket Units

FB3-U200N

Cast Iron Housing
3-bolt Mounting
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

Shaft Diameter *mm*	Shaft Diameter inches	Flanged unit number	A	B	C	D	E	F Bolts	G	H	K	L	N	P	U	Unit wt. (lbs./kg)	Bearing no.
	¾	**FB3-U212N**	2½	1 11/16	⅞	1 9/32	2⅜	⅜	1/16	5/16	3	1 11/32	4¼	1 1/32	1½	1.4	UG212NL
20		FB3-U2M20N	*63.5*	*42.9*	*22.2*	*32.5*	*60.3*	*10*	*1.6*	*7.9*	*76.2*	*34.1*	*108.0*	*8.7*	*38.1*	*.64*	*UG2M20NL*
	⅞	**FB3-U214N**△														1.9	UG214NL
	15/16	**FB3-U215N**△	2¾	1 13/16	1⅛	1 23/64	2½	⅜	3/32	⅜	3⅜	1 29/64	4¾	19/64	1⅝	1.9	UG215NL
	1	**FB3-U216N**△														1.8	UG216NL
25		*FB3-U2M25N*	*69.8*	*46.0*	*28.6*	*34.53*	*63.5*	*10*	*2.4*	*9.5*	*85.7*	*38.9*	*120.6*	*7.5*	*41.3*	*0.9*	*UG2M25NL*
	1⅛	**FB3-U218N**														2.6	UG218NL
	1 3/16	**FB3-U219N**	3¼	2 1/16	1¼	1 9/16	2¾	⅜	1/16	⅜	3¾	1⅝	5⅜	⅜	1⅞	2.5	UG219NL
	1¼	**FB3-U2E20N**														2.5	UG2E20NL
30		*FB3-U2M30N*	*82.6*	*52.3*	*31.8*	*39.69*	*69.8*	*10*	*1.6*	*9.5*	*95.2*	*43.7*	*136.5*	*9.5*	*47.6*	*1.1*	*UG2M30NL*
	1¼	**FB3-U220N**△														3.5	UG220NL
	1⅜	**FB3-U222N**△	3¾	2⅜	1¼	1 49/64	3¼	½	5/32	½	4¼	1 59/64	6⅛	31/64	2	3.4	UG222NL
	1 7/16	**FB3-U223N**△														3.4	UG223NL
35		*FB3-U2M35N*	*95.2*	*60.3*	*31.8*	*44.85*	*82.6*	*12*	*4.0*	*12.7*	*108.0*	*48.8*	*155.6*	*12.3*	*50.8*	*1.5*	*UG2M35NL*

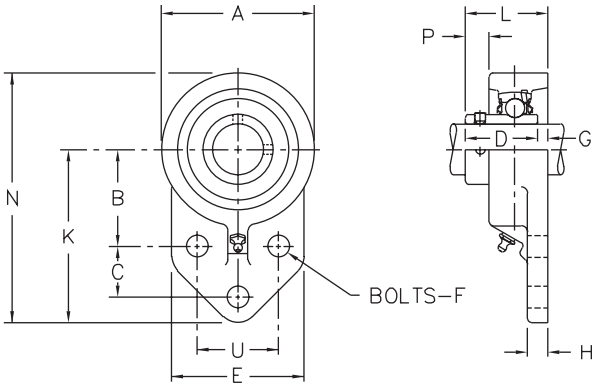
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ¼"-28 UNF.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Flanged Bracket Units

FB3-S200E

Cast Iron Housing
3-bolt Mounting
Alignable
Spring Locking
Relubricatable
Extended Inner Ring
Available in Nickel Plate □
Available in DURA-KLEAN



Dimensions (inches/*mm*)

Shaft Diameter Inches	Flanged unit number	A	B	C	D	E	F Bolts	G	H	K	L	N	P	U	Unit wt. (lbs./kg)	Bearing no.
¾	**FB3-S212E**	2½	1 11/16	⅞	1⅛	2⅜	⅜	7/32	5/16	3	1 11/32	4¼	1 1/32	1½	1.2	SG212EL
		63.5	*42.9*	*22.2*	*28.58*	*60.3*	*10*	*1.6*	*7.9*	*76.2*	*34.1*	*108.0*	*8.7*	*38.1*	*.54*	
⅞	**FB3-S214E**														1.7	SG214EL
15/16	**FB3-S215E**	2¾	1 13/16	1⅛	1 3/16	2½	⅜	9/32	⅜	3⅜	1 29/64	4¾	5/16	1⅝	1.7	SG215EL
1	**FB3-S216E**														1.6	SG216EL
		69.8	*46.0*	*28.6*	*30.17*	*63.5*	*10*	*2.4*	*9.5*	*85.7*	*38.9*	*120.6*	*7.5*	*41.3*	*0.72*	
1⅛	**FB3-S218E**														2.2	SG218EL
1 3/16	**FB3-S219E**	3¼	2 1/16	1¼	1 11/32	2¾	⅜	9/32	⅜	3¾	1⅝	5⅜	⅜	1⅞	2.2	SG219EL
1¼	**FB3-S2E20E**														2.1	SG2E20EL
		82.6	*52.3*	*31.8*	*34.13*	*69.8*	*10*	*1.6*	*9.5*	*95.2*	*43.7*	*136.5*	*9.5*	*47.6*	*0.95*	
1¼	**FB3-S220E**														3.2	SG220EL
1⅜	**FB3-S222E**	3¾	2⅜	1¼	1 9/16	3¼	½	23/64	½	4¼	1 59/64	6⅛	31/64	2	3.2	SG222EL
1 7/16	**FB3-S223E**														3.1	SG223EL
		95.2	*60.3*	*31.8*	*39.67*	*82.6*	*12*	*4.0*	*12.7*	*108.0*	*48.8*	*155.6*	*12.3*	*50.8*	*1.41*	

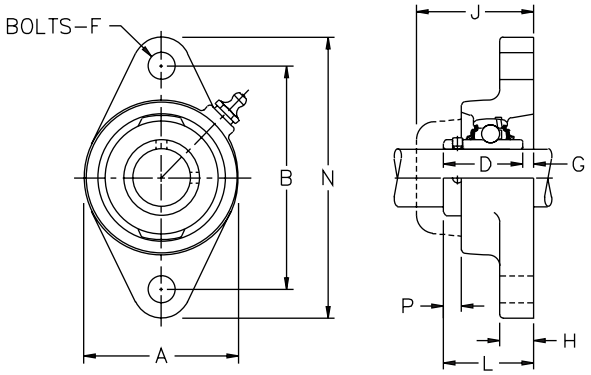
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ¼"-28 UNF.
□ Nickel plated housings; add suffix K75, (i.e. FB3-S212EK75).
Nickel plated units are furnished prelubricated with food grade grease and black oxide coated inner and outer rings.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Flanged Units

FX3-U200N

Cast Iron Housing
2-bolt Mounting
Alignable
Spring Locking
Relubricatable
Wide Inner Ring
Available in Nickel Plate □



Dimensions (inches/*mm*)

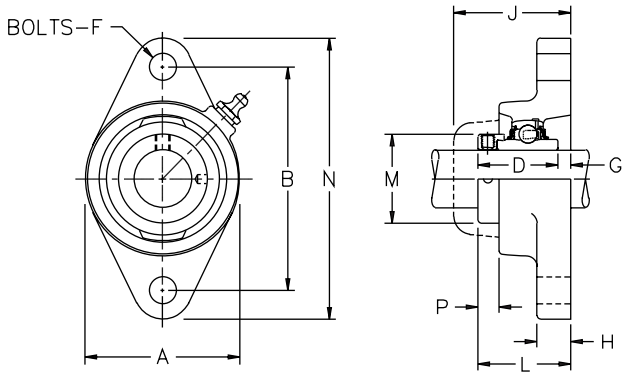
Shaft Diameter		Flanged unit number ■	A	B	D	F Bolts	G	H	J ◆	L	N	P	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals												
	½	**FX3-U2B08N**											1.0	UG2B08NL
	⅝	**FX3-U210N**	2 1/8	3	1 3/32	3/8	5/32	½	1 25/32	1 1/4	3 7/8	¼	.9	UG210NL
	11/16	FX3-U211N											.9	UG211NL
17		*FX3-U2M17N*	*54.0*	*76.20*	*27.78*	*10*	*4.0*	*12.7*	*45.2*	*31.8*	*98.4*	*6.4*	*0.5*	*UG2M17NL*
	¾	**FX3-U212N**	2 7/16	3 17/32	1 9/32	3/8	13/64	9/16	2 1/64	1 31/64	4 13/32	9/32	1.2	UG212NL
20		*FX3-U2M20N*	*61.9*	*89.69*	*32.54*	*10*	*5.2*	*14.3*	*51.2*	*37.7*	*111.9*	*7.1*	*0.6*	*UG2M20NL*
	⅞	**FX3-U214N**△											1.6	UG214NL
	15/16	**FX3-U215N**△	2 11/16	3 57/64	1 23/64	7/16	3/16	19/32	2	1 35/64	4 29/32	19/64	1.6	UG215NL
	1	**FX3-U216N**△											1.5	UG216NL
25		*FX3-U2M25N*	*68.3*	*98.82*	*34.53*	*10*	*4.8*	*15.1*	*50.8*	*39.3*	*124.6*	*7.5*	*0.7*	*UG2M25NL*
	1⅛	**FX3-U218N**											2.5	UG218NL
	1 3/16	**FX3-U219N**	3 3/16	4 19/32	1 9/16	7/16	11/64	19/32	2 15/64	1 47/64	5 19/32	27/64	2.4	UG219NL
	1¼	**FX3-U2E20N**											2.4	UG2E20NL
30		*FX3-U2M30N*	*81.0*	*116.68*	*39.69*	*10*	*4.4*	*15.1*	*56.7*	*44.0*	*142.1*	*10.7*	*1.0*	*UG2M30NL*
	1¼	**FX3-U220N**△											3.1	UG220NL
	1⅜	**FX3-U222N**△	3 5/8	5 1/8	1 49/64	½	5/32	5/8	2 23/64	1 59/64	6 1/8	33/64	3.0	UG222NL
	1 7/16	**FX3-U223N**△											3.0	UG223NL
35		*FX3-U2M35N*	*92.1*	*130.18*	*44.85*	*12*	*4.0*	*15.9*	*59.9*	*48.8*	*155.6*	*13.1*	*1.4*	*UG2M35NL*
	1½	**FX3-U224N**△	4	5 21/32	1 29/32	½	11/64	5/8	2 35/64	2 5/64	6 25/32	½	4.2	UG224NL
40		*FX3-U2M40N*	*101.6*	*143.67*	*48.42*	*12*	*4.4*	*15.9*	*64.7*	*52.8*	*172.2*	*12.7*	*1.9*	*UG2M40NL*
	1⅝	**FX3-U226N**△											5.1	UG226NL
	1 11/16	**FX3-U227N**△	4¼	5 27/32	2 1/32	½	7/64	5/8	2 9/16	2 9/64	7 3/32	35/64	5.1	UG227NL
	1¾	**FX3-U228N**△											5.0	UG228NL
45		*FX3-U2M45N*	*108.0*	*148.30*	*51.59*	*12*	*2.8*	*15.9*	*65.1*	*54.4*	*180.2*	*13.9*	*2.2*	*UG2M45NL*
	1 15/16	**FX3-U231N**△	4 9/16	6 3/16	2 3/32	9/16	19/64	¾	2 57/64	2 25/64	7 7/16	9/16	6.3	UG231NL
	2	FX3-U2E32N△											6.2	UG2E32NL
50		*FX3-U2M50N*	*115.9*	*157.16*	*53.18*	*14*	*7.5*	*19.0*	*73.4*	*60.7*	*188.9*	*14.3*	*2.8*	*UG2M50NL*
	2	**FX3-U232N**△	5	7¼	2¼	⅝	13/32	13/16	3¼	2 21/32	8½	21/32	7.4	UG232NL
	2 3/16	**FX3-U235N**△											7.3	UG235NL
55		*FX3-U2M55N*	*127.0*	*184.15*	*57.15*	*16*	*10.3*	*20.6*	*82.6*	*67.5*	*215.9*	*16.7*	*3.3*	*UG2M55NL*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" *(17 mm)* and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
□ Nickel plated housings available through size 235; add suffix K75, i.e. FX3-U2B08NK75.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Flanged Units

FX3-Y200N

Cast Iron Housing
2-bolt Mounting
Alignable
Eccentric Cam Locking Collar
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

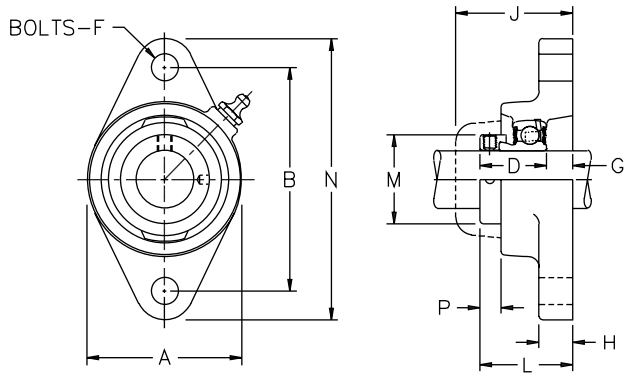
Shaft Diameter inches	Flanged unit number ■ / Lip seals	A	B	D	F Bolts	G	H	J ◆	L	M	N	P	Unit wt. (lbs./kg)	Bearing no.
½ ⅝ 1 1/16	**FX3-Y2B08N** **FX3-Y210N** FX3-Y211N	2⅛ *54.0*	3 *76.20*	1 15/32 *37.31*	⅜ *10*	1/16 *1.6*	½ *12.7*	1 25/32 *45.2*	1 17/32 *38.9*	1⅛ *28.6*	3⅞ *98.4*	33/64 *13.1*	1.0 *0.5*	YG2B08NL YG210NL YG211NL
¾	**FX3-Y212N**	2 7/16 *61.9*	3 17/32 *89.69*	1 23/32 *43.66*	⅜ *10*	1/16 *1.6*	9/16 *14.3*	2 1/64 *51.2*	1 51/64 *45.6*	1 5/16 *33.3*	4 13/32 *111.9*	37/64 *14.7*	1.3 *0.6*	YG212NL
⅞ 15/16 1	**FX3-Y214N△** **FX3-Y215N△** **FX3-Y216N△**	2 11/16 *68.3*	3 57/64 *98.82*	1¾ *44.45*	7/16 *10*	1/16 *1.6*	19/32 *15.1*	2 *50.8*	1 13/16 *46.0*	1½ *38.1*	4 29/32 *124.6*	35/64 *13.9*	1.7 *0.8*	YG214NL YG215NL YG216NL
1⅛ 1 3/16 1¼	**FX3-Y218N** **FX3-Y219N** **FX3-Y2E20N**	3 3/16 *81.0*	4 19/32 *116.68*	1 29/32 *48.42*	7/16 *10*	1/16 *1.6*	19/32 *15.1*	2 15/64 *56.7*	1 31/32 *50.0*	1¾ *44.4*	5 19/32 *142.1*	21/32 *16.7*	2.5 *1.1*	YG218NL YG219NL YG2E20NL
1¼ 1⅜ 1 7/16	**FX3-Y220N△** **FX3-Y222N△** **FX3-Y223N△**	3⅝ *92.1*	5⅛ *130.18*	2 1/64 *51.20*	½ *12*	1/16 *1.6*	⅝ *15.9*	2 23/64 *59.9*	2 5/64 *52.8*	2 3/16 *55.6*	6⅛ *155.6*	11/16 *17.5*	3.3 *1.5*	YG220NL YG222NL YG223NL
1½	**FX3-Y224N△**	4 *101.6*	5 21/32 *143.67*	2 7/32 *56.36*	½ *12*	1/16 *1.6*	⅝ *15.9*	2 35/64 *65.1*	2 9/32 *57.9*	2⅜ *63.5*	6 25/32 *180.2*	45/64 *17.5*	4.5 *2.5*	YG224NL
1⅝ 1 11/16 1¾	**FX3-Y226N△** **FX3-Y227N△** **FX3-Y228N△**	4¼ *108.0*	5 27/32 *148.3*	2 7/32 *56.36*	½ *12*	1/16 *1.6*	⅝ *15.9*	2 9/16 *64.7*	2 9/32 *57.9*	2½ *60.3*	7 3/32 *172.2*	11/16 *17.8*	5.4 *2.5*	YG226NL YG227NL YG228NL
1 15/16 2	**FX3-Y231N△** FX3-Y2E32N△	4 9/16 *115.9*	6 3/16 *157.16*	2 15/32 *62.71*	9/16 *14*	5/32 *4.0*	¾ *19.0*	2 57/64 *73.4*	2⅝ *66.7*	2¾ *69.8*	7 7/16 *188.9*	25/32 *19.8*	6.6 *3.0*	YG231NL YG2E32NL
2 2 3/16	**FX3-Y232N△** **FX3-Y235N△**	5 *127.0*	7¼ *184.15*	2 13/16 *71.44*	⅝ *16*	5/32 *4.0*	13/16 *20.6*	3¼ *82.6*	2 31/32 *75.4*	3 *76.2*	8½ *215.9*	31/32 *24.6*	8.0 *3.6*	YG232NL YG235NL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 1 1/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Flanged Units

FX3-W200E

Cast Iron Housing
2-bolt Mounting
Alignable
Eccentric Cam Locking Collar
Relubricatable
Extended Inner Ring



Dimensions (inches/*mm*)

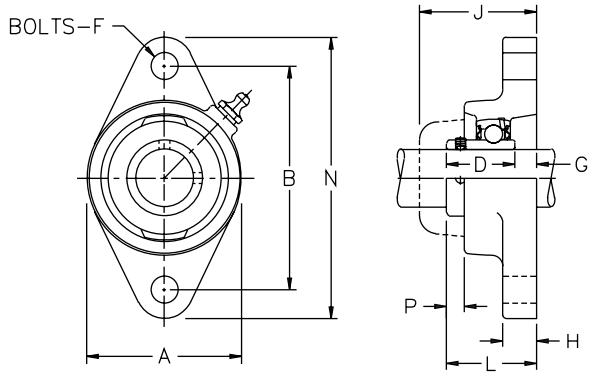
Shaft Diameter inches	Flanged unit number	A	B	D	F Bolts	G	H	J ◆	L	M	N	P	Unit wt. (lbs./kg)	Bearing no.
½	**FX3-W2B08E**	2⅛	3	1⅛	⅜	23/64	½	1 25/32	1 31/64	1⅛	3⅞	15/32	.6	WG2B08EL
⅝	**FX3-W210E**	*54.0*	*76.20*	*28.58*	*10*	*9.1*	*12.7*	*45.2*	*37.7*	*28.6*	*98.4*	*11.9*	*0.3*	WG210EL
¾	**FX3-W212E**	2 7/16	3 17/32	1 7/32	⅜	7/16	9/16	2 1/64	1 21/32	1 5/16	4 13/32	29/64	1.0	WG212EL
		61.9	*89.69*	*30.96*	*10*	*11.1*	*14.3*	*51.2*	*42.1*	*33.3*	*111.9*	*11.5*	*0.4*	
⅞	**FX3-W214E**	2 11/16	3 57/64	1 7/32	7/16	29/64	19/32	2	1 43/64	1½	4 29/32	27/64	1.4	WG214EL
15/16	**FX3-W215E**	*68.3*	*98.82*	*30.96*	*10*	*11.5*	*15.1*	*50.8*	*42.5*	*38.1*	*124.6*	*10.7*	*0.6*	WG215EL
1	**FX3-W216E**													WG216EL
1⅛	**FX3-W218E**	3 3/16	4 19/32	1 13/32	7/16	27/64	19/32	2 15/64	1 53/64	1¾	5 19/32	33/64	2.1	WG218EL
1 3/16	**FX3-W219E**	*81.0*	*116.68*	*35.72*	*10*	*10.7*	*15.1*	*56.7*	*64.4*	*44.4*	*142.1*	*13.1*	*1.0*	WG219EL
1¼	**FX3-W2E20E**													WG2E20EL
1¼	**FX3-W220E**	3⅝	5⅛	1 17/32	½	7/16	⅝	2 23/64	1 31/32	2 3/16	6⅛	9/16	3.0	WG220EL
1⅜	**FX3-W222E**	*92.1*	*130.18*	*38.89*	*12*	*11.1*	*15.9*	*59.9*	*50.0*	*55.6*	*155.6*	*14.3*	*1.4*	WG222EL
1 7/16	**FX3-W223E**													WG223EL
1½	**FX3-W224E**	4	5 21/32	1 23/32	½	15/32	⅝	2 35/64	2 3/16	2⅜	6 25/32	39/64	4.0	WG224EL
		101.6	*143.67*	*43.66*	*12*	*11.9*	*15.9*	*64.7*	*55.6*	*60.3*	*172.2*	*15.5*	*1.8*	
1⅝	**FX3-W226E**	4¼	5 27/32	1 23/32	½	15/32	⅝	2 9/16	2 3/16	2½	7 3/32	19/32	4.7	WG226EL
1 11/16	**FX3-W227E**	*108.0*	*148.43*	*43.66*	*12*	*11.9*	*15.9*	*65.1*	*55.6*	*63.5*	*180.2*	*15.1*	*2.1*	WG227EL
1¾	**FX3-W228E**													WG228EL
1 15/16	**FX3-W231E**	4 9/16	6 3/16	1 23/32	9/16	1 1/16	¾	2 57/64	2 13/32	2¾	7 7/16	9/16	5.7	WG231EL
2	FX3-W2E32E	*115.9*	*157.16*	*43.66*	*14*	*17.5*	*19.0*	*73.4*	*61.1*	*69.8*	*188.9*	*14.3*	*2.6*	WG2E32EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 1 1/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Flanged Units

FX3-S200E

Cast Iron Housing
2-bolt Mounting
Alignable
Spring Locking
Relubricatable
Extended Inner Ring
Available in Nickel Plate □
Available in DURA-KLEAN ■



Dimensions (inches/*mm*)

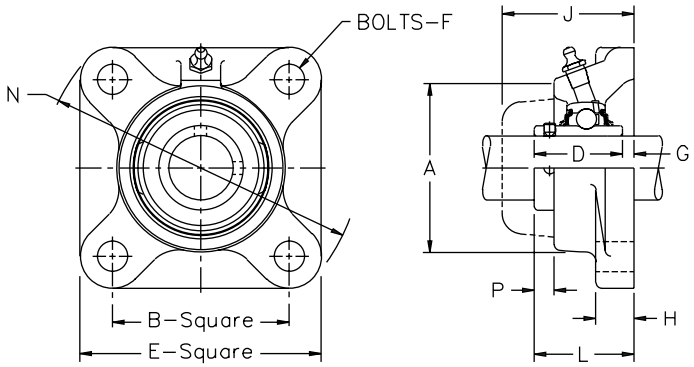
Shaft Diameter inches	Flanged unit number	A	B	D	F Bolts	G	H	J ◆	L	N	P	Unit wt. (lbs./kg)	Replacement bearing no.
¾	**FX3-S212E**	2 7/16 *61.9*	3 17/32 *89.69*	1 1/8 *28.58*	3/8 *10*	23/64 *9.1*	9/16 *14.3*	2 1/64 *51.2*	1 31/64 *37.7*	4 13/32 *111.9*	9/32 *7.1*	1.1 *.50*	SG212EL
⅞	**FX3-S214E**											1.5	SG214EL
15/16	**FX3-S215E**	2 11/16	3 57/64	1 3/16	7/16	3/8	19/32	2	1 9/16	4 29/32	5/16	1.5	SG215EL
1	**FX3-S216E**											1.4	SG216EL
		68.3	*98.82*	*30.17*	*10*	*9.5*	*15.1*	*50.8*	*39.7*	*124.6*	*7.9*	*.64*	
1⅛	**FX3-S218E**											2.2	SG218EL
1 3/16	**FX3-S219E**	3 3/16	4 19/32	1 11/32	7/16	25/64	19/32	2 15/64	1 47/64	5 19/32	27/64	2.1	SG219EL
1¼	**FX3-S2E20E**											2.1	SG2E20EL
		81.0	*116.68*	*34.13*	*10*	*9.9*	*15.1*	*56.7*	*44.0*	*142.1*	*10.7*	*.95*	
1¼	**FX3-S220E**											2.8	SG220EL
1⅜	**FX3-S222E**	3 5/8	5 1/8	1 9/16	½	23/64	5/8	2 23/64	1 59/64	6 1/8	33/64	2.7	SG222EL
1 7/16	**FX3-S223E**											2.6	SG223EL
		92.1	*130.18*	*39.69*	*12*	*9.1*	*15.9*	*59.9*	*48.8*	*155.6*	*13.1*	*1.18*	
1½	**FX3-S224E**	4 *101.6*	5 21/32 *143.67*	1 11/16 *42.87*	½ *12*	27/64 *10.7*	5/8 *15.9*	2 35/64 *64.7*	2 7/64 *53.6*	6 25/32 *172.2*	17/32 *13.5*	3.8 *1.73*	SG224EL
1⅝	**FX3-S226E**											4.4	SG226EL
1 11/16	**FX3-S227E**	4¼	5 27/32	1 49/64	½	3/8	5/8	2 9/16	2 9/64	7 3/32	35/64	4.4	SG227EL
1¾	**FX3-S228E**											4.3	SG228EL
		108.0	*148.43*	*44.85*	*12*	*9.5*	*15.9*	*65.1*	*54.4*	*180.2*	*13.9*	*1.95*	
1 15/16	**FX3-S231E**	4 9/16 *115.9*	6 3/16 *157.16*	1 51/64 *45.64*	9/16 *14*	19/32 *15.1*	¾ *19.0*	2 57/64 *73.4*	2 25/64 *60.7*	7 7/16 *188.9*	35/64 *13.9*	5.6 *2.54*	SG231EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
■ DURA-KLEAN coated housings available; add prefix W, i.e. WFX3-S212E.
□ Nickel plated housings available, add suffix K75, i.e. FX3-S212EK75.
Nickel plated units are furnished prelubricated with food grade grease and black oxide coated inner and outer rings.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Flanged Units

F3-U200N

Cast Iron Housing
4-bolt Mounting
Alignable
Spring Locking
Relubricatable
Wide Inner Ring
Available in Nickel Plate □



Dimensions (inches/*mm*)

Shaft Diameter		Flanged unit number ■	A	B	D	E	F Bolts	G	H	J ◆	L	M Collar O.D.	N	P	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals														
	½	**F3-U2B08N**													1.1	UG2B08NL
	⅝	**F3-U210N**	2⅛	2⅛	1³⁄₃₂	3	⅜	⁵⁄₃₂	½	1²⁵⁄₃₂	1¼	. . .	3⅞	¼	1.0	UG210NL
	1¹⁄₁₆	F3-U211N													1.0	UG211NL
17		*F3-U2M17N*	*54.0*	*53.98*	*27.78*	*76.2*	*10*	*4.0*	*12.7*	*45.2*	*31.8*	*. . .*	*98.4*	*6.4*	*0.5*	*UG2M17NL*
	¾	**F3-U212N**	2⁷⁄₁₆	2½	1⁹⁄₃₂	3⅜	⅜	¹³⁄₆₄	⁹⁄₁₆	2¹⁄₆₄	1³¹⁄₆₄	. . .	4¹³⁄₃₂	⁹⁄₃₂	1.5	UG212NL
20		*F3-U2M20N*	*61.9*	*63.50*	*32.54*	*85.7*	*10*	*5.2*	*14.3*	*51.2*	*37.7*	*. . .*	*111.9*	*7.1*	*0.7*	*UG2M20NL*
	⅞	**F3-U214N**△													1.9	UG214NL
	¹⁵⁄₁₆	**F3-U215N**△	2¹¹⁄₁₆	2¾	1²³⁄₆₄	3¾	⁷⁄₁₆	³⁄₁₆	¹⁹⁄₃₂	2	1³⁵⁄₆₄	. . .	4²⁹⁄₃₂	¹⁹⁄₆₄	1.9	UG215NL
	1	**F3-U216N**△													1.8	UG216NL
25		*F3-U2M25N*	*68.3*	*69.85*	*34.53*	*95.2*	*10*	*4.8*	*15.1*	*50.8*	*39.3*	*. . .*	*124.6*	*7.5*	*0.9*	*UG2M25NL*
	1⅛	**F3-U218N**													3.2	UG218NL
	1³⁄₁₆	**F3-U219N**	3³⁄₁₆	3¼	1⁹⁄₁₆	4¼	⁷⁄₁₆	¹¹⁄₆₄	¹⁹⁄₃₂	2¹⁵⁄₆₄	1⁴⁷⁄₆₄	. . .	5¹⁹⁄₃₂	⁷⁄₁₆	3.1	UG219NL
	1¼	**F3-U2E20N**													3.1	UG2E20NL
30		*F3-U2M30N*	*81.0*	*82.55*	*39.69*	*108.0*	*10*	*4.4*	*15.1*	*56.7*	*44.0*	*. . .*	*142.1*	*11.1*	*1.3*	*UG2M30NL*
	1¼	**F3-U220N**△													4.0	UG220NL
	1⅜	**F3-U222N**△	3⅝	3⅝	1⁴⁹⁄₆₄	4⅝	½	⁵⁄₃₂	⅝	2²³⁄₆₄	1⁵⁹⁄₆₄	. . .	6⅛	³³⁄₆₄	3.9	UG222NL
	1⁷⁄₁₆	**F3-U223N**△													3.9	UG223NL
35		*F3-U2M35N*	*92.1*	*92.08*	*44.85*	*117.5*	*12*	*4.0*	*15.9*	*59.9*	*48.8*	*. . .*	*155.6*	*13.1*	*1.7*	*UG2M35NL*
	1½	**F3-U224N**△	4	4	1²⁹⁄₃₂	5⅛	½	¹¹⁄₆₄	⅝	2³⁵⁄₆₄	2⁵⁄₆₄	. . .	6²⁵⁄₃₂	½	5.0	UG224NL
40		*F3-U2M40N*	*101.6*	*101.60*	*48.42*	*130.2*	*12*	*4.4*	*15.9*	*64.7*	*52.8*	*. . .*	*172.2*	*12.7*	*2.3*	*UG2M40NL*
	1⅝	**F3-U226N**△													6.2	UG226NL
	1¹¹⁄₁₆	**F3-U227N**△	4¼	4⅛	2¹⁄₃₂	5⅜	½	⁷⁄₆₄	⅝	2⁹⁄₁₆	2⁹⁄₆₄	. . .	7³⁄₃₂	³⁵⁄₆₄	6.2	UG227NL
	1¾	**F3-U228N**△													6.1	UG228NL
45		*F3-U2M45N*	*108.0*	*104.78*	*51.59*	*136.5*	*12*	*2.8*	*15.9*	*65.1*	*54.4*	*. . .*	*180.2*	*13.9*	*2.6*	*UG2M45NL*
	1¹⁵⁄₁₆	**F3-U231N**△	4½	4⅜	2³⁄₃₂	5⅝	½	¹³⁄₆₄	¾	2¹³⁄₁₆	2¹⁹⁄₆₄	. . .	7⁷⁄₁₆	⁹⁄₁₆	6.9	UG231NL
	2	F3-U2E32N△													6.8	UG2E32NL
50		*F3-U2M50N*	*114.3*	*111.12*	*53.18*	*142.9*	*12*	*5.2*	*19.0*	*71.4*	*58.3*	*. . .*	*188.9*	*14.3*	*3.0*	*UG2M50NL*
	2	**F3-U232N**△	4¹⁵⁄₁₆	5⅛	2¼	6⅜	⅝	⁵⁄₁₆	²⁹⁄₃₂	3¹¹⁄₆₄	2⁹⁄₁₆	. . .	8½	⅝	8.9	UG232NL
	2³⁄₁₆	**F3-U235N**△													8.8	UG235NL
55		*FE-U2M55N*	*125.4*	*130.18*	*57.15*	*161.9*	*16*	*7.9*	*23.0*	*80.6*	*65.1*	*. . .*	*215.9*	*15.9*	*3.9*	*UG2M55NL*
	2¼	**F3-U236N**													11.9	UG236NL
	2⅜	F3-U238N	5⅜	5⅝	2½	6⅞	⅝	¹¹⁄₃₂	¹⁵⁄₁₆	3²⁵⁄₆₄	2²⁷⁄₃₂	. . .	9⁷⁄₃₂	⁴¹⁄₆₄	11.9	UG238NL
	2⁷⁄₁₆	**F3-U239N**													11.8	UG239NL
60		*F3-U2M60N*	*136.5*	*142.88*	*63.50*	*174.6*	*16*	*8.7*	*23.8*	*86.1*	*72.2*	*. . .*	*234.2*	*16.3*	*5.4*	*UG2M60NL*
	2½	F3-U240N	5⅞	5⅞	2¹¹⁄₁₆	7⅜	⅝	³⁄₃₂	¾	3⁵⁄₃₂	2²⁵⁄₃₂	4³⁄₁₆	9¹³⁄₁₆	⅝	14.7	UG240NL
	2¹¹⁄₁₆	F3-U243N													14.0	UG243NL
65		*F3-U2M65N*	*149.2*	*149.22*	*68.26*	*187.3*	*16*	*2.4*	*19.0*	*80.2*	*70.6*	*106.4*	*249.2*	*15.9*	*6.0*	*UG2M65NL*
	2¾	F3-U244N													18.0	UG244NL
	2¹⁵⁄₁₆	F3-U247N	6⅜	6	2⅞	7¾	¾	³⁄₃₂	¾	3⅜	2³¹⁄₃₂	4⅝	10¼	¹¹⁄₁₆	17.2	UG247NL
	3	F3-U2E48N													17.0	UG2E48NL
75		*F3-U2M75N*	*161.9*	*152.40*	*73.02*	*196.8*	*20*	*2.4*	*19.0*	*85.7*	*75.4*	*117.5*	*260.4*	*17.5*	*7.8*	*UG2M75NL*
	3⁷⁄₁₆	F3-U255N	7½	6¾	3⁹⁄₁₆	8⁹⁄₁₆	¾	³⁄₃₂	1	4¹⁄₃₂	3²¹⁄₃₂	5³⁄₁₆	11⅜	¾	26.0	UG255NL
	3½	F3-U2E56N													25.5	UG2E56NL
85		*F3-U2M85N*	*190.5*	*171.45*	*90.49*	*217.5*	*20*	*2.4*	*25.4*	*102.4*	*92.9*	*131.8*	*288.9*	*19.0*	*11.9*	*UG2M85NL*

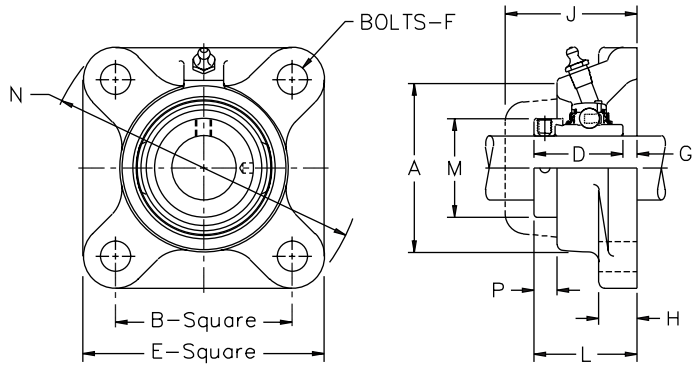
Bold face items are normally available from stock; please consult for availability of non-stock items.
Shaft sizes over 2⁷⁄₁₆" have collars.
Lubrication fitting tap size: for 1¹⁄₁₆" *(17 mm)* and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
□ Nickel plated housings available through size 239; add Suffix K75, i.e. F3-U2B08NK75.
△ Available with E3 triple lip seals.

◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Flanged Units

F3-Y200N

Cast Iron Housing
4-bolt Mounting
Alignable
Eccentric Cam Locking Collar
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

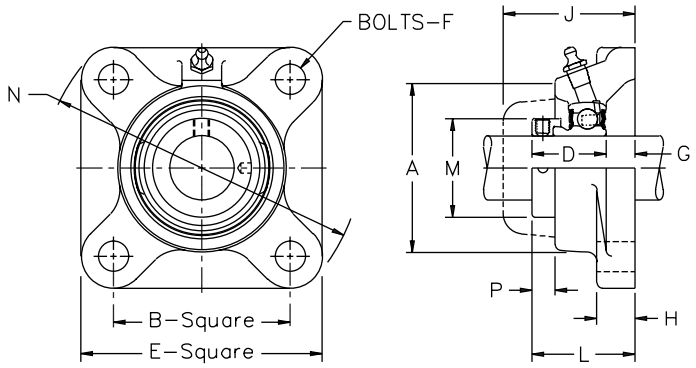
Shaft Diameter inches	Flanged unit number ■ / Lip seals	A	B	D	E	F Bolts	G	H	J ◆	L	M	N	P	Unit wt. (lbs./kg)	Bearing no.
¾	**F3-Y212N**	2 7/16 *61.9*	2 1/2 *63.50*	1 23/32 *43.66*	3 3/8 *85.7*	3/8 *10*	1/16 *1.6*	9/16 *14.3*	2 1/64 *51.2*	1 51/64 *45.6*	1 5/16 *33.3*	4 13/32 *111.9*	37/64 *14.7*	1.6 *0.7*	YG212NL
7/8 15/16 1	**F3-Y214N**△ **F3-Y215N**△ **F3-Y216N**△	2 11/16 *68.3*	2 3/4 *69.85*	1 3/4 *44.45*	3 3/4 *95.2*	7/16 *10*	1/16 *1.6*	19/32 *15.1*	2 *50.8*	1 13/16 *46.0*	1 1/2 *38.1*	4 29/32 *124.6*	35/64 *13.9*	2.0 *0.9*	YG214NL YG215NL YG216NL
1 1/8 1 3/16 1 1/4	**F3-Y218N** **F3-Y219N** **F3-Y2E20N**	3 3/16 *81.0*	3 1/4 *82.55*	1 29/32 *48.42*	4 1/4 *108.0*	7/16 *10*	1/16 *1.6*	19/32 *15.1*	2 15/64 *56.7*	1 31/32 *50.0*	1 3/4 *44.4*	5 19/32 *142.1*	21/32 *16.7*	3.2 *1.5*	YG218NL YG219NL YG2E20NL
1 1/4 1 3/8 1 7/16	**F3-Y220N**△ **F3-Y222N**△ **F3-Y223N**△	3 5/8 *92.1*	3 5/8 *92.08*	2 1/64 *51.20*	4 5/8 *117.5*	1/2 *12*	1/16 *1.6*	5/8 *15.9*	2 23/64 *59.9*	2 5/64 *52.8*	2 3/16 *55.6*	6 1/8 *155.6*	11/16 *17.5*	4.2 *1.9*	YG220NL YG222NL YG223NL
1 1/2	**F3-Y224N**△	4 *101.6*	4 *101.60*	2 7/32 *56.36*	5 1/8 *130.2*	1/2 *12*	1/16 *1.6*	5/8 *15.9*	2 35/64 *64.7*	2 9/32 *57.9*	2 3/8 *60.3*	6 25/32 *172.2*	45/64 *17.8*	5.3 *2.4*	YG224NL
1 5/8 1 11/16 1 3/4	**F3-Y226N**△ **F3-Y227N**△ **F3-Y228N**△	4 1/4 *108.0*	4 1/8 *104.78*	2 7/32 *56.36*	5 3/8 *136.5*	1/2 *12*	1/16 *1.6*	5/8 *15.9*	2 9/16 *65.1*	2 9/32 *57.9*	2 1/2 *63.5*	7 3/32 *180.2*	11/16 *17.5*	6.5 *3.0*	YG226NL YG227NL YG228NL
1 15/16 2	**F3-Y231N**△ F3-Y2E32N△	4 1/2 *114.3*	4 3/8 *111.12*	2 15/32 *62.71*	5 5/8 *142.9*	1/2 *12*	1/16 *1.6*	3/4 *19.0*	2 13/16 *71.4*	2 17/32 *64.3*	2 3/4 *69.8*	7 7/16 *188.9*	51/64 *20.2*	7.2 *3.3*	YG231NL YG2E32NL
2 2 3/16	**F3-Y232N**△ **F3-Y235N**△	4 15/16 *125.4*	5 1/8 *130.18*	2 13/16 *71.44*	6 3/8 *161.9*	5/8 *16*	1/16 *1.6*	29/32 *23.0*	3 11/64 *80.6*	2 7/8 *73.0*	3 *76.2*	8 1/2 *215.9*	15/16 *23.8*	9.5 *4.3*	YG232NL YG235NL
2 1/4 2 3/8 2 7/16	**F3-Y236N** F3-Y238N **F3-Y239N**	5 3/8 *136.5*	5 5/8 *142.88*	3 1/16 *77.79*	6 7/8 *174.6*	5/8 *16*	1/16 *1.6*	15/16 *23.8*	3 25/64 *86.1*	3 1/8 *79.4*	3 5/16 *84.1*	9 7/32 *234.2*	15/16 *23.8*	12.5 *5.7*	YG236NL YG238NL YG239NL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 11/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Flanged Units

F3-W200E

Cast Iron Housing
4-bolt Mounting
Alignable
Eccentric Cam Locking Collar
Relubricatable
Extended Inner Ring



Dimensions (inches/*mm*)

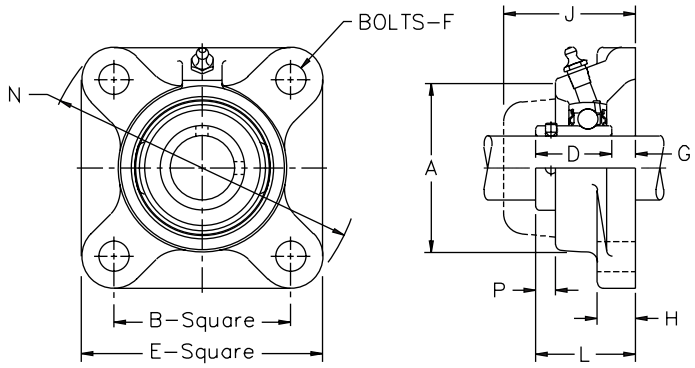
Shaft dia. inches	Flanged unit number	A	B	D	E	F Bolts	G	H	J ◆	L	M	N	P	Unit wt. (lbs./kg.)	Bearing no.
½	**F3-W2B08E**	2⅛	2⅛	1⅛	3	⅜	23/64	½	1 25/32	1 31/64	1⅛	3⅞	15/32	.8	WG2B08EL
⅝	**F3-W210E**	*54.0*	*53.98*	*28.58*	*76.2*	*10*	*9.1*	*12.7*	*45.2*	*37.7*	*28.6*	*98.4*	*11.9*	*0.4*	WG210EL
¾	**F3-W212E**	2 7/16	2½	1 17/32	3⅜	⅜	7/16	9/16	2 1/64	1 21/32	1 5/16	4 13/32	29/64	1.3	WG212EL
		61.9	*63.50*	*30.96*	*85.7*	*10*	*11.1*	*14.3*	*51.2*	*42.1*	*33.3*	*111.9*	*11.5*	*0.6*	
⅞	**F3-W214E**	2 11/16	2¾	1 17/32	3¾	7/16	29/64	19/32	2	1 43/64	1½	4 29/32	27/64	1.8	WG214EL
15/16	**F3-W215E**	*68.3*	*69.85*	*30.96*	*95.2*	*10*	*11.5*	*15.1*	*50.8*	*42.5*	*38.1*	*124.6*	*10.7*	*0.8*	WG215EL
1	**F3-W216E**														WG216EL
1⅛	**F3-W218E**	3 3/16	3¼	1 13/32	4¼	7/16	27/64	19/32	2 15/64	1 53/64	1¾	5 19/32	33/64	2.9	WG218EL
1 3/16	**F3-W219E**	*81.0*	*82.55*	*35.72*	*108.0*	*10*	*10.7*	*15.1*	*56.7*	*64.4*	*44.4*	*142.1*	*13.1*	*1.3*	WG219EL
1¼	**F3-W2E20E**														WG2E20EL
1¼	**F3-W220E**	3⅝	3⅝	1 17/32	4⅝	½	7/16	⅝	2 23/64	1 31/32	2 3/16	6⅛	9/16	3.7	WG220EL
1⅜	**F3-W222E**	*92.1*	*92.08*	*38.89*	*117.5*	*12*	*11.1*	*15.9*	*59.9*	*50.0*	*55.6*	*155.6*	*14.3*	*1.7*	WG222EL
1 7/16	**F3-W223E**														WG223EL
1½	**F3-W224E**	4	4	1 23/32	5⅛	½	15/32	⅝	2 35/64	2 3/16	2⅜	6 25/32	39/64	4.8	WG224EL
		101.6	*101.60*	*43.66*	*130.2*	*12*	*11.9*	*15.9*	*64.7*	*55.6*	*60.3*	*172.2*	*15.5*	*2.2*	
1⅝	**F3-W226E**	4¼	4⅛	1 23/32	5⅜	½	15/32	⅝	2 9/16	2 3/16	2½	7 3/32	19/32	5.6	WG226EL
1 11/16	**F3-W227E**	*108.0*	*104.78*	*43.66*	*136.5*	*12*	*11.9*	*15.9*	*65.1*	*55.6*	*63.5*	*180.2*	*15.1*	*2.5*	WG227EL
1¾	**F3-W228E**														WG228EL
1 15/16	**F3-W231E**	4½	4⅜	1 23/32	5⅝	½	19/32	¾	2 13/16	2 5/16	2¾	7 7/16	37/64	6.1	WG231EL
2	F3-W2E32E	*114.3*	*111.12*	*43.66*	*142.9*	*12*	*15.1*	*19.0*	*71.4*	*58.7*	*69.8*	*188.9*	*14.7*	*2.8*	WG2E32EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 1 1/16" and smaller shaft sizes, ¼"-28 UNF; for all other shafts, ⅛" PT.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Flanged Units

F3-S200E

Cast Iron Housing
4-bolt Mounting
Alignable
Spring Locking
Relubricatable
Extended Inner Ring
Available in Nickel Plate□
Available in DURA-KLEAN■



Dimensions (inches/*mm*)

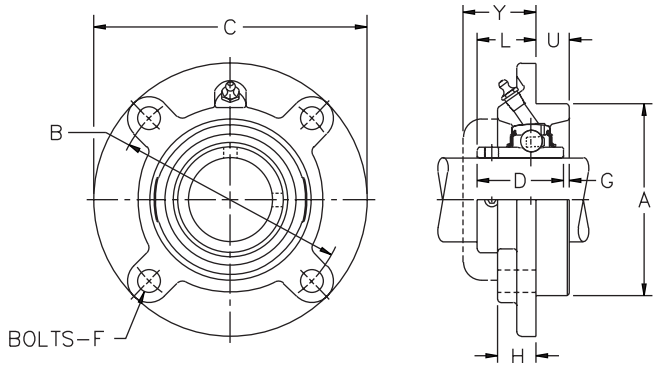
Shaft Diameter inches	Flanged unit number	A	B	D	E	F Bolts	G	H	J ◆	L	N	P	Unit wt. (lbs./kg)	Replacement bearing no.
¾	**F3-S212E**	2 7/16 *61.9*	2 1/2 *63.50*	1 1/8 *28.58*	3 3/8 *85.7*	3/8 *10*	23/64 *9.1*	9/16 *14.3*	2 1/64 *51.2*	1 31/64 *37.7*	4 13/32 *111.9*	9/32 *7.1*	1.6 *.73*	SG212EL
7/8	**F3-S214E**												2.0	SG214EL
15/16	**F3-S215E**	2 11/16	2 3/4	1 3/16	3 3/4	7/16	3/8	19/32	2	1 9/16	4 29/32	5/16	1.9	SG215EL
1	**F3-S216E**												1.9	SG216EL
		68.3	*69.85*	*30.17*	*95.2*	*10*	*9.5*	*15.1*	*50.8*	*39.7*	*124.6*	*7.9*	*.86*	
1 1/8	**F3-S218E**												2.7	SG218EL
1 3/16	**F3-S219E**	3 3/16	3 1/4	1 11/32	4 1/4	7/16	25/64	19/32	2 15/64	1 47/64	5 19/32	27/64	2.6	SG219EL
1 1/4	**F3-S2E20E**												2.6	SG2E20EL
		81.0	*82.55*	*34.13*	*108.0*	*10*	*9.9*	*15.1*	*56.7*	*44.0*	*142.1*	*10.7*	*1.18*	
1 1/4	**F3-S220E**												3.5	SG220EL
1 3/8	**F3-S222E**	3 5/8	3 5/8	1 9/16	4 5/8	1/2	23/64	5/8	2 23/64	1 59/64	6 1/8	37/64	3.4	SG222EL
1 7/16	**F3-S223E**												3.3	SG223EL
		92.1	*92.08*	*39.67*	*117.5*	*12*	*9.1*	*15.9*	*59.9*	*48.8*	*155.6*	*14.7*	*1.50*	
1 1/2	**F3-S224E**	4 *101.6*	4 *101.60*	1 11/16 *42.87*	5 1/8 *130.2*	1/2 *12*	27/64 *10.7*	5/8 *15.9*	2 35/64 *64.7*	2 7/64 *53.6*	6 25/32 *172.2*	17/32 *13.5*	4.7 *2.13*	SG224EL
1 5/8	**F3-S226E**												5.4	SG226EL
1 11/16	**F3-S227E**	4 1/4	4 1/8	1 49/64	5 3/8	1/2	3/8	5/8	2 9/16	2 9/64	7 3/32	35/64	5.4	SG227EL
1 3/4	**F3-S228E**												5.3	SG228EL
		108.0	*104.78*	*44.85*	*136.5*	*12*	*9.5*	*15.9*	*65.1*	*54.4*	*180.2*	*13.9*	*2.41*	
1 15/16	**F3-S231E**	4 1/2 *114.3*	4 3/8 *111.12*	1 51/64 *45.64*	5 5/8 *142.9*	1/2 *12*	1/2 *12.7*	3/4 *19.0*	2 13/16 *71.4*	2 19/64 *58.3*	7 7/16 *188.9*	9/16 *14.3*	6.2 *2.81*	SG231EL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
■ DURA-KLEAN coated housings available; add prefix W, i.e. WF3-S212E.
□ Nickel plated housings available, add suffix K75, i.e. F3-S212EK75.
Nickel plated units are furnished prelubricated with food grade grease and black oxide coated inner and outer rings
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Flanged Cartridge Units

FC3-U200N

Cast Iron Housing
4-bolt Mounting
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

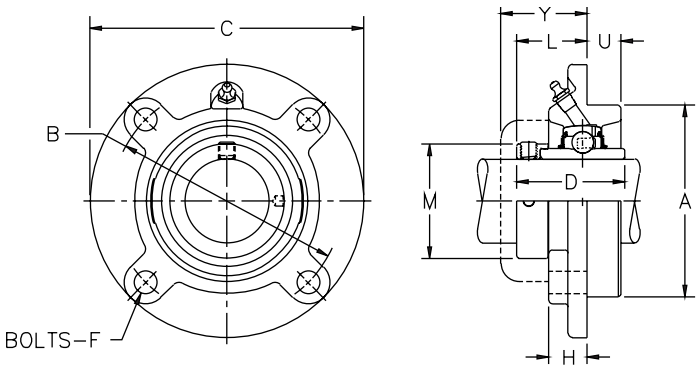
Shaft Diameter		Flanged cartridge unit number ■	A †	B	C	D	F Bolts	G	H	L	M Collar O.D.	U	Y ◆	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals													
	7/8	**FC3-U214N**△												3.0	UG214NL
	15/16	**FC3-U215N**△	3.000	3 5/8	4 3/8	1 23/64	3/8	0	5/8	55/64	. . .	1/2	1 3/8	3.0	UG215NL
	1	**FC3-U216N**												2.9	UG216NL
25		*FC3-U2M25N*	*76.20*	*92.08*	*111.1*	*34.53*	*10*	*0.0*	*15.9*	*21.8*	*. . .*	*12.7*	*34.9*	*1.3*	*UG2M25NL*
	1 1/8	**FC3-U218N**												4.6	UG218NL
	1 3/16	**FC3-U219N**	3.375	4 1/8	5	1 9/16	7/16	0	13/16	1 9/64	. . .	27/64	1 41/64	4.5	UG219NL
	1 1/4	**FC3-U2E20N**												4.5	UG2E20NL
30		*FC3-U2M30N*	*85.72*	*104.78*	*127.0*	*39.69*	*10*	*0.0*	*20.6*	*29.0*	*. . .*	*10.7*	*41.7*	*2.0*	*UG2M30NL*
	1 1/4	**FC3-U220N**△												4.7	UG220NL
	1 3/8	**FC3-U222N**△	3.625	4 3/8	5 1/4	1 49/64	7/16	3/16	1 1/16	1 31/64	. . .	15/32	1 59/64	4.6	UG222NL
	1 7/16	**FC3-U223N**△												4.6	UG223NL
35		*FC3-U2M35N*	*92.08*	*111.2*	*133.4*	*44.85*	*10*	*4.8*	*27.0*	*37.7*	*. . .*	*11.9*	*48.8*	*2.1*	*UG2M35NL*
	1 1/2	**FC3-U224N**△	3.625	4 3/8	5 1/4	1 29/32	7/16	1/32	1 1/32	1 15/32	. . .	15/32	1 15/16	4.3	UG224NL
40		*FC3-U2M40N*	*92.08*	*111.12*	*133.4*	*48.42*	*10*	*0.8*	*26.2*	*37.3*	*. . .*	*11.9*	*49.2*	*2.0*	*UG2M40NL*
	1 5/8	**FC3-U226N**△												6.3	UG226NL
	1 11/16	**FC3-U227N**△	4.250	5 1/8	6 1/8	2 1/32	1/2	0	1 1/16	1 9/16	. . .	15/32	1 63/64	6.3	UG227NL
	1 3/4	**FC3-U228N**△												6.2	UG228NL
45		*FC3-U2M45N*	*107.95*	*130.18*	*155.6*	*51.59*	*12*	*0.0*	*27.0*	*39.7*	*. . .*	*11.9*	*50.4*	*2.7*	*UG2M45NL*
	1 15/16	**FC3-U231N**△	4.500	5 3/8	6 3/8	2 3/32	1/2	11/64	1 13/64	1 41/64	. . .	5/8	2 5/32	7.4	UG231NL
50		*FC3-U2M50N*	*114.30*	*136.52*	*161.9*	*53.18*	*12*	*4.4*	*30.6*	*41.7*	*. . .*	*15.9*	*54.8*	*3.2*	*UG2M50NL*
	2	**FC4-U232N**△	4.500	5 3/8	6 3/8	2 1/4	1/2	1/32	1 1/32	1 21/32	. . .	5/8	2 17/64	7.7	UG232NL
55		*FC4-U2M55N*	*114.30*	*136.52*	*161.9*	*57.15*	*12*	*0.8*	*26.2*	*42.1*	*. . .*	*15.9*	*57.5*		*UG2M55NL*
	2	**FC3-U232N**△	5.000	6	7 1/8	2 1/4	9/16	5/32	1	1 17/32	. . .	7/8	2 1/8	9.9	UG232NL
	2 3/16	**FC3-U235N**△												8.8	UG235NL
55		*FC3-U2M55N*	*127.00*	*152.40*	*181.0*	*57.15*	*14*	*4.0*	*25.4*	*38.9*	*. . .*	*22.2*	*54.0*		*UG2M55NL*
	2 1/4	FC3-U236N												13.0	UG236NL
	2 3/8	FC3-U238N	5.500	6 1/2	7 5/8	2 1/2	9/16	0	1	1 5/8	. . .	7/8	2 11/64	11.0	UG238NL
	2 7/16	**FC3-U239N**												10.8	UG239NL
60		*FC3-U2M60N*	*139.70*	*165.10*	*193.7*	*63.50*	*14*	*0.0*	*25.4*	*41.3*	*. . .*	*22.2*	*55.2*		*UG2M60NL*
	2 1/2	FC3-U240N	6.375	7 1/2	8 3/4	2 11/16	5/8	3/16	1 3/16	1 13/16	4 3/16	1 1/16	2 3/16	17.0	UG240NL
	2 11/16	FC3-U243N												16.7	UG243NL
65		*FC3-U2M65N*	*161.92*	*190.50*	*222.2*	*68.26*	*16*	*4.8*	*30.2*	*46.0*	*106.4*	*27.0*	*55.6*	*7.7*	*UG2M65NL*
	2 3/4	FC3-U244N												17.9	UG244NL
	2 15/16	FC3-U247N	6.375	7 1/2	8 3/4	2 7/8	5/8	3/16	1 1/16	1 13/16	4 5/8	1 1/4	2 7/32	17.7	UG247NL
	3	FC3-U2E48N												17.5	UG2E48NL
75		*FC3-U2M75N*	*161.92*	*190.50*	*222.2*	*73.02*	*16*	*4.8*	*27.0*	*46.0*	*117.5*	*31.8*	*56.4*	*8.1*	*UG2M75NL*
	3 7/16	FC3-U255N	7.375	8 5/8	10 1/4	3 9/16	3/4	0	1 5/8	2 13/32	5 3/16	1 5/32	2 25/32	34.0	UG255NL
	3 1/2	FC3-U2E56N												33.6	UG2E56NL
85		*FC3-U2M85N*	*187.32*	*219.08*	*260.4*	*90.49*	*20*	*0.0*	*41.3*	*61.1*	*131.8*	*29.4*	*70.6*	*15.6*	*UG2M85NL*
	3 15/16	FC3-U263N	8.120	9 3/8	10 7/8	4 1/4	3/4	0	2 1/8	3 1/8	5 15/16	1 1/8	3 9/16	42.0	UG263NL
	4	FC3-U2E64N												41.5	UG2E64NL
100		*FC3-U2M100N*	*206.25*	*238.12*	*276.2*	*107.95*	*20*	*0.0*	*54.0*	*79.4*	*150.8*	*28.6*	*90.5*	*19.0*	*UG2M100NL*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Shaft sizes over 2 7/16" have collars.
Lubrication fitting tap size: for FC3-U2E20N and smaller units, 1/4"-28 UNF; for all other units, 1/8" PT.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
† Tolerance: +.000" –.002" *(+0.00 mm –0.05 mm)*. Bore tolerance for mounting: +.002" –.000" *(+0.05 mm –0.00 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Flanged Cartridge Units

FC3-Y200N

Cast Iron Housing
4-bolt Mounting
Alignable
Eccentric Cam Locking Collar
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

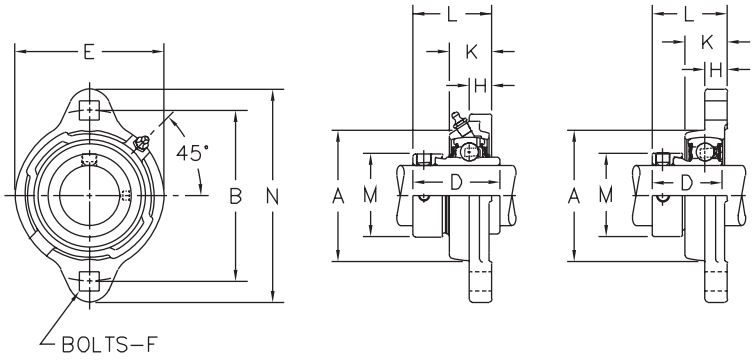
Shaft Diameter inches	Flanged cartridge number ■ / Lip seals	A †	B	C	D	F Bolts	H	L	M	U	Y ◆	Unit wt. (lbs./kg.)	Bearing no.
7/8 15/16 1	FC3-Y214N△ FC3-Y215N△ **FC3-Y216N△**	3.000 *76.20*	3 3/8 *92.08*	4 3/8 *111.1*	1 3/4 *44.45*	3/8 *10*	5/8 *15.9*	1 1/8 *28.6*	1 1/2 *38.1*	1/2 *12.7*	1 3/8 *34.9*	3.1 *1.4*	YG214NL YG215NL YG216NL
1 1/8 1 3/16 1 1/4	**FC3-Y218N** **FC3-Y219N** **FC3-Y2E20N**	3.375 *85.72*	4 1/8 *104.78*	5 *127.0*	1 29/32 *48.42*	7/16 *10*	13/16 *20.6*	1 3/8 *34.9*	1 3/4 *44.4*	27/64 *10.7*	1 41/64 *41.7*	4.6 *2.1*	YG218NL YG219NL YG2E20NL
1 1/4 1 3/8 1 7/16	**FC3-Y220N△** **FC3-Y222N△** **FC3-Y223N△**	3.625 *92.08*	4 3/8 *111.12*	5 1/4 *133.4*	2 1/64 *51.20*	7/16 *10*	1 1/16 *27.0*	1 21/32 *42.1*	2 3/16 *55.6*	15/32 *11.9*	1 59/64 *48.8*	4.9 *2.2*	YG220NL YG222NL YG223NL
1 1/2	**FC3-Y224N△**	3.625 *92.08*	4 3/8 *111.12*	5 1/4 *133.4*	2 7/32 *56.36*	7/16 *10*	1 1/32 *26.2*	1 43/64 *42.5*	2 3/8 *60.3*	15/32 *11.9*	1 15/16 *49.2*	4.6 *2.1*	YG224NL
1 5/8 1 11/16 1 3/4	**FC3-Y226N△** **FC3-Y227N△** **FC3-Y228N△**	4.250 *107.95*	5 1/8 *130.18*	6 1/8 *155.6*	2 7/32 *56.36*	1/2 *12*	1 1/16 *27.0*	1 45/64 *43.2*	2 1/2 *63.5*	15/32 *11.9*	1 63/64 *50.4*	6.6 *3.0*	YG226NL YG227NL YG228NL
1 15/16	**FC3-Y231N△**	4.500 *114.30*	5 3/8 *136.52*	6 3/8 *161.9*	2 15/32 *62.71*	1/2 *12*	1 13/64 *30.6*	1 7/8 *47.6*	2 3/4 *69.8*	5/8 *15.9*	2 5/32 *54.8*	7.7 *3.5*	YG231NL
2	**FC4-Y232N△**	4.500 *114.30*	5 3/8 *136.52*	6 3/8 *161.9*	2 13/16 *71.44*	1/2 *12*	1 1/32 *26.2*	1 31/32 *50.0*	3 *76.2*	5/8 *15.9*	2 17/64 *57.5*	7.2 *3.3*	YG232NL
2 2 3/16	**FC3-Y232N△** **FC3-Y235N△**	5.000 *127.00*	6 *152.40*	7 1/8 *181.0*	2 13/16 *71.44*	9/16 *14*	1 *25.4*	1 27/32 *46.8*	3 *76.2*	7/8 *22.2*	2 1/8 *54.0*	11.0 *9.6*	YG232NL YG235NL
2 1/4 2 3/8 2 7/16	FC3-Y236N FC3-Y238N **FC3-Y239N**	5.500 *139.70*	6 1/2 *165.10*	7 5/8 *193.7*	3 1/16 *77.79*	9/16 *14*	1 *25.4*	1 29/32 *48.4*	3 5/16 *84.1*	7/8 *22.2*	2 11/64 *55.2*	12.7 12.4 *12.2*	YG236NL YG238NL YG239NL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for FC3-Y2E20N and smaller units, ¼"-28 UNF; for all other sizes, ⅛" PT.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
† Tolerance: +.000" –.002" *(+0.00 mm −0.05 mm)*. Bore tolerance for mounting + .002 –.000" *(+0.05 mm −0.00 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Flanged Units

FX-W200E, FX-Y200N
FX-WG200E, FX-YG200N

High-test Iron Housing
2-bolt (Carriage) Mounting
Alignable
Eccentric Cam Locking Collar
Optional Relubrication Feature
Extended and Wide Inner Ring



Dimensions (inches/*mm*)

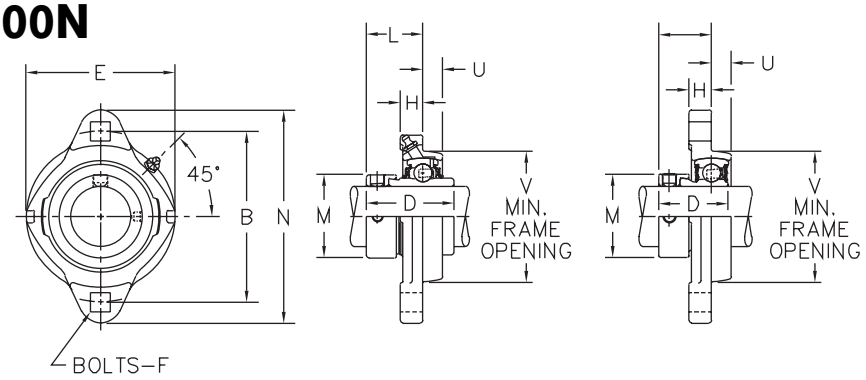
Shaft dia. inches	Flanged unit number ● Non-relubricatable Relubricatable	Non-relubricatable Relubricatable ■	A	B	D W200 WG200	D Y200 YG200	E Non-relubricatable	E Relubricatable	F Carriage bolt size	H	K	L W200 WG200	L Y200 YG200	M	N	Unit wt. (lbs./kg.) W200 WG200	Unit wt. (lbs./kg.) Y200 YG200
½	FX-W2B08E	FX-Y2B08N															
	FX-WG2B08E	FX-YG2B08N															
⅝	FX-W210E	FX-Y210N	1 25/32	2 1/2	1 1/8	1 15/32	2 3/16	2 3/32	1/4	3/8	45/64	1 1/4	1 19/64	1 1/8	3 3/16	.5	.6
	FX-WG210E	FX-YG210N	*45.2*	*63.5*	*28.58*	*37.31*	*55.6*	*53.2*	*. . .*	*9.5*	*17.8*	*31.8*	*32.9*	*28.6*	*81.0*	*0.2*	*0.2*
11/16	– – – – – – –	FX-Y211N															
	– – – – – – –	FX-YG211N															
¾	**FX-W212E**	FX-Y212N	2 1/16	2 13/16	1 7/32	1 23/32	2 15/32	2 3/8	5/16	27/64	25/32	1 11/32	1 15/32	1 5/16	3 9/16	.7	.8
	FX-WG212E	FX-YG212N	*52.4*	*71.4*	*30.96*	*43.66*	*62.7*	*60.3*	*. . .*	*10.7*	*19.8*	*34.1*	*37.3*	*33.3*	*90.5*	*0.3*	*0.4*
⅞	FX-W214E	FX-Y214N△															
	FX-WG214E	FX-YG214N△															
15/16	FX-W215E	FX-Y215N△	2 9/32	3	1 7/32	1 3/4	2 23/32	2 5/8	5/16	27/64	25/32	1 11/32	1 31/64	1 1/2	3 3/4	.8	1.0
	FX-WG215E	FX-YG215N△	*57.9*	*76.2*	*30.96*	*44.45*	*69.0*	*66.7*	*. . .*	*10.7*	*19.8*	*34.1*	*37.7*	*38.1*	*95.2*	*0.4*	*0.5*
1	**FX-W216E**	FX-Y216N△															
	FX-WG216E	FX-YG216N△															
1⅛	FX-W218E	FX-Y218N															
	FX-WG218E	FX-YG218N															
1 3/16	FX-W219E	FX-Y219N	2 23/32	3 9/16	1 13/32	1 29/32	3 3/32	3 3/32	3/8	15/32	57/64	1 17/32	1 21/32	1 3/4	4 7/16	1.2	1.4
	FX-WG219E	FX-YG219N	*69.0*	*90.5*	*35.72*	*48.42*	*78.6*	*78.6*	*. . .*	*11.9*	*22.6*	*38.9*	*42.1*	*44.4*	*112.7*	*0.5*	*0.6*
1¼	FX-W2E20E	FX-Y2E20N															
	FX-WG2E20E	FX-YG2E20N															
1¼	**FX-W220E**	FX-Y220N△															
	FX-WG220E	FX-YG220N△															
1⅜	FX-W222E	FX-Y222N△	3 1/8	3 15/16	1 17/32	2 1/64	3 1/2	3 1/2	3/8	1/2	15/16	1 21/32	1 25/32	2 3/16	4 13/16	1.8	2.0
	FX-WG222E	FX-YG222N△	*79.4*	*100.0*	*38.89*	*51.20*	*88.9*	*88.9*	*. . .*	*12.7*	*23.8*	*42.1*	*45.2*	*55.6*	*122.2*	*0.8*	*0.9*
1 7/16	**FX-W223E**	FX-Y223N△															
	FX-WG223E	FX-YG223N△															

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for ¾" and smaller shaft sizes, 10-32 UNF; for all other shafts, ¼"-28 UNF.
Also available with wide U200N inner ring. Replace "Y" with "U"; i.e. FX-U2B08N. For dimension D and U see page B-30.
▲ Loading slots are on mounting face side for non-relubricatable units.
● For replacement bearing number, drop prefix FX and add suffix L.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Flanged Units

FXR-W200E, FXR-Y200N
FXR-WG200E, FXR-YG200N

High-test Iron Housing
2-bolt (Carriage) Inboard Mounting
Alignable
Eccentric Cam Locking Collar
Optional Relubrication Feature
Extended and Wide Inner Ring



Dimensions (inches/*mm*)

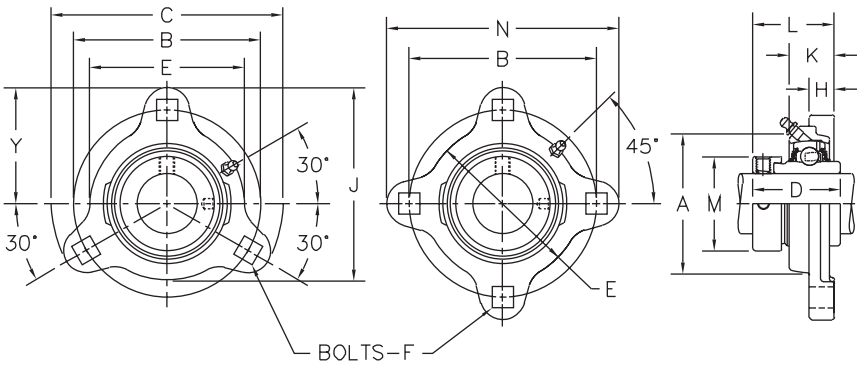
Shaft dia. inches	Flanged unit number ● Non-relubricatable Relubricatable	Non-relubricatable Relubricatable ■	B	D W200 WG200	D Y200 YG200	E	F□ Carriage bolt size	H	L W200 WG200	L Y200 YG200	M	N	U	V	Unit wt. (lbs./kg.) W200 WG200	Unit wt. (lbs./kg.) Y200 YG200
½	FXR-W2B08E FXR-WG2B08E	FXR-Y2B08N FXR-YG2B08N														
⅝	FXR-W210E FXR-WG210E	FXR-Y210N FXR-YG210N	2½ *63.5*	1⅛ *28.58*	1 15/32 *37.31*	2 3/16 *55.6*	¼ . . .	⅜ *9.5*	⅞ *22.2*	59/64 *23.4*	1⅛ *28.6*	3 3/16 *81.0*	21/64 *8.3*	1⅞ *47.6*	.5 *0.2*	.6 *0.2*
11/16	– – – – – – – – – – – – – –	FXR-Y211N FXR-YG211N														
¾	FXR-W212E FXR-WG212E	FXR-Y212N FXR-YG212N	2 13/16 *71.4*	1 7/32 *30.96*	1 23/32 *43.66*	2 15/32 *62.7*	5/16 . . .	27/64 *10.7*	59/64 *23.4*	1 3/64 *26.6*	1 5/16 *33.3*	3 9/16 *90.5*	23/64 *9.1*	2 5/32 *54.8*	.7 *0.3*	.8 *0.4*
⅞	FXR-W214E FXR-WG214E	FXR-Y214N△ FXR-YG214N△														
15/16	FXR-W215E FXR-WG215E	FXR-Y215N△ FXR-YG215N△	3 *76.2*	1 7/32 *30.96*	1¾ *44.45*	2 23/32 *69.0*	5/16 . . .	27/64 *10.7*	59/64 *23.4*	1 1/16 *27.0*	1½ *38.1*	3¾ *95.2*	23/64 *9.1*	2⅜ *60.3*	.8 *0.4*	1.0 *0.5*
1	FXR-W216E FXR-WG216E	FXR-Y216N△ FXR-YG216N△														
1⅛	FXR-W218E FXR-WG218E	FXR-Y218N FXR-YG218N														
1 3/16	FXR-W219E FXR-WG219E	FXR-Y219N FXR-YG219N	3 9/16 *90.5*	1 13/32 *35.72*	1 29/32 *48.42*	3 3/32 *78.6*	⅜ . . .	15/32 *11.9*	1 3/64 *26.6*	1 3/16 *30.2*	1¾ *44.4*	4 7/16 *112.7*	27/64 *10.7*	2 13/16 *71.4*	1.2 *0.5*	1.4 *0.6*
1¼	FXR-W2E20E FXR-WG2E20E	FXR-Y2E20N FXR-YG3E20N														
1¼	FXR-W220E FXR-WG220E	FXR-Y220N△ FXR-YG220N△														
1⅜	FXR-W222E FXR-WG222E	FXR-Y222N△ FXR-YG222N△	3 15/16 *100.0*	1 17/32 *38.89*	2 1/64 *51.20*	3½ *88.9*	⅜ . . .	½ *12.7*	1 5/32 *29.4*	1 9/32 *32.5*	2 3/16 *55.6*	4 13/16 *122.2*	7/16 *11.1*	3 7/32 *81.8*	1.8 *0.8*	2.0 *0.9*
1 7/16	FXR-W223E FXR-WG223E	FXR-Y223N△ FXR-YG223N△														

Please consult for availability.
Lubrication fitting tap size: for ¾" and smaller shaft sizes, 10-32 UNF; for all other shafts, ¼"-28 UNF.
Also available with wide U200N inner ring. Replace "Y" with "U"; i.e. FXR-U2B08N. For dimension D and U see page B-30.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
● For replacement bearing number, drop prefix FX and add suffix L.
□ Short shank square neck carriage bolt is not recommended.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Flanged Units

F-W200E, F-Y200N
F-WG200E, F-YG200N

High-test Iron Housing
3 and 4-bolt (Carriage) Mounting
Alignable
Eccentric Cam Locking Collar
Optional Relubrication Feature
Extended and Wide Inner Ring



Dimensions (inches/*mm*)

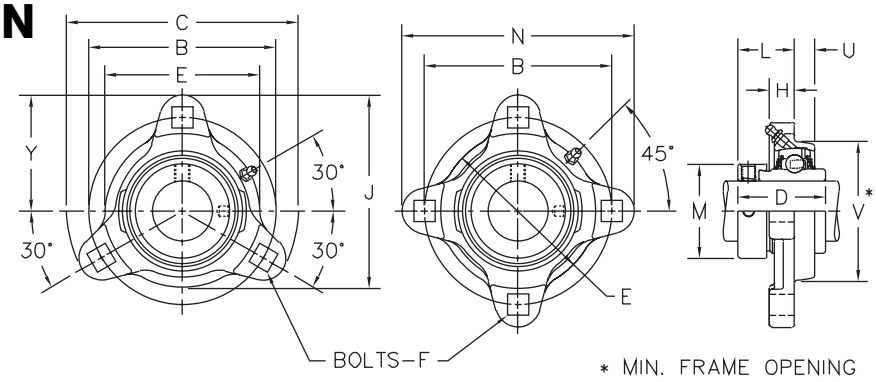
Style of housing	Shaft dia. inches	Flanged unit number ● Non-relubricatable Relubricatable	Non-relubricatable Relubricatable ■	A Non-relubricatable	A Relubricatable	B	C	D W200 WG200	D Y200 YG200	E	F Carriage bolt size	H	K	L W200 WG200	L Y200 YG200	M	N	Y	Unit wt. (lbs./kg.) W200 WG200	Unit wt. (lbs./kg.) Y200 YG200
3-BOLT	½	F-W2B08E	F-Y2B08N																	
		F-WG2B08E	F-YG2B08N																	
	⅝	F-W210E	F-Y210N	1 25/32	1 29/32	2 1/2	3 3/16	1 1/8	1 15/32	2 3/32	1/4	3/8	45/64	1 1/4	1 19/64	1 1/8	. . .	1 19/32	.5	.6
		F-WG210E	F-YG210N	*45.2*	*48.4*	*63.5*	*81.0*	*28.58*	*37.31*	*53.2*	*. . .*	*9.5*	*17.8*	*31.8*	*32.9*	*28.6*	*. . .*	*40.5*	*0.2*	*0.2*
	11/16	– – – – – –	F-Y211N																	
		– – – – – –	F-YG211N																	
	¾	F-W212E	F-Y212N	2 1/16	2 3/16	2 13/16	3 9/16	1 7/32	1 23/32	2 3/8	5/16	27/64	25/32	1 11/32	1 15/32	1 5/16	. . .	1 25/32	.7	.8
		F-WG212E	F-YG212N	*52.4*	*55.6*	*71.4*	*90.5*	*30.96*	*43.66*	*60.3*	*. . .*	*10.7*	*19.8*	*34.1*	*37.3*	*33.3*	*. . .*	*45.2*	*0.3*	*0.4*
	⅞	F-W214E	F-Y214N△																	
		F-WG214E	F-YG214N△																	
	15/16	F-W215E	F-Y215N△	2 9/32	2 3/8	3	3 3/4	1 7/32	1 3/4	2 5/8	5/16	27/64	25/32	1 11/32	1 31/64	1 1/2	. . .	1 7/8	.8	1.0
		F-WG215E	F-YG215N△	*57.9*	*60.3*	*76.2*	*95.2*	*30.96*	*44.45*	*66.7*	*. . .*	*10.7*	*19.8*	*34.1*	*37.7*	*38.1*	*. . .*	*47.6*	*0.4*	*0.5*
	1	**F-W216E**	F-Y216N△																	
		F-WG216E	F-YG216N△																	
	1 1/8	F-W218E	F-Y218N																	
		F-WG218E	F-YG218N																	
	1 3/16	F-W219E	F-Y219N	2 23/32	2 13/16	3 9/16	4 7/16	1 13/32	1 29/32	3 3/32	3/8	15/32	57/64	1 17/32	1 21/32	1 3/4	. . .	2 7/32	1.2	1.4
		F-WG219E	F-YG219N	*69.0*	*71.4*	*90.5*	*112.7*	*35.72*	*48.42*	*78.6*	*. . .*	*11.9*	*22.6*	*38.9*	*42.1*	*44.4*	*. . .*	*56.4*	*0.5*	*0.6*
	1 1/4	**F-W2E20E**	F-Y2E20N																	
		F-WG2E20E	F-YG2E20N																	
	1 1/4	F-W220E	F-Y220N△																	
		F-WG220E	F-YG220N△																	
	1 3/8	F-W222E	F-Y222N△	3 1/8	3 7/32	3 15/16	4 13/16	1 17/32	2 1/64	3 1/2	3/8	1/2	15/16	1 21/32	1 25/32	2 3/16	. . .	2 13/32	1.8	2.0
		F-WG222E	F-YG222N△	*79.4*	*81.8*	*100.0*	*122.2*	*38.89*	*51.20*	*88.9*	*. . .*	*12.7*	*23.8*	*42.1*	*45.2*	*55.6*	*. . .*	*61.1*	*0.8*	*0.9*
	1 7/16	F-W223E	F-Y223N△																	
		F-WG223E	F-YG223N△																	
4-BOLT	1½	**F-W224E**	F-Y224N△	3 15/32	3 21/32	4 11/16	5 13/16	1 23/32	2 7/32	3 7/8	1/2	5/8	1 1/8	1 29/32	2	2 3/8	5 13/16	. . .	2.8	3.0
		F-WG224E	F-YG224N△	*88.1*	*92.9*	*119.1*	*147.6*	*43.66*	*56.36*	*98.4*	*. . .*	*15.9*	*28.6*	*48.4*	*50.8*	*60.3*	*147.6*	*. . .*	*1.3*	*1.4*
	1 5/8	F-W226E	F-Y226N△																	
		F-WG226E	F-YG226N△																	
	1 11/16	F-W227E	F-Y227N△	3 11/16	3 13/16	4 3/4	5 7/8	1 23/32	2 7/32	4 7/32	1/2	5/8	1 1/8	1 29/32	2	2 1/2	5 7/8	. . .	2.9	3.1
		F-WG227E	F-YG227N△	*93.7*	*96.8*	*120.6*	*149.2*	*43.66*	*56.36*	*107.2*	*. . .*	*15.9*	*28.6*	*48.4*	*50.8*	*63.5*	*149.2*	*. . .*	*1.3*	*1.4*
	1 3/4	**F-W228E**	F-Y228N△																	
		F-WG228E	F-YG228N△																	
	1 15/16	F-W231E	F-Y231N△																	
		F-WG231E	F-YG231N△	3 7/8	4 1/16	5	6 1/8	1 23/32	2 15/32	4 15/32	1/2	5/8	1 1/8	1 29/32	2 1/8	2 3/4	6 1/8	. . .	3.1	3.6
	2	F-W2E32E	F-Y2E32N△	*98.4*	*103.2*	*127.0*	*155.6*	*43.66*	*62.71*	*113.5*	*. . .*	*15.9*	*28.6*	*48.4*	*54.0*	*69.8*	*155.6*	*. . .*	*1.4*	*1.6*
		F-WG2E32E	F-YG2E32N△																	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for ¾" and smaller shaft sizes, 10-32 UNF; for all other shafts, ¼"-28 UNF.
Also available with wide U200N inner ring. Replace "Y" with "U"; i.e. F-U2B08N. For dimension D and U see page B-30.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
● For replacement bearing number, drop prefix F and add suffix L.
▲ Loading slots are on mounting face side for non-relubricatable units.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Intermediate Ball Bearing Flanged Units

FR-W200E, FR-Y200N
FR-WG200E, FR-YG200N

High-test Iron Housing
3 and 4-bolt (Carriage) Inboard Mounting
Alignable
Eccentric Cam Locking Collar
Optional Relubrication Feature
Extended and Wide Inner Ring



Dimensions (inches/*mm*)

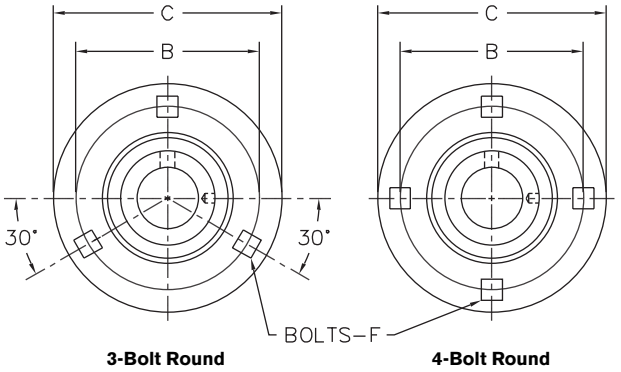
Style of housing	Shaft dia. inches	Flanged unit number ● Non-relubricatable Relubricatable	Non-relubricatable Relubricatable ■	B	C	D W200 WG200	D Y200 YG200	E	F ■ Carriage bolt size	H	L W200 WG200	L Y200 YG200	M	U	V	Y	Unit wt. (lbs./kg.) W200 WG200	Unit wt. (lbs./kg.) Y200 YG200
3-BOLT	½	FR-W2B08E FR-WG2B08E	FR-Y2B08N FR-YG2B08N	2½	3 3/16	1 1/8	1 15/32	2 3/32	1/4	3/8	7/8	59/64	1 1/8	21/64	1 7/8	1 19/32	.5	.6
	5/8	FR-W210E FR-WG210E	FR-Y210N FR-YG210N	*63.5*	*81.0*	*28.58*	*37.31*	*53.2*	*. . .*	*9.5*	*22.2*	*23.4*	*28.6*	*8.3*	*47.6*	*40.5*	*0.2*	*0.2*
	1 1/16	– – – – – – – – – – – –	FR-Y211N FR-YG211N															
	¾	FR-W212E FR-WG212E	FR-Y212N FR-YG212N	2 13/16 *71.4*	3 9/16 *90.5*	1 7/32 *30.96*	1 23/32 *43.66*	2 3/8 *60.3*	5/16 *. . .*	27/64 *10.7*	59/64 *23.4*	1 3/64 *26.6*	1 5/16 *33.3*	23/64 *9.1*	2 5/32 *54.8*	1 25/32 *45.2*	.7 *0.3*	.8 *0.4*
	7/8	FR-W214E FR-WG214E	FR-Y214N△ FR-YG214N△															
	15/16	FR-W215E FR-WG215E	FR-Y215N△ FR-YG215N△	3 *76.2*	3¾ *95.2*	1 7/32 *30.96*	1¾ *44.45*	2 5/8 *66.7*	5/16 *. . .*	27/64 *10.7*	59/64 *23.4*	1 1/16 *27.0*	1½ *38.1*	23/64 *9.1*	2⅜ *60.3*	1⅞ *47.6*	.8 *0.4*	1.0 *0.5*
	1	FR-W216E FR-WG216E	FR-Y216N△ FR-YG216N△															
	1⅛	FR-W218E FR-WG218E	FR-Y218N FR-YG218N															
	1 3/16	FR-W219E FR-WG219E	FR-Y219N FR-YG219N	3 9/16 *90.5*	4 7/16 *112.7*	1 13/32 *35.72*	1 25/32 *48.42*	3 3/32 *78.6*	3/8 *. . .*	15/32 *11.9*	1 3/64 *26.6*	1 3/16 *30.2*	1¾ *44.4*	27/64 *10.7*	2 13/16 *71.4*	2 7/32 *56.4*	1.2 *0.5*	1.4 *0.6*
	1¼	FR-W2E20E FR-WG2E20E	FR-Y2E20N FR-YG2E20N															
	1¼	FR-W220E FR-WG220E	FR-Y220N△ FR-YG220N△															
	1⅜	FR-W222E FR-WG222E	FR-Y222N△ FR-YG222N△	3 15/16 *100.0*	4 13/16 *122.2*	1 17/32 *38.89*	2 1/64 *51.20*	3½ *88.9*	3/8 *. . .*	½ *12.7*	1 5/32 *29.4*	1 9/32 *32.5*	2 3/16 *55.6*	7/16 *11.1*	3 7/32 *81.8*	2 13/32 *61.1*	1.8 *0.8*	2.0 *0.9*
	1 7/16	FR-W223E FR-WG223E	FR-Y223N△ FR-YG223N△															
4-BOLT	1½	FR-W224E FR-WG224E	FR-Y224N△ FR-YG224N△	4 11/16 *119.1*	5 13/16 *147.6*	1 23/32 *43.66*	2 7/32 *56.36*	3 7/8 *98.4*	½ *. . .*	5/8 *15.9*	1 9/32 *32.5*	1⅜ *34.9*	2⅜ *60.3*	½ *12.7*	3 9/16 *90.5*	. . .	2.8 *1.3*	3.0 *1.4*
	1 5/8	FR-W226E FR-WG226E	FR-Y226N△ FR-YG226N△															
	1 11/16	FR-W227E FR-WG227E	FR-Y227N△ FR-YG227N△	4¾ *120.6*	5⅞ *149.2*	1 23/32 *43.66*	2 7/32 *56.36*	2 7/32 *107.2*	½ *. . .*	5/8 *15.9*	1 9/32 *32.5*	1⅜ *34.9*	2½ *63.5*	½ *12.7*	3 25/32 *96.0*	. . .	2.9 *1.3*	3.1 *1.4*
	1¾	FR-W228E FR-WG228E	FR-Y228N△ FR-YG228N△															
	1 15/16	FR-W231E FR-WG231E	FR-Y231N△ FR-YG231N△															
	2	FR-W2E32E FR-WG2E32E	FR-Y2E32N△ FR-YG2E32N△	5 *127.0*	6⅛ *155.6*	1 23/32 *43.66*	2 15/32 *62.7*	4 15/32 *113.5*	½ *. . .*	5/8 *15.9*	1 9/32 *32.5*	1½ *38.1*	2¾ *69.8*	½ *12.7*	3 31/32 *100.8*	. . .	3.1 *1.4*	3.6 *1.6*

Please consult for availability.
Lubrication fitting tap size: for ¾" and smaller shaft sizes, 10-32 UNF; for all other shafts, ¼"-28 UNF.
Also available with wide U200N inner ring. Replace "Y" with "U"; i.e. FR-U2B08N. For dimension D and U see page B-30.
■ N lip seals standard. H labyrinth seals available.
△ Available with E3 triple lip seals.
● For replacement bearing number, drop prefix FR and add suffix L.
□ Short shank square neck carriage bolt is not recommended.
▲ For dimension N, see page B-45.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

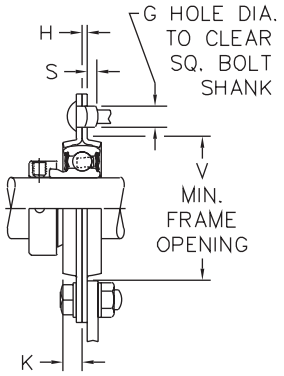
Round Flanged Housings, 2-piece Formed Steel

MS, MSC

3-bolt or 4-bolt (Carriage) Mounting
For Collar Mounted, Round, Square, or Hex Bore Bearings
Alignable
Non-relubricatable
Bearing Not Included



3-Bolt Round **4-Bolt Round**



Dimensions (inches/*mm*)

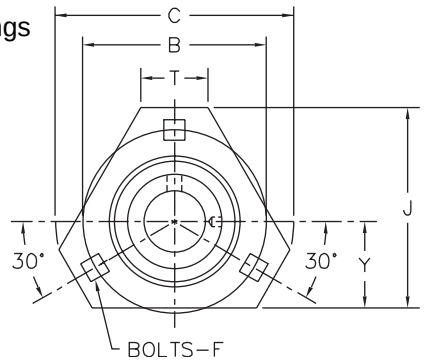
Round housing style	Housing half number ■	For collar mounted bearings: Shaft diameter *mm*	For collar mounted bearings: Shaft diameter in.	For collar mounted bearings: Bearing size number	For round, square and hex bore bearings: Shaft size: Round bore	Square bore	Hex bore	Basic size bearing	B	C	F: Carriage bolt size	F: Hole nominal ±.005" ±0.13 *mm*	G	H: Stock thickness	K	S: Carriage bolts: Short shank	S: Carriage bolts: Long shank	V	Radial load rating of housing assembly lbs/*newtons*
3-BOLT	40MSC1		½	2B08	...	...	...	...	2½	3³⁄₁₆	¼	⁹⁄₃₂	¹³⁄₃₂	.075	⁹⁄₃₂	.006	.100	1¹⁵⁄₁₆	600
			⅝	210					*63.5*	*81.0*	...	*7.14*	*10.3*	*1.90*	*7.1*	...	...	*49.2*	*2 670*
			¹¹⁄₁₆	211															
		17		*2M17*															
	47MSC1		¾	212	...	...	⅝	204	2¹³⁄₁₆	3⁹⁄₁₆	⁵⁄₁₆	¹¹⁄₃₂	½	.083	⁵⁄₁₆	.021	.115	2³⁄₁₆	700
		20		*2M20*			¹¹⁄₁₆		*71.4*	*90.5*	...	*8.73*	*12.7*	*2.11*	*7.9*	...	...	*55.6*	*3 110*
	52MSC1 52MS2		⅞	214	...	...	⅞	205	3	3¾	⁵⁄₁₆	¹¹⁄₃₂	½	.083	¹¹⁄₃₂	.021	.115	2⅜	800
			¹⁵⁄₁₆	215					*76.2*	*95.2*	...	*8.73*	*12.7*	*2.11*	*8.7*	...	...	*60.3*	*3 560*
			1	216										.104		.000	.073		1100
		25		*2M25*										*2.64*		...	...		*4 890*
	62MSC1		1⅛	218	...	...	1	206	3⁹⁄₁₆	4⁷⁄₁₆	⅜	¹³⁄₃₂	¹⁹⁄₃₂	.104	¹¹⁄₃₂	.011	.104	2¹³⁄₁₆	1100
			1³⁄₁₆	219					*90.5*	*112.7*	...	*10.32*	*15.1*	*2.64*	*8.7*	...	...	*71.4*	*4 890*
			1¼	2E20															
		30		*2M30*															
	72MSC1 72MS2 72MS3		1¼	220	...	...	1⅛	207	3¹⁵⁄₁₆	4¹³⁄₁₆	⅜	¹³⁄₃₂	¹⁹⁄₃₂	.104	⅜	.011	.104	3⅜	1400
			1⅜	222					*100.0*	*122.2*	...	*10.32*	*15.1*	*2.64*	*9.5*	...	...	*81.0*	*6 230*
			1⁷⁄₁₆	223										.134		.000	.044		1700
		35		*2M35*										*3.40*		...	...		*7 560*
														.149		.000	.014		1900
														3.78		...	...		*8 450*
4-BOLT	80MSC1		1½	224	⅞	⅞	1¼	208	4¹¹⁄₁₆	5¹³⁄₁₆	½	¹⁷⁄₃₂	⁴⁹⁄₆₄	.134	¹³⁄₃₂	.013	.107	3⁹⁄₁₆	1700
		40		*2M40*	1³⁄₁₆	1			*119.1*	*147.6*	...	*13.49*	*19.4*	*3.40*	*10.3*	...	...	*90.5*	*7 560*
					1½	1⅛													
	85MSC1		1⅝	226	1½	1¼	1½	209	4¾	5⅞	½	¹⁷⁄₃₂	⁴⁹⁄₆₄	.134	⁷⁄₁₆	.013	.107	3¹³⁄₁₆	1700
			1¹¹⁄₁₆	227					*120.6*	*149.2*	...	*13.49*	*19.4*	*3.40*	*11.1*	...	...	*96.8*	*7 560*
			1¾	228															
		45		*2M45*	*45*														
	90MSC1		1¹⁵⁄₁₆	231	1⅜				5	6⅛	½	¹⁷⁄₃₂	⁴⁹⁄₆₄	.149	⁷⁄₁₆	.000	.077	4	1900
			2	2E32	1¾	1⅛	1⅝	210	*127.0*	*155.6*	...	*13.49*	*19.4*	*3.78*	*11.1*	...	...	*101.6*	*8 450*
		50		*2M50*	1¹⁵⁄₁₆														
	100MSC1		2	232	1⅝	1½	...	211	5⁷⁄₁₆	6⁹⁄₁₆	½	¹⁷⁄₃₂	⁴⁹⁄₆₄	.149	¹⁵⁄₃₂	.000	.077	4⁷⁄₁₆	1900
			2³⁄₁₆	235	2³⁄₁₆				*138.1*	*166.7*	...	*13.49*	*19.4*	*3.78*	*11.9*	...	...	*112.7*	*8 450*
		55		*2M55*															

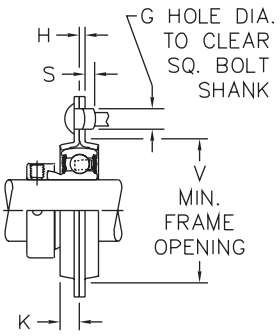
Please consult for availability.
■ Assembly requires two housing halves.
Additional information, page B-76.

Triangular Flanged Housings, 2-piece Formed Steel

MSTR

3-bolt (Carriage) Mounting
For Collar Mounted, Round, Square, or Hex Bore Bearings
Alignable
Non-relubricatable
Bearing Not Included





Dimensions (inches/*mm*)

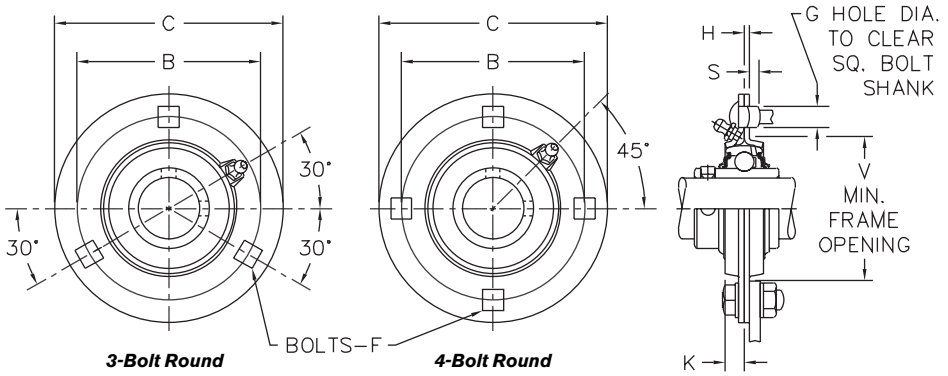
Housing half number ■	For collar mounted bearings: Shaft diameter *mm*	Shaft diameter in.	Bearing size number	For round, square and hex bore bearings: Shaft size Round bore	Square bore	Hex bore	Basic size bearing	B	C	F Carriage bolt size	F Hole nominal ±.005" *±0.13 mm*	G	H Stock thickness	J	K	N	S Carriage bolt Short shank	S Carriage bolt Long shank	T	V	Y	Radial load rating of housing assembly lbs/*newtons*
47MSTR		¾	212	. . .	. . .	5/8	204	2 13/16	3 9/16	5/16	11/32	½	.083	3	5/16	3	.021	.115	1 1/16	2 3/16	1 5/16	700
	20		*2M20*			11/16		*71.4*	*90.5*	. . .	*8.73*	*12.7*	*2.11*	*76.2*	*7.9*	*76.2*	. . .	. . .	*27.0*	*55.6*	*33.3*	*3 110*
52MSTR		7/8 15/16 1	214 215 216	. . .	. . .	7/8	205	3	3¾	5/16	11/32	½	.083	3 5/32	11/32	3 5/32	.021	.115	1 7/64	2⅜	1⅜	800
	25		*2M25*					*76.2*	*95.2*	. . .	*8.73*	*12.7*	*2.11*	*80.2*	*8.7*	*80.2*	. . .	. . .	*28.2*	*60.3*	*34.9*	*3 560*
62MSTR		1⅛ 1 3/16 1¼	218 219 2E20	. . .	. . .	1	206	3 9/16	4 7/16	⅜	13/32	19/32	.104	3 11/16	11/32	3 11/16	.011	.104	3 1/32	2 13/16	1½	1100
	30		*2M30*					*90.5*	*112.7*	. . .	*10.32*	*15.1*	*2.64*	*93.7*	*8.7*	*93.7*	. . .	. . .	*24.6*	*71.4*	*38.1*	*4 890*

Please consult for availability.
■ Assembly requires two housing halves.
Additional information, page B-76.

Round Flanged Housings, 2-piece Formed Steel

GMSA, GMSB

3-bolt or 4-bolt (Carriage) Mounting
For Collar Mounted, Round, Square, or Hex Bore Bearings
Alignable
Relubricatable
Bearing Not Included



Dimensions (inches/*mm*)

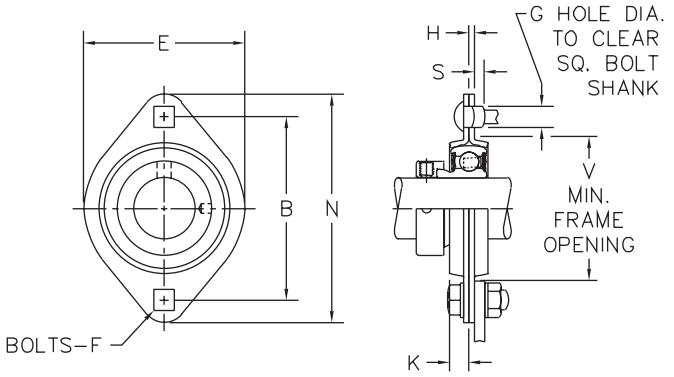
Round housing style	Housing half number ■	For collar mounted bearings: Shaft diameter *mm*	Shaft diameter in.	Bearing size number	For round, square and hex bore bearings: Shaft size Round bore	Square bore	Hex bore	Basic size bearing	B	C	F Carriage bolt size	F Hole▲ nominal ±.005" ±*0.13 mm*	G	H Stock thickness	K	S Carriage bolts Short shank	S Carriage bolts Long shank	V	Radial load rating of housing assembly lbs/*newtons*
3-BOLT	G52MSA 52MSC1	*25*	⅞ 15/16 1	214 215 216 *2M25*	. . .	. . .	⅞	205	3 *76.2*	3¾ *95.2*	5/16 . . .	11/32 *8.73*	½ *12.7*	.083 *2.11*	11/32 *8.7*	.021 . . .	.115 . . .	2⅜ *60.3*	800 *3 560*
3-BOLT	G62MSA G62MSB G62MSA-3 G62MSB-3	*30*	1⅛ 1 3/16 1¼	218 219 2E20 *2M30*	. . .	. . .	1	206	3 9/16 *90.5*	4 7/16 *112.7*	⅜ . . .	13/32 *10.32*	19/32 *15.1*	.104 *2.64* .134 *3.40*	⅜ *9.5*	.011 . . . .000 . . .	.104 . . . .044 . . .	2 13/16 *71.4*	1100 *4 890* 1400 *6 230*
3-BOLT	G72MSA G72MSB	*35*	1¼ 1⅜ 1 7/16	220 222 223 *2M35*	. . .	. . .	1⅛	207	3 15/16 *100.0*	4 13/16 *122.2*	⅜ . . .	13/32 *10.32*	13/32 *15.1*	.134 *3.40*	7/16 *11.1*	.000 . . .	.044 . . .	3 3/16 *81.0*	1400 *6 230*
4-BOLT	G80MSA G80MSB	*40*	1½	224 *2M40*	⅞ 1 3/16 1½	⅞ 1 1⅛	1¼	208	4 11/16 *119.1*	5 13/16 *147.6*	½ . . .	17/32 *13.49*	49/64 *19.4*	.149 *3.78*	⅝ *15.9*	.013 . . .	.107 . . .	3 9/16 *90.5*	1700 *7 560*
4-BOLT	G85MSA G85MSB	*45*	1⅝ 1 11/16 1¾	226 227 228 *2M45*	1½ *45*	1¼	1½	209	4¾ *120.6*	5⅞ *149.2*	½ . . .	17/32 *13.49*	49/64 *19.4*	.149 *3.78*	⅝ *15.9*	.013 . . .	.107 . . .	3 13/16 *96.8*	1700 *7 560*
4-BOLT	G90MSA G90MSB	*50*	1 15/16 2	231 2E32 *2M50*	1⅜ 1¾ 1 15/16	1⅛	1⅝	210	5 *127.0*	6⅛ *155.6*	½ . . .	17/32 *13.49*	49/64 *19.4*	.164 *4.17*	½ *12.7*	.000 . . .	.077 . . .	4 *101.6*	1900 *8 450*
4-BOLT	G100MSA G100MSB	*55*	2 2 3/16	232 235 *2M55*	1⅝ 2 3/16	1½	. . .	211	5 7/16 *138.1*	6 9/16 *166.7*	½ . . .	17/32 *13.49*	49/64 *19.4*	.164 *4.93*	⅝ *15.9*	.000 . . .	.077 . . .	4 9/16 *115.9*	2300 *10 230*

Please consult for availability.
■ GMSA are housing halves with straight lube fittings; GMSB are housing halves without fittings. Assembly requires one of each.
▲ G100MSA and G100MSB hole tolerance ±.015", ±*.038 mm*.
Additional information, page B-76.

Flanged Housings, 2-piece Formed Steel

MST

2-bolt (Carriage) Mounting
For Collar Mounted, Round, Square, or Hex Bore Bearings
Alignable
Non-relubricatable
Bearing Not Included



Dimensions (inches/*mm*)

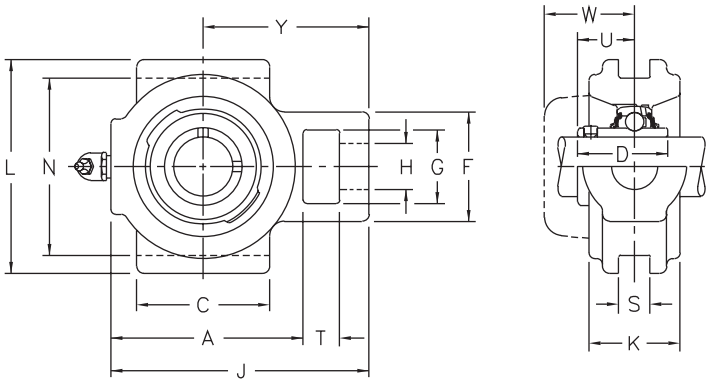
Housing half number ■	For collar mounted bearings: Shaft diameter *mm*	in.	Bearing size number	For round, square and hex bore bearings: Shaft size: Round bore	Square bore	Hex bore	Basic size bearing	B	E	F: Carriage bolt size	F: Hole nominal ±.005" ±*0.13 mm*	G	H: Stock thickness	K	N	S: Carriage bolt: Short shank	Long shank	V	Radial load rating of housing assembly lbs/*newtons*
40MST		½	2B08	. . .	. . .	. . .	. . .	2½	2⁵⁄₁₆	¼	⁹⁄₃₂	¹³⁄₃₂	.075	⁹⁄₃₂	3³⁄₁₆	.006	.100	1¹⁵⁄₁₆	600
		⅝	210																
		¹¹⁄₁₆	211																
	17		*2M17*					*63.5*	*58.7*	. . .	*7.14*	*10.3*	*1.90*	*7.1*	*81.0*	. . .	. . .	*49.2*	*2 670*
47MST		¾	212	. . .	. . .	⅝	204	2¹³⁄₁₆	2⅝	⅝	¹¹⁄₃₂	½	.083	⅝	3⁹⁄₁₆	.021	.115	2³⁄₁₆	700
	20		*2M20*			¹¹⁄₁₆		*71.4*	*66.7*	. . .	*8.73*	*12.7*	*2.11*	*7.9*	*90.5*	. . .	. . .	*55.6*	*3 110*
52MST		⅞	214	. . .	. . .	⅞	205	3	2⁵¹⁄₆₄	⅝	¹¹⁄₃₂	½	.083	¹¹⁄₃₂	3¾	.021	.115	2⅜	800
		¹⁵⁄₁₆	215																
		1	216																
	25		*2M25*					*76.2*	*71.0*	. . .	*8.73*	*12.7*	*2.11*	*8.7*	*95.2*	. . .	. . .	*60.3*	*3 560*
62MST		1⅛	218	. . .	. . .	1	206	3⁹⁄₁₆	3⁵⁄₁₆	⅜	¹³⁄₃₂	¹⁹⁄₃₂	.104	¹¹⁄₃₂	4⁷⁄₁₆	.011	.104	2¹³⁄₁₆	1100
		1³⁄₁₆	219																
		1¼	2E20																
	30		*2M30*					*90.5*	*84.1*	. . .	*10.32*	*15.1*	*2.64*	*8.7*	*112.7*	. . .	. . .	*71.4*	*4 890*

Please consult for availability.
■ Assembly requires two housing halves.
Additional information, page B-76.

Standard Duty Ball Bearing Takeup Units

T3-U200N

Cast Iron Housing
Standard Slot Design
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

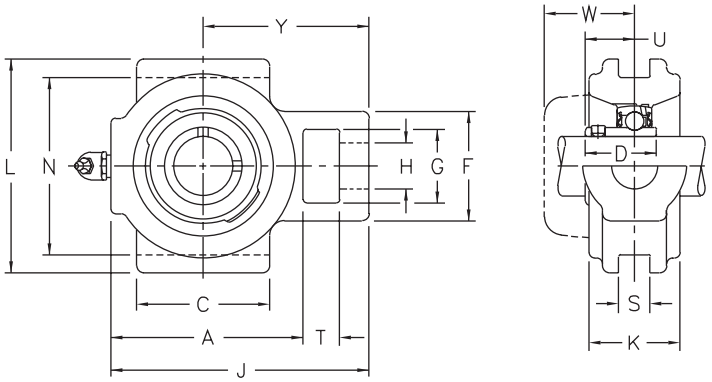
Shaft diameter		Takeup unit number	A	C	D	F	G	H	J	K	L	N +.000" –.015" *(+0.00 –0.38)*	S +.005" –.015" *(+0.13 –0.38)*	T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.
mm	in.	Lip seals																	
	1/2	**T3-U2B08N**	2 3/16	1 7/8	1 3/32	1 11/16	1 1/16	9/16	3	1 3/16	2 1/4	1.875	.281	1/2	41/64	1 13/64	1 15/16	1.0	UG2B08NL
	5/8	**T3-U210N**																	UG210NL
	11/16	T3-U211N																	UG211NL
17		*T3-U2M17N*	*55.6*	*47.6*	*27.78*	*42.9*	*27.0*	*14.3*	*76.2*	*20.6*	*57.2*	*47.62*	*7.14*	*12.7*	*16.3*	*30.6*	*49.2*	*0.4*	*UG2M17NL*
	3/4	**T3-U212N**	2 1/2	1 7/8	1 9/32	1 11/16	1 1/16	9/16	3 5/16	1 5/16	2 5/8	2.125	.281	1/2	3/4	1 5/16	2 3/32	1.5	UG212NL
20		*T3-U2M20N*	*63.5*	*47.6*	*32.54*	*42.9*	*27.0*	*14.3*	*84.1*	*23.8*	*66.7*	*53.98*	*7.14*	*12.7*	*19.0*	*33.3*	*53.2*	*0.9*	*UG2M20NL*
	7/8	**T3-U214N**	2 3/4	2	1 23/64	1 11/16	1 1/16	9/16	3 9/16	1	2 7/8	2.375	.281	1/2	51/64	1 5/16	2 7/32	2.0	UG214NL
	15/16	**T3-U215N**																	UG215NL
	1	**T3-U216N**																	UG216NL
25		*T3-U2M25N*	*69.8*	*50.8*	*34.53*	*42.9*	*27.0*	*14.3*	*90.5*	*25.4*	*73.0*	*60.32*	*7.14*	*12.7*	*20.2*	*33.3*	*56.4*	*0.9*	*UG2M25NL*
	1 1/8	**T3-U218N**	3 1/4	2 3/8	1 9/16	1 7/8	1 1/8	5/8	4 3/16	1 3/32	3 1/2	2.875	.406	9/16	61/64	1 29/64	2 19/32	3.0	UG218NL
	1 3/16	**T3-U219N**																	UG219NL
	1 1/4	**T3-U2E20N**																	UG2E20NL
30		*T3-U2M30N*	*82.6*	*60.3*	*39.69*	*47.6*	*28.6*	*15.9*	*106.4*	*27.8*	*88.9*	*73.02*	*10.31*	*14.3*	*24.2*	*36.9*	*65.9*	*1.4*	*UG2M30NL*
	1 1/4	**T3-U220N**	3 11/16	2 5/8	1 49/64	2	1 1/4	1 1/16	4 11/16	1 3/16	4	3.375	.406	5/8	1 7/64	1 35/64	2 7/8	3.5	UG220NL
	1 3/8	**T3-U222N**																3.4	UG222NL
	1 7/16	**T3-U223N**																3.4	UG223NL
35		*T3-U2M35N*	*93.7*	*66.7*	*44.85*	*50.8*	*31.8*	*17.5*	*119.1*	*30.2*	*101.6*	*85.72*	*10.31*	*15.9*	*28.2*	*39.3*	*73.0*	*1.5*	*UG2M35NL*
	1 1/2	**T3-U224N**	4 1/16	2 7/8	1 29/32	2	1 1/4	1 1/16	5 1/8	1 11/32	4 1/8	3.500	.406	5/8	1 11/64	1 41/64	3 1/8	4.5	UG224NL
40		*T3-U2M40N*	*103.2*	*73.0*	*48.42*	*50.8*	*31.8*	*17.5*	*130.2*	*34.1*	*104.8*	*88.90*	*10.31*	*15.9*	*29.8*	*41.7*	*79.4*	*2.6*	*UG2M40NL*
	1 5/8	T3-U226N	4 5/16	3 1/8	2 1/32	2 1/4	1 7/16	7/8	5 3/8	1 3/8	4 1/2	3.750	.406	5/8	1 15/64	1 21/32	3 1/4	5.3	UG226NL
	1 11/16	T3-U227N																5.3	UG227NL
	1 3/4	T3-U228N																5.2	UG228NL
45		*T3-U2M45N*	*109.5*	*79.4*	*51.59*	*57.2*	*36.5*	*22.2*	*136.5*	*34.9*	*114.3*	*95.25*	*10.31*	*15.9*	*31.4*	*42.1*	*82.6*	*2.3*	*UG2M45NL*
	1 15/16	**T3-U231N**	4 9/16	3 1/4	2 3/32	2 1/4	1 7/16	7/8	5 5/8	1 13/32	4 3/4	4.000	.406	5/8	1 17/64	1 53/64	3 3/8	6.0	UG231NL
50		*T3-U2M50N*	*115.9*	*82.6*	*53.18*	*57.2*	*36.5*	*22.2*	*142.9*	*35.7*	*120.6*	*101.60*	*10.31*	*15.9*	*32.1*	*46.4*	*85.7*	*2.6*	*UG2M50NL*
	2	T3-U232N	5	3 3/4	2 1/4	2 7/8	1 15/16	1 1/8	6 1/4	1 9/16	5 1/4	4.500	.531	3/4	1 13/32	2 1/64	3 25/32	7.6	UG232NL
	2 3/16	T3-U235N																7.5	UG235NL
55		*T3-U2M55N*	*127.0*	*95.2*	*57.15*	*73.0*	*49.2*	*28.6*	*158.8*	*39.7*	*133.4*	*114.30*	*13.49*	*19.0*	*35.7*	*51.2*	*96.0*	*3.3*	*UG2M55NL*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 1 1/16" *(17 mm)* and smaller shafts, 1/4"-28 UNF; for all other shafts, 1/8" PT.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Takeup Units

T3-S200E

Cast Iron Housing
Standard Slot Design
Alignable
Spring Locking
Relubricatable
Extended Inner Ring



Dimensions (inches/*mm*)

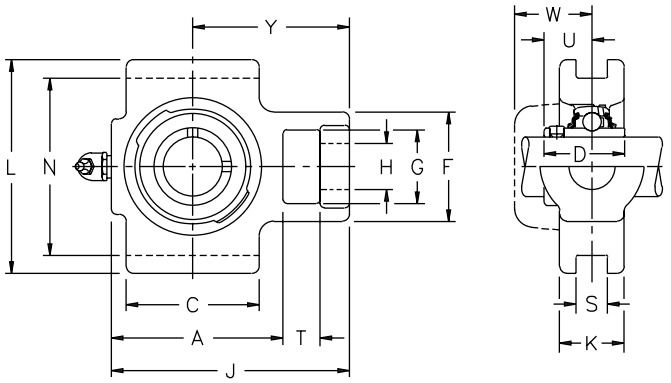
Shaft diameter in.	Takeup unit number Lip seals	A	C	D	F	G	H	J	K	L	N +.000" –.015" *(+0.00 –0.38)*	S +.005" –.015" *(+0.13 –0.38)*	T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.
¾	**T3-S212E**	2½	1⅞	1⅛	1¹¹⁄₁₆	1⅛	⁹⁄₁₆	3⁵⁄₁₆	¹⁵⁄₁₆	2⅝	2.125	.281	½	¾	1⁵⁄₁₆	2³⁄₃₂	1.5	SG212EL
		63.5	*47.6*	*28.58*	*42.9*	*27.0*	*14.3*	*84.1*	*23.8*	*66.7*	*53.98*	*7.14*	*12.7*	*19.0*	*33.3*	*53.2*	*0.9*	
⅞	**T3-S214E**																	SG214EL
¹⁵⁄₁₆	**T3-S215E**	2¾	2	1³⁄₁₆	1¹¹⁄₁₆	1⅛	⁹⁄₁₆	3⁹⁄₁₆	1	2⅞	2.375	.281	½	¹³⁄₁₆	1⁵⁄₁₆	2⁷⁄₃₂	2.0	SG215EL
1	**T3-S216E**																	SG216EL
		69.8	*50.8*	*30.17*	*42.9*	*27.0*	*14.3*	*90.5*	*25.4*	*73.0*	*60.32*	*7.14*	*12.7*	*20.6*	*33.3*	*56.4*	*0.9*	
1⅛	**T3-S218E**																	SG218EL
1³⁄₁₆	**T3-S219E**	3¼	2⅜	1¹¹⁄₃₂	1⅞	1⅛	⅝	4³⁄₁₆	1³⁄₃₂	3½	2.875	.406	⁹⁄₁₆	⁶¹⁄₆₄	1²⁹⁄₆₄	2¹⁹⁄₃₂	3.0	SG219EL
1¼	**T3-S2E20E**																	SG2E20EL
		82.6	*60.3*	*34.13*	*47.6*	*28.6*	*15.9*	*106.4*	*27.8*	*88.9*	*73.02*	*10.31*	*14.3*	*24.2*	*36.9*	*65.9*	*1.4*	
1¼	**T3-S220E**																3.5	SG220EL
1⅜	**T3-S222E**	3¹¹⁄₁₆	2⅝	1⁹⁄₁₆	2	1¼	¹¹⁄₁₆	4¹¹⁄₁₆	1³⁄₁₆	4	3.375	.406	⅝	1⁷⁄₆₄	1³⁵⁄₆₄	2⅞	3.4	SG222EL
1⁷⁄₁₆	**T3-S223E**																3.4	SG223EL
		93.7	*66.7*	*39.67*	*50.8*	*31.8*	*17.5*	*119.1*	*30.2*	*101.6*	*85.72*	*10.31*	*15.9*	*28.2*	*39.3*	*73.0*	*1.5*	
1½	**T3-S224E**	4¹⁄₁₆	2⅞	1¹¹⁄₁₆	2	1¼	¹¹⁄₁₆	5⅛	1¹¹⁄₃₂	4⅛	3.500	.406	⅝	1¹³⁄₆₄	1⁴¹⁄₆₄	3⅛	4.5	SG224EL
		103.2	*73.0*	*42.87*	*50.8*	*31.8*	*17.5*	*130.2*	*34.1*	*104.8*	*88.90*	*10.31*	*15.9*	*30.6*	*41.7*	*79.4*	*2.6*	
1⅝	T3-S226E																5.3	SG226EL
1¹¹⁄₁₆	T3-S227E	4⁵⁄₁₆	3⅛	1⁴⁹⁄₆₄	2¼	1⁷⁄₁₆	⅞	5⅜	1⅜	4½	3.750	.406	⅝	1¹⁵⁄₆₄	1²¹⁄₃₂	3¼	5.3	SG227EL
1¾	T3-S228E																5.2	SG228EL
		109.5	*79.4*	*44.85*	*57.2*	*36.5*	*22.2*	*136.5*	*34.9*	*114.3*	*95.25*	*10.31*	*15.9*	*31.4*	*42.1*	*82.6*	*2.3*	
1¹⁵⁄₁₆	**T3-S231E**	4⁹⁄₁₆	3¼	1⁵¹⁄₆₄	2¼	1⁷⁄₁₆	⅞	5⅝	1¹³⁄₃₂	4¾	4.000	.406	⅝	1¹⁷⁄₆₄	1⁵³⁄₆₄	3⅜	6.0	SG231EL
		115.9	*82.6*	*45.64*	*57.2*	*36.5*	*22.2*	*142.9*	*35.7*	*120.6*	*101.60*	*10.31*	*15.9*	*32.1*	*46.4*	*85.7*	*2.6*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for ¹¹⁄₁₆" *(17 mm)* and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-76.

Standard Duty Ball Bearing Takeup Units

TH3-U200N

Cast Iron Housing
Wide Slot Design
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

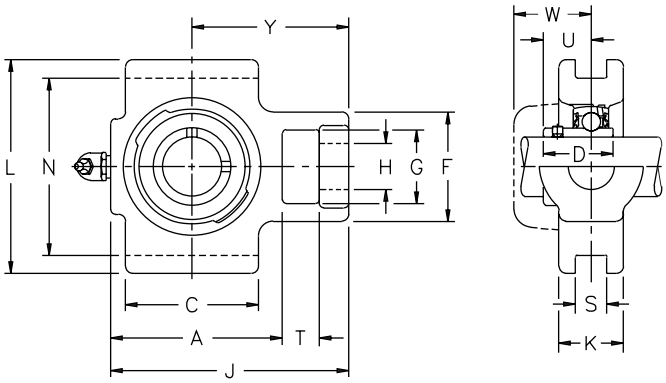
Shaft diameter	Takeup unit number	A	C	D	F	G	H	J	K	L	N +.000" −.015" *(+0.00 −0.38)*	S +.005" −.015" *(+0.13 −0.38)*	T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.
inches	Lip seals																	
¾	TH3-U212N	2 27/32	2 1/4	1 9/32	1 7/8	1 1/4	3/4	3 31/32	1 1/16	3 5/8	3.000	.531	5/8	3/4	1 5/16	2 21/32	2.4	UG212NL
		72.2	*57.2*	*32.54*	*47.6*	*31.8*	*19.0*	*100.8*	*27.0*	*92.1*	*76.20*	*13.49*	*15.9*	*19.0*	*33.3*	*67.5*	*1.1*	
⅞	TH3-U214N	2 29/32	2 1/4	1 23/64	1 27/32	1 1/4	3/4	4 1/32	1 3/32	3 5/8	3.000	.531	5/8	51/64	1 5/16	2 21/32	2.7	UG214NL
15/16	TH3-U215N																	UG215NL
1	**TH3-U216N**	*73.8*	*57.2*	*34.53*	*46.8*	*31.8*	*19.0*	*102.4*	*27.8*	*92.1*	*76.20*	*13.49*	*15.9*	*20.2*	*33.3*	*67.5*	*1.2*	UG216NL
1 1/8	TH3-U218N																	UG218NL
1 3/16	TH3-U219N	3 11/32	2 1/2	1 9/16	2 3/16	1 7/16	7/8	4 15/32	1 3/32	4 1/8	3.500	.531	5/8	61/64	1 29/64	2 27/32	3.2	UG219NL
1 1/4	TH3-U2E20N	*84.9*	*63.5*	*39.69*	*55.6*	*36.5*	*22.2*	*113.5*	*27.8*	*104.8*	*88.90*	*13.49*	*15.9*	*24.2*	*36.9*	*72.2*	*1.5*	UG2E20NL
1 1/4	TH3-U220N																	UG220NL
1 3/8	TH3-U222N	3 11/16	2 3/4	1 49/64	2 5/16	1 7/16	7/8	4 13/16	1 3/16	4 1/8	3.500	.531	5/8	1 7/64	1 35/64	2 31/32	4.0	UG222NL
1 7/16	**TH3-U223N**	*93.7*	*69.8*	*44.85*	*58.7*	*36.5*	*22.2*	*122.2*	*30.2*	*104.8*	*88.90*	*13.49*	*15.9*	*28.2*	*39.3*	*75.4*	*1.8*	UG223NL
1 1/2	TH3-U224N	4 3/16	3 1/4	1 29/32	2 27/32	1 15/16	1 1/8	5 9/16	1 5/16	4 3/4	3.969	.688	3/4	1 11/64	1 41/64	3 15/32	5.3	
		106.4	*82.6*	*48.42*	*72.2*	*49.2*	*28.6*	*141.3*	*33.3*	*120.6*	*100.81*	*17.48*	*19.0*	*29.8*	*41.7*	*88.6*	*2.4*	UG224NL
1 5/8	TH3-U226N																	UG226NL
1 11/16	TH3-U227N	4 3/16	3 1/4	2 1/32	2 7/8	1 15/16	1 1/8	5 9/16	1 3/8	4 3/4	3.969	.688	3/4	1 15/64	1 21/32	3 15/32	5.3	UG227NL
1 3/4	TH3-U228N	*106.4*	*82.6*	*51.59*	*73.0*	*49.2*	*28.6*	*141.3*	*34.9*	*120.6*	*100.81*	*17.48*	*19.0*	*31.4*	*42.1*	*88.6*	*2.4*	UG228NL
1 15/16	**TH3-U231N**	4 9/16	3 3/8	2 3/32	2 7/8	1 15/16	1 1/8	5 15/16	1 43/64	4 3/4	3.969	.688	3/4	1 17/64	1 25/32	3 19/32	6.6	UG231NL
2	TH3-U2E32N	*115.9*	*85.7*	*53.18*	*73.0*	*49.2*	*28.6*	*150.8*	*42.5*	*120.6*	*100.81*	*17.48*	*19.0*	*32.1*	*45.2*	*91.3*	*3.0*	UG2E32NL
2	TH3-U232N	5 7/16	4	2 1/4	3 19/32	2 1/2	1 3/8	7 7/16	1 3/4	5 7/8	5.094	1.062	1 1/4	1 13/32	2 1/64	4 23/32	13.5	UG232NL
2 3/16	TH3-U235N	*138.1*	*101.6*	*57.15*	*91.3*	*63.5*	*34.9*	*188.9*	*44.4*	*149.2*	*129.39*	*26.97*	*31.8*	*35.7*	*51.2*	*119.8*	*6.1*	UG235NL
2 1/4	TH3-U236N																	UG236NL
2 3/8	TH3-U238N	5 7/16	4	2 1/2	3 19/32	2 1/2	1 3/8	7 7/16	2 1/16	5 7/8	5.094	1.062	1 1/4	1 9/16	2 7/64	4 23/32	12.9	UG238NL
2 7/16	**TH3-U239N**	*138.1*	*101.6*	*63.50*	*91.3*	*63.5*	*34.9*	*188.9*	*52.4*	*149.2*	*129.39*	*26.97*	*31.8*	*39.7*	*53.6*	*119.8*	*5.9*	UG239NL

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Intermediate Ball Bearing Takeup Units

TH3-S200E

Cast Iron Housing
Wide Slot Design
Alignable
Spring Locking
Relubricatable
Extended Inner Ring



Dimensions (inches/*mm*)

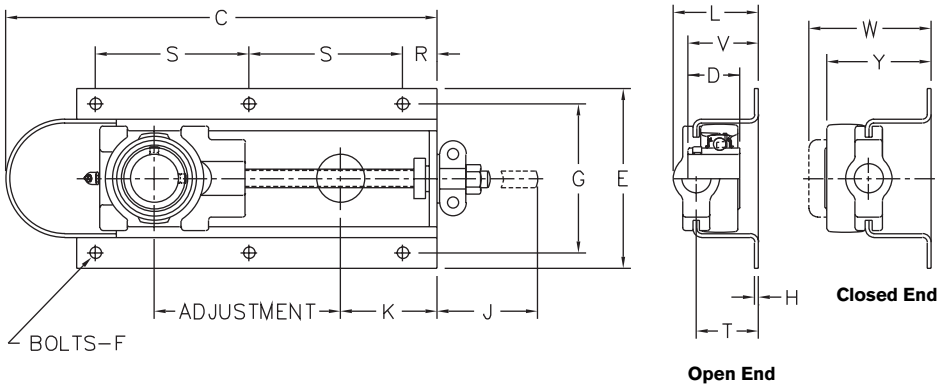
Shaft diameter	Takeup unit number	A	C	D	F	G	H	J	K	L	N +.000" −.015" *(+0.00 −0.38)*	S +.005" −.015" *(+0.13 −0.38)*	T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.
inches	Lip seals																	
¾	TH3-S212E	2 27/32	2 1/4	1 1/8	1 7/8	1 1/4	¾	3 31/32	1 1/16	3 5/8	3.000	.531	5/8	¾	1 5/16	2 21/32	2.4	SG212EL
		72.2	*57.2*	*28.58*	*47.6*	*31.8*	*19.0*	*100.8*	*27.0*	*92.1*	*76.20*	*13.49*	*15.9*	*19.0*	*33.3*	*67.5*	*1.1*	
7/8	TH3-S214E																	SG214EL
15/16	TH3-S215E	2 29/32	2 1/4	1 3/16	1 27/32	1 1/4	¾	4 1/32	1 3/32	3 5/8	3.000	.531	5/8	13/16	1 5/16	2 21/32	2.7	SG215EL
1	**TH3-S216E**	*73.8*	*57.2*	*30.17*	*46.8*	*31.8*	*19.0*	*102.4*	*27.8*	*92.1*	*76.20*	*13.49*	*15.9*	*20.6*	*33.3*	*67.5*	*1.2*	SG216EL
1 1/8	TH3-S218E																	SG218EL
1 3/16	TH3-S219E	3 11/32	2 1/2	1 11/32	2 3/16	1 7/16	7/8	4 15/32	1 3/32	4 1/8	3.500	.531	5/8	61/64	1 29/64	2 27/32	3.2	SG219EL
1 1/4	TH3-S2E20E	*84.9*	*63.5*	*34.13*	*55.6*	*36.5*	*22.2*	*113.5*	*27.8*	*104.8*	*88.90*	*13.49*	*15.9*	*24.2*	*36.9*	*72.2*	*1.5*	SG2E20EL
1 1/4	TH3-S220E																	SG220EL
1 3/8	TH3-S222E	3 11/16	2 3/4	1 9/16	2 5/16	1 7/16	7/8	4 13/16	1 3/16	4 1/8	3.500	.531	5/8	1 7/64	1 35/64	2 31/32	4.0	SG222EL
1 7/16	**TH3-S223E**	*93.7*	*69.8*	*39.67*	*58.7*	*36.5*	*22.2*	*122.2*	*30.2*	*104.8*	*88.90*	*13.49*	*15.9*	*28.2*	*39.3*	*75.4*	*1.8*	SG223EL
1 1/2	TH3-S224E	4 3/16	3 1/4	1 11/16	2 27/32	1 15/16	1 1/8	5 9/16	1 5/16	4 3/4	3.969	.688	¾	1 13/64	1 41/64	3 15/32	5.3	
		106.4	*82.6*	*42.87*	*72.2*	*49.2*	*28.6*	*141.3*	*33.3*	*120.6*	*100.81*	*17.48*	*19.0*	*30.6*	*41.7*	*88.6*	*2.4*	SG224EL
1 5/8	TH3-S226E																	SG226EL
1 11/16	TH3-S227E	4 3/16	3 1/4	1 49/64	2 7/8	1 15/16	1 1/8	5 9/16	1 3/8	4 3/4	3.969	.688	¾	1 15/64	1 21/32	3 15/32	5.3	SG227EL
1 3/4	TH3-S228E	*106.4*	*82.6*	*44.85*	*73.0*	*49.2*	*28.6*	*141.3*	*34.9*	*120.6*	*100.81*	*17.48*	*19.0*	*31.4*	*42.1*	*88.6*	*2.4*	SG228EL
1 15/16	**TH3-S231E**	4 9/16	3 3/8	1 51/64	2 7/8	1 15/16	1 1/8	5 15/16	1 43/64	4 3/4	3.969	.688	¾	1 17/64	1 25/32	3 19/32	6.6	SG231EL
		115.9	*85.7*	*45.64*	*73.0*	*49.2*	*28.6*	*150.8*	*42.5*	*120.6*	*100.81*	*17.48*	*19.0*	*32.1*	*45.2*	*91.3*	*3.0*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, 1/8" PT.
◆ Width dimension for closed end unit.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Takeups

TAS3-U200N

Formed Steel Frame
Cast Iron Bearing Housing
Alignable
Spring Locking
Relubricatable
Wide Inner Ring
TA3-U200N Takeup Unit



Dimensions (inches/*mm*)

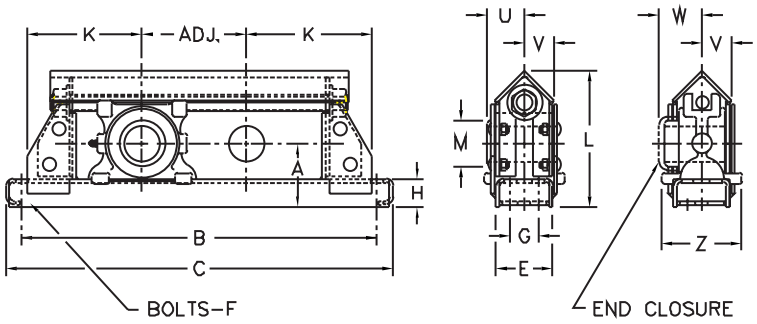
Shaft diameter *mm*	Shaft diameter in.	Adjustment	Takeup unit number — Lip seals	C	D	E	F Bolts	G	H	J	K	L	M	R	S ▲	T	V	W ●	Y ●	Unit wt. (lbs./kg.)	Unit no.
	15/16	6	TAS3-U215N-6	13 1/4	1 23/64	4 7/8	5/16	4 1/8	1/8	7 3/16	3 3/8	2 5/16	1 3/4	1 1/2	4 1/2	1 5/8	1 51/64	3 37/64	2 27/32	7.5	TA3-U215N
	1		**TAS3-U216N-6**																	7.5	TA3-U216N
25		*152.4*	*TAS3-U2M25N-6*	*336.5*	*34.53*	*123.8*	*8*	*104.8*	*3.2*	*198.4*	*85.7*	*58.7*	*44.4*	*38.1*	*114.3*	*41.3*	*45.6*	*90.9*	*72.2*	*3.4*	*TA3-U2M25N*
	1 1/8	6	TAS3-U218N-6	15						8 3/16					4 7/8					11.0	TA3-U218N
		12	TAS3-U218N-12	21						14 3/16					5 3/8					15.0	
	1 3/16	6	**TAS3-U219N-6**	15	1 9/16	6 1/4	3/8	5 1/4	3/16	8 3/16	3 11/16	2 7/8	2 3/32	1 5/8	4 7/8	2 1/8	2 11/32	4 19/64	3 1/2	11.0	TA3-U219N
		12	TAS3-U219N-12	21						14 3/16					5 3/8					15.0	
30		*152.4*	*TAS3-U2M30N-6*	*381.0*	*39.69*	*158.8*	*10*	*133.4*	*4.8*	*208.0*	*93.7*	*73.0*	*53.2*	*41.3*	*123.8*	*54.0*	*59.5*	*109.1*	*88.9*	*5.0*	*TA3-U2M30N*
		304.8	*TAS3-U2M30N-12*	*533.4*						*360.4*					*136.5*					*6.8*	
	1 1/4	6	**TAS3-U220N-6**	15						8 5/16					4 7/8					13.5	TA3-U220N
		12	**TAS3-U220N-12**	21						14 5/16					5 3/8					15.2	
	1 7/16	6	**TAS3-U223N-6**	15	1 49/64	6 1/4	3/8	5 1/4	3/16	8 5/16	3 3/4	2 7/8	2 7/16	1 5/8	4 7/8	2 1/8	2 31/64	4 7/16	3 35/64	13.0	TA3-U223N
		12	**TAS3-U223N-12**	21						14 5/16					5 3/8					16.0	
35		*152.4*	*TAS3-U2M35N-6*	*381.0*	*44.85*	*158.8*	*10*	*133.4*	*4.8*	*211.1*	*95.2*	*73.0*	*61.9*	*41.3*	*123.8*	*54.0*	*63.1*	*112.7*	*90.1*	*5.9*	*TA3-U2M35N*
		304.8	*TAS3-U2M35N-12*	*533.4*						*363.5*					*136.5*					*7.2*	
	1 1/2	9	**TAS3-U224N-9**	19 3/4	1 29/32	7 7/8	3/8	6 5/8	1/4	11 1/4	4 1/2	3 5/8	2 11/16	1 5/8	5	2 3/4	3 1/16	5 9/32	4 3/8	24.0	TA3-U224N
		18	TAS3-U224N-18	28 3/4						20 1/4					6					31.0	
40		*228.6*	*TAS3-U2M40N-9*	*501.6*	*48.42*	*200.0*	*10*	*168.3*	*6.4*	*285.8*	*114.3*	*92.1*	*68.3*	*41.3*	*127.0*	*69.8*	*77.8*	*134.1*	*111.1*	*10.9*	*TA3-U2M40N*
		457.2	*TAS3-U2M40N-18*	*730.2*						*514.4*					*152.4*					*14.1*	
	1 11/16	9	**TAS3-U227N-9**	19 3/4	2 1/32	7 7/8	3/8	6 5/8	1/4	11 3/16	4 5/8	3 5/8	2 7/8	1 5/8	5	2 3/4	3 1/16	5 7/16	4 1/2	25.5	TA3-U227N
		18	TAS3-U227N-18	28 3/4						20 3/16					6					32.0	
	1 3/4	9	**TAS3-U228N-9**	19 3/4						11 3/16					5					25.0	TA3-U228N
		18	TAS3-U228N-18	28 3/4						20 3/16					6					31.5	
45		*228.6*	*TAS3-U2M45N-9*	*501.6*	*41.59*	*200.0*	*10*	*168.3*	*6.4*	*284.2*	*117.5*	*92.1*	*73.0*	*41.3*	*127.0*	*69.8*	*77.8*	*138.1*	*114.3*	*11.3*	*TA3-U2M45N*
		457.2	*TAS3-U2M45N-18*	*730.2*						*512.8*					*152.4*					*14.5*	
	1 15/16	9	**TAS3-U231N-9**	19 3/4	2 3/32	7 7/8	3/8	6 5/8	1/4	11 1/4	4 5/8	3 5/8	3 1/8	1 5/8	5	2 3/4	3 1/16	5 19/32	4 17/32	23.0	TA3-U231N
		18	**TAS3-U231N-18**	28 3/4						20 1/4					6					29.8	
50		*228.6*	*TAS3-U2M50N-9*	*501.6*	*53.18*	*200.0*	*10*	*168.3*	*6.4*	*285.8*	*117.5*	*92.1*	*79.4*	*41.3*	*127.0*	*69.8*	*77.8*	*142.1*	*115.1*	*10.4*	*TA3-U2M40N*
		457.2	*TAS3-U2M50N-18*	*730.2*						*514.4*					*152.4*					*13.5*	
	2	9	TAS3-U232N-9	21 5/8	2 1/4	8 1/4	1/2	7 1/8	1/4	11 3/16	5 1/2	4 1/4	3 1/2	2 1/2	5	3 1/4	3 11/16	6 5/16	5 1/16	32.3	TA3-U232N
		18	TAS3-U232N-18	30 5/8						20 3/16					6					41.2	
	2 3/16	9	**TAS3-U235N-9**	21 5/8						11 3/16					5					29.9	TA3-U235N
		18	**TAS3-U235N-18**	30 5/8						20 3/16					6					39.0	
55		*228.6*	*TAS3-U2M55N-9*	*549.3*	*57.15*	*209.6*	*12*	*181.0*	*6.4*	*284.2*	*139.7*	*108.0*	*88.9*	*63.5*	*127.0*	*82.6*	*93.7*	*160.3*	*128.6*	*13.6*	*TA3-U2M55N*
		457.2	*TAS3-U2M55N-18*	*777.9*						*512.8*					*152.4*					*17.7*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, 1/8" PT.
Closed end takeups available, suffix "C" (optional).
● On closed end takeup, bearing assembly is reversed.
▲ Frames with 6" *(152.4 mm)* adjustment have six holes.
Frames with 9" *(228.6 mm)* or 12" *(304.8 mm)* adjustment have eight holes.
Frames with 18" *(457.2 mm)* adjustment have ten holes.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Takeups

TDS3-U200N

Welded Steel Frame
Removable Top
Protected Screw
Cast Iron Bearing Housing
Alignable
Spring Locking
Relubricatable
Wide Inner Ring
TD3-U200N Takeup Units



Dimensions (inches/*mm*)

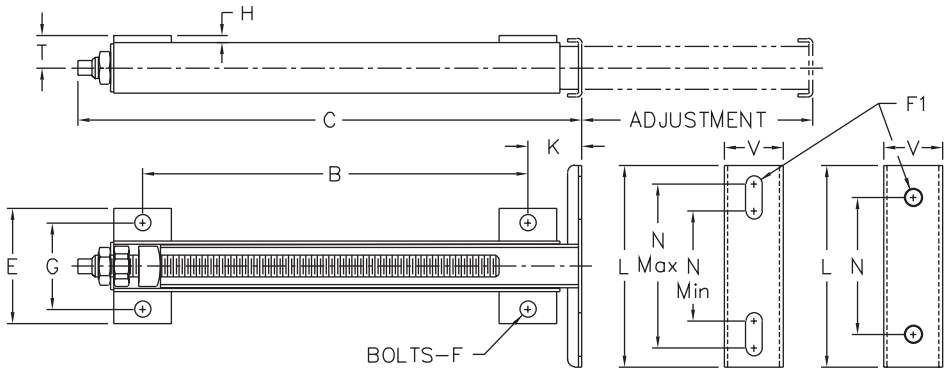
Shaft diameter *mm*	Shaft diameter *inches*	Adjustment ▲	Takeup number / Lip seals	A	B	C	E	F Bolts	G	H	K	L	M	U	V	W	Z	Unit wt. (lbs./kg.)	Unit no.
	1 15/16	12	**TDS3-U231N-12**	3 15/16	26 1/2	28 1/2	3	5/8	. . .	1 3/4	7 1/4	8 1/4	. . .	1 17/64	55/64	1 15/16	4 1/8	41.0	TD3-U231N
		18	**TDS3-U231N-18**		32 1/2	34 1/2												47.0	
		24	TDS3-U231N-24		38 1/2	40 1/2												52.0	
		304.8	*TDS3-U2M50N-12*		*673.1*	*723.9*												*18.6*	
50		*457.2*	*TDS3-U2M50N-18*	*100.0*	*825.5*	*876.3*	*76.2*	*16*	*. . .*	*44.4*	*184.2*	*209.6*	*. . .*	*32.1*	*21.8*	*49.2*	*104.8*	*21.3*	*TD3-U2M50N*
		609.6	*TDS3-U2M50N-24*		*977.9*	*1028.7*												*23.6*	
	2 3/16	12	**TDS3-U235N-12**	4 3/16	27 1/2	29 1/2	3	5/8	. . .	1 3/4	7 3/4	8 11/16	. . .	1 13/32	55/64	2 3/32	4 1/8	45.0	TD3-U235N
		18	TDS3-U235N-18		33 1/2	35 1/2												51.0	
		24	TDS3-U235N-24		39 1/2	41 1/2												56.0	
		304.8	*TDS3-U2M55N-12*		*698.5*	*749.3*												*20.4*	
55		*457.2*	*TDS3-U2M55N-18*	*106.4*	*850.9*	*901.7*	*76.2*	*16*	*. . .*	*44.4*	*196.8*	*220.7*	*. . .*	*35.7*	*21.8*	*53.3*	*104.8*	*23.1*	*TD3-U2M55N*
		609.6	*TDS3-U2M55N-24*		*1003.3*	*1054.1*												*25.4*	
	2 7/16	12	**TDS3-U239N-12**	4 3/8	28 1/2	30 1/2	3	3/4	. . .	1 3/4	8 1/4	9 1/8	. . .	1 9/16	31/32	2 5/32	4 1/8	52.0	TD3-U239N
		18	**TDS3-U239N-18**		34 1/2	36 1/2												58.0	
		24	TDS3-U239N-24		40 1/2	42 1/2												63.0	
		30	TDS3-U239N-30		46 1/2	48 1/2												68.0	
		304.8	*TDS3-U2M60N-12*		*725.9*	*774.7*												*23.6*	
60		*457.2*	*TDS3-U2M60N-18*	*111.1*	*876.3*	*927.1*	*76.2*	*20*	*. . .*	*44.4*	*209.6*	*231.8*	*. . .*	*39.7*	*24.6*	*54.8*	*104.8*	*38.6*	*TD3-U2M60N*
		609.6	*TDS3-U2M60N-24*		*1028.7*	*1079.5*												*42.2*	
		762.0	*TDS3-U2M60N-30*		*1181.1*	*1231.9*												*45.8*	
	2 15/16	12	**TDS-U247N-12**	5 1/8	30 1/2	32 1/2	4	5/8	2	2	9 1/4	10 5/8	4 5/8	1 13/16	1 5/32	2 13/64	5 1/8	76.0	TD3-U247N
		18	**TDS-U247N-18**		36 1/2	38 1/2												85.0	
		24	TDS-U247N-24		42 1/2	44 1/2												93.0	
		30	TDS-U247N-30		48 1/2	50 1/2												101.0	
		304.8	*TDS-U2M75N-12*		*774.7*	*825.5*												*34.5*	
75		*457.2*	*TDS-U2M75N-18*	*130.2*	*927.1*	*977.9*	*101.6*	*16*	*50.8*	*50.8*	*235.0*	*269.9*	*117.5*	*46.0*	*29.4*	*56.0*	*130.2*	*38.6*	*TD3-U2M75N*
		609.6	*TDS-U2M75N-24*		*1079.5*	*1130.3*												*42.2*	
		762.0	*TDS-U2M75N-30*		*1231.9*	*1282.7*												*45.8*	
	3 7/16	12	TDS-U255N-12	5 5/8	32	34 1/2	4	3/4	2	2	10	11 13/16	5 3/16	2 1/8	1 7/16	2 1/2	5 5/8	99.0	TD3-U255N
		18	TDS-U255N-18		38	40 1/4												108.0	
		24	TDS-U255N-24		44	46 1/4												116.0	
		30	TDS-U255N-30		50	52 1/4												124.0	
		304.8	*TDS-U2M85N-12*		*812.8*	*870.0*												*44.9*	
85		*457.2*	*TDS-U2M85N-18*	*142.9*	*965.2*	*1022.4*	*101.6*	*20*	*50.8*	*50.8*	*254.0*	*300.0*	*131.8*	*54.0*	*36.5*	*63.5*	*142.9*	*49.0*	*TD3-U2M85N*
		609.6	*TDS-U2M85N-24*		*1117.6*	*1174.8*												*52.6*	
		762.0	*TDS-U2M85N-30*		*1270.0*	*1327.2*												*56.2*	
	3 15/16	12	TDS-U263N-12	7	36	38 1/2	5	3/4	2 1/2	2 1/4	12	14 11/16	5 15/16	2 37/64	1 45/64	3 1/64	6 7/8	173.0	TD3-U263N
		18	TDS-U263N-18		42	44 1/2												185.0	
		24	TDS-U263N-24		48	50 1/2												195.0	
		30	TDS-U263N-30		54	56 1/2												205.0	
		304.8	*TDS-U2M100N-12*		*914.4*	*977.9*												*78.5*	
100		*457.2*	*TDS-U2M100N-18*	*177.8*	*1066.8*	*1130.3*	*127.0*	*20*	*63.5*	*57.2*	*304.8*	*373.1*	*150.8*	*65.5*	*43.2*	*76.6*	*174.6*	*83.9*	*TD3-U2M100N*
		609.6	*TDS-U2M100N-24*		*1219.2*	*1282.7*												*88.4*	
		762.0	*TDS-U2M100N-30*		*1371.6*	*1435.1*												*93.0*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, 1/8" PT.
Closed end takeups available, suffix "C" (optional).
5 inch channel (DIM E) has hinged top construction.
▲ Takeups with adjustment of 18" *(457.2 mm)* or more have center supporting pad welded to bottom of frame.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Ball Bearing Takeups

TP, TPT, TSP, TSPT

T-Frame Takeup
Protected Screw
Mild Steel or
AISI 304 Stainless Steel
Pillow Block Mounting or
Tapped Base Pillow Block Mounting
Pillow Block and Tapped Base
Pillow Block Units Not Included



Pillow Block Plate **Tapped Base Plate**

Basic Series No.	Adjustment	B	C	E	F Bolts	G	H	K	T	Adj. Screw Sq. Drive	Adj. Screw THD	Unit wt. lbs. Steel	Unit wt. lbs. Stainless
100	3	3 9/16	6 7/8	3 11/16	3/8	2 5/8	1/4	1 1/2	7/8	3/8	5/8-11	3.0	2.6
	6	7 1/16	10 3/8									4.0	3.5
	9	11 1/16	14 3/8									5.1	4.4
250	3	4 3/8	8 1/2	4	1/2	3	1/4	1 7/8	1 1/8	1/2	3/4-10	5.8	4.8
	6	7 3/8	11 1/2									7.1	5.8
	9	10 3/8	14 1/2									8.4	7.0
	12	13 3/8	17 1/2									9.9	8.1
300	6	6 1/8	11 1/8	5 1/4	5/8	4	1/4	2 3/8	1 1/2	1/2	7/8-9	11.0	11.4
	9	10 1/8	15 1/8									13.1	13.4
	12	14 1/8	19 1/8									16.0	16.5
	18	21 1/8	26 1/8									20.4	21.6
400	12	27 3/4	20	7 1/2	3/4	5 1/2	1/4	3 1/2	2 1/8	Pinned Nut	1 1/4-7	42.9	. . .
	18	33 3/4	26									52.1	. . .
	24	39 3/4	32									61.3	. . .

Pillow Block Mounting*

Basic Series No.	Shaft dia.	T-Frame Steel	T-Frame Stainless	F1 Bolts	L	N Min.	N Max.	V
100	1/2 Thru 1	**TP100-3** **TP100-6** **TP100-9**	**TSP100-3** **TSP100-6** **TSP100-9**	3/8	5 1/4	2 15/16	4 5/16	1 1/2
250	1 1/8 Thru 1 3/4	**TP250-3** **TP250-6** **TP250-9** **TP250-12**	**TSP250-3** **TSP250-6** **TSP250-9** **TSP250-12**	1/2	7	3 13/16	5 11/16	2 1/32
300	1 15/16 Thru 2 7/16	**TP300-6** **TP300-9** **TP300-12** **TP300-18**	**TSP300-6** **TSP300-9** **TSP300-12** **TSP300-18**	5/8	10	5 9/16	8 11/16	2 27/32
400	2 1/2 Thru 3 1/2	**TP400-12** **TP400-18** **TP400-24**	– – – – – – – – – –	3/4	14	8 1/2	11 3/4	3 1/2

Tapped Base Mounting■

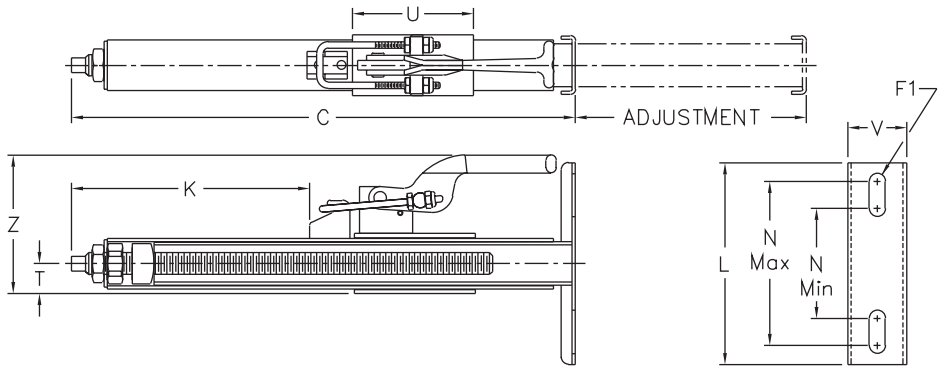
Shaft dia.	T-Frame Steel	T-Frame Stainless	F1 Bolts	L	N	V
3/4 Thru 1	**TPT100-3** TPT100-6 **TPT100-9**	**TSPT100-3** **TSPT100-6** TSPT100-9	3/8	3	2	1 1/2
1 1/8 Thru 1 1/4	TPT2501-3 TPT2501-6 TPT2501-9 TPT2501-12	TSPT2501-3 TSPT2501-6 TSPT2501-9 TSPT2501-12	7/16	4	3	1 1/2
1 1/4 Thru 1 7/16	TPT2502-3 **TPT2502-6** TPT2502-9 TPT2502-12	TSPT2502-3 TSPT2502-6 TSPT2502-9 TSPT2502-12	1/2	4 1/4	3 1/4	2
1 15/16 2	TPT2505-3 TPT2505-6 TPT2505-9 TPT2505-12	TSPT2505-3 TSPT2505-6 TSPT2505-9 TSPT2505-12	5/8	5 1/2	4	2
. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .

See footnotes on facing page.

Standard Duty Ball Bearing Takeups

TQP

T-Frame Takeup
Quick Release
Protected Screw
AISI 304 Stainless Steel
Pillow Block Mounting
Pillow Block Units Not Included



Shaft Dia.	T-Frame No.*	Adjust-ment	C	F1	K	L	N		T	U	V	Z	Adj. Screw		Unit wt. lbs.
							Min.	Max.					Sq Drive	THD	
½	**TQP100-6**	6	10⅜	⅜	3⅞	5¼	2 15/16	4 5/16	¾	3	1½	3 7/16	⅜	⅝-11	4.0
Thru 1	**TQP100-9**	9	14⅜		5⅞					5					5.0
1⅛	**TQP250-6**	6	11½		1 9/16					4					7.0
Thru	**TQP250-9**	9	14½	½	3 1/16	7	3 13/16	5 11/16	1	6	2 1/32	4⅞	½	¾-10	8.2
1¾	**TQP250-12**	12	17½		4 9/16					8					9.5

Bold face items are normally available from stock; please consult for availability of non-stock items.

* For pillow block dimensions see page B-21.

■ For tapped base dimensions see page B-30.

Selection guide, pages B-9, B-10.

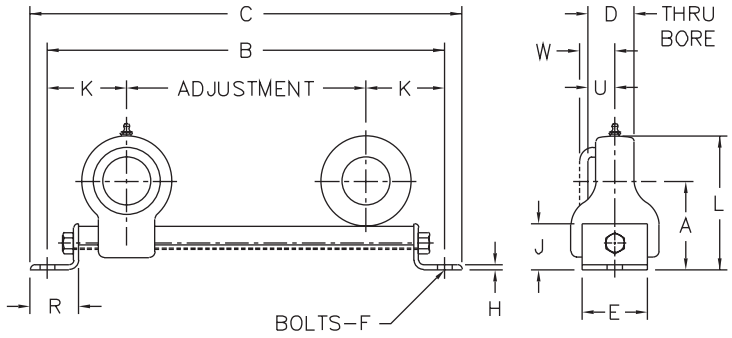
Load ratings, pages B-11, B-12.

Additional information, page B-75.

Standard Duty Ball Bearing Takeups

NT3-U200N

Welded Channel Frame
Protected Screw
Cast Iron Bearing Housing
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Dimensions (inches/*mm*)

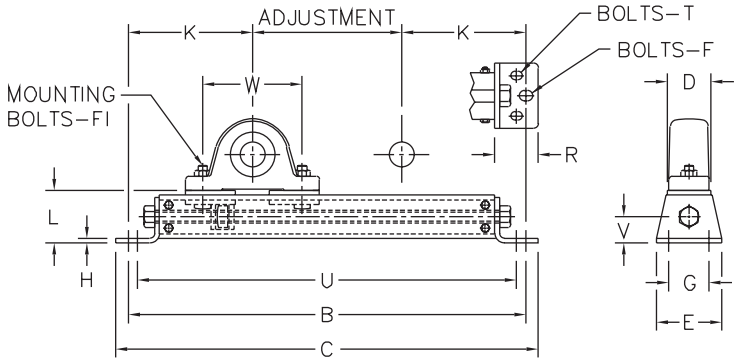
Shaft diameter		Adjust-ment	Takeup number	A	B	C	D	E	F Bolts	H	J	K	L	R	U	W	Unit wt. (lbs./kg.)
mm	in.																
	15/16	6	NT3-U215N-6	2¾	10⅞	12¼	1 23/64	1¾	½	3/16	1½	2 7/16	4 3/16	2	51/64	1 9/32	4.5
	1		**NT3-U216N-6**														4.5
25		*152.4*	*NT3-U2M25N-6*	*69.8*	*276.2*	*311.2*	*34.53*	*44.4*	*12*	*4.8*	*38.1*	*61.9*	*106.4*	*50.8*	*20.2*	*32.5*	*2.0*
	1 3/16	6	**NT3-219N-6**	3	10⅞	12¼	1 9/16	1¾	½	3/16	1½	2 7/16	4 11/16	2	61/64	1 15/32	5.0
30		*152.4*	*NT3-U2M30N-6*	*76.2*	*276.2*	*311.2*	*39.69*	*44.4*	*12*	*4.8*	*38.1*	*61.9*	*119.1*	*50.8*	*24.2*	*37.3*	*2.3*
	1 7/16	9	**NT3-U223N-9**	3 11/16	14½	16½	1 49/64	2¼	½	¼	2	2¾	5 9/16	2½	1 7/64	1 9/16	9.5
		12	**NT3-U223N-12**		17½	19½											10.0
		228.6	*NT3-U2M35N-9*	*93.7*	*368.3*	*419.1*	*44.85*	*57.2*	*12*	*6.4*	*50.8*	*69.8*	*141.3*	*63.5*	*28.2*	*39.7*	*4.3*
35		*304.8*	*NT3-U2M35N-12*		*444.5*	*495.3*											*4.5*
		9	NT3-U231N-9		16	18½											18.0
	1 15/16	12	NT3-U231N-12	4 21/32	19	21½	2 3/32	3¼	⅝	5/16	2½	3½	6 29/32	3	1 17/64	1 25/32	19.0
		18	NT3-U231N-18		25	27½											21.0
		228.6	*NT3-U2M50N-9*		*406.4*	*469.9*											*8.2*
50		*304.8*	*NT3-U2M50N-12*	*118.3*	*482.6*	*546.1*	*53.18*	*82.6*	*16*	*7.9*	*63.5*	*88.9*	*175.4*	*76.2*	*32.1*	*45.2*	*8.6*
		457.2	*NT3-U2M50N-18*		*635.0*	*698.5*											*9.5*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size, ⅛" PT.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Universal Takeup Frames

LC

Bolted Steel Frames
2 or 4-bolt Frame Mounting
Bolt Hole Centers Adjustable
Pillow Block Units Not Included



Dimensions (inches/*mm*)

Pillow block series*	Unit Mounting: Bolt dia. (F') and max. shaft size (A) in.	Unit Mounting: Bolt dia. (F') and max. shaft size (A) *mm*	Takeup frame number	Adjustment	B	C	D	E	F Bolts	G	H	K	L	R	T Bolts	U	V	W Min.	W Max.
P3-U216N				6	16	17										15¼			
P3-U2M25N				9	19	20										18¼			
. . . . .	⅜	*10*	**LC1-6**	12	22	23	1¾	2⅝	⅜	1⅝	3⁄16	5	2⅛	1¾	5⁄16	21¼	1⅛16	3	5¹⁵⁄16
. . . . .	bolts		**LC1-9**				*44.5*	*66.7*	*10*	*41.3*	*4.8*	*127.0*	*54.0*	*44.5*	*8*		*27.0*	*76.2*	*127.0*
PL3-U216N			LC1-12																
PL3-U2M25N	1	25		*152.4*	*406.4*	*431.8*										*387.4*			
. . . . .	shaft			*228.6*	*482.6*	*508.0*										*436.6*			
. . . . .				*304.8*	*558.8*	*584.2*										*539.8*			
P3-U231N				6	19⅛	20¼										18⅛			
P3-U2M50N	½	*12*		9	22⅛	23¼										21⅛			
. . . . .	bolts			12	25⅛	26¼										24⅛			
. . . . .		**LC2-9**	**LC2-6**	18	31⅛	32¼	2⅜	3⅛	½	2⅛	¼	6⁹⁄16	2¹¹⁄16	2³⁄16	⅜	30⅛	1¹¹⁄32	3¾	7¼
PL3-U231N	1¹⁵⁄16	*50*	**LC2-12**				*60.3*	*79.4*	*12*	*54.0*	*6.4*	*166.7*	*68.3*	*55.6*	*10*		*34.1*	*95.2*	*184.2*
PL3-U2M50N	shaft		**LC2-18**	*152.4*	*485.8*	*514.4*										*460.4*			
PH3-U219N			*304.8*	*228.6*	*562.0*	*590.6*										*536.6*			
PH3-U2M30N				*638.2*	*667.8*											*612.8*			
				457.2	*790.6*	*819.2*										*765.2*			
				9	25⁵⁄16	26⁹⁄16										24¹⁄16			
				12	28⁵⁄16	29⁹⁄16										27¹⁄16			
P3-U239N	⅝	*16*		18	34⁵⁄16	35⁹⁄16										33¹⁄16			
P3-U2M60N	bolts		**LC3-9**	24	40⁵⁄16	41⁹16										39¹⁄16			
PL3-U235N			**LC3-12**				3	4	⅝	2¾	5⁄16	8⁵⁄32	3⁵⁄16	2¾	½		1⅛	4¼	9
PL3-U2M55N	2³⁄16	*60*	**LC3-18**	*228.6*	*642.9*	*674.7*	*76.2*	*101.6*	*16*	*69.8*	*7.9*	*207.2*	*84.1*	*69.8*	*12*	*611.2*	*41.3*	*108.0*	*228.6*
PH3-U235N	shaft		LC3-24	*304.8*	*719.1*	*750.9*										*687.4*			
PH3-U2M55N				*457.2*	*871.5*	*903.3*										*839.8*			
				609.6	*1023.9*	*1055.7*										*992.2*			

Bold face items are normally available from stock; please consult for availability of non-stock items.

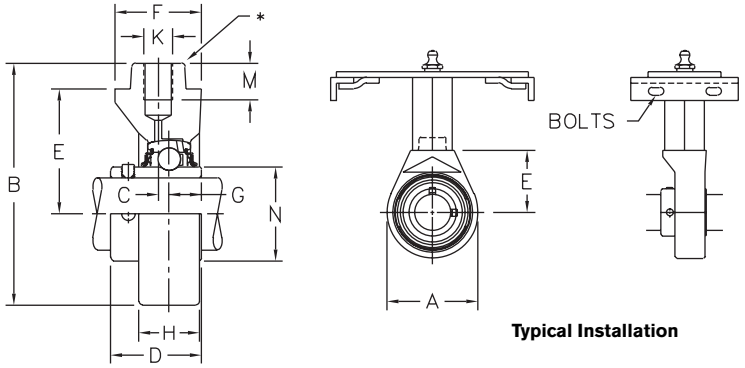
* Nominal maximum size of pillow block to fit frame. Use dimensions A, D, and W as limits for fitting and mounting ball bearing pillow blocks.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Screw Conveyor Hanger Bearing Units

HM3-U200

High-test Iron Housing
Alignable
Spring Locking
Relubricatable
Wide Inner Ring



Typical Installation

Dimensions (inches/*mm*)

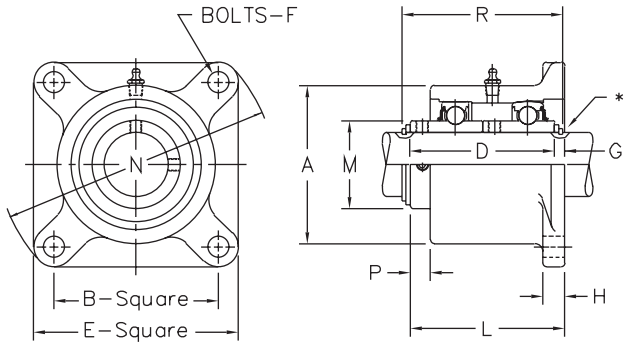
Shaft diameter	Hanger unit number	A	B	C	D	E ±.015" *±0.38 mm*	F	G	H	Thread K	M	N	Unit wt. (lbs./kg.)	Bearing no.
1½	HM3-U224E3	3.88 *98.6*	5.19 *131.8*	.218 *5.54*	1.91 *48.5*	2.500 *63.50*	1.75 *44.4*	.734 *18.64*	.97 *24.6*	¾-10 NC –	1.00 *25.4*	2.083 *52.91*	5.0 *2.3*	UG224E3L
2	HM3-U2E32E3	4.38 *111.3*	5.44 *138.2*	.170 *4.32*	2.00 *50.8*	2.500 *63.50*	1.75 *44.4*	.828 *21.03*	.91 *23.1*	¾-10 NC –	1.00 *25.4*	2.475 *62.86*	6.3 *2.9*	BS225555
2 7/16	HM3-U239N	5.25 *133.4*	7.00 *177.8*	.310 *7.87*	2.50 *63.5*	3.625 *92.08*	2.50 *63.5*	.938 *23.83*	1.75 *44.4*	⅞-9 NC –	1.06 *26.9*	3.012 *76.50*	11.3 *5.1*	UG239NL
3	HM3-U2E48N	6.12 *155.6*	7.44 *189.0*	.375 *9.52*	2.88 *73.02*	3.625 *92.08*	2.50 *63.5*	1.062 *26.99*	2.00 *50.8*	⅞-9 NC –	1.06 *26.9*	3.624 *92.05*	12.9 *5.9*	UG2E48NL
3 7/16	HM3-U255N	7.50 *190.5*	9.25 *235.0*	.344 *8.74*	3.562 *90.49*	4.500 *114.30*	3.56 *90.5*	1.438 *36.51*	2.56 *65.0*	1⅛-12 NF –	1.88 *47.8*	4.158 *105.61*	24.8 *11.3*	UG255NL

Please consult for availability.
† Shaft sizes 1½"-2" to fit 1¼" square tubing; 2 7/16"-3", 1¾" square, 3 7/16", 2½" square.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

Standard Duty Screw Conveyor Trough End Units

FF 200

Cast Iron Housing
2 Ball Bearings
Spring Locking
Relubricatable



Dimensions (inches/*mm*)

Shaft diameter inches	Flanged unit number Lip seals	Replacement bearing number ■	A	B	D	E	F Bolts	G	H	L	M	N	P	R	Unit wt. (lbs./kg.)
1½	**FF 224N**	UR224A	4 *101.6*	4 *101.60*	3 13/16 *96.84*	5 1/8 *130.2*	½ *12*	¼ *6.4*	9/16 *14.3*	4 1/16 *103.2*	. . . . . .	6 25/32 *172.2*	½ *12.7*	4 7/32 *107.2*	10.0 *4.5*
2	**FF 232N**	UR232A	4 15/16 *125.4*	5 1/8 *130.17*	4½ *114.30*	6 3/8 *161.9*	5/8 *16*	5/16 *7.9*	11/16 *17.5*	4 13/16 *122.2*	. . . . . .	8½ *215.9*	5/8 *15.9*	5 1/32 *127.8*	17.4 *7.9*
2 3/16	FF 235N	UR235A													
2 7/16	**FF 239N**	UR239A	5 3/8 *136.5*	5 5/8 *142.88*	5 *127.00*	6 7/8 *174.6*	5/8 *16*	5/16 *7.9*	11/16 *17.5*	5 5/16 *134.9*	. . . . . .	9 7/32 *234.2*	19/32 *15.1*	5 17/32 *140.5*	20.8 *9.4*
2¾	FF 244N	UR244A	6⅜ *161.9*	6 *152.40*	5¾ *146.05*	7¾ *196.8*	¾ *20*	5/16 *7.9*	¾ *19.0*	6 1/16 *154.0*	4⅝ *117.5*	10¼ *260.4*	11/16 *17.5*	6 9/32 *159.5*	31.1 *14.1*
2 15/16	FF 247N	UR247A													
3	FF 2E48N	UR2E48A													
3 7/16	FF 255N	UR255A	7 *177.8*	6¾ *171.45*	7⅛ *180.98*	8 9/16 *217.5*	¾ *20*	½ *12.7*	1 *25.4*	7⅝ *193.7*	5 3/16 *131.8*	11⅜ *288.9*	¾ *19.0*	7 23/32 *196.0*	50.2 *22.8*

Bold face items are normally available from stock; please consult for availability of non-stock items.

* Support thrust load (preferably in shear) with heavy duty snap ring and square face washer. See below.

Lubrication fitting tap size: for 2 7/16" and smaller shafts, ¼" PT; for all other shafts, ⅜" PT.

■ Includes two bearings, with seals, and inner ring set screws or collar with set screws.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-75.

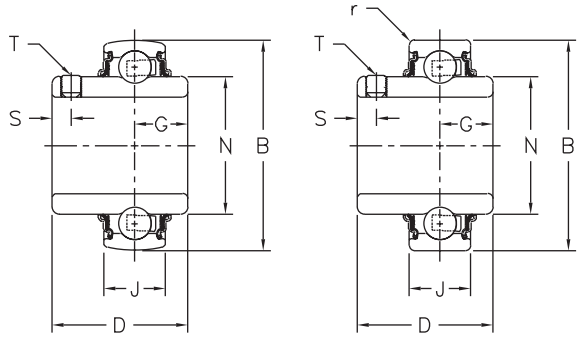
Shaft Washer and Retaining Data. Not Furnished by Link-Belt Bearing Division.

Shaft Size (inches)	Heavy Series Retaining Ring Eaton Number	Sharp Cornered Thrust Washer Bore (in.)	O.D. (in.)	Width (in.)
1½	344-1		2	.0625
2 and 2 3/16	1071	(1/64 over	2½	.125
2 7/16	1227	the shaft	3	.125
2¾ to 3	5224	diameter)	3½	.125
3 7/16	5531		4 1/16	.140

Spring Locking Ball Bearings

U200NL, UB200NL

Spherical or Cylindrical O.D.
Sealed
Spring Locking
Non-relubricatable
Wide Inner Ring



U200NL **UB200NL**

Dimensions (inches/*mm*)

Shaft diameter		Bearing number with set screws■		Bore tolerance	B □	D	G	J		N	r ◆	S	T Tap Size
mm	inches	Spherical O.D.	Cylindrical O.D.					Cyl. O.D.	Spher. O.D.				
	½	U2B08NL	UB2B08NL	+.0006 –.0000	1.5748	1 3/32	.4531	.4724	.5118	.941	.024	.15	10–32
	⅝	U210NL	UB210NL										
	11/16	U211NL	UB211NL										
17		*U2M17NL*	*UB2M17NL*	*+0.015 −0.000*	*40.000*	*27.78*	*11.509*	*12.000*	*13.000*	*23.90*	*0.61*	*3.8*	
	¾	U212NL	UB212NL	+.0007 –.0000	1.8504	1 9/32	.5313	.5512	.5906	1.121	.039	.19	¼–28
20		*U2M20NL*	*UB2M20NL*	*+0.018 −0.000*	*47.000*	*32.54*	*13.494*	*14.000*	*15.000*	*28.47*	*1.00*	*4.8*	
	⅞	U214NL△	UB214NL△	+.0007 –.0000	2.0472	1 23/64	.5625	.5906	.5906	1.313	.039	.22	¼–28
	15/16	U215NL△	UB215NL△										
	1	U216NL△	UB216NL△										
25		*U2M25NL*	*UB2M25NL*	*+0.018 −0.000*	*52.000*	*34.53*	*14.288*	*15.000*	*15.000*	*33.35*	*1.00*	*5.6*	
	1⅛	U218NL	UB218NL	+.0007 –.0000	2.4409	1 9/16	.6094	.6299	.7087	1.587	.039	.22	¼–28
	1 3/16	U219NL	UB219NL										
	1¼	U2E20NL	UB2E20NL										
30		*U2M30NL*	*UB2M30NL*	*+0.018 −0.000*	*62.000*	*39.69*	*15.478*	*16.000*	*18.000*	*40.31*	*1.00*	*5.6*	
	1¼	U220NL△	UB220NL△	+.0008 –.0000	2.8346	1 49/64	.6563	.6693	.7480	1.847	.039	.25	5/16–24
	1⅜	U222NL△	UB222NL△										
	1 7/16	U223NL△	UB223NL△										
35		*U2M35NL*	*UB2M35NL*	*+0.020 −0.000*	*72.000*	*44.85*	*16.669*	*17.000*	*19.000*	*46.91*	*1.00*	*6.4*	
	1½	U224NL△	UB224NL△	+.0008 – .0000	3.1496	1 29/32	.7344	.7087	.8661	2.083	.039	.32	5/16–24
40		*U2M40NL*	*UB2M40NL*	*+0.020 −0.000*	*80.000*	*48.42*	*18.653*	*18.000*	*22.000*	*52.91*	*1.00*	*8.1*	
	1⅝	U226NL△	UB226NL△	+.0008 –.0000	3.3465	2 1/32	.7969	.7480	.8661	2.281	.039	.32	5/16–24
	1 11/16	U227NL△	UB227NL△										
	1¾	U228NL△	UB228NL△										
45		*U2M45NL*	*UB2M45NL*	*+0.020 −0.000*	*85.000*	*51.59*	*20.241*	*19.000*	*22.000*	*57.94*	*1.00*	*8.1*	
	1 15/16	U231NL△	UB231NL△	+.0008 –.0000	3.5433	2 3/32	.8261	.7874	.8661	2.475	.039	.38	⅜–24
	2	U2E32NL△	UB2E32NL△										
50		*U2M50NL*	*UB2M50NL*	*+0.020 −0.000*	*90.000*	*53.18*	*21.034*	*20.000*	*22.000*	*62.86*	*1.00*	*9.6*	
	2	U232NL△	UB232NL△	+.0009 –.0000	3.9370	2¼	.8438	.8268	.9843	2.749	.059	.38	⅜–24
	2 3/16	U235NL△	UB235NL△										
55		*U2M55NL*	*UB2M55NL*	*+0.023 −0.000*	*100.000*	*57.15*	*21.431*	*21.000*	*25.000*	*69.82*	*1.50*	*9.6*	
	2¼	U236NL	UB236NL	+.0009 –.0000	4.3307	2½	.9375	.8661	1.0630	3.012	.059	.38	⅜–24
	2⅜	U238NL	UB238NL										
	2 7/16	U239NL	UB239NL										
60		*U2M60NL*	*UB2M60NL*	*+0.023 −0.000*	*110.000*	*63.50*	*23.813*	*22.000*	*27.000*	*76.50*	*1.50*	*9.6*	

Please consult for availability.

◆ Max fillet radius of housing to clear bearing corner.

□ Bearing O.D. tolerance; for 1½" and smaller shaft, +.0000"–.0005" *(+0.000 mm −0.013 mm)*; 1⅝ thru 2 11/16 shafts, +.0000" –.0006" *(+0.000 mm −0.015 mm)*; 2½" thru 3½" shafts +.0000" –.0008" *(+0.000 mm −0.020 mm)*; all other sizes, +.0000" –.0010" *(+0.000 mm −0.025 mm)*.

■ N lip seals standard. H labyrinth seals available.

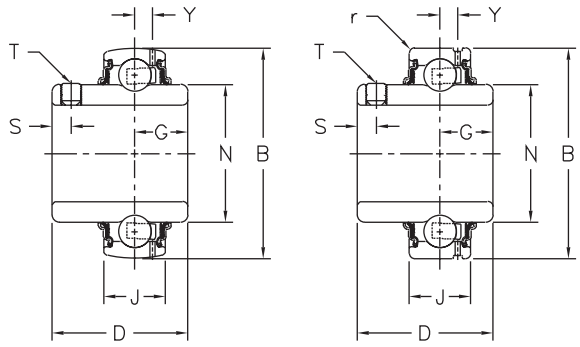
△ Available with E3 triple lip seals.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Spring Locking Ball Bearings

UG200NL, UBG200NL

Spherical or Cylindrical O.D.
Sealed
Spring Locking
Relubricatable
Wide Inner Ring



UG200NL **UBG200NL**

Dimensions (inches/*mm*)

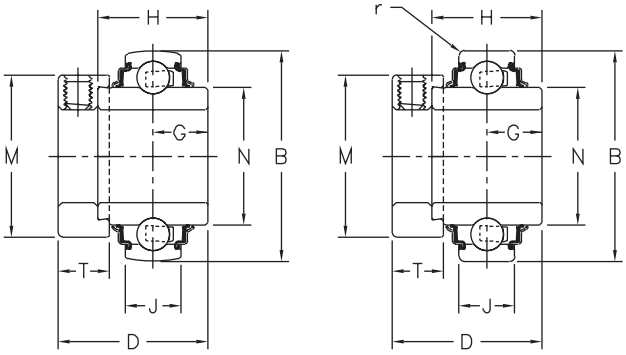
Shaft diameter		Bearing number with set screws■		Bore tolerance	B □	D	G	J		M	N	r	S	T	Y
								Cyl. O.D.	Spher. O.D.	Collar O.D.		◆		Tap Size	
mm	inches	Spherical O.D.	Cylindrical O.D.												
	½	**UG2B08NL**	UBG2B08NL	+.0006 –.0000	1.5748	1 3/32	.4531	.4724	.5118	. . .	.941	.024	.15	10–32	.129
	⅝	**UG210NL**	UBG210NL												
	11/16	UG211NL	UBG211NL												
17		*UG2M17NL*	*UBG2M17NL*	*+0.015 −0.000*	*40.000*	*27.78*	*11.509*	*12.000*	*13.000*	*. . .*	*23.90*	*0.61*	*3.8*		*3.28*
	¾	**UG212NL**	UBG212NL	+.0007 –.0000	1.8504	1 9/32	.5313	.5512	.5906	. . .	1.121	.039	.19	¼–28	.137
20		*UG2M20NL*	*UBG2M20NL*	*+0.018 −0.000*	*47.000*	*32.54*	*13.494*	*14.000*	*15.000*	*. . .*	*28.47*	*1.00*	*4.8*		*3.48*
	⅞	**UG214NL**△	UBG214NL△	+.0007 –.0000	2.0472	1 23/64	.5625	.5906	.5906	. . .	1.313	.039	.22	¼–28	.140
	15/16	**UG215NL**△	UBG215NL△												
	1	**UG216NL**△	UBG216NL△												
25		*UG2M25NL*	*UBG2M25NL*	*+0.018 −0.000*	*52.000*	*34.53*	*14.288*	*15.000*	*15.000*	*. . .*	*33.35*	*1.00*	*5.6*		*3.56*
	1⅛	**UG218NL**	UBG218NL	+.0007 –.0000	2.4409	1 9/16	.6094	.7087	.7087	. . .	1.587	.039	.22	¼–28	.202
	1 3/16	**UG219NL**	UBG219NL												
	1¼	**UG2E20NL**	UBG2E20NL												
30		*UG2M30NL*	*UBG2M30NL*	*+0.018 −0.000*	*62.000*	*39.69*	*15.478*	*18.000*	*18.000*	*. . .*	*40.31*	*1.00*	*5.6*		*5.13*
	1¼	**UG220NL**△	UBG220NL△	+.0008 –.0000	2.8346	1 49/64	.6563	.7480	.7480	. . .	1.847	.039	.25	5/16–24	.239
	1⅜	**UG222NL**△	UBG222NL△												
	1 7/16	**UG223NL**△	UBG223NL△												
35		*U2M35NL*	*UBG2M35NL*	*+0.020 −0.000*	*72.000*	*44.85*	*16.669*	*19.000*	*19.000*	*. . .*	*46.91*	*1.00*	*6.4*		*6.07*
	1½	**UG224NL**△	UBG224NL△	+.0008 – .0000	3.1496	1 29/32	.7344	.8268	.8661	. . .	2.083	.039	.32	5/16–24	.253
40		*UG2M40NL*△	*UBG2M40NL*△	*+0.020 −0.000*	*80.000*	*48.42*	*18.653*	*21.000*	*22.000*	*. . .*	*52.91*	*1.00*	*8.1*		*6.43*
	1⅝	**UG226NL**△	UBG226NL△	+.0008 –.0000	3.3465	2 1/32	.7969	.8661	.8661	. . .	2.281	.039	.32	5/16–24	.254
	1 11/16	**UG227NL**△	UBG227NL△												
	1¾	**UG228NL**△	UBG228NL△												
45		*UG2M45NL*	*UBG2M45NL*	*+0.020 −0.000*	*85.000*	*51.59*	*20.241*	*22.000*	*22.000*	*. . .*	*57.94*	*1.00*	*8.1*		*6.45*
	1 15/16	**UG231NL**△	UBG231NL△	+.0008 –.0000	3.5433	2 3/32	.8281	.9055	.8661	. . .	2.475	.039	.38	⅜–24	.268
	2	**UG2E32NL**△	UBG2E32NL△												
50		*UG2M50NL*	*UBG2M50NL*	*+0.020 −0.000*	*90.000*	*53.18*	*21.034*	*23.000*	*22.000*	*. . .*	*62.86*	*1.00*	*9.6*		*6.81*
	2	**UG232NL**△	UBG232NL△	+.0009 –.0000	3.9370	2¼	.8438	.9843	.9843	. . .	2.749	.059	.38	⅜–24	.295
	2 3/16	**UG235NL**△	UBG235NL△												
55		*UG2M55NL*	*UBG2M55NL*	*+0.023 −0.000*	*100.000*	*57.15*	*21.431*	*25.000*	*25.000*	*. . .*	*69.82*	*1.50*	*9.6*		*7.49*
	2¼	**UG236NL**	UBG236NL	+.0009 –.0000	4.3307	2½	.9375	1.0630	1.0630	. . .	3.012	.059	.38	⅜–24	.330
	2⅜	UG238NL	UBG238NL												
	2 7/16	**UG239NL**	UBG239NL												
60		*UG2M60NL*	*UBG2M60NL*	*+0.023 −0.000*	*110.000*	*63.50*	*23.813*	*27.000*	*27.000*	*. . .*	*76.50*	*1.50*	*9.6*		*8.38*
	2½	UG240NL	. . .	+.0009 –.0000	4.7244	2 11/16	1.0000	. . .	1.0630	4 3/16	3.331	. . .	. . .	. . .	.343
	2 11/16	UG243NL	. . .												
65		*UG2M65NL*	*. . .*	*+0.023 −0.000*	*120.000*	*68.26*	*25.400*	*. . .*	*27.000*	*106.4*	*84.61*	*. . .*	*. . .*	*. . .*	*8.71*
	2¾	UG244NL	. . .	+.0009 –.0000	5.1181	2⅞	1.0625	. . .	1.1417	4⅝	3.624	. . .	. . .	. . .	.367
	2 15/16	UG247NL	. . .												
	3	UG2E48NL	. . .												
75		*UG2M75NL*	*. . .*	*+0.023 −0.000*	*130.000*	*73.02*	*26.987*	*. . .*	*29.000*	*117.5*	*92.05*	*. . .*	*. . .*	*. . .*	*9.32*
	3 7/16	UG255NL	. . .	+.0011 –.0000	5.9055	3 9/16	1.4375	. . .	1.3386	5 3/16	4.158	. . .	. . .	. . .	.415
	3½	UG2E56NL	. . .												
85		*UG2M85NL*	*. . .*	*+0.028 −0.000*	*150.000*	*90.49*	*36.513*	*. . .*	*34.000*	*131.8*	*105.61*	*. . .*	*. . .*	*. . .*	*10.54*
	3 15/16	UG263NL	. . .	+.0011 –.0000	7.0866	4¼	1.6719	. . .	1.5748	5 15/16	4.913	. . .	. . .	. . .	.504
	4	UG2E64NL	. . .												
100		*UG2M100NL*	*. . .*	*+0.028 −0.000*	*180.000*	*107.95*	*42.466*	*. . .*	*40.000*	*150.8*	*124.79*	*. . .*	*. . .*	*. . .*	*12.80*

See footnotes on facing page.

Collar Mounted Ball Bearings

Y200NL, YB200NL

Spherical or Cylindrical O.D.
Sealed
Eccentric Cam Locking Collar
Non-relubricatable
Wide Inner Ring



Y200NL **YB200NL**

Dimensions (inches/*mm*)

Shaft diameter in.	Bearing number with collar		Collar number	Bore tolerance	B □	D	G	H	J		M	N	r ◆	T
	Spherical O.D.	Cylindrical O.D.							Cyl. O.D.	Spher. O.D.				
½	Y2B08NL	YB2B08NL	W2B08-5S	+.0006 –.0000	1.5748	1 15/32	.5469	1.0938	.4724	.5118	1⅛	.941	.024	17/32
⅝	Y210NL	YB210NL	W210-5S	*+0.015–0.000*	*40.000*	*37.31*	*13.891*	*27.781*	*12.000*	*13.000*	*28.6*	*23.90*	*0.61*	*13.5*
11/16	Y211NL	YB211NL	W211-5S											
¾	Y212NL	YB212NL	W212-5S	+.0007 –.0000	1.8504	1 23/32	.6719	1.3438	.5512	.5906	1 5/16	1.121	.039	18/32
				+0.018 –0.000	*47.000*	*43.66*	*17.066*	*34.131*	*14.000*	*15.000*	*33.3*	*28.47*	*1.00*	*13.5*
⅞	Y214NL△	YB214NL△	W214-5S	+.0007 –.0000	2.0472	1¾	.6875	1.3750	.5906	.5906	1½	1.313	.039	17/32
15/16	Y215NL△	YB215NL△	W215-5S	*+0.018 –0.000*	*52.000*	*44.45*	*17.462*	*34.925*	*15.000*	*15.000*	*38.1*	*33.35*	*1.00*	*13.5*
1	Y216NL△	YB216NL△	W216-5S											
1⅛	Y218NL	YB218NL	W218-5S	+.0007 –.0000	2.4409	1 29/32	.7188	1.4375	.6299	.7087	1¾	1.587	.039	⅝
1 3/16	Y219NL	YB219NL	W219-5S	*+0.018 –0.000*	*62.000*	*48.42*	*18.256*	*36.513*	*16.000*	*18.000*	*44.4*	*40.31*	*1.00*	*15.9*
1¼	Y2E20NL	YB2E20NL	W2E20-5S											
1¼	Y220NL△	YB220NL△	W220-5S	+.0008 –.0000	2.8346	2 1/64	.7422	1.4844	.6693	.7480	2 3/16	1.847	.039	11/16
1⅜	Y222NL△	YB222NL△	W222-5S	*+0.020 –0.000*	*72.000*	*51.20*	*18.852*	*37.703*	*17.000*	*19.000*	*55.6*	*46.91*	*1.00*	*17.5*
1 7/16	Y223NL△	YB223NL△	W223-5S											
1½	Y224NL△	YB224NL△	W224-5S	+.0008 –.0000	3.1496	2 7/32	.8438	1.6875	.7087	.8661	2⅜	2.083	.039	23/32
				+0.020 –0.000	*80.000*	*56.36*	*21.431*	*42.863*	*18.000*	*22.000*	*60.3*	*52.91*	*1.00*	*18.2*
1⅝	Y226NL△	YB226NL△	W226-5S	+.0008 –.0000	3.3465	2 7/32	.8438	1.6875	.7480	.8661	2½	2.281	.039	23/32
1 11/16	Y227NL△	YB227NL△	W227-5S	*+0.020 –0.000*	*85.000*	*56.36*	*21.431*	*42.863*	*19.000*	*22.000*	*63.5*	*57.94*	*1.00*	*18.2*
1¾	Y228NL△	YB228NL△	W228-5S											
1 15/16	Y231NL△	YB231NL△	W231-5S	+.0008 –.0000	3.5433	2 15/32	.9688	1.9375	.7874	.8661	2¾	2.475	.039	23/32
2	Y2E32NL△	YB2E32NL△	W2E32-5S	*+0.020 –0.000*	*90.000*	*62.71*	*24.606*	*49.213*	*20.000*	*22.000*	*69.8*	*62.86*	*1.00*	*18.2*
2	Y232NL△	YB232NL△	W232-5S	+.0009 –.0000	3.9370	2 13/16	1.0938	2.1875	.8268	.9843	3	2.749	.059	13/16
2 3/16	Y235NL△	YB235NL△	W235-5S	*+0.023 –0.000*	*100.000*	*71.44*	*27.781*	*55.563*	*21.000*	*25.000*	*76.2*	*69.82*	*1.50*	*20.6*
2¼	Y236NL	YB236NL	W236-5S	+.0009 –.0000	4.3307	3 1/16	1.2188	2.4375	.8661	1.0630	3¼	3.012	.059	⅞
2⅜	Y238NL	YB238NL	W238-5S	*+0.023 –0.000*	*110.000*	*77.79*	*30.956*	*61.913*	*22.000*	*27.000*	*82.6*	*76.50*	*1.50*	*22.2*
2 7/16	Y239NL	YB239NL	W239-5S											

Please consult for availability.

◆ Max fillet radius of housing to clear bearing corner.

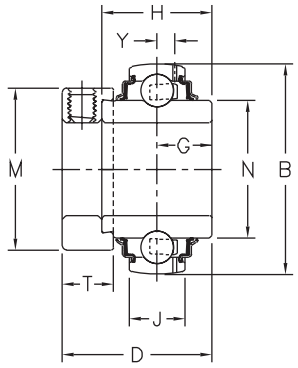
△ Available with E3 triple lip seals.

□ Bearing O.D. tolerance; for 1½" and smaller shaft, +.0000" –.0005" (+0.000 mm –0.013 mm); all others +.0000" –.0006" *(+0.000 mm −0.015 mm)*.

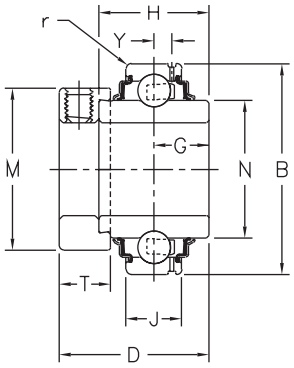
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Collar Mounted Ball Bearing
YG200NL, YBG200NL

Spherical or Cylindrical O.D.
Sealed
Eccentric Cam Locking Collar
Relubricatable
Wide Inner Ring



YG200NL



YBG200NL

Dimensions (inches/*mm*)

Shaft diameter inches	Bearing number with collar ■ Spherical O.D.	Bearing number with collar ■ Cylindrical O.D.	Collar number	Bore tolerance	B □	D	G	H	J Cyl. O.D.	J Spher. O.D.	M	N	r ◆	Y
½	**YG2B08NL**	YBG2B08NL	W2B08-5S	+.0006 –.0000	1.5748	1 15/32	.5469	1.0938	.4724	.5118	1 1/8	.941	.024	.129
⅝	**YG210NL**	YBG210NL	W210-5S	*+0.015 −0.000*	*40.000*	*37.31*	*13.891*	*27.781*	*12.000*	*13.000*	*28.6*	*23.90*	*0.61*	*3.28*
11/16	YG211NL	YBG211NL	W211-5S											
¾	**YG212NL**	YBG212NL	W212-5S	+.0007 –.0000	1.8504	1 23/32	.6719	1.3438	.5512	.5906	1 5/16	1.121	.039	.137
				+0.018 −0.000	*47.000*	*43.66*	*17.066*	*34.131*	*14.000*	*15.000*	*33.3*	*28.47*	*1.00*	*3.48*
⅞	**YG214NL**△	YBG214NL△	W214-5S	+.0007 –.0000	2.0472	1¾	.6875	1.3750	.5906	.5906	1½	1.313	.039	.140
15/16	**YG215NL**△	YBG215NL△	W215-5S	*+0.018 −0.000*	*52.000*	*44.45*	*17.462*	*34.925*	*15.000*	*15.000*	*38.1*	*33.35*	*1.00*	*3.56*
1	**YG216NL**△	YBG216NL△	W216-5S											
1⅛	**YG218NL**	YBG218NL	W218-5S	+.0007 –.0000	2.4409	1 29/32	.7188	1.4375	.7087	.7087	1¾	1.587	.039	.202
1 3/16	**YG219NL**	YBG219NL	W219-5S	*+0.018 −0.000*	*62.000*	*48.42*	*18.256*	*36.513*	*18.000*	*18.000*	*44.5*	*40.31*	*1.00*	*5.13*
1¼	**YG2E20NL**	YBG2E20NL	W2E20-5S											
1¼	**YG220NL**△	YBG220NL△	W220-5S	+.0008 –.0000	2.8346	2 1/64	.7422	1.4844	.7480	.7480	2 3/16	1.847	.039	.239
1⅜	**YG222NL**△	YBG222NL△	W222-5S	*+0.020 −0.000*	*72.000*	*51.20*	*18.852*	*37.703*	*19.000*	*19.000*	*55.6*	*46.91*	*1.00*	*6.07*
1 7/16	**YG223NL**△	YBG223NL△	W223-5S											
1½	**YG224NL**△	YBG224NL△	W224-5S	+.0008 –.0000	3.1496	2 7/32	.8438	1.6875	.8268	.8661	2⅜	2.083	.039	.253
				+0.020 −0.000	*80.000*	*56.36*	*21.431*	*42.863*	*21.000*	*22.000*	*60.3*	*52.91*	*1.00*	*6.43*
1⅝	**YG226NL**△	YBG226NL△	W226-5S	+.0008 –.0000	3.3465	2 7/32	.8438	1.6875	.8661	.8661	2½	2.281	.039	.254
1 11/16	**YG227NL**△	YBG227NL△	W227-5S	*+0.020 −0.000*	*85.000*	*56.36*	*21.431*	*42.863*	*22.000*	*22.000*	*63.5*	*57.94*	*1.00*	*6.45*
1¾	**YG228NL**△	YBG228NL△	W228-5S											
1 15/16	**YG231NL**△	YBG231NL△	W231-5S	+.0008 –.0000	3.5433	2 15/32	.9688	1.9375	.9055	.8661	2¾	2.475	.039	.268
2	**YG2E32NL**△	YBG2E32NL△	W2E32-5S	*+0.020 −0.000*	*90.000*	*62.71*	*24.606*	*49.213*	*23.000*	*22.000*	*69.8*	*62.86*	*1.00*	*6.81*
2	**YG232NL**△	YBG232NL△	W232-5S	+.0009 –.0000	3.9370	2 13/16	1.0938	2.1875	.9843	.9843	3	2.749	.059	.295
2 3/16	**YG235NL**△	YBG235NL△	W235-5S	*+0.023 −0.000*	*100.000*	*71.44*	*27.781*	*55.563*	*25.000*	*25.000*	*76.2*	*69.82*	*1.50*	*7.49*
2¼	**YG236NL**	YBG236NL	W236-5S	+.0009 –.0000	4.3307	3 1/16	1.2188	2.4375	1.0630	1.0630	3¼	3.012	.059	.330
2⅜	YG238NL	YBG238NL	W238-5S	*+0.023 −0.000*	*110.000*	*77.79*	*30.956*	*61.913*	*27.000*	*27.000*	*82.6*	*76.50*	*1.50*	*8.38*
2 7/16	**YG239NL**	YBG239NL	W239-5S											

Bold face items are normally available from stock; please consult for availability of non-stock items.

■ N lip seals standard. H labyrinth seals available.

□ Bearing O.D. tolerance; for 1½" and smaller shaft, +.0000" –.0005" *(+0.000 mm −0.013 mm)*; all others +.0000" –.0006" *(+0.000 mm −0.015 mm)*.

◆ Max fillet radius of housing to clear bearing corner.

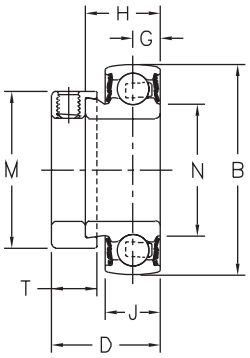
△ Available with E3 triple lip seals.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

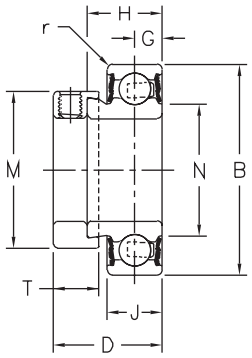
Collar Mounted Ball Bearings

W200EL, WB200EL

Spherical or Cylindrical O.D.
Sealed
Eccentric Cam Locking Collar
Non-relubricatable
Extended Inner Ring



W200UL



WB200UL

Dimensions (inches/*mm*)

Shaft diameter in.	Bearing number with collar		Collar number	Bore tolerance	B □	D	G	H	J	M	N	r ◆	T
	Spherical O.D.	Cylindrical O.D.											
½	**W2B08EL**	WB2B08EL	W2B08-5S	+.0006 –.0000	1.5748	1⅛	.2559	.7500	.5118	1⅛	.879	.024	17/32
⅝	**W210EL**	**WB210EL**	W210-5S	*+0.015 −0.000*	*40.000*	*28.57*	*6.500*	*19.050*	*13.000*	*28.6*	*22.33*	*0.61*	*13.5*
¾	**W212EL**	**WB212EL**	W212-5S	+.0007 –.0000	1.8504	1 17/32	.2953	.8437	.5906	1 5/16	1.013	.039	17/32
				+0.018 −0.000	*47.000*	*30.96*	*7.500*	*21.430*	*15.000*	*33.3*	*25.73*	*1.00*	*13.5*
⅞	**W214EL**	WB214EL	W214-5S	+.0007 –.0000	2.0472	1 17/32	.2953	.8437	.5906	1½	1.210	.039	17/32
15/16	**W215EL**	WB215EL	W215-5S	*+0.018 −0.000*	*52.000*	*30.96*	*7.500*	*21.430*	*15.000*	*38.1*	*30.73*	*1.00*	*13.5*
1	**W216EL**	**WB216EL**	W216-5S										
1⅛	**W218EL**	WB218EL	W218-5S	+.0007 –.0000	2.4409	1 13/32	.3543	.9375	.7087	1¾	1.587	.039	⅝
1 3/16	**W219EL**	**WB219EL**	W219-5S	*+0.018 −0.000*	*62.000*	*35.71*	*9.000*	*23.812*	*18.000*	*44.4*	*40.31*	*1.00*	*15.9*
1¼	**W2E20EL**	**WB2E20EL**	W2E20-5S										
1¼	**W220EL**	**WB220EL**	W220-5S	+.0008 –.0000	2.8346	1 17/32	.3740	1.0000	.7480	2 3/16	1.847	.039	11/16
1⅜	**W222EL**	WB222EL	W222-5S	*+0.020 −0.000*	*72.000*	*38.89*	*9.500*	*25.400*	*19.000*	*55.6*	*46.91*	*1.00*	*17.5*
1 7/16	**W223EL**	**WB223EL**	W223-5S										
1½	**W224EL**	**WB224EL**	W224-5S	+.0008 –.0000	3.1496	1 23/32	.4330	1.1875	.8661	2⅜	2.083	.039	23/32
				+0.020 −0.000	*80.000*	*43.66*	*11.000*	*30.162*	*22.000*	*60.3*	*52.91*	*1.00*	*18.2*
1⅝	**W226EL**	WB226EL	W226-5S	+.0008 –.0000	3.3465	1 23/32	.4330	1.1875	.8661	2½	2.109	.039	23/32
1 11/16	**W227EL**	WB227EL	W227-5S	*+0.020 −0.000*	*85.000*	*43.66*	*11.000*	*30.162*	*22.000*	*63.5*	*53.57*	*1.00*	*18.2*
1¾	**W228EL**	**WB228EL**	W228-5S										
1 15/16	**W231EL**	**WB231EL**	W231-5S	+.0008 –.0000	3.5433	1 23/32	.4330	1.1875	.8661	2¾	2.306	.039	23/32
2	W2E32EL	WB2E32EL	W2E32-5S	*+0.020 −0.000*	*90.000*	*43.66*	*11.000*	*30.162*	*22.000*	*69.8*	*58.57*	*1.00*	*18.2*

Bold face items are normally available from stock; please consult for availability of non-stock items.

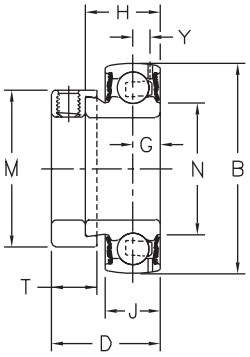
◆ Max fillet radius of housing to clear bearing corners.

□ Bearing O.D. tolerance; for 1½" and smaller shaft, +.0000" –.0005" *(+0.000 mm −0.013 mm)*; all others +.0000" –.0006" *(+0.000 mm −0.015 mm)*.

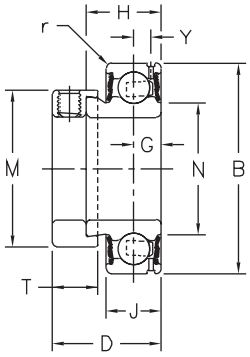
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Collar Mounted Ball Bearing
WG200EL, WBG200EL

Spherical or Cylindrical O.D.
Sealed
Eccentric Cam Locking Collar
Relubricatable
Extended Inner Ring



WG200UL



WBG200UL

Dimensions (inches/*mm*)

Shaft diameter in.	Bearing number with collar: Spherical O.D.	Bearing number with collar: Cylindrical O.D.	Collar number	Bore tolerance	B □	D	G	H	J	M	N	r ◆	T	Y
½	**WG2B08EL**	WBG2B08EL	W2B08-5S	+.0006 –.0000	1.5748	1⅛	.2559	.7500	.5118	1⅛	.879	.024	17/32	.129
⅝	**WG210EL**	WBG210EL	W210-5S	*+0.015 −0.000*	*40.000*	*28.57*	*6.500*	*19.050*	*13.000*	*28.6*	*22.33*	*0.61*	*13.5*	*3.28*
¾	**WG212EL**	WBG212EL	W212-5S	+.0007 –.0000	1.8504	1 7/32	.2953	.8437	.5906	1 5/16	1.013	.039	17/32	.137
				+0.018 −0.000	*47.000*	*30.96*	*7.500*	*21.430*	*15.000*	*33.3*	*25.73*	*1.00*	*13.5*	*3.48*
⅞	**WG214EL**	WBG214EL	W214-5S	+.0007 –.0000	2.0472	1 7/32	.2953	.8437	.5906	1½	1.210	.039	17/32	.140
15/16	**WG215EL**	WBG215EL	W215-5S	*+0.018 −0.000*	*52.000*	*30.96*	*7.500*	*21.430*	*15.000*	*38.1*	*30.73*	*1.00*	*13.5*	*3.56*
1	**WG216EL**	WBG216EL	W216-5S											
1⅛	**WG218EL**	WBG218EL	W218-5S	+.0007 –.0000	2.4409	1 13/32	.3543	.9375	.7087	1¾	1.587	.039	⅝	.202
1 1/16	**WG219EL**	WBG219EL	W219-5S	*+0.018 −0.000*	*62.000*	*35.71*	*9.000*	*23.812*	*18.000*	*44.4*	*40.31*	*1.00*	*15.9*	*5.13*
1¼	**WG2E20EL**	WBG2E20EL	W2E20-5S											
1¼	**WG220EL**	WBG220EL	W220-5S	+.0008 –.0000	2.8346	1 17/32	.3740	1.0000	.7480	2 3/16	1.847	.039	11/16	.239
1⅜	**WG222EL**	WBG222EL	W222-5S	*+0.020 −0.000*	*72.000*	*38.89*	*9.500*	*25.400*	*19.000*	*55.6*	*46.91*	*1.00*	*17.5*	*6.07*
1 7/16	**WG223EL**	WBG223EL	W223-5S											
1½	**WG224EL**	WBG224EL	W224-5S	+.0008 –.0000	3.1496	1 23/32	.4330	1.1875	.8661	2⅜	2.083	.039	23/32	.253
				+0.020 −0.000	*80.000*	*43.66*	*11.000*	*30.162*	*22.000*	*60.3*	*52.91*	*1.00*	*18.2*	*6.43*
1⅝	**WG226EL**	WBG226EL	W226-5S	+.0008 –.0000	3.3465	1 23/32	.4330	1.1875	.8661	2½	2.109	.039	23/32	.254
1 11/16	**WG227EL**	WBG227EL	W227-5S	*+0.020 −0.000*	*85.000*	*43.66*	*11.000*	*30.162*	*22.000*	*63.5*	*53.57*	*1.00*	*18.2*	*6.45*
1¾	**WG228EL**	WBG228EL	W228-5S											
1 15/16	**WG231EL**	WBG231EL	W231-5S	+.0008 –.0000	3.5433	1 23/32	.4330	1.1875	.8661	2¾	2.306	.039	23/32	.268
2	WG2E32EL	WBG2E32EL	W2E32-5S	*+0.020 −0.000*	*90.000*	*43.66*	*11.000*	*30.162*	*22.000*	*69.8*	*58.57*	*1.00*	*18.2*	*6.81*

Bold face items are normally available from stock; please consult for availability of non-stock items.

◆ Max fillet radius of housing to clear bearing corners.

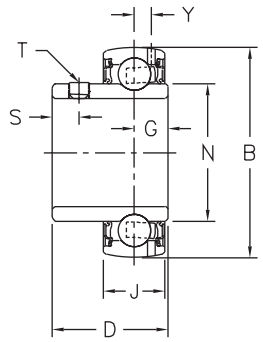
□ Bearing O.D. tolerance; for 1½" and smaller shaft, +.0000" –.0005" *(+0.000 mm −0.013 mm)*; all others +.0000" –.0006" *(+0.000 mm −0.015 mm)*.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Spring Locking Ball Bearings

SG200EL

Spherical O.D.
Sealed
Spring Locking
Relubricatable
Extended Inner Ring



SG200EL

Dimensions (inches/*mm*)

Shaft diameter in.	Bearing number with set screws	Bore tolerance	B □	D	G	J	N	S	T Tap Size	Y
¾	**SG212EL**	+.0007 –.0000 — —	1.8504 *47.000*	1⅛ *28.58*	.3750 *9.525*	.5906 *15.000*	1.116 *28.35*	.24 *6.1*	10-32 –	.137 *3.48*
⅞ 15⁄16 1	**SG214EL** **SG215EL** **SG216EL**	+.0007 –.0000 — —	2.0472 *52.000*	1 3⁄16 *30.17*	.3750 *9.525*	.5906 *15.000*	1.313 *33.35*	.24 *6.1*	10-32 –	.140 *3.56*
1⅛ 1 3⁄16 1¼	**SG218EL** **SG219EL** **SG2E20EL**	+.0007 –.0000 — —	2.4409 *62.000*	1 11⁄32 *34.13*	.3910 *9.931*	.7087 *18.000*	1.587 *40.31*	.32 *8.1*	¼-28 –	.202 *5.13*
1¼ 1⅜ 1 7⁄16	**SG220EL** **SG222EL** **SG223EL**	+.0008 –.0000 — —	2.8346 *72.000*	1 9⁄16 *39.67*	.4530 *11.506*	.7480 *19.000*	1.847 *46.91*	.34 *8.6*	¼-28 –	.239 *6.07*
1½	**SG224EL**	+.0008 –.0000 — —	3.1496 *80.000*	1 11⁄16 *42.87*	.4840 *12.294*	.8861 *22.000*	2.084 *52.93*	.34 *8.6*	5⁄16-24 –	.253 *6.43*
1⅝ 1 11⁄16 1¾	**SG226EL** **SG227EL** **SG228EL**	+.0008 –.0000 — —	3.3465 *85.000*	1 49⁄64 *44.85*	.5310 *13.487*	.8661 *22.000*	2.281 *57.94*	.36 *9.1*	5⁄16-24 –	.254 *6.45*
1 15⁄16	**SG231EL**	+.0008 –.0000 — —	3.5433 *90.000*	1 51⁄64 *45.64*	.5310 *13.487*	.8661 *22.000*	2.478 *62.94*	.38 *9.6*	5⁄16-24 –	.268 *6.81*

Bold face items are normally available from stock; please consult for availability of non-stock items.

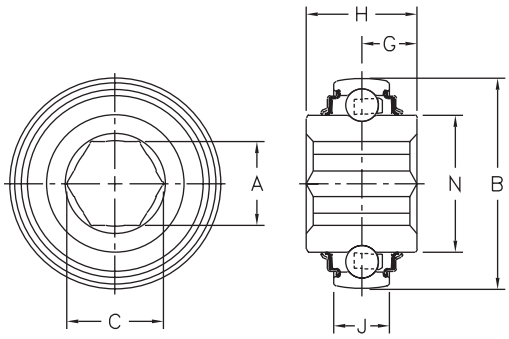
□ Bearing O.D. tolerance; for 1½" and smaller shaft, +.0000" –.0005" *(+0.000 mm −0.013 mm)*; all others +.0000" –.0006" *(+0.000 mm −0.015 mm)*.

◆ Max fillet radius of housing to clear bearing corner.

Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Hex Bore Ball Bearings

Alignable Spherical O.D.
Lip Seals
Non-relubricatable



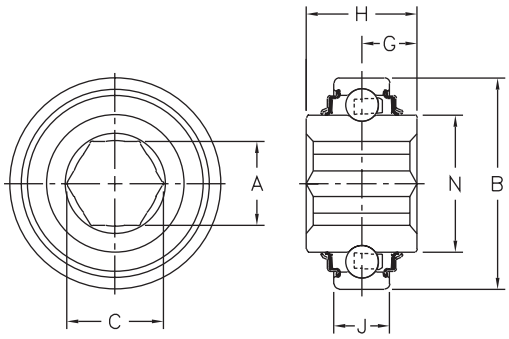
Dimensions (inches/*mm*)

Hex shaft size, inches	Bearing number	Industry number	A		B		C	G	H	J	N
			Across flats	Tolerance	Outside diameter	Tolerance	Across corners		Inner ring width	Outer ring width	
11/16	11K204N	(204KRRB2)	.695		1.8504		.797	.412	.8250	.5906	1.121
			17.65		*47.000*		*20.24*	*10.48*	*20.955*	*15.000*	*28.47*
7/8	14K205N	(205KRRB2)	.876		2.0472		1.010	.500	1.0000	.5906	1.313
			22.25		*52.000*	+.0000	*25.65*	*12.70*	*25.400*	*15.000*	*33.35*
1	16K206N	(206KRRB6)	1.001		2.4409	–.0005	1.153	.472	.9449	.7087	1.587
			25.43	+.000	*62.000*	*+0.000*	*29.29*	*12.00*	*24.000*	*18.000*	*40.31*
1 1/8	18K207N	(207KRRB9)	1.126	+.005	2.8346	*–0.013*	1.299	.742	1.4844	.7480	1.847
			28.60	*+0.00*	*72.000*		*32.99*	*18.85*	*37.704*	*19.000*	*46.91*
1 1/4	20K5-208E3△	(W208PPB16)	1.251	*+0.13*	3.1496		1.450	.718	1.4375	.7087	2.083
			31.78		*80.000*		*36.83*	*18.26*	*36.512*	*18.000*	*52.91*
1 1/2	24K209N	(209KRRB2)	1.501		3.3465	+.0000	1.732	.591	1.1811	.8661	2.281
			38.13		*85.000*	–.0006	*43.99*	*15.00*	*30.000*	*22.000*	*57.94*
1 5/8	26K3-210E3△	(W210PPB7)	1.626		3.5433	*+0.000*	1.876	.594	1.1875	1.1875	2.475
			41.30		*90.000*	*–0.015*	*47.65*	*15.08*	*30.162*	*30.162*	*62.86*

Please consult for availability.
△ Type E3 triple lip seals are standard. On bearings 205, 207, and 209, type E3 seals are optional.

Hex Bore Ball Bearings

Cylindrical O.D.
Lip Seals
Non-relubricatable



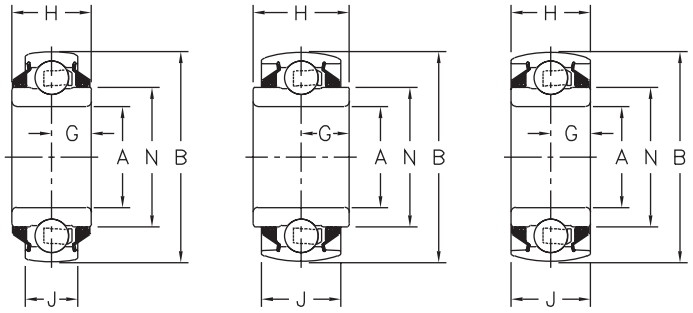
Dimensions (inches/*mm*)

Hex shaft size, inches	Bearing number	Industry number	A		B		C	G	H	J	N
			Across flats	Tolerance	Outside diameter	Tolerance	Across corners		Inner ring width	Outer ring width	
5/8	10KB204N	(204KRR4)	.626		1.8504		.728	.412	.8250	.5512	1.121
			15.90		*47.000*		*18.49*	*10.48*	*20.955*	*14.000*	*28.47*
11/16	11KB204N	(204KRR2)	.695		1.8504		.797	.412	.8250	.5512	1.121
			17.65		*47.000*	+.0000	*20.24*	*10.48*	*20.955*	*14.000*	*28.47*
7/8	14KB205N	(205KRR2)	.876		2.0472	–.0005	1.010	.500	1.0000	.5906	1.313
			22.25	+.000	*52.000*	*+0.000*	*25.65*	*12.70*	*25.400*	*15.000*	*33.35*
1	16KB206N	(206KRR6)	1.001	+.005	2.4409	*–0.013*	1.153	.472	.9449	.6299	1.587
			25.43	*+0.00*	*62.000*		*29.29*	*12.00*	*24.000*	*16.000*	*40.31*
1 1/8	18KB207N	(207KRR9)	1.126	*+0.13*	2.8346		1.299	.742	1.4844	.6693	1.847
			28.60		*72.000*		*32.99*	*18.85*	*37.704*	*17.000*	*46.91*
1 1/2	24KB209N	(209KRR2)	1.501		3.3465	+.0000	1.732	.591	1.1811	.7480	2.281
			31.78		*85.000*	–.0006	*43.99*	*15.00*	*30.000*	*19.000*	*57.94*
1 5/8	26KB3-210E3△	(W210PP7)	1.626		3.5433	*+0.000*	1.876	.594	1.1875	1.1875	2.475
			41.30		*90.000*	*–0.015*	*47.65*	*15.08*	*30.162*	*30.162*	*62.86*

Please consult for availability.
△ Type E3 triple lip seals are standard. On bearings 205, 207, and 209, type E3 seals are optional.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Round Bore Ball Bearings

Alignable Spherical O.D.
Triple Lip Seals
Non-relubricatable



Style 1 **Style 2** **Style 3**

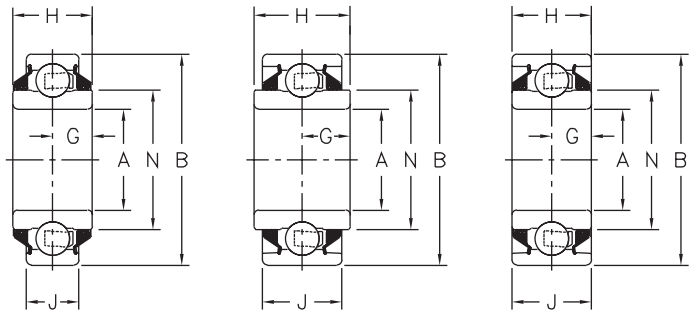
Dimensions (inches/mm)

Shaft diameter *mm* inches	Bearing number	Industry number	Style	A Bearing bore	A Tolerance + .0000" *+0.000 mm*	B Outside diameter	B Tolerance + .0000" *+0.000 mm*	G	H Inner ring width	J Outer ring width	N
7/8	14R4-208E3	(W208PPB14)	2	.890	–.010	3.438	‡	.719	1.4375	1.1875	2.083
				22.61	*– 0.25*	*87.32*		*18.26*	*36.512*	*30.162*	*52.91*
1 3/16	19R208E3	(W208PPB7)	1	1.1880	–.0005	3.1496		.594	1.1875	.7087	2.083
				30.175	*– 0.013*	*80.000*		*15.08*	*30.162*	*18.000*	*52.91*
1 3/16	19R3-208E3	(W208PPB4)	3	1.1880	–.0005	3.1496	–.0005	.594	1.1875	1.1875	2.083
				30.175	*– 0.013*	*80.000*	*– 0.013*	*15.08*	*30.162*	*30.162*	*52.91*
1 1/2	24R6-208E3	(W208PPB2)	2	1.5005	–.0005	3.1496		.844	1.6875	1.1875	2.083
				30.113	*– 0.013*	*80.000*		*21.43*	*42.862*	*30.162*	*52.91*
1 1/2	24R3-209E3	(W209PPB4)	3	1.535	–.010	3.3465		.594	1.1875	1.1875	2.281
				38.99	*– 0.25*	*85.000*		*15.08*	*30.162*	*30.162*	*57.94*
1 1/2	24R4-209E3	(W209PPB6)	2	1.535	–.010	3.438		.719	1.4375	1.1875	2.281
				38.99	*– 0.25*	*87.32*		*18.26*	*36.512*	*30.162*	*57.94*
45	R3-209E3	(W209PPB2)	3	1.7717	–.0005	3.3465		.594	1.1875	1.1875	2.281
				45.000	*– 0.013*	*85.000*	–.0006	*15.08*	*30.162*	*30.162*	*57.94*
1 3/4	28R3-210E3	(W210PPB5)	3	1.785	–.010	3.5433	*– 0.015*	.594	1.1875	1.1875	2.475
				45.34	*– 0.25*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*
1 15/16	31R3-210E3	(W210PPB2)	3	1.9380	–.0005	3.5433		.594	1.1875	1.1875	2.475
				49.225	*– 0.013*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*
2 3/16	35R3-211E3	(W211PPB2)	3	2.1880	–.0005	3.9370		.656	1.3125	1.3125	2.749
				55.575	*– 0.013*	*100.000*		*16.67*	*33.338*	*33.338*	*69.82*

Please consult for availability.
‡ Unground spherical O.D. tolerance, ±.005" (±*0.13 mm*). Center portion of O.D. is cylindrical.

Round Bore Ball Bearings

Cylindrical O.D.
Triple Lip Seals
Non-relubricatable



Style 1 **Style 2** **Style 3**

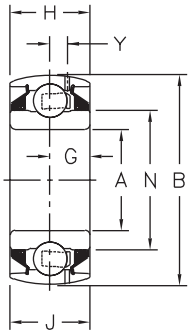
Dimensions (inches/mm)

Shaft diameter *mm* inches	Bearing number	Industry number	Style	A Bearing bore	A Tolerance + .0000" *+0.000 mm*	B Outside diameter	B Tolerance + .0000" *+0.000 mm*	G	H Inner ring width	J Outer ring width	N
1 3/16	19RB208E3	(W208PP7)	1	1.1880		3.1496		.594	1.1875	.7087	2.083
				30.175		*80.000*		*15.08*	*30.162*	*18.000*	*52.91*
1 3/16	19RB3-208E3	(W208PP4)	3	1.1880		3.1496		.594	1.1875	1.1875	2.083
				30.175		*80.000*	–.0005	*15.08*	*30.162*	*30.162*	*52.91*
1 1/2	24RB6-208E3	(W208PP2)	2	1.5005		3.1496	*– 0.013*	.844	1.6875	1.1875	2.083
				38.113	– 0.0005	*80.000*		*21.43*	*42.862*	*30.162*	*52.91*
1 1/2	24RB8-208E3	(W208PP10)	1	1.5005	*– 0.013*	3.1496		.844	1.6875	.8268	2.083
				38.113		*80.000*		*21.43*	*42.862*	*21.000*	*52.91*
1 15/16	31RB3-210E3	(W210PP2)	3	1.9380		3.5433		.594	1.1875	1.1875	2.475
				49.225		*90.000*	–.0006	*15.08*	*30.162*	*30.162*	*62.86*
2 3/16	35RB3-211E3	(W211PP2)	3	2.1880		3.9370	*– 0.015*	.656	1.3125	1.3125	2.749
				55.575		*100.000*		*16.67*	*33.338*	*33.338*	*69.82*

Please consult for availability.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Round Bore Ball Bearings

Alignable Spherical O.D.
Triple Lip Seals
Relubricatable



Style 3

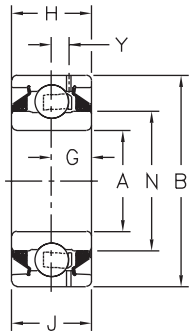
Dimensions (inches/*mm*)

Shaft diameter inches	Bearing number	Industry number	Style	A Bearing bore	A Tolerance + .0000" +0.000 mm	B Outside diameter	B Tolerance + .0000" +0.000 mm	G	H Inner ring width	J Outer ring width	N	Y
1⅜	22RG3-210E3	(GW210PPB3)	3	1.4065	–.0005	3.5433		.594	1.1875	1.1875	2.475	.255
				35.725	*– 0.013*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*	*6.48*
1½	24RG3-209E3	(GW209PPB4)	3	1.535	–.010	3.3465		.594	1.1875	1.1875	2.281	.248
				38.99	*– 0.25*	*85.000*		*15.08*	*30.162*	*30.162*	*57.94*	*6.30*
1⅝	26RG3-211E3	(GW211PPB4)	3	1.660	–.010	3.9370		.656	1.3125	1.3125	2.749	.267
				42.16	*– 0.25*	*100.000*		*16.67*	*33.338*	*33.338*	*69.82*	*6.78*
45	RG3-209E3	(GW209PPB2)	3	1.7717	–.0005	3.3465	–.0006	.594	1.1875	1.1875	2.281	.248
				45.000	*– 0.013*	*85.000*	*– 0.015*	*15.08*	*30.162*	*30.162*	*57.94*	*6.30*
1¾	28RG3-210E3	(GW210PPB5)	3	1.785	–.010	3.5433		.594	1.1875	1.1875	2.475	.255
				45.34	*– 0.25*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*	*6.48*
1 15/16	31RG3-210E3	(GW210PPB2)	3	1.9380	–.0005	3.5433		.594	1.1875	1.1875	2.475	.255
				49.225	*– 0.013*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*	*6.48*
2 3/16	35RG3-211E3	(GW211PPB2)	3	2.1880	–.0005	3.9370		.656	1.3125	1.3125	2.749	.267
				55.575	*– 0.013*	*100.000*		*16.67*	*33.338*	*33.338*	*69.82*	*6.78*

Please consult for availability.

Round Bore Ball Bearings

Cylindrical O.D.
Triple Lip Seals
Relubricatable



Style 3

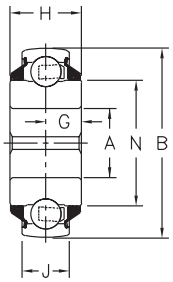
Dimensions (inches/*mm*)

Shaft diameter inches	Bearing number	Industry number	Style	A Bearing bore	A Tolerance + .0000" +0.000 mm	B Outside diameter	B Tolerance + .0000" +0.000 mm	G	H Inner ring width	J Outer ring width	N	Y
1⅜	22RBG3-210E3	(GW210PP3)	3	1.4065	–.0005	3.5433		.594	1.1875	1.1875	2.475	.255
				35.725	*– 0.013*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*	*6.48*
1⅝	26RBG3-211E3	(GW211PP4)	3	1.660	–.010	3.9370		.656	1.3125	1.3125	2.749	.267
				42.16	*– 0.25*	*100.000*	–.0006	*16.67*	*33.338*	*33.338*	*69.82*	*6.78*
1 15/16	31RBG3-210E3	(GW210PP2)	3	1.9380	–.0005	3.5433	*–0.015*	.594	1.1875	1.1875	2.475	.255
				49.225	*– 0.013*	*90.000*		*15.08*	*30.162*	*30.162*	*62.86*	*6.48*
2 3/16	35RBG3-211E3	(GW211PP2)	3	2.1880	–.0005	3.9370		.656	1.3125	1.3125	2.749	.267
				55.575	*– 0.013*	*100.000*		*16.67*	*33.338*	*33.338*	*69.82*	*6.78*

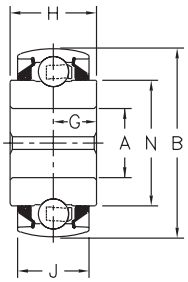
Please consult for availability.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Square Bore Ball Bearings

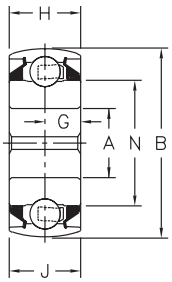
Alignable Spherical O.D.
Triple Lip Seals
Non-relubricatable



Style 1



Style *2*



Style 3

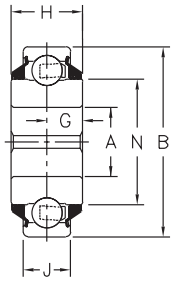
Dimensions (inches/*mm*)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H	J	N
				Bearing bore	Tolerance	Outside diameter	Tolerance + .0000" *+0.000 mm*		Inner ring width	Outer ring width	
⅞	14S4-208E3	(W208PPB11)	2	.905		3.438	‡	.719	1.4375	1.1875	2.083
				22.99		*87.32*		*18.26*	*36.512*	*30.162*	*52.91*
1	16S5-208E3	(W208PPB6)	1	1.030		3.1496		.719	1.4375	.7087	2.083
				26.16		*80.000*		*18.26*	*36.512*	*18.000*	*52.91*
1	16S2-208E3	(W208PPB9)	2	1.030		3.1496		.719	1.4375	1.1875	2.083
				26.16		*80.000*	–.0005	*18.26*	*36.512*	*30.162*	*52.91*
1⅛	18S5-2E08E3	(W208PPB5)	1	1.185		3.1496	*− 0.013*	.719	1.4375	.7087	2.083
				30.10		*80.000*		*18.26*	*36.512*	*18.000*	*52.91*
1⅛	18S2-2E08E3	(W208PPB8)	2	1.185	±.005	3.1496		.719	1.4375	1.1875	2.083
				30.10	*±0.13*	*80.000*		*18.26*	*36.512*	*30.162*	*52.91*
1⅛	18S4-2E08E3	(W208PPB12)	2	1.185		3.438	‡	.719	1.4375	1.1875	2.083
				30.10		*87.32*		*18.26*	*36.512*	*30.162*	*52.91*
1¼	20S2-209E3	(W209PPB5)	2	1.280		3.3465	–.0006	.719	1.4375	1.1875	2.281
				32.51		*85.000*	*− 0.015*	*18.26*	*36.512*	*30.162*	*57.94*
1¼	20S4-209E3	(W209PPB7)	2	1.280		3.438	‡	.719	1.4375	1.1875	2.281
				32.51		*87.32*		*18.26*	*36.512*	*30.162*	*57.94*
1½	24S3-211E3	(W211PPB3)	3	1.530		3.9370	–.0006	.656	1.3125	1.3125	2.749
				38.86		*100.000*	*− 0.015*	*16.67*	*33.338*	*33.338*	*69.82*

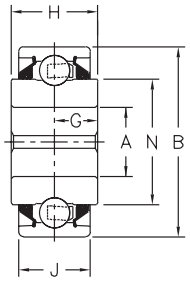
Please consult for availability.
‡ Unground spherical O.D. tolerance, ±.005" *(±0.13 mm)*. Center portion of O.D. is cylindrical.

Square Bore Ball Bearings

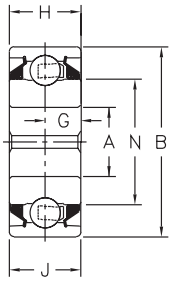
Cylindrical O.D.
Triple Lip Seals
Non-relubricatable



Style 1



Style 2



Style 3

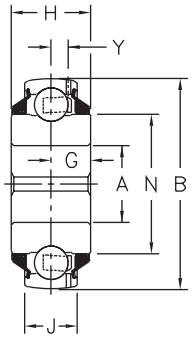
Dimensions (inches/*mm*)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H	J	N
				Bearing bore	Tolerance	Outside diameter	Tolerance + .0000" *+0.000 mm*		Inner ring width	Outer ring width	
⅞	14SB5-208E3	(W208PP13)	1	.905		3.1496		.719	1.4375	.7087	2.083
				22.99		*80.000*		*18.26*	*36.512*	*18.000*	*52.91*
1	16SB5-208E3	(W208PP6)	1	1.030		3.1496		.719	1.4375	.7087	2.083
				26.16		*80.000*		*18.26*	*36.512*	*18.000*	*52.91*
1	16SB2-208E3	(W208PP9)	2	1.030		3.1496	–.0005	.719	1.4375	1.1875	2.083
				26.16	±.005	*80.000*	*− 0.013*	*18.26*	*36.512*	*30.162*	*52.91*
1⅛	18SB5-2E08E3	(W208PP5)	1	1.185	*±0.13*	3.1496		.719	1.4375	.7087	2.083
				30.10		*80.000*		*18.26*	*36.512*	*18.000*	*52.91*
1⅛	18SB2-2E08E3	(W208PP8)	2	1.185		3.1496		.719	1.4375	1.1875	2.083
				30.10		*80.000*		*18.26*	*36.512*	*30.162*	*52.91*
1½	24SB3-211E3	(W211PP3)	3	1.530		3.9370	–.0006	.656	1.3125	1.3125	2.749
				38.96		*100.000*	*− 0.015*	*16.67*	*33.338*	*33.338*	*69.82*

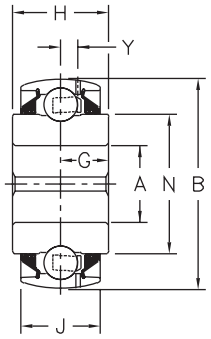
Please consult for availability.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Square Bore Ball Bearings

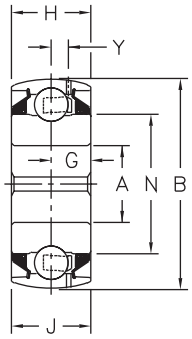
Alignable Spherical O.D.
Triple Lip Seals
Relubricatable



Style 1



Style 2



Style 3

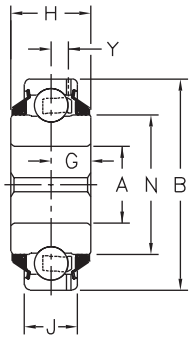
Dimensions (inches/*mm*)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H	J	N	Y
				Bearing bore	Tolerance	Outside diameter	Tolerance		Inner ring width	Outer ring width		
1	16SG5-208E3	(GW208PPB6)	1	1.030		3.1496		.719	1.4375	.8661	2.083	.253
				26.16		*80.000*	*+.0000*	*18.26*	*36.512*	*22.000*	*52.91*	*6.43*
1⅛	18SG5-2E08E3	(GW208PPB5)	1	1.185		3.1496	–.0005	.719	1.4375	.8661	2.083	.253
				30.10		*80.000*	*+0.000*	*18.26*	*36.512*	*22.000*	*52.91*	*6.43*
1⅛	18SG2-2E08E3	(GW208PPB8)	2	1.185	±.005	3.1496	*±0.013*	.719	1.4375	1.1875	2.083	.253
				30.10	±0.13	*80.000*		*18.26*	*36.512*	*30.162*	*52.91*	*6.43*
1¼	20SG5-209E3	(GW209PPB8)	1	1.280		3.3465	*+0.000*	.719	1.4375	.8661	2.281	.254
				32.51		*85.000*	–.0006	*18.26*	*36.512*	*22.000*	*57.94*	*6.45*
1½	24SG3-211E3	(GW211PPB3)	3	1.530		3.9370	*+0.000*	.656	1.3125	1.3125	2.749	.267
				38.86		*100.000*	*–0.015*	*16.67*	*33.338*	*33.338*	*69.82*	*6.78*

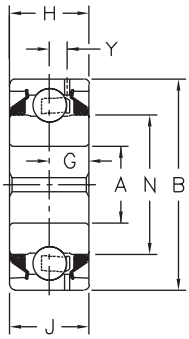
Please consult for availability.

Square Bore Ball Bearings

Cylindrical O.D.
Triple Lip Seals
Relubricatable



Style 1



Style 3

Dimensions (inches/*mm*)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H	J	N	Y
				Bearing bore	Tolerance	Outside diameter	Tolerance		Inner ring width	Outer ring width		
1¼	20SBG5-209E3	(GW209PP8)	1	1.280		3.3465	*+0.000*	.719	1.4375	.8661	2.281	.254
				32.51	±.005	*85.000*	–.0006	*18.26*	*36.512*	*22.000*	*57.94*	*6.45*
1½	24SBG3-211E3	(GW211PP3)	3	1.530	*±0.13*	3.9370	*+0.000*	.656	1.3125	1.3125	2.749	.267
				38.86		*100.000*	*–0.015*	*16.67*	*33.338*	*33.338*	*69.82*	*6.78*

Please consult for availability.
Selection guide, pages B-9, B-10.
Load ratings, pages B-11, B-12.
Additional information, page B-77.

Series 3-U200, 3-Y200
Standard Duty Ball Bearing Units

Additional Features:
All 3-200 mounted units can be purchased with formed steel closed end caps on the collar side which cover all rotating elements. Two bearing seals are provided with all open or closed end units on series 3-U200 and 3-Y200. Closed end units require specially counter bored housings on these series. Closed end units are designated with the suffix C (i.e. P3-U231NC). Shafting should not extend beyond the bearing inner ring more than ⅛" *(3.2 mm)* when end caps are to be used. Closed end unit is not available for PT3 tapped base pillow blocks.

Series 3-200 mounted units have drilled or cored mounting bolt holes suitable for the inch or metric bolts listed. Drilled holes will be 1/32" *(0.8 mm)* larger than the largest inch shown. Cast slots in pillow blocks are normally 1/16" wider than the specified mounting bolt nominal diameter. It is expected that plain washers will be used under the bolt head to span the slot width and aid torquing. Narrow (N) series washers per ANSI B18.22.1-1981 (previously designated SAE series) are recommended. If wide series washers are used, the full length of the slot may not be usable for positioning the unit.

Sealed bearings can be replaced in series 3-200 mounted units. It is normally recommended, however, that complete units be replaced to assure a good fit between the bearing O.D. and the housing bore.

Service instructions for mounting are included with each replacement bearing and should be carefully followed.

Operation:
Series 3-200 mounted units are prelubricated with a good quality petroleum grease of No. 2 consistency which has been tested for operational characteristics and stability for long shelf life. The service instructions packed with each unit provide guidelines for relubrication intervals and recommended greases. The lubricant furnished is generally limited to an operating temperature range of –20°F to +200°F *(–29 ° to 93 °C)*. The lip seals N and E3 should be limited to a temperature less than 225°F *(107 °C*).

Where significant thrust loads are applied to Standard Duty Ball Bearing Units, thrust collars, spacers, shaft shoulders etc. should be utilized to support the thrust so that it is not transmitted through the locking collars.

Imposed radial loads should not exceed 25% of bearing basic load rating; where high speeds, thrust loads, or vibratory loads are unavoidable, consult Link-Belt Bearing Division.

Takeups:
The mounting of 3-200 pillow blocks on universal takeup frames is illustrated on page B-60. For replacement bearing units in takeups, specify takeup part number without prefix S and adjustment (i.e. TA3-U215N, TD3-U231N). Frames for takeup units must be securely fastened to their supports.

Mountings:
Two-bolt FX housings have fully machined mounting surfaces; for maximum stability, radial load should be along center line of bolts.

Recommended Shaft Tolerances:

Shaft Diameter	Tolerance
½"-2"	Nominal to –.0005"
2 1/16"-4"	Nominal to –.0010"
17 mm-50 mm	Nominal to –0.013 mm
55 mm-100 mm	Nominal to –0.025 mm

CAUTION The above shaft tolerances are suitable for loads up to .18C and L_{10} life greater than 20,000 hours. For more severe conditions, consult Link-Belt Bearing Division.

The service life of a collar mounted bearing is largely dependent on shaft fit and may be expected to approach theoretical L_{10} life only if the bearing is press fitted to a shaft. A slip fit mounting in accordance with the shaft tolerances shown in table will provide generally acceptable service life on normal applications under light to moderate load and speed conditions. A shaft tolerance resulting in looser fits (such as with commercial shafting) may be expected to have greatly reduced reliability and increasing problems of shaft fret wear, bearing inner ring fracture and shaft slippage. In general, looser fits than recommended are feasible only for very light loading and lower speeds. Prototype or field testing is strongly recommended if looser fits must be considered.

Shafting should be designed for adequate strength and stiffness for the intended application. It should be round, straight, free of nicks and burrs and of correct size.

Warning:
The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stop bars, etc., together with proper safety factors. When these conditions are unavoidable, Link-Belt Bearing Division should be consulted.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Series 3-W200, 3-S200, U200, W200, Y200
Intermediate Ball Bearing Units

Additional Features:

Series 3-W200, 3-S200, U200, W200, Y200 mounted units have cored or drilled mounting bolt holes suitable for the inch or metric round or carriage bolts listed. Drilled holes will be 1/32" *(0.8 mm)* larger than the largest inch shown. Cast slots in pillow blocks are normally 1/16" wider than the specified mounting bolt nominal diameter. It is expected that plain washers will be used under the bolt head to span the slot width and aid torquing. Narrow (N) series washers per ANSI B18.22.1-1981 (previously designated SAE series) are recommended. If wide series washers are used, the full length of the slot may not be usable for positioning the unit.

Two bolt FX high-test iron flanged housings have stabilizing pads for four-point load support. For maximum stability, the radial load should be in line with the centerline of the mounting bolts.

Sealed bearings can be replaced in series 3-W200, 3-S200, U200, W200, Y200 mounted units. It is normally recommended, however, that complete units be replaced to assure a good fit between the bearing O.D. and the housing bore. Service instructions for mounting are included with each replacement bearing and should be carefully followed. Replacement bearings for intermediate mounted units are sealed and prelubricated. 3-W200 and 3-S200 intermediate ball bearing units are available with closed end caps, except for PT3-S200E and PT3-U200N.

Operation:

Series 3-W200, 3-S200, U200, W200 and Y200 intermediate ball bearing mounted units are prelubricated with a good quality petroleum grease of No. 2 consistency which has been tested for operational characteristics and stability for long shelf life. The service instructions packed with each unit provide guidelines for relubrication intervals and recommended greases. The lubricant furnished is generally limited to an operating temperature range of –20°F to +200°F (–29 ° to 93 °C). Lip seals should be limited to a temperature less than 225°F (107 °C).

Where significant thrust loads are applied to intermediate ball bearing units, thrust collars, spacers, shaft shoulders, etc. should be utilized to support the thrust so that it is not transmitted through the locking collars.

Imposed radial loads should not exceed .15C for S200 and W200 or .25C for U200 and Y200 bearings. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Formed steel housings have radial load ratings which should not be exceeded. Thrust ratings are basically 50% of the radial ratings. Loads other than down through the pillow block (style PS) base should be avoided.

Recommended Shaft Tolerances:

Shaft Diameter	Tolerance
½"—2"	Nominal to –.0005"
17 mm —50 mm	Nominal to –0.013 mm

CAUTION The above shaft tolerances are suitable for loads up to .18C for series U200 and Y200 and loads up to .11C for series W200 and S200 and L_{10} life greater than 20,000 hours. For more severe conditions, consult Link-Belt Bearing Division.

The service life of a collar mounted bearing is largely dependent on shaft fit and may be expected to approach theoretical L_{10} life only if the bearing is press fitted to a shaft. A slip fit mounting in accordance with the shaft tolerances shown in table will provide generally acceptable service life on normal applications under light to moderate load and speed conditions. A shaft tolerance resulting in looser fits (such as with commercial shafting) may be expected to have greatly reduced reliability and increasing problems of shaft fret wear, bearing inner ring fracture and shaft slippage. In general, looser fits than recommended are feasible only for very light loading and lower speeds. Prototype or field testing is strongly recommended if looser fits must be considered.

Shafting should be designed for adequate strength and stiffness for the intended application. It should be round, straight, free of nicks and burrs and of correct size.

Warning:

The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stop bars, etc., together with proper safety factors. When these conditions are unavoidable Link-Belt Bearing Division should be consulted.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Additional Information
Series U200, S200, W200, Y200, Collar/Set Screw Mounted Ball Bearings
Series Round, Square and Hex Bore Ball Bearings

Additional Features:

Cylindrical O.D. collar mounted or round, square and hex bore bearings are made for mounting in customer manufactured housings or machine frames. Dimensions for machined bores to hold cylindrical O.D. bearings are on page B-82.

Formed steel flanged housings consist of two housing halves in which can be mounted spherical O.D. collar mounted or round, square and hex bore bearings. Initial bearing alignment is obtained when the two halves are bolted around the bearing during mounting. It is best to position all bearings and housings correctly before final mounting bolt tightening.

Round, square and hex bore bearings are available in a variety of styles (1, 2, 3, etc.) to be completely adaptable for individual applications. Style 2 and 3 outer rings overhang the seal assemblies to give additional protection from fibre wrappage. Style 2 inner rings are extra long to act as spacers between machine components.

Operation:

Series 200 collar mounted and round, square and hex bore ball bearings are prelubricated with a good quality petroleum grease of No. 2 consistency which has been tested for operational characteristics and stability for long shelf life. Relubricatable bearings should be greased at a frequency depending on the environment conditions prevalent. Recommendations for specific lubricants and relubrication intervals can be obtained from Link-Belt Bearing Division.

Imposed radial loads should not exceed .15C for S200 and W200 or .25C for U200 and Y200 bearings. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Shaft locking of round bore bearings is usually accomplished by clamping an assembly along the shaft.

Square bore bearings are finished for use with AISI hot rolled, carbon steel square bars with round corners. Hex bore bearings are finished for use with AISI cold drawn, carbon steel hex bars.

Recommended Shaft Tolerances For U200, S200, W200, Y200

Shaft Diameter	Tolerance
½"—2"	Nominal to –.0005"
17 mm —50 mm	Nominal to –0.013 mm

CAUTION The above shaft tolerances are suitable for loads up to .18C for series U200 and Y200 and loads up to .11C for series W200 and S200 and L_{10}life greater than 20,000 hours. For more severe conditions, consult Link-Belt Bearing Division.

The service life of a collar mounted bearing is largely dependent on shaft fit and may be expected to approach theoretical L_{10} life only if the bearing is press fitted to a shaft. A slip fit mounting in accordance with the shaft tolerances shown in table will provide generally acceptable service life on normal applications under light to moderate load and speed conditions. A shaft tolerance resulting in looser fits (such as with commercial shafting) may be expected to have greatly reduced reliability and increasing problems of shaft fret wear, bearing inner ring fracture and shaft slippage. In general, looser fits than recommended are feasible only for very light loading and lower speeds. Prototype or field testing is strongly recommended if looser fits must be considered.

Shafting should be designed for adequate strength and stiffness for the intended application. It should be round, straight, free of nicks and burrs and of correct size.

Warning:

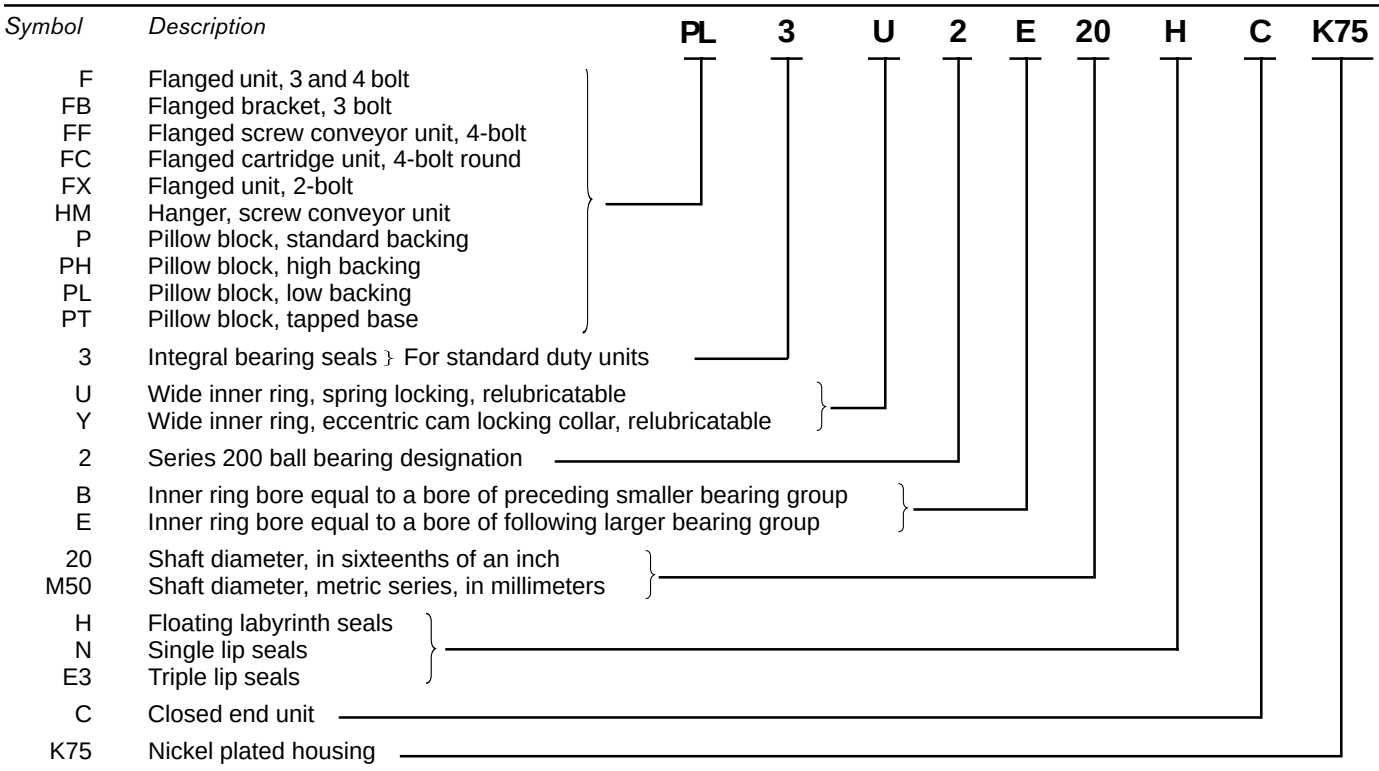
The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stop bars, etc., together with proper safety factors. When these conditions are unavoidable Link-Belt Bearing Division should be consulted.

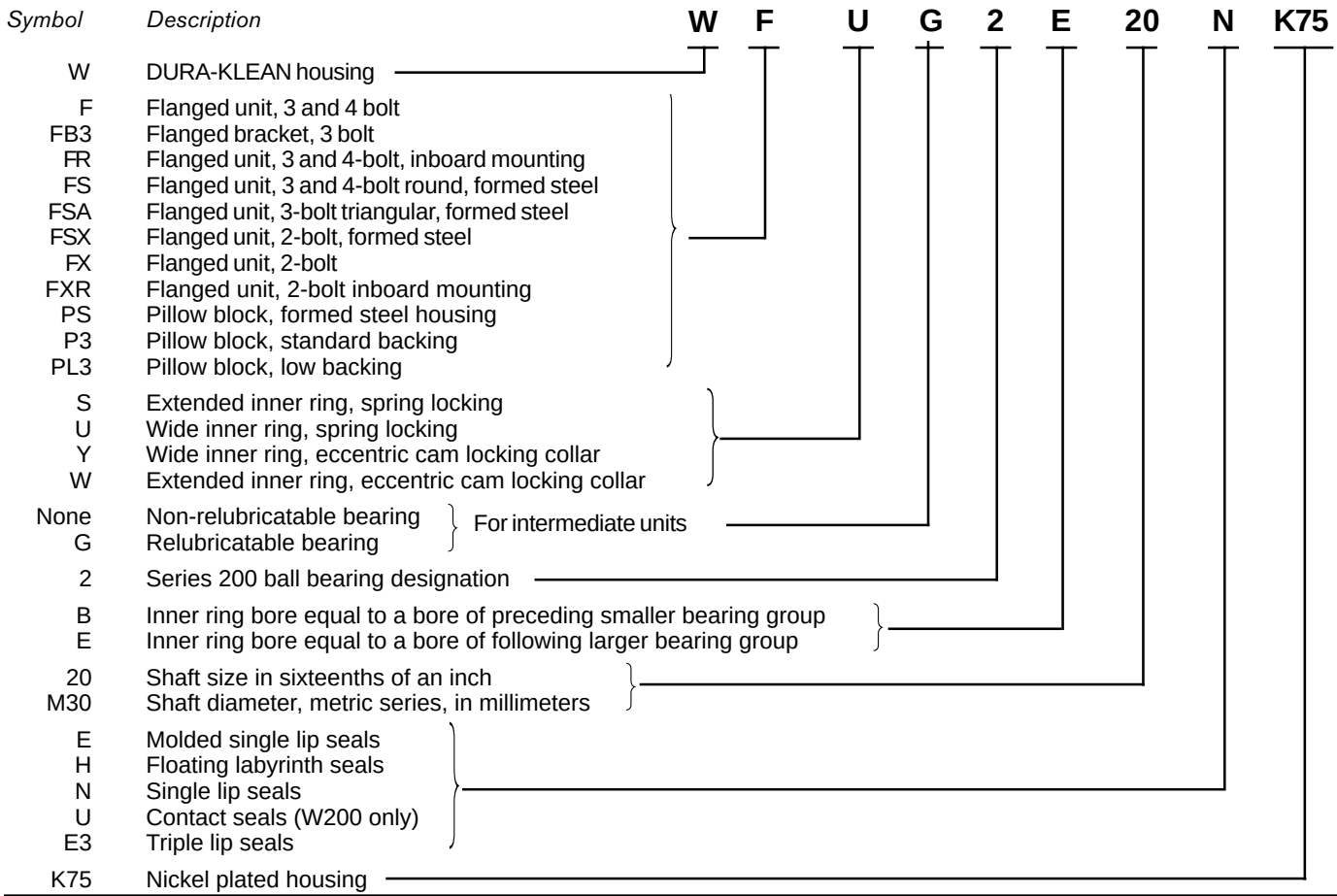
Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Nomenclature
Series 200

Standard Duty Ball Bearing Units



Intermediate Duty Ball Bearing Units



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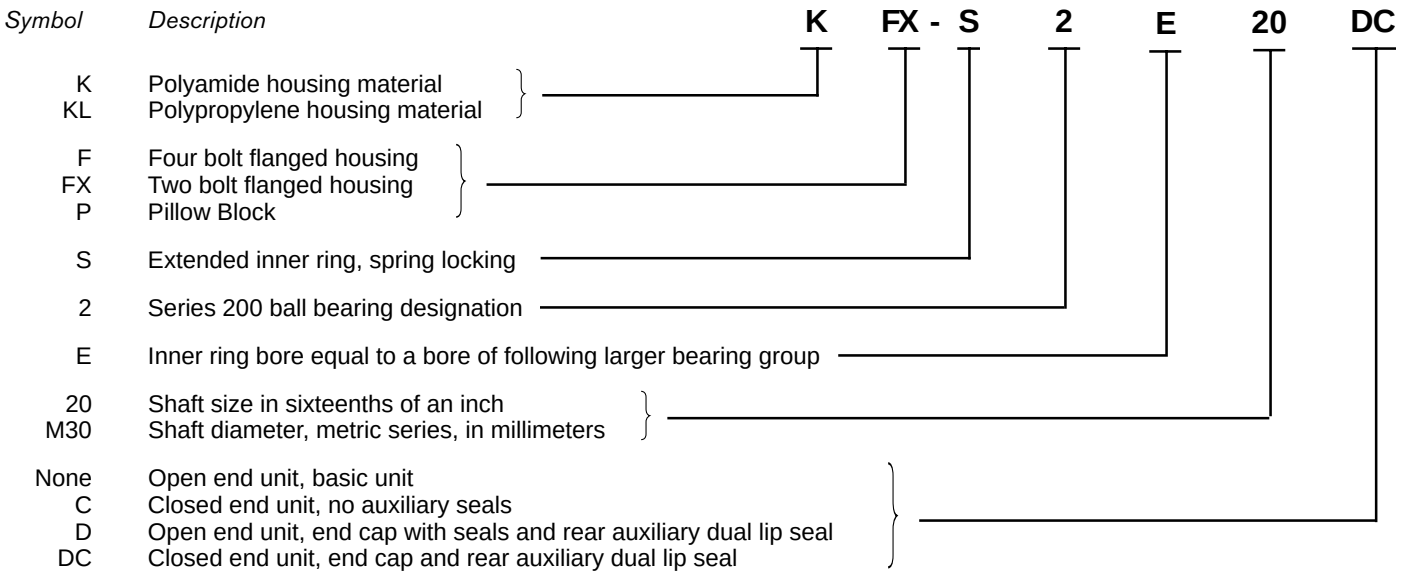
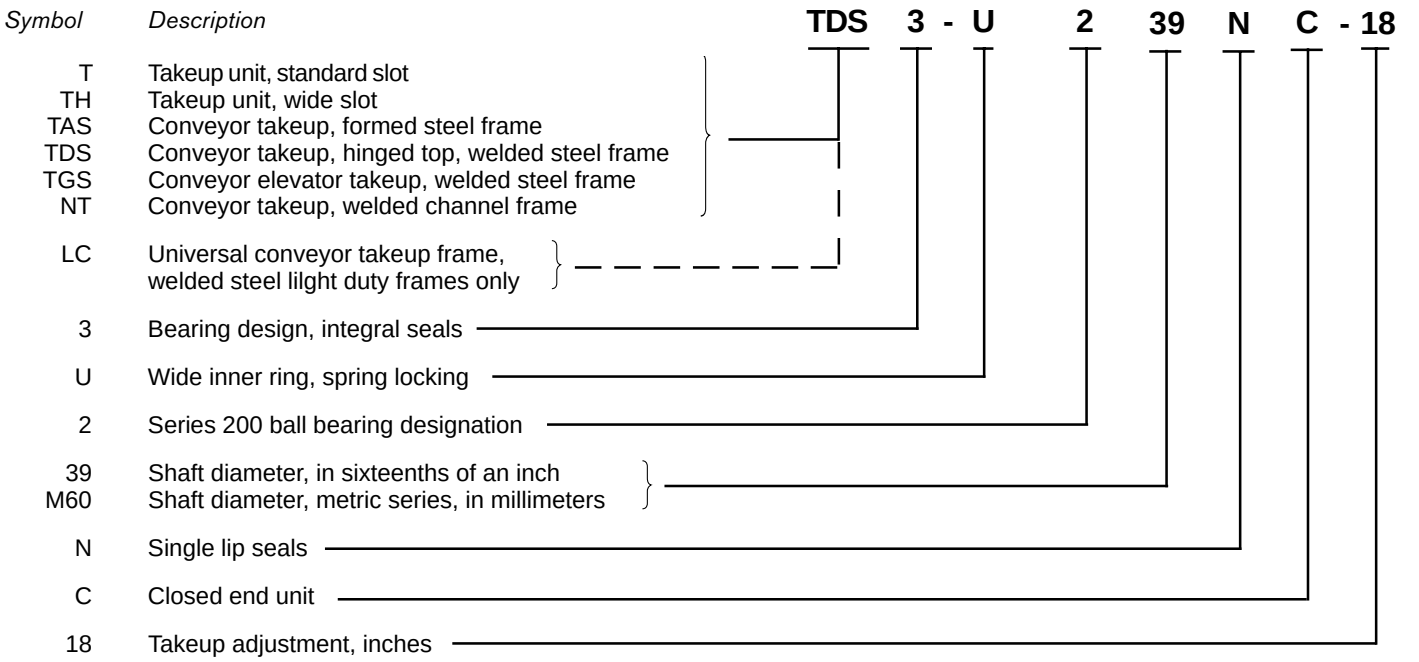
Klean-Gard Units



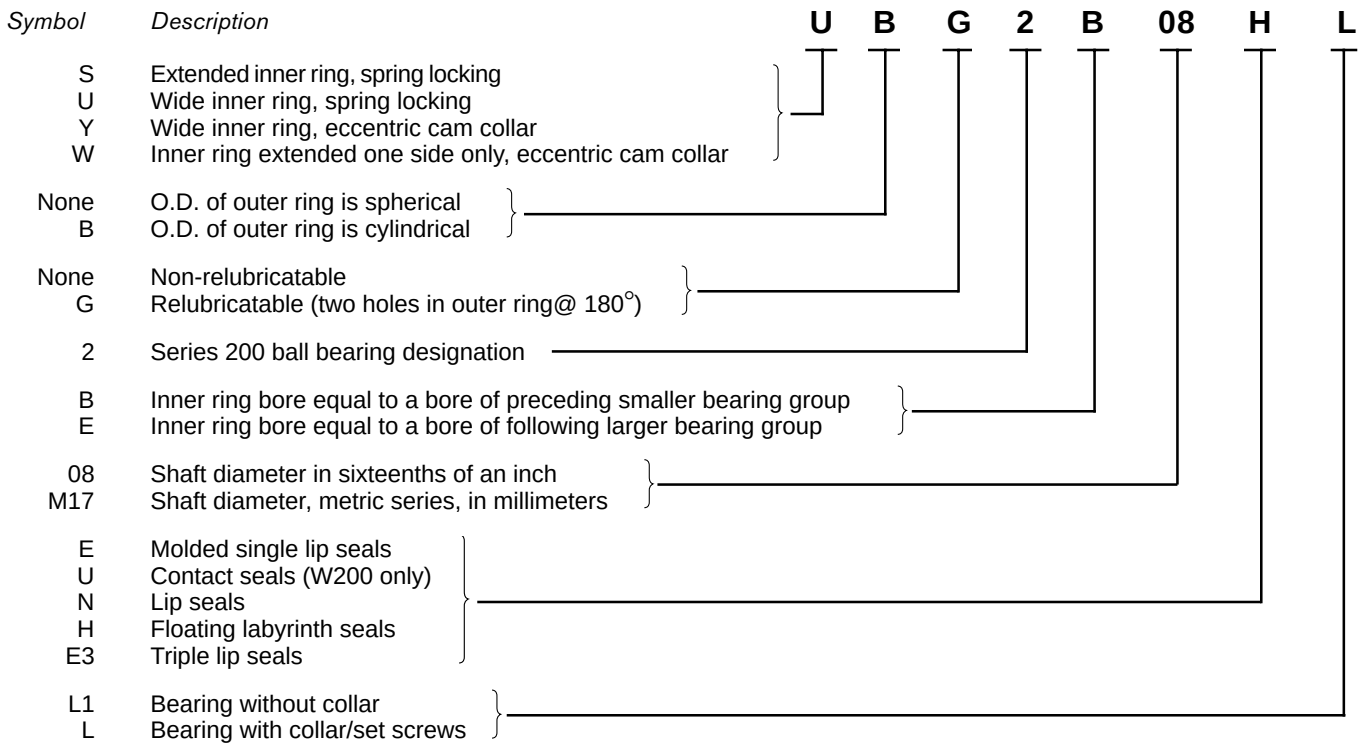
Ball Bearing Takeup Units



For bearing nomenclature see following pages.
The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, availability, and the application requirements.

Nomenclature
Series U200, S200, W200, Y200

Collar Mounted Ball Bearings

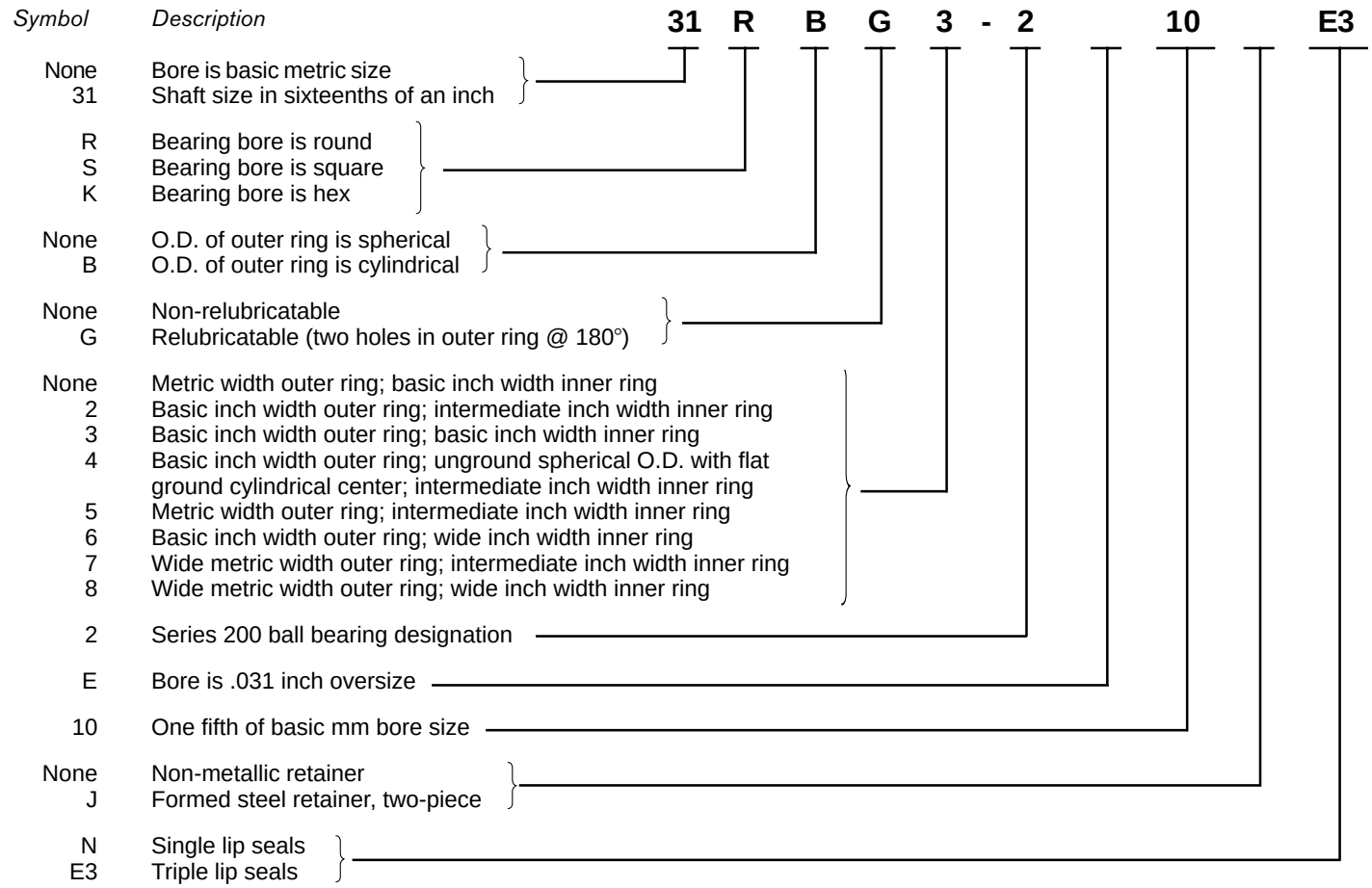


The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, availability, and the application requirements.

Nomenclature

Hex, Square, and Round Bores

Round, Square, Hex Bore Ball Bearings

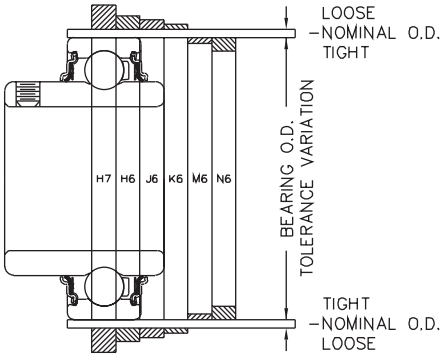


The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, availability, and the application requirements.

Housing Bearing Seat Diameters
For Cylindrical O.D. Ball Bearings

Class of fit selection

Housing construction	Operating condition			Class of fit ■	Remarks
Housing not split radially	Housing rotating in relation to direction of load	Normal and heady loads		N6	Outer ring not axially displaceable
		Light loads		M6	
		Heavy shock loads			
	Direction of load indeterminate	Normal and heavy loads where outer ring does not have to be axially displaceable		K6	Outer ring, as a rule not axially displaceable
		Normal and light loads where displaceability of outer ring is desirable		J6	Outer ring, as a rule, axially displaceable
Housing split or not split radially	Housing stationary in relation to direction of loads	Shock loads, temporary complete unloading			
		All loads	Housing not split radially	H6	Outer ring is easily displaceable axially
			Housing split radially	H7	



■ For cast iron or steel housings. For housings of light metal, select tolerances which give slightly tighter fits than those shown.

Class of fit and housing bores (inches/*μm*)

Basic size		Nominal bearing O.D. and housing bore		Bearing O.D. tolerance △	Bearing/housing diameter fits▲											
					H7		H6		J6		K6		M6		N6	
					Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance	
W200, Y200, U200,	R200, S200, K200,	*mm*	inches		Fit	Housing bore	Fit	Housing bore	Fit	Housing bore	Fit	Housing bore	Fit	Housing bore	Fit	Housing bore
				+.0000	.0000	–.0000	.00000	–.0000	.0002T	–.0002	.0005T	–.0005	.0008T	–.0008	.0011T	–.0011
2M17 211	. . .	*40*	1.5748	–.0005	.0015L	+.0010	.0011L	+.0006	.0009L	+.0004	.0006L	+.0001	.0003L	–.0002	.0000	–.0005
2M20 212	204	*47*	1.8504	*+0*	*0*	*– 0*	*0*	*– 0*	*5T*	*– 5*	*13T*	*–13*	*20T*	*–20*	*28T*	*–28*
				–13	*38L*	*+25*	*28L*	*+15*	*23L*	*+10*	*15L*	*+2*	*8L*	*–5*	*0*	*–13*
				+.0000	.0000	–.0000	.0000	–.0000	.0002T	–.0002	.0006T	–.0006	.0010T	–.0010	.0013T	–.0013
2M25 216	205	*52*	2.0472	–.0005	.0017L	+.0012	.0012L	+.0007	.0010L	+.0005	.0006L	+.0001	.0002L	–.0003	.0001T	–.0006
2M30 219	206	*62*	2.4409	*+0*	*0*	*– 0*	*0*	*– 0*	*5T*	*– 5*	*15T*	*–15*	*25T*	*–25*	*33T*	*– 43*
2M35 223	207	*72*	2.8346	*–13*	*43L*	*+30*	*30L*	*+17*	*26L*	*+13*	*15L*	*+2*	*5L*	*– 8*	*2T*	*–15*
2M40 225	208	*80*	3.1496													
				+.0000	.0000	–.0000	.0000	–.0000	.0002T	–.0002	.0007T	–.0007	.0012T	–.0012	.0016T	–.0016
2M45 228	209	*85*	3.3465	–.0006	.0020L	+.0014	.0015L	+.0009	.0013L	+.0007	.0008L	+.0002	.0003L	–.0003	.0001T	–.0007
2M50 231	210	*90*	3.5433	*+0*	*0*	*– 0*	*0*	*– 0*	*5T*	*– 5*	*18T*	*–18*	*30T*	*– 30*	*40T*	*– 40*
2M55 235	211	*100*	3.9370	*–15*	*50L*	*+35*	*38L*	*+23*	*33L*	*+18*	*20L*	*+5*	*8L*	*– 8*	*3T*	*–18*
2M60 239	. . .	*110*	4.3307													

Please consult for availability.
1μm = *.001 mm*
The appropriate housing bore for any class of fit can be easily determined by applying the housing tolerance to the nominal housing bore. Example, (using basic size 211 and class of fit H7):

		inches		*mm*	
Nominal housing bore	=	1.5748	1.5748	*40.000*	*40.000*
Housing bore tolerance	=	– .0000	+ .0010	*– 0.000*	*+ 0.025*
Resultant housing bore	=	1.5748	1.5758	*40.000*	*40.025*

▲ Symbol L indicates a loose or clearance fit. Symbol T indicates a tight or interference fit.
△ The arithmetical mean of the largest and smallest single diameter to be within tolerance shown. Allowable deviations from mean diameter per ANSI/ABMA Standard 20, latest printing.

Heavy Duty Ball Bearing Units

Contents

Series 300

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Pictorial Index C-3
Selection C-5
Load Ratings C-7
Dimensions C-9
Replacements C-16
Additional Information C-17
Nomenclature C-18

Series 300

Heavy Duty Ball Bearing Units

Series 300 wide inner ring ball bearing units are designed for heavy duty applications requiring high capacity and compactness. Manufactured from quality alloy bearing steel to precision tolerances, these bearings are used extensively on general industrial equipment, high speed fans and blowers and heavier duty power transmission and material handling equipment.

① Spring locking collar and two setscrews lock inner ring securely to shaft.

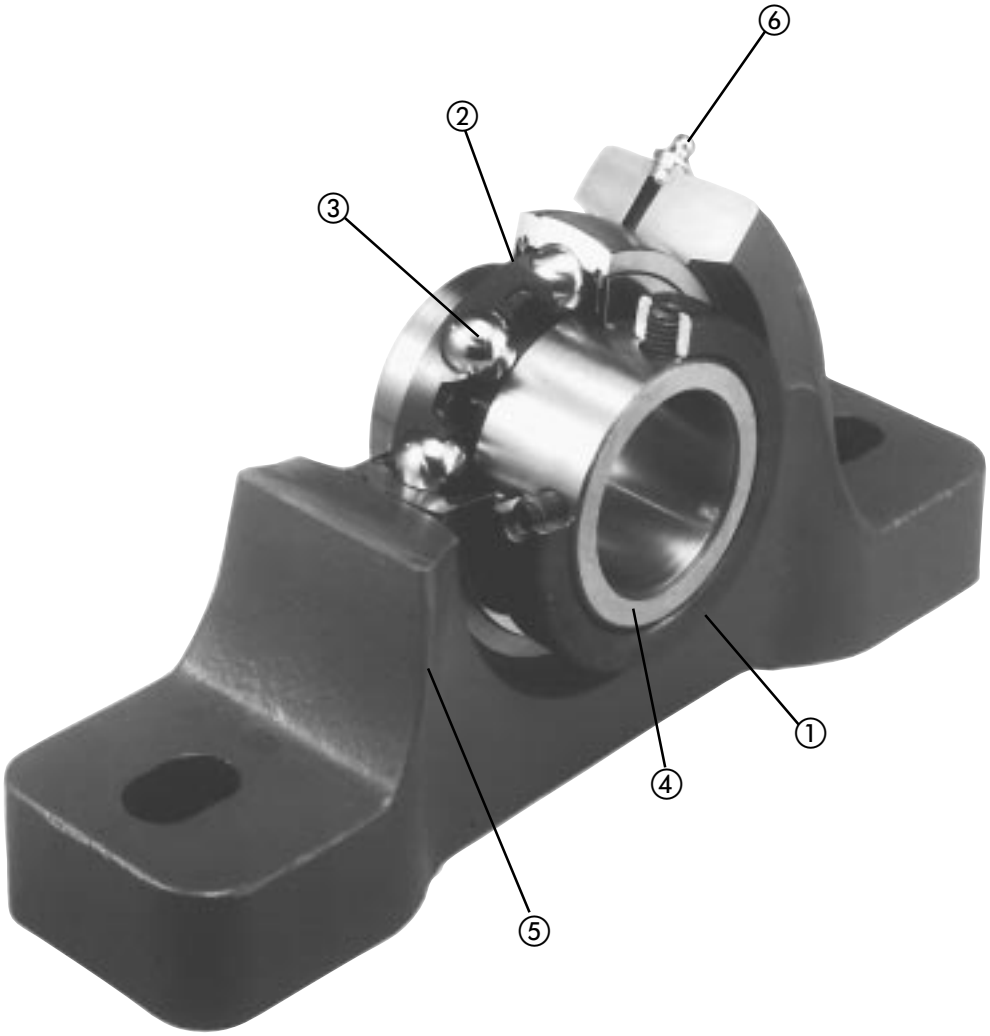
② Steel-clad molded Type H clearance seal.

③ Alignable, precision, deep groove ball bearing of quality alloy bearing steel provides high capacity for radial/thrust loads.

④ Wide inner ring for greater contact surface between shaft and bearing.

⑤ One-piece, cast iron housings available in many types for a variety of application requirements.

⑥ Prelubricated and relubricatable.



Heavy Duty Ball Bearings

Heavy series precision alignable ball bearings of deep groove construction with larger balls and thicker rings for high capacity and longer life. The extra inner ring width furnishes ultimate shaft and load support and concentricity for high speed precision application.

The spring locking collar design provides a secure grip of the wide inner ring bearing to the shaft. The two set screws extend through the inner ring of the bearing and lock firmly into the shaft. Tightening the two set screws produces elastic strain in the spring locking collar resulting in a continuous pressure on the shaft.

Furnished with anti-rotation pin in the outer ring to prevent the outer ring from spinning in the bearing housing.

Bearing Mounted Molded Rubber Seal

TYPE H SEAL:

These molded rubber seals effectively retain lubricant and protect against contamination. An external seal guard enhances protection against contamination and protects the molded rubber seal. A snap ring locates and retains the molded rubber seal in the outer ring to ensure proper operation. This is an excellent non-contact seal for grease lubrication.

One-piece Cast Iron Housings

Compact, one-piece cast iron housings provide strength with minimum size and weight, and excellent rigidity. All housings are designed with standard mounting dimensions and have finished mounting surfaces for proper installation stability. Pillow blocks have slotted bolt holes with ample space provided for drilling dowel pin holes and are also available with high backing dimensions. Flanged and flanged cartridge units have drilled mounting holes. Takeup units have machined slots for accurate adjustment.

Pillow Blocks, One-piece Housing

P-U300, PE-U300, P2-U300

Alignable pillow blocks with standard backing for shaft sizes ¾" through 3 15⁄16". High backing units for shaft sizes from ⅞" through 3 15⁄16". Open or closed end, fixed or expansion type units. Furnished with bearing clearance seals for grease lubrication.

Load ratings on pages C-7 and C-8.

Dimensions on pages C-9 and C-10.
Additional information on page C-17.

Flanged Units

F-U300, FE-U300

Alignable units for shaft sizes ¾" through 3 15⁄16". Open or closed end, fixed or expansion type units, drilled mounting holes, and machined surfaces. Furnished with bearing clearance seals for grease lubrication.

Load ratings on pages C-7 and C-8.
Dimensions on page C-11.
Additional information on page C-17.

Flanged Cartridge Units

FC-U300, FCE-U300

Alignable units for shaft sizes ¾" through 3 15⁄16". Open or closed end, fixed or expansion type units, drilled mounting holes, and machined mounting surfaces. Furnished with bearing clearance seals for grease lubrication.

Load ratings on pages C-7 and C-8.
Dimensions on page C-12.
Additional information on page C-17.

Cartridge Units

C-U300, CE-U300

Alignable units for shaft sizes ¾" through 3 15⁄16". Open or closed end, fixed or expansion type units. Furnished with bearing clearance seals for grease lubrication.

Load ratings on pages C-7 and C-8.
Dimensions on page C-13.
Additional information on page C-17.

Takeup Frames

LHD

Heavy duty welded steel takeup frames. For use in mounting heavy duty ball bearing pillow blocks listed on page C-9.

Dimensions on page C-15.
Additional information on page C-17.

Takeup Units

T-U300

Alignable units for takeup applications with shaft sizes ⅞" through 2 15/16". Open or closed end and without frames, guides, or adjusting screws, Furnished with bearing clearance seals for grease lubrication.

Load ratings on pages C-7 and C-8.
Dimensions on page C-14.
Additional information on page C-17.

Replacement Bearings

UG300L

Wide inner ring deep-groove single row ball bearings for shaft sizes ¾" through 3 15/16". Furnished with spring locking collar, stainless steel flingers, and seals.

Load ratings on pages C-7 and C-8.
Dimensions on page C-16.
Additional information on page C-17.

To select a bearing, determine the applied radial load, the applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA STD 9-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

For radial load applications only, Table 4, page C-8, can be used to select a bearing or to determine life expectancy.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—Continuous	8,700	10	80,000 to 100,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a ball bearing.

a For radial load only:
$P = F_r$

required C = $\left(\frac{C}{P}\right)$ P using $\left(\frac{C}{P}\right)$ from Step 2

Select a ball bearing from Table 3, page C-7 with a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads when $\frac{F_a}{F_r}$ is 0.19 or less:

$P = F_r$

required C = $\left(\frac{C}{P}\right)$ P using $\left(\frac{C}{P}\right)$ from Step 2

Select a ball bearing from Table 3, page C-7 with a basic load rating C equal to or greater than the required C.

c For combined radial and thrust loads when $\frac{F_a}{F_r}$ is greater than 0.19,

use the following trial method:
Maximum $P = .56F_r + 2.30F_a$

Maximum required C = $\left(\frac{C}{P}\right)$ P using $\left(\frac{C}{P}\right)$ from Step 2

Select a trial ball bearing with a basic load rating C from Table 3, page C-7, approximately equal to the maximum required C.

With this trial bearing calculate: $\frac{F_a}{Nd^2}$

Determine X and Y from Table 2.
Calculate P for the trial bearing.
$P = XF_r + YF_a$

required C = $\left(\frac{C}{P}\right)$ P for the trial bearing using $\left(\frac{C}{P}\right)$ from Step 2.

Consult Table 3, page C-7, basic load rating. If a smaller bearing meets or nearly meets the required C, its life expectancy can be calculated.
Note: If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	2.08	2.62	3.30	3.77	4.15	4.47	4.75	5.01	5.23
4000	2.29	2.88	3.63	4.15	4.57	4.92	5.23	5.51	5.76
5000	2.46	3.10	3.91	4.47	4.92	5.30	5.64	5.93	6.20
6000	2.62	3.30	4.15	4.75	5.23	5.64	5.99	6.30	6.59
8000	2.88	3.63	4.57	5.23	5.76	6.20	6.59	6.94	7.25
10000	3.10	3.91	4.92	5.64	6.20	6.68	7.10	7.47	7.81
12000	3.30	4.15	5.23	5.99	6.59	7.10	7.54	7.94	8.30
14000	3.47	4.37	5.51	6.30	6.94	7.47	7.94	8.36	8.74
16000	3.63	4.57	5.76	6.59	7.25	7.81	8.30	8.74	9.14
18000	3.77	4.75	5.99	6.86	7.54	8.13	8.63	9.09	9.50
20000	3.91	4.92	6.20	7.10	7.81	8.42	8.94	9.41	9.84
25000	4.21	5.30	6.68	7.65	8.42	9.07	9.63	10.1	10.6
30000	4.47	5.64	7.10	8.13	8.94	9.63	10.2	10.8	11.3
35000	4.71	5.93	7.47	8.55	9.41	10.1	10.8	11.3	11.9
40000	4.92	6.20	7.81	8.94	9.84	10.6	11.3	11.9	12.4
45000	5.12	6.45	8.13	9.30	10.2	11.0	11.7	12.3	12.9
50000	5.30	6.68	8.42	9.63	10.6	11.4	12.1	12.8	13.4
60000	5.64	7.10	8.94	10.2	11.3	12.1	12.9	13.6	14.2
70000	5.93	7.47	9.41	10.8	11.9	12.8	13.6	14.3	14.9
80000	6.20	7.81	9.84	11.3	12.4	13.4	14.2	14.9	15.6
90000	6.45	8.13	10.2	11.7	12.9	13.9	14.8	15.5	16.2
100000	6.68	8.42	10.6	12.1	13.4	14.4	15.3	16.1	16.8
150000	7.65	9.63	12.1	13.9	15.3	16.5	17.5	18.4	19.3
200000	8.42	10.6	13.4	15.3	16.8	18.1	19.3	20.3	21.2
	Speed, n								
	900	1000	1200	1500	1800	2400	3600	6000	10000
3000	5.44	5.64	5.99	6.45	6.86	7.54	8.63	10.2	12.1
4000	5.99	6.20	6.59	7.10	7.54	8.30	9.50	11.3	13.4
5000	6.45	6.68	7.10	7.65	8.13	8.94	10.2	12.1	14.4
6000	6.86	7.10	7.54	8.13	8.63	9.50	10.9	12.9	15.3
8000	7.54	7.81	8.30	8.94	9.50	10.5	12.0	14.2	16.8
10000	8.13	8.42	8.94	9.63	10.2	11.3	12.9	15.3	18.1
12000	8.63	8.94	9.50	10.2	10.9	12.0	13.7	16.2	19.3
14000	9.09	9.41	10.0	10.8	11.4	12.6	14.4	17.1	20.3
16000	9.50	9.84	10.5	11.3	12.0	13.2	15.1	17.9	21.2
18000	9.88	10.2	10.9	11.7	12.4	13.7	15.7	18.6	22.0
20000	10.2	10.6	11.3	12.1	12.9	14.2	16.2	19.3	22.8
25000	11.0	11.4	12.1	13.1	13.9	15.3	17.5	20.7	24.6
30000	11.7	12.1	12.9	13.9	14.8	16.2	18.6	22.0	26.1
35000	12.3	12.8	13.6	14.6	15.5	17.1	19.6	23.2	27.5
40000	12.9	13.4	14.2	15.3	16.2	17.9	20.5	24.3	28.7
45000	13.4	13.9	14.8	15.9	16.9	18.6	21.3	25.2	29.9
50000	13.9	14.4	15.3	16.5	17.5	19.3	22.0	26.1	31.0
60000	14.8	15.3	16.2	17.5	18.6	20.5	23.4	27.8	32.9
70000	15.5	16.1	17.1	18.4	19.6	21.5	24.6	29.2	34.6
80000	16.2	16.8	17.9	19.3	20.5	22.5	25.8	30.5	36.2
90000	16.9	17.5	18.6	20.0	21.3	23.4	26.8	31.8	37.7
100000	17.5	18.1	19.3	20.7	22.0	24.3	27.8	32.9	39.0
150000	20.0	20.7	22.0	23.7	25.2	27.8	31.8	37.7	44.6
200000	22.0	22.8	24.3	26.1	27.8	30.5	35.0	41.4	49.1

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{1/3}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^3 \times 1{,}000{,}000}{n \times 60}$$

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:
$P = F_r$

b For combined radial and thrust load:
$P = XF_r + YF_a$ using X and Y from Table 2 below.

Step 2 Calculate the ratio of basic load rating C to the equivalent radial load.

$$\frac{C}{P}$$

Step 3 Approximate the bearing life from Table 1.

Table 2 • X and Y factors for ball bearings

$\frac{F_a}{Nd^2}$	e	$\frac{F_a}{F_r} \le e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
25	.19	1.0	0	.56	2.30
37.5	.21	1.0	0	.56	2.15
50	.22	1.0	0	.56	1.99
75	.24	1.0	0	.56	1.85
100	.26	1.0	0	.56	1.71
125	.27	1.0	0	.56	1.63
150	.28	1.0	0	.56	1.56
200	.30	1.0	0	.56	1.45
300	.34	1.0	0	.56	1.31
500	.38	1.0	0	.56	1.15
750	.42	1.0	0	.56	1.04
1000	.44	1.0	0	.56	1.00

For values between those in the table linear interpolation can be used. Nd^2 values are given in Table 3, p. C-7.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L_n = a_1 a_2 a_3 L_{10}$$

where L_n = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on link adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Table 3 • Load ratings, speed limits and ball data

Shaft diameter	Bearing size number	C_0 Static load rating		C Basic load rating		Approximate speed limit RPM ●	d Ball diameter	N Number of balls	Nd^2
inches		*newtons*	pounds	*newtons*	pounds		*inches*		
¾	312	*7 890*	1770	*12 370*	2780	10950	⅜	7	.984
⅞ 15⁄16 1	314 315 316	*10 900*	2450	*16 460*	3700	9350	7⁄16	7	1.34
1⅛ 1 3⁄16	318 319	*15 700*	3530	*21 660*	4870	8300	31⁄64	8	1.88
1¼ 1⅜ 1 7⁄16	320 322 323	*19 100*	4290	*25 620*	5760	7550	17⁄32	8	2.26
1½	324	*24 000*	5390	*31 230*	7020	7200	19⁄32	8	2.82
1⅝ 1 11⁄16 1¾	326 327 328	*31 600*	7110	*40 750*	9160	6200	11⁄16	8	3.78
1 15⁄16	331	*37 800*	8500	*47 600*	10700	5600	¾	8	4.50
2 2⅛ 2 3⁄16	332 334 335	*44 600*	10000	*55 200*	12400	4950	13⁄16	8	5.28
2¼ 2 7⁄16	336 339	*51 900*	11700	*62 700*	14100	4450	⅞	8	6.12
2 11⁄16 2¾	343 344	*68 100*	15300	*80 100*	18000	3950	1	8	8.00
2 15⁄16	347	*77 100*	17300	*88 100*	19800	3700	1 1⁄16	8	9.03
3 3 3⁄16	348 351	*86 600*	19500	*93 900*	21100	3400	1⅛	8	10.1
3 7⁄16 3½	355 356	*107 200*	24100	*109 400*	24600	3100	1¼	8	12.5
3 15⁄16	363	*140 500*	31600	*133 400*	30000	2750	1 7⁄16	8	16.5

If the load P is greater than .25C, Consult Link-Belt Bearing Division, Rexnord Corp.

● Based on grease lubrication and moderate load.

Additional information, page C-17.

Table 4 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

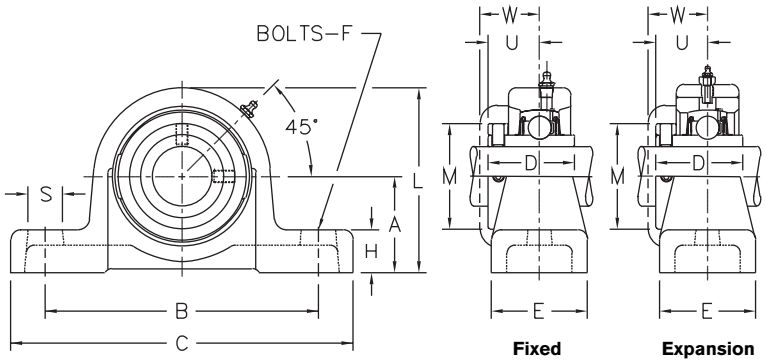
Shaft diameter, inches	Bearing size number	L_{10} Min. life, hrs.	Radial load ratings, pounds																				
			Speed, RPM																				
			50	100	200	300	400	500	600	700	800	900	1000	1200	1500	1800	2000	2500	3000	3500	4000	5000
3/4	312	3000	....	....	....	....	675	628	589	558	536	514	497	469	436	408	397	369	347	330	316	294
		8000	....	....	614	536	486	453	428	405	389	372	358	339	316	297	289	267	251	239	229	212
		20000	....	567	453	394	361	336	316	300	286	276	267	251	233	220	213	197	186	177	170	158
		40000	569	453	361	316	286	267	251	239	229	220	212	200	186	175	170	158	149	141	136	126
7/8	314	3000	....	....	....	....	897	834	782	741	712	682	660	623	579	542	527	490	460	438	419	380
15/16	315	8000	....	....	815	712	645	601	567	538	516	493	475	449	419	394	382	353	332	317	303	281
1	316	20000	....	752	601	523	479	445	419	397	379	366	353	332	309	291	282	261	246	234	224	208
		40000	756	601	479	419	379	354	333	316	303	291	281	265	246	231	225	209	196	187	179	166
1 1/8	318	3000	....	....	....	....	1170	1090	1020	974	935	896	867	818	760	711	692	643	604	575	550	511
1 3/16	319	8000	....	....	1070	935	848	789	745	706	677	648	623	589	550	516	502	463	436	415	398	368
		20000	....	989	789	687	628	585	550	521	497	480	463	436	405	382	369	342	322	306	294	272
		40000	994	789	628	550	497	464	436	414	397	381	368	347	323	303	294	273	257	244	234	217
1 1/4	320	3000			....	....	1390	1290	1210	1150	1100	1050	1020	967	898	840	817	760	713	679	650	604
1 3/8	322	8000	....	....	1260	1100	1001	932	881	834	800	765	737	696	650	610	593	547	515	490	469	435
1 7/16	323	20000	....	1160	932	811	742	690	650	616	587	567	547	515	478	451	436	404	380	362	347	321
		40000	1170	932	742	650	587	548	515	489	469	450	434	410	381	358	347	322	303	288	276	256
1 1/2	324	3000	....	....	....	....	1690	1570	1470	1400	1340	1290	1240	1170	1090	1020	995	925	868	826	791	735
		8000	....	....	1540	1340	1210	1130	1070	1010	974	932	897	847	791	742	721	666	626	596	571	529
		20000	....	1420	1130	988	904	840	791	749	714	689	666	626	581	548	530	491	462	440	421	390
		40000	1430	1130	904	791	714	666	627	595	570	548	528	499	463	435	422	391	368	350	336	311
1 5/8	326	3000	....	....	....	....	2210	2050	1920	1820	1750	1680	1620	1530	1420	1330	1290	1200	1130	1070	1030	
1 11/16	327	8000	....	....	2010	1750	1590	1480	1390	1320	1260	1210	1160	1100	1030	967	939	867	816	776	743	
1 3/4	328	20000	....	1850	1480	1280	1170	1090	1030	976	930	898	867	816	757	714	690	639	601	572	548	
		40000	1860	1480	1170	1030	930	868	817	774	742	713	687	649	602	566	549	509	479	455	436	
1 15/16	331	3000	....	....	....	....	2580	2400	2250	2130	2040	1960	1890	1790	1660	1550	1510	1400	1320	1250	1200	
		8000	....	....	2340	2040	1850	1720	1630	1540	1480	1410	1360	1280	1200	1120	1090	1010	952	906	867	
		20000	....	2160	1720	1500	1370	1270	1200	1130	1080	1040	1010	952	883	833	805	745	702	667	640	
		40000	2170	1720	1370	1200	1080	1010	953	904	866	832	802	757	703	660	641	594	558	530	509	
2	332	3000	....	....	....	....	2990	2780	2600	2470	2370	2270	2200	2070	1920	1800	1750	1620	1530	1450		
2 1/8	334	8000	....	....	2720	2370	2150	2000	1890	1790	1710	1640	1580	1490	1390	1300	1270	1170	1100	1040		
2 3/16	335	20000	....	2510	2000	1740	1590	1480	1390	1310	1250	1210	1170	1100	1020	965	933	863	812	773		
		40000	2520	2000	1590	1390	1250	1170	1100	1040	1003	964	929	877	813	764	742	687	646	614		
2 1/4	336	3000	....	....	....	....	3400	3160	2960	2810	2690	2580	2500	2360	2190	2050	1990	1850	1730			
2 7/16	339	8000	....	....	3090	2690	2440	2270	2140	2030	1950	1860	1790	1690	1580	1480	1440	1330	1250			
		20000	....	2850	2270	1970	1810	1680	1580	1500	1420	1380	1330	1250	1160	1090	1060	981	923			
		40000	2860	2270	1810	1580	1420	1330	1250	1180	1140	1090	1050	996	924	868	843	781	734			
2 11/16	343	3000	....	....	....	....	4340	4030	3780	3580	3440	3290	3190	3010	2790	2610	2540	2360				
2 3/4	344	8000	....	....	3940	3440	3110	2900	2740	2590	2480	2380	2290	2160	2020	1890	1840	1690				
		20000	....	3640	2900	2520	2300	2140	2020	1910	1820	1760	1690	1590	1480	1390	1350	1250				
		40000	3650	2900	2300	2020	1820	1700	1600	1510	1450	1390	1340	1270	1170	1100	1070	995				
2 15/16	347	3000	....	....	....	....	4770	4440	4160	3940	3780	3620	3510	3310	3070	2870	2790	2590				
		8000	....	....	4340	3780	3430	3190	3010	2850	2730	2610	2520	2380	2220	2080	2020	1860				
		20000	....	4000	3190	2770	2530	2360	2220	2100	2000	1930	1860	1750	1630	1530	1480	1370				
		40000	4020	3190	2530	2220	2000	1870	1750	1660	1590	1530	1480	1390	1290	1210	1180	1090				
3	348	3000	....	....	....	....	5090	4730	4430	4200	4030	3860	3740	3520	3270	3060	2980	2760				
3 3/16	351	8000	....	....	4620	4030	3650	3400	3210	3040	2910	2790	2680	2530	2360	2220	2150	1990				
		20000	....	4260	3400	2950	2700	2510	2360	2240	2130	2060	1990	1870	1730	1630	1580	1460				
		40000	4280	3400	2700	2360	2130	1990	1870	1770	1700	1630	1570	1480	1380	1290	1250	1160				
3 7/16	355	3000	....	....	....	....	5930	5510	5170	4900	4700	4500	4350	4110	3810	3570	3470					
3 1/2	356	8000	....	....	5390	4700	4260	3960	3740	3540	3400	3250	3120	2950	2760	2580	2510					
		20000	....	4970	3960	3440	3150	2930	2760	2610	2490	2400	2320	2180	2020	1900	1840					
		40000	4990	3960	3150	2760	2490	2320	2180	2070	1980	1900	1830	1730	1600	1510	1460					
3 15/16	363	3000	....	....	....	....	7230	6720	6300	5970	5730	5490	5310	5010	4650	4350	4230					
		8000	....	....	6570	5730	5190	4830	4560	4320	4140	3960	3810	3600	3360	3150	3060					
		20000	....	6060	4830	4200	3840	3570	3360	3180	3030	2930	2820	2660	2460	2320	2240					
		40000	6090	4830	3840	3360	3030	2830	2660	2520	2420	2320	2240	2110	1960	1840	1780					

Operation in the high speed shaded areas requires frequent relubrication.
If the load P is greater than .25C, Consult Link-Belt Bearing Division, Rexnord Corp.

Heavy Duty Ball Bearing Pillow Blocks

P-U300, PE-U300

Cast Iron Housing
Standard Backing Height
Fixed or Expansion
Alignable
Spring Locking Collar
Relubricatable



Dimensions (inches/*mm*)

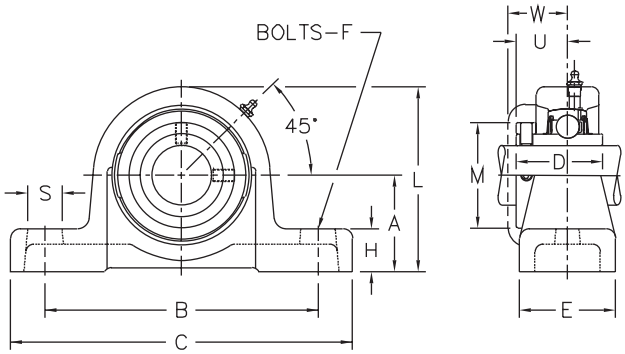
Shaft diameter inches	Pillow block number △ Fixed	Pillow block number △ Expansion	A +.000" – .010" *+0.00 – 0.25 mm*	B	C	D	E □	F Bolts	H	L Fixed	L Expansion	M	S	U	W ◆	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
¾	P-U312	PE-U312	1⅝ *41.28*	5 *127.0*	6½ *165.1*	1 15/32 *37.31*	1¾ *44.4*	½ *12*	13/16 *20.6*	3 1/16 *77.8*	3 3/16 *81.0*	1⅝ *41.3*	⅞ *22.2*	27/32 *21.4*	1 3/64 *26.6*	3/16 *4.8*	3.0 *1.4*	UG312L
⅞ 15/16 1	P-U314 P-U315 **P-U316**	PE-U314 PE-U315 **PE-U316**	1⅞ *47.62*	5½ *139.7*	7 *177.8*	1 43/64 *42.46*	2 *50.8*	½ *12*	⅞ *22.2*	3 9/16 *90.5*	3 23/32 *94.4*	2 *50.8*	⅞ *22.2*	63/64 *25.0*	1 15/64 *31.4*	3/16 *4.8*	4.0 *1.8*	UG314L UG315L UG316L
1⅛ 1 3/16	P-U318 **P-U319**	PE-U318 **PE-U319**	2⅛ *53.98*	6 7/16 *163.5*	8¼ *209.6*	1 59/64 *48.82*	2¼ *57.2*	½ *12*	15/16 *23.8*	4 1/16 *103.2*	4¼ *108.0*	2 5/16 *58.7*	1 1/16 *27.0*	1 9/64 *29.0*	1 13/32 *35.7*	3/16 *4.8*	5.9 *2.7*	UG318L UG319L
1¼ 1⅜ 1 7/16	**P-U320** P-U322 **P-U323**	PE-U320 PE-U322 **PE-U323**	2⅜ *60.32*	7⅜ *187.3*	9¼ *235.0*	2 3/32 *53.18*	2⅜ *60.3*	⅝ *16*	1 *25.4*	4½ *114.3*	4 11/16 *119.1*	2 9/16 *65.1*	1⅛ *28.6*	1¼ *31.8*	1½ *38.1*	3/16 *4.8*	7.5 *3.4*	UG320L UG322L UG323L
1½	**P-U324**	**PE-U324**	2⅝ *66.68*	8 *203.2*	10⅛ *257.2*	2 5/16 *58.74*	2⅝ *66.7*	⅝ *16*	1¼ *31.8*	5 *127.0*	5 7/32 *132.6*	3 1/16 *77.8*	1¼ *31.8*	1 25/64 *35.3*	1 39/64 *40.9*	3/16 *4.8*	11.5 *5.2*	UG324L
1⅝ 1 11/16 1¾	P-U326 **P-U327** **P-U328**	PE-U326 **PE-U327** P-U328	2⅞ *73.02*	8¼ *209.6*	10¼ *260.4*	2 19/32 *65.88*	3 *76.2*	⅝ *16*	1 5/16 *33.3*	5½ *139.7*	5⅝ *142.9*	3¼ *82.6*	1⅛ *28.6*	1 35/64 *39.3*	1 27/32 *46.8*	3/16 *4.8*	13.0 *5.9*	UG326L UG327L UG328L
1 15/16	**P-U331**	**PE-U331**	3⅛ *79.38*	8⅞ *225.4*	11⅛ *282.6*	2 13/16 *71.44*	3⅛ *79.4*	⅝ *16*	1⅜ *34.9*	6 *152.4*	6 7/32 *158.0*	3 7/16 *87.3*	1⅛ *28.6*	1 43/64 *42.5*	1 31/32 *50.0*	3/16 *4.8*	17.2 *7.8*	UG331L
2 2⅛ 2 3/16	**P-U332** P-U334 **P-U335**	PE-U332 PE-U334 **PE-U335**	3½ *88.90*	10¼ *260.4*	12⅝ *320.7*	3 1/16 *77.79*	3⅜ *85.7*	¾ *20*	1½ *38.1*	6⅝ *168.3*	6 13/16 *173.0*	3 15/16 *100.0*	1¼ *31.8*	1 27/32 *46.8*	2 3/16 *55.6*	3/16 *4.8*	21.5 *9.8*	UG332L UG334L UG335L
2¼ 2 7/16	**P-U336** **P-U339**	PE-U336 **PE-U339**	3⅝ *92.08*	11¼ *285.8*	13¾ *349.2*	3 5/16 *84.14*	3½ *88.9*	¾ *20*	1⅝ *41.3*	7⅛ *181.0*	7 3/16 *182.6*	4 3/16 *106.4*	1⅜ *34.9*	1 15/16 *49.2*	2 7/16 *61.9*	3/16 *4.8*	27.5 *12.5*	UG336L UG339L
2 11/16 2¾	**P-U343** **P-U344**	**PE-U343** PE-U344	4 *101.60*	11 13/16 *300.0*	14⅝ *371.5*	3 13/16 *96.84*	3¾ *95.2*	⅞ *24*	1⅝ *41.3*	7¾ *196.8*	7 15/16 *201.6*	4¾ *120.6*	1⅝ *41.3*	2¼ *57.2*	2⅝ *66.7*	¼ *6.4*	39.0 *17.7*	UG343L UG344L
2 15/16	**P-U347**	**PE-U347**	4¼ *107.95*	12 *304.8*	15⅛ *384.2*	4 3/32 *103.98*	4 *101.6*	⅞ *24*	1¾ *44.4*	8⅜ *212.7*	8⅜ *212.7*	4 15/16 *125.4*	1⅝ *41.3*	2⅜ *60.3*	2¾ *69.8*	¼ *6.4*	44.5 *20.2*	UG347L
3 3 3/16	P-U348 **P-U351**	PE-U348 **PE-U351**	4 9/16 *115.89*	12¼ *311.2*	15⅜ *390.5*	4 13/32 *111.92*	4 5/16 *105.6*	⅞ *24*	1 15/16 *49.2*	9 *228.6*	9 *228.6*	5 11/16 *144.5*	1⅝ *41.3*	2 19/32 *65.9*	3 *76.2*	⅜ *9.5*	53.0 *24.0*	UG348L UG351L
3 7/16 3½	**P-U355** P-U356	**PE-U355** PE-U356	5⅛ *130.18*	12⅞ *327.0*	16⅛ *409.6*	4 15/16 *125.41*	5 *127.0*	1 *24*	2¼ *57.2*	9⅞ *250.8*	10 1/16 *255.6*	6 *152.4*	1⅝ *41.3*	2 29/32 *73.8*	3 9/32 *83.3*	⅜ *9.5*	70.0 *31.8*	UG355L UG356L
3 15/16	**P-U363**	**PE-U363**	5 11/16 *144.46*	14½ *368.3*	17 5/16 *439.7*	5 9/16 *141.29*	5 *127.0*	1 *24*	2 9/16 *65.1*	11 1/16 *281.0*	11 1/16 *281.0*	7 *177.8*	1½ *38.1*	3 9/32 *83.3*	3 11/16 *93.7*	⅜ *9.5*	98.0 *44.4*	UG363L

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for all expansion units with 2 7/16" and smaller shafts, ¼"-28 UNF; for other expansion units and all fixed units, ⅛" PT.
△ 1⅛ thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. P-U319N
◆ Width dimension for closed end unit.
□ Dimension E for PE-U326 thru PE-U328 is 2¾", PE-U336 and PE-U339 is 3¾".
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Heavy Duty Ball Bearing Pillow Blocks

P2-U300

Cast Iron Housing
High Backing Height
Alignable
Spring Locking Collar
Relubricatable



Dimensions (inches/*mm*)

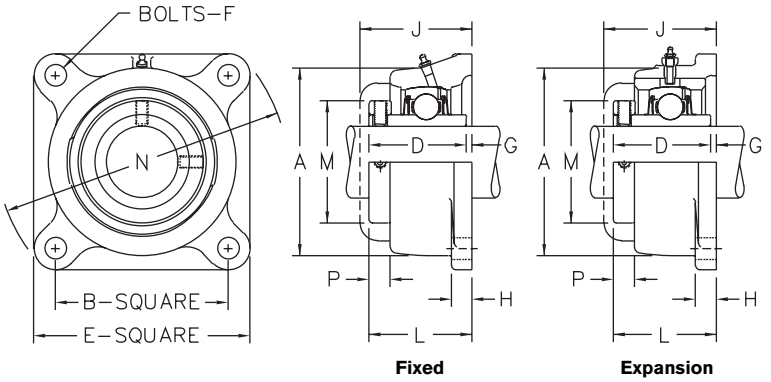
Shaft diameter inches	Pillow block number △	A + .000" – .010" *+0.00 – 0.25 mm*	B	C	D	E	F Bolts	H	L	M	S	U	W ◆	Unit wt. (lbs./kg.)	Bearing no.
7/8 15/16 1	P2-U314 P2-U315 **P2-U316**	2 *50.80*	5 1/2 *139.7*	7 *177.8*	1 43/64 *42.46*	2 *50.8*	1/2 *12*	7/8 *22.2*	3 11/16 *93.7*	2 *50.8*	7/8 *22.2*	63/64 *25.0*	1 15/64 *31.4*	4.2 *1.9*	UG314L UG315L UG316L
1 1/8 1 3/16	P2-U318 **P2-U319**	2 3/8 *60.32*	6 5/8 *168.3*	8 1/4 *209.6*	1 59/64 *48.82*	2 3/8 *60.3*	1/2 *12*	7/8 *22.2*	4 5/16 *109.5*	2 5/16 *58.7*	1 *25.4*	1 9/64 *29.0*	1 13/32 *35.7*	6.5 *2.9*	UG318L UG319L
1 1/4 1 3/8 1 7/16	P2-U320 P2-U322 **P2-U323**	2 3/4 *69.85*	8 1/4 *209.6*	10 1/8 *257.2*	2 3/32 *53.18*	2 3/4 *69.8*	5/8 *16*	15/16 *23.8*	4 7/8 *123.8*	2 9/16 *65.1*	1 1/8 *28.6*	1 1/4 *31.8*	1 1/2 *38.1*	8.9 *4.0*	UG320L UG322L UG323L
1 1/2	**P-U324★**	2 5/8 *66.68*	8 *203.2*	10 1/8 *257.2*	2 5/16 *58.74*	2 5/8 *66.7*	5/8 *16*	1 1/4 *31.8*	5 *127.0*	3 1/16 *77.8*	1 1/4 *31.8*	1 25/64 *35.3*	1 39/64 *40.9*	11.5 *5.2*	UG324L
1 5/8 1 11/16 1 3/4	P2-U326 **P2-U327** P2-U328	3 1/8 *79.38*	9 *228.6*	11 *279.4*	2 19/32 *65.88*	3 *76.2*	5/8 *16*	1 3/16 *30.2*	5 3/4 *146.0*	3 1/4 *82.6*	1 1/8 *28.6*	1 35/64 *39.3*	1 27/32 *46.8*	14.0 *6.4*	UG326L UG327L UG328L
1 15/16	**P-U331★**	3 1/8 *79.38*	8 7/8 *225.4*	11 1/8 *282.6*	2 13/16 *71.44*	3 1/8 *79.4*	5/8 *16*	1 3/8 *34.9*	6 *152.4*	3 7/16 *87.3*	1 1/8 *28.6*	1 43/64 *42.5*	1 31/32 *50.0*	17.2 *7.8*	UG331L
2 2 1/8 2 3/16	P2-U332 P2-U334 **P2-U335**	3 3/4 *95.25*	10 1/4 *260.4*	12 5/8 *320.7*	3 1/16 *77.79*	3 3/8 *85.7*	3/4 *20*	1 7/16 *36.5*	6 7/8 *174.6*	3 15/16 *100.0*	1 3/8 *34.9*	1 27/32 *46.8*	2 3/16 *55.6*	22.9 *10.4*	UG332L UG334L UG335L
2 1/4 2 7/16	P2-U336 **P2-U339**	4 1/8 *104.78*	11 1/4 *285.8*	13 3/4 *349.2*	3 5/16 *84.14*	4 *101.6*	3/4 *20*	1 1/2 *38.1*	7 1/2 *190.5*	4 3/16 *106.4*	1 3/8 *34.9*	1 15/16 *49.2*	2 7/16 *61.9*	31.1 *14.1*	UG336L UG339L
2 11/16 2 3/4	**P2-U343** P2-U344	4 9/16 *115.89*	12 *304.8*	14 13/16 *376.2*	3 13/16 *96.84*	4 3/8 *111.1*	7/8 *24*	1 3/4 *44.4*	8 7/16 *214.3*	4 3/4 *120.6*	1 3/8 *34.9*	2 1/4 *57.2*	2 5/8 *66.7*	44.0 *20.0*	UG343L UG344L
2 15/16	**P2-U347**	4 9/16 *115.89*	12 3/8 *314.3*	15 3/8 *390.5*	4 3/32 *103.98*	4 3/8 *111.1*	7/8 *24*	1 7/8 *47.6*	8 11/16 *220.7*	4 15/16 *125.4*	1 3/8 *34.9*	2 3/8 *60.3*	2 3/4 *69.8*	47.2 *21.4*	UG347L
3 3 3/16	P-U348★ **P-U351★**	4 9/16 *115.89*	12 1/4 *311.2*	15 3/8 *390.5*	4 13/32 *111.92*	4 5/16 *105.6*	7/8 *24*	1 15/16 *49.2*	9 *228.6*	5 11/16 *144.5*	1 5/8 *41.3*	2 19/32 *65.9*	3 *76.2*	53.0 *24.0*	UG348L UG351L
3 7/16	**P-U355★**	5 1/8 *130.18*	12 7/8 *327.0*	16 1/8 *409.6*	4 15/16 *125.41*	5 *127.0*	1 *24*	2 1/4 *57.2*	9 7/8 *250.8*	6 *152.4*	1 5/8 *41.3*	2 29/32 *73.8*	3 9/32 *83.3*	70.0 *31.8*	UG355L
3 15/16	**P-U363★**	5 11/16 *144.46*	14 1/2 *368.3*	17 5/16 *439.7*	5 9/16 *141.29*	5 1/2 *139.7*	1 *24*	2 9/16 *65.1*	11 1/16 *281.0*	7 *177.8*	1 1/2 *38.1*	3 9/32 *83.3*	3 11/16 *93.7*	98.0 *44.4*	UG363L

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: 1/8" PT.
★ Same as P-U300 series.
△ 1 1/8 thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. P-U319N
◆ Width dimension for closed end unit.
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Heavy Duty Ball Bearing Flanged Units

F-U300, FE-U300

Cast Iron Housing
4-bolt Mounting
Fixed or Expansion
Alignable
Spring Locking Collar
Relubricatable



Dimensions (inches/*mm*)

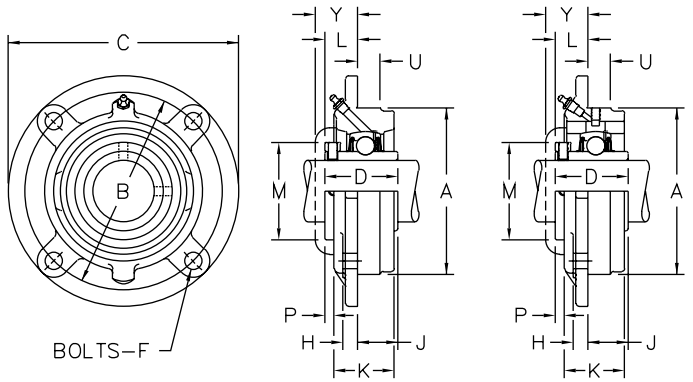
Shaft diameter Inches	Flanged unit number △ Fixed	Flanged unit number △ Expansion	A Fixed	A Expansion	B	D	E	F Bolts	G	H	J ◆	L	M	N	P	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
¾	F-U312	. . .	2¾ *69.8*	3 1/16 *77.8*	2⅞ *73.02*	1 15/32 *37.31*	3⅞ *98.4*	7/16 *10*	⅛ *3.2*	½ *12.7*	1 51/64 *45.6*	1 19/32 *40.5*	1⅝ *41.3*	5 1/16 *128.6*	15/64 *6.0*	. . . . . .	2.5 *1.1*	UG312L
⅞	F-U314	FE-U314	3¼	3 11/16	3½	1 43/64	4⅝	½	⅛	9/16	2 3/64	1 51/64	2	6 1/16	19/64	3/16	4.0	UG314L
15/16	F-U315	FE-U315	*82.6*	*93.7*	*88.90*	*42.46*	*117.5*	*12*	*3.2*	*14.3*	*52.0*	*45.6*	*50.8*	*154.0*	*7.5*	*4.8*	*1.8*	UG315L
1	**F-U316**	**FE-U316**																UG316L
1⅛	F-U318	FE-U318	3⅝	4⅛	3 13/16	1 59/64	4 15/16	½	⅛	⅝	2 5/16	2 3/64	2 5/16	6 17/32	25/64	3/16	4.7	UG318L
1 3/16	**F-U319**	**FE-U319**	*92.1*	*104.8*	*96.84*	*48.82*	*125.4*	*12*	*3.2*	*15.9*	*58.7*	*52.0*	*58.7*	*165.9*	*9.9*	*4.8*	*2.1*	UG319L
1¼	**F-U320**	FE-U320	4 1/16	4 15/32	4	2 3/32	5⅛	½	5/32	⅝	2½	2¼	2 9/16	6 25/32	7/16	9/32	6.0	UG320L
1⅜	**F-U322**	FE-U322	*103.2*	*113.5*	*101.60*	*53.18*	*130.2*	*12*	*4.0*	*15.9*	*63.5*	*57.2*	*65.1*	*172.2*	*11.1*	*7.1*	*2.7*	UG322L
1 7/16	**F-U323**	**FE-U323**																UG323L
1½	**F-U324**	**FE-U324**	4 9/16 *115.9*	5 *127.0*	4⅝ *117.48*	2 5/16 *58.74*	6 *152.4*	⅝ *16*	5/32 *4.0*	⅝ *15.9*	2 11/16 *68.3*	2 15/32 *62.7*	3 1/16 *77.8*	7 29/32 *200.8*	½ *12.7*	9/32 *7.1*	8.5 *3.8*	UG324L
1⅝	F-U326	FE-U326	5	5½	4⅞	2 19/32	6¼	⅝	5/32	1 1/16	3 3/64	2¾	3¼	8 9/32	35/64	3/16	10.2	UG326L
1 11/16	**F-U327**	**FE-U327**	*127.0*	*139.7*	*123.82*	*65.88*	*158.8*	*16*	*4.0*	*17.5*	*77.4*	*69.8*	*82.6*	*210.3*	*13.9*	*4.8*	*4.6*	UG327L
1¾	**F-U328**	FE-U328																UG328L
1 15/16	**F-U331**	**FE-U331**	5½ *139.7*	5 15/16 *150.8*	5⅛ *130.18*	2 13/16 *71.44*	6½ *165.1*	⅝ *16*	5/32 *4.0*	1 1/16 *17.5*	3 17/64 *82.9*	2 31/32 *75.4*	3 7/16 *87.3*	8⅝ *219.1*	37/64 *14.7*	3/16 *4.8*	12.2 *5.5*	UG331L
2	**F-U332**	FE-U332	6	6⅜	5¾	3 1/16	7 5/16	¾	5/32	¾	3 9/16	3 7/32	3 15/16	9 11/16	21/32	3/16	16.5	UG332L
2⅛	F-U334	FE-U334	*152.4*	*161.9*	*146.05*	*77.79*	*185.7*	*20*	*4.0*	*19.0*	*90.5*	*81.8*	*100.0*	*246.1*	*16.7*	*4.8*	*7.5*	UG334L
2 3/16	**F-U335**	**FE-U335**																UG335L
2¼	F-U336	FE-U336	6⅜	6 13/16	6	3 5/16	7⅝	¾	5/32	¾	3 31/32	3 15/32	4 3/16	10⅛	21/32	3/16	19.2	UG336L
2 7/16	**F-U339**	**FE-U339**	*161.9*	*173.0*	*152.40*	*84.14*	*193.7*	*20*	*4.0*	*19.0*	*100.8*	*88.1*	*106.4*	*257.2*	*16.7*	*4.8*	*8.7*	UG339L
2 11/16	**F-U343**	**FE-U343**	7 5/16	7¾	7	3 13/16	8⅞	⅞	5/32	⅞	4 11/32	3 31/32	4¾	11 25/32	¾	¼	30.0	UG343L
2¾	F-U344	FE-U344	*185.7*	*196.8*	*177.80*	*96.84*	*225.4*	*24*	*4.0*	*22.2*	*110.3*	*100.8*	*120.6*	*299.2*	*19.0*	*6.4*	*13.6*	UG344L
2 15/16	**F-U347**	**FE-U347**	7⅞ *200.0*	8¼ *209.6*	7¼ *184.15*	4 3/32 *103.98*	9 1/16 *230.2*	⅞ *24*	7/32 *5.6*	⅞ *22.2*	4 11/16 *119.1*	4 5/16 *109.5*	4 15/16 *125.4*	12 1/16 *306.4*	⅞ *22.2*	¼ *6.4*	33.5 *15.2*	UG347L
3 7/16	**F-U355**	**FE-U355**	9¼	9⅞	8½	4 15/16	11	1	7/32	1¼	5 17/32	5 5/32	6	14 17/32	1	⅜	58.0	UG355L
3½	F-U356	FE-U356	*235.0*	*250.8*	*215.90*	*125.41*	*279.4*	*24*	*5.6*	*31.8*	*140.5*	*131.0*	*152.4*	*369.1*	*25.4*	*9.5*	*26.3*	UG356L
3 15/16	**F-U363**	**FE-U363**	10⅜ *263.5*	10 15/16 *277.8*	9½ *241.30*	5 9/16 *141.29*	12⅛ *308.0*	1⅛ *30*	7/32 *5.6*	1⅜ *34.9*	6 3/16 *157.2*	5 25/32 *146.8*	7 *177.8*	16 1/16 *408.0*	1 3/32 *27.8*	⅜ *9.5*	78.0 *35.4*	UG363L

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for all expansion units with 2 7/16" and smaller shafts, ¼"-28 UNF; for other expansion units and all fixed units, ⅛" PT.
△ 1⅛ thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. P-U319N
◆ Width dimension for closed end unit.
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Heavy Duty Ball Bearing Flanged Cartridge Units

FC-U300, FCE-U300

Cast Iron Housing
Fixed or Expansion
Alignable
Spring Locking Collar
Relubricatable



Fixed **Expansion**

Dimensions (inches/*mm*)

Shaft diameter inches	Flanged cartridge unit number △ Fixed	Expansion	A †	B	C	D	F Bolts	H	J	K	L	M	P	U	Y ◆	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
¾	FC-U312	. . .	3.125 *79.38*	3¾ *95.25*	4½ *114.3*	1 15/32 *37.31*	5/16 *8*	7/16 *11.1*	13/16 *20.6*	1 7/32 *31.0*	21/32 *16.7*	1⅝ *41.3*	13/64 *5.2*	½ *12.7*	55/64 *21.8*	. . . . . .	3.0 *1.4*	UG312L
⅞	FC-U314	. . .	3.688	4½	5⅜	1 43/64	⅜	7/16	⅞	1 5/16	51/64	2	19/64	⅝	1 3/64	. . .	4.5	UG314L
15/16	FC-U315	. . .	*93.68*	*114.30*	*136.5*	*42.46*	*10*	*11.1*	*22.2*	*33.3*	*20.2*	*50.8*	*7.5*	*15.9*	*26.6*	. . .	*2.0*	UG315L
1	**FC-U316**	. . .																UG316L
1⅛	FC-U318	. . .	4.125	5	6	1 59/64	7/16	7/16	31/32	1 7/16	61/64	2 5/16	25/64	⅝	1 7/32	. . .	6.0	UG318L
1 3/16	**FC-U319**	. . .	*104.78*	*127.00*	*152.4*	*48.82*	*10*	*11.1*	*24.6*	*36.5*	*24.2*	*58.7*	*9.9*	*15.9*	*31.0*	. . .	*2.7*	UG319L
1¼	**FC-U320**	FCE-U320	4.500	5⅜	6⅜	2 3/32	7/16	7/16	1 3/32	1 9/16	1	2 9/16	7/16	⅝	1¼	¼	7.5	UG320L
1⅜	FC-U322	FCE-U322	*114.30*	*136.52*	*161.9*	*53.18*	*10*	*11.1*	*27.8*	*39.7*	*25.4*	*65.1*	*11.1*	*15.9*	*31.8*	*6.4*	*3.4*	UG322L
1 7/16	**FC-U323**	**FCE-U323**																UG323L
1½	**FC-U324**	**FCE-U324**	5.000 *127.00*	6 *152.40*	7⅛ *181.0*	2 5/16 *58.74*	½ *12*	½ *12.7*	1 11/64 *29.8*	1 23/32 *43.6*	1 9/64 *29.0*	3 1/16 *77.8*	½ *12.7*	⅝ *15.9*	1 23/64 *34.5*	¼ *6.4*	10.0 *4.5*	UG324L
1⅝	FC-U326	FCE-U326	5.500	6½	7⅝	2 19/32	½	½	1 19/64	1 59/64	1 19/64	3¼	35/64	¾	1 19/32	¼	12.2	UG326L
1 11/16	**FC-U327**	**FCE-U327**	*139.70*	*165.10*	*193.7*	*65.88*	*12*	*12.7*	*32.9*	*48.8*	*32.9*	*82.6*	*13.9*	*19.0*	*40.5*	*6.4*	*5.5*	UG327L
1¾	**FC-U328**	FCE-U328																UG328L
1 15/16	**FC-U331**	**FCE-U331**	6.000 *152.40*	7 *177.80*	8⅛ *206.4*	2 13/16 *71.44*	½ *12*	9/16 *14.3*	1 25/64 *35.3*	2⅛ *54.0*	1 27/64 *36.1*	3 7/16 *87.3*	9/16 *14.3*	⅞ *22.2*	1 23/32 *43.6*	¼ *6.4*	15.0 *6.8*	UG331L
2	**FC-U332**	FCE-U332	6.375	7⅝	9	3 1/16	⅝	⅝	1 17/32	2 9/32	1 17/32	3 15/16	21/32	15/16	1⅞	¼	19.5	UG332L
2⅛	FC-U334	FCE-U334	*161.92*	*193.68*	*228.6*	*77.79*	*16*	*15.9*	*38.9*	*57.9*	*38.9*	*100.0*	*16.7*	*23.8*	*47.6*	*6.4*	*8.8*	UG334L
2 3/16	**FC-U335**	**FCE-U335**																UG335L
2¼	FC-U336	FCE-U336	6.875	8⅛	9½	3 5/16	⅝	⅝	1 11/16	2 15/32	1⅝	4 3/16	21/32	15/16	2⅛	¼	23.5	UG336L
2 7/16	**FC-U339**	**FCE-U339**	*174.62*	*206.38*	*241.3*	*84.14*	*16*	*15.9*	*42.9*	*62.7*	*41.3*	*106.4*	*16.7*	*23.8*	*54.0*	*6.4*	*10.6*	UG339L
2 11/16	**FC-U343**	**FCE-U343**	7.750	9	10⅜	3 13/16	⅝	¾	1 15/16	2 27/32	1⅞	4¾	25/32	1⅛	2¼	13/32	32.5	UG343L
2¾	FC-U344	FCE-U344	*196.85*	*228.60*	*263.5*	*96.84*	*16*	*19.0*	*49.2*	*72.2*	*47.6*	*120.6*	*19.8*	*28.6*	*57.2*	*10.3*	*14.7*	UG344L
2 15/16	**FC-U347**	**FCE-U347**	8.250 *209.55*	9½ *241.30*	10⅞ *276.2*	4 3/32 *103.98*	⅝ *16*	¾ *19.0*	2 3/32 *53.2*	3⅛ *79.4*	2 *50.8*	4 15/16 *125.4*	¾ *19.0*	1⅛ *28.6*	2⅜ *60.3*	13/32 *10.3*	37.0 *16.8*	UG347L
3 7/16	**FC-U355**	**FCE-U355**	9.875	11⅜	12⅞	4 15/16	¾	⅞	2 17/32	3 11/16	2 13/32	6	1	1¼	2 25/32	13/32	64.0	UG355L
3½	FC-U356	FCE-U356	*250.82*	*288.92*	*327.0*	*125.41*	*20*	*22.2*	*64.3*	*93.7*	*61.1*	*152.4*	*25.4*	*31.8*	*70.6*	*10.3*	*29.0*	UG356L
3 15/16	**FC-U363**	**FCE-U363**	11.000 *279.40*	12½ *317.50*	14 *355.6*	5 9/16 *141.29*	¾ *20*	⅞ *22.2*	2 25/32 *70.6*	4 7/32 *107.2*	2 25/32 *70.6*	7 *177.8*	1 3/32 *27.8*	1⅜ *34.9*	3 3/16 *81.0*	13/32 *10.3*	85.0 *38.6*	UG363L

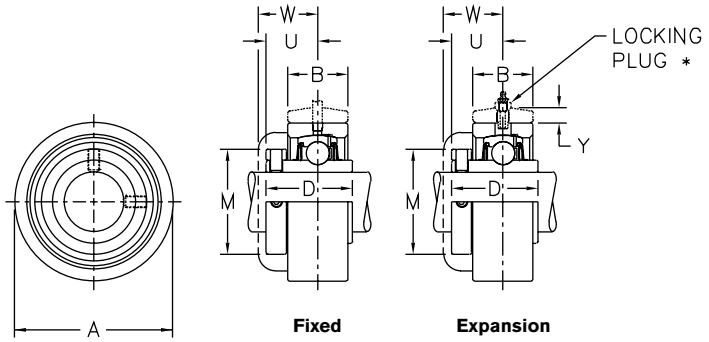
Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size for 1 3/16" and smaller shaft sizes, ¼"-28; all other shafts, ⅛" PT.
† Tolerance: +.000" –.002" *(+0.00 –0.05 mm)*. Bore tolerance for mounting: +.002" –.000" *(+0.05 –0.00 mm)*.
△ 1⅛ thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. P-U319N
◆ Width dimension for closed end unit.

Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Heavy Duty Ball Bearing Cartridge Units

C-U300, CE-U300

Steel Housing
Fixed or Expansion
Alignable
Spring Locking Collar
Relubricatable



Dimensions (inches/*mm*)

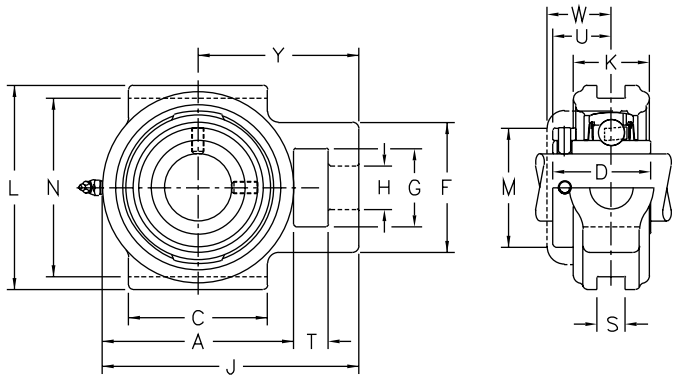
Shaft diameter inches	Cartridge unit number △ Fixed	Cartridge unit number △ Expansion	A †	B	D	M	U	W ◆	Y	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
¾	C-U312	CE-U312	2.469 *62.71*	1 5/32 *29.37*	1 15/32 *37.31*	1 5/8 *41.3*	27/32 *21.4*	1 3/64 *26.6*	3/8 *9.5*	3/16 *4.8*	1.2 *0.5*	UG312L
7/8	C-U314	CE-U314	3.000 *76.20*	1 1/4 *31.75*	1 43/64 *42.46*	2 *50.8*	63/64 *25.0*	1 15/64 *31.4*	3/8 *9.5*	3/16 *4.8*	2.0 *0.9*	UG314L
15/16	C-U315	CE-U315										UG315L
1	**C-U316**	**CE-U316**										UG316L
1 1/8	C-U318	CE-U318	3.438 *87.32*	1 3/8 *34.92*	1 59/64 *48.82*	2 5/16 *58.7*	1 9/64 *29.0*	1 13/32 *35.7*	13/32 *10.3*	3/16 *4.8*	2.7 *1.2*	UG318L
1 3/16	**C-U319**	**CE-U319**										UG319L
1 1/4	C-U320	CE-U320	3.750 *95.25*	1 1/2 *38.10*	2 3/32 *53.18*	2 9/16 *65.1*	1 1/4 *31.8*	1 1/2 *38.1*	9/16 *14.3*	3/16 *4.8*	3.5 *1.6*	UG320L
1 3/8	C-U322	CE-U322										UG322L
1 7/16	**C-U323**	**CE-U323**										UG323L
1 1/2	**C-U324**	**CE-U324**	4.188 *106.38*	1 21/32 *42.07*	2 5/16 *58.74*	3 1/16 *77.8*	1 25/64 *35.3*	1 39/64 *40.9*	9/16 *14.3*	3/16 *4.8*	5.0 *2.3*	UG324L
1 5/8	C-U326	CE-U326	4.594 *116.69*	1 27/32 *46.83*	2 19/32 *65.88*	3 1/4 *82.6*	1 35/64 *39.3*	1 27/32 *46.8*	9/16 *14.3*	3/16 *4.8*	6.5 *2.9*	UG326L
1 11/16	**C-U327**	**CE-U327**										UG327L
1 3/4	**C-U328**	CE-U328										UG328L
1 15/16	**C-U331**	**CE-U331**	5.000 *127.00*	2 1/32 *51.59*	2 13/16 *71.44*	3 7/16 *87.3*	1 43/64 *42.5*	1 31/32 *50.0*	19/32 *15.1*	3/16 *4.8*	7.7 *3.5*	UG331L
2	**C-U332**	CE-U332	5.375 *136.52*	2 3/16 *55.56*	3 1/16 *77.79*	3 15/16 *100.0*	1 27/32 *46.8*	2 3/16 *55.6*	1 1/16 *17.5*	3/16 *4.8*	9.7 *4.4*	UG332L
2 1/8	C-U334	CE-U334										UG334L
2 3/16	**C-U335**	**CE-U335**										UG335L
2 1/4	C-U336	CE-U336	5.781 *146.84*	2 3/8 *60.32*	3 5/16 *84.14*	4 3/16 *106.4*	1 15/16 *49.2*	2 7/16 *61.9*	23/32 *18.2*	3/16 *4.8*	12.0 *5.4*	UG336L
2 7/16	**C-U339**	**CE-U339**										UG339L
2 11/16	**C-U343**	**CE-U343**	6.562 *166.67*	2 3/4 *69.85*	3 13/16 *96.84*	4 3/4 *120.6*	2 1/4 *57.2*	2 5/8 *66.7*	13/16 *20.6*	1/4 *6.4*	17.0 *7.7*	UG343L
2 3/4	C-U344	CE-U344										UG344L
2 15/16	**C-U347**	**CE-U347**	6.969 *177.01*	3 *76.20*	4 3/32 *103.98*	4 15/16 *125.4*	2 3/8 *60.3*	2 3/4 *69.8*	13/16 *20.6*	3/8 *9.5*	19.7 *8.9*	UG347L
3	C-U348	CE-U348	7.594 *192.89*	3 3/16 *80.96*	4 13/32 *111.92*	5 11/16 *144.5*	2 19/32 *65.9*	3 *76.2*	1 *25.4*	3/8 *9.5*	26.9 *12.2*	UG348L
3 3/16	**C-U351**	**CE-U351**										UG351L
3 7/16	**C-U355**	**CE-U355**	8.375 *212.72*	3 9/16 *90.49*	4 15/16 *125.41*	6 *152.4*	2 29/32 *73.8*	3 9/32 *83.3*	1 *25.4*	3/8 *9.5*	35.5 *16.1*	UG355L
	C-U356	CE-U356										UG356L
3 15/16	**C-U363**	**CE-U363**	9.375 *238.12*	4 1/16 *103.17*	5 9/16 *141.29*	7 *177.8*	3 9/32 *83.3*	3 11/16 *93.7*	1 *25.4*	3/8 *9.5*	49.5 *22.4*	UG363L

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for all expansion units with 2 7/16" and smaller shafts, ¼"-28 UNF; for other expansion units and all fixed units, ⅛" PT.
* Locking plug thread sizes: for 2 7/16" and smaller shafts, 7/16"-20 UNF; for all others, 5/8"-18 UNF.
† Tolerance: +.000" –.002" *(+0.00 –0.05 mm)*. Bore tolerance for mounting: +.002" –.000" *(+0.05 –0.00 mm)*.
△ 1⅛ thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. C-U319N
◆ Width dimension for closed end unit
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Heavy Duty Ball Bearing Takeup Units

T-U300

Cast Iron Housing
Machined Slots
Alignable
Spring Locking Collar
Relubricatable



Dimensions (inches/*mm*)

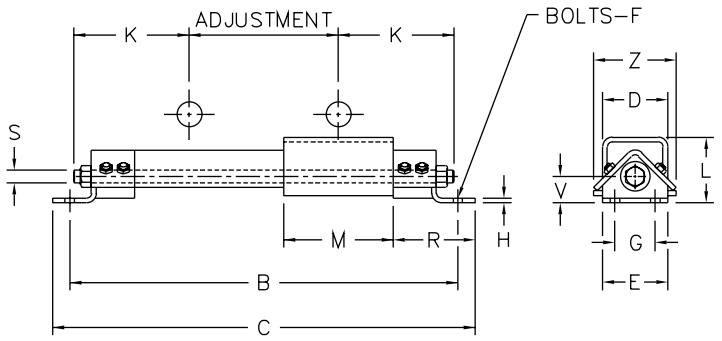
Shaft diameter inches	Takeup unit number△	A	C	D	F	G	H	J	K	L	M	N +.000" –.015" +0.00 –0.38 mm	S +.000" –.015" +0.00 –0.38 mm	T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.
7/8 15/16 1	T-U314 T-U315 T-U316	3 5/16 *84.1*	2 1/4 *57.2*	1 43/64 *42.46*	2 *50.8*	1 1/4 *31.8*	3/4 *19.0*	4 3/8 *111.1*	1 3/8 *34.9*	3 5/8 *92.1*	2 *50.8*	3.000 *76.20*	.531 *13.49*	5/8 *15.9*	63/64 *25.0*	1 15/64 *31.4*	2 3/4 *69.8*	3.2 *1.4*	UG314L UG315L UG316L
1 1/4 1 3/8 1 7/16	T-U320 T-U322 **T-U323**	4 *101.6*	2 3/4 *69.8*	2 3/32 *53.18*	2 3/8 *60.3*	1 7/16 *36.5*	7/8 *22.2*	5 1/4 *133.4*	1 5/8 *41.3*	4 1/8 *104.8*	2 9/16 *65.1*	3.500 *88.90*	.531 *13.49*	5/8 *15.9*	1 1/4 *31.8*	1 1/2 *38.1*	3 1/4 *82.6*	5.5 *2.5*	UG320L UG322L UG323L
1 1/2	**T-U324**	4 5/8 *117.5*	3 1/4 *82.6*	2 5/16 *58.74*	3 3/16 *81.0*	1 15/16 *49.2*	1 1/8 *28.6*	6 1/8 *155.6*	1 25/32 *45.2*	4 7/8 *123.8*	3 1/16 *77.8*	4.125 *104.78*	.687 *17.45*	3/4 *19.0*	1 25/64 *35.3*	1 39/64 *40.9*	3 13/16 *96.8*	8.5 *3.8*	UG324L
1 15/16	**T-U331**	5 1/2 *139.7*	4 *101.6*	2 13/16 *71.44*	3 3/4 *95.2*	2 1/4 *57.2*	1 1/4 *31.8*	7 3/8 *187.3*	2 3/16 *55.6*	5 7/8 *149.2*	3 7/16 *87.3*	5.125 *130.18*	.812 *20.62*	1 *25.4*	1 43/64 *42.5*	1 31/32 *50.0*	4 5/8 *117.5*	13.7 *6.2*	UG331L
2 2 1/8 2 3/16	**T-U332** T-U334 T-U335	5 13/16 *147.6*	4 1/8 *104.8*	3 1/16 *77.79*	3 3/4 *95.2*	2 1/4 *57.2*	1 1/4 *31.8*	7 3/4 *196.8*	2 3/8 *60.3*	6 1/4 *158.8*	3 15/16 *100.0*	5.500 *139.70*	.812 *20.62*	1 *25.4*	1 27/32 *46.8*	2 3/16 *55.6*	4 27/32 *123.0*	17.2 *7.8*	UG332L UG334L UG335L
2 1/4 2 7/16	T-U336 **T-U339**	6 1/4 *158.8*	4 1/2 *114.3*	3 5/16 *84.14*	4 1/8 *104.8*	2 1/2 *63.5*	1 3/8 *34.9*	8 5/8 *219.1*	2 9/16 *65.1*	6 3/4 *171.4*	4 3/16 *106.4*	6.000 *152.40*	1.062 *26.97*	1 3/8 *34.9*	1 15/16 *49.2*	2 7/16 *61.9*	5 7/16 *138.1*	20.0 *9.1*	UG336L UG339L
2 15/16	**T-U347**	8 *203.2*	5 3/4 *146.0*	4 3/32 *103.98*	4 3/4 *120.6*	2 3/4 *69.8*	1 5/8 *41.3*	10 1/2 *266.7*	3 1/4 *82.6*	8 1/4 *209.6*	4 15/16 *125.4*	7.500 *190.50*	1.312 *33.32*	1 1/4 *31.8*	2 3/8 *60.3*	2 3/4 *69.8*	6 1/2 *165.1*	37.5 *17.0*	UG347L

Please consult for availability.
Lubrication fitting tap size: 1/8" PT.
△ 1 1/4 thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. T-U320N
◆ Width dimension for closed end unit.
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Heavy Duty Ball Bearing Takeups

LHD Type (Bearing Unit Not Included)

Welded Steel Frame
Protected Screw
P-U300 Bearing Unit Pillow Block



Dimensions (inches/*mm*)

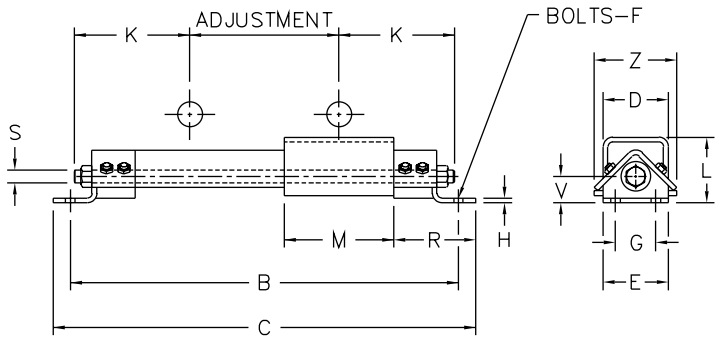
Shaft Sizes inches	Takeup Frame number	Adjust-ment	B	C	D	E	F bolts	G	H	K	L	M	R	S Rod Dia.	V	Z
7/8 Thru 1 15/16	**LHD20-12**	12	29	31												
	LHD20-18	18	35	37												
	LHD20-24	24	41	43	4	5	5/8	2 1/2	1/4	8 1/2	5 1/4	11	4	3/4	2	6 1/4
	LHD20-30	30	47	49	*101.6*	*127.0*	*16*	*63.5*	*6.4*	*215.9*	*133.4*	*279.4*	*101.6*	. . .	*50.8*	*158.8*
	LHD20-36	36	53	55												
	LHD20-48	48	65	67												
2 Thru 2 3/16	**LHD25-12**	12	32 3/4	35 1/4												
	LHD25-18	18	38 3/4	41 1/4												
	LHD25-24	24	44 3/4	47 1/4	5	5 1/2	5/8	3	3/8	10 3/8	6 1/4	13 1/4	5	1	2 3/16	7 1/8
	LHD25-30	30	50 3/4	53 1/4	*127.0*	*139.7*	*16*	*76.2*	*9.5*	*263.5*	*158.8*	*336.6*	*127.0*	. . .	*65.1*	*181.0*
	LHD25-36	36	56 3/4	59 1/4												
	LHD25-48	48	68 3/4	71 1/4												
2 1/4 Thru 2 7/16	LHD30-12	12	35 1/2	38 1/4												
	LHD30-18	18	41 1/2	44 1/4												
	LHD30-24	24	47 1/2	50 1/4	6	6 1/2	3/4	3	1/2	11 3/4	7	14 1/4	6	1	2 1/2	9
	LHD30-30	30	53 1/2	56 1/4	*152.4*	*165.1*	*20*	*76.2*	*12.7*	*298.4*	*177.8*	*362.0*	*152.4*	. . .	*63.5*	*228.6*
	LHD30-36	36	59 1/2	62 1/4												
	LHD30-48	48	71 1/2	74 1/4												
2 11/16 Thru 3 3/16	LHD35-12	12	37 1/4	40												
	LHD35-18	18	43 1/4	46												
	LHD35-24	24	49 1/4	52	6	6 1/2	3/4	3	1/2	12 5/8	7	16	6	1 1/4	2 1/2	9
	LHD35-30	30	55 1/4	58	*152.4*	*165.1*	*20*	*76.2*	*12.7*	*320.7*	*177.8*	*406.4*	*152.4*	. . .	*63.5*	*228.6*
	LHD35-36	36	61 1/4	64												
	LHD35-48	48	73 1/4	76												
3 7/16 Thru 3 15/16	LHD40-12	12	41 1/4	44												
	LHD40-18	18	47 1/4	50												
	LHD40-24	24	53 1/4	56	7	6 1/2	3/4	3	1/2	14 5/8	7	20	6	1 1/2	2 1/8	9 13/16
	LHD40-30	30	59 1/4	62	*177.8*	*165.1*	*20*	*76.2*	*12.7*	*371.5*	*177.8*	*508.0*	*152.4*	. . .	*54.0*	*249.2*
	LHD40-36	36	65 1/4	68												
	LHD40-48	48	77 1/4	80												

Bold face items are normally available from stock; please consult for availability of non-stock items.
Takeup frames can be furnished drilled to accommodate pillow block; order takeup frame drilled for " " pillow block; i.e. LHD20-12 drilled for P-U316.
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Replacement Ball Bearings

UG300L

Alignable Spherical O.D.
Bearing Seals
Spring Locking Collar
Relubricatable



Dimensions (inches/*mm*)

Shaft diameter inches	Bearing Number ★	Bearing bore tolerance	B	Bearing OD tolerance	D	G	J	M	N	T
¾	*UG312L*		*2.0472*		1 15/32	5/8	*.7874*	1 5/8	*1.194*	1 1/32
			52.000		*37.31*	*15.88*	*20.000*	*41.3*	*30.33*	*8.7*
		+.0007 –.0000		*+.0000 –.0005*						
7/8	*UG314L*	*+0.018 –0.000*		*+0.000 –0.013*						
15/16	**UG315L**		*2.4409*		1 43/64	1 1/16	*.8661*	*2*	*1.451*	1 3/32
1	**UG316L**		*62.000*		*42.46*	*17.46*	*22.000*	*50.8*	*46.86*	*10.3*
1 1/8	**UG318L**	*+.0008 –.0000*	*2.8346*		1 59/64	25/32	*.9449*	2 5/16	*1.708*	½
1 3/16	**UG319L**	*+.0020 –.0000*	*72.000*	*+.0000 –.0005*	*48.82*	*19.84*	*24.000*	*58.7*	*43.38*	*12.7*
1 1/4	**UG320L**			*+0.000 –0.013*						
1 3/8	**UG322L**	*+.0008 –0.000*	*3.1496*		2 3/32	27/32	*1.0236*	2 9/16	*1.946*	½
1 7/16	**UG323L**	*+0.020 –0.000*	*80.000*		*53.18*	*21.43*	*26.000*	*65.1*	*49.43*	*12.7*
1½	**UG324L**	*+.0008 –.0000*	*3.5433*	*+.0000 –.0006*	2 5/16	59/64	*1.1024*	3 1/16	*2.204*	9/16
		+0.020 –0.000	*90.000*	*+0.000 –0.015*	*58.74*	*23.42*	*28.000*	*77.8*	*55.98*	*14.3*
1 5/8	**UG326L**									
1 11/16	**UG327L**	*+.0009 –.0000*	*3.9370*		2 19/32	1 3/64	*1.1811*	3½	*2.443*	5/8
1¾	**UG328L**	*+0.023 –0.000*	*100.000*		*65.88*	*26.59*	*30.000*	*82.6*	*62.05*	*15.9*
1 15/16	**UG331L**		*4.3307*	*+.0000 –.0006*	2 13/16	1 9/64	*1.2598*	3 7/16	*2.701*	21/32
			110.000	*+0.000 –0.015*	*71.44*	*28.97*	*32.000*	*87.3*	*68.60*	*16.7*
2	**UG332L**	*+.0009 –.0000*								
2 1/8	**UG334L**	*+.0023 –.0000*	*4.7244*		3 1/16	1 7/32	*1.3386*	3 15/16	*2.959*	¾
2 3/16	**UG335L**		*120.000*		*77.79*	*30.96*	*34.000*	*100.0*	*75.16*	*19.0*
2¼	**UG336L**	*+.0009 –.0000*	*5.1181*		3 5/16	1 3/8	*1.4173*	4 3/16	*3.216*	¾
2 7/16	**UG339L**	*+0.023 –0.000*	*130.000*	*+.0000 –.0008*	*84.14*	*34.92*	*36.000*	*106.4*	*81.69*	*19.0*
2 11/16	**UG343L**	*+0.011 –0.000*	*5.9055*	*+0.000 –0.020*	3 13/16	1 9/16	*1.6142*	4¾	*3.732*	7/8
2¾	**UG344L**	*+0.028 –0.000*	*150.000*		*96.84*	*39.69*	*41.000*	*120.6*	*94.79*	*22.2*
2 15/16	**UG347L**		*6.2992*		4 3/32	1 23/32	*1.6929*	4 15/16	*3.990*	7/8
		+.0011 –.0000	*160.000*	*+.0000 –.0010*	*103.98*	*43.66*	*43.000*	*125.4*	*101.35*	*22.2*
3	*UG348L*	*+0.028 –0.000*	*6.6929*	*+0.000 –0.025*	4 13/32	1 13/16	*1.7717*	5 1/16	*4.247*	*1*
3 3/16	**UG351L**		*170.000*		*111.92*	*46.04*	*45.000*	*144.5*	*107.87*	*25.4*
3 7/16	*UG355L*		*7.4806*		4 15/16	2 1/32	*1.9291*	6	*4.763*	1 1/8
3½	*UG356L*	*+.0011 –.0000*	*190.000*	*+.0000 –.0012*	*125.41*	*51.59*	*49.000*	*152.4*	*120.98*	*28.6*
3 15/16	**UG363L**	*+0.028 –0.000*	*8.4646*	*+0.000 –0.030*	5 9/16	2 9/32	*2.1654*	7	*5.339*	1¼
			215.000		*141.29*	*57.94*	*55.000*	*177.8*	*135.61*	*31.8*

Bold face items are normally available from stock; please consult for availability of non-stock items.
★ Bearing sealed replacement bearing includes bearing, collar, seals, and two external seal flingers.
Selection guide, pages C-5, C-6.
Load ratings, pages C-7, C-8.
Additional information, page C-17.

Additional Features:

All Series 300 mounted units can be purchased with a closed end cap in place of one seal, usually the collar side. End caps are made of heavy gauge steel and completely cover rotating elements on the closed end side. The bearing and grease condition can be inspected by removing the closed end cap. With the use of end caps, shafting should not extend more than 1/8" *(3.2 mm)* beyond the end of the bearing inner ring.

Series 300 units have drilled or cored mounting bolt holes suitable for the inch or metric bolts listed. Drilled holes will be 1/32" *(0.8 mm)* larger than the largest inch bolt shown. Cast slots in pillow blocks are normally 1/16" wider than the specified mounting bolt nominal diameter. It is expected that plain washers will be used under the bolt head to span the slot width and aid torquing. Narrow (N) series washers per ANSI B18.22.1-1981 (previously designated SAE series) are recommended. If wide series washers are used, the full length of the slot may not be usable for positioning the unit.

Bearings and seals can be replaced in all Series 300 mounted units. When UG300L replacement bearings are inserted in a housing, the Service Instructions for mounting should be closely followed. A copy is enclosed with each replacement UG300L. Replacement bearings are prelubricated.

Operation:

Series 300 solid housing units are prelubricated with a good quality petroleum grease of No. 2 consistency which has been tested for operational characteristics and stability for long shelf life. Service instructions packed with each unit provide guidelines for correct installation and for relubrication intervals. Greases tested for use in Series 300 units are listed and can be used for relubrication. The lubricant furnished by Rexnord Corporation is generally limited to an operating temperature range of –20°F to 200°F *(–29°C to +93°C)*.

Imposed radial loads should not exceed .25C. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Care should be taken during relubrication to avoid the application of excessive grease pressure or volume. Use of automatic lubricators or hand grease guns is recommended.

Bearings furnished with all standard series 300 units have sufficient clearance (C3) for operation within stated speed limits.

Takeups:

For mounting P-U300 or PE-U300 series pillow blocks to universal takeup frames as illustrated on page B-60 or heavy duty welded steel frames as illustrated on page C-15.

Recommended Shaft Tolerances

Shaft Diameter	Tolerance
1/2"-2"	Nominal to –.0005"
2 1/8"-3 15/16"	Nominal to –.0010"

CAUTION The above shaft tolerances are suitable for loads up to .18C and L_{10} life greater than 20,000 hours. For more severe conditions, consult Rexnord Corporation.

The service life of a collar mounted bearing is largely dependent on shaft fit and may be expected to approach theoretical L_{10} life only if the bearing is press fitted to a shaft. A slip fit mounting in accordance with the shaft tolerances shown in table will provide generally acceptable service life on normal applications under light to moderate load and speed conditions. A shaft tolerance resulting in looser fits (such as with commercial shafting) may be expected to have greatly reduced reliability and increasing problems of shaft fret wear, bearing inner ring fracture and shaft slippage. In general, looser fits than recommended are feasible only for very light loading and lower speeds. Prototype or field testing is strongly recommended if looser fits must be considered.

Shafting should be designed for adequate strength and stiffness for the intended application. It should be round, straight, free of nicks and burrs and of correct size.

Warning:

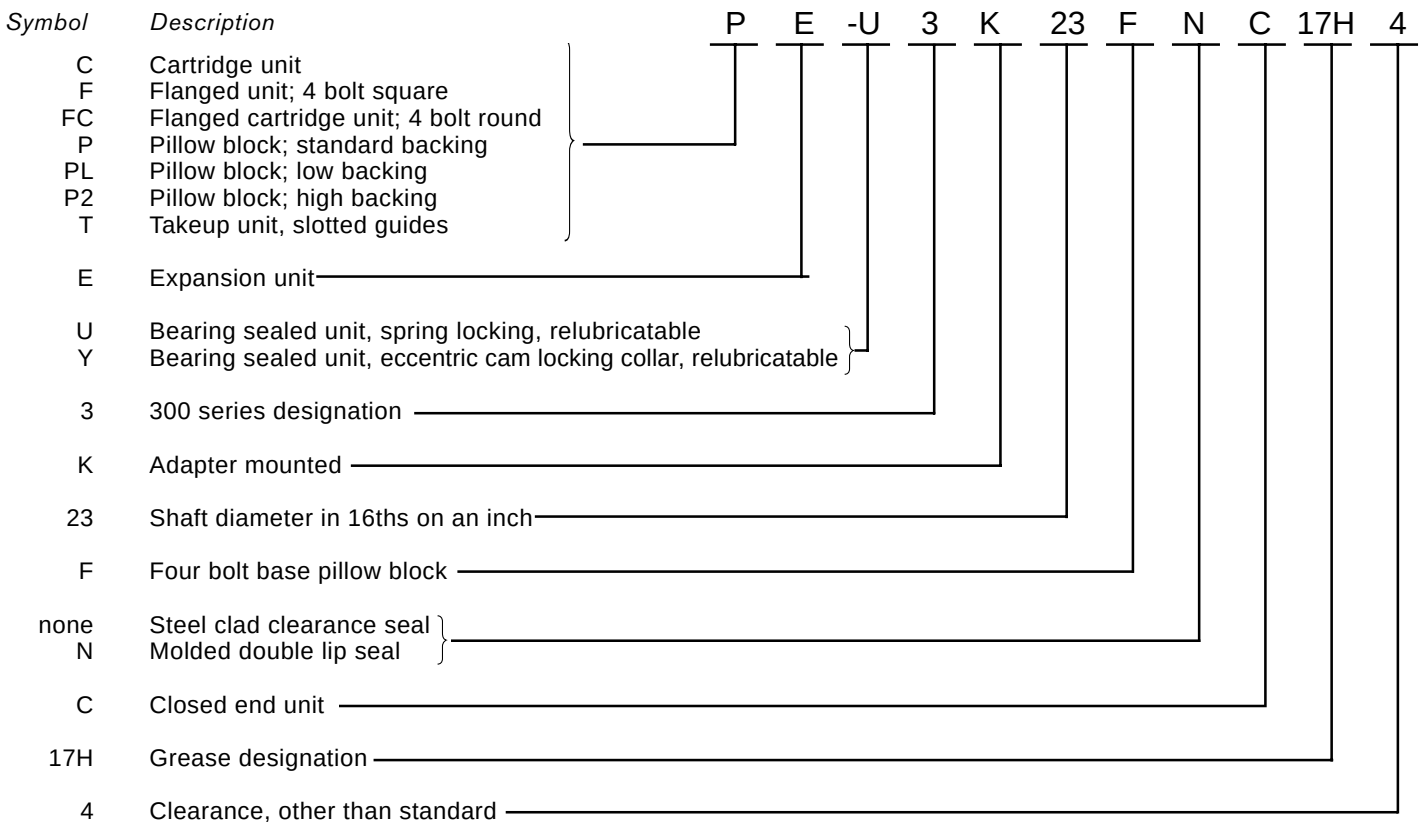
The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and designs of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflections or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stop bars, etc., together with proper safety factors. When these conditions are unavoidable, Link-Belt Bearing Division, Rexnord Corporation should be consulted.

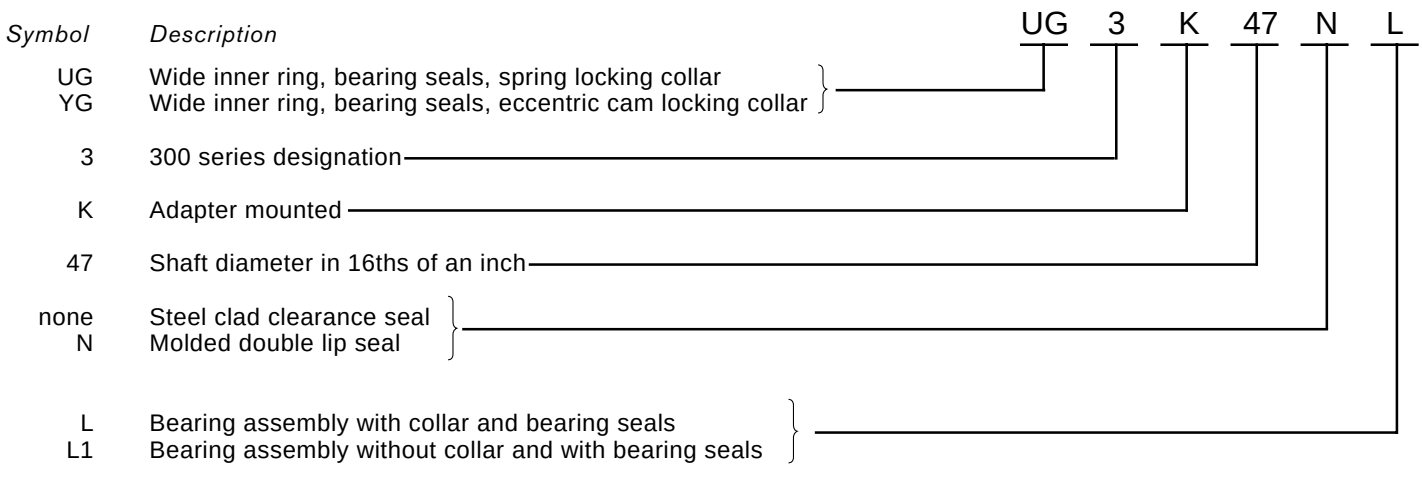
Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Nomenclature
Series 300

Ball Bearing Units



Replacement Ball Bearing



The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division, Rexnord Corp. should be consulted regarding optional features, availability, and the application requirements.

Spherical Roller Bearing Units and Takeups

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Max Mount™ Series B22600

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Series B22400

Spherical Roller Bearing Units and Takeups

Series B22400 collar mounted spherical roller bearing units provide economic and versatile arrangements for supporting shafts carrying substantial radial or combination radial and thrust loads. These units are especially adaptable for conveyors, elevators, general industrial machinery, heavier duty fans and blowers, power transmission applications, ditchers, trenchers, pavers and other such applications. Series B22400 units are easy to mount, sealed, prelubricated and do not require bearing adjustment during mounting.

① Spring locking collar locks inner ring securely to shaft.

② Choice of two seals, floating labyrinth Type H and spring-loaded lip Type E.

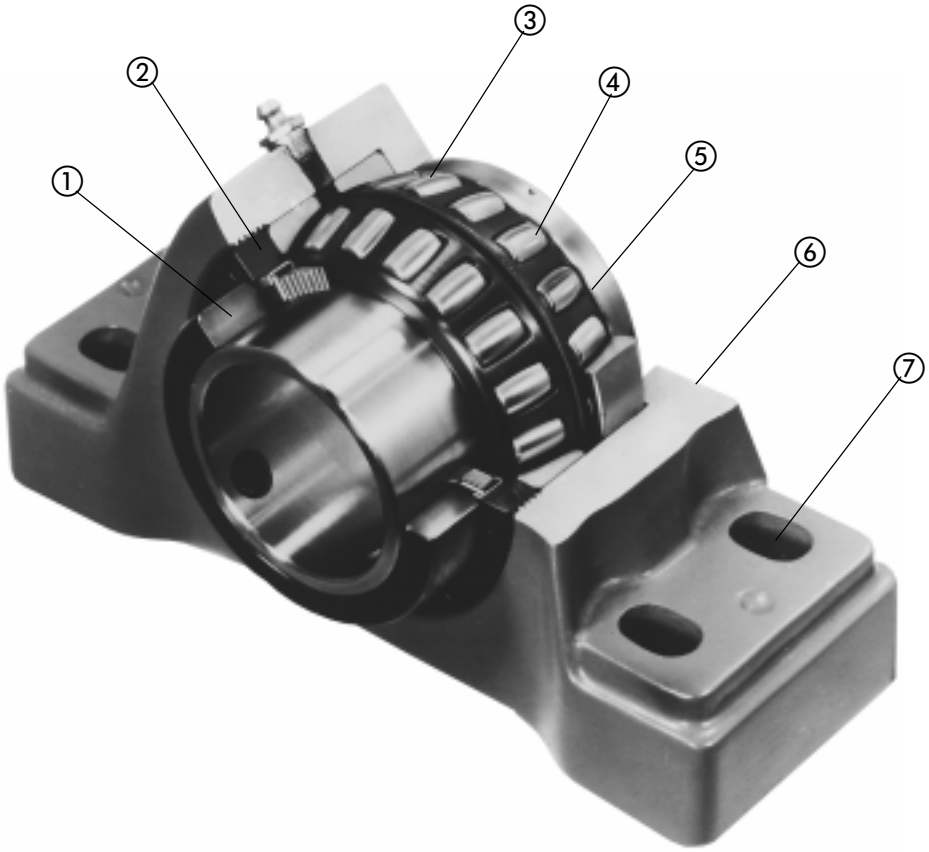
③ Long inner ring for high stability and load support.

④ Self-aligning double row spherical roller bearing adjusts ±2° to allow for alignment variations between shaft and supporting structure.

⑤ Double contoured retainer pockets assure accurate roller guidance and positive roller control.

⑥ Sturdy, compact one-piece cast iron or cast steel housing.

⑦ Slotted bolt holes in pillow block bases facilitate mounting; bottom of base is machined.



Spherical Roller Bearings

Series B22400 self-aligning double row spherical roller bearings have high LDN values and are designed to distribute the load over the symmetrical rollers, assuring positive tracking and smooth operation. The large roller complement provides high capacity for radial or combined radial-thrust loads. Osculation clearance at the ends of the rollers compensates for shock loads and prevents destructive edge loading. These precision bearings with double contoured retainer pockets are designed to meet a broad range of application requirements.

Spring Locking Collar

The spring locking collar design provides a secure grip of the wide inner ring bearing to the shaft. The two set screws extend through the inner ring of the bearing and lock firmly onto the shaft. Installation is fast and simple. Correctly tightening the two set screws produces elastic strain in the spring locking collar resulting in a continuous pressure on the set screw threads and providing a positive lock.

Seals

Two standard sealing systems are available. . .each offering maximum protection for the bearing.

Type H floating labyrinth seals have multiple self-centering rings held securely in a steel carrier. Type H seals are normally furnished.

Type E spring-loaded lip seals utilize a spring to provide uniform pressure for keeping the sealing lip in contact with the inner ring. Type E seals are normally used for liquid splash environments.

Seals are interchangeable and are designed for grease lubrication.

TYPE H SEAL

TYPE E SEAL

One-Piece Cast Iron or Cast Steel Housings

Compact one-piece housings provide for strength and load support. Scientifically contoured housing design provides superior rigidity. Cast iron or cast steel pillow blocks have two or four slotted bolt holes with ample space provided for drilling dowel pin holes. Flanged and flanged cartridge units have drilled mounting holes and machined mounting surfaces for maximum stability. Cartridge units have cast iron or steel housings and are finished to precision tolerances. Takeup units have machined slots for smooth, precise operation. Pillow blocks, flanged, and cartridge units are available for fixed or expansion operation.

Series B22400
Spherical Roller Bearing Units

Pillow Blocks, cast iron

EP-B22400H*, EPE-B22400H*, EP-B22400FH*, EPE-B22400FH*
P-B22400H, PE-B22400H, P-B22400FH, PE-B22400FH
P-B22500FH, PE-22500FH

Self-aligning 2-bolt base pillow blocks for shaft sizes 1" through 4" and *25 mm* through *100 mm*, and 4-bolt base pillow blocks for shaft sizes 1 15/16" through 5" and *45 mm* through *125 mm*. Units are available for fixed or expansion mounting.

Load ratings on pages D-7 and D-8.
Dimensions on pages D-9 through D-12.
Additional information on page D-68.

***Self-aligning Type E Interchange**

Pillow Blocks, cast steel

PK-B22400H, PKE-B22400H, PK-B22400FH, PKE-B22400FH,
PK-B22500FH, PKE-B22500FH

Self-aligning 2-bolt base pillow blocks for shaft sizes 1 3/16" through 4" and *30 mm* through *100 mm*, 4-bolt base pillow blocks for shaft sizes 1 15/16" through 5" and *45 mm* through *125 mm*. Units are available for fixed or expansion mounting.

Load ratings on pages D-7 and D-8.
Dimensions on pages D-13 and D-14.
Additional information on page D-68.

Flanged Units, cast iron

EFR-B22400H*
F-B22400H, FE-B22400H

Self-aligning flanged units for shaft sizes 1" through 4" and *25 mm* through *100 mm*. Units are available for fixed or expansion mounting.

Load ratings on pages D-7 and D-8.
Dimensions on pages D-17 and D-18.
Additional information on page D-68.

***Self-aligning Type E Interchange**

Flanged Cartridge Units, cast iron

FC-B22400H*

Self-aligning flanged cartridge units for shaft sizes 1" through 4" and 2*5 mm* through *100 mm*. Units are available for fixed mounting.

Load ratings on pages D-7 and D-8.
Dimensions on page D-20.
Additional information on page D-68.

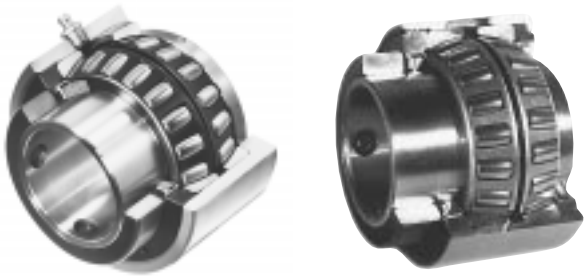
***Self-aligning Type E Interchange**

Cartridge Units, cast iron and steel

C-B22400H, CSE-B22400H

Self-aligning cartridge units. Cast iron housings for shaft sizes 1" through 3½" and *25 mm* through *85 mm*, steel housings for shaft sizes 1" through 4" and *25 mm* through *100 mm*. Cast iron cartridge units are for fixed mounting and steel cartridge units are available for fixed or expansion mounting.

Load ratings on pages D-7 and D-8.
Dimensions on pages D-15 and D-16.
Additional information on page D-68.



Takeup Units, cast iron

T-B22400H

Self-aligning units for takeup applications with shaft sizes 1" through 4" and *25 mm* through *100 mm*. Fixed units without frames, guides, or adjusting screws.

Load ratings on pages D-7 and D-8.
Dimensions on page D-21.
Additional information on page D-68.

Takeups, cast iron

DS-B22400H; DS-B22500H, LHD

DS-B22400H and DS-B22500H for shaft sizes 1 15⁄16" through 4 7⁄16" and *45 mm* through *115 mm* have welded steel adjustable frames.

LHD universal takeup frames use pillow blocks mounted to takeup frame. For shaft sizes 1 3⁄16" through 5" and *25 mm* through *125 mm*.

Load ratings on pages D-7 and D-8.
Dimensions on pages D-22 through D-24.
Additional information on page D-68.

Replacement Bearings

B22400HL

Self-aligning double row spherical roller bearings with spring locking collars for shaft sizes 1" through 4" and *25 mm* through *100 mm*.

Load ratings on pages D-7 and D-8.
Dimensions on page D-26.
Additional information on page D-68.

To select a bearing, determine the applied radial load, the applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ ABMA Standards STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

For radial load applications only, Table 3, page D-8, can be used to select a bearing or to determine L_{10} life expectancy.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a roller bearing.

a For radial load only:

$P = F_r$

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a roller bearing from Table 2, page D-7 with a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads:

Select a trial roller bearing of the desired shaft size from Table 2, page D-7.

Calculate the ratio of thrust load F_a to the radial load F_r.

$\frac{F_a}{F_r}$

Calculate the equivalent radial load P

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then $P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, see Table 2, page D-7.

Calculate the required C

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2.

Consult Table 2, page D-7, basic load rating. If a smaller bearing meets, or nearly meets, the required C, its life expectancy can be calculated.

Note: If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:

$P = F_r$

b For combined radial and thrust load:

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a$$

If $\frac{F_a}{F_r}$ is greater than e, then

$$P = X_2F_r + Y_2F_a$$

For values of e, X_1, Y_1, X_2, and Y_2, see Table 2, page D-7.

Step 2 Calculate the ratio of the basic load rating C to the equivalent radial load.

$\frac{C}{P}$

Step 3 Approximate the bearing life from Table 1.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L_n' = a_1a_2a_3L_{10}$$

where L_n' = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Table 2 • Load ratings and speed limits

Shaft diameter		Bearing size number	C_0 Static load rating		C Basic load rating		Approximate speed limit RPM ●	e	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
mm	inches		*newtons*	pounds	*newtons*	pounds	H and E seals		X_1	Y_1	X_2	Y_2
	1	B22416	*66 100*	14900	*51 200*	11500	3500	.51	1.00	1.32	.67	1.96
25		*B224M25*										
	1 3/16	B22419										
	1 1/4	B22420	*80 500*	18100	*60 900*	13700	3000	.48	1.00	1.40	.67	2.08
30		*B224M30*										
	1 7/16	B22423										
	1 1/2	B22424	*93 200*	20900	*64 900*	14600	2750	.44	1.00	1.54	.67	2.29
35		*B224M35*										
	1 1/2	B224B24										
	1 5/8	B22426										
	1 11/16	B22427	*127 700*	28700	*89 800*	20200	2350	.45	1.00	1.51	.67	2.25
	1 3/4	B22428										
40		*B224M40*										
	1 3/4	B224B28										
	1 15/16	B22431										
	2	B22432	*147 700*	33200	*94 300*	21200	2150	.40	1.00	1.68	.67	2.50
45		*B224M45*										
50		*B225M50*										
	2 3/16	B22435										
	2 1/4	B22436	*197 500*	44400	*117 400*	26400	1950	.40	1.00	1.68	.67	2.50
55		*B224M55*										
	2 1/4	B224B36										
	2 7/16	B22439										
	2 1/2	B22440	*238 000*	53500	*139 700*	31400	1750	.38	1.00	1.80	.67	2.68
60		*B224M60*										
	2 11/16	B22443										
	2 3/4	B22444										
	2 15/16	B22447										
	3	B22448	*318 000*	71500	*185 900*	41800	1500	.38	1.00	1.79	.67	2.67
65		*B224M65*										
70		*B224M70*										
75		*B224M75*										
	3 3/16	B22451										
	3 7/16	B22455										
	3 1/2	B22456	*403 400*	90700	*226 800*	51000	1250	.38	1.00	1.77	.67	2.64
80		*B224M80*										
85		*B224M85*										
	3 11/16	B22459										
	3 15/16	B22463										
	4	B22464	*609 400*	137000	*351 800*	79100	1100	.36	1.00	1.88	.67	2.79
90		*B224M90*										
100		*B224M100*										

For load ratings of 4 3/16" *(110 through 125 mm)*, see series B22500 page D-33.
If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.
For vertical shift application, consult Link-Belt Bearing Division, Rexnord Corp.
● Based on grease lubrication and moderate load.
Additional information, page D-68.

Table 3 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

Shaft diameter		Bearing size number	L_{10} Minimum life, hours	Radial load ratings, pounds														
				Speed, RPM														
mm	inches			50	100	200	300	500	700	900	1000	1200	1500	1800	2000	2500	3000	3500
	1	B22416	8000	....	....	....	2590	2220	2000	1860	1800	1700	1600	1510	1470	1370	1300	1230
			20000	....	2730	2220	1970	1690	1520	1410	1370	1300	1210	1140	1110	1040	985	941
25		*B224M25*	40000	2730	2220	1800	1600	1370	1230	1140	1110	1050	985	933	904	845	800	764
			100000	2080	1690	1370	1210	1040	941	872	845	800	749	709	687	642	608	580
	1 3/16	B22419	8000	....	....	....	3080	2640	2390	2210	2140	2030	1900	1800	1740	1630	1540	
	1 1/4	B22420	20000	....	3250	2640	2340	2010	1810	1690	1630	1540	1440	1370	1320	1240	1170	
30		*B224M30*	40000	3250	2640	2140	1900	1630	1480	1370	1320	1250	1170	1110	1080	1000	953	
			100000	2480	2010	1630	1440	1240	1120	1030	1000	953	892	844	818	765	724	
	1 7/16	B22423	8000	....	....	....	3290	2820	2540	2360	2290	2170	2020	1920	1860	1740		
	1 1/2	B22424	20000	....	3470	2820	2500	2140	1930	1800	1740	1640	1540	1450	1410	1320		
35		*B224M35*	40000	3470	2820	2290	2020	1740	1570	1450	1410	1330	1250	1180	1140	1070		
			100000	2630	2140	1740	1540	1320	1200	1100	1070	1010	950	900	872	815		
	1 1/2	B224B24	8000	....	....	....	4540	3900	3520	3270	3170	3000	2800	2650	2570			
	1 5/8	B22426	20000	....	4800	3900	3450	2960	2680	2480	2400	2280	2130	2010	1950			
	1 11/16	B22427	40000	4800	3900	3170	2800	2400	2180	2010	1950	1850	1730	1630	1590			
	1 3/4	B22428																
40		*B224M40*	100000	3640	2960	2400	2130	1820	1650	1530	1490	1400	1310	1240	1200			
	1 3/4	B224B28	8000	....	....	....	4770	4100	3700	3430	3320	3140	2940	2790	2700			
	1 15/16	B22431	20000	....	5040	4100	3620	3110	2810	2600	2520	2390	2230	2110	2050			
	2	B22432	40000	5040	4100	3320	2940	2520	2280	2110	2050	1940	1810	1720	1670			
45		*B224M45*																
50		*B225M50*	100000	3830	3110	2520	2230	1910	1730	1600	1550	1480	1380	1300	1270			
	2 3/16	B22435	8000	....	....	....	5940	5100	4600	4280	4140	3920	3670	3470				
	2 1/4	B22436	20000	....	6280	5100	4510	3870	3500	3240	3140	2980	2790	2630				
55		*B224M55*	40000	6280	5100	4140	3670	3140	2840	2630	2550	2410	2260	2140				
			100000	4770	3870	3140	2790	2390	2160	2000	1940	1830	1710	1620				
	2 1/4	B224B36	8000	....	....	....	7070	6070	5480	5090	4920	4660	4360					
	2 7/16	B22439	20000	....	7470	6070	5370	4600	4170	3860	3740	3540	3310					
	2 1/2	B22440	40000	7470	6070	4920	4360	3740	3380	3130	3030	2880	2690					
60		*B224M60*	100000	5670	4600	3740	3310	2840	2570	2380	2300	2190	2040					
	2 11/16	B22443																
	2 3/4	B22444																
	2 15/16	B22447	8000	....	....	....	9410	8070	7300	6770	6550	6200	5800					
	3	B22448	20000	....	9940	8070	7150	6130	5540	5140	4980	4710	4410					
65		*B224M65*	40000	9940	8070	6550	5800	4980	4500	4180	4040	3830	3580					
70		*B224M70*	100000	7550	6130	4980	4410	3780	3420	3170	3070	2910	2720					
75		*B224M75*																
	3 3/16	B22451																
	3 7/16	B22455	8000	....	....	....	11400	9850	8900	8250	8000	7580						
	3 1/2	B22456	20000	....	12100	9850	8720	7480	6770	6270	6080	5750						
80		*B224M80*	40000	12100	9850	8000	7090	6080	5500	5100	4930	4670						
85		*B224M85*	100000	9210	7480	6080	5380	4610	4170	3870	3750	3550						
	3 11/16	B22459																
	3 15/16	B22463	8000	....	....	....	17800	15200	13800	12800	12400							
	4	B22464	20000	....	18800	15200	13500	11600	10400	9730	9420							
90		*B224M90*	40000	18800	15200	12400	11000	9420	8520	7900	7650							
100		*B224M100*	100000	14200	11600	9420	8340	7160	6470	6000	5810							

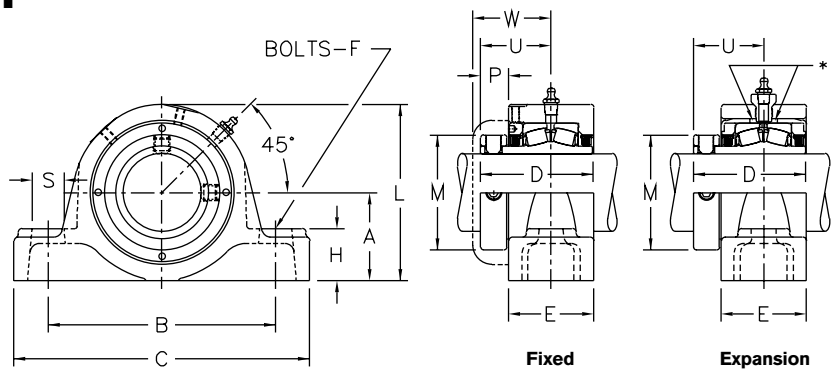
For radial load ratings of 4 3/16" through 5" *(110 mm through 125 mm)*, see series B22500 page D-34.

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

Spherical Roller Bearing Pillow Blocks

P-B22400H, PE-B22400H

Cast Iron Housing
2-bolt Base
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Fixed **Expansion**

Dimensions (inches/*mm*)

Shaft dia.		Pillow block number		A †	B	C	D	E	F Bolts	H ■	L		M	P	S	U	W ◆	Unit wt. (lbs./kg.)
mm	inches	Fixed	Expansion								Fixed	Expansion						
	1	**P-B22416H**	**PE-B22416H**	1 9/16	4 3/8	5 15/16	2 9/16	2 1/16	3/8	7/8	3 1/8	3 5/16	2	17/32	5/8	1 9/16	1 29/32	5
25		*P-B224M25H*	*PE-B224M25H*	*39.67*	*111.1*	*150.8*	*65.09*	*52.4*	*10*	*22.2*	*79.4*	*84.1*	*50.8*	*13.5*	*15.9*	*39.7*	*48.4*	*2.1*
	1 3/16	**P-B22419H**	**PE-B22419H**	1 3/4	4 3/4	6 5/16	2 11/16	2 3/16	3/8	1 1/16	3 1/2	3 5/8	2 3/16	17/32	5/8	1 5/8	1 31/32	6
	1 1/4	**P-B22420H**	**PE-B22420H**															6
30		*P-B224M30H*	*PE-B224M30H*	*44.45*	*120.6*	*160.3*	*68.26*	*55.6*	*10*	*27.0*	*88.9*	*92.1*	*55.6*	*13.5*	*15.9*	*41.3*	*50.0*	*2.9*
	1 7/16	**P-B22423H**	**PE-B22423H**	1 7/8	5	6 7/8	2 7/8	2 1/4	1/2	1 3/16	3 11/16	3 7/8	2 1/2	21/32	13/16	1 25/32	2 3/16	7
	1 1/2	**P-B22424H**	**PE-B22424H**															7
35		*P-B224M35H*	*PE-B224M35H*	*47.62*	*127.0*	*174.6*	*73.02*	*57.2*	*12*	*30.2*	*93.7*	*98.4*	*63.5*	*16.7*	*20.6*	*45.2*	*55.6*	*3.2*
	1 5/8	**P-B22426H**	PE-B22426H															10
	1 11/16	**P-B22427H**	**PE-B22427H**	2 1/8	5 1/2	7 3/8	3 1/8	2 1/2	1/2	1 5/16	4 1/4	4 3/8	2 3/4	21/32	13/16	1 29/32	2 1/4	10
	1 3/4	**P-B22428H**	**PE-B22428H**															10
40		*P-B224M40H*	*PE-B224M40H*	*53.98*	*139.7*	*187.3*	*79.38*	*63.5*	*12*	*33.3*	*108.0*	*111.1*	*69.8*	*16.7*	*20.6*	*48.4*	*57.2*	*4.7*
	1 15/16	**P-B22431H**	**PE-B22431H**	2 1/4	6 1/4	8 3/8	3 1/8	2 1/2	5/8	1 3/8	4 9/16	4 9/16	2 15/16	21/32	15/16	1 29/32	2 9/32	12
	2	**P-B22432H**	**PE-B22432H**															12
45		*P-B224M45H*	*PE-B224M45H*	*57.15*	*158.8*	*212.7*	*79.38*	*63.5*	*16*	*34.9*	*115.9*	*115.9*	*74.6*	*16.7*	*23.8*	*48.4*	*57.9*	*5.5*
50		*P-B224M50H*	*PE-B224M50H*															*5.2*
	2 3/16	**P-B22435H**	**PE-B22435H**	2 1/2	6 3/4	8 7/8	3 5/16	2 9/16	5/8	1 5/8	5	5	3 3/8	25/32	15/16	2 1/16	2 7/16	14
	2 1/4	**P-B22436H**	**PE-B22436H**															14
55		*P-B224M55H*	*PE-B224M55H*	*63.50*	*171.4*	*225.4*	*84.14*	*65.1*	*16*	*41.3*	*127.0*	*127.0*	*85.7*	*19.8*	*23.8*	*52.4*	*61.9*	*6.5*
	2 7/16	**P-B22439H**	**PE-B22439H**	2 3/4	7 1/8	9 1/4	3 1/2	2 11/16	5/8	1 5/8	5 1/2	5 1/2	3 5/8	27/32	15/16	2 3/16	2 9/16	17
	2 1/2	**P-B22440H**	**PE-B22440H**															17
60		*P-B224M60H*	*PE-B224M60H*	*69.85*	*181.0*	*235.0*	*88.90*	*68.3*	*16*	*41.3*	*139.7*	*139.7*	*92.1*	*21.4*	*23.8*	*55.6*	*65.1*	*8.0*
	2 11/16	**P-B22443H**	**PE-B22443H**															29
	2 3/4	P-B22444H	PE-B22444H															29
	2 15/16	**P-B22447H**	**PE-B22447H**	3 1/4	8 1/8	10 7/16	4	3 3/16	3/4	2	6 7/16	6 7/16	4 3/16	27/32	1 1/16	2 7/16	2 25/32	27
	3	**P-B22448H**	**PE-B22448H**															27
65		*P-B224M65H*	*PE-B224M65H*															*13.2*
70		*P-B224M70H*	*PE-B224M70H*	*82.55*	*206.4*	*265.1*	*101.60*	*81.0*	*20*	*57.2*	*163.5*	*163.5*	*106.4*	*21.4*	*27.0*	*61.9*	*70.6*	*13.0*
75		*P-B224M75H*	*PE-B224M75H*															*12.5*
	3 3/16	**P-B22451H**	**PE-B22451H**															43
	3 7/16	**P-B22455H**	**PE-B22455H**	3 3/4	10	13	4 3/8	3 7/16	7/8	2 1/4	7 1/2	7 1/2	5	15/16	1 5/8	2 21/32	3	42
	3 1/2	**P-B22456H**	**PE-B22456H**															41
80		*P-B224M80H*	*PE-B224M80H*	*95.25*	*254.0*	*330.2*	*111.12*	*87.3*	*24*	*57.2*	*190.5*	*190.5*	*127.0*	*23.8*	*41.3*	*67.5*	*76.2*	*19.6*
85		*P-B224M85H*	*PE-B224M85H*															*19.1*
	3 11/16	**P-B22459H**	**PE-B22459H**															61
	3 15/16	**P-B22463H**	**PE-B22463H**	4 1/4	11 3/4	15 1/4	5 1/16	4	1	2 5/8	8 1/2	8 1/2	5 29/32	1 1/16	2 1/4	3 1/16	3 7/16	59
	4	**P-B22464H**	**PE-B22464H**															59
90		*P-B224M90H*	*PE-B224M90H*	*107.95*	*298.4*	*387.4*	*128.59*	*101.6*	*24*	*66.7*	*215.9*	*215.9*	*150.0*	*27.0*	*57.2*	*77.8*	*87.3*	*28.7*
100		*P-B224M100H*	*PE-B224M100H*															*26.9*
	3 15/16	**PL-B22463H**	—	4 1/8	10 7/8	14 1/4	5 1/16	4	1	2 1/2	8 3/8	—	5 29/32	1 1/16	1 7/8	3 1/16	3 7/16	58
	4	PL-B22464H	—	*104.78*	*276.2*	*362.0*	*128.59*	*101.6*	*24*	*63.5*	*212.7*	—	*150.0*	*27.0*	*47.6*	*77.8*	*87.3*	*57*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.

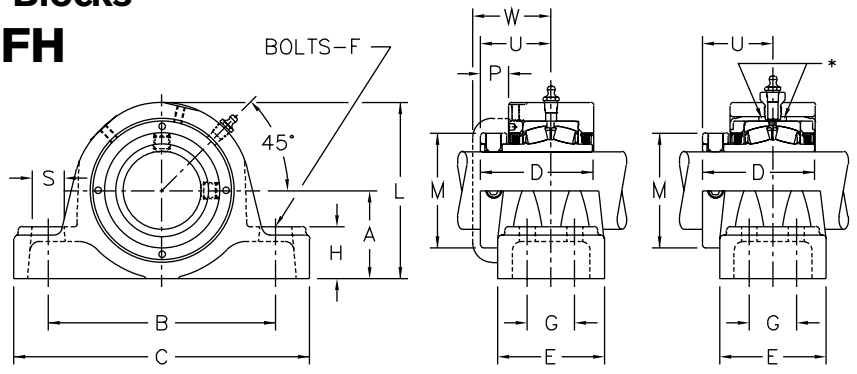
◆ Width dimension for closed end unit.
Selection guide, page D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
† Tolerance, ±.005" *(±0.13 mm)*.
■ Dimension H for PE-B22439H and PE-B22440H is 1 3/4"; Dimension H for PE-B22443H thru PE-B22448H is 2 1/4".

Spherical Roller Bearing Pillow Blocks

P-B22400FH, PE-B22400FH

Cast Iron Housing
4-bolt Base
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Fixed **Expansion**

Dimensions (inches/*mm*)

Shaft dia.		Pillow block number		A	B	C	D	E	F	G	H	L	M	P	S	U	W	Unit wt.
mm	inches	Fixed	Expansion	†					Bolts								◆	(lbs./kg.)
	1 15/16	**P-B22431FH**	**PE-B22431FH**	2 1/4	6 1/4	8 3/8	3 1/8	3 3/16	1/2	1 19/32	1 3/8	4 9/16	2 15/16	2 1/32	13/16	1 29/32	2 9/32	13
	2	**P-B22432FH**	**PE-B22432FH**															13
45		*P-B224M45FH*	*PE-B224M45FH*	*57.15*	*158.8*	*212.7*	*79.38*	*81.0*	*12*	*40.5*	*34.9*	*115.9*	*74.6*	*16.7*	*20.6*	*48.4*	*57.9*	*6.3*
50		*P-B224M50FH*	*PE-B224M50FH*															*5.9*
	2 3/16	**P-B22435FH**	**PE-B22435FH**	2 1/2	6 3/4	8 7/8	3 5/16	3 1/4	1/2	1 11/16	1 5/8	5	3 3/8	25/32	13/16	2 1/16	2 7/16	15
	2 1/4	**P-B22436FH**	**PE-B22436FH**															15
55		*P-B224M55FH*	*PE-B224M55FH*	*63.50*	*171.4*	*225.4*	*84.14*	*82.6*	*12*	*42.9*	*41.3*	*127.0*	*85.7*	*19.8*	*20.6*	*52.4*	*61.9*	*6.9*
	2 7/16	**P-B22439FH**	**PE-B22439FH**	2 3/4	7 1/8	9 1/4	3 1/2	3 3/8	1/2	1 3/4	1 3/4	5 1/2	3 5/8	27/32	13/16	2 3/16	2 9/16	19
	2 1/2	**P-B22440FH**	**PE-B22440FH**															19
60		*P-B224M60FH*	*PE-B224M60FH*	*69.85*	*181.0*	*235.0*	*88.90*	*85.7*	*12*	*44.4*	*44.4*	*139.7*	*92.1*	*21.4*	*20.6*	*55.6*	*65.1*	*8.6*
	2 11/16	**P-B22443FH**	**PE-B22443FH**	3 1/4	8 1/8	10 7/16	4	3 3/4	5/8	1 7/8	2 1/4	6 7/16	4 3/16	27/32	15/16	2 7/16	2 25/32	30
	2 3/4	**P-B22444FH**	PE-B22444FH															30
	2 15/16	**P-B22447FH**	**PE-B22447FH**															29
	3	**P-B22448FH**	**PE-B22448FH**															28
65		*P-B224M65FH*	*PE-B224M65FH*	*82.55*	*206.4*	*265.1*	*101.60*	*95.2*	*16*	*47.6*	*57.2*	*163.5*	*106.4*	*21.4*	*23.8*	*61.9*	*70.6*	*13.7*
70		*P-B224M70FH*	*PE-B224M70FH*															*13.5*
75		*P-B224M75FH*	*PE-B224M75FH*															*13.0*
	3 3/16	**P-B22451FH**	**PE-B22451FH**	3 3/4	10	13	4 3/8	4 1/8	3/4	2	2 1/4	7 1/2	5	15/16	1 1/2	2 21/32	3	45
	3 7/16	**P-B22455FH**	**PE-B22455FH**															43
	3 1/2	**P-B22456FH**	**PE-B22456FH**															43
80		*P-B224M80FH*	*PE-B224M80FH*	*95.25*	*254.0*	*330.2*	*111.12*	*104.8*	*20*	*50.8*	*57.2*	*190.5*	*127.0*	*23.8*	*38.1*	*67.5*	*76.2*	*20.5*
85		*P-B224M85FH*	*PE-B224M85FH*															*20.0*
	3 11/16	**P-B22459FH**	**PE-B22459FH**	4 1/4	12 1/2	15 1/4	5 1/16	4 1/2	3/4	2 1/4	2 5/8	8 1/2	5 29/32	1 1/16	1 1/4	3 1/16	3 7/16	69
	3 15/16	**P-B22463FH**	**PE-B22463FH**															67
	4	**P-B22464FH**	**PE-B22464FH**															66
90		*P-B224M90FH*	*PE-B224M90FH*	*107.95*	*317.5*	*387.4*	*128.59*	*114.3*	*20*	*57.2*	*66.7*	*215.9*	*150.0*	*27.0*	*31.8*	*77.8*	*87.3*	*32.1*
100		*P-B224M100FH*	*PE-B224M100FH*															*30.3*
	4 3/16	P-B22567FH○	PE-B22567FH○	4 3/4	13 1/2	16 1/2	6 3/4	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	1 1/8	1 3/8	3 3/8	3 3/4	92
	4 7/16	**P-B22571FH**○	**PE-B22571FH**○															88
	4 1/2	**P-B22572FH**○	**PE-B22572FH**○															87
110		*P-B225M110FH*○	*PE-B225M110FH*○	*120.65*	*342.9*	*419.1*	*171.45*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*28.6*	*34.9*	*85.7*	*95.2*	*40.7*
115		*P-B225M115FH*○	*PE-B225M115FH*○															*39.5*
	4 15/16	**P-B22579FH**○	**PE-B22579FH**○	5 1/2	15 1/2	18 1/2	7 1/4	5 3/8	7/8	2 3/4	3	10 7/8	6 7/8	1 7/32	1 1/2	3 5/8	4	129
	5	**P-B22580FH**○	**PE-B22580FH**○															128
125		*P-B225M125FH*○	*PE-B225M125FH*○	*139.70*	*393.7*	*469.9*	*184.15*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*174.6*	*31.0*	*38.1*	*92.1*	*101.6*	*58.1*

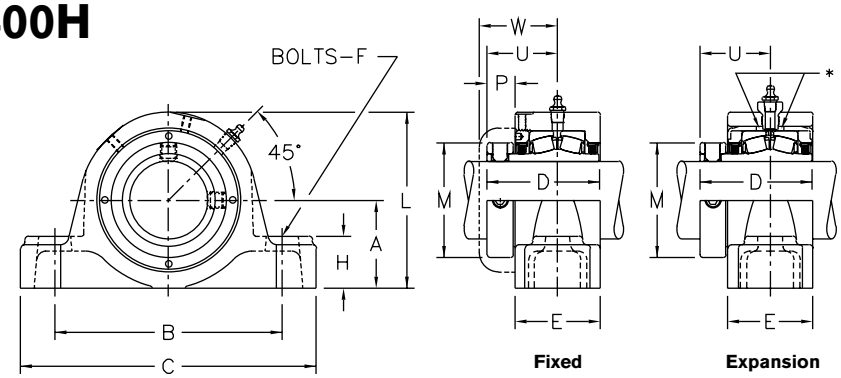
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62 through D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
○ Series P-B22500FH pillow blocks have two spring locking collars (bearing dimensions, page D-40, load ratings, pages D-33, D-34).
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Pillow Blocks

EP-B22400H, EPE-B22400H

Cast Iron Housing
2-Bolt Base
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed

Self-Aligning Type E Interchange



Dimensions (inches/*mm*)

Shaft dia. *mm*	Shaft dia. inches	Pillow block number Fixed	Pillow block number Expansion	A †	B min.	B max.	C	D	E	F Bolts	H	L	M	P	U	W ◆	Unit wt. (lbs./kg.)
	1 7/16	**EP-B22423H**	**EPE-B22423H**	1 7/8	4 3/4	6	7 3/8	2 7/8	2 1/4	1/2	1 1/8	3 7/8	2 1/2	21/32	1 25/32	2 3/16	8
35		*EP-B224M35H*	*EPE-B224M35H*	*47.62*	*120.6*	*152.4*	*187.3*	*73.02*	*57.2*	*12*	*28.6*	*98.4*	*63.5*	*16.7*	*45.2*	*55.6*	*3.1*
	1 1/2	**EP-B224B24H**	EPE-B224B24H														12
	1 5/8	**EP-B22426H**	EPE-B22426H	2 1/8	5 1/4	6 1/2	7 7/8	3 1/8	2 1/2	1/2	1 1/4	4 3/8	2 3/4	21/32	1 29/32	2 1/4	11
	1 11/16	**EP-B22427H**	**EPE-B22427H**														11
40		*EP-B224M40H*	*EPE-B224M40H*	*53.98*	*133.4*	*165.1*	*200.0*	*79.38*	*63.5*	*12*	*31.8*	*111.1*	*69.8*	*16.7*	*48.4*	*57.2*	*5.4*
	1 3/4	**EP-B224B28H**	EPE-B224B28H														12
	1 15/16	**EP-B22431H**	**EPE-B22431H**	2 1/4	6 1/16	7 1/4	8 7/8	3 1/8	2 1/2	5/8	1 5/16	4 9/16	2 15/16	21/32	1 29/32	2 9/32	12
	2	**EP-B22432H**	**EPE-B22432H**														12
45		*EP-B224M45H*	*EPE-B224M45H*	*57.15*	*154.0*	*184.2*	*225.4*	*79.38*	*63.5*	*16*	*33.3*	*115.9*	*74.6*	*16.7*	*48.4*	*57.9*	*5.5*
50		*EP-B224M50H*	*EPE-B224M50H*														*5.2*
	2 3/16	**EP-B22435H**	**EPE-B22435H**	2 1/2	6 9/16	8	9 5/8	3 5/16	2 9/16	5/8	1 1/2	5	3 3/8	25/32	2 1/16	2 7/16	15
55		*EP-B224M55H*	*EPE-B224M55H*	*63.50*	*166.7*	*203.2*	*244.5*	*84.14*	*65.1*	*16*	*38.1*	*127.0*	*85.7*	*19.8*	*52.4*	*61.9*	*6.6*
	2 1/4	**EP-B224B36H**	EPE-B224B36H														18
	2 7/16	**EP-B22439H**	**EPE-B22439H**	2 3/4	6 15/16	8 3/4	10 1/2	3 1/2	2 11/16	5/8	1 5/8	5 1/2	3 5/8	27/32	2 3/16	2 9/16	17
	2 1/2	**EP-B22440H**	EPE-B22440H														17
60		*EP-B224M60H*	*EPE-B224M60H*	*69.85*	*176.2*	*222.2*	*266.7*	*88.90*	*68.3*	*16*	*41.3*	*139.7*	*92.1*	*21.4*	*55.6*	*65.1*	*8.2*
	2 11/16	**EP-B22443H**	**EPE-B22443H**														29
	2 3/4	EP-B22444H	EPE-B22444H														29
	2 15/16	**EP-B22447H**	**EPE-B22447H**	3 1/8	7 13/16	9 3/4	11 13/16	4	3 3/16	3/4	1 7/8	6 5/16	4 3/16	27/32	2 7/16	2 25/32	27
	3	**EP-B22448H**	**EPE-B22448H**														27
65		*EP-B224M65H*	*EPE-B224M65H*														*13.5*
70		*EP-B224M70H*	*EPE-B224M70H*	*79.38*	*198.4*	*247.6*	*300.0*	*101.60*	*81.0*	*20*	*47.6*	*160.3*	*106.4*	*21.4*	*61.9*	*70.6*	*13.3*
75		*EP-B224M75H*	*EPE-B224M75H*														*12.8*
	3 3/16	**EP-B22451H**	EPE-B22451H														44
	3 7/16	**EP-B22455H**	**EPE-B22455H**	3 3/4	9 5/16	11 5/16	13 13/16	4 3/8	3 1/2	7/8	2 1/4	7 1/2	5	15/16	2 21/32	3	43
	3 1/2	**EP-B22456H**	EPE-B22456H														42
80		*EP-B224M80H*	*EPE-B224M80H*	*95.25*	*236.5*	*287.3*	*350.8*	*111.12*	*88.9*	*24*	*57.2*	*190.5*	*127.0*	*23.8*	*67.5*	*76.2*	*20.0*
85		*EP-B224M85H*	*EPE-B224M85H*														*19.5*

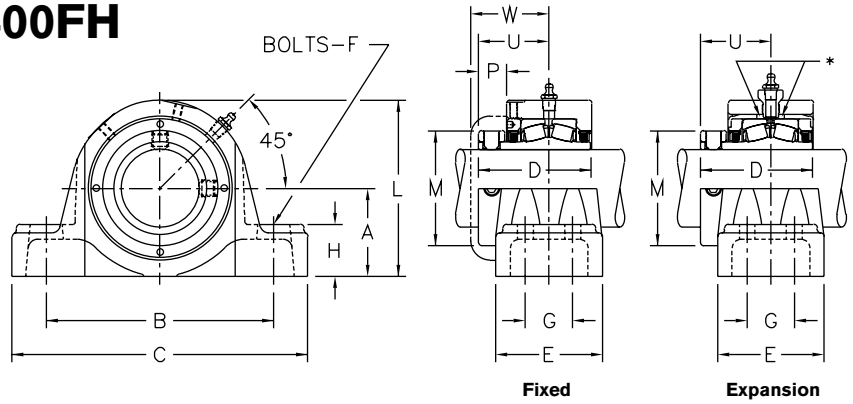
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
† Tolerance, ±.005" *(±0.13 mm)*.
◆Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Pillow Blocks

EP-B22400FH, EPE-B22400FH

Cast Iron Housing
4-Bolt Base
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed

Self-Aligning Type E Interchange



Dimensions (inches/*mm*)

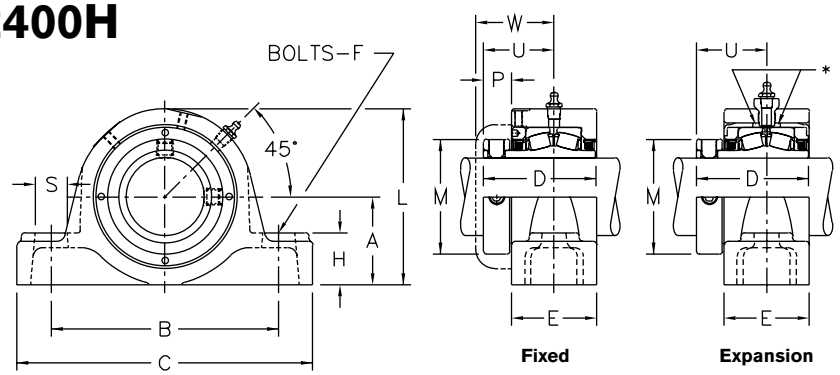
Shaft dia. *mm*	Shaft dia. inches	Pillow block number Fixed	Pillow block number Expansion	A †	B min.	B max.	C	D	E	F Bolts	G	H	L	M	P	U	W ◆	Unit wt. (lbs./kg.)
	2 1/4	EP-B224B36FH	EPE-B224B36FH															21
	2 7/16	**EP-B22439FH**	EPE-B22439FH	2 3/4	6 15/16	8 3/4	10 1/2	3 1/2	3 5/8	5/8	1 7/8	1 5/8	5 1/2	3 5/8	27/32	2 3/16	2 9/16	20
	2 1/2	**EP-B22440FH**	EPE-B22440FH															20
60		*EP-B224M60FH*	*EPE-B224M60FH*	*69.85*	*176.2*	*222.2*	*266.7*	*88.90*	*92.1*	*16*	*47.6*	*41.3*	*139.7*	*92.1*	*21.4*	*55.6*	*65.1*	*8.8*
	2 11/16	**EP-B22443FH**	EPE-B22443FH															31
	2 3/4	EP-B22444FH	EPE-B22444FH	3 1/8	7 13/16	9 7/8	11 13/16	4	4 1/4	5/8	2 1/8	1 7/8	6 5/16	4 3/16	27/32	2 7/16	2 25/32	31
	2 15/16	**EP-B22447FH**	**EPE-B22447FH**															29
	3	**EP-B22448FH**	EPE-B22448FH															29
65		*EP-B224M65FH*	*EPE-B224M65FH*															*14.0*
70		*EP-B224M70FH*	*EPE-B224M70FH*	*79.38*	*198.4*	*250.8*	*300.0*	*101.60*	*108.0*	*16*	*54.0*	*47.6*	*160.3*	*106.4*	*21.4*	*61.9*	*70.6*	*13.8*
75		*EP-B224M75FH*	*EPE-B224M75FH*															*13.3*
	3 3/16	EP-B22451FH	EPE-B22451FH															47
	3 7/16	**EP-B22455FH**	**EPE-B22455FH**	3 3/4	9 5/16	11 5/16	13 13/16	4 3/8	4 3/4	3/4	2 3/8	2 1/4	7 1/2	5	15/16	2 21/32	3	46
	3 1/2	**EP-B22456FH**	EPE-B22456FH															45
80		*EP-B224M80FH*	*EPE-B224M80FH*	*95.25*	*236.5*	*290.5*	*350.8*	*111.12*	*120.6*	*20*	*60.3*	*57.2*	*190.5*	*127.0*	*23.8*	*67.5*	*76.2*	*21.3*
85		*EP-B224M85FH*	*EPE-B224M85FH*															*20.8*
	3 11/16	**P-B22459FH**	**PE-B22459FH**															69
	3 15/16	**P-B22463FH**	**PE-B22463FH**	4 1/4	11 7/8	13	15 1/4	5 1/16	4 1/2	3/4	2 1/4	2 5/8	8 1/2	5 29/32	1 1/16	3 1/16	3 7/16	67
	4	**P-B22464FH**	**PE-B22464FH**															66
90		*P-B224M90FH*	*PE-B224M90FH*	*107.95*	*301.6*	*330.2*	*387.4*	*128.59*	*114.3*	*20*	*57.2*	*66.7*	*215.9*	*150.0*	*27.0*	*77.8*	*87.3*	*32.1*
100		*P-B224M100FH*	*PE-B224M100FH*															*30.3*
	4 3/16	P-B22567FH○	PE-B22567FH○															92
	4 7/16	**P-B22571FH**○	**PE-B22571FH**○	4 3/4	12 3/4	14 1/8	16 1/2	6 3/4	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	1 1/8	3 3/8	3 3/4	88
	4 1/2	**P-B22572FH**○	PE-B22572FH○															87
110		*P-B225M110FH*○	*PE-B225M110FH*○	*120.65*	*323.8*	*358.8*	*419.1*	*171.45*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*28.6*	*85.7*	*95.2*	*40.7*
115		*P-B225M115FH*○	*PE-B225M115FH*○															*39.5*
	4 15/16	**P-B22579FH**○	**PE-B22579FH**○	5 1/2	14 5/16	16 1/8	18 1/2	7 1/4	5 3/8	7/8	2 3/4	3	10 7/8	6 7/8	1 7/32	3 5/8	4	129
	5	**P-B22580FH**○	**PE-B22580FH**○															128
125		*P-B225M125FH*○	*PE-B225M125FH*○	*139.70*	*363.5*	*409.6*	*469.9*	*184.15*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*174.6*	*31.0*	*92.1*	*101.6*	*58.1*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62 through D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
† Tolerance, ±.005" *(±0.13 mm)*.
○ Series P-B22500FH pillow blocks have two spring locking collars (bearing dimensions, page D-40, load ratings, pages D-33, D-34).
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Pillow Blocks

PK-B22400H, PKE-B22400H

Cast Steel Housing
2-Bolt Base
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

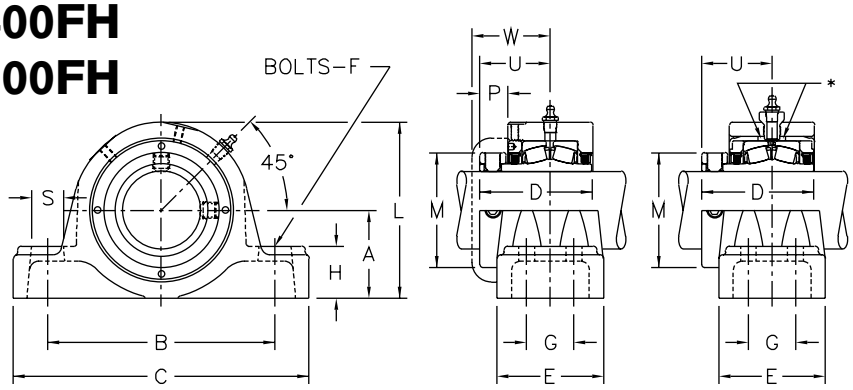
Shaft dia.		Pillow block number		A	B	C	D	E	F	H	L		M	P	S	U	W	Unit wt.
mm	inches	Fixed	Expansion	†					Bolts		Fixed	Expansion					◆	(lbs./kg.)
	1 3/16	**PK-B22419H**	. . .	1 3/4	4 3/4	6 5/16	2 11/16	2 3/16	3/8	1 1/16	3 1/2	3 5/8	2 3/16	17/32	5/8	1 5/8	1 31/32	7
	1 1/4	**PK-B22420H**	. . .															7
30		*PK-B224M30H*	*. . .*	*44.45*	*120.6*	*160.3*	*68.26*	*55.6*	*10*	*27.0*	*88.9*	*92.1*	*55.6*	*13.5*	*15.9*	*41.3*	*50.0*	*3.2*
	1 7/16	**PK-B22423H**	**PKE-B22423H**	1 7/8	5	6 7/8	2 7/8	2 1/4	1/2	1 3/16	3 11/16	3 7/8	2 1/2	21/32	13/16	1 25/32	2 3/16	7
	1 1/2	**PK-B22424H**	**PKE-B22424H**															7
35		*PK-B224M35H*	*PKE-B224M35H*	*47.62*	*127.0*	*174.6*	*73.02*	*57.2*	*12*	*30.2*	*93.7*	*98.4*	*63.5*	*16.7*	*20.6*	*45.2*	*55.6*	*3.4*
	1 5/8	**PK-B22426H**	**PKE-B22426H**															10
	1 11/16	**PK-B22427H**	**PKE-B22427H**	2 1/8	5 1/2	7 3/8	3 1/8	2 1/2	1/2	1 5/16	4 1/4	4 3/8	2 3/4	21/32	13/16	1 29/32	2 1/4	10
	1 3/4	**PK-B22428H**	**PKE-B22428H**															10
40		*PK-B224M40H*	*PKE-B224M40H*	*53.98*	*139.7*	*187.3*	*79.38*	*63.5*	*12*	*33.3*	*108.0*	*111.1*	*69.8*	*16.7*	*20.6*	*48.4*	*57.2*	*4.8*
	1 15/16	**PK-B22431H**	**PKE-B22431H**	2 1/4	6 1/4	8 3/8	3 1/8	2 1/2	5/8	1 3/8	4 9/16	4 9/16	2 15/16	21/32	15/16	1 29/32	2 9/32	12
	2	**PK-B22432H**	**PKE-B22432H**															12
45		*PK-B224M45H*	*PKE-B224M45H*	*57.15*	*158.8*	*212.7*	*79.38*	*63.5*	*16*	*34.9*	*115.9*	*115.9*	*74.6*	*16.7*	*23.8*	*48.4*	*57.9*	*5.8*
50		*PK-B224M50H*	*PKE-B224M50H*															*5.5*
	2 3/16	**PK-B22435H**	**PKE-B22435H**	2 1/2	6 3/4	8 7/8	3 5/16	2 9/16	5/8	1 5/8	5	5	3 3/8	25/32	15/16	2 1/16	2 7/16	16
	2 1/4	**PK-B22436H**	**PKE-B22436H**															16
55		*PK-B224M55H*	*PKE-B224M55H*	*63.50*	*171.4*	*225.4*	*84.14*	*65.1*	*16*	*41.3*	*127.0*	*127.0*	*85.7*	*19.8*	*23.8*	*52.4*	*61.9*	*7.1*
	2 7/16	**PK-B22439H**	**PKE-B22439H**	2 3/4	7 1/8	9 1/4	3 1/2	2 11/16	5/8	1 3/4	5 1/2	5 1/2	3 5/8	27/32	15/16	2 3/16	2 9/16	19
	2 1/2	**PK-B22440H**	**PKE-B22440H**															18
60		*PK-B224M60H*	*PKE-B224M60H*	*69.85*	*181.0*	*235.0*	*88.90*	*68.3*	*16*	*44.4*	*139.7*	*139.7*	*92.1*	*21.4*	*23.8*	*55.6*	*65.1*	*8.6*
	2 11/16	**PK-B22443H**	**PKE-B22443H**															30
	2 3/4	PK-B22444H	PKE-B22444H															30
	2 15/16	**PK-B22447H**	**PKE-B22447H**	3 1/4	8 1/8	10 7/16	4	3 3/16	3/4	2 1/4	6 7/16	6 7/16	4 3/16	27/32	1 1/16	2 7/16	2 25/32	29
	3	**PK-B22448H**	**PKE-B22448H**															28
65		*PK-B224M65H*	*PKE-B224M65H*															*13.7*
70		*PK-B224M70H*	*PKE-B224M70H*	*82.55*	*206.4*	*265.1*	*101.60*	*81.0*	*20*	*57.2*	*163.5*	*163.5*	*106.4*	*21.4*	*27.0*	*61.9*	*70.6*	*13.5*
75		*PK-B224M75H*	*PKE-B224M75H*															*13.0*
	3 3/16	**PK-B22451H**	PKE-B22451H															45
	3 7/16	**PK-B22455H**	**PKE-B22455H**	3 3/4	10	13	4 3/8	3 7/16	7/8	2 1/4	7 1/2	7 1/2	5	15/16	1 5/8	2 21/32	3	43
	3 1/2	**PK-B22456H**	**PKE-B22456H**															43
80		*PK-B224M80H*	*PKE-B224M80H*	*95.25*	*254.0*	*330.2*	*111.12*	*87.3*	*24*	*57.2*	*190.5*	*190.5*	*127.0*	*23.8*	*41.3*	*67.5*	*76.2*	*20.2*
85		*PK-B224M85H*	*PKE-B224M85H*															*19.7*
	3 11/16	**PK-B22459H**	PKE-B22459H															64
	3 15/16	**PK-B22463H**	**PKE-B22463H**	4 1/4	11 3/4	15 1/4	5 1/16	4	1	2 5/8	8 1/2	8 1/2	5 29/32	1 1/16	2 1/4	3 1/16	3 7/16	62
	4	**PK-B22464H**	**PKE-B22464H**															62
90		*PK-B224M90H*	*PKE-B224M90H*	*107.95*	*298.4*	*387.4*	*128.59*	*101.6*	*24*	*66.7*	*215.9*	*215.9*	*150.0*	*27.0*	*57.2*	*77.8*	*87.3*	*29.9*
100		*PK-B224M100H*	*PKE-B224M100H*															*28.1*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Pillow Blocks

PK-B22400FH, PKE-B22400FH
PK-B22500FH, PKE-B22500FH

Cast Steel Housing
4-Bolt Base
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Fixed **Expansion**

Dimensions (inches/*mm*)

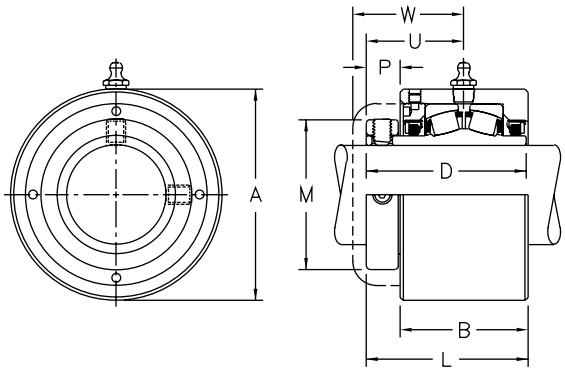
Shaft dia.		Pillow block number		A †	B	C	D	E	F Bolts	G	H	L	M	P	S	U	W ◆	Unit wt. (lbs./kg.)
mm	inches	Fixed	Expansion															
	1 15/16	**PK-B22431FH**	**PKE-B22431FH**	2 1/4	6 1/4	8 3/8	3 1/8	3 3/16	1/2	1 19/32	1 3/8	4 9/16	2 15/16	21/32	13/16	1 29/32	2 9/32	13
	2	**PK-B22432FH**	**PKE-B22432FH**															13
45		*PK-B224M45FH*	*PKE-B224M45FH*	*57.15*	*158.8*	*212.7*	*79.38*	*81.0*	*12*	*40.5*	*34.9*	*115.9*	*74.6*	*16.7*	*20.6*	*48.4*	*57.9*	*6.1*
50		*PK-B224M50FH*	*PKE-B224M50FH*															*5.8*
	2 3/16	**PK-B22435FH**	**PKE-B22435FH**	2 1/2	6 3/4	8 7/8	3 5/16	3 1/4	1/2	1 11/16	1 5/8	5	3 3/8	25/32	13/16	2 1/16	2 7/16	16
	2 1/4	**PK-B22436FH**	**PKE-B22436FH**															16
55		*PK-B224M55FH*	*PKE-B224M55FH*	*63.50*	*171.4*	*225.4*	*84.14*	*82.6*	*12*	*42.9*	*41.3*	*127.0*	*85.7*	*19.8*	*20.6*	*52.4*	*61.9*	*7.3*
	2 7/16	**PK-B22439FH**	**PKE-B22439FH**	2 3/4	7 1/8	9 1/4	3 1/2	3 3/8	1/2	1 3/4	1 3/4	5 1/2	3 5/8	27/32	13/16	2 3/16	2 9/16	20
	2 1/2	**PK-B22440FH**	**PKE-B22440FH**															20
60		*PK-B224M60FH*	*PKE-B224M60FH*	*69.85*	*181.0*	*235.0*	*88.90*	*85.7*	*12*	*44.4*	*44.4*	*139.7*	*92.1*	*21.4*	*20.6*	*55.6*	*65.1*	*9.3*
	2 11/16	**PK-B22443FH**	PKE-B22443FH	3 1/4	8 1/8	10 7/16	4	3 3/4	5/8	1 7/8	2 1/4	6 7/16	4 3/16	27/32	15/16	2 7/16	2 25/32	30
	2 3/4	PK-B22444FH	PKE-B22444FH															30
	2 15/16	**PK-B22447FH**	**PKE-B22447FH**															29
	3	**PK-B22448FH**	**PKE-B22448FH**															28
65		*PK-B224M65FH*	*PKE-B224M65FH*	*82.55*	*206.4*	*265.1*	*101.60*	*95.2*	*16*	*47.6*	*57.2*	*163.5*	*106.4*	*21.4*	*23.8*	*61.9*	*70.6*	*13.7*
70		*PK-B224M70FH*	*PKE-B224M70FH*															*13.5*
75		*PK-B224M75FH*	*PKE-B224M75FH*															*13.0*
	3 3/16	PK-B22451FH	PKE-B22451FH	3 3/4	10	13	4 3/8	4 1/8	3/4	2	2 1/4	7 1/2	5	15/16	1 1/2	2 21/32	3	49
	3 7/16	**PK-B22455FH**	**PKE-B22455FH**															47
	3 1/2	**PK-B22456FH**	**PKE-B22456FH**															47
80		*PK-B224M80FH*	*PKE-B224M80FH*	*95.25*	*254.0*	*330.2*	*111.12*	*104.8*	*20*	*50.8*	*57.2*	*190.5*	*127.0*	*23.8*	*38.1*	*67.5*	*76.2*	*22.0*
85		*PK-B224M85FH*	*PKE-B224M85FH*															*21.5*
	3 11/16	**PK-B22459FH**	**PKE-B22459FH**	4 1/4	12 1/2	15 1/4	5 1/16	4 1/2	3/4	2 1/4	2 5/8	8 1/2	5 29/32	1 1/16	1 1/4	3 1/16	3 7/16	76
	3 15/16	**PK-B22463FH**	**PKE-B22463FH**															74
	4	**PK-B22464FH**	**PKE-B22464FH**															73
90		*PK-B224M90FH*	*PKE-B224M90FH*	*107.95*	*317.5*	*387.4*	*128.59*	*114.3*	*20*	*57.2*	*66.7*	*215.9*	*150.0*	*27.0*	*31.8*	*77.8*	*87.3*	*35.2*
100		*PK-B224M100FH*	*PKE-B224M100FH*															*33.5*
	4 3/16	PK-B22567FH○	PKE-B22567FH○	4 3/4	13 1/2	16 1/2	6 3/4	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	1 1/8	1 3/8	3 3/8	3 3/4	97
	4 7/16	**PK-B22571FH**○	PKE-B22571FH○															93
	4 1/2	**PK-B22572FH**○	PKE-B22572FH○															92
110		*PK-B225M110FH*○	*PKE-B225M110FH*○	*120.65*	*342.9*	*419.1*	*171.45*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*28.6*	*34.9*	*85.7*	*95.2*	*43.0*
115		*PK-B225M115FH*○	*PKE-B225M115FH*○															*41.7*
	4 15/16	**PK-B22579FH**○	PKE-B22579FH○	5 1/2	15 1/2	18 1/2	7 1/4	5 3/8	7/8	2 3/4	3	10 7/8	6 7/8	1 7/32	1 1/2	3 5/8	4	125
	5	**PK-B22580FH**○	PKE-B22580FH○															124
125		*PK-B225M125FH*○	*PKE-B225M125FH*○	*139.70*	*393.7*	*469.9*	*184.15*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*174.6*	*31.0*	*38.1*	*92.1*	*101.6*	*56.6*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62 through D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
○ Series P-B22500FH pillow blocks have two spring locking collars (bearing dimensions, page D-40, load ratings, pages D-33, D-34).
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Cartridge Units

C-B22400H

Cast Iron Housing
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

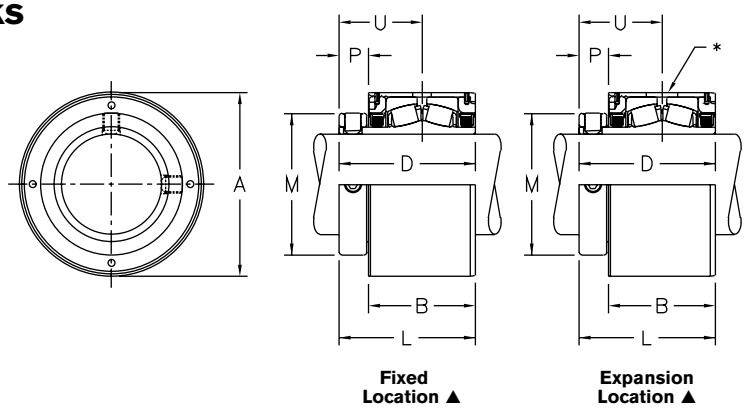
Shaft dia. *mm*	Shaft dia. inches	Cartridge unit number	A †	B	D	L	M	P	U	W ◆	Unit wt. (lbs./kg.)
	1	**C-B22416H**	3.000	2 1/16	2 9/16	2 19/32	2	17/32	1 9/16	1 29/32	3
25		*C-B224M25H*	*76.20*	*52.39*	*65.09*	*65.9*	*50.8*	*13.5*	*39.7*	*48.4*	*1.4*
	1 3/16	**C-B22419H**	3.219	2 3/16	2 11/16	2 23/32	2 3/16	17/32	1 5/8	1 31/32	4
	1 1/4	**C-B22420H**									4
30		*C-B224M30H*	*81.76*	*55.56*	*68.26*	*69.0*	*55.6*	*13.5*	*41.3*	*50.0*	*1.7*
	1 7/16	**C-B22423H**	3.437	2 1/4	2 7/8	2 29/32	2 1/2	21/32	1 25/32	2 3/16	4
	1 1/2	**C-B22424H**									4
35		*C-B224M35H*	*87.30*	*57.15*	*73.02*	*73.8*	*63.5*	*16.7*	*45.2*	*55.6*	*2.1*
	1 5/8	**C-B22426H**	3.937	2 1/2	3 1/8	3 5/32	2 3/4	21/32	1 29/32	2 1/4	6
	1 11/16	**C-B22427H**									6
	1 3/4	**C-B22428H**									6
40		*C-B224M40H*	*100.00*	*63.50*	*79.38*	*80.2*	*69.8*	*16.7*	*48.4*	*57.2*	*2.9*
	1 15/16	**C-B22431H**	4.125	2 1/2	3 1/8	3 5/32	2 15/16	21/32	1 29/32	2 9/32	6
	2	**C-B22432H**									6
45		*C-B224M45H*	*104.78*	*63.50*	*79.38*	*80.2*	*74.6*	*16.7*	*48.4*	*57.9*	*3.1*
50		*C-B224M50H*									*3.0*
	2 3/16	**C-B22435H**	4.531	2 9/16	3 5/16	3 11/32	3 3/8	25/32	2 1/16	2 7/16	8
	2 1/4	**C-B22436H**									8
55		*C-B224M55H*	*115.09*	*65.09*	*84.14*	*84.9*	*85.7*	*19.8*	*52.4*	*61.9*	*3.8*
	2 7/16	**C-B22439H**	5.000	2 11/16	3 1/2	3 17/32	3 5/8	27/32	2 3/16	2 9/16	10
	2 1/2	**C-B22440H**									10
60		*C-B224M60H*	*127.00*	*68.26*	*88.90*	*89.7*	*92.1*	*21.4*	*55.6*	*65.1*	*4.8*
	2 11/16	**C-B22443H**	5.875	3 3/16	4	4 1/32	4 3/16	27/32	2 7/16	2 25/32	18
	2 3/4	C-B22444H									17
	2 15/16	**C-B22447H**									16
	3	**C-B22448H**									16
65		*C-B224M65H*									*8.1*
70		*C-B224M70H*	*149.22*	*80.96*	*101.60*	*102.4*	*106.4*	*21.4*	*61.9*	*70.6*	*8.0*
75		*C-B224M75H*									*7.8*
	3 3/16	**C-B22451H**	6.750	3 7/16	4 3/8	4 3/8	5	15/16	2 21/32	3	25
	3 7/16	**C-B22455H**									23
	3 1/2	**C-B22456H**									23
80		*C-B224M80H*	*171.45*	*87.31*	*111.12*	*111.1*	*127.0*	*23.8*	*67.5*	*76.2*	*11.2*
85		*C-B224M85H*									*11.0*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, +.000" –.002" *(+0.00 mm –0.05 mm)*; bore tolerance for mounting +.002" –.000" *(+0.05 mm –0.00 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Pillow Blocks

CSE-B22400H

Steel Housing
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Fixed Location ▲ **Expansion Location ▲**

Dimensions (inches/*mm*)

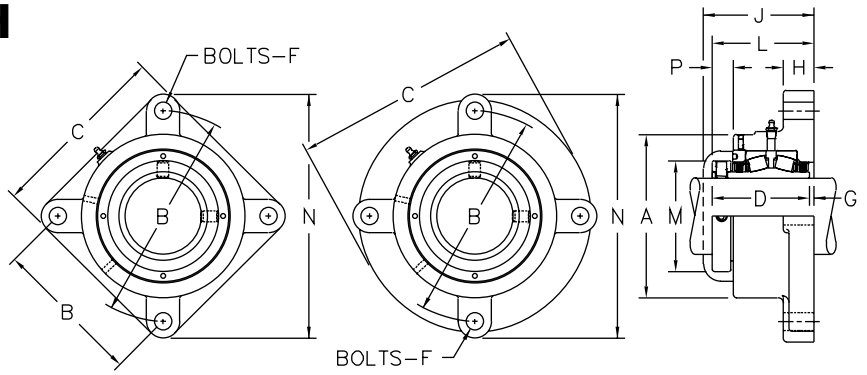
Shaft dia.		Cartridge unit number ▲	A †	B	D	L	M	P	U	Unit wt. (lbs./kg.)
mm	inches									
	1	**CSE-B22416H**	2.665	2	2 9/16	2 9/16	2	9/16	1 9/16	3
25		*CSE-B224M25H*	*67.69*	*50.80*	*65.09*	*65.1*	*50.8*	*14.3*	*39.7*	*1.3*
	1 3/16	**CSE-B22419H**	2.915	2 1/8	2 11/16	2 11/16	2 3/16	9/16	1 5/8	4
	1 1/4	**CSE-B22420H**								4
30		*CSE-B224M30H*	*74.04*	*53.98*	*68.26*	*68.3*	*55.6*	*14.3*	*41.3*	*1.7*
	1 7/16	**CSE-B22423H**	3.124	2 3/16	2 7/8	2 7/8	2 1/2	1 1/16	1 25/32	4
	1 1/2	**CSE-B22424H**								4
35		*CSE-B224M35H*	*79.35*	*55.56*	*73.02*	*73.0*	*63.5*	*17.5*	*45.2*	*1.8*
	1 5/8	**CSE-B22426H**	3.636	2 7/16	3 1/8	3 1/8	2 3/4	1 1/16	1 29/32	6
	1 11/16	**CSE-B22427H**								5
	1 3/4	**CSE-B22428H**								5
40		*CSE-B224M40H*	*92.35*	*61.91*	*79.38*	*79.4*	*69.8*	*17.5*	*48.4*	*2.5*
	1 15/16	**CSE-B22431H**	3.833	2 25/64	3 1/8	3 1/8	2 15/16	1 1/16	1 29/32	6
	2	**CSE-B22432H**								5
45		*CSE-B224M45H*	*97.36*	*60.72*	*79.38*	*79.4*	*74.6*	*17.5*	*48.4*	*2.6*
50		*CSE-B224M50H*								*2.3*
	2 3/16	**CSE-B22435H**	4.227	2 1/2	3 5/16	3 5/16	3 3/8	13/16	2 1/16	7
	2 1/4	**CSE-B22436H**								7
55		*CSE-B224M55H*	*107.36*	*63.50*	*84.14*	*84.1*	*85.7*	*20.6*	*52.4*	*3.2*
	2 7/16	**CSE-B22439H**	4.621	2 5/8	3 1/2	3 1/2	3 5/8	7/8	2 3/16	8
	2 1/2	**CSE-B22440H**								8
60		*CSE-B224M60H*	*117.37*	*66.68*	*88.90*	*88.9*	*92.1*	*22.2*	*55.6*	*3.9*
	2 11/16	**CSE-B22443H**	5.407	3 1/8	4	4	4 3/16	7/8	2 7/16	14
	2 3/4	**CSE-B22444H**								14
	2 15/16	**CSE-B22447H**								13
	3	**CSE-B22448H**								13
65		*CSE-B224M65H*	*137.34*	*79.38*	*101.60*	*101.6*	*106.4*	*22.2*	*61.9*	*6.6*
70		*CSE-B224M70H*								*6.4*
75		*CSE-B224M75H*								*5.9*
	3 3/16	**CSE-B22451H**	6.194	3 7/16	4 3/8	4 3/8	5	15/16	2 21/32	20
	3 7/16	**CSE-B22455H**								18
	3 1/2	**CSE-B22456H**								18
80		*CSE-B224M80H*	*157.33*	*87.31*	*111.12*	*111.1*	*127.0*	*23.8*	*67.5*	*9.0*
85		*CSE-B224M85H*								*8.6*
	3 11/16	CSE-B22459H	7.375	4	5 1/16	5 1/16	5 29/32	1 1/16	3 1/16	33
	3 15/16	**CSE-B22463H**								31
	4	CSE-B22464H								31
90		*CSE-B224M90H*	*187.32*	*101.60*	*128.59*	*128.6*	*150.0*	*27.0*	*77.8*	*15.9*
100		*CSE-B224M100H*								*14.1*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Steel cartridge units cannot be disassembled. For replacement, use entire new unit.
For 4 3/16" through 5" *(110 mm through 125 mm)* CSE-B22500, see page D-39.
All units available with type E lip seals.
† Tolerance, +.000" –.002" (+*0.00 mm −0.05 mm)*; bore tolerance for mounting +.002" –.000" (+*0.05 mm −0.00 mm)*.
* Plug diameter .531" *(13.49 mm)*, engagement depth .125" ±.015" *(3.18 ±0.38 mm)*, allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position on expansion units.
▲ Hole for fixed location and slot for expansion location in the same housing.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Flanged Units

F-B22400H, FE-B22400H

Cast Iron Housing
3-bolt or 4-bolt Mounting
Fixed or Expansion
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

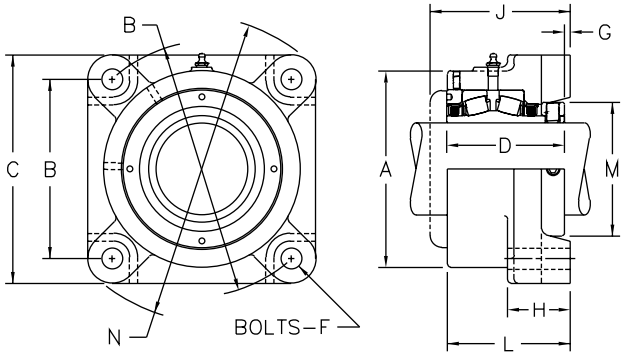
Type of Housing	Shaft dia.		Flanged unit number		A		B		C ▲	D	F Bolts	G ●	H	J ◆	L ●	M	N	P ●	Unit wt. (lbs./kg.)
	mm	inches	Fixed	Expansion	Fixed	Exp	Circle	Square											
3-BOLT ROUND		1	**F-B22416H**	FE-B22416H	2⅞	3¼	4⅛	. . .	4¾	2⁹⁄₁₆	⅜	1⁄32	⁹⁄₁₆	2¹⁵⁄₁₆	2¹⁹⁄₃₂	2	5⅛	17⁄32	3
	25		*F-B224M25H*	*FE-B224M25H*	*73.0*	*82.6*	*104.78*	*. . .*	*120.6*	*65.09*	*10*	*0.8*	*14.3*	*74.6*	*65.9*	*50.8*	*130.2*	*13.5*	*1.3*
		1³⁄₁₆	**F-B22419H**	**FE-B22419H**	3⅛	3½	4½	. . .	5⅛	2¹¹⁄₁₆	⅜	1⁄32	¹⁹⁄₃₂	3¹⁄₁₆	2²³⁄₃₂	2⁹⁄₁₆	5½	17⁄32	6
		1¼	**F-B22420H**	**FE-B22420H**															6
	30		*F-B224M30H*	*FE-B224M30H*	*79.4*	*88.9*	*114.30*	*. . .*	*130.2*	*68.26*	*10*	*0.8*	*15.1*	*77.8*	*69.0*	*55.6*	*139.7*	*13.5*	*2.4*
		1⁷⁄₁₆	**F-B22423H**	**FE-B22423H**	3⁷⁄₁₆	3¾	5	. . .	5⅞	2⅞	½	1⁄32	⅝	3⁵⁄₁₆	2²⁹⁄₃₂	2½	6¼	21⁄32	7
		1½	**F-B22424H**	**FE-B22424H**															7
	35		*F-B224M35H*	*FE-B224M35H*	*87.3*	*95.2*	*127.00*	*. . .*	*149.2*	*73.02*	*12*	*0.8*	*15.9*	*84.1*	*73.8*	*63.5*	*158.8*	*16.7*	*3.2*
4-BOLT ROUND		1⅝	**F-B22426H**	**FE-B22426H**	3¹⁵⁄₁₆	4¼	5½	3⁵⁷⁄₆₄	6⅜	3⅛	½	1⁄32	⅝	3½	3⁵⁄₃₂	2¾	6¾	21⁄32	9
		1¹¹⁄₁₆	**F-B22427H**	**FE-B22427H**															9
		1¾	**F-B22428H**	**FE-B22428H**															9
	40		*F-B224M40H*	*FE-B224M40H*	*100.0*	*108.0*	*139.70*	*98.83*	*161.9*	*79.38*	*12*	*0.8*	*15.9*	*88.9*	*80.2*	*69.8*	*171.4*	*16.7*	*4.3*
		1¹⁵⁄₁₆	**F-B22431H**	**FE-B22431H**	4¼	4½	5¾	4¹⁄₁₆	6¹¹⁄₁₆	3⅛	½	1⁄16	¹¹⁄₁₆	3⁹⁄₁₆	3³⁄₁₆	2¹⁵⁄₁₆	7	21⁄32	10
		2	**F-B22432H**	**FE-B22432H**															10
	45		*F-B224M45H*	*FE-B224M45H*	*108.0*	*114.3*	*146.05*	*103.17*	*169.9*	*79.38*	*12*	*1.6*	*17.5*	*90.5*	*81.0*	*74.6*	*177.8*	*16.7*	*5.0*
	50		*F-B224M50H*	*FE-B224M50H*															*4.7*
		2³⁄₁₆	**F-B22435H**	**FE-B22435H**	4⅞	4⅞	6⅜	4½	7⅜	3⁵⁄₁₆	⅝	3⁄32	1¹⁄₁₆	3²⁵⁄₃₂	3¹³⁄₃₂	3⅜	7¾	25⁄32	14
		2¼	**F-B22436H**	**FE-B22436H**															14
	55		*F-B224M55H*	*FE-B224M55H*	*123.8*	*123.8*	*161.92*	*114.30*	*187.3*	*84.14*	*16*	*2.4*	*17.5*	*96.0*	*86.5*	*85.7*	*196.8*	*19.8*	*6.5*
		2⁷⁄₁₆	**F-B22439H**	**FE-B22439H**	5⅜	5⅜	6¾	4⁴⁹⁄₆₄	7¾	3½	⅝	3⁄32	¾	3³¹⁄₃₂	3¹⁹⁄₃₂	3⅝	8⅛	27⁄32	17
		2½	**F-B22440H**	**FE-B22440H**															17
	60		*F-B224M60H*	*FE-B224M60H*	*136.5*	*136.5*	*171.45*	*121.06*	*196.8*	*88.90*	*16*	*2.4*	*19.0*	*100.8*	*91.3*	*92.1*	*206.4*	*21.4*	*7.9*
		2¹¹⁄₁₆	**F-B22443H**	**FE-B22443H**	6¼	6¼	7⅞	5⁹⁄₁₆	9⅛	4	¾	3⁄32	⅞	4⁷⁄₁₆	4³⁄₃₂	4³⁄₁₆	9½	27⁄32	28
		2¾	F-B22444H	FE-B22444H															27
		2¹⁵⁄₁₆	**F-B22447H**	**FE-B22447H**															26
		3	**F-B22448H**	**FE-B22448H**															26
	65		*F-B224M65H*	*FE-B224M65H*	*158.8*	*158.8*	*200.02*	*141.27*	*231.8*	*101.60*	*20*	*2.4*	*22.2*	*112.7*	*104.0*	*106.4*	*241.3*	*21.4*	*12.7*
	70		*F-B224M70H*	*FE-B224M70H*															*12.5*
	75		*F-B224M75H*	*FE-B224M75H*															*12.0*
4-BOLT SQUARE		3⅜₁₆	**F-B22451H**	**FE-B22451H**	7⅜	7⅜	9½	6²³⁄₃₂	8⅝	4⅜	¾	3⁄16	1⅜	4²⁹⁄₃₂	4⁹⁄₁₆	5	11⁷⁄₁₆	15⁄16	41
		3⁷⁄₁₆	**F-B22455H**	**FE-B22455H**															39
		3½	**F-B22456H**	**FE-B22456H**															39
	80		*F-B224M80H*	*FE-B224M80H*	*187.3*	*187.3*	*241.30*	*170.64*	*219.1*	*111.12*	*20*	*4.8*	*34.9*	*124.6*	*115.9*	*127.0*	*290.5*	*23.8*	*18.6*
	85		*F-B224M85H*	*FE-B224M85H*															*18.1*
		3¹¹⁄₁₆	**F-B22459H**	FE-B22459H	8⅛	8⅜	10¾	7³⁹⁄₆₄	9¾	5¹⁄₁₆	⅞	5⁄32	1½	5⅝	5⁷⁄₃₂	5²⁹⁄₃₂	12²⁹⁄₃₂	1¹⁄₃₂	59
		3¹⁵⁄₁₆	**F-B22463H**	**FE-B22463H**															57
		4	**F-B22464H**	**FE-B22464H**															57
	90		*F-B224M90H*	*FE-B224M90H*	*206.4*	*212.7*	*273.05*	*193.28*	*247.6*	*128.59*	*24*	*4.0*	*38.1*	*142.9*	*132.6*	*150.0*	*327.8*	*26.2*	*27.7*
	100		*F-B224M100H*	*FE-B224M100H*															*25.9*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, ⅛" PT.
All units available with type E lip seals.
Expansion unit allows axial movement of ³⁄₁₆" *(4.8 mm)* in either direction from centered position shown.
● For expansion units, dimensions G, L, and P are minimum values. For maximum values, add .375" *(9.5 mm)*.
▲ Cross flat dimension for 3³⁄₁₆" and larger shaft.
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Flanged Units

EFR-B22400H

Cast Iron Housing
Padded Flange
4-bolt Mounting
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Self-Aligning Type E Interchange

Dimensions (inches/*mm*)

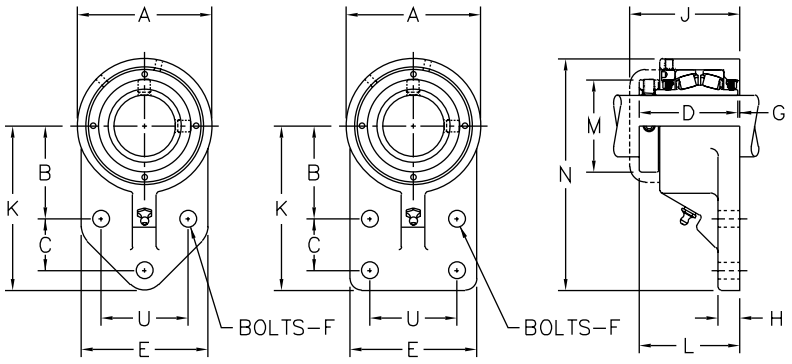
Shaft dia.		Flanged unit number	A	B		C	D	F	G	H	J	L	M	N	Unit wt.
mm	inches			Circle	Square			Bolts			◆				(lbs./kg.)
	1 7/16	**EFR-B22423H**	3 3/4	4 61/64	3 1/2	4 5/8	2 7/8	1/2	1/16	1 1/4	4 1/32	2 31/32	2 1/2	6 1/16	8
35		*EFR-B224M35H*	*95.2*	*125.81*	*88.9*	*117.5*	*73.02*	*12*	*1.6*	*31.8*	*102.4*	*75.4*	*63.5*	*154.0*	*3.4*
	1 1/2	**EFR-B224B24H**													11
	1 5/8	**EFR-B22426H**	4 1/4	5 53/64	4 1/8	5 1/2	3 1/8	1/2	1/8	1 3/8	4 9/32	3 9/32	2 3/4	7 7/32	11
	1 11/16	**EFR-B22427H**													10
40		*EFR-B224M40H*	*108.0*	*148.03*	*104.8*	*139.7*	*79.38*	*12*	*3.2*	*34.9*	*108.7*	*83.3*	*69.8*	*183.4*	*5.1*
	1 3/4	**EFR-B224B28H**													11
	1 15/16	**EFR-B22431H**	4 1/2	6 3/16	4 3/8	5 1/2	3 1/8	1/2	1/8	1 7/16	4 5/16	3 9/32	2 15/16	7 5/16	11
	2	**EFR-B22432H**													10
45		*EFR-B224M45H*	*114.3*	*157.18*	*111.1*	*139.7*	*79.38*	*12*	*3.2*	*36.5*	*109.5*	*83.3*	*74.6*	*185.7*	*5.3*
50		*EFR-B224M50H*													*5.0*
	2 3/16	**EFR-B22435H**	5	6 57/64	4 7/8	6 1/4	3 5/16	5/8	1/8	1 1/2	4 5/8	3 15/32	3 3/8	8 9/32	15
55		*EFR-B224M55H*	*127.0*	*175.03*	*123.8*	*158.8*	*84.14*	*16*	*3.2*	*38.1*	*117.5*	*88.1*	*85.7*	*210.3*	*7.1*
	2 1/4	**EFR-B224B36H**													18
	2 7/16	**EFR-B22439H**	5 3/8	7 19/32	5 3/8	6 3/4	3 1/2	5/8	3/16	1 11/16	4 15/16	3 23/32	3 5/8	8 31/32	17
	2 1/2	**EFR-B22440H**													17
60		*EFR-B224M60H*	*136.5*	*192.89*	*136.5*	*171.4*	*88.90*	*16*	*4.8*	*42.9*	*125.4*	*94.5*	*92.1*	*227.8*	*7.9*
	2 11/16	**EFR-B22443H**													26
	2 3/4	EFR-B22444H	6 1/4	8 31/64	6	7 5/8	4	3/4	3/16	1 13/16	5 13/32	4 7/32	4 3/16	10 1/8	25
	2 15/16	**EFR-B22447H**													24
	3	**EFR-B22448H**													24
65		*EFR-B224M65H*													*11.7*
70		*EFR-B224M70H*	*158.8*	*215.49*	*152.4*	*193.7*	*101.60*	*20*	*4.8*	*46.0*	*137.3*	*107.2*	*106.4*	*257.2*	*11.5*
75		*EFR-B224M75H*													*11.0*
	3 3/16	**EFR-B22451H**													42
	3 7/16	**EFR-B22455H**	7 3/8	9 59/64	7	8 3/4	4 3/8	3/4	3/32	1 15/16	5 3/4	4 15/32	5	11 21/32	41
	3 1/2	EFR-B22456H													40
80		*EFR-B224M80H*	*187.3*	*251.23*	*177.8*	*222.2*	*111.12*	*20*	*2.4*	*49.2*	*146.0*	*113.5*	*127.0*	*296.1*	*18.9*
85		*EFR-B224M85H*													*18.4*
	3 11/16	EFR-B22459H													58
	3 15/16	**EFR-B22463H**	8 3/8	10 61/64	7 3/4	9 3/4	5 1/16	7/8	3/32	2 3/16	6 5/8	5 3/16	5 29/32	12 31/32	56
	4	**EFR-B22464H**													56
90		*EFR-B224M90H*	*212.7*	*278.21*	*196.8*	*247.6*	*128.59*	*24*	*2.4*	*55.6*	*168.3*	*131.8*	*150.0*	*329.4*	*27.2*
100		*EFR-B224M100H*													*25.4*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Flanged Bracket Units

FB-B22400H

High-Test Iron Housing
3-bolt or 4-bolt Mounting
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

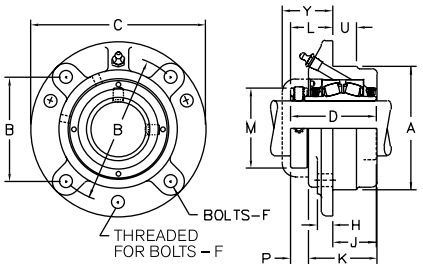
Type of Housing	Shaft dia. *mm*	Shaft dia. inches	Flanged bracket unit number	A	B	C	D	E	F Bolts	G	H	J ◆	K	L	M	N	U	Unit wt. (lbs./kg.)
3-BOLT		1 7/16	**FB-B22423H**	3 7/16	2 3/8	1 1/4	2 7/8	3 1/4	1/2	1/32	5/8	3 5/16	4 1/4	2 29/32	2 1/2	5 31/32	2	6.4
		1 1/2	**FB-B22424H**															6.4
	35		*FB-B224M35H*	*87.3*	*60.3*	*31.8*	*73.02*	*82.6*	*12*	*0.8*	*15.9*	*84.1*	*108.0*	*73.8*	*63.5*	*151.6*	*50.8*	*2.9*
		1 15/16	**FB-B22431H**	4 1/4	2 15/16	1 5/8	3 1/8	4	1/2	1/16	1 1/16	3 9/16	5 3/16	3 3/16	2 15/16	7 5/16	2 3/4	10.0
		2	**FB-B22432H**															10.0
	45		*FB-B224M45H*	*108.0*	*74.6*	*41.3*	*79.38*	*101.6*	*12*	*1.6*	*17.5*	*90.5*	*131.8*	*81.0*	*74.6*	*185.7*	*69.8*	*4.4*
	50		*FB-B224M50H*															*4.3*
4-BOLT		2 7/16	**FB-B22439H**	5 3/8	3 3/4	1 3/4	3 1/2	4 7/8	5/8	3/32	3/4	3 31/32	6 1/4	3 19/32	3 5/8	8 15/16	3	17.5
		2 1/2	**FB-B22440H**															17.5
	60		*FB-B224M60H*	*136.5*	*95.2*	*44.4*	*88.90*	*123.8*	*16*	*2.4*	*19.0*	*100.8*	*158.8*	*91.3*	*92.1*	*227.0*	*76.2*	*8.1*
		2 11/16	**FB-B22443H**	6 1/4	3 7/8	2 1/4	4	5 3/4	3/4	3/32	7/8	4 7/16	7	4 3/32	4 3/16	10 1/8	4	30.0
		2 3/4	FB-B22444H															30.0
		2 15/16	**FB-B22447H**															28.0
		3	**FB-B22448H**															28.0
	65		*FB-B224M65H*	*158.8*	*98.4*	*57.2*	*101.60*	*146.0*	*20*	*2.4*	*22.2*	*112.7*	*177.8*	*104.0*	*106.4*	*257.2*	*101.6*	*13.7*
	70		*FB-B224M70H*															*13.5*
	75		*FB-B224M75H*															*12.8*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size: for 1½ and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
All units available with type E lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Flanged Cartridge Units

FC-B22400H

Cast Iron Housing
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed
Jack Screw Holes for Removal



Self-Aligning Type E Interchange

Dimensions (inches/*mm*)

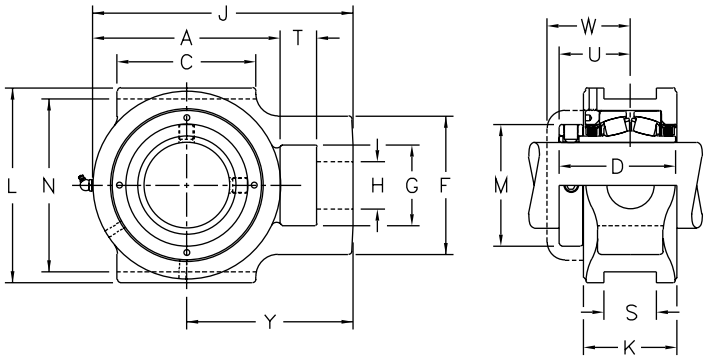
Shaft dia.		Flanged cartridge unit number	A	B		C	D	F	H	J	K	L	M	P	U	Y	Unit wt. (lbs./kg.)
mm	inches		†	Circle	Square			Bolts								◆	
	1	**FC-B22416H**	3.000	3⅝	2⁹⁄₁₆	4⅜	2⁹⁄₁₆	⅝	⁷⁄₁₆	1¼	2¹⁄₃₂	1⁹⁄₃₂	2	1⁷⁄₃₂	⅝	1⅝	4
25		*FC-B224M25H*	*76.20*	*92.08*	*65.1*	*111.1*	*65.09*	*8*	*11.1*	31.8	51.6	*32.5*	*50.8*	*13.5*	*15.9*	*41.3*	*1.6*
	1³⁄₁₆	**FC-B22419H**	3.375	4⅛	2⁵⁹⁄₆₄	5	2¹¹⁄₁₆	⅜	⁷⁄₁₆	1²⁵⁄₆₄	2⁵⁄₃₂	1⁹⁄₃₂	2³⁄₁₆	1⁷⁄₃₂	¾	1⅝	5
	1¼	**FC-B22420H**															5
30		*FC-B224M30H*	*85.72*	*104.78*	*74.2*	*127.0*	*68.26*	*10*	*11.1*	*35.3*	*54.8*	*32.5*	*55.6*	*13.5*	*19.0*	*41.3*	*2.2*
	1⁷⁄₁₆	**FC-B22423H**	3.625	4⅜	3³⁄₃₂	5¼	2⅞	⅜	½	1²⁵⁄₆₄	2⁷⁄₃₂	1¹⁵⁄₃₂	2½	2¹⁄₃₂	¾	1⅞	6
	1½	**FC-B22424H**															6
35		*FC-B224M35H*	*92.08*	*111.12*	*78.6*	*133.4*	*73.02*	*10*	*12.7*	*35.3*	*56.4*	*37.3*	*63.5*	*16.7*	*19.0*	*47.6*	*2.6*
	1⅝	**FC-B22426H**															9
	1¹¹⁄₁₆	**FC-B22427H**	4.250	5⅛	3⅝	6⅛	3⅛	⁷⁄₁₆	½	1¹⁹⁄₃₂	2¹⁵⁄₃₂	1¹⁷⁄₃₂	2¾	2¹⁄₃₂	⅞	1⅞	9
	1¾	**FC-B22428H**															9
40		*FC-B224M40H*	*107.95*	*130.18*	*92.1*	*155.6*	*79.38*	*10*	*12.7*	*40.5*	*62.7*	*38.9*	*69.8*	*16.7*	*22.2*	*47.6*	*3.8*
	1¹⁵⁄₁₆	**FC-B22431H**	4.500	5⅜	3⁵¹⁄₆₄	6⅜	3⅛	⁷⁄₁₆	⁹⁄₁₆	1¹⁹⁄₃₂	2¹⁵⁄₃₂	1¹⁷⁄₃₂	2¹⁵⁄₁₆	2¹⁄₃₂	⅞	1²⁹⁄₃₂	9
	2	**FC-B22432H**															9
45		*FC-B224M45H*	*114.30*	*136.52*	*96.4*	*161.9*	*79.38*	*10*	*14.3*	*40.5*	*62.7*	*38.9*	*74.6*	*16.7*	*22.2*	*48.4*	*4.0*
50		*FC-B224M50H*															*4.3*
	2³⁄₁₆	**FC-B22435H**	5.000	6	4¼	7⅛	3⁵⁄₁₆	½	⁹⁄₁₆	1²¹⁄₃₂	2¹⁷⁄₃₂	1²¹⁄₃₂	3⅜	2⁵⁄₃₂	1	2¹⁄₃₂	12
	2¼	**FC-B22436H**															12
55		*FC-B224M55H*	*127.00*	*152.40*	*107.9*	*181.0*	*84.14*	*12*	*14.3*	*42.1*	*64.3*	*42.1*	*85.7*	*19.8*	*25.4*	*51.6*	*5.6*
	2⁷⁄₁₆	**FC-B22439H**	5.500	6½	4¹⁹⁄₃₂	7⅝	3½	½	⅝	1¹¹⁄₁₆	2²¹⁄₃₂	1¹³⁄₁₆	3⅝	⅞	1	2⁵⁄₃₂	16
	2½	**FC-B22440H**															16
60		*FC-B224M60H*	*139.70*	*165.10*	*116.7*	*193.7*	*88.90*	*12*	*15.9*	*42.9*	*67.5*	*46.0*	*92.1*	*22.2*	*25.4*	*54.8*	*7.2*
	2¹¹⁄₁₆	**FC-B22443H**	6.375	7½	5¹⁹⁄₆₄	8¾	4	⅝	¾	2¹⁄₃₂	3⁵⁄₃₂	1³¹⁄₃₂	4³⁄₁₆	2⁷⁄₃₂	1¼	2⁵⁄₁₆	25
	2¾	FC-B22444H															25
	2¹⁵⁄₁₆	**FC-B22447H**															24
	3	**FC-B22448H**															24
65		*FC-B224M65H*	*161.92*	*190.50*	*134.5*	*222.2*	*101.60*	*16*	*19.0*	*51.6*	*80.2*	*50.0*	*106.4*	*21.4*	*31.8*	*58.7*	*11.6*
70		*FC-B224M70H*															*11.4*
75		*FC-B224M75H*															*11.0*
	3³⁄₁₆	**FC-B22451H**	7.375	8⅝	6³⁄₃₂	10¼	4⅜	¾	¹⁵⁄₁₆	1¹⁵⁄₁₆	3⅜	2⁷⁄₁₆	5	¹⁵⁄₁₆	1¼	2²⁵⁄₃₂	38
	3⁷⁄₁₆	**FC-B22455H**															37
	3½	FC-B22456H															36
80		*FC-B224M80H*	*187.32*	*219.08*	*154.8*	*260.4*	*111.12*	*20*	*23.8*	*49.2*	*85.8*	*61.9*	*127.0*	*23.8*	*31.8*	*70.6*	*17.4*
85		*FC-B224M85H*															*16.9*
	3¹¹⁄₁₆	**FC-B22459H**	8.125	9⅜	6⅝	10⅞	5¹⁄₁₆	¾	1⅛	2¹³⁄₃₂	3³¹⁄₃₂	2²¹⁄₃₂	5²⁹⁄₃₂	1¹⁄₃₂	2	3¹⁄₁₆	52
	3¹⁵⁄₁₆	**FC-B22463H**															50
	4	**FC-B22464H**															50
90		*FC-B224M90H*	*206.38*	*238.12*	*168.3*	*276.2*	*128.59*	*20*	*28.6*	*61.1*	*101.1*	*67.5*	*150.0*	*26.2*	*50.8*	*77.8*	*24.6*
100		*FC-B224M100H*															*22.8*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1" & smaller shaft size, ¼-28 UNF; for all others, ⅛" PT.
All units available with type E lip seals.
† Tolerance, +.000 –.002" (+*0.00 mm −0.05 mm)*; bore tolerance for mounting +.002" –.000" (+*0.05 mm −0.00 mm).*
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Takeup Units

T-B22400H

Cast Iron Housing
Machined Slots
Self-aligning
Spring Locking Collar
Factory Adjusted Clearance



Dimensions (inches/*mm*)

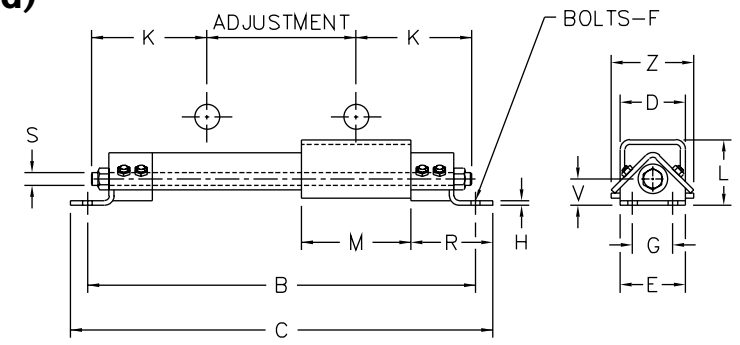
Shaft dia. mm	Shaft dia. inches	Takeup unit number	A	C	D	F	G	H	J	K	L	M	N □	S □	T	U	W ◆	Y	Unit wt. (lbs./kg.)
	1	**T-B22416H**	2 15/16	2 1/4	2 9/16	2	1 1/4	13/16	4	2 1/16	3 5/8	2	3.000	.531	5/8	1 9/16	1 29/32	2 9/16	4.4
25		*T-B224M25H*	*74.6*	*57.2*	*65.09*	*50.8*	*31.8*	*20.6*	*101.6*	*52.4*	*92.1*	*50.8*	*76.20*	*13.49*	*15.9*	*39.7*	*48.4*	*65.1*	*2.0*
	1 3/16	**T-B22419H**	3 1/4	2 1/2	2 11/16	2 5/16	1 7/16	7/8	4 7/16	2 3/16	4 1/8	2 3/16	3.500	.531	5/8	1 5/8	1 31/32	2 13/16	5.7
	1 1/4	**T-B22420H**																	5.6
30		*T-B224M30H*	*82.6*	*63.5*	*68.26*	*58.7*	*36.5*	*22.2*	*112.7*	*55.6*	*104.8*	*55.6*	*88.90*	*13.49*	*15.9*	*41.3*	*50.0*	*71.4*	*2.6*
	1 7/16	**T-B22423H**	3 1/2	2 3/4	2 7/8	2 3/8	1 7/16	7/8	4 3/4	2 1/4	4 1/8	2 1/2	3.500	.531	5/8	1 25/32	2 3/16	3	6.4
	1 1/2	**T-B22424H**																	6.4
35		*T-B224M35H*	*88.9*	*69.8*	*73.02*	*60.3*	*36.5*	*22.2*	*120.6*	*57.2*	*104.8*	*63.5*	*88.90*	*13.49*	*15.9*	*45.2*	*55.6*	*76.2*	*2.9*
	1 5/8	**T-B22426H**	4 1/8	3 1/4	3 1/8	3 3/16	1 15/16	1 1/8	5 11/16	2 1/2	4 3/4	2 3/4	4.000	.687	3/4	1 29/32	2 1/4	3 5/8	9.7
	1 11/16	**T-B22427H**																	9.5
	1 3/4	**T-B22428H**																	9.5
40		*T-B224M40H*	*104.8*	*82.6*	*79.38*	*81.0*	*49.2*	*28.6*	*144.5*	*63.5*	*120.6*	*69.8*	*101.60*	*17.46*	*19.0*	*48.4*	*57.2*	*92.1*	*4.5*
	1 15/16	**T-B22431H**	4 3/8	3 3/8	3 1/8	3 3/16	1 15/16	1 1/8	5 15/16	2 1/2	4 3/4	2 15/16	4.000	.687	3/4	1 29/32	2 9/32	3 3/4	9.9
	2	**T-B22432H**																	9.7
45		*T-B224M45H*	*111.1*	*85.7*	*79.38*	*81.0*	*49.2*	*28.6*	*150.8*	*63.5*	*120.6*	*74.6*	*101.60*	*17.46*	*19.0*	*48.4*	*57.9*	*95.2*	*4.7*
50		*T-B224M50H*																	*4.7*
	2 3/16	**T-B22435H**	5 1/16	3 3/4	3 5/16	3 3/4	2 1/4	1 1/4	7	2 9/16	5 1/4	3 3/8	4.500	.813	1	2 1/16	2 7/16	4 15/32	14.1
	2 1/4	**T-B22436H**																	14.1
55		*T-B224M55H*	*128.6*	*95.2*	*84.14*	*95.2*	*57.2*	*31.8*	*177.8*	*65.1*	*133.4*	*85.7*	*114.30*	*20.64*	*25.4*	*52.4*	*61.9*	*113.5*	*6.8*
	2 7/16	**T-B22439H**	5 9/16	4	3 1/2	4 1/8	2 1/2	1 3/8	7 13/16	2 11/16	5 7/8	3 5/8	5.125	1.063	1 1/4	2 3/16	2 9/16	5 1/32	18.0
	2 1/2	**T-B22440H**																	17.8
60		*T-B224M60H*	*141.3*	*101.6*	*88.90*	*104.8*	*63.5*	*34.9*	*198.4*	*68.3*	*149.2*	*92.1*	*130.18*	*26.99*	*31.8*	*55.6*	*65.1*	*127.8*	*8.3*
	2 11/16	**T-B22443H**	6 7/16	4 3/4	4	4 3/4	2 3/4	1 5/8	8 15/16	3 3/16	6 11/16	4 3/16	5.937	1.812	1 1/4	2 7/16	2 25/32	5 23/32	13.6
	2 3/4	T-B22444H																	13.5
	2 15/16	**T-B22447H**																	13.0
	3	**T-B22448H**																	12.9
65		*T-B224M65H*																	*6.6*
70		*T-B224M70H*	*163.5*	*120.6*	*101.60*	*120.6*	*69.8*	*41.3*	*227.0*	*81.0*	*169.9*	*106.4*	*150.81*	*46.02*	*31.8*	*61.9*	*70.6*	*145.2*	*6.4*
75		*T-B224M75H*																	*5.9*
	3 7/16	**T-B22455H**	7 3/8	5 1/2	4 3/8	4 7/8	2 7/8	1 7/8	10	3 7/16	7 13/16	5	6.812	1.812	1 9/16	2 21/32	3	6 5/16	43.5
	3 1/2	**T-B22456H**																	43.1
80		*T-B224M80H*	*187.3*	*139.7*	*111.12*	*123.8*	*73.0*	*47.6*	*254.0*	*87.3*	*198.4*	*127.0*	*173.02*	*46.02*	*39.7*	*67.5*	*76.2*	*160.3*	*20.5*
85		*T-B224M85H*																	*20.0*
	3 15/16	**T-B22463H**	8 7/8	7	5 1/16	5 1/4	3 1/8	1 7/8	11 7/8	4	9 5/8	5 29/32	8.625	2.062	1 5/8	3 1/16	3 7/16	7 7/16	77
	4	**T-B22464H**																	76
90		*T-B224M90H*	*225.4*	*177.8*	*128.59*	*133.4*	*79.4*	*47.6*	*301.6*	*101.6*	*244.5*	*150.0*	*219.08*	*52.37*	*41.3*	*77.8*	*87.3*	*188.9*	*34.9*
100		*T-B224M100H*																	*34.5*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62, D-63.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
□ Slots are machined, tolerance, +.005" –.015" (*+0.13 mm −0.38 mm).*
◆ Width dimension for closed end unit.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Spherical Roller Bearing Takeups

LHD Type (Bearing Unit Not Included)

Welded Steel Frame
Protected Screw
P-B22400FH Pillow Block
P-B22500FH Pillow Block
P-B22600FH Pillow Block



Dimensions (inches/*mm*)

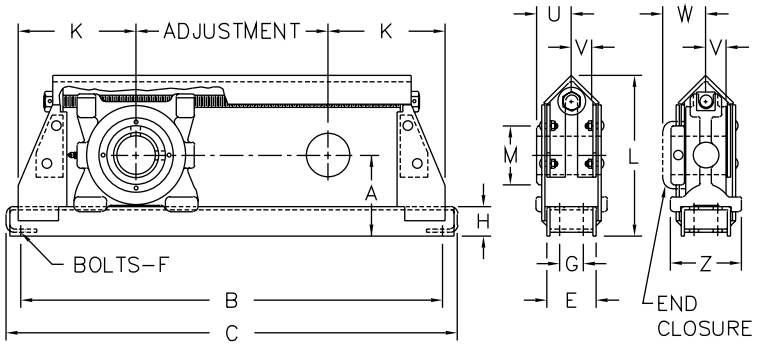
Shaft Sizes			Takeup frame number	Adjustment	B	C	D	E	F Bolts	G	H	K	L	M	R	S Rod Dia.	V	Z
P-B224 PK-B224 P-B226 PK-B226	EP-B224 EP-B225 EP-B226	P-B225																
1 3/16 thru 2 1/2	1 7/16 thru 2 1/2	1 7/16 thru 2 7/16	**LHD20-12**	12	29	31												
			LHD20-18	18	35	37												
			LHD20-24	24	41	43	4	5	5/8	2 1/2	1/4	8 1/2	5 1/4	11	4	3/4	2	6 1/4
			LHD20-30	30	47	49	101.6	127.0	16	63.5	6.4	215.9	133.4	279.4	101.6	. . .	50.8	158.8
			LHD20-36	36	53	55												
			LHD20-48	48	65	67												
2 11/16 thru 3	2 11/16 thru 3	2 11/16 thru 2 15/16	**LHD25-12**	12	32 3/4	35 1/4												
			LHD25-18	18	38 3/4	41 1/4												
			LHD25-24	24	44 3/4	47 1/4	5	5 1/2	5/8	3	3/8	10 3/8	6 1/4	13 1/4	5	1	2 9/16	7 1/8
			LHD25-30	30	50 3/4	53 1/4	127.0	139.7	16	76.2	9.5	263.5	158.8	336.6	127.0	. . .	65.1	181.0
			LHD25-36	36	56 3/4	59 1/4												
			LHD25-48	48	68 3/4	71 1/4												
3 3/16 thru 3 1/2	. . . . . .	3 7/16	LHD30-12	12	35 1/2	38 1/4												
			LHD30-18	18	41 1/2	44 1/4												
			LHD30-24	24	47 1/2	50 1/4	6	6 1/2	3/4	3	1/2	11 3/4	7	14 1/4	6	1	2 1/2	9
			LHD30-30	30	53 1/2	56 1/4	152.4	165.1	20	76.2	12.7	298.4	177.8	362.0	152.4	. . .	63.5	228.6
			LHD30-36	36	59 1/2	62 1/4												
			LHD30-48	48	71 1/2	74 1/4												
3 11/16 thru 4	3 3/16 thru 3 1/2	3 15/16 thru 4 1/2	LHD35-12	12	37 1/4	40												
			LHD35-18	18	43 1/4	46												
			LHD35-24	24	49 1/4	52	6	6 1/2	3/4	3	1/2	12 5/8	7	16	6	1 1/4	2 1/2	9
			LHD35-30	30	55 1/4	58	152.4	165.1	20	76.2	12.7	320.7	177.8	406.4	152.4	. . .	63.5	228.6
			LHD35-36	36	61 1/4	64												
			LHD35-48	48	73 1/4	76												
. . . . . .	. . . . . .	4 15/16 thru 5	LHD40-12	12	41 1/4	44												
			LHD40-18	18	47 1/4	50												
			LHD40-24	24	53 1/4	56	7	6 1/2	3/4	3	1/2	14 5/8	7	20	6	1 1/2	2 1/2	9
			LHD40-30	30	59 1/4	62	177.8	165.1	20	76.2	12.7	371.5	177.8	508.0	152.4	. . .	63.5	228.6
			LHD40-36	36	65 1/4	68												
			LHD40-48	48	77 1/4	80												
. . . . . .	. . . . . .	. . . . . .	LHD50-12	12	47	49 1/2												
			LHD50-18	18	53	55 1/2												
			LHD50-24	24	59	61 1/2	8 1/2	7	7/8	4	1/2	17 1/2	7 3/4	23 1/2	6 3/4	1 1/2	3 3/8	11 1/4
			LHD50-30	30	65	67 1/2	215.9	177.8	24	101.6	12.7	444.5	196.8	596.9	171.4	. . .	85.7	285.8
			LHD50-36	36	71	73 1/2												
			LHD50-48	48	83	85 1/2												

Bold face items are normally available from stock; please consult for availability of non-stock items.
Takeup frames can be furnished drilled to accommodate pillow block; order takeup frame drilled for " " pillow block; i.e. LHD20-12 drilled for P-B22419FH.
For load ratings, see rating table for pillow block to be used.
Additional information, page D-68, D-69.

Spherical Roller Bearing Takeups

DS-B22400H, DS-B22500H

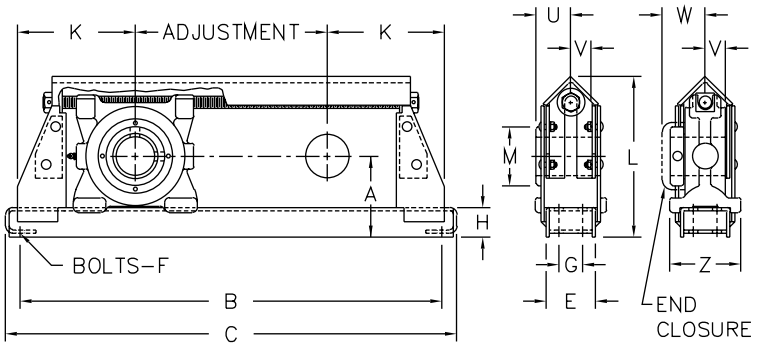
Welded Steel Frame
Removable Top
Protected Screw
Cast Iron Bearing Housing
Self-aligning
Spring Locking Collar
Factory Adjusted and Sealed
DS-B22400H or DS-B22500H Takeup Units



Dimensions (inches/*mm*)

Shaft dia. *mm*	Shaft dia. inches	Adjustment ▲	Takeup unit number	A	B	C	E	F Bolts	G	H	K	L	M	U	V	W ◆	Z	Unit wt. (lbs./kg.)
	1 15/16	12	**DS-B22431H-12**	3 15/16	26 1/2	28 1/2	3	5/8	. . .	1 3/4	7 1/4	8 1/4	2 15/16	1 29/32	1 1/4	2 9/32	4 1/8	43
		18	**DS-B22431H-18**		32 1/2	34 1/2												49
		24	**DS-B22431H-24**		38 1/2	40 1/2												54
		304.8	*DS-B224M45H-12*															*19.5*
45		*457.2*	*DS-B224M45H-18*															*22.2*
		609.6	*DS-B224M45H-24*		*673.1*	*723.9*												*24.5*
				100	*825.5*	*876.3*	*76.2*	*16*	. . .	*44.4*	*184.2*	*209.6*	*74.6*	*48.4*	*31.8*	*57.9*	*104.8*	
		304.8	*DS-B224M50H-12*		*977.9*	*1028.7*												*19.5*
50		*457.2*	*DS-B224M50H-18*															*22.2*
		609.6	*DS-B224M50H-24*															*24.5*
	2 3/16	12	**DS-B22435H-12**	4 3/16	27 1/2	29 1/2	3	5/8	. . .	1 3/4	7 3/4	8 11/16	3 3/8	2 1/16	1 9/32	2 7/16	4 1/8	49
		18	**DS-B22435H-18**		33 1/2	35 1/2												55
		24	**DS-B22435H-24**		39 1/2	41 1/2												60
		304.8	*DS-B224M55H-12*		*698.5*	*749.3*												*22.2*
55		*457.2*	*DS-B224M55H-18*	*106.4*	*850.9*	*901.7*	*76.2*	*16*	. . .	*44.4*	*196.8*	*220.7*	*85.7*	*52.4*	*32.5*	*61.9*	*104.8*	*24.9*
		609.6	*DS-B224M55H-24*		*1003.3*	*1054.1*												*27.2*
	2 7/16	12	**DS-B22439H-12**	4 3/8	28 1/2	30 1/2	3	3/4	. . .	1 3/4	8 1/4	9 1/8	3 5/8	2 3/16	1 3/8	2 9/16	4 1/8	55
		18	**DS-B22439H-18**		34 1/2	36 1/2												61
		24	**DS-B22439H-24**		40 1/2	42 1/2												66
		30	**DS-B22439H-30**		46 1/2	48 1/2												71
		304.8	*DS-B224M60H-12*		*723.9*	*774.7*												*24.9*
60		*457.2*	*DS-B224M60H-18*	*111.1*	*876.3*	*927.1*	*76.2*	*20*	. . .	*44.4*	*209.6*	*231.8*	*92.1*	*55.6*	*34.9*	*65.1*	*104.8*	*27.2*
		609.6	*DS-B224M60H-24*		*1028.7*	*1079.5*												*29.9*
		762.0	*DS-B224M60H-30*		*1181.1*	*1231.9*												*32.2*
	2 15/16	12	**DS-B22447H-12**	5 1/8	30 1/2	32 1/2	4	5/8	2	2	9 1/4	10 5/8	4 3/16	2 7/16	1 5/8	2 25/32	5 1/8	80
		18	**DS-B22447H-18**		36 1/2	38 1/2												89
		24	**DS-B22447H-24**		42 1/2	44 1/2												97
		30	**DS-B22447H-30**		48 1/2	50 1/2												05
		304.8	*DS-B224M65H-12*															
65		*457.2*	*DS-B224M65H-18*															
		609.6	*DS-B224M65H-24*															
		762.0	*DS-B224M65H-30*															
		304.8	*DS-B224M70H-12*		*774.7*	*825.5*												*36.3*
70		*457.2*	*DS-B224M70H-18*	*130.2*	*927.1*	*977.9*	*101.6*	*16*	*50.8*	*50.8*	*235.0*	*269.9*	*106.4*	*61.9*	*41.3*	*70.6*	*130.2*	*40.4*
		609.6	*DS-B224M70H-24*		*1079.5*	*1130.3*												*44.4*
		762.0	*DS-B224M70H-30*		*1231.9*	*1282.7*												*47.6*
		304.8	*DS-B224M75H-12*															
75		*457.2*	*DS-B224M75H-18*															
		609.6	*DS-B224M75H-24*															
		762.0	*DS-B224M75H-30*															

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62 through D-65.
◆ Width dimension for closed end unit.
Continued on facing page.



Dimensions (inches/*mm*)

Shaft dia. *mm*	Shaft dia. inches	Adjustment ▲	Takeup unit number	A	B	C	E	F Bolts	G	H	K	L	M	U	V	W ◆	Z	Unit wt. (lbs./kg.)
	3 7/16	12	**DS-B22455H-12**	5 5/8	32	34 1/4	4	3/4	2	2	10	11 13/16	5	2 21/32	1 23/32	3	5 5/8	107
		18	**DS-B22455H-18**		38	40 1/4												116
		24	**DS-B22455H-24**		44	46 1/4												124
		30	**DS-B22455H-30**		50	52 1/4												132
80		*304.8*	*DS-B224M80H-12*	*142.9*	*812.8*	*870.0*	*101.6*	*20*	*50.8*	*50.8*	*254.0*	*300.0*	*127.0*	*67.5*	*43.6*	*76.2*	*142.9*	*48.5*
		457.2	*DS-B224M80H-18*		*965.2*	*1022.4*												*52.6*
		609.6	*DS-B224M80H-24*		*1117.6*	*1174.8*												*56.2*
		762.0	*DS-B224M80H-30*		*1270.0*	*1327.2*												*59.9*
85		*304.8*	*DS-B224M85H-12*															
		457.2	*DS-B224M85H-18*															
		609.6	*DS-B224M85H-24*															
		762.0	*DS-B224M85H-30*															
	3 15/16	12	**DS-B22463H-12**	7	36	38 1/2	5	3/4	2 1/2	2 1/4	12	14 11/16	5 29/32	3 1/16	2	3 7/16	6 7/8	180
		18	**DS-B22463H-18**		42	44 1/2												192
		24	**DS-B22463H-24**		48	50 1/2												202
		30	**DS-B22463H-30**		54	56 1/2												212
90		*304.8*	*DS-B224M90H-12*	*177.8*	*914.4*	*977.9*	*127.0*	*20*	*63.5*	*57.2*	*304.8*	*373.1*	*150.0*	*77.8*	*50.8*	*87.3*	*174.6*	*81.6*
		457.2	*DS-B224M90H-18*		*1066.8*	*1130.3*												*87.1*
		609.6	*DS-B224M90H-24*		*1219.2*	*1282.7*												*91.6*
		762.0	*DS-B224M90H-30*		*1371.6*	*1435.1*												*96.2*
100		*304.8*	*DS-B224M100H-12*															
		457.2	*DS-B224M100H-18*															
		609.6	*DS-B224M100H-24*															
		762.0	*DS-B224M100H-30*															
	4 7/16	18	**DS-B22571H-18**○	7 1/2	42	44 1/2	5	3/4	2 1/2	2 1/4	12	15 11/16	6 1/8	3 3/8	3 3/8	3 3/4	6 7/8	238
		24	**DS-B22571H-24**○		48	50 1/2												250
		30	DS-B22571H-30○		54	56 1/2												263
110		*457.2*	*DS-B225M110H-18*○	*190.5*	*1066.8*	*1130.3*	*127.0*	*20*	*63.5*	*57.2*	*304.8*	*398.5*	*155.6*	*85.7*	*85.7*	*95.2*	*174.6*	*108.0*
		609.6	*DS-B225M110H-24*○		*1219.2*	*1282.7*												*113.4*
		762.0	*DS-B225M110H-30*○		*1371.6*	*1435.1*												*119.3*
115		*457.2*	*DS-B225M115H-18*○															
		609.6	*DS-B225M115H-24*○															
		762.0	*DS-B225M115H-30*○															
	4 15/16	18	**DS-B22579H-18**○	10	47	50 1/2	6	7/8	3	4	14 1/2	20 1/4	6 7/8	3 5/8	3 5/8	4	7 7/8	406
		24	**DS-B22579H-24**○		53	56 1/2												424
		30	**DS-B22579H-30**○		59	62 1/2												441
125		*457.2*	*DS-B225M125H-18*○	*254.0*	*1193.8*	*1282.7*	*152.4*	*24*	*76.2*	*101.6*	*368.3*	*514.4*	*174.8*	*91.9*	*91.9*	*101.6*	*200.1*	*184.2*
		609.6	*DS-B225M125H-24*○		*1346.2*	*1435.1*												*192.3*
		762.0	*DS-B225M125H-30*○		*1498.6*	*1587.5*												*200.0*

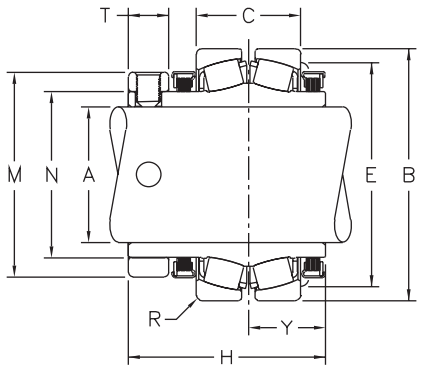
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-62 through D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
◆ Width dimension for closed end unit.
5 inch channel (Dim E) has hinged top construction
▲ Takeups with adjustment of 18" *(457.2 mm)* or more have center supporting pad welded to bottom of frame.
○ Series DS-B22500H takeups have two spring locking collars (bearing dimensions, page D-40, load rating, pages D-33, D-34, selection guide, pages D-31, D-32.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

Notes:

Replacement Spherical Roller Bearings

B22400HL

Self-aligning
Spring Locking Collar



Dimensions (inches/*mm*)

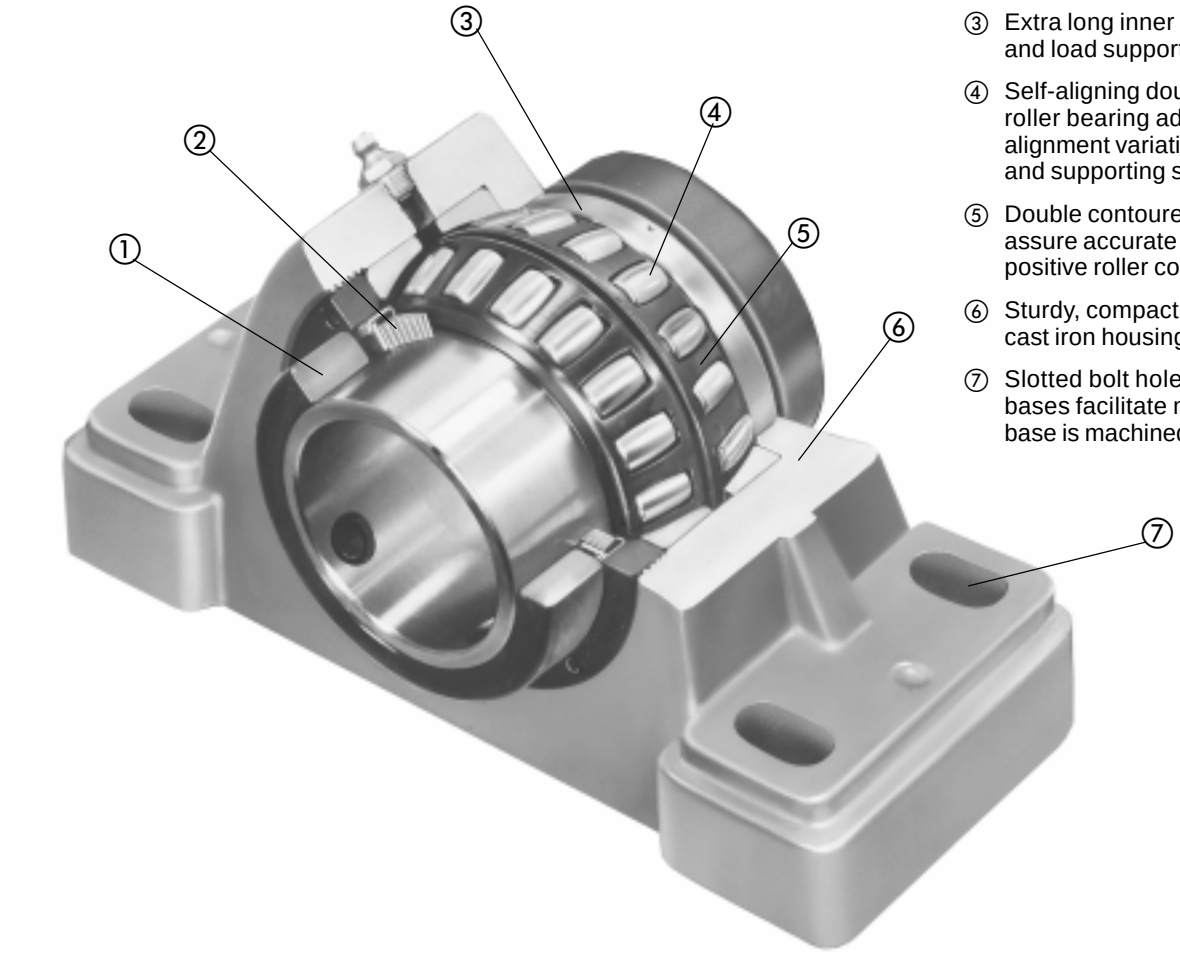
Shaft Sizes		Bearing number *	A		B +.0010" −.000" +0.025 −0.000 mm	C ±.025" ±0.64 mm ‡	E Shoulder diameter	H	M	N	R Housing fillet	T	Y	Unit wt. (lbs./kg.)
mm	inches		*mm* +0.025 −0.000	inches +.0010 −.0000										
	1	**B22416HL**		1.0000	2.3750	1.188	2	2 9/16	2	1.307	.046	1/2	1	1.3
25		*B224M25HL*	*25.000*		*60.325*	*30.18*	*50.8*	*65.09*	*50.8*	*33.20*	*1.17*	*12.7*	*25.40*	*0.6*
	1 3/16	**B22419HL**		1.1875	2.6250	1.312	2 5/16	2 11/16	2 3/16	1.532	.062	1/2	1 1/16	1.8
	1 1/4	**B22420HL**		1.2500										1.7
30		*B224M30HL*	*30.000*		*66.675*	*33.32*	*58.7*	*68.26*	*55.6*	*38.91*	*1.57*	*12.7*	*26.99*	*0.8*
	1 7/16	**B22423HL**		1.4375	2.8345	1.310	2 1/2	2 7/8	2 1/2	1.745	.062	5/8	1 3/32	2.2
	1 1/2	**B22424HL**		1.5000										2.1
35		*B224M35HL*	*35.000*		*71.996*	*33.27*	*63.5*	*73.02*	*63.5*	*44.32*	*1.57*	*15.9*	*27.78*	*1.0*
	1 1/2	**B224B24HL**		1.5000										
	1 5/8	**B22426HL**		1.6250	3.3464	1.578	2 7/8	3 1/8	2 3/4	2.027	.062	5/8	1 7/32	3.3
	1 11/16	**B22427HL**		1.6875										3.2
	1 3/4	**B22428HL**		1.7500										3.0
40		*B224M40HL*	*40.000*		*84.998*	*40.08*	*73.0*	*79.38*	*69.8*	*51.48*	*1.57*	*15.9*	*30.96*	*1.6*
	1 3/4	**B224B28HL**		1.7500										3.5
	1 15/16	**B22431HL**		1.9375	3.5433	1.526	3 3/16	3 1/8	2 15/16	2.307	.078	5/8	1 7/32	3.3
	2	**B22432HL**		2.0000										1.8
45		*B224M45HL*	*45.000*		*90.000*	*38.76*	*81.0*	*79.38*	*74.6*	*58.59*	*1.98*	*15.9*	*30.96*	*1.5*
50		*B224M50HL*	*50.000*											
	2 3/16	**B22435HL**		2.1875	3.9370	1.656	3 1/2	3 5/16	3 3/8	2.620	.062	3/4	1 1/4	4.7
	2 1/4	**B22436HL**		2.2500										4.5
55		*B224M55HL*	*55.000*		*100.000*	*42.06*	*88.9*	*84.14*	*85.7*	*66.55*	*1.57*	*19.0*	*31.75*	*2.2*
	2 1/4	**B224B36HL**		2.2500										
	2 7/16	**B22439HL**		2.4375	4.3307	1.750	3 7/8	3 1/2	3 5/8	2.901	.078	13/16	1 5/16	5.9
	2 1/2	**B22440HL**		2.5000										5.7
60		*B224M60HL*	*60.000*		*110.000*	*44.45*	*98.4*	*88.90*	*92.1*	*73.69*	*1.57*	*19.0*	*33.34*	*2.8*
	2 11/16	**B22443HL**		2.6875										10.3
	2 3/4	**B22444HL**		2.7500										10.1
	2 15/16	**B22447HL**		2.9375	5.1172	2.125	4 17/32	4	4 3/16	3.370	.078	13/16	1 9/16	9.0
	3	**B22448HL**		3.0000										8.7
65		*B224M65HL*	*65.000*											*4.8*
70		*B224M70HL*	*70.000*		*129.977*	*53.98*	*115.1*	*101.60*	*106.4*	*85.60*	*1.98*	*20.6*	*39.69*	*4.6*
75		*B224M75HL*	*75.000*											*4.1*
	3 3/16	**B22451HL**		3.1875										14.4
	3 7/16	**B22455HL**		3.4375	5.9045	2.313	5 11/32	4 3/8	5	3.975	.125	27/32	1 23/32	12.8
	3 1/2	**B22456HL**		3.5000										12.4
80		*B224M80HL*	*80.000*		*149.974*	*58.75*	*135.7*	*111.12*	*127.0*	*100.97*	*3.18*	*21.4*	*43.66*	*6.6*
85		*B224M85HL*	*85.000*											*6.1*
	3 11/16	**B22459HL**		3.6875										25.2
	3 15/16	**B22463HL**		3.9375	7.0856	2.750	6 3/8	5 1/16	5 29/32	4.561	.125	31/32	2	23.2
	4	**B22464HL**		4.0000										22.6
90		*B224M90HL*	*90.000*		*179.974*	*69.85*	*161.9*	*128.59*	*150.0*	*115.85*	*3.18*	*24.6*	*50.80*	*12.3*
100		*B224M100HL*	*100.000*											*10.5*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearings for expansion units use complete CSE-B22400H per page D-16.
For B22500 replacement bearing 4 3/16" through 5" *(110 mm through 125 mm)*, see page D-40.
* Includes bearing, two floating labyrinth seals, and one spring locking collar.
All bearings available with type E lip seals.
Selection guide, pages D-5, D-6.
Load ratings, pages D-7, D-8.
Additional information, page D-68.

‡ Use shims, threaded cover, or spacer ring to provide for adjustment. Housing must allow clearance for this adjustment on dimension C.

Series B22500
Spherical Roller Bearing Units

Series B22500 double collar mounted spherical roller bearing units will support shafts carrying substantial radial or combination radial and thrust loads. These units are adaptable for conveyors, elevators, general industrial machinery, heavier duty fans and blowers, power transmission applications, ditchers, trenchers, pavers and other applications. They differ from series B22400 units in that they have two locking collars and the pillow blocks have higher backing and longer bolt centers. Series B22500 units are easy to mount, sealed, prelubricated and do not require bearing adjustment during mounting.



① Two spring locking collars lock inner ring securely to shaft.

② Choice of two seals, floating labyrinth Type H, and spring-loaded lip Type E.

③ Extra long inner ring for high stability and load support.

④ Self-aligning double row spherical roller bearing adjusts ±2° to allow for alignment variations between shaft and supporting structure.

⑤ Double contoured retainer pockets assure accurate roller guidance and positive roller control.

⑥ Sturdy, compact one-piece high-test cast iron housing.

⑦ Slotted bolt holes in pillow block bases facilitate mounting; bottom of base is machined.

Spherical Roller Bearings

Series B22500 self-aligning double row spherical roller bearings have extra long inner rings, high LDN values and are designed to distribute the load over the symmetrical rollers, assuring positive tracking and smooth operation. The large roller complement provides high capacity for radial or combined radial-thrust loads.

Osculation clearance at the ends of the rollers compensates for shock loads and prevents destructive edge loading. These precision bearings with double contoured retainer pockets are designed to meet a broad range of application requirements.

Spring Locking Collars

The two spring locking collar design provides a secure grip of the extra long inner ring bearing to the shaft. The four set screws extend through the inner ring of the bearing and lock firmly onto the shaft. Installation is fast and simple. Correctly tightening the four set screws produces elastic strain in the spring locking collars resulting in a continuous pressure on the set screw threads and providing a positive lock.

Seals

Two standard sealing systems are available. . .each offering maximum protection for the bearing.

Type H floating labyrinth seals have multiple self-centering rings held securely in a steel carrier. Type H seals are normally furnished.

Type E spring-loaded lip seals utilize a spring to provide uniform pressure for keeping the sealing lip in contact with the inner ring. Type E seals are normally used for liquid splash environments.

Seals are interchangeable and are designed for grease lubrication.

TYPE H SEAL

TYPE E SEAL

One-piece Cast Iron Housings

Compact one-piece housings provide for strength and load support. Scientifically contoured housing design provides superior rigidity. Pillow blocks have two or four slotted bolt holes with ample space provided for drilling dowel pin holes. Cartridge units have steel housings and are finished to precision tolerances. Pillow blocks and cartridge units are available for fixed or expansion operation.

Series B22500
Spherical Roller Bearing Units

Pillow Blocks, cast iron

P-B22500H, PE-B22500H, EP-B22500H*, EPE-B22500H*
P-B22500FH, PE-B22500FH, EP-B22500FH*, EPE-B22500FH*

Self-aligning 2-bolt base pillow blocks for shaft sizes 1 7/16" through 2 15/16", and 4-bolt base pillow blocks for shaft sizes 1 15/16" through 5". Metric bores of *110, 115,* and *125 mm* available. Bearings have extra long inner ring and two spring locking collars. Units are available for fixed or expansion mounting.

Load ratings on pages D-33 and D-34.
Dimensions on page D-35.
Additional information on page D-68.

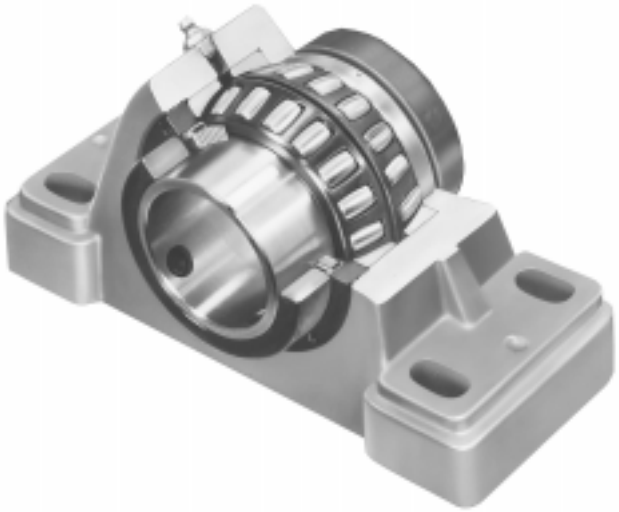
***Self-aligning Type E Interchange**

Pillow Blocks, cast steel

PK-B22500FH, PKE-B22500FH

Self-aligning 4-bolt base pillow blocks. Cast steel housing for shaft sizes 4 3/16" through 5" and *110, 115,* and *125 mm*. Bearings have extra long inner ring and two spring locking collars. Units are available for fixed or expansion mounting.

Load ratings on pages D-33 and D-34.
Dimensions on page D-14.
Additional information on page D-68.



Flanged Units, cast iron

EF-B22500H*

Self-aligning flanged units for shaft sizes, 1 7/16" through 4". Bearings have extra long inner ring and two spring locking collars.

Load ratings on pages D-33 and D-34.
Dimensions on page D-37.
Additional information on page D-68.

***Self-aligning Type E Interchange**

Cartridge Units, steel

CSE-B22500H

Self-aligning cartridge units for shaft sizes 1 7/16" through 5" and *110*, *115*, and *125 mm*. Bearings have extra long inner ring and two spring locking collars. Units are available for fixed or expansion mounting.

Load ratings on pages D-33 and D-34.
Dimensions on page D-39.
Additional information on page D-68.

Takeups, cast iron

DSH-B22500H

Self-aligning takeups for shaft sizes 1 15/16" through 3 15/16". Bearings have extra long inner ring and two spring locking collars and are mounted in a one-piece cast iron housing. Takeups have extra heavy welded steel adjustable type frames.

Load ratings on pages D-33 and D-34.
Dimensions on page D-38.
Additional information on page D-68.

Replacement Bearings

B22500HL

Self-aligning double-row spherical roller bearing with extra long inner ring and two spring locking collars for shaft sizes 1 7/16" through 5" and *110, 115,* and *125 mm*.

Load ratings on pages D-33 and D-34.
Dimensions on page D-40.
Additional information on page D-68.

To select a bearing, determine the applied radial load, the applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA Standards STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

For radial load applications only, Table 3, page D-34, can be used to select a bearing or to determine L_{10} life expectancy.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a roller bearing.

a For radial load only:

$P = F_r$

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a roller bearing from Table 2, page D-33 with a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads:

Select a trial roller bearing of the desired shaft size from Table 2, page D-33.

Calculate the ratio of thrust load F_a to the radial load F_r.

$\frac{F_a}{F_r}$

Calculate the equivalent radial load P

$$P = XF_r + YF_a$$

if $\frac{F_a}{F_r}$ is equal to or less than e, then $P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, see Table 2, page D-31.

Calculate the required C

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2.

Consult Table 2, page D-33, basic load rating. If a smaller bearing meets, or nearly meets, the required C, its life expectancy can be calculated.

Note: If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:

$$P = F_r$$

b For combined radial and thrust load:

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a$$

If $\frac{F_a}{F_r}$ is greater than e, then

$$P = X_2F_r + Y_2F_a$$

For values of e, X_1, Y_1, X_2, and Y_2, see the bearing rating Table 2, page D-33.

Step 2 Calculate the ratio of the basic load rating C to the equivalent radial load.

$$\frac{C}{P}$$

Step 3 Approximate the bearing life from Table 1.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L'_n = a_1a_2a_3L_{10}$$

where L'_n = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Table 2 • Load ratings and speed limits

Shaft diameter		Bearing size number	C_0 Static load rating		C Basic load rating		Approximate speed limit RPM ●	e	$\frac{F_a}{F_r} \leqq e$		$\frac{F_a}{F_r} > e$	
mm	inches		*newtons*	pounds	*newtons*	pounds	H and E seals		X_1	Y_1	X_2	Y_2
	1 7/16	B22523	*93 200*	20900	*64 900*	14600	2750	.44	1.00	1.54	.67	2.29
	1 11/16	B22527	*127 700*	28700	*89 800*	20200	2350	.45	1.00	1.51	.67	2.25
	1 15/16	B22531	*147 700*	33200	*94 300*	21200	2150	.40	1.00	1.68	.67	2.50
	2 2 3/16	B22532 B22535	*197 500*	44400	*117 400*	26400	1950	.40	1.00	1.68	.67	2.50
	2 7/16	B22539	*238 000*	53500	*139 700*	31400	1750	.38	1.00	1.80	.67	2.68
	2 11/16 2 15/16	B22543 B22547	*318 000*	71500	*185 900*	41800	1500	.38	1.00	1.79	.67	2.67
	3 7/16	B22555	*403 400*	90700	*226 800*	51000	1250	.38	1.00	1.77	.67	2.64
	3 15/16 4	B22563 B22564	*609 400*	137000	*351 800*	79100	1100	.36	1.00	1.88	.67	2.79
	4 3/16 4 7/16 4 1/2 *110* *115*	B22567 B22571 B22572 *B225M110* *B225M115*	*790 200*	178000	*419 400*	94300	1000	.38	1.00	1.80	.67	2.68
	4 15/16 5 *125*	B22579 B22580 *B225M125*	*944 700*	212000	*520 400*	117000	900	.37	1.00	1.83	.67	2.72

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

* Based on grease lubrication and moderate load.

Additional information, page D-68.

Table 3 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

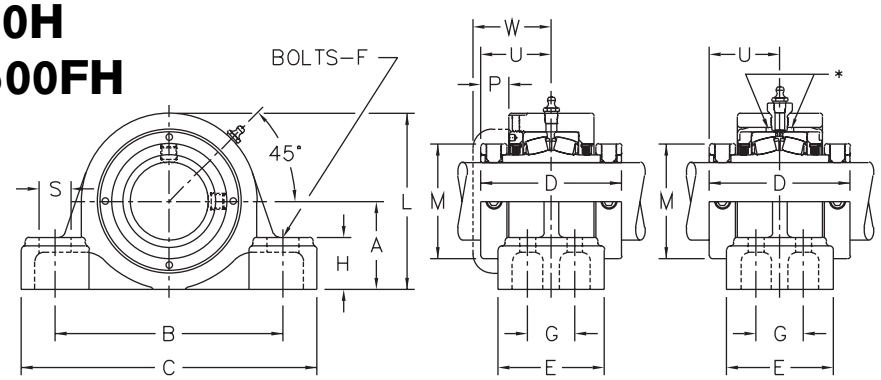
Shaft diameter mm	Shaft diameter inches	Bearing size number	L_{10} Minimum life, hours	Radial load ratings, pounds — Speed, RPM 50	100	200	300	500	700	900	1000	1200	1500	1800	2000	2500
	1 7/16	B22523	8000				3290	2820	2540	2360	2290	2170	2020	1920	1860	1740
			20000		3470	2820	2500	2140	1930	1800	1740	1640	1540	1450	1410	1320
			40000	3470	2820	2290	2020	1740	1570	1450	1410	1330	1250	1180	1140	1070
			100000	2630	2140	1740	1540	1320	1200	1100	1070	1010	950	900	872	815
	1 11/16	B22527	8000				4540	3900	3520	3270	3170	3000	2800	2650	2570	
			20000		4800	3900	3450	2960	2680	2480	2400	2280	2130	2010	1950	
			40000	4800	3900	3170	2800	2400	2180	2010	1950	1850	1730	1630	1590	
			100000	3640	2960	2400	2130	1820	1650	1530	1490	1400	1310	1240	1200	
	1 15/16	B22531	8000				4770	4100	3700	3430	3320	3140	2940	2790	2700	
			20000		5040	4100	3620	3110	2810	2600	2520	2390	2230	2110	2050	
			40000	5040	4100	3320	2940	2520	2280	2110	2050	1940	1810	1720	1670	
			100000	3830	3110	2520	2230	1910	1730	1600	1550	1480	1380	1300	1270	
	2	B22532	8000				5940	5100	4600	4280	4140	3920	3670	3470		
	2 3/16	B22535	20000		6280	5100	4510	3870	3500	3240	3140	2980	2790	2630		
			40000	6280	5100	4140	3670	3140	2840	2630	2550	2410	2260	2140		
			100000	4770	3870	3140	2790	2390	2160	2000	1940	1830	1710	1620		
	2 7/16	B22539	8000				7070	6070	5480	5090	4920	4660	4360			
			20000		7470	6070	5370	4600	4170	3860	3740	3540	3310			
			40000	7470	6070	4920	4360	3740	3380	3130	3030	2880	2690			
			100000	5670	4600	3740	3310	2840	2570	2380	2300	2190	2040			
	2 11/16	B22543	8000				9410	8070	7300	6770	6550	6200	5800			
	2 15/16	B22547	20000		9940	8070	7150	6130	5540	5140	4980	4710	4410			
			40000	9940	8070	6550	5800	4980	4500	4180	4040	3830	3580			
			100000	7550	6130	4980	4410	3780	3420	3170	3070	2910	2720			
	3 7/16	B22555	8000				11400	9850	8900	8250	8000	7580				
			20000		12100	9850	8720	7480	6770	6270	6080	5750				
			40000	12100	9850	8000	7090	6080	5500	5100	4930	4670				
			100000	9210	7480	6080	5380	4610	4170	3870	3750	3550				
	3 15/16	B22563	8000				17800	15200	13800	12800	12400					
	4	B22564	20000		18800	15200	13500	11600	10400	9730	9420					
			40000	18800	15200	12400	11000	9420	8520	7900	7650					
			100000	14200	11600	9420	8340	7160	6470	6000	5810					
	4 3/16	B22567	8000				21200	18200	16400	15200	14800					
	4 7/16	B22571	20000		22400	18200	16100	13800	12500	11600	11200					
	4 1/2	B22572	40000	22400	18200	14800	13100	11200	10100	9420	9120					
110		*B225M110*	100000	17000	13800	11200	9950	8530	7710	7150	6930					
115		*B225M115*														
	4 5/16	B22579	8000				26300	22500	20400	18900						
	5	B22580	20000		27800	22500	20000	17100	15500	14300						
125		*B225M125*	40000	27800	22500	18300	16200	13900	12600	11700						
			100000	21100	17100	13900	12300	10500	9580	8880						

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

Spherical Roller Bearing Pillow Blocks

P-B22500H, PE-B22500H
P-B22500FH, PE-B22500FH

Cast Iron Housing
2- or 4-Bolt Base
Fixed or Expansion
Self-aligning
Two Spring Locking Collars
Factory Adjusted and Sealed



Fixed **Expansion**

Dimensions (inches/*mm*)

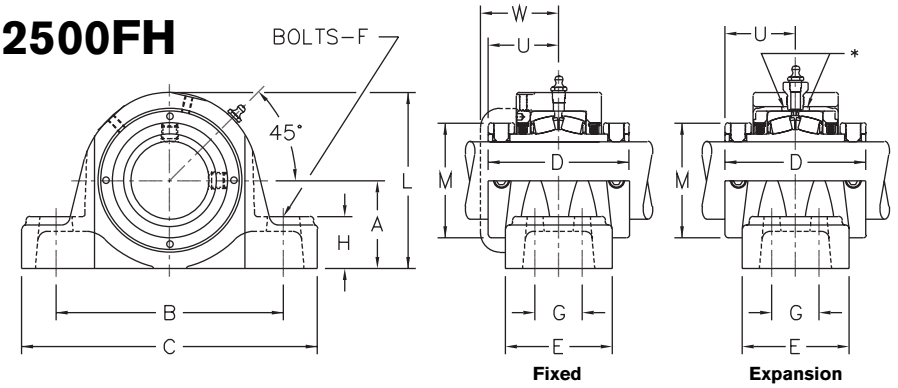
Shaft dia.		Pillow block number △		A †	B	C	D	E	F Bolts	G	H	L	M	P	S	U	W ◆	Unit wt. (lbs./kg.)
mm	inches	Fixed	Expansion															
2-bolt base																		
	1 7/16	**P-B22523H**	**PE-B22523H**	2 1/8	5 7/8	7 7/8	3 9/16	2 1/2	1/2	. . .	1 3/8	4 1/8	2 1/2	1 1/16	7/8	1 25/32	2 3/16	10
				53.98	*149.2*	*200.0*	*90.49*	*63.5*	*12*	. . .	*34.9*	*104.8*	*63.5*	*17.5*	*22.2*	*45.2*	*55.6*	–
	1 11/16	**P-B22527H**	**PE-B22527H**	2 5/16	6 1/2	8 9/16	3 13/16	2 13/16	1/2	. . .	1 1/2	4 19/32	2 3/4	23/32	7/8	1 29/32	2 1/4	12
				58.74	*165.1*	*217.5*	*96.84*	*71.4*	*12*	. . .	*38.1*	*116.7*	*69.8*	*18.2*	*22.2*	*48.4*	*57.2*	–
	1 15/16	**P-B22531H**	**PE-B22531H**	2 1/2	7	9 1/4	3 13/16	2 7/8	5/8	. . .	1 11/16	4 7/8	2 15/16	23/32	1 1/8	1 29/32	2 9/32	14
				63.50	*177.8*	*235.0*	*96.84*	*73.0*	*16*	. . .	*42.9*	*123.8*	*74.6*	*18.2*	*28.6*	*48.4*	*57.9*	–
	2	**P-B22532H**	**PE-B22532H**	2 3/4	7 1/2	9 15/16	4 1/8	3 1/8	5/8	. . .	2	5 15/32	3 3/8	25/32	1 1/8	2 1/16	2 7/16	21
	2 3/16	**P-B22535H**	**PE-B22535H**	*69.85*	*190.5*	*252.4*	*104.78*	*79.4*	*16*	. . .	*50.8*	*138.9*	*85.7*	*19.8*	*28.6*	*52.4*	*61.9*	20
	2 7/16	**P-B22539H**	**PE-B22539H**	3	8 1/4	10 3/4	4 3/8	3 3/8	3/4	. . .	2 1/8	5 7/8	3 5/8	13/16	1 1/4	2 3/16	2 9/16	24
				76.20	*209.6*	*273.0*	*111.12*	*85.7*	*20*	. . .	*54.0*	*149.2*	*92.1*	*20.6*	*31.8*	*55.6*	*65.1*	–
	2 11/16	**P-B22543H**	**PE-B22543H**	3 1/2	9 3/4	12 7/8	4 7/8	3 7/8	7/8	. . .	2 5/16	6 15/16	4 3/16	29/32	1 5/8	2 7/16	2 25/32	39
	2 15/16	**P-B22547H**	**PE-B22547H**	*88.90*	*247.6*	*327.0*	*123.82*	*98.4*	*24*	. . .	*58.7*	*176.2*	*106.4*	*23.0*	*41.3*	*61.9*	*70.6*	37
4-bolt Base																		
	1 15/16	**P-B22531FH**	**PE-B22531FH**	2 1/2	7	9	3 13/16	3 13/16	1/2	2 1/4	1 11/16	4 7/8	2 15/16	23/32	7/8	1 29/32	2 9/32	16
				63.50	*177.8*	*228.6*	*96.84*	*96.8*	*12*	*57.2*	*42.9*	*123.8*	*74.6*	*18.2*	*22.2*	*48.4*	*57.9*	–
	2	**P-B22532FH**	**PE-B22532FH**	2 3/4	7 1/2	9 15/16	4 1/8	4	5/8	2 1/4	2	5 15/32	3 3/8	25/32	1 1/8	2 1/16	2 7/16	22
	2 3/16	**P-B22535FH**	**PE-B22535FH**	*69.85*	*190.5*	*252.4*	*104.78*	*101.6*	*16*	*57.2*	*50.8*	*138.9*	*85.7*	*19.8*	*28.6*	*52.4*	*61.9*	22
	2 7/16	**P-B22539FH**	**PE-B22539FH**	3	8 1/4	10 5/8	4 3/8	4 3/8	5/8	2 5/8	2 1/8	5 7/8	3 5/8	13/16	1 1/8	2 3/16	2 9/16	26
				76.20	*209.6*	*269.9*	*111.12*	*111.1*	*16*	*66.7*	*54.0*	*149.2*	*92.1*	*20.6*	*28.6*	*55.6*	*65.1*	—
	2 11/16	**P-B22543FH**	**PE-B22543FH**	3 1/2	9 3/4	12 5/8	4 7/8	4 3/4	3/4	2 3/4	2 5/16	6 15/16	4 3/16	27/32	1 1/2	2 7/16	2 25/32	38
	2 15/16	**P-B22547FH**	**PE-B22547FH**	*88.90*	*247.6*	*320.7*	*123.82*	*120.6*	*20*	*69.8*	*58.7*	*176.2*	*106.4*	*21.4*	*38.1*	*61.9*	*70.6*	36
	3 7/16	**P-B22555FH**	**PE-B22555FH**	4	11 1/2	14 1/4	5 5/16	5	3/4	3	2 1/2	7 31/32	5	15/16	1 1/2	2 21/32	3	56
				101.60	*292.1*	*362.0*	*134.94*	*127.0*	*20*	*76.2*	*63.5*	*202.4*	*127.0*	*23.8*	*38.1*	*67.5*	*76.2*	–
	3 15/16	**P-B22563FH**	**PE-B22563FH**	4 7/16	12 1/4	15 5/8	6 1/8	5 5/8	7/8	3 3/8	2 7/8	8 13/16	5 29/32	1 1/16	1 3/4	3 1/16	3 7/16	76
	4	**P-B22564FH**	**PE-B22564FH**	*112.71*	*311.2*	*396.9*	*155.58*	*142.9*	*24*	*85.7*	*73.0*	*223.8*	*150.0*	*27.0*	*44.4*	*77.8*	*87.3*	76
	4 3/16	**P-B22567FH▲**	**PE-B22567FH▲**															92
	4 7/16	**P-B22571FH▲**	**PE-B22571FH▲**	4 3/4	13 1/2	16 1/2	6 3/4	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	1 1/8	1 3/8	3 3/8	3 3/4	88
	4 1/2	**P-B22572FH▲**	**PE-B22572FH▲**															87
110		*P-B225M110FH▲*	*PE-B225M110FH▲*	*120.65*	*342.9*	*419.1*	*171.45*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*28.6*	*34.9*	*85.7*	*95.2*	*40.7*
115		*P-B225M115FH▲*	*PE-B225M115FH▲*															*39.5*
	4 15/16	**P-B22579FH▲**	**PE-B22579FH▲**	5 1/2	15 1/2	18 1/2	7 1/4	5 3/8	7/8	2 3/4	3	10 7/8	6 7/8	1 7/32	1 1/2	3 5/8	4	129
	5	**P-B22580FH▲**	**PE-B22580FH▲**															128
125		*P-B225M125FH▲*	*PE-B225M125FH▲*	*139.70*	*393.7*	*469.9*	*184.15*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*174.6*	*31.0*	*38.1*	*92.1*	*101.6*	*58.1*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-64, D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
▲ Also available with cast steel housings. See page D-14.
△ LHD sliding base takeup can be drilled for P-B22500H pillow blocks, see page D-22.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
◆ Width dimension for closed end unit.
Selection guide, pages D-31, D-32.
Load ratings, pages D-33, D-34.
Additional information, page D-68.

Spherical Roller Bearing Pillow Blocks
EP-B22500H, EPE-B22500H
EP-B22500FH, EPE-B22500FH

Cast Iron Housing
2 or 4-Bolt Base
Fixed or Expansion
Self-aligning
Two Spring Locking Collars
Factory Adjusted and Sealed

Self-Aligning Type E Interchange



Dimensions (inches/*mm*)

Shaft dia. inches	Pillow block number △ Fixed	Pillow block number △ Expansion	A †	B min.	B max.	C	D	E	F	G	H	L	M	U	W ◆	Unit wt.
2-bolt base																
1 7/16	EP-B22523H	EPE-B22523H	1 7/8	4 3/4	6	7 3/8	3 9/16	2 1/4	1/2	. . .	1 1/8	3 7/8	2 1/2	1 25/32	2 3/16	8
			47.62	*120.6*	*152.4*	*187.3*	*90.49*	*57.2*	*12*	. . .	*28.6*	*98.4*	*63.5*	*45.2*	*55.6*	–
1 11/16	EP-B22527H	EPE-B22527H	2 1/8	5 1/2	6 1/2	7 7/8	3 13/16	2 1/2	1/2	. . .	1 1/4	4 3/8	2 3/4	1 29/32	2 1/4	12
			53.98	*139.7*	*165.1*	*200.0*	*96.84*	*63.5*	*12*	. . .	*31.8*	*111.1*	*69.8*	*48.4*	*57.2*	–
1 15/16	**EP-B22531H**	EPE-B22531H	2 1/4	6 1/16	7 1/4	8 7/8	3 13/16	2 1/2	5/8	. . .	1 5/16	4 9/16	2 15/16	1 29/32	2 9/32	13
			57.15	*154.0*	*184.2*	*225.4*	*96.84*	*63.5*	*16*	. . .	*33.3*	*115.9*	*74.6*	*48.4*	*57.9*	–
2 3/16	EP-B22535H	EPE-B22535H	2 1/2	6 9/16	8	9 5/8	4 1/8	2 9/16	5/8	. . .	1 1/2	5	3 3/8	2 1/16	2 7/16	16
			63.50	*166.7*	*203.2*	*244.5*	*104.78*	*65.1*	*16*	. . .	*38.1*	*127.0*	*85.7*	*52.4*	*61.9*	—
2 7/16	EP-B22539H	EPE-B22539H	2 3/4	6 15/16	8 3/4	10 1/2	4 3/8	2 11/16	5/8	. . .	1 5/8	5 1/2	3 5/8	2 3/16	2 9/16	18
			69.85	*176.2*	*222.2*	*266.7*	*111.12*	*68.3*	*16*	. . .	*41.3*	*139.7*	*92.1*	*55.6*	*65.1*	–
2 11/16	EP-B22543H	EPE-B22543H	3 1/8	7 13/16	9 3/4	11 11/16	4 7/8	3 13/16	3/4	. . .	1 7/8	6 5/16	4 3/16	2 7/16	2 25/32	31
2 15/16	EP-B22547H	EPE-B22547H														29
			79.38	*198.4*	*247.6*	*296.9*	*123.82*	*96.8*	*20*	. . .	*47.6*	*160.3*	*106.4*	*61.9*	*70.6*	–
3 7/16	EP-B22555H	EPE-B22555H	3 3/4	9 5/16	11 5/16	13 13/16	5 5/16	3 1/2	7/8	. . .	2 1/4	7 1/2	5	2 21/32	3	45
			96.25	*236.5*	*287.3*	*350.8*	*134.9*	*88.9*	*24*	. . .	*57.2*	*190.5*	*127.0*	*67.5*	*76.2*	–
4-bolt base																
2 7/16	EP-B22539FH	EPE-B22539FH	2 3/4	6 15/16	8 3/4	10 1/2	4 3/8	3 5/8	5/8	1 7/8	1 5/8	5 1/2	3 5/8	2 3/16	2 9/16	21
			69.85	*176.2*	*222.2*	*266.7*	*111.12*	*92.1*	*16*	*47.6*	*41.3*	*139.7*	*92.1*	*55.6*	*65.1*	–
2 11/16	EP-B22543FH	EPE-B22543FH	3 1/8	7 13/16	9 7/8	11 13/16	4 7/8	4 1/4	5/8	2 1/8	1 7/8	6 5/16	4 3/16	2 7/16	2 25/32	33
2 15/16	EP-B22547FH	EPE-B22547FH														31
			79.38	*198.4*	*247.6*	*300.0*	*123.82*	*108.0*	*16*	*54.0*	*47.6*	*160.3*	*106.4*	*61.9*	*70.6*	–
3 7/16	EP-B22555FH	EPE-B22555FH	3 3/4	9 5/16	11 7/16	13 13/16	5 5/16	4 3/4	3/4	2 3/8	2 1/4	7 1/2	5	2 21/32	3	48
			96.25	*236.5*	*290.5*	*350.8*	*134.94*	*120.6*	*20*	*60.3*	*57.2*	*190.5*	*127.0*	*67.5*	*76.2*	–
3 15/16	EP-B22563FH	EPE-B22563FH	4 1/4	11 7/8	13	15 1/4	6 1/8	4 1/2	3/4	2 1/4	2 5/8	8 1/2	5 29/32	3 1/16	3 7/16	71
4	EP-B22564FH	EPE-B22564FH														70
			107.95	*301.6*	*330.2*	*387.4*	*155.58*	*114.3*	*20*	*57.2*	*66.7*	*215.9*	*150.0*	*77.8*	*87.3*	–
4 3/16	P-B22567FH▲	PE-B22567FH▲	4 3/4	12 3/4	14 1/8	16 1/2	6 3/4	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	3 3/8	3 3/4	92
4 7/16	**P-B22571FH▲**	**PE-B22571FH▲**														88
4 1/2	**P-B22572FH▲**	PE-B22572FH▲	*120.65*	*323.9*	*358.8*	*419.1*	*171.45*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*85.7*	*95.2*	87
4 15/16	**P-B22579FH▲**	**PE-B22579FH▲**	5 1/2	14 5/16	16 1/8	18 1/2	7 1/4	5 3/8	7/8	2 3/4	3	10 7/8	6 7/8	3 5/8	4	129
5	**P-B22580FH▲**	**PE-B22580FH▲**	*139.70*	*363.6*	*409.6*	*469.9*	*184.15*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*174.6*	*92.1*	*101.6*	128

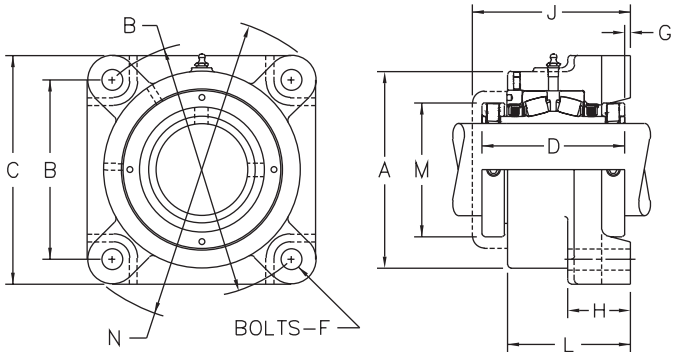
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-64, D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
▲ Also available with cast steel housings. See page D-14.
△ LHD sliding base takeup can be drilled for EP-B22500H pillow blocks, see page D-22.
† Tolerance, ±.005" *(±0.13 mm)*.
◆ Width dimension for closed end unit.
Selection guide, pages D-31, D-32.
Load ratings, pages D-33, D-34.
Additional information, page D-68.

Spherical Roller Bearing Flanged Units

EF-B22500H

Cast Iron Housing
Padded Flange
4-Bolt Mounting
Self-aligning
Two Spring Locking Collars
Factory Adjusted and Sealed

Self-Aligning Type E Interchange



Dimensions (inches/*mm*)

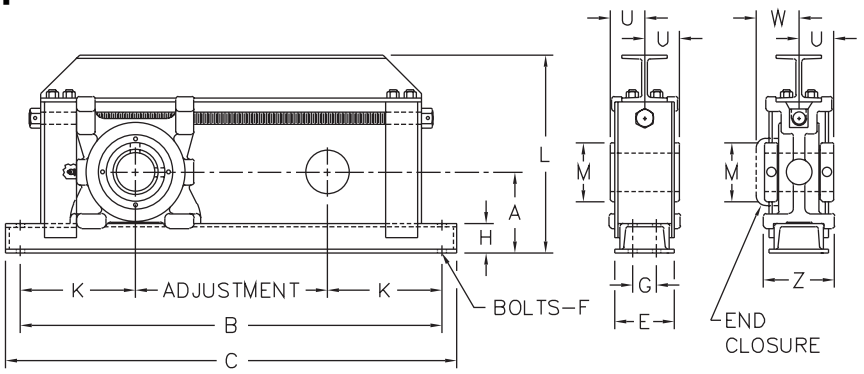
Shaft dia. inches	Flanged unit number	A	B	C	D	F	G	H	J ◆	L	M	N	Unit wt.
1 7/16	EF-B22523H	3 3/4 *95.2*	3 1/2 *88.9*	4 5/8 *117.5*	3 9/16 *90.49*	1/2 *12*	1/16 *1.6*	1 1/4 *31.8*	4 1/32 *102.4*	2 31/32 *75.4*	2 1/2 *63.5*	6 1/16 *154.0*	8 –
1 11/16	EF-B22527H	4 1/4 *108.0*	4 1/8 *104.8*	5 1/2 *139.7*	3 13/16 *96.84*	1/2 *12*	1/8 *3.2*	1 3/8 *34.9*	4 9/32 *108.7*	3 9/32 *83.3*	2 3/4 *69.8*	7 7/32 *183.4*	11 –
1 15/16	EF-B22531H	4 1/2 *114.3*	4 3/8 *111.1*	5 1/2 *139.7*	3 13/16 *96.84*	1/2 *12*	1/8 *3.2*	1 7/16 *36.5*	4 5/16 *109.5*	3 9/32 *83.3*	2 15/16 *74.6*	7 5/16 *185.7*	12 –
2 3/16	EF-B22535H	5 *127.0*	4 7/8 *123.8*	6 1/4 *158.8*	4 1/8 *104.78*	5/8 *16*	1/8 *3.2*	1 1/2 *38.1*	4 5/8 *117.5*	3 15/32 *88.1*	3 3/8 *85.7*	8 9/32 *210.3*	16 –
2 7/16	**EF-B22539H**	5 3/8 *136.5*	5 3/8 *136.5*	6 3/4 *171.4*	4 3/8 *111.12*	5/8 *16*	3/16 *4.8*	1 11/16 *42.9*	4 15/16 *125.4*	3 23/32 *94.5*	3 5/8 *92.1*	8 31/32 *227.8*	18 –
2 11/16 2 15/16	EF-B22543H EF-B22547H	6 1/4 *158.8*	6 *152.4*	7 5/8 *193.7*	4 7/8 *123.82*	3/4 *20*	3/16 *4.8*	1 13/16 *46.0*	5 13/16 *137.3*	4 7/32 *107.3*	4 3/16 *106.4*	10 1/8 *275.2*	28 26 –
3 7/16	EF-B22555H	7 3/8 *187.3*	7 *177.8*	8 3/4 *222.2*	5 5/16 *134.94*	3/4 *20*	3/32 *2.4*	1 15/16 *49.2*	5 3/4 *146.0*	4 15/32 *113.5*	5 *127.0*	11 21/32 *296.1*	44 –
3 15/16 4	EF-B22563H EF-B22564H	8 3/8 *212.7*	7 3/4 *196.8*	9 3/4 *247.6*	6 1/8 *155.58*	7/8 *24*	3/32 *2.4*	2 3/16 *55.6*	6 5/8 *168.3*	5 3/16 *131.8*	5 29/32 *150.0*	12 31/32 *329.4*	60 59 –

Please consult for availability.
For replacement bearing numbers, see pages D-64, D-65.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages D-31, D-32.
Load ratings, pages D-33, D-34.
Additional information, page D-68.

Spherical Roller Bearing Takeups

DSH-B22500H

Extra-Strength Welded Steel Frame
Cast Iron Bearing Housing
Self-aligning
Two Spring Locking Collars
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

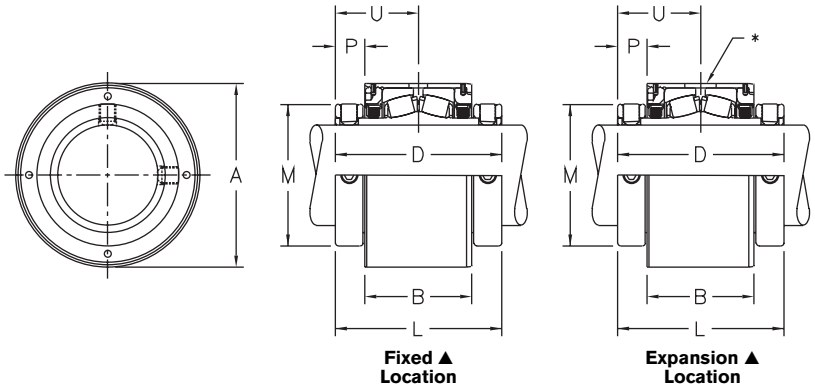
Shaft dia. inches	Adjustment	Takeup number	A	B	C	E	F Bolts	G	H	K	L	M	U	W ◆	Z	Unit wt. (lbs.)
1 15/16	12 *304.8*	**DSH-B22531H-12**	3 15/16	27½ *698.5*	29½ *749.3*	3½	5/8	. . .	1¾	7¾	10 5/8	2 15/16	1 29/32	2 9/32	4⅛	78
	18 *457.2*	**DSH-B22531H-18**	*100.0*	33½ *850.9*	35½ *901.7*	*88.9*	*16*	. . .	*44.4*	*196.8*	*269.9*	*74.6*	*48.4*	*57.9*	*104.8*	88
	24 *609.6*	**DSH-B22531H-24**		39½ *1003.3*	41½ *1054.1*											98
2 3/16	12 *304.8*	**DSH-B22535H-12**	4 7/16	27½ *698.5*	29½ *749.3*	4½	5/8	. . .	2	7¾	11¼	3⅜	2 1/16	2 7/16	5¼	83
	18 *457.2*	**DSH-B22535H-18**	*112.7*	33½ *850.9*	35½ *901.7*	*114.3*	*16*	. . .	*50.8*	*196.8*	*285.8*	*85.7*	*52.4*	*61.9*	*133.4*	93
	24 *609.6*	**DSH-B22535H-24**		39½ *1003.3*	41½ *1054.1*											103
2 7/16	12 *304.8*	**DSH-B22539H-12**	4⅝	28½ *723.9*	30½ *774.7*	4½	¾	. . .	2	8¼	12 13/16	3⅝	2 3/16	2 9/16	5¼	105
	18 *457.2*	**DSH-B22539H-18**	*117.5*	34½ *876.3*	36½ *927.1*	*114.3*	*20*	. . .	*50.8*	*209.6*	*325.4*	*92.1*	*55.6*	*65.1*	*133.4*	118
	24 *609.6*	**DSH-B22539H-24**		40½ *1028.7*	42½ *1079.5*											132
2 15/16	12 *304.8*	**DSH-B22547H-12**	5⅛	30½ *774.7*	32½ *825.5*	4½	5/8	2	2	9¼	13 15/16	4 3/16	2 7/16	2 25/32	5¼	125
	18 *457.2*	**DSH-B22547H-18**		36½ *927.1*	38½ *977.9*											140
	24 *609.6*	**DSH-B22547H-24**	*130.2*	42½ *1079.5*	44½ *1130.3*	*114.3*	*16*	*50.8*	*50.8*	*235.0*	*354.0*	*106.4*	*61.9*	*70.6*	*133.4*	155
	30 *762.0*	**DSH-B22547H-30**		48½ *1231.9*	50½ *1282.7*											170
	36 *914.4*	DSH-B22547H-36		54½ *1384.3*	56½ *1435.1*											185
3 7/16	12 *304.8*	**DSH-B22555H-12**	5⅝	32 *812.8*	34¼ *870.0*	4½	¾	2	2	10	15 1/16	5	2 21/32	3	5⅝	146
	18 *457.2*	**DSH-B22555H-18**		38 *965.2*	40¼ *1022.4*											162
	24 *609.6*	**DSH-B22555H-24**	*142.9*	44 *1117.6*	46¼ *1174.8*	*114.3*	*20*	*50.8*	*50.8*	*254.0*	*382.6*	*127.0*	*67.5*	*76.2*	*142.9*	178
	30 *762.0*	**DSH-B22555H-30**		50 *1270.0*	52¼ *1327.2*											194
	36 *914.4*	DSH-B22555H-36		56 *1422.4*	58¼ *1479.6*											210
3 15/16	12 *304.8*	**DSH-B22563H-12**	7	36 *914.4*	38½ *977.9*	5½	¾	2½	2¼	12	17 1/16	5 29/32	3 1/16	3 7/16	6⅞	260
	18 *457.2*	**DSH-B22563H-18**		42 *1066.8*	44½ *1130.3*											278
	24 *609.6*	**DSH-B22563H-24**	*177.8*	48 *1219.2*	50½ *1282.7*	*139.7*	*20*	*63x5*	*57.2*	*304.8*	*433.4*	*150.0*	*77.8*	*87.3*	*174.6*	296
	30 *762.0*	**DSH-B22563H-30**		54 *1371.6*	56½ *1435.1*											314
	36 *914.4*	DSH-B22563H-36		60 *1524.0*	62½ *1587.5*											332

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-64, D-65.
Lubrication fitting tap size, ⅛" PT.
All units available with type E lip seals.
◆ Width dimension for closed end unit.
Selection guide, pages D-31, D-32.
Load ratings, pages D-33, D-34.
Additional information, page D-68.

Spherical Roller Bearing Cartridge Units

CSE-B22500H

Steel Housing
Fixed or Expansion
Self-aligning
Two Spring Locking Collars
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

Shaft dia. *mm*	Shaft dia. inches	Cartridge unit number ▲	A	B	D	L	M	P	U	Unit wt. (lbs./kg.)
	1 7/16	**CSE-B22523H**	3.124 *79.35*	2 3/16 *55.56*	3 9/16 *90.49*	3 9/16 *90.5*	2 1/2 *63.5*	11/16 *17.5*	1 25/32 *45.2*	4.2 –
	1 11/16	**CSE-B22527H**	3.636 *92.35*	2 7/16 *61.91*	3 13/16 *96.84*	3 13/16 *96.8*	2 3/4 *69.8*	11/16 *17.5*	1 29/32 *48.4*	5.6 –
	1 15/16	**CSE-B22531H**	3.833 *97.36*	2 25/64 *60.72*	3 13/16 *96.84*	3 13/16 *96.8*	2 15/16 *74.6*	11/16 *17.5*	1 29/32 *48.4*	6.1 —
	2 2 3/16	**CSE-B22532H** **CSE-B22535H**	4.227 *107.36*	2 1/2 *63.50*	4 1/8 *104.78*	4 1/8 *104.8*	3 3/8 *85.7*	13/16 *20.6*	2 1/16 *52.4*	9.0 8.7
	2 7/16	**CSE-B22539H**	4.621 *117.37*	2 5/8 *66.68*	4 3/8 *111.12*	4 3/8 *111.1*	3 5/8 *92.1*	7/8 *22.2*	2 3/16 *55.6*	10.1 –
	2 11/16 2 15/16	**CSE-B22543H** **CSE-B22547H**	5.407 *137.34*	3 1/8 *79.38*	4 7/8 *123.82*	4 7/8 *123.8*	4 3/16 *106.4*	7/8 *22.2*	2 7/16 *61.9*	16.4 15.3
	3 7/16	**CSE-B22555H**	6.194 *157.33*	3 7/16 *87.31*	5 5/16 *134.94*	5 5/16 *134.9*	5 *127.0*	15/16 *23.8*	2 21/32 *67.5*	21.1 —
	3 15/16 4	**CSE-B22563H** **CSE-B22564H**	7.375 *187.32*	4 *101.60*	6 1/8 *155.58*	6 1/8 *155.6*	5 29/32 *150.0*	1 1/16 *27.0*	3 1/16 *77.8*	36.1 35.6
	4 3/16 4 7/16 4 1/2	**CSE-B22567H** **CSE-B22571H** **CSE-B22572H**	7.769	4 9/16	6 3/4	6 3/4	6 1/8	1 3/32	3 3/8	52.8 50.6 49.9
110 *115*		*CSE-B225M110H* *CSE-B225M115H*	*197.33*	*115.89*	*171.45*	*171.4*	*155.6*	*27.8*	*85.7*	– —
	4 15/16 5	**CSE-B22579H** **CSE-B22580H**	8.753	4 7/8	7 1/4	7 1/4	6 7/8	1 3/16	3 5/8	55.3 54.7
125		*CSE-B225M125H*	*222.33*	*123.82*	*184.15*	*184.2*	*174.6*	*30.2*	*92.1*	–

Bold face items are normally available from stock; please consult for availability of non-stock items.
Steel cartridge units cannot be disassembled. For replacement, use entire new unit.
All units available with type E lip seals.

▲ Hole for fixed location and slot for expansion location in the same housing.

† Tolerance, 4" and smaller shaft diameters, +.000" –.002" (*+0.00 mm −0.05 mm)*; Larger than 4" shaft, +.000 –.003" *(*+0.00 *mm −0.08 mm)*; Bore tolerance for mounting, +.002" –.000" *(+0.05 mm −0.00 mm).*

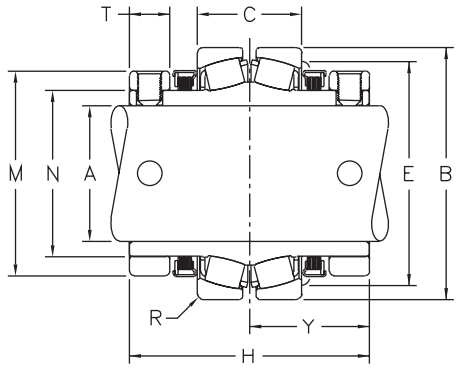
* Plug diameter .531" *(13.49 mm)*, engagement depth .125" ±.015" *(3.18 ±.038 mm)*, allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position on expansion units.

Selection guide, pages D-31, D-32.
Load ratings, pages D-31, D-34.
Additional information, page D-68.

Replacement Spherical Roller Bearings

B22500HL

Self-aligning
Two Spring Locking Collars



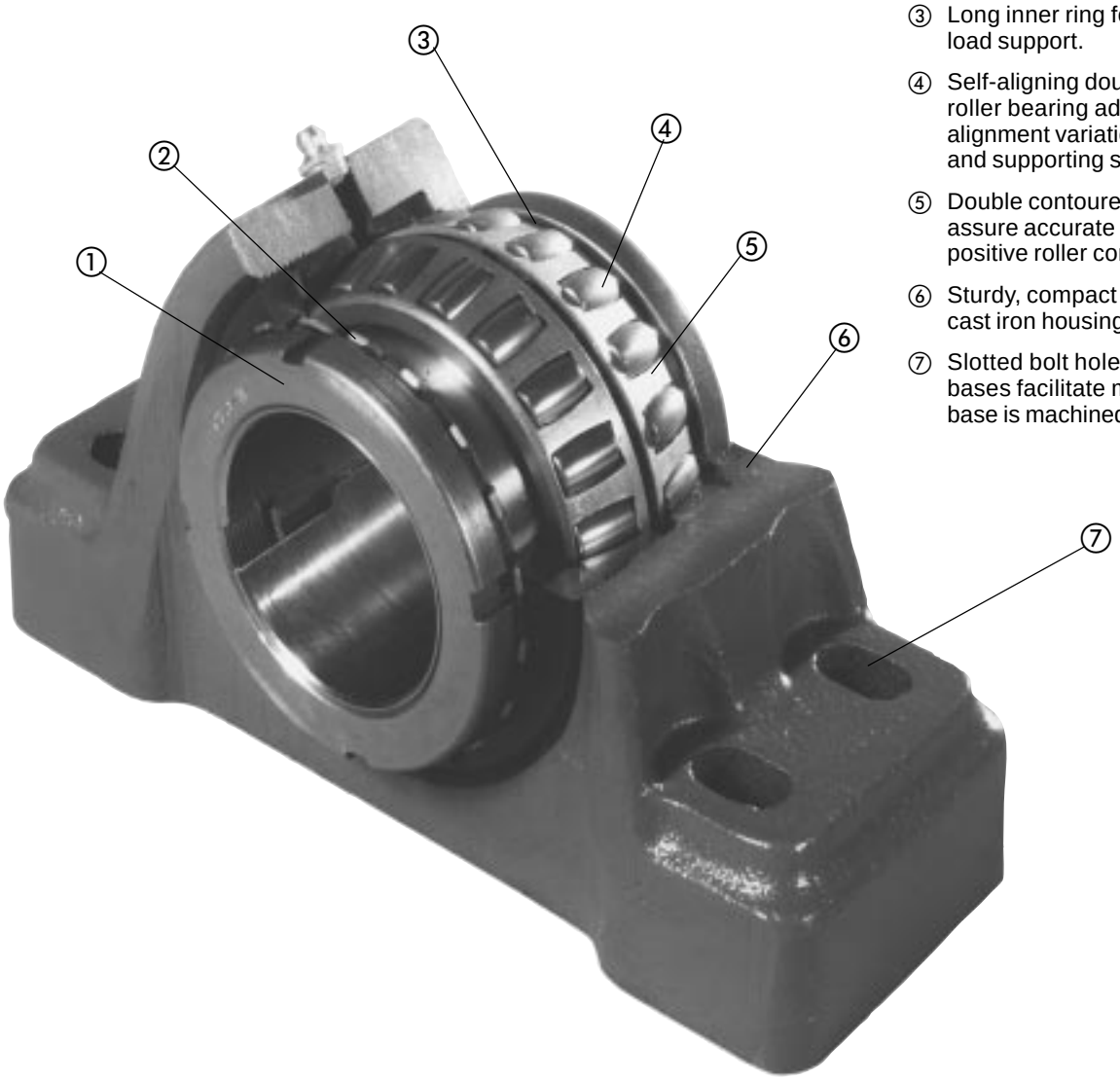
Dimensions (inches/*mm*)

Shaft Sizes *mm*	Shaft Sizes inches	Bearing number *	A *mm* +0.025 –0.000	A inches +.0010" –.0000"	B +.0010" –.000" / +0.025 –0.000 *mm*	C ±.025" / ±0.64 *mm* ‡	E Shoulder diameter	H	M	N	R Housing fillet	T	Y	Unit wt. (lbs./kg.)
	1 7/16	**B22523HL**		1.4375	2.8345 *71.996*	1.310 *33.27*	2 1/2 *63.5*	3 9/16 *90.49*	2 1/2 *63.5*	1.745 *44.32*	.062 *1.57*	5/8 *15.9*	1 25/32 *45.24*	2.4 –
	1 11/16	**B22527HL**		1.6875	3.3464 *84.998*	1.578 *40.08*	2 7/8 *73.0*	3 13/16 *96.84*	2 3/4 *69.8*	2.027 *51.48*	.062 *1.57*	5/8 *15.9*	1 29/32 *48.42*	3.5 –
	1 15/16	**B22531HL**		1.9375	3.5433 *90.000*	1.526 *38.76*	3 3/16 *81.0*	3 13/16 *96.84*	2 15/16 *74.6*	2.307 *58.59*	.078 *1.98*	5/8 *15.9*	1 29/32 *48.42*	3.8 –
	2	**B22532HL**		2.0000	3.9370	1.656	3 1/2	4 1/8	3 3/8	2.620	.062	3/4	2 1/16	6.2
	2 3/16	**B22535HL**		2.1875	*100.000*	*42.06*	*88.9*	*104.78*	*85.7*	*66.55*	*1.57*	*19.0*	*52.39*	5.5
	2 7/16	**B22539HL**		2.4375	4.3307 *110.000*	1.750 *44.45*	3 7/8 *98.4*	4 3/8 *111.12*	3 5/8 *92.1*	2.901 *73.69*	.078 *1.98*	13/16 *20.6*	2 3/16 *55.56*	7.2 –
	2 11/16	**B22543HL**		2.6875	5.1172	2.125	4 17/32	4 7/8	4 3/16	3.370	.078	13/16	2 7/16	11.6
	2 15/16	**B22547HL**		2.9375	*129.977*	*53.98*	*115.1*	*123.82*	*106.4*	*85.60*	*1.98*	*20.6*	*61.91*	10.6
	3 7/16	**B22555HL**		3.4375	5.9045 *149.974*	2.313 *58.75*	5 11/32 *135.7*	5 5/16 *134.94*	5 *127.0*	3.975 *100.97*	.125 *3.18*	27/32 *21.4*	2 21/32 *67.47*	15.7 –
	3 15/16	**B22563HL**		3.9375	7.0856	2.750	6 3/8	6 1/8	5 29/32	4.561	.125	31/32	3 1/16	26.9
	4	**B22564HL**		4.0000	*179.974*	*69.85*	*161.9*	*155.58*	*150.0*	*115.85*	*3.18*	*24.6*	*77.79*	26.4
	4 3/16	**B22567HL**		4.1875										38.2
	4 7/16	**B22571HL**		4.4375	7.4792	2.974	6 5/8	6 3/4	6 1/8	5.000	.125	1	3 3/8	36.0
	4 1/2	**B22572HL**		4.5000										35.3
110		*B225M110HL*	*110.000*		*189.972*	*75.54*	*168.3*	*171.45*	*155.6*	*127.00*	*3.18*	*25.4*	*85.72*	*16.3*
115		*B225M115HL*	*115.000*											*16.0*
	4 15/16	**B22579HL**		4.9375	8.4634	3.437	7 1/2	7 1/4	6 7/8	5.594	.125	1 3/32	3 5/8	41.6
	5	**B22580HL**		5.0000										40.7
125		*B225M125HL*	*125.000*		*214.970*	*87.30*	*190.5*	*184.15*	*174.6*	*142.08*	*3.18*	*27.8*	*92.08*	*18.4*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearings for expansion units see CSE-B22500H unit shown on page D-39.
All bearings available with type E lip seals.
* Includes bearing, two floating labyrinth seals, and two spring locking collars.
‡ Use shims, threaded cover, or spacer ring to provide for adjustment. Housing must allow clearance for this adjustment on dimension C.
Selection guide, pages D-31, D-32.
Load ratings, pages D-33, D-34.
Additional information, page D-68.

Max Mount™
Series B22600
Spherical Roller Bearing Units

Series B22600 adapter mounted spherical roller bearing units will support shafts carrying substantial radial or combination radial and thrust loads. These units are adaptable for conveyors, elevators, general industrial machinery, heavier duty fans and blowers, power transmission applications, ditchers, trenchers, pavers and other applications. They differ from series B22400 & B22500 units in that they have a tapered adapter mounting system. Series B22600 units are easy to mount, sealed, prelubricated and do not require bearing adjustment during mounting.



① Tapered adapter mounting system.

② Choice of two seals, floating labyrinth Type H, and spring-loaded lip Type E.

③ Long inner ring for high stability and load support.

④ Self-aligning double row spherical roller bearing adjusts ±2° to allow for alignment variations between shaft and supporting structure.

⑤ Double contoured retainer pockets assure accurate roller guidance and positive roller control.

⑥ Sturdy, compact one-piece high-test cast iron housing.

⑦ Slotted bolt holes in pillow block bases facilitate mounting; bottom of base is machined.

Spherical Roller Bearings

Series B22600 self-aligning double row spherical roller bearings have high LDN values and are designed to distribute the load over the symmetrical rollers, assuring positive tracking and smooth operation. The large roller complement provides high capacity for radial or combined radial-thrust loads. Osculation clearance at the ends of the rollers compensates for shock loads and prevents destructive edge loading. These precision bearings with double contoured retainer pockets are designed to meet a broad range of application requirements.

Adapter Mount

The B22600 adapter mounting provides better concentricity and shaft control, increasing service life. Where Turned, Ground and Polished shafting is the norm on collar-mounted units, the maximized mounting power of the B22600 allows for Commercial Grade Shafting compatibility (a commonly used grade of shafting due to its price and availability).

Shaft damage from set screws is eliminated with the B22600's improved mounting design. Shaft damage from the bearing inner ring fretting to the shaft (the result of a clearance or loose fit) is also eliminated. These improvements facilitate easier bearing removal, replacement bearing installation and longer shaft service life.

Seals

Two standard sealing systems are available. . .each offering maximum protection for the bearing.

Type H floating labyrinth seals have multiple self-centering rings held securely in a steel carrier. Type H seals are normally furnished.

Type E spring-loaded lip seals utilize a spring to provide uniform pressure for keeping the sealing lip in contact with the inner ring. Type E seals are normally used for liquid splash environments.

Seals are interchangeable and are designed for grease lubrication.

TYPE H SEAL

TYPE E SEAL

One-Piece Cast Iron or Cast Steel Housings

Compact one-piece housings provide for strength and load support. Scientifically contoured housing design provides superior rigidity. Cast iron or cast steel pillow blocks have two or four slotted bolt holes with ample space provided for drilling dowel pin holes. Flanged and flanged cartridge units have drilled mounting holes and machined mounting surfaces for maximum stability. Cartridge units have steel housings and are finished to precision tolerances. Takeup units have machined slots for smooth, precise operation. Pillow blocks, flanged, and cartridge units are available for fixed or expansion operation.

Max Mount™
Series B22600
Spherical Roller Bearing Units

Pillow Blocks, cast iron

EP-B22600H*, EPE-B22600H*, EP-B22600FH*, EPE-B22600FH*
P-B22600H, PE-B22600H, P-B22600FH, PE-B22600FH

Self-aligning 2-bolt base pillow blocks for shaft sizes 1 7/16" through 3 15/16" and 4-bolt base pillow blocks for shaft sizes 1 15/16" through 4 15/16". Units are available for fixed or expansion mounting.

Load ratings on pages D-47 and D-48.
Dimensions on pages D-49 through D-52.
Additional information on page D-69.

***Self-aligning Type E Interchange**

Pillow Blocks, cast steel

PK-B22600H, PKE-B22600H, PK-B22600FH, PKE-B22600FH

Self-aligning 2-bolt base pillow blocks for shaft sizes 1 7/16" through 3 15/16", 4-bolt base pillow blocks for shaft sizes 1 15/16" through 4 15/16". Units are available for fixed or expansion mounting.

Load ratings on pages D-47 and D-48.
Dimensions on pages D-53 and D-54.
Additional information on page D-69.

Flanged Units, cast iron

EF-B22600H,* FB-B22600H
F-B22600H, FE-B22600H

Self-aligning flanged units for shaft sizes 1 7/16" through 3 15/16". Units are available for fixed or expansion mounting.

Load ratings on pages D-47 and D-48.
Dimensions on pages D-56 through D-58.
Additional information on page D-69.

***Self-aligning Type E Interchange**

Flanged Cartridge Units, cast iron

FC-B22600H*

Self-aligning flanged cartridge units for shaft sizes 1 7/16" through 3 15/16". Units are available for fixed mounting.

Load ratings on pages D-47 and D-48.
Dimensions on page D-59.
Additional information on page D-69.

***Self-aligning Type E Interchange**

Cartridge Units, steel

CSE-B22600H

Self-aligning cartridge units. Steel housings for shaft sizes 1 7/16" through 3 15/16". Steel cartridge units are available for fixed or expansion mounting.

Load ratings on pages D-47 and D-48.
Dimensions on pages D-55.
Additional information on page D-69.

Takeup Units, cast iron

T-B22600H

Self-aligning units for takeup applications with shaft sizes 1 7/16" through 3 15/16". Fixed units without frames, guides, or adjusting screws.

Load ratings on pages D-47 and D-48.
Dimensions on page D-60.
Additional information on page D-69.

Replacement Bearings

B22600HL

Self-aligning double row spherical roller bearings with adapter assembly for shaft sizes 1 7/16" through 4 15/16".

Load ratings on pages D-47 and D-48.
Dimensions on page D-61.
Additional information on page D-69.

Selection
Max Mount™ Series B22600

To select a bearing, determine the applied radial load, the applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA Standards STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

For radial load applications only, Table 3, page D-48, can be used to select a bearing or to determine L_{10} life expectancy.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a roller bearing.

a For radial load only:

$P = F_r$

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a roller bearing from Table 2, page D-47 with a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads:

Select a trial roller bearing of the desired shaft size from Table 2, page D-47.

Calculate the ratio of thrust load F_a to the radial load F_r.

$\frac{F_a}{F_r}$

Calculate the equivalent radial load P

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then $P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, see Table 2, page D-47.

Calculate the required C

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2.

Consult Table 2, page D-47, basic load rating. If a smaller bearing meets, or nearly meets, the required C, its life expectancy can be calculated.

Note: If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

Max Mount™ Series B22600

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:

$P = F_r$

b For combined radial and thrust load:

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a$$

If $\frac{F_a}{F_r}$ is greater than e, then

$$P = X_2F_r + Y_2F_a$$

For values of e, X_1, Y_1, X_2, and Y_2, see Table 2, page D-47.

Step 2 Calculate the ratio of the basic load rating C to the equivalent radial load.

$\frac{C}{P}$

Step 3 Approximate the bearing life from Table 1.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L'_n = a_1a_2a_3L_{10}$$

where L'_n = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Load Ratings
Max Mount™ Series B22600

Table 2 • Load ratings and speed limits

Shaft diameter inches	Bearing size number	C_0 Static load rating		C Basic load rating		Approximate speed limit RPM ●	e	$\frac{F_a}{F_r} \leqq e$		$\frac{F_a}{F_r} > e$	
		newtons	pounds	*newtons*	pounds	H and E seals		X_1	Y_1	X_2	Y_2
1 7/16	B22623	*93 200*	20900	*64 900*	14600	2750	.44	1.00	1.54	.67	2.29
1 15/16	B22631	*147 700*	33200	*94 300*	21200	2150	.40	1.00	1.68	.67	2.50
2 3/16	B22635	*197 500*	44400	*117 400*	26400	1950	.40	1.00	1.68	.67	2.50
2 7/16	B22639	*238 000*	53500	*139 700*	31400	1750	.38	1.00	1.80	.67	2.68
2 11/16 2 15/16	B22643 B22647	*318 000*	71500	*185 900*	41800	1500	.38	1.00	1.79	.67	2.67
3 7/16	B22655	*403 400*	90700	*226 800*	51000	1250	.38	1.00	1.77	.67	2.64
3 15/16	B22663	*609 400*	137000	*351 800*	79100	1100	.36	1.00	1.88	.67	2.79
4 7/16	B22671	*790 200*	178000	*419 400*	94300	1000	.38	1.00	1.80	.67	2.68
4 15/16	B22679	*944 700*	212000	*520 400*	117000	900	.37	1.00	1.83	.67	2.72

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.
For vertical shift application, consult Link-Belt Bearing Division, Rexnord Corp.
● Based on grease lubrication and moderate load.
Additional information, page D-69.

Load Ratings
Max Mount™
Series B22600

Table 3 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

Shaft diameter inches	Bearing size number	L_{10} Minimum life, hours	Radial load ratings, pounds														
			Speed, RPM														
			50	100	200	300	500	700	900	1000	1200	1500	1800	2000	2500	3000	3500
1 7/16	B22623	8000	....	....	....	3290	2820	2540	2360	2290	2170	2020	1920	1860	1740		
		20000	....	3470	2820	2500	2140	1930	1800	1740	1640	1540	1450	1410	1320		
		40000	3470	2820	2290	2020	1740	1570	1450	1410	1330	1250	1180	1140	1070		
		100000	2630	2140	1740	1540	1320	1200	1100	1070	1010	950	900	872	815		
1 15/16	B22631	8000	....	....	....	4770	4100	3700	3430	3320	3140	2940	2790	2700			
		20000	....	5040	4100	3620	3110	2810	2600	2520	2390	2230	2110	2050			
		40000	5040	4100	3320	2940	2520	2280	2110	2050	1940	1810	1720	1670			
		100000	3830	3110	2520	2230	1910	1730	1600	1550	1480	1380	1300	1270			
2 3/16	B22635	8000	....	....	....	5940	5100	4600	4280	4140	3920	3670	3470				
		20000	....	6280	5100	4510	3870	3500	3240	3140	2980	2790	2630				
		40000	6280	5100	4140	3670	3140	2840	2630	2550	2410	2260	2140				
		100000	4770	3870	3140	2790	2390	2160	2000	1940	1830	1710	1620				
2 7/16	B22639	8000	....	....	....	7070	6070	5480	5090	4920	4660	4360					
		20000	....	7470	6070	5370	4600	4170	3860	3740	3540	3310					
		40000	7470	6070	4920	4360	3740	3380	3130	3030	2880	2690					
		100000	5670	4600	3740	3310	2840	2570	2380	2300	2190	2040					
2 11/16	B22643	8000	....	....	....	9410	8070	7300	6770	6550	6200	5800					
2 15/16	B22647	20000	....	9940	8070	7150	6130	5540	5140	4980	4710	4410					
		40000	9940	8070	6550	5800	4980	4500	4180	4040	3830	3580					
		100000	7550	6130	4980	4410	3780	3420	3170	3070	2910	2720					
3 7/16	B22655	8000	....	....	....	11400	9850	8900	8250	8000	7580						
		20000	....	12100	9850	8720	7480	6770	6270	6080	5750						
		40000	12100	9850	8000	7090	6080	5500	5100	4930	4670						
		100000	9210	7480	6080	5380	4610	4170	3870	3750	3550						
3 15/16	B22663	8000	....	....	....	17800	15200	13800	12800	12400							
		20000	....	18800	15200	13500	11600	10400	9730	9420							
		40000	18800	15200	12400	11000	9420	8520	7900	7650							
		100000	14200	11600	9420	8340	7160	6470	6000	5810							
	4 7/16	8000	....	....	....	21200	18200	16400	15200	14800							
		20000	....	....	22400	18200	15100	13800	12500	11600	11200						
	B22671	40000		40000	22400	18200	14800	13100	11200	10100	9420	9120					
		100000			100000	17000	13800	11200	9950	8530	7710	7150	6930				
	4 5/16	8000	....	....	....	26300	22500	20400	18900								
		20000	....	....	27800	22500	20000	17100	15500	14300							
	B22679	40000		40000	27800	22500	18300	16200	13900	12600	11700						
		100000			100000	2100	17100	13900	12300	10500	9580	8880					

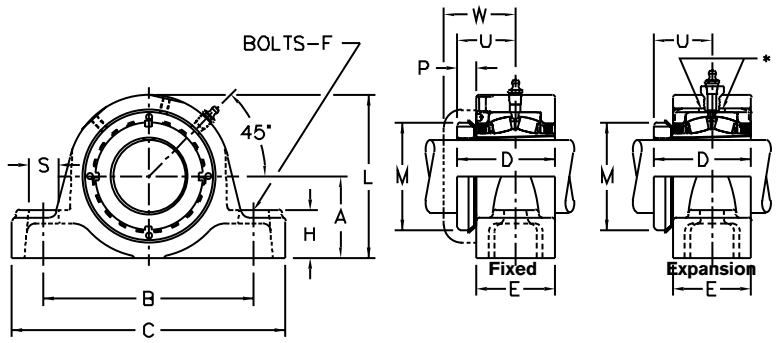
If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

Spherical Roller Bearing Pillow Blocks

Max Mount™

P-B22600H, PE-B22600H

Cast Iron Housing
2-bolt Base
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

Shaft dia. inches	Pillow block number△ Fixed	Pillow block number△ Expansion	A †	B	C	D ●	E	F Bolts	H ■	L Fixed	L Expansion	M	P ●	S	U ●	W ◆	Unit wt. (lbs./kg.)
1 7/16	**P-B22623H**	**PE-B22623H**	1 7/8 *47.62*	5 *127.0*	6 7/8 *174.6*	2.708 *68.78*	2 1/4 *57.2*	1/2 *12*	1 3/16 *30.2*	3 11/16 *93.7*	3 7/8 *98.4*	2 1/4 *57.2*	9/16 *14.3*	13/16 *20.6*	1 43/64 *42.5*	2 3/16 *55.6*	7 *3.2*
1 15/16	**P-B22631H**	**PE-B22631H**	2 1/4 *57.15*	6 1/4 *158.8*	8 3/8 *212.7*	3.075 *78.10*	2 1/2 *63.5*	5/8 *16*	1 3/8 *34.9*	4 9/16 *115.9*	4 9/16 *115.9*	2 31/32 *75.4*	43/64 *17.1*	15/16 *23.8*	1 55/64 *47.2*	2 9/32 *57.9*	12 *5.4*
2 3/16	**P-B22635H**	**PE-B22635H**	2 1/2 *63.50*	6 3/4 *171.4*	8 7/8 *225.4*	3.159 *80.24*	2 9/16 *65.1*	5/8 *16*	1 5/8 *41.3*	5 *127.0*	5 *127.0*	3 5/32 *80.2*	21/32 *16.7*	15/16 *23.8*	1 9/32 *30.7*	2 7/16 *61.9*	14 *6.4*
2 7/16	**P-B22639H**	**PE-B22639H**	2 3/4 *69.85*	7 1/8 *181.0*	9 1/4 *235.0*	3.362 *85.39*	2 11/16 *68.3*	5/8 *16*	1 5/8 *41.3*	5 1/2 *139.7*	5 1/2 *139.7*	3 5/8 *92.1*	43/64 *17.1*	15/16 *23.8*	2 3/64 *52.0*	2 9/16 *65.1*	17 *7.7*
2 11/16 2 15/16	**P-B22643H** **P-B22647H**	**PE-B22643H** **PE-B22647H**	3 1/4 *82.55*	8 1/8 *206.4*	10 7/16 *265.1*	3.863 *98.12*	3 3/16 *81.0*	3/4 *20*	2 *57.2*	6 7/16 *163.5*	6 7/16 *163.5*	4 5/32 *105.6*	3/4 *19.1*	1 1/16 *27.0*	2 19/64 *58.3*	2 25/32 *70.6*	29 27 *13.2* *12.2*
3 7/16	**P-B22655H**	**PE-B22655H**	3 3/4 *95.25*	10 *254.0*	13 *330.2*	4.306 *109.37*	3 7/16 *87.3*	7/8 *24*	2 1/4 *57.2*	7 1/2 *190.5*	7 1/2 *190.5*	4 15/16 *125.4*	7/8 *22.2*	1 5/8 *41.3*	2 9/16 *65.1*	3 *76.2*	42 *19.1*
3 15/16	**P-B22663H**	**PE-B22663H**	4 1/4 *107.95*	11 3/4 *298.4*	15 1/4 *387.4*	4.944 *125.58*	4 *101.6*	1 *24*	2 5/8 *66.7*	8 1/2 *215.9*	8 1/2 *215.9*	5 7/16 *138.1*	15/16 *23.8*	2 1/4 *57.2*	2 15/16 *74.6*	3 7/16 *87.3*	59 *26.9*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size, 1/8" PT.
with type E lip seals.
Selection guide, page D-45, D4-6.
Load ratings, pages D-47, D-48. All units available
Additional information, page D-69.

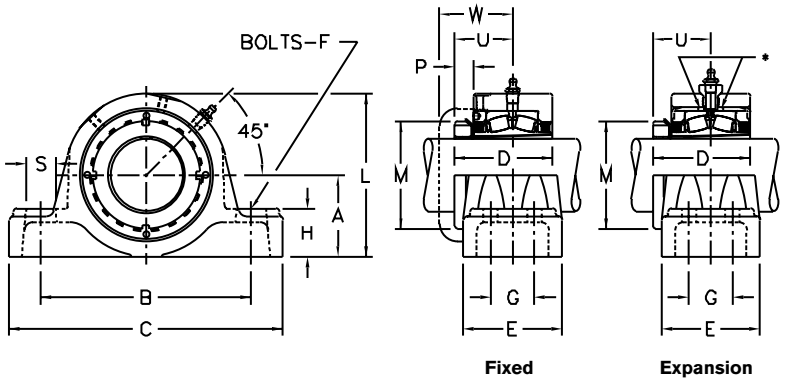
* Expansion unit allows axial movement of 3/16" (4.8 mm) in either direction from centered position shown.
† Tolerance, ±.005" (±0.13 mm).
■ Dimension H for PE-B22639H is 1 3/4"; Dimension H for PE-B22643H thru PE-B22647H is 2 1/4".
◆ Width dimension for closed end unit.
△ LHD Sliding Base Takeup can be drilled for P-B22600H pillow blocks, see page D-22
● Dimensions based on unmounted condition.

Spherical Roller Bearing Pillow Blocks

Max Mount™

P-B24600FH, PE-B22600FH

Cast Iron Housing
4-bolt Base
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Fixed **Expansion**

Dimensions (inches/*mm*)

Shaft dia. inches	Pillow block number		A †	B	C	D ●	E	F Bolts	G	H	L	M	P ●	S	U ●	W ◆	Unit wt. (lbs./kg.)
Fixed		Expansion															
1 15/16	**P-B22631FH**	PE-B22631FH	2 1/4	6 1/4	8 3/8	3.075	3 3/16	1/2	1 19/32	1 3/8	4 9/16	2 31/32	4 3/64	1 3/16	1 55/64	2 9/32	13
			57.15	*158.8*	*212.7*	*78.10*	*81.0*	*12*	*40.5*	*34.9*	*115.9*	*75.4*	*17.1*	*20.6*	*47.2*	*57.9*	*5.9*
2 3/16	**P-B22635FH**	PE-B22635FH	2 1/2	6 3/4	8 7/8	3.159	3 1/4	1/2	1 11/16	1 5/8	5	3 5/32	2 1/32	1 3/16	1 9/32	2 7/16	15
			63.50	*171.4*	*225.4*	*80.24*	*82.6*	*12*	*42.9*	*41.3*	*127.0*	*80.2*	*16.7*	*20.6*	*30.7*	*61.9*	*6.8*
2 7/16	P-B22639FH	PE-B22639FH	2 3/4	7 1/8	9 1/4	3.362	3 3/8	1/2	1 3/4	1 3/4	5 1/2	3 5/8	4 3/64	1 3/16	2 3/64	2 9/16	19
			69.85	*181.0*	*235.0*	*85.39*	*85.7*	*12*	*44.4*	*44.4*	*139.7*	*92.1*	*17.1*	*20.6*	*52.0*	*65.1*	*8.6*
2 11/16	P-B22643FH	PE-B22643FH	3 1/4	8 1/8	10 7/16	3.863	3 3/4	5/8	1 7/8	2 1/4	6 7/16	4 5/32	3/4	1 5/16	2 19/64	2 25/32	30
2 15/16	P-B22647FH	PE-B22647FH															29
			82.55	*206.4*	*265.1*	*98.12*	*95.2*	*16*	*47.6*	*57.2*	*163.5*	*105.6*	*19.1*	*23.8*	*58.3*	*70.6*	*13.6* *13.2*
3 7/16	P-B22655FH	PE-B22655FH	3 3/4	10	13	4.306	4 1/8	3/4	2	2 1/4	7 1/2	4 15/16	7/8	1 1/2	2 9/16	3	43
			95.25	*254.0*	*330.2*	*109.37*	*104.8*	*20*	*50.8*	*57.2*	*190.5*	*125.4*	*22.2*	*38.1*	*65.1*	*76.2*	*19.5*
3 15/16	P-B22663FH	PE-B22663FH	4 1/4	12 1/2	15 1/4	4.944	4 1/2	3/4	2 1/4	2 5/8	8 1/2	5 7/16	1 5/16	1 1/4	2 15/16	3 7/16	67
			107.95	*317.5*	*387.4*	*125.58*	*114.3*	*20*	*57.2*	*66.7*	*215.9*	*138.1*	*23.8*	*31.8*	*74.6*	*87.3*	*30.3*
4 7/16	**P-B22671FH**	**PE-B22671FH**	4 3/4	13 1/2	16 1/2	5.534	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	1 3/32	1 3/8	3 1/32	3 3/4	88
			120.65	*342.9*	*419.1*	*140.56*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*27.8*	*34.9*	*84.9*	*95.2*	*39.9*
4 15/16	**P-B22679FH**	**PE-B22679FH**	5 1/2	15 1/2	18 1/2	6.056	5 3/8	7/8	2 3/4	3	10 7/8	6 3/4	1 3/16	1 1/2	3 21/32	4	128
			139.70	*393.7*	*469.9*	*153.82*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*171.4*	*30.2*	*38.1*	*92.9*	*101.6*	*58.1*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66 through D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

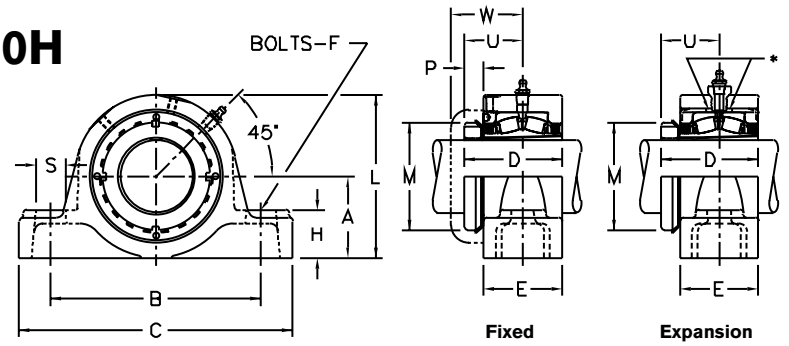
Spherical Roller Bearing Pillow Blocks

Max Mount™

EP-B22600H, EPE-B22600H

Cast Iron Housing
2-Bolt Base
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed

Self-Aligning Type E Interchange



Dimensions (inches/*mm*)

Shaft dia. inches	Pillow block number△ Fixed	Pillow block number△ Expansion	A †	B min.	B max.	C	D ●	E	F Bolts	H	L	M	P ●	U ●	W ◆	Unit wt. (lbs./kg.)
1 7/16	EP-B22623H	EPE-B22623H	1 7/8 *47.62*	4 3/4 *120.6*	6 *152.4*	7 3/8 *187.3*	2.708 *68.78*	2 1/4 *57.2*	1/2 *12*	1 1/8 *28.6*	3 7/8 *98.4*	2 1/4 *57.2*	9/16 *14.3*	1 43/64 *42.5*	2 3/16 *55.6*	8 *3.1*
1 15/16	EP-B22631H	EPE-B22631H	2 1/4 *57.15*	6 1/16 *154.0*	7 1/4 *184.2*	8 7/8 *225.4*	3.075 *78.10*	2 1/2 *63.5*	5/8 *16*	1 5/16 *33.3*	4 9/16 *115.9*	2 31/32 *75.4*	43/64 *17.1*	1 55/64 *47.2*	2 9/32 *57.9*	12 *5.5*
2 3/16	EP-B22635H	EPE-B22635H	2 1/2 *63.50*	6 9/16 *166.7*	8 *203.2*	9 5/8 *244.5*	3.159 *80.24*	2 9/16 *65.1*	5/8 *16*	1 1/2 *38.1*	5 *127.0*	3 5/32 *80.2*	21/32 *16.7*	1 9/32 *30.7*	2 7/16 *61.9*	15 *6.8*
2 7/16	EP-B22639H	EPE-B22639H	2 3/4 *69.85*	6 15/16 *176.2*	8 3/4 *222.2*	10 1/2 *266.7*	3.362 *85.39*	2 11/16 *68.3*	5/8 *16*	1 5/8 *41.3*	5 1/2 *139.7*	3 5/8 *92.1*	43/64 *17.1*	2 3/64 *52.0*	2 9/16 *65.1*	17 *7.7*
2 11/16 2 15/16	EP-B22643H EP-B22647H	EPE-B22643H EPE-B22647H	3 1/8 *79.38*	7 13/16 *198.4*	9 3/4 *247.6*	11 13/16 *300.0*	3.863 *98.12*	3 3/16 *81.0*	3/4 *20*	1 7/8 *47.6*	6 5/16 *160.3*	4 5/32 *105.6*	3/4 *19.1*	2 19/64 *58.3*	2 25/32 *70.6*	29 27 *13.3* *12.2*
3 7/16	EP-B22655H	EPE-B22655H	3 3/4 *95.25*	9 5/16 *236.5*	11 5/16 *287.3*	13 13/16 *350.8*	4.306 *109.37*	3 1/2 *88.9*	7/8 *24*	2 1/4 *57.2*	7 1/2 *190.5*	4 15/16 *125.4*	7/8 *22.2*	2 9/16 *65.1*	3 *76.2*	43 *19.5*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
† Tolerance, ±.005" *(±0.13 mm)*.
△ LHD Sliding Base Takeup can be drilled for P-B22600H pillow blocks, see page D-22.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

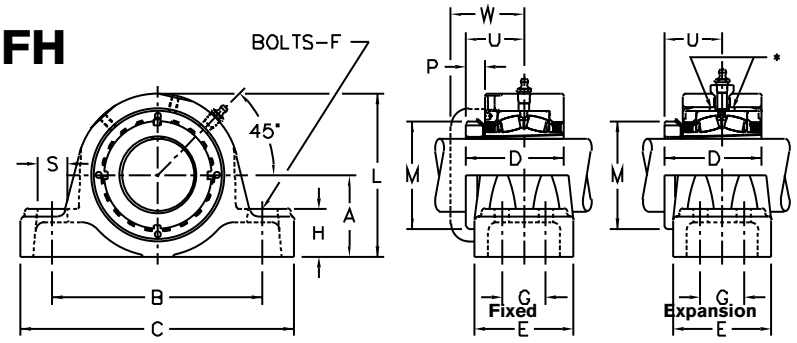
Spherical Roller Bearing Pillow Blocks

Max Mount™

EP-B22600FH, EPE-B22600FH

Cast Iron Housing
4-Bolt Base
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed

Self-Aligning Type E Interchange



Dimensions (inches/*mm*)

Shaft dia. inches	Pillow block number Fixed	Pillow block number Expansion	A †	B min.	B max.	C	D ●	E	F Bolts	G	H	L	M	P ●	U ●	W ◆	Unit wt. (lbs./kg.)
2 7/16	EP-B22639FH	EPE-B22639FH	2 3/4	6 15/16	8 3/4	10 1/2	3.362	3 5/8	5/8	1 7/8	1 5/8	5 1/2	3 5/8	43/64	2 3/64	2 9/16	20
			69.85	*176.2*	*222.2*	*266.7*	*85.39*	*92.1*	*16*	*47.6*	*41.3*	*139.7*	*92.1*	*17.1*	*52.0*	*65.1*	*9.1*
2 11/16	EP-B22643FH	EPE-B22643FH	3 1/8	7 13/16	9 7/8	11 13/16	3.863	4 1/4	5/8	2 1/8	1 7/8	6 5/16	4 5/32	3/4	2 19/64	2 25/32	31
2 15/16	EP-B22647FH	EPE-B22647FH															29
			79.38	*198.4*	*250.8*	*300.0*	*98.12*	*108.0*	*16*	*54.0*	*47.6*	*160.3*	*105.6*	*19.1*	*58.3*	*70.6*	*14.0* *13.1*
3 7/16	EP-B22655FH	EPE-B22655FH	3 3/4	9 5/16	11 5/16	13 13/16	4.306	4 3/4	3/4	2 3/8	2 1/4	7 1/2	4 15/16	7/8	2 9/16	3	46
			95.25	*236.5*	*290.5*	*350.8*	*109.37*	*120.6*	*20*	*60.3*	*57.2*	*190.5*	*125.4*	*22.2*	*65.1*	*76.2*	*20.9*
3 15/16	P-B22663FH	PE-B22663FH	4 1/4	11 7/8	13	15 1/4	4.944	4 1/2	3/4	2 1/4	2 5/8	8 1/2	5 7/16	15/16	2 15/16	3 7/16	67
			107.95	*301.6*	*330.2*	*387.4*	*125.58*	*114.3*	*20*	*57.2*	*66.7*	*215.9*	*138.1*	*23.8*	*74.6*	*87.3*	*30.4*
4 7/16	**P-B22671FH**	PE-B22671FH	4 3/4	12 3/4	14 1/8	16 1/2	5.534	4 3/4	3/4	2 1/2	2 3/4	9 3/8	6 1/8	1 3/32	3 11/32	3 3/4	88
			120.65	*323.8*	*358.8*	*419.1*	*140.56*	*120.6*	*20*	*63.5*	*69.8*	*238.1*	*155.6*	*27.8*	*84.9*	*95.2*	*39.5*
4 15/16	**P-B22679FH**	PE-B22679FH	5 1/2	14 5/16	16 1/8	18 1/2	6.056	5 3/8	7/8	2 3/4	3	10 7/8	6 3/4	1 3/16	3 21/32	4	128
			139.70	*363.5*	*409.6*	*469.9*	*153.82*	*136.5*	*24*	*69.8*	*76.2*	*276.2*	*171.4*	*30.2*	*92.9*	*101.6*	*58.1*

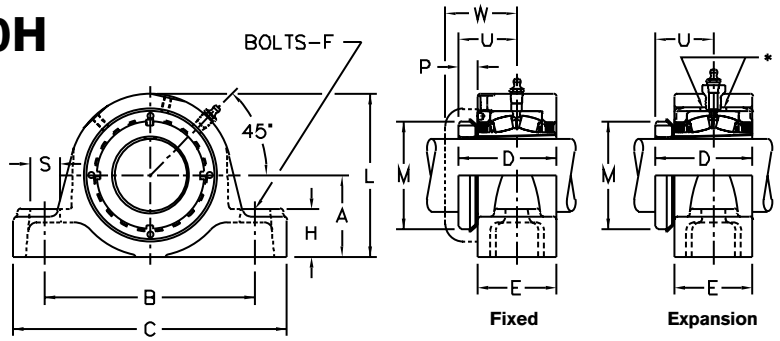
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66 through D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
† Tolerance, ±.005" *(±0.13 mm)*.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Pillow Blocks

Max Mount™

PK-B22600H, PKE-B22600H

Cast Steel Housing
2-Bolt Base
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

Shaft dia. inches	Pillow block number△ Fixed	Pillow block number△ Expansion	A †	B	C	D ●	E	F Bolts	H	L Fixed	L Expansion	M	P ●	S	U ●	W ◆	Unit wt. (lbs./kg.)
1 7/16	PK-B22623H	PKE-B22623H	1 7/8 *47.62*	5 *127.0*	6 7/8 *174.6*	2.708 *68.78*	2 1/4 *57.2*	1/2 *12*	1 3/16 *30.2*	3 11/16 *93.7*	3 7/8 *98.4*	2 1/4 *57.2*	9/16 *14.3*	13/16 *20.6*	1 43/64 *42.5*	2 3/16 *55.6*	7 *3.2*
1 15/16	PK-B22631H	PKE-B22631H	2 1/4 *57.15*	6 1/4 *158.8*	8 3/8 *212.7*	3.075 *78.10*	2 1/2 *63.5*	5/8 *16*	1 3/8 *34.9*	4 9/16 *115.9*	4 9/16 *115.9*	2 31/32 *75.4*	43/64 *17.1*	15/16 *23.8*	1 55/64 *47.2*	2 9/32 *57.9*	12 *5.4*
2 3/16	PK-B22635H	PKE-B22635H	2 1/2 *63.50*	6 3/4 *171.4*	8 7/8 *225.4*	3.159 *80.24*	2 9/16 *65.1*	5/8 *16*	1 5/8 *41.3*	5 *127.0*	5 *127.0*	3 5/32 *80.2*	2 1/32 *16.7*	15/16 *23.8*	1 9/32 *30.7*	2 7/16 *61.9*	16 *7.3*
2 7/16	PK-B22639H	PKE-B22639H	2 3/4 *69.85*	7 1/8 *181.0*	9 1/4 *235.0*	3.362 *85.39*	2 11/16 *68.3*	5/8 *16*	1 3/4 *44.4*	5 1/2 *139.7*	5 1/2 *139.7*	3 5/8 *92.1*	43/64 *17.1*	15/16 *23.8*	2 3/64 *52.0*	2 9/16 *65.1*	18 *8.2*
2 11/16	PK-B22643H	PKE-B22643H	3 1/4	8 1/8	10 7/16	3.863	3 3/16	3/4	2 1/4	6 7/16	6 7/16	4 5/32	3/4	1 1/16	2 19/64	2 25/32	30 29
2 15/16	PK-B22647H	PKE-B22647H	*82.55*	*206.4*	*265.1*	*98.12*	*81.0*	*20*	*57.2*	*163.5*	*163.5*	*105.6*	*19.1*	*27.0*	*58.3*	*70.6*	*13.6* *13.2*
3 7/16	PK-B22655H	PKE-B22655H	3 3/4 *95.25*	10 *254.0*	13 *330.2*	4.306 *109.37*	3 7/16 *87.3*	7/8 *24*	2 1/4 *57.2*	7 1/2 *190.5*	7 1/2 *190.5*	4 15/16 *125.4*	7/8 *22.2*	1 5/8 *41.3*	2 9/16 *65.1*	3 *76.2*	43 *19.5*
3 15/16	PK-B22663H	PKE-B22663H	4 1/4 *107.95*	11 3/4 *298.4*	15 1/4 *387.4*	4.944 *125.58*	4 *101.6*	1 *24*	2 5/8 *66.7*	8 1/2 *215.9*	8 1/2 *215.9*	5 7/16 *138.1*	1 5/16 *23.8*	2 1/4 *57.2*	2 15/16 *74.6*	3 7/16 *87.3*	62 *28.1*

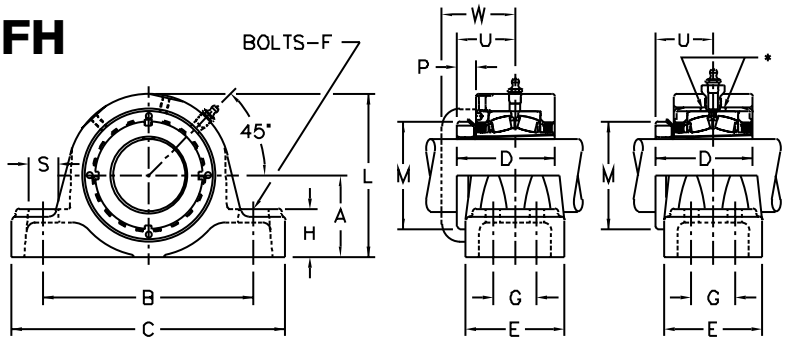
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
△ LHD Sliding Base Takeup can be drilled for PK-B22600H pillow blocks, see page D-22.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Pillow Blocks

Max Mount™

PK-B22600FH, PKE-B22600FH

Cast Steel Housing
4-Bolt Base
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Fixed **Expansion**

Dimensions (inches/*mm*)

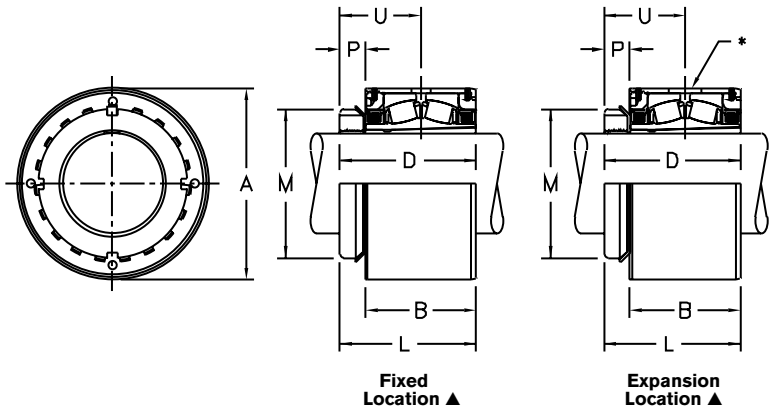
Shaft dia. inches	Pillow block number Fixed	Pillow block number Expansion	A †	B	C	D ●	E	F Bolts	G	H	L	M	P ●	S	U ●	W ◆	Unit wt. (lbs./kg.)
1 15/16	PK-B22631FH	PKE-B22631FH	2 1/4 *57.15*	6 1/4 *158.8*	8 3/8 *212.7*	3.075 *78.10*	3 3/16 *81.0*	1/2 *12*	1 19/32 *40.5*	1 3/8 *34.9*	4 9/16 *115.9*	2 31/32 *75.4*	43/64 *17.1*	13/16 *20.6*	1 55/64 *47.2*	2 9/32 *57.9*	13 *5.9*
2 3/16	PK-B22635FH	PKE-B22635FH	2 1/2 *63.50*	6 3/4 *171.4*	8 7/8 *225.4*	3.159 *80.24*	3 1/4 *82.6*	1/2 *12*	1 11/16 *42.9*	1 5/8 *41.3*	5 *127.0*	3 5/32 *80.2*	21/32 *16.7*	13/16 *20.6*	1 9/32 *30.7*	2 7/16 *61.9*	16 *7.3*
2 7/16	PK-B22639FH	PKE-B22639FH	2 3/4 *69.85*	7 1/8 *181.0*	9 1/4 *235.0*	3.362 *85.39*	3 3/8 *85.7*	1/2 *12*	1 3/4 *44.4*	1 3/4 *44.4*	5 1/2 *139.7*	3 5/8 *92.1*	43/64 *17.1*	13/16 *20.6*	2 3/64 *52.0*	2 9/16 *65.1*	20 *9.3*
2 11/16	PK-B22643FH	PKE-B22643FH	3 1/4	8 1/8	10 7/16	3.863	3 3/4	5/8	1 7/8	2 1/4	6 7/16	4 5/32	3/4	15/16	2 19/64	2 25/32	30 29
2 15/16	PK-B22647FH	PKE-B22647FH	*82.55*	*206.4*	*265.1*	*98.12*	*95.2*	*16*	*47.6*	*57.2*	*163.5*	*105.6*	*19.1*	*23.8*	*58.3*	*70.6*	*13.6* *13.2*
3 7/16	PK-B22655FH	PKE-B22655FH	3 3/4 *95.25*	10 *254.0*	13 *330.2*	4.306 *109.37*	4 1/8 *104.8*	3/4 *20*	2 *50.8*	2 1/4 *57.2*	7 1/2 *190.5*	4 15/16 *125.4*	7/8 *22.2*	1 1/2 *38.1*	2 9/16 *65.1*	3 *76.2*	47 *21.3*
3 15/16	PK-B22663FH	PKE-B22663FH	4 1/4 *107.95*	12 1/2 *317.5*	15 1/4 *387.4*	4.944 *125.58*	4 1/2 *114.3*	3/4 *20*	2 1/4 *57.2*	2 5/8 *66.7*	8 1/2 *215.9*	5 7/16 *138.1*	15/16 *23.8*	1 1/4 *31.8*	2 15/16 *74.6*	3 7/16 *87.3*	74 *33.5*
4 7/16	PK-B22671FH	PKE-B22671FH	4 3/4 *120.65*	13 1/2 *342.9*	16 1/2 *419.1*	5.534 *140.56*	4 3/4 *120.6*	3/4 *20*	2 1/2 *63.5*	2 3/4 *69.8*	9 3/8 *238.1*	6 1/8 *155.6*	1 3/32 *27.8*	1 3/8 *34.9*	3 1 1/32 *84.9*	3 3/4 *95.2*	93 *42.2*
4 15/16	PK-B22679FH	PKE-B22679FH	5 1/2 *139.70*	15 1/2 *393.7*	18 1/2 *469.9*	6.056 *153.82*	5 3/8 *136.5*	7/8 *24*	2 3/4 *69.8*	3 *76.2*	10 7/8 *276.2*	6 3/4 *171.4*	1 3/16 *30.2*	1 1/2 *38.1*	3 2 1/32 *92.9*	4 *101.6*	124 *56.2*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66 through D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, ±.005" *(±0.13 mm)*.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Cartridge Units

Max Mount™
CSE-B22600H

Steel Housing
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

Shaft dia. inches	Cartridge unit number ▲	A †	B	D ●	L	M	P ●	U ●	Unit wt. (lbs./kg.)
1 7/16	**CSE-B22623H**	3.124 *79.35*	2 3/16 *55.56*	2.708 *68.78*	2 3/4 *69.9*	2 1/4 *57.2*	9/16 *14.3*	1 43/64 *42.5*	4 *1.8*
1 15/16	**CSE-B22631H**	3.833 *97.36*	2 25/64 *60.72*	3.075 *78.10*	3 1/16 *77.8*	2 31/32 *75.4*	43/64 *17.1*	1 55/64 *47.2*	5 *2.3*
2 3/16	**CSE-B22635H**	4.227 *107.36*	2 1/2 *63.50*	3.159 *80.24*	3 5/32 *80.2*	3 5/32 *80.2*	21/32 *16.7*	1 9/32 *30.7*	7 *3.2*
2 7/16	**CSE-B22639H**	4.621 *117.37*	2 5/8 *66.68*	3.362 *85.39*	3 19/64 *83.7*	3 5/8 *92.1*	43/64 *17.1*	2 3/64 *52.0*	8 *3.6*
2 11/16	**CSE-B22643H**	5.407	3 1/8	3.863	3 7/8	4 5/32	3/4	2 19/64	14 13
2 15/16	**CSE-B22647H**	*137.34*	*79.38*	*98.12*	*98.4*	*105.6*	*19.1*	*58.3*	*6.4* *5.9*
3 7/16	**CSE-B22655H**	6.194 *157.33*	3 7/16 *87.31*	4.306 *109.37*	4 5/16 *109.5*	4 15/16 *125.4*	7/8 *22.2*	2 9/16 *65.1*	18 *8.2*
3 15/16	**CSE-B22663H**	7.375 *187.32*	4 *101.60*	4.944 *125.58*	4 15/16 *125.4*	5 7/16 *138.1*	15/16 *23.8*	2 15/16 *74.6*	31 *14.1*
4 7/16	**CSE-B22671H**	7.769 *197.33*	4 9/16 *115.89*	5.534 *140.56*	5 21/32 *143.7*	6 1/8 *155.6*	1 3/32 *27.8*	3 11/32 *84.9*	51 *23.1*
4 15/16	**CSE-B22679H**	8.753 *222.33*	4 7/8 *123.82*	6.056 *153.82*	6 1/16 *154.0*	6 3/4 *171.4*	1 3/16 *30.2*	3 21/32 *92.9*	55 *24.9*

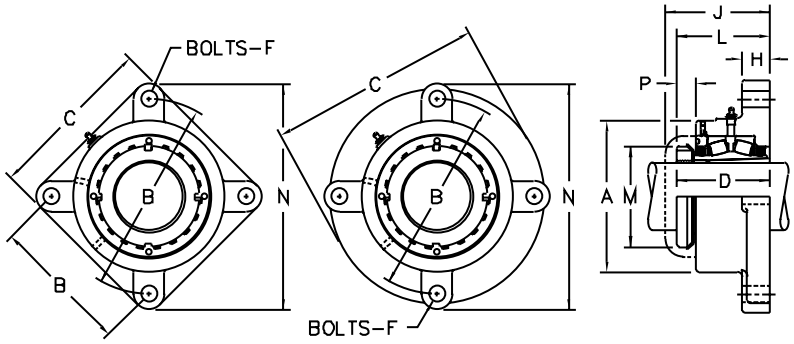
Bold face items are normally available from stock; please consult for availability of non-stock items.
Steel cartridge units cannot be disassembled. For replacement, use entire new unit.
All units available with type E lip seals.
† Tolerance, +.000" –.002" (+*0.00 mm –0.05 mm)*; bore tolerance for mounting +.002" –.000" (+*0.05 mm –0.00 mm)*.
* Plug diameter .531" *(13.49 mm)*, engagement depth .125" ±.015" *(3.18 ±0.38 mm)*, allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position on expansion units.
● Dimensions based on unmounted condition.
▲ Hole for fixed location and slot for expansion location in the same housing.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Flanged Units

Max Mount™

F-B22600H, FE-B22600H

Cast Iron Housing
3-bolt or 4-bolt Mounting
Fixed or Expansion
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

Type of Housing	Shaft dia. inches	Flanged unit number Fixed	Expansion†	A Fixed	A Exp	B Circle	B Square	C ▲	D ●	F Bolts	H	J ◆	L ●	M	N	P ●	Unit wt. (lbs./kg.)
3-BOLT ROUND	1 7/16	**F-B22623H**	**FE-B22623H**	3 7/16 *87.3*	3 3/4 *95.2*	5 *127.00*	. . . . . .	5 7/8 *149.2*	2.708 *68.78*	1/2 *12*	5/8 *15.9*	3 5/16 *84.1*	2 13/16 *71.4*	2 1/4 *57.2*	6 1/4 *158.8*	9/16 *14.3*	7 *3.2*
4-BOLT ROUND	1 15/16	**F-B22631H**	**FE-B22631H**	4 1/4 *108.0*	4 1/2 *114.3*	5 3/4 *146.05*	4 1/16 *103.17*	6 11/16 *169.9*	3.075 *78.10*	1/2 *12*	11/16 *17.5*	3 9/16 *90.5*	3 13/64 *81.4*	2 31/32 *75.4*	7 *177.8*	43/64 *17.1*	10 *4.5*
	2 3/16	**F-B22635H**	**FE-B22635H**	4 7/8 *123.8*	4 7/8 *123.8*	6 3/8 *161.92*	4 1/2 *114.30*	7 3/8 *187.3*	3.159 *80.24*	5/8 *16*	11/16 *17.5*	3 25/32 *96.0*	3 9/32 *83.3*	3 5/32 *80.2*	7 3/4 *196.8*	21/32 *16.7*	14 *6.5*
	2 7/16	**F-B22639H**	**FE-B22639H**	5 3/8 *136.5*	5 3/8 *136.5*	6 3/4 *171.45*	4 49/64 *121.06*	7 3/4 *196.8*	3.362 *85.39*	5/8 *16*	3/4 *19.0*	3 31/32 *100.8*	3 27/64 *86.9*	3 5/8 *92.1*	8 1/8 *206.4*	43/64 *17.1*	17 *7.9*
	2 11/16	**F-B22643H**	**FE-B22643H**	6 1/4	6 1/4	7 7/8	5 9/16	9 1/8	3.863	3/4	7/8	4 7/16	4	4 5/32	9 1/2	3/4	27 26
	2 15/16	**F-B22647H**	**FE-B22647H**	*158.8*	*158.8*	*200.02*	*141.27*	*231.8*	*98.12*	*20*	*22.2*	*112.7*	*101.6*	*105.6*	*241.3*	*19.1*	*12.2* *11.8*
4-BOLT SQUARE	3 7/16	**F-B22655H**	**FE-B22655H**	7 3/8 *187.3*	7 3/8 *187.3*	9 1/2 *241.30*	6 23/32 *170.64*	8 5/8 *219.1*	4.306 *109.37*	3/4 *20*	1 3/8 *34.9*	4 29/32 *124.6*	4 1/2 *114.3*	4 15/16 *125.4*	11 7/16 *290.5*	7/8 *22.2*	39 *17.7*
	3 15/16	**F-B22663H**	**FE-B22663H**	8 1/8 *206.4*	8 3/8 *212.7*	10 3/4 *273.05*	7 39/64 *193.28*	9 3/4 *247.6*	4.944 *125.58*	7/8 *24*	1 1/2 *38.1*	5 5/8 *142.9*	5 1/8 *130.2*	5 7/16 *138.1*	12 29/32 *327.8*	15/16 *23.8*	57 *25.9*

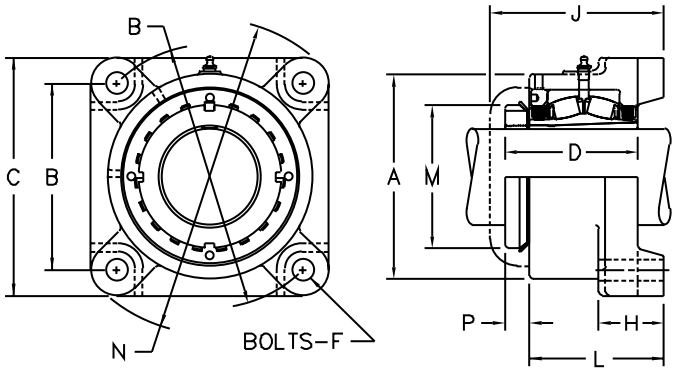
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
† For expansion units, dimensions G, L, and P are minimum values. For maximum values, add .375" *(9.5 mm)*.
● Dimensions based on unmounted condition.
▲ Cross flat dimension for 3 3/16" and larger shaft.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Flanged Units

Max Mount™

EF-B22600H

Cast Iron Housing
Padded Flange
4-bolt Mounting
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Self-Aligning Type E Interchange

Dimensions (inches/*mm*)

Shaft dia. inches	Flanged unit number	A	B Circle	B Square	C	D ●	F Bolts	H	J ◆	L ●	M	N	P ●	Unit wt. (lbs./kg.)
1 7/16	EF-B22623H	3¾ *95.2*	4 61/64 *125.81*	3½ *88.9*	4⅝ *117.5*	2.708 *68.78*	½ *12*	1¼ *31.8*	4 1/32 *102.4*	3⅝ *92.1*	2¼ *57.2*	6 1/16 *154.0*	9/16 *14.3*	8 *3.6*
1 15/16	EF-B22631H	4½ *114.3*	6 3/16 *157.18*	4⅜ *111.1*	5½ *139.7*	3.075 *78.10*	½ *12*	1 7/16 *36.5*	4 5/16 *109.5*	3 15/16 *100.0*	2 31/32 *75.4*	7 5/16 *185.7*	43/64 *17.1*	11 *5.0*
2 3/16	EF-B22635H	5 *127.0*	6 57/64 *175.03*	4⅞ *123.8*	6¼ *158.8*	3.159 *80.24*	⅝ *16*	1½ *38.1*	4⅝ *117.5*	4¼ *108.0*	3 5/32 *80.2*	8 9/32 *210.3*	21/32 *16.7*	15 *6.8*
2 7/16	EF-B22639H	5⅜ *136.5*	7 19/32 *192.89*	5⅜ *136.5*	6¾ *171.4*	3.362 *85.39*	⅝ *16*	1 11/16 *42.9*	4 15/16 *125.4*	4 9/16 *115.9*	3⅜ *92.1*	8 31/32 *227.8*	43/64 *17.1*	17 *7.7*
2 11/16	EF-B22643H	6¼ *158.8*	8 31/64 *215.49*	6 *152.4*	7⅝ *193.7*	3.863 *98.12*	¾ *20*	1 13/16 *46.0*	5 13/32 *137.3*	5 1/16 *128.6*	4 5/32 *105.6*	10⅛ *257.2*	¾ *19.1*	25 24 *11.5* *11.0*
2 15/16	EF-B22647H													
3 7/16	EF-B22655H	7⅜ *187.3*	9 59/64 *251.23*	7 *177.8*	8¾ *222.2*	4.306 *109.37*	¾ *20*	1 15/16 *49.2*	5¾ *146.0*	5 13/32 *137.3*	4 15/16 *125.4*	11 21/32 *296.1*	⅞ *22.2*	41 *18.6*
3 15/16	EF-B22663H	8⅜ *212.7*	10 61/64 *278.21*	7¾ *196.8*	9¾ *247.6*	4.944 *125.58*	⅞ *24*	2 3/16 *55.6*	6⅝ *168.3*	6 7/32 *158.0*	5 7/16 *138.1*	12 31/32 *329.4*	15/16 *23.8*	56 *25.4*

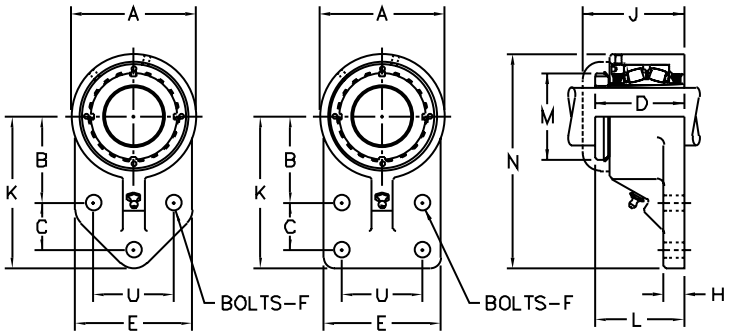
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size, ⅛" PT.
All units available with type E lip seals.
* Expansion unit allows axial movement of 3/16" *(4.8 mm)* in either direction from centered position shown.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Flanged Bracket Units

Max Mount™

FB-B22600H

High-Test Iron Housing
3-bolt or 4-bolt Mounting
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed



Dimensions (inches/*mm*)

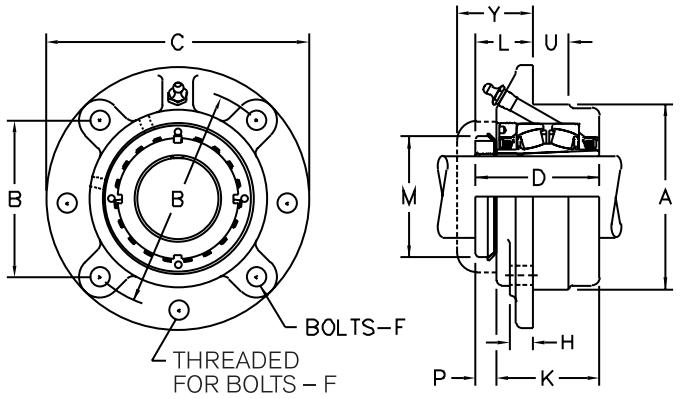
Type of Housing	Shaft dia. inches	Flanged bracket unit number	A	B	C	D	E	F Bolts	H	J ◆	K	L	M	N	U	Unit wt. (lbs./kg.)
3-BOLT	1 7/16	FB-B22623H	3 7/16 *87.3*	2 3/8 *60.3*	1 1/4 *31.8*	2.708 *68.78*	3 1/4 *82.6*	1/2 *12*	5/8 *15.9*	3 5/16 *84.1*	4 1/4 *108.0*	2 13/16 *71.4*	2 1/4 *57.2*	5 31/32 *151.6*	2 *50.8*	6.4 *2.9*
	1 15/16	FB-B22631H	4 1/4 *108.0*	2 15/16 *74.6*	1 5/8 *41.3*	3.075 *78.10*	4 *101.6*	1/2 *12*	11/16 *17.5*	3 9/16 *90.5*	5 3/16 *131.8*	3 13/64 *81.4*	2 31/32 *75.4*	7 5/16 *185.7*	2 3/4 *69.8*	10.0 *4.4*
4-BOLT	2 7/16	FB-B22639H	5 3/8 *136.5*	3 3/4 *95.2*	1 3/4 *44.4*	3.159 *80.24*	4 7/8 *123.8*	5/8 *16*	3/4 *19.0*	3 31/32 *100.8*	6 1/4 *158.8*	3 9/32 *83.3*	3 5/32 *80.2*	8 15/16 *227.0*	3 *76.2*	17.5 *7.9*
	2 11/16	FB-B22643H	6 1/4 *158.8*	3 7/8 *98.4*	2 1/4 *57.2*	3.362 *85.39*	5 3/4 *146.0*	3/4 *20*	7/8 *22.2*	4 7/16 *112.7*	7 *177.8*	3 27/64 *86.9*	3 5/8 *92.1*	10 1/8 *257.2*	4 *101.6*	30.0 28.0 *13.7* *12.8*
	2 15/16	FB-B22647H														

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size: for 1½ and smaller shafts, ¼"-28 UNF; for all other shafts, ⅛" PT.
All units available with type E lip seals.
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Flanged Cartridge Units

Max Mount™
FC-B22600H

Cast Iron Housing
Self-aligning
Adapter Mounted
Factory Adjusted and Sealed
Jack Screws for Removal



Self-Aligning Type E Interchange

Dimensions (inches/*mm*)

Shaft dia. inches	Flanged cartridge unit number	A †	B Circle	B Square	C	D	F Bolts	H	J	K	L	M	P	U	Y ◆	Unit wt. (lbs./kg.)
1 7/16	**FC-B22623H**	3.625 *92.08*	4 3/8 *111.12*	3 3/32 *78.6*	5 1/4 *133.4*	2.708 *68.78*	3/8 *10*	1/2 *12.7*	1 25/64 *35.3*	2 7/32 *56.4*	1 3/8 *60.3*	2 1/4 *57.2*	9/16 *14.3*	3/4 *19.0*	1 7/8 *47.6*	6 *2.6*
1 15/16	**FC-B22631H**	4.500 *114.30*	5 3/8 *136.52*	3 51/64 *96.4*	6 3/8 *161.9*	3.075 *78.10*	7/16 *10*	9/16 *14.3*	1 19/32 *40.5*	2 15/32 *62.7*	1 35/64 *39.3*	2 31/32 *75.4*	43/64 *17.1*	7/8 *22.2*	1 29/32 *48.4*	9 *4.0*
2 3/16	**FC-B22635H**	5.000 *127.00*	6 *152.40*	4 1/4 *107.9*	7 1/8 *181.0*	3.159 *80.24*	1/2 *12*	9/16 *14.3*	1 21/32 *42.1*	2 17/32 *64.3*	1 17/32 *38.9*	3 5/32 *80.2*	21/32 *16.7*	1 *25.4*	2 1/32 *51.6*	12 *5.4*
2 7/16	**FC-B22639H**	5.500 *139.70*	6 1/2 *165.10*	4 19/32 *116.7*	7 5/8 *193.7*	3.362 *85.39*	1/2 *12*	5/8 *15.9*	1 11/16 *42.9*	2 21/32 *67.5*	1 39/64 *40.9*	3 5/8 *92.1*	43/64 *17.1*	1 *25.4*	2 5/32 *54.8*	16 *7.2*
2 11/16	**FC-B22643H**	6.375	7 1/2	5 19/64	8 3/4	3.863	5/8	3/4	2 1/32	3 5/32	1 7/8	4 5/32	3/4	1 1/4	2 5/16	25 24
2 15/16	**FC-B22647H**	*161.92*	*190.50*	*134.5*	*222.2*	*98.12*	*16*	*19.0*	*51.6*	*80.2*	*44.4*	*105.6*	*19.1*	*31.8*	*58.7*	*11.4* *11.0*
3 7/16	**FC-B22655H**	7.375 *187.32*	8 5/8 *219.08*	6 3/32 *154.8*	10 1/4 *260.4*	4.306 *109.37*	3/4 *20*	15/16 *23.8*	1 15/16 *49.2*	3 13/32 *86.5*	2 23/64 *59.9*	4 15/16 *125.4*	7/8 *22.2*	1 1/4 *31.8*	2 25/32 *70.6*	37 *16.9*
3 15/16	**FC-B22663H**	8.125 *206.38*	9 3/8 *238.12*	6 5/8 *168.3*	10 7/8 *276.2*	4.944 *125.58*	3/4 *20*	1 1/8 *28.6*	2 13/32 *61.1*	3 31/32 *101.1*	2 9/16 *65.1*	5 7/16 *138.1*	15/16 *23.8*	2 *50.8*	3 1/16 *77.8*	50 *22.8*

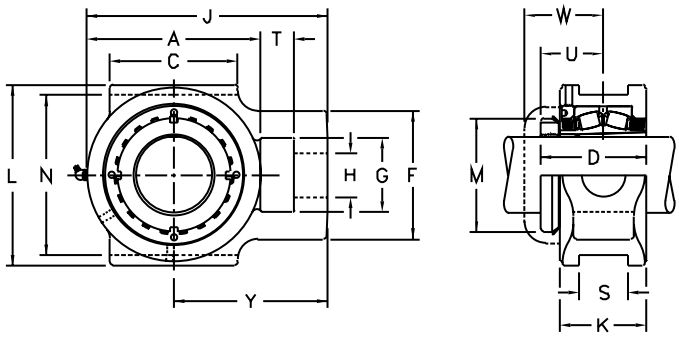
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-66, D-67.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
† Tolerance, +.000 –.002" (+*0.00 mm −0.05 mm)*; bore tolerance for mounting +.002" –.000" (+*0.05 mm −0.00 mm).*
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Spherical Roller Bearing Takeup Units

Max Mount™

T-B22600H

Cast Iron Housing
Machined Slots
Self-aligning
Adapter Mounted
Factory Adjusted Clearance



Dimensions (inches/*mm*)

Shaft dia. inches	Takeup unit number	A	C	D ●	F	G	H	J	K	L	M	N □	S □	T	U ●	W ◆	Y	Unit wt. (lbs./kg.)
1 7/16	**T-B22623H**	3 1/2 *88.9*	2 3/4 *69.8*	2.708 *68.78*	2 3/8 *60.3*	1 7/16 *36.5*	7/8 *22.2*	4 3/4 *120.6*	2 1/4 *57.2*	4 1/8 *104.8*	2 1/4 *57.2*	3.500 *88.90*	.531 *13.49*	5/8 *15.9*	1 43/64 *42.5*	2 3/16 *55.6*	3 *76.2*	6.4 *2.9*
1 15/16	**T-B22631H**	4 3/8 *111.1*	3 3/8 *85.7*	3.075 *78.10*	3 3/16 *81.0*	1 15/16 *49.2*	1 1/8 *28.6*	5 15/16 *150.8*	2 1/2 *63.5*	4 3/4 *120.6*	2 31/32 *75.4*	4.000 *101.60*	.687 *17.46*	3/4 *19.0*	1 55/64 *47.2*	2 9/32 *57.9*	3 3/4 *95.2*	9.7 *4.4*
2 3/16	**T-B22635H**	5 1/16 *128.6*	3 3/4 *95.2*	3.159 *80.24*	3 3/4 *95.2*	2 1/4 *57.2*	1 1/4 *31.8*	7 *177.8*	2 9/16 *65.1*	5 1/4 *133.4*	3 5/32 *80.2*	4.500 *114.30*	.813 *20.64*	1 *25.4*	1 9/32 *30.7*	2 7/16 *61.9*	4 15/32 *113.5*	14.1 *6.4*
2 7/16	**T-B22639H**	5 9/16 *141.3*	4 *101.6*	3.362 *85.39*	4 1/8 *104.8*	2 1/2 *63.5*	1 3/8 *34.9*	7 13/16 *198.4*	2 11/16 *68.3*	5 7/8 *149.2*	3 5/8 *92.1*	5.125 *130.18*	1.063 *26.99*	1 1/4 *31.8*	2 3/64 *52.0*	2 9/16 *65.1*	5 1/32 *127.8*	17.8 *8.3*
2 11/16	**T-B22643H**	6 7/16	4 3/4	3.863	4 3/4	2 3/4	1 5/8	8 15/16	3 3/16	6 11/16	4 5/32	5.937	1.812	1 1/4	2 19/64	2 25/32	5 23/32	13.5 13.0
2 15/16	**T-B22647H**	*163.5*	*120.6*	*98.12*	*120.6*	*69.8*	*41.3*	*227.0*	*81.0*	*169.9*	*105.6*	*150.81*	*46.02*	*31.8*	*58.3*	*70.6*	*145.2*	*6.1* *5.9*
3 7/16	**T-B22655H**	7 3/8 *187.3*	5 1/2 *139.7*	4.306 *109.37*	4 7/8 *123.8*	2 7/8 *73.0*	1 7/8 *47.6*	10 *254.0*	3 7/16 *87.3*	7 13/16 *198.4*	4 15/16 *125.4*	6.812 *173.02*	1.812 *46.02*	1 9/16 *39.7*	2 9/16 *65.1*	3 *76.2*	6 5/16 *160.3*	43.1 *19.6*
3 15/16	**T-B22663H**	8 7/8 *225.4*	7 *177.8*	4.944 *125.58*	5 1/4 *133.4*	3 1/8 *79.4*	1 7/8 *47.6*	11 7/8 *301.6*	4 *101.6*	9 5/8 *244.5*	5 7/16 *138.1*	8.625 *219.08*	2.062 *52.37*	1 5/8 *41.3*	2 15/16 *74.6*	3 7/16 *87.3*	7 7/16 *188.9*	76 *34.5*

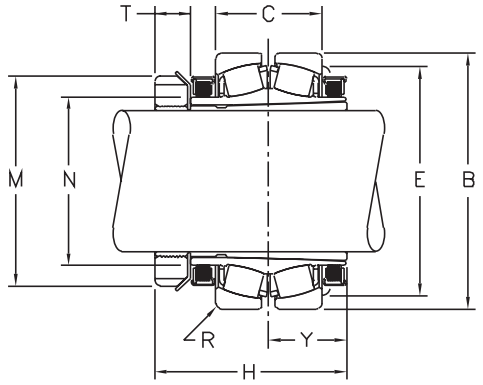
Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing numbers, see pages D-67, D-68.
Lubrication fitting tap size, 1/8" PT.
All units available with type E lip seals.
□ Slots are machined, tolerance, +.005" –.015" (*+0.13 mm −0.38 mm).*
● Dimensions based on unmounted condition.
◆ Width dimension for closed end unit.
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

Replacement Spherical Roller Bearings

Max Mount™

B22600HL

Self-aligning
Adapter Mounted



Dimensions (inches/*mm*)

Shaft Sizes inches	Bearing number *	B +.0010" −.000" *+0.025 −0.000 mm*	C ±.025" *±0.64 mm* ‡	E Shoulder diameter	H ●	M ●	N	R Housing fillet	T	Y	Unit wt. (lbs./kg.)
1 7/16	**B22623HL**	2.8345 *71.996*	1.310 *33.27*	2 1/2 *63.5*	2.708 *68.78*	2 1/4 *57.2*	1.745 *44.32*	.062 *1.57*	1/2 *12.7*	1 3/32 *27.78*	2.1 *1.0*
1 15/16	**B22631HL**	3.5433 *90.000*	1.526 *38.76*	3 3/16 *81.0*	3.075 *78.10*	2 31/32 *75.4*	2.307 *58.59*	.078 *1.98*	9/16 *14.3*	1 7/32 *30.96*	3.3 *1.5*
2 3/16	**B22635HL**	3.9370 *100.000*	1.656 *42.06*	3 1/2 *88.9*	3.159 *80.24*	3 5/32 *80.2*	2.620 *66.55*	.062 *1.57*	19/32 *15.1*	1 1/4 *31.75*	4.5 *2.1*
2 7/16	**B22639HL**	4.3307 *110.000*	1.750 *44.45*	3 7/8 *98.4*	3.362 *85.39*	3 5/8 *92.1*	2.901 *73.69*	.078 *1.98*	5/8 *15.9*	1 5/16 *33.34*	5.9 *2.8*
2 11/16	**B22643HL**	5.1172	2.125	4 17/32	3.863	4 5/32	3.370	.078	43/64	1 9/16	10.1 9.0
2 15/16	**B22647HL**	*129.977*	*53.98*	*115.1*	*98.12*	*105.6*	*85.60*	*1.98*	*17.1*	*39.69*	*4.6* *4.1*
3 7/16	**B22655HL**	5.9045 *149.974*	2.313 *58.75*	5 11/32 *135.7*	4.306 *109.37*	4 15/16 *125.4*	3.975 *100.97*	.125 *3.18*	51/64 *20.2*	1 23/32 *43.66*	12.8 *5.8*
3 15/16	**B22663HL**	7.0856 *179.974*	2.750 *69.85*	6 3/8 *161.9*	4.944 *125.58*	5 7/16 *138.1*	4.561 *115.85*	.125 *3.18*	55/64 *21.8*	2 *50.80*	23.2 *10.5*
4 7/16	**B22671HL**	7.4792 *189.972*	2.974 *75.54*	6 5/8 *168.3*	5.534 *140.56*	6 1/8 *155.6*	5.000 *127.00*	.125 *3.18*	61/64 *24.2*	3 3/8 *85.72*	36.0 *16.3*
4 15/16	**B22679HL**	8.4634 *214.970*	3.437 *87.30*	7 1/2 *190.5*	6.056 *153.82*	6 3/4 *171.4*	5.594 *142.08*	.125 *3.18*	1 1/64 *25.8*	3 5/8 *92.08*	40.7 *18.9*

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearings for expansion units use complete CSE-B22600H per page D-55.

* Includes bearing, two floating labyrinth seals and one adapter assembly.

● Dimensions based on unmounted condition. All bearings available with type E lip seals.

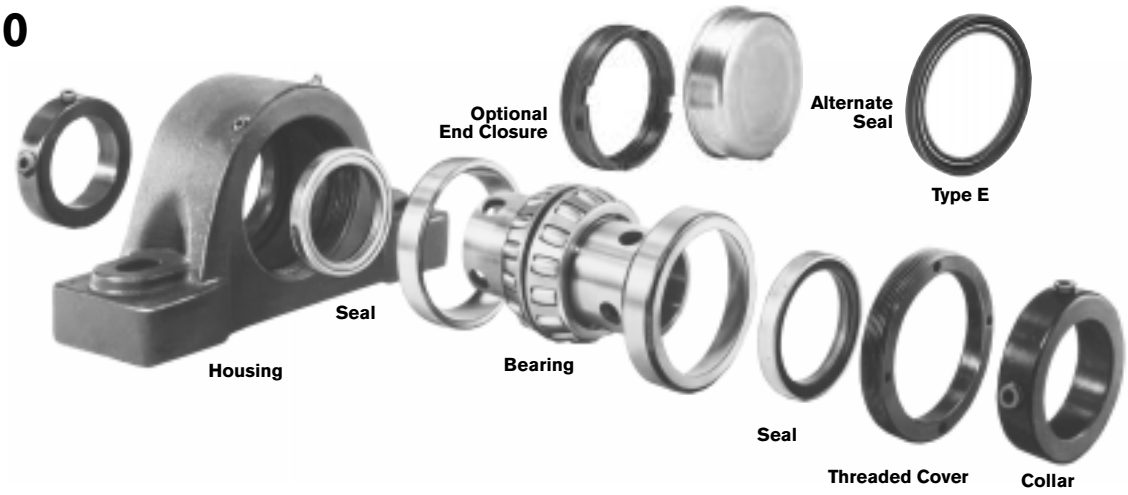
Selection guide, pages D-45, D-46.
Load ratings, pages D-47, D-48.
Additional information, page D-69.

‡ Use shims, threaded cover, or spacer ring to provide for adjustment. Housing must allow clearance for this adjustment on dimension C.

Spherical Roller Bearing Unit Replacement Parts

Series B22400

Fixed Type



Shaft diameter mm	Shaft diameter inches	Basic Bearing Designation ▲	Repair kit ■	Components in repair kit: Spherical roller bearing	Components in repair kit: Type H multi-disc labyrinth seals (2 reqd.)■	Components in repair kit: Collar with setscrews	Threaded cover for open end	Threaded cover for closed end	End closure *	Housing number ▲
25	1	B22416 *B224M25*	B22416HL *B224M25HL*	B22416 *B224M25*	B22417-3H	B22416-5S	B22417-7	B22417-7C	B22417-6	P-B22417-0
30	1 3/16 1 1/4	B22419 B22420 *B224M30*	B22419HL B22420HL *B224M30HL*	B22419 B22420 *B224M30*	B22420-3H	B22420-5S	B22420-7	B22420-7C	B22420-6	P-B22420-0
35	1 7/16 1 1/2	B22423 B22424 *B224M35*	B22423HL B22424HL *B224M35HL*	B22423 B22424 *B224M35*	B22424-3H	B22424-5S	B22424-7	B22424-7C	B22424-6	P-B22424-0
40	1 1/2 1 5/8 1 11/16 1 3/4	B224B24 B22426 B22427 B22428 *B224M40*	B224B24HL B22426HL B22427HL B22428HL *B224M40HL*	B224B24 B22426 B22427 B22428 *B224M40*	B22428-3H	B22524-5S B22428-5S B22428-5S B22428-5S B22428-5S	B22428-7	B22428-7C	B22428-6	P-B22428-0
45 50	1 3/4 1 15/16 2	B224B28 B22431 B22432 *B224M45* *B224M50*	B224B28HL B22431HL B22432HL *B224M45HL* *B224M50HL*	B224B28 B22431 B22432 *B224M45* *B224M50*	B22432-3H	B22528-5S B22432-5S B22432-5S B22432-5S B22432-5S	B22432-7	B22432-7C	B22432-6	P-B22432-0
55	2 3/16 2 1/4	B22435 B22436 *B224M55*	B22435HL B22436HL *B224M55HL*	B22435 B22436 *B224M55*	B22436-3H	B22435-5S B22436-5S B22436-5S	B22436-7	B22436-7C	B22436-6	P-B22436-0
60	2 1/4 2 7/16 2 1/2	B224B36 B22439 B22440 *B224M60*	B224B36HL B22439HL B22440HL *B224M60HL*	B224B36 B22439 B22440 *B224M60*	B22440-3H	B22536-5S B22440-5S B22440-5S B22440-5S	B22440-7	B22440-7C	B22440-6	P-B22440-0
65 70 75	2 11/16 2 3/4 2 15/16 3	B22443 B22444 B22447 B22448 *B224M65* *B224M70* *B224M75*	B22443HL B22444HL B22447HL B22448HL *B224M65HL* *B224M70HL* *B224M75HL*	B22443 B22444 B22447 B22448 *B224M65* *B224M70* *B224M75*	B22448-3H	B22443-5S B22448-5S B22448-5S B22448-5S B22443-5S B22448-5S B22448-5S	B22448-7	B22448-7C	B22448-6	P-B22448-0
80 85	3 3/16 3 7/16 3 1/2	B22451 B22455 B22456 *B224M80* *B224M85*	B22451HL B22455HL B22456HL *B224M80HL* *B224M85HL*	B22451 B22455 B22456 *B224M80* *B224M85*	B22456-3H	B22551-5S B22456-5S B22456-5S B22551-5S B22456-5S	B22456-7	B22456-7C	B22456-6	P-B22456-0
90 100	3 11/16 3 15/16 4	B22459 B22463 B22464 *B224M90* *B224M100*	B22459HL B22463HL B22464HL *B224M90HL* *B224M100HL*	B22459 B22463 B22464 *B224M90* *B224M100*	B22464-3H	B22464-5S	B22464-7	B22464-7C	B22464-6	P-B22464-0

▲ For variations in type and material, use prefix:

T — takeup unit
EFR — padded flanged unit
EP — pillow block, cast iron
F — flanged unit
FB — flanged bracket unit
FC — flanged cartridge unit
C — cartridge unit, cast iron
P — pillow block, cast iron
PK — pillow block, cast steel
PL — pillow block, low backing
DS — takeup unit

P-B22432 -0 For construction features, use suffix:
F — 4-bolt base pillow block (on 1 15/16" and larger shafts only)

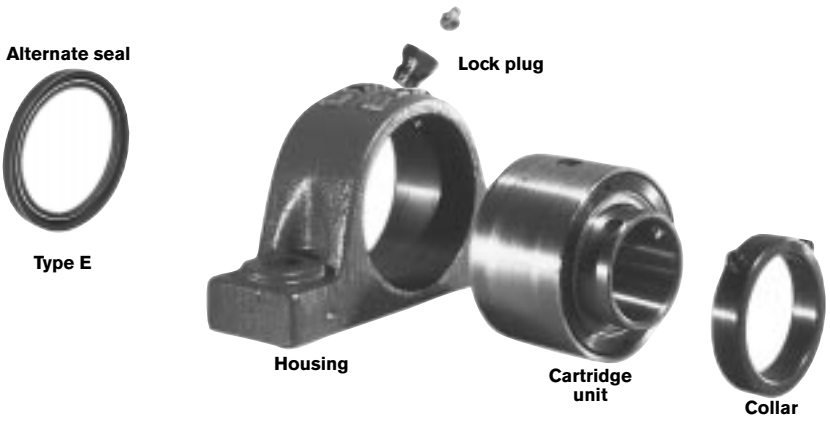
* Closed end units are assembled with two seals.

■ Floating labyrinth seals, suffix H, are furnished with B22400HL repair kits. For spring-loaded lip type seals specify B22400EL.

Spherical Roller Bearing Unit Replacement Parts

Series B22400

Expansion Type



Shaft diameter mm	Shaft diameter inches	Pillow block number ▲	Basic Bearing Designation	Repair kit ■	Components in repair kit: Type H■ multi-disc labyrinth seals (2 reqd.)	Components in repair kit: Collar with setscrews	Locking plug number: For pillow block	Locking plug number: For flanged unit	Housing number ▲
	1	PE-B22416H	B22416	CSE-B22416H	B22417-3H	B22416-5S	B22440-8A	B22440-8A	PE-B22417-OE
25		*PE-B224M25H*	*B224M25*	*CSE-B224M25H*					
	1 3/16	PE-B22419H	B22419	CSE-B22419H	B22420-3H	B22420-5S	B22440-8A	B22440-8A	PE-B22420-OE
	1 1/4	PE-B22420H	B22420	CSE-B22420H					
30		*PE-B224M30H*	*B224M30*	*CSE-B224M30H*					
	1 7/16	PE-B22423H	B22423	CSE-B22423H	B22424-3H	B22424-5S	B22440-8A	B22440-8A	PE-B22424-OE
	1 1/2	PE-B22424H	B22424	CSE-B22424H					
35		*PE-B224M35H*	*B224M35*	*CSE-B224M35H*					
	1 1/2	PE-B224B24H	B224B24	CSE-B224B24H	B22428-3H	B22524-5S	B22440-8A	B22440-8A	PE-B22428-OE
	1 5/8	PE-B22426H	B22426	CSE-B22426H		B22428-5S			
	1 11/16	PE-B22427H	B22427	CSE-B22427H		B22428-5S			
	1 3/4	PE-B22428H	B22428	CSE-B22428H		B22428-5S			
40		*PE-B224M40H*	*B224M40*	*CSE-B224M40H*		B22428-5S			
	1 3/4	PE-B224B28H	B224B28	CSE-B224B28H	B22432-3H	B22528-5S	B22440-8A	B22440-8A	PE-B22432-OE
	1 15/16	PE-B22431H	B22431	CSE-B22431H		B22432-5S			
	2	PE-B22432H	B22432	CSE-B22432H		B22432-5S			
45		*PE-B224M45H*	*B224M45*	*CSE-B224M45H*		B22432-5S			
50		*PE-B224M50H*	*B224M50*	*CSE-B224M50H*		B22432-5S			
	2 3/16	PE-B22435H	B22435	CSE-B22435H	B22436-3H	B22435-5S	B22440-8A	B22440-8A	PE-B22436-OE
	2 1/4	PE-B22436H	B22436	CSE-B22436H		B22436-5S			
55		*PE-B224M55H*	*B224M55*	*CSE-B224M55H*		B22436-5S			
	2 1/4	PE-B224B36H	B224B36	CSE-B224B36H	B22440-3H	B22536-5S	B22440-8A	B22440-8A	PE-B22440-OE
	2 7/16	PE-B22439H	B22439	CSE-B22439H		B22440-5S			
	2 1/2	PE-B22440H	B22440	CSE-B22440H		B22440-5S			
60		*PE-B224M60H*	*B224M60*	*CSE-B224M60H*		B22440-5S			
	2 11/16	PE-B22443H	B22443	CSE-B22443H	B22448-3H	B22443-5S	B22448-8A	B22448-8A	PE-B22448-OE
	2 3/4	PE-B22444H	B22444	CSE-B22444H		B22448-5S			
	2 15/16	PE-B22447H	B22447	CSE-B22447H		B22448-5S			
	3	PE-B22448H	B22448	CSE-B22448H		B22448-5S			
65		*PE-B224M65H*	*B224M65*	*CSE-B224M65H*		B22443-5S			
70		*PE-B224M70H*	*B224M70*	*CSE-B224M70H*		B22448-5S			
75		*PE-B224M75H*	*B224M75*	*CSE-B224M75H*		B22448-5S			
	3 3/16	PE-B22451H	B22451	CSE-B22451H	B22456-3H	B22551-5S	B22572-8A	B22572-8A	PE-B22456-OE
	3 7/16	PE-B22455H	B22455	CSE-B22455H		B22456-5S			
	3 1/2	PE-B22456H	B22456	CSE-B22456H		B22456-5S			
80		*PE-B224M80H*	*B224M80*	*CSE-B224M80H*		B22551-5S			
85		*PE-B224M85H*	*B224M85*	*CSE-B224M85H*		B22456-5S			
	3 11/16	PE-B22459H	B22459	CSE-B22459	B22464-3H	B22464-5S	B22448-8A	B22572-8A	PE-B22464-OE
	3 15/16	PE-B22463H	B22463	CSE-B22463					
	4	PE-B22464H	B22464	CSE-B22464					
90		*PE-B224M90H*	*B224M90*	*CSE-B224M90H*					
100		*PE-B224M100H*	*B224M100*	*CSE-B224M100H*					

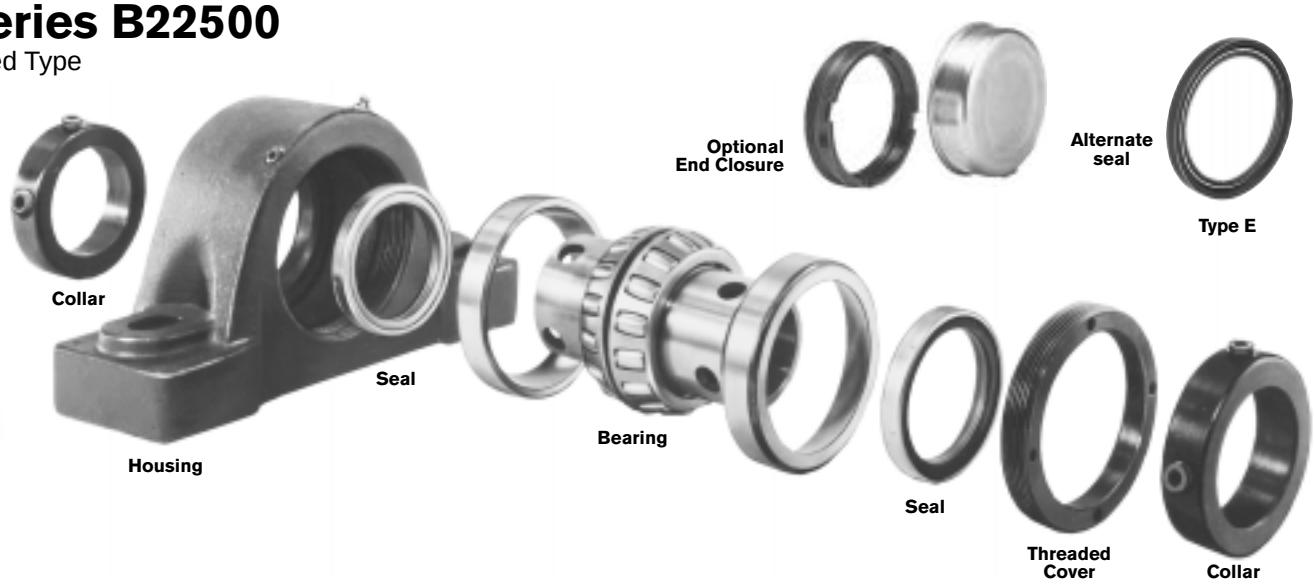
▲ For variations in type and material, use prefix: PE-B22432 -0 For construction features, use suffix:
FE — flanged unit PE — pillow block, cast iron F — 4-bolt base pillow block
EPE — pillow block, cast iron PKE — pillow block, cast steel (on 1 15/16" and larger shafts only)

■ Floating labyrinth seals, suffix H, are furnished with CSE-B22400H repair kits. For spring-loaded lip type seals specify CSE-B22400E.

Spherical Roller Bearing Unit Replacement Parts

Series B22500

Fixed Type



Shaft diameter *mm*	Shaft diameter inches	Basic Bearing Designation ▲	Repair kit ■	Components in repair kit: Spherical roller bearing	Components in repair kit: Type H multi-disc labyrinth seals (2 reqd.)■	Components in repair kit: Collar with setscrews (2 included)	Threaded cover for open end	Threaded cover for closed end	End closure	Housing number ▲
	1 7/16	B22523	B22523HL	B22523	B22424-3H	B22424-5S	B22424-7	B22424-7C	B22424-6	P-B22523-0
	1 11/16	B22527	B22527HL	B22527	B22428-3H	B22428-5S	B22428-7	B22428-7C	B22428-6	P-B22527-0
	1 15/16	B22531	B22531HL	B22531	B22432-3H	B22432-5S	B22432-7	B22432-7C	B22432-6	P-B22531-0
	2	B22532	B22532HL	B22532	B22436-3H	B22435-5S	B22436-7	B22436-7C	B22436-6	P-B22535-0
	2 3/16	B22535	B22535HL	B22535						
	2 7/16	B22539	B22539HL	B22539	B22440-3H	B22440-5S	B22440-7	B22440-7C	B22440-6	P-B22539-0
	2 11/16	B22543	B22543HL	B22543	B22448-3H	B22443-5S	B22448-7	B22448-7C	B22448-6	P-B22547-0
	2 15/16	B22547	B22547HL	B22547		B22448-5S				
	3 7/16	B22555	B22555HL	B22555	B22456-3H	B22456-5S	B22456-7	B22456-7C	B22456-6	P-B22556F-0
	3 15/16	B22563	B22563HL	B22563	B22464-3H	B22464-5S	B22464-7	B22464-7C	B22464-6	P-B22564F-0
	4	B22564	B22564HL	B22564						
	4 3/16	B22567	B22567HL	B22567	B22572-3H	B22571-5S	B22572-7	B22572-7C	B22572-6	P-B22572F-0
	4 7/16	B22571	B22571HL	B22571		B22571-5S				
	4 1/2	B22572	B22572HL	B22572		B22572-5S				
110		*B225M110*	*B225M110HL*	*B225M110*		B22571-5S				
115		*B225M115*	*B225M115HL*	*B225M115*		B22572-5S				
	4 15/16	B22579	B22579HL	B22579	B22580-3H	B22580-5S	B22580-7	B22580-7C	B22580-6	P-B22580F-0
	5	B22580	B22580HL	B22580						
125		*B225M125*	*B225M125HL*	*B225M125*						

▲ For variations in type and material, use prefix: P-B22531 -0 For construction features, use suffix:

P — pillow block, cast iron — F — 4-bolt base pillow block

PK — pillow block, cast steel (for 4 3/16", 110 mm and larger shaft only) (on 1 15/16" and larger shafts only)

DSH — takeup unit

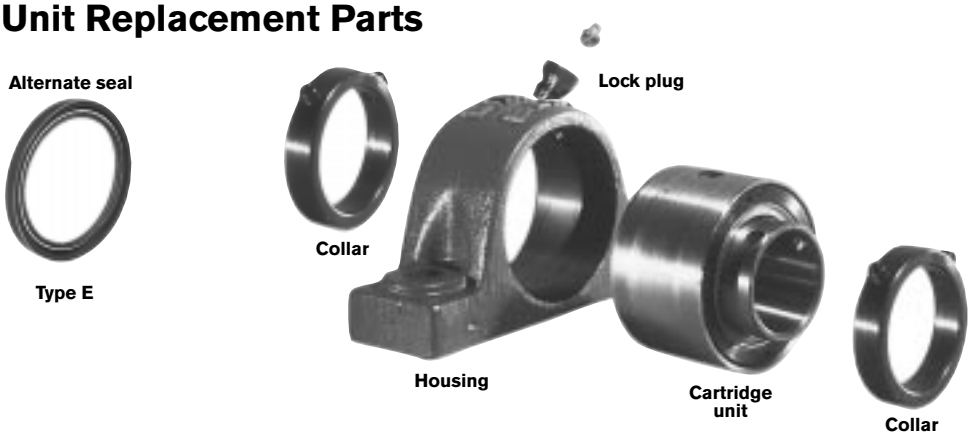
■ Floating labyrinth seals, suffix H, are furnished with B22500HL repair kits. For spring-loaded lip type seals specify B22500EL.

* Closed end units are assembled with two seals.

Spherical Roller Bearing Unit Replacement Parts

Series B22500

Expansion Type



Shaft diameter mm	Shaft diameter inches	Pillow block number	Basic Bearing Designation	Repair kit ■	Components in repair kit: Type H multi-disc labyrinth seals (2 reqd.)■	Components in repair kit: Collar with setscrews (2 included)	Locking plug number	Housing number ▲
	1 7/16	PE-B22523H	B22523	CSE-B22523H	B22424-3H	B22424-5S	B22440-8A	PE-B22523-OE
	1 11/16	PE-B22527H	B22527	CSE-B22527H	B22428-3H	B22428-5S	B22448-8A	PE-B22527-OE
	1 15/16	PE-B22531H	B22531	CSE-B22531H	B22432-3H	B22432-5S	B22448-8A	PE-B22531-OE
	2	PE-B22532H	B22532	CSE-B22532H	B22436-3H	B22435-5S	B22448-8A	PE-B22535-OE
	2 3/16	PE-B22535H	B22535	CSE-B22535H				
	2 7/16	PE-B22539H	B22539	CSE-B22539H	B22440-3H	B22440-5S	B22448-8A	PE-B22539-OE
	2 11/16	PE-B22543H	B22543	CSE-B22543H	B22448-3H	B22443-5S	B22572-8A	PE-B22547-OE
	2 15/16	PE-B22547H	B22547	CSE-B22547H		B22448-5S		
	3 7/16	PE-B22555FH	B22555	CSE-B22555H	B22456-3H	B22456-5S	B22580-8A	PE-B22556F-OE
	3 15/16	PE-B22563FH	B22563	CSE-B22563H	B22464-3H	B22464-5S	B22572-8A	PE-B22564F-OE
	4	PE-B22564FH	B22564	CSE-B22564H				
	4 3/16	PE-B22567FH	B22567	CSE-B22567H	B22572-3H	B22571-5S	B22572-8A	PE-B22572F-OE
	4 7/16	PE-B22571FH	B22571	CSE-B22571H		B22571-5S		
	4 1/2	PE-B22572FH	B22572	CSE-B22572H		B22572-5S		
110		*PE-B225M110FH*	*B225M110*	*CSE-B225M110H*		B22571-5S		
115		*PE-B225M115FH*	*B225M115*	*CSE-B225M115H*		B22572-5S		
	4 15/16	PE-B22579FH	B22579	CSE-B22579H	B22580-3H	B22580-5S	B22580-8A	PE-B22580F-OE
	5	PE-B22580FH	B22580	CSE-B22580H				
125		*PE-B225M125FH*	*B225M125*	*CSE-B225M125H*				

Expansion units cannot be furnished with closed end caps.

4 3/16", 110 mm and larger shafts are available with cast steel housing, use prefix PKE i.e., PKE-B22567FH.

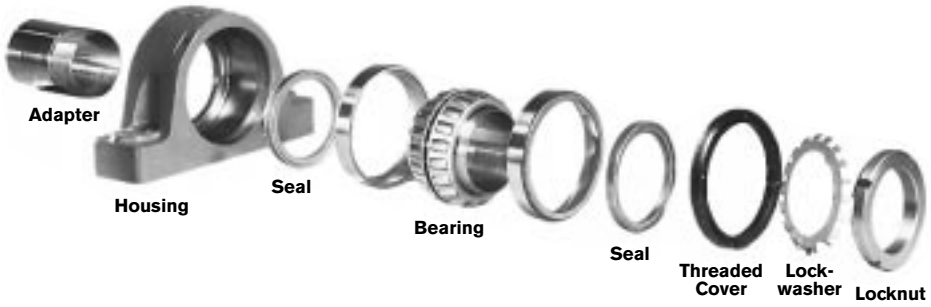
▲ For pillow block with 4-bolt base, use suffix F (on 1 15/16" and larger shafts only).

■ Floating labyrinth seals, suffix H, are furnished with CSE-B22500H repair kits. For spring-loaded lip type seals specify CSE-B22500E.

Spherical Roller Bearing Unit Replacement Parts

Max Mount™ Series B22600

Fixed Type



Shaft diameter inches	Basic Bearing Designation ▲	Repair kit ■	Components in repair kit: Spherical roller bearing	Components in repair kit: Type H multi-disc labyrinth seals (2 reqd.)■	Components in repair kit: Adapter assembly†	Threaded cover for open end	Threaded cover for closed end	End closure *	Housing number ▲
1 7/16	B22623	B22623HL	B22623	B22424-3H	SNW623-1 7/16	B22424-7	B22424-7C	B22424-6	P-B22424-0
1 15/16	B22631	B22631HL	B22631	B22432-3H	SNW631-1 15/16	B22432-7	B22432-7C	B22432-6	P-B22432-0
2 3/16	B22635	B22635HL	B22635	B22436-3H	SNW635-2 3/16	B22436-7	B22436-7C	B22436-6	P-B22436-0
2 7/16	B22639	B22639HL	B22639	B22440-3H	SNW639-2 7/16	B22440-7	B22440-7C	B22440-6	P-B22440-0
2 11/16 2 15/16	B22643 B22647	B22643HL B22647HL	B22643 B22647	B22448-3H	SNW647-2 11/16 SNW647-2 15/16	B22448-7	B22448-7C	B22448-6	P-B22448-0
3 7/16	B22655	B22655HL	B22655	B22456-3H	SNW655-3 7/16	B22456-7	B22456-7C	B22456-6	P-B22456-0
3 15/16	B22663	B22663HL	B22663	B22464-3H	SNW663-3 15/16	B22464-7	B22464-7C	B22464-6	P-B22464-0
4 7/16	B22671	B22671HL	B22671	B22572-3H	SNW671-4 7/16	B22572-7	B22572-7C	B22572-6	P-B22572F-0
4 15/16	B22679	B22679HL	B22679	B22580-3H	SNW679-4 7/16	B22580-7	B22580-7C	B22580-6	P-B22580F-0

▲For variations in type and material, use prefix:
T — takeup unit
EF — padded flanged unit
EP — pillow block, cast iron
F — flanged unit
FB— flanged bracket unit
FC— flanged cartridge unit
P— pillow block, cast iron
PK— pillow block, cast steel

P-B22631 -0 For construction features, use suffix:
F— 4-bolt base pillow block (on 1 15/16" and larger shafts only)

* Closed end units are assembled with two seals.

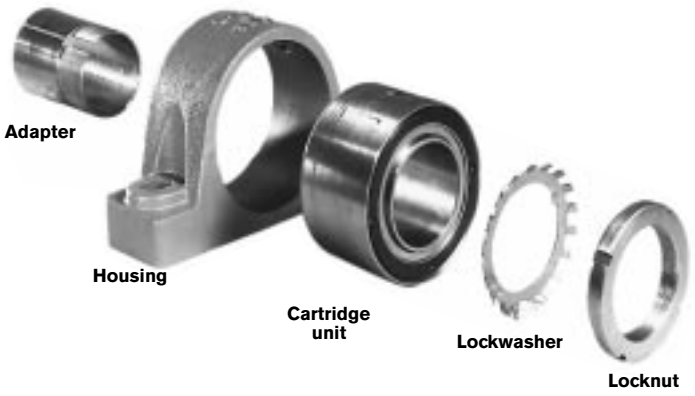
■ Floating labyrinth seals, suffix H, are furnished with B22600HL repair kits. For spring-loaded lip type seals specify B22600EL.

† — Adapter assembly consists of adapter, lockwasher and locknut.

Spherical Roller Bearing Unit Replacement Parts

Max Mount™ B22600

Expansion Type



Shaft diameter inches	Pillow block number ▲	Basic Bearing Designation	Repair kit ■	Components in repair kit: Type H■ multi-disc labyrinth seals (2 reqd.)	Components in repair kit: Adapter assembly†	Locking plug number: For pillow block	Locking plug number: For flanged unit	Housing number ▲
1 7/16	PE-B22623H	B22623	CSE-B22623H	B22424-3H	SNW623-1 7/16	B22440-8A	B22440-8A	PE-B22424-OE
1 15/16	PE-B22631H	B22631	CSE-B22631H	B22432-3H	SNW631-1 15/16	B22440-8A	B22440-8A	PE-B22432-OE
2 3/16	PE-B22635H	B22635	CSE-B22635H	B22436-3H	SNW635-2 3/16	B22440-8A	B22440-8A	PE-B22436-OE
2 7/16	PE-B22639H	B22639	CSE-B22639H	B22440-3H	SNW639-2 7/16	B22440-8A	B22440-8A	PE-B22440-OE
2 11/16 2 15/16	PE-B22643H PE-B22647H	B22643 B22647	CSE-B22643H CSE-B22647H	B22448-3H	SNW647-2 11/16 SNW647-2 15/16	B22448-8A	B22448-8A	PE-B22448-OE
3 7/16	PE-B22655H	B22655	CSE-B22655H	B22456-3H	SNW655-3 7/16	B22572-8A	B22572-8A	PE-B22456-OE
3 15/16	PE-B22663H	B22663	CSE-B22663H	B22464-3H	SNW663-3 15/16	B22448-8A	B22572-8A	PE-B22464-OE
4 7/16	PE-B22671H	B22671	CSE-B22671H	B22572-3H	SNW671-4 7/16	B22572-8A		PE-B22572F-OE
4 15/16	PE-B22679H	B22679	CSE-B22679H	B22580-3H	SNW679-4 15/16	B22580-8A		PE-B22580F-OE

▲ For variations in type and material, use prefix:
FE — flanged unit
EPE — pillow block, cast iron
PE — pillow block, cast iron
PKE — pillow block, cast steel

PE-B22631 -0

For construction features, use suffix:
F — 4-bolt base pillow block (on 1 15/16" and larger shafts only)

■ Floating labyrinth seals, suffix H, are furnished with CSE-B22600H repair kits. For spring-loaded lip type seals specify CSE-B22600E.

† — Adapter assembly consists of adapter, lockwasher and locknut.

Series B22400 and B22500

Housing End Closures:

All fixed type B22400 and B22500 mounted units can be purchased with formed steel closed end caps on the collar side which covers all rotating elements. Two housing seals are provided to protect the bearing during mounting or in case of accidental cap removal. Closed end units have a special extended threaded cover for mounting the end cap. They are designated with the suffix HHC or EEC (i.e., P-B22431HHC). Shafting should not extend beyond the end of the bearing inner ring more than ⅛" *(3.2 mm)* when end caps are to be used.

Housing Mounting:

Series B22400 and B22500 mounted units have drilled or cored mounting bolt holes suitable for the inch or metric bolts listed. Drilled holes will be 1/32" *(0.8 mm)* larger than the largest inch bolt shown. Cast slots in pillow blocks are normally 1/16" wider than the specified mounting bolt nominal diameter. It is expected that plain washers will be used under the bolt head to span the slot width and aid torquing. Narrow (N) series washers per ANSI B18.22.1-1981 (previously designated SAE series) are recommended. If wide series washers are used, the full length of the slot may not be usable for positioning the unit.

Replacement Parts:

Bearings and seals can be replaced in Series B22400 and B22500 mounted units (except CSE units). Replacement parts are listed on pages D-62 through D-65. Service instructions for mounting are included with each unit or replacement bearing and should be closely followed. Replacement bearings are not prelubricated but are coated with a mineral base preservative and should be further protected from moisture and dirt, especially during installation.

Operation:

Series B22400 and B22500 mounted units are prelubricated with a good quality petroleum grease of No. 2 consistency which has been tested for operational characteristics and stability for long shelf life. The service instructions packed with each unit provide guidelines for relubrication intervals and recommended greases. The lubricant furnished is generally limited to an operating temperature range of –20°F to +200°F *(–29° to 93°C)*. The lip seal E should be limited to a temperature less than 225°F *(107°C)*.

Where significant thrust loads are applied to B22400 or B22500 mounted units, thrust collars, spacers, shaft shoulders etc. should be utilized to support the thrust so that it is not transmitted through the locking collars and set screws.

These units have a misalignment capability of ±2°. They are factory adjusted with sufficient clearance for operation within stated speed limits.

Takeups:

The mounting of B22400 and B22500 pillow blocks on universal LHD takeup frames is illustrated on page D-22. Smaller pillow blocks can be mounted on LC frames, see page B-60.

Fixed and Expansion Units:

Fixed and expansion type units are available in series B22400 and B22500 pillow blocks and flanged units. As these units are designed for slip fitted shafts, collar mounted, two fixed units can usually be applied to a shaft. Expansion units are recommended for use on one end of longer shafts, where supports are not steel or where significant temperature differentials are expected between shafts and mounting structures.

Recommended Shaft Tolerances

Shaft Diameter	Tolerance
1"–2"	Nominal to –.0005"
2 1/16"–5"	Nominal to –.0010"
17 mm–50 mm	Nominal to –0.013 mm
55 mm–125 mm	Nominal to –0.025 mm

CAUTION The above shaft tolerances are suitable for loads up to .18 C and an L_{10} life greater than 20,000 hours. For more severe conditions, consult Rexnord Corporation.

The service life of a collar mounted bearing is largely dependent on shaft fit and may be expected to approach theoretical L_{10} life only if the bearing is press fitted to a shaft. A slip fit mounting in accordance with the shaft tolerances shown in table will provide generally acceptable service life on normal applications under light to moderate load and speed conditions. A shaft tolerance resulting in looser fits (such as with commercial shafting) may be expected to have greatly reduced reliability and increasing problems of shaft fret wear, bearing inner ring fracture and shaft slippage. In general, looser fits than recommended are feasible only for very light loading and lower speeds. Prototype or field testing is strongly recommended if looser fits must be considered.

Shafting should be designed for adequate strength and stiffness for the intended application. It should be round, straight, free of nicks and burrs and of correct size.

Warning:

The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stops bars, etc., together with proper safety factors. When these conditions are unavoidable Link-Belt Bearing Division, Rexnord Corp. should be consulted.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Max Mount™ Series B22600

Housing End Closures:

All fixed type B22600 mounted units can be purchased with formed steel closed end caps on the collar side which covers all rotating elements. Two housing seals are provided to protect the bearing during mounting or in case of accidental cap removal. Closed end units have a special extended threaded cover for mounting the end cap. They are designated with the suffix HHC or EEC (i.e., P-B22631HHC). Shafting should not extend beyond the end of the bearing inner ring more than 1/8" *(3.2 mm)* when end caps are to be used.

Housing Mounting:

Series B22600 mounted units have drilled or cored mounting bolt holes suitable for the inch or metric bolts listed. Drilled holes will be 1/32" *(0.8 mm)* larger than the largest inch bolt shown. Cast slots in pillow blocks are normally 1/16" wider than the specified mounting bolt nominal diameter. It is expected that plain washers will be used under the bolt head to span the slot width and aid torquing. Narrow (N) series washers per ANSI B18.22.1-1981 (previously designated SAE series) are recommended. If wide series washers are used, the full length of the slot may not be usable for positioning the unit.

Replacement Parts:

Bearings and seals can be replaced in Series B22600 mounted units (except CSE units). Replacement parts are listed on pages D-66 and D-67. Service instructions for mounting are included with each unit or replacement bearing and should be closely followed. Replacement bearings are not prelubricated but are coated with a mineral base preservative and should be further protected from moisture and dirt, especially during installation.

Operation:

Series B22600 mounted units are prelubricated with a good quality petroleum grease of No. 2 consistency which has been tested for operational characteristics and stability for long shelf life. The service instructions packed with each unit provide guidelines for relubrication intervals and recommended greases. The lubricant furnished is generally limited to an operating temperature range of –20°F to +200°F *(–29° to 93°C)*. The lip seal E should be limited to a temperature less than 225°F *(107°C*).

Where significant thrust loads are applied to B22600 mounted units, thrust collars, spacers, shaft shoulders etc. should be utilized to support the thrust so that it is not transmitted through the locking collars and set screws.

These units have a misalignment capability of ±2°. They are factory adjusted with sufficient clearance for operation within stated speed limits.

Takeups:

The mounting of B22600 pillow blocks on universal LHD takeup frames is illustrated on page D-22. Smaller pillow blocks can be mounted on LC frames, see page B-60.

Fixed and Expansion Units:

Fixed and expansion type units are available in series B22600 pillow blocks and flanged units. Expansion units are recommended for use on one end of the shaft, unless special consideration is taken into account for axial movement when mounting the adapter assemblies. In the case of fixed units only, consult the Link-Belt Bearing Division for proper mounting instructions.

Recommended Shaft Tolerances

Shaft Diameter	Tolerance
1"–2"	Nominal to –.003"
2 1/16"–4"	Nominal to –.004"
3 1/16"–5"	Nominal to –.005"
17 mm–50 mm	Nominal to –0.076 mm
55 mm–100 mm	Nominal to –0.102 mm
110 mm–125 mm	Nominal to –0.127 mm

CAUTION The above shaft tolerances are suitable for loads up to .18C and an L10 life greater than 20,000 hours. For more severe conditions, consult the Rexnord Corporation.

The service life of an adapter mounted bearing is largely dependent on a correctly tightened adapter. Improperly tightened bearings and adapter assemblies may slip or turn on the shaft. The proper procedure for tightening the adapter assembly is specified in the service instructions B-RBU-47. Refer to these instructions before mounting the B22600 series bearings.

The shafting should be designed for adequate strength and stiffness for the intended application. It should be round, straight, free of nicks and burrs and of the correct size.

Warning:

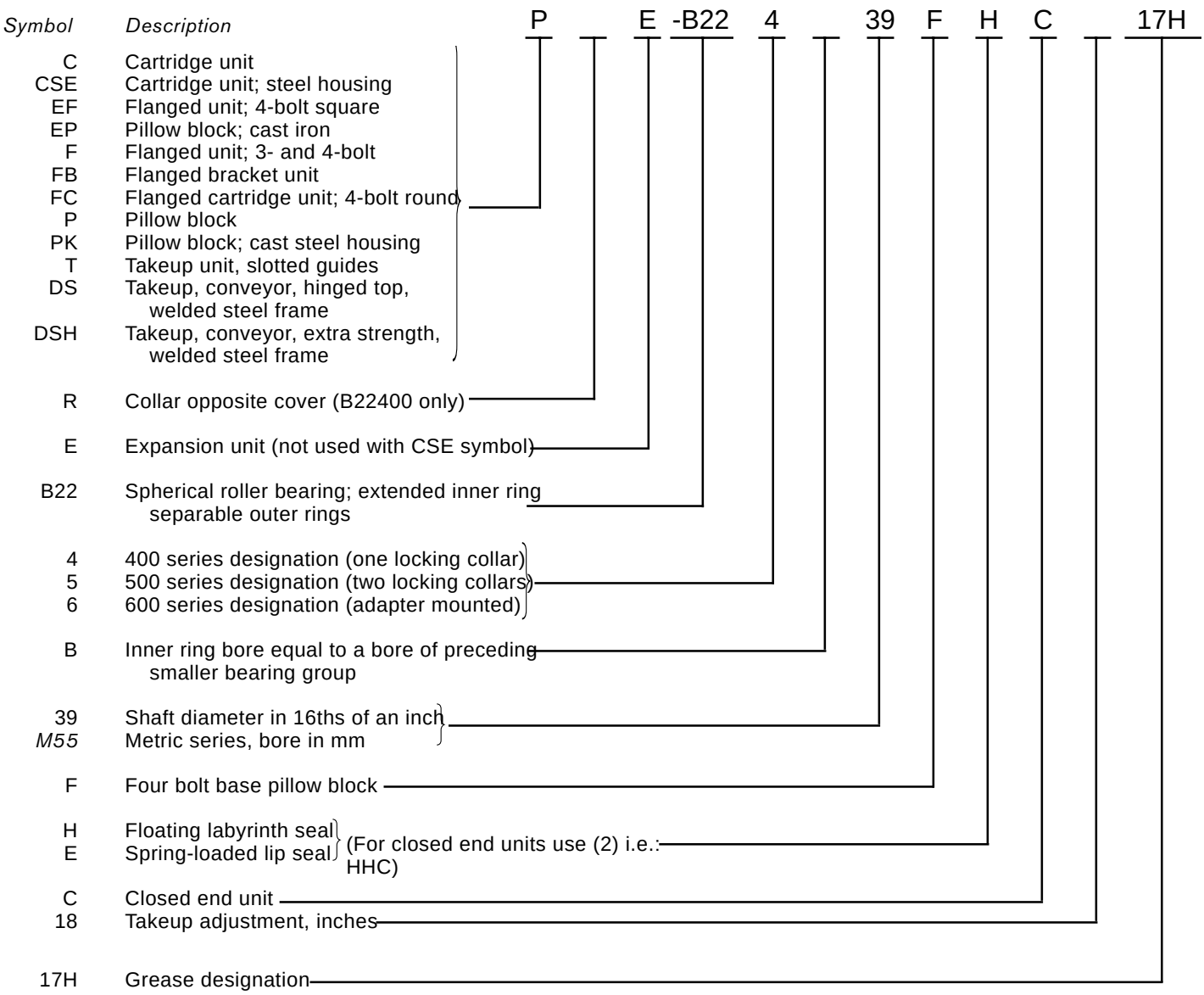
The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stops bars, etc., together with proper safety factors. When these conditions are unavoidable Link-Belt Bearing Division, Rexnord Corp. should be consulted.

Nomenclature

Series B22400, B22500 and B22600

Spherical Roller Bearing Units



The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division, Rexnord Corp. should be consulted regarding optional features, availability, and the application requirements.

Spherical Roller Bearing Pillow Blocks and Takeups

Contents

Series 6600, 6800, SAF22600, 7600, 7800, SAF22300

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Selection E-7
Load Ratings E-9
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Nomenclature E-27
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Series 6600, 6800, 6900, SAF22600, 7600, 7800, 7900, SAF22300

Spherical Roller Bearing Pillow Blocks and Takeups

Self-aligning spherical roller bearing pillow blocks and takeups provide high load carrying capacity for radial or combination radial and thrust loads. They are designed for use on conveyors, dryers, road building equipment, runout tables, fans, crushers, hammermills and many other high-precision, heavy-duty applications.

① Spherical roller bearings may be direct or adapter mounted. Housings have provision for fixed or expansion mounting.

② Choice of seals — Type R multi-labyrinth, D5 Pentac®, or Type D8 independently flushable seals — effectively retain lubricant and exclude contaminants.

③ Removable housing cap facilitates bearing mounting, inspection and maintenance.

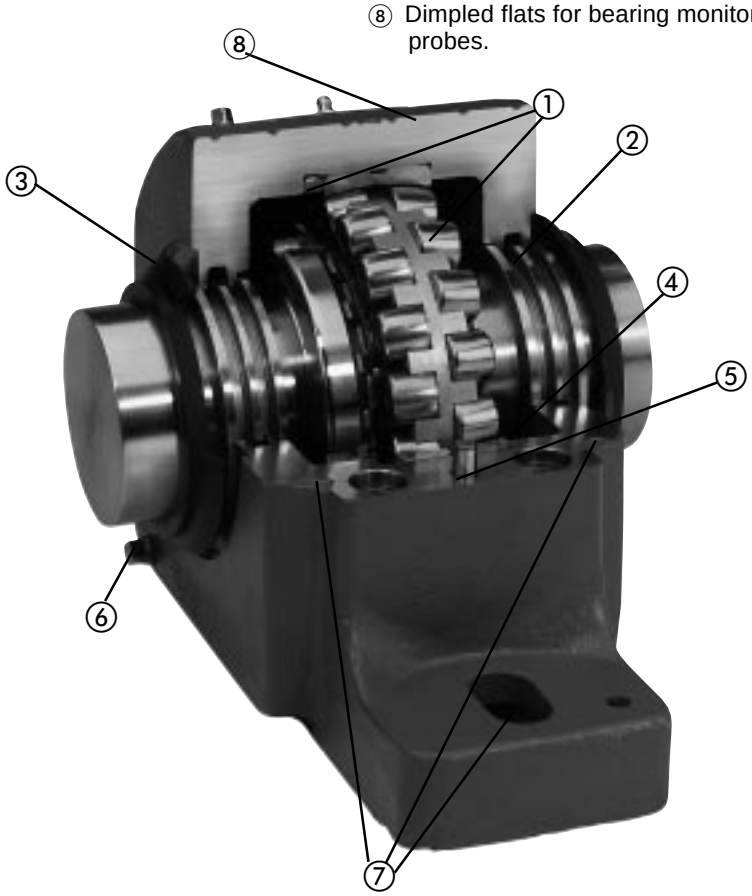
④ Mating surfaces are machined. Caps and bases matched and marked.

⑤ Base and cap are dowelled for accurate assembly and security.

⑥ Oil or grease lubrication ready. Large lubricant reservoir in base prolongs lubrication interval.

⑦ Slotted bolt holes in base facilitate mounting; machined finish on base for firm seating on supporting surface. Pry slots for easy cap removal.

⑧ Dimpled flats for bearing monitor probes.



A Seal Choice for Every Environment

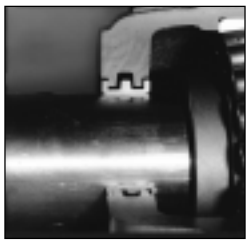
Select the proper seal from Link-Belt's seal menu.

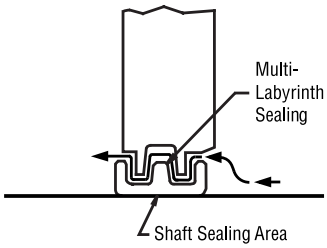
	Triple Ring R Seal	PenTac® D5 Seal	Taconite D8 Seal	Wash Down T Seal
Dirt/Dust	✔	✔✔	✔✔✔	✔
Speed	✔✔✔	✔✔	✔	✔✔
Wash Down	✔	✔✔	✔✔	✔✔✔

✔ Good ✔✔ *Better* ✔✔✔ *Best*

Metal Triple-Ring R Seal

This industry standard seal provides a labyrinth grease chamber between the housing grooves and the seal rings. Operates at high speed; good for moderate dust, dirt or moisture.





D5 PenTac 5-Point Sealing System

Rugged contact lip seal, molded on a Kevlar® body, rotates with the shaft. The PenTac seal acts as a flinger, keeping debris away from the seal area, and provides five seal points.

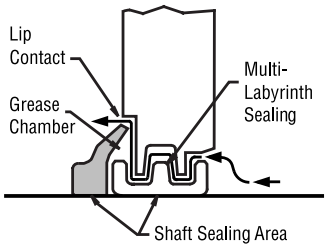
1 - Seals shaft

2 - Seals housing

3 - Creates a grease chamber to prevent bearing contamination

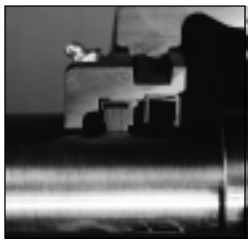
4 - Acts as a flinger

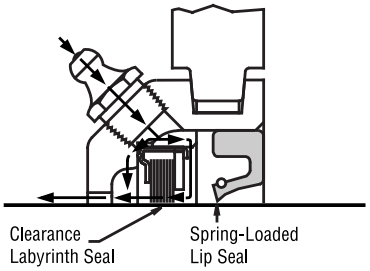
5 - Grease chambers created by multi-labyrinth chamber



D8 Taconite Sealing System

A rugged cast carrier protects a metal labyrinth outboard seal and a spring-loaded inboard seal. When independently lubricated, the D8 system directs the grease between the two seals, purging all contaminants before they can reach the bearing chamber. Thousands are in use in the toughest applications worldwide.

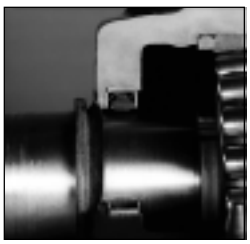


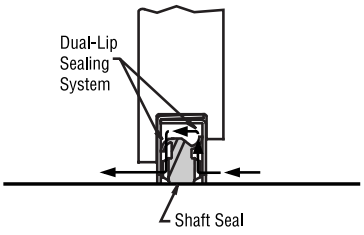


Exclusive T Water Seal

Available on special order, this patented seal was developed for use on equipment which experiences constant water splash or frequent wash down. The unique T-shaped lip seal rides in a stainless steel carrier and rotates with the shaft. It seals the shaft and its one-way, double-contact lips allow for grease purge from the bearing chamber, but prevent the reverse flow of water or debris. Link Belt's T seal is the standard in the environmental equipment industry.

Link Belt Bearing offers Pillow Blocks with special features for severe wash down environments. Black Rilsan Nylon 11 coated housings, stainless steel hardware and end caps or solid closed end housings, and the patented T contact water seal are the standard features of the BP-LB6800C series. Units may be further modified to meet specific needs.





Shaft	Part Number	Shaft	Part Number
1 7/16"	BP-LB6823	3 3/16"	BP-LB6851*
2 3/16"	BP-LB6835*	3 15/16"	BP-LB6863F
2 7/16"	BP-LB6839*	4 1/2"	BP-LB6872F
2 11/16"	BP-LB6843*	4 15/16"	BP-LB6879F
2 15/16"	BP-LB6847*		

** For four-bolt base add suffix "F."*
Unit with one side solid cast closed, add "C" suffix.

Series P-LB6800, P-LB6600, P-LB6900, SAF22600

Pillow Blocks

P-LB6800R 2-bolt base pillow blocks for shafts 1 7/16" through 3½", *40 mm through 90 mm.*
P-LB6800FR 4-bolt base pillow block for shafts 2 7/16" through 8", *65 mm through 200 mm*.

These pillow blocks have Series 22200LBK tapered bore spherical roller bearings with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-9 through E-12.
Dimensions on pages E-15 and E-16.
Additional information on page E-34.

Pillow Blocks

P-LB6600FR 4-bolt base pillow blocks for shafts 8 7/16" through 10½", *220 mm through 300 mm*.

These pillow blocks have Series 23000LBK tapered bore spherical roller bearing with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-10 through E-12.
Dimensions on page E-16.

Additional information on page E-34.

Pillow Blocks

P-LB6800D8 2-bolt base pillow blocks for shafts 1 7/16" through 3½".
P-LB6800FD8 4-bolt base pillow blocks for shafts 2 7/16" through 8".
P-LB6600FD8 4-bolt base pillow blocks for shafts 8 7/16" through 10½".

These pillow blocks are equipped with type D8 sealing systems for extreme adverse operating conditions and have Series 22200LBK or 23000LBK tapered bore spherical roller bearings with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease lubrication.

Load ratings on pages E-9 through E-12.

Dimensions on pages E-17 and E-18.
Additional information on page E-34.

Pillow Blocks

P-LB6900R 2-bolt base pillow blocks for shafts 1 7/16" through 2 15/16".
P-LB6900FR 2-bolt base pillow blocks for shafts 2 3/16" through 2 15/16".
SAF22600 4-bolt base pillow blocks for shafts 3 3/16" through 5 15/16".

These pillow blocks have Series 22300LBK tapered bore spherical roller bearings with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-13 and E-14.
Dimensions on page E-23.
Additional information on page E-34.

Series P-LB7800, P-LB7600, P-LB7900, SAF22300 Series DS-LB6800

Pillow Blocks

P-LB7800R 2-bolt base pillow blocks with bearing bores 2.9528" *(75 mm)* through 3.9370" *(100 mm)*.
P-LB7800FR 4-bolt base pillow blocks with bearing bores 2.9528" *(75 mm)* through 8.6614" *(220 mm)*.

These pillow blocks have Series 22200LB cylindrical bore spherical roller bearings for direct shaft mounting. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-9 through E-12.
Dimensions on page E-21.
Additional information on page E-34.

Pillow Blocks

P-LB7600FR 4-bolt base pillow blocks with bearing bores 9.4488" *(240 mm)* through 11.0236" *(280 mm)*.

These pillow blocks have Series 23000LB cylindrical bore spherical roller bearings for direct shaft mounting. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-10 and E-12.
Dimensions on page E-21.
Additional information on page E-34.

Pillow Blocks

P-LB7900R 2-bolt base pillow block with bearing bores 1.7717" *(45 mm)* through 3.3465" *(85 mm)*.
P-LB7900FR 4-bolt base pillow block with bearing bores 2.5591" *(65 mm)* through 3.3465" *(85 mm)*.
SAF22300 4-bolt base pillow blocks with bearing bores 3.5433" *(90 mm)* through 6.6929" *(170 mm)*.

These pillow blocks have Series 22300LB cylindrical bore spherical roller bearings for direct shaft mounting. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-13 and E-14.
Dimensions on page E-24.
Additional information on page E-34.

Takeups

DS-LB6800 conveyor takeups with hinged top welded steel frame and Series 22200LBK tapered bore spherical roller bearings with adapter assemblies. Bearing bores are parallel to the base of the frame.They are available with open or closed ends, fixed or expansion type, for grease lubrication.

LHD heavy duty sliding base welded steel frame are available for pillow block mounting.

Load ratings on pages E-9 through E-12.
Dimensions on pages E-25 and E-26.
Additional information on page E-34.

Pillow Blocks

PK-LB6800FR 4-bolt base pillow block for shafts 2 7/16" through 8", *65 mm through 200 mm*.

These cast steel pillow blocks have Series 22200LBK tapered bore spherical roller bearings with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-9 through E-12.
Dimensions on page E-19.
Additional information on page E-34.

Pillow Blocks

PK-LB6600FR 4-bolt base pillow blocks for shafts 8 7/16" through 10½", *220 mm through 260 mm*.

These cast steel pillow blocks have Series 23000LBK tapered bore spherical roller bearings with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-10 through E-12.
Dimensions on page E-19.
Additional information on page E-34.

Pillow Blocks

PK-LB6800FD8 4-bolt base pillow blocks for shafts 2 7/16" through 8". PK-LB6600FD8 4-bolt base pillow blocks for shafts 8 7/16" through 10½".

The cast steel pillow blocks are equipped with type D8 independently flushable seals for extreme adverse operating conditions and have Series 22200LBK or 23000LBK tapered bore spherical roller bearings with adapter assemblies. They are available with open or closed ends, fixed or expansion type, for grease lubrication.

Load ratings on pages E-9 through E-12.
Dimensions on page E-20.
Additional information on page E-34.

Pillow Blocks

PK-LB7800FR 4-bolt base pillow blocks with bearing bores 2.9528" *(75 mm)* through 8.6614" *(220 mm)*.

These cast steel pillow blocks have Series 22200LB cylindrical bore spherical roller bearings for direct shaft mounting. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-9 through E-12.
Dimensions on page E-22.
Additional information on page E-34.

Pillow Blocks

PK-LB7600FR 4-bolt base pillow block with bearing bores 9.4488" *(240 mm)* through 11.0236" *(280 mm)*.

These cast steel pillow blocks have Series 23000LB cylindrical bore spherical roller bearings for direct shaft mounting. They are available with open or closed ends, fixed or expansion type, for grease or oil lubrication.

Load ratings on pages E-10 through E-12.
Dimensions on page E-22.
Additional information on page E-34.

Series 6600, 6800, 6900, 7600, 7800, 7900, 22600, 22300

To select a pillow block, determine the applied radial load, the applied thrust load, the desired Rating Life, the required minimum shaft size, and applicable operating conditions. The procedure shown here will aid in selecting a pillow block to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the pillow block selected. Spherical roller bearing pillow blocks are available in Series 6600, 6800, 22600, 7600, 7800, and 22300. Because a number of series are available, several different pillow blocks that will fulfill and L_{10} life requirement can often be chosen.

Some of the factors to consider when choosing between series are: cost, speed limit, minimum shaft diameter, thrust load, space limitations, and type of shaft mounting.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA Standards STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

For radial load applications only, Table 3, page E-11 and Table 5, page E-14 can be used to select a unit or to determine L_{10} life expectancy.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000
Industrial—High reliability	—	—	120,000 to 300,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a roller bearing pillow block.

a For radial load only:

$P = F_r$

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a roller bearing pillow block from Table 2, page E-9, or Table 4, page E-13 having a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads:

Select a roller bearing pillow block of the desired shaft size from Table 2, page E-9 or Table 4, E-13.

Calculate the ratio of thrust load F_a to the radial load F_r.

$\frac{F_a}{F_r}$

Calculate the equivalent radial load P

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then $P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, see Table 2, page E-9 or Table 4, page E-13.

Calculate the required C

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Consult the bearing rating Table 2, page E-9 or Table 4, page E-13 to see if the selected bearing meets or exceeds the required C. The life expectancy of other sizes and series of bearings can be calculated similarly.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10} \qquad L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:

$P = F_r$

b For combined radial and thrust load:

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a$$

If $\frac{F_a}{F_r}$ is greater than e, then

$$P = X_2F_r + Y_2F_a$$

For values of e, X_1, Y_1, X_2, and Y_2, consult the appropriate bearing rating Table 2, page E-9 or Table 4, page E-13.

Step 2 Calculate the ratio of the basic load rating C to the equivalent radial load.

$\frac{C}{P}$

Step 3 Approximate the bearing life from Table 1.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L_n' = a_1a_2a_3L_{10}$$

where L_n' = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Table 2 • Load ratings and speed limits

Basic unit number				Bearing size number	C_0 Static load rating	C Basic load rating	Approximate speed limit RPM ●			e	$\frac{F_a}{F_r} \le e$		$\frac{F_a}{F_r} > e$	
Adapter mounted		Direct shaft mounted												
Shaft diameter inches/*mm*	number	Bearing seat *mm*	number		pounds/ *newtons*	pounds/ *newtons*	oil	grease	D5 PenTac ™ 1mm Push-in ■		X_1	Y_1	X_2	Y_2
1 7/16 1 1/2 *40*	LB6823 LB6824 *LB68M40*	. . . .	. . . .	22209LB	23600 *105000*	20800 *92500*	6200	5300	5300	.26	1.00	2.6	.67	3.9
1 11/16 1 3/4 *45*	LB6827 LB6828 *LB68M45*	. . . .	. . . .	22210LB	25500 *113000*	22000 *97900*	5500	5000	5000	.26	1.00	2.8	.67	4.2
1 15/16 2 *50*	LB6831 LB6832 *LB68M50*	. . . .	. . . .	22211LB	32500 *145000*	27000 *120000*	5000	4500	4500	.23	1.00	2.9	.67	4.4
2 3/16 *60*	LB6835 *LB68M60*	. . . . . .	. . . . . .	22213LB	46500 *207000*	38000 *169000*	4300	3800	3800	.24	1.00	2.8	.67	4.2
2 7/16 *65*	LB6839 *LB68M65*	*75*	LB7875	22215LB	53000 *236000*	41500 *185000*	3700	3400	3400	.22	1.00	3.1	.67	4.6
2 11/16 *70*	LB6843 *LB68M70*	*80*	LB7880	22216LB	58500 *260000*	46500 *207000*	3500	3200	3200	.22	1.00	3.1	.67	4.7
2 15/16 3 *75*	LB6847 LB6848 *LB68M75*	*85*	LB7885	22217LB	73500 *327000*	58500 *260000*	3250	3000	3000	.22	1.00	3.0	.67	4.5
3 3/16 *80*	LB6851 *LB68M80*	*90*	LB7890	22218LB	81500 *363000*	64000 *285000*	3000	2600	2600	.23	1.00	2.9	.67	4.3
3 7/16 3 1/2 *90*	LB6855 LB6856 *LB68M90*	*100*	LB78100	22220LB	104000 *463000*	80000 *356000*	2800	2200	2200	.24	1.00	2.8	.67	4.2
3 11/16 3 15/16 4 *100*	LB6859 LB6863 LB6864 *LB68M100*	*110*	LB78110	22222LB	132000 *587000*	102000 *454000*	2500	2000	2000	.25	1.00	2.7	.67	4.0
4 3/16 *110*	LB6867 *LB68M110*	*120*	LB78120	22224LB	163000 *725000*	120000 *534000*	2300	1900	1900	.25	1.00	2.7	.67	4.0
4 7/16 4 1/2 *115*	LB6871 LB6872 *LB68M115*	*130*	LB78130	22226LB	196000 *872000*	143000 *636000*	2100	1800	1800	.26	1.00	2.6	.67	3.9
4 15/16 5 *125*	LB6879 LB6880 *LB68M125*	*140*	LB78140	22228LB	228000 *1010000*	166000 *738000*	1950	1700	1700	.25	1.00	2.7	.67	4.0

Continued on facing page.

Table 2 • Load ratings and speed limits (continued)

Basic unit number				Bearing size number	C_0 Static load rating	C Static load rating	Approximate speed limit RPM ●			e	$\frac{F_a}{F_r} \le e$		$\frac{F_a}{F_r} > e$	
Adapter mounted		Direct shaft mounted												
Shaft diameter *mm*/inches	number	Bearing seat *mm*	number		pounds/ *newtons*	pounds/ *newtons*	oil	grease	D5 PenTac ™ 1mm Push-in ■		X_1	Y_1	X_2	Y_2
5 3/16	LB6883				270000	190000								
135	*LB68M135*	*150*	LB78150	22230LB	*1200000*	*845000*	1850	1600	1600	.25	1.00	2.7	.67	4.0
5 7/16	LB6887				310000	216000								
140	*LB68M140*	*160*	LB78160	22232LB	*1380000*	*961000*	1700	1500	1500	.26	1.00	2.6	.67	3.9
5 15/16	LB6895													
6	LB6896				345000	250000								
150	*LB68M150*	*170*	LB78170	22234LB	*1530000*	*1110000*	1600	1300	1300	.26	1.00	2.6	.67	3.9
6 7/16	LB68103													
6 1/2	LB68104				365000	255000								
160	*LB68M160*	*180*	LB78180	22236LB	*1620000*	*1130000*	1500	1300	1300	.25	1.00	2.7	.67	4.0
6 15/16	LB68111													
7	LB68112				415000	270000								
170	*LB68M170*	*190*	LB78190	22238LB	*1850000*	*1200000*	1400	1200	1200	.28	1.00	2.4	.67	3.6
7 3/16	LB68115				450000	300000								
180	*LB68M180*	*200*	LB78200	22240LB	*2000000*	*1330000*	1300	1100	1100	.29	1.00	2.3	.67	3.5
7 1/2	LB68120													
7 15/16	LB68127				550000	365000								
8	LB68128	*220*	LB78220	22244LB	*2450000*	*1620000*	1200	1000	1000	.29	1.00	2.3	.67	3.5
200	*LB68M200*													
8 7/16	LB66135													
8 1/2	LB66136													
8 15/16	LB66143				490000	260000								
9	LB66144	*240*	LB76240	23048LB	*2180000*	*1160000*	1100	1000	100	.25	1.00	2.7	.67	4.1
220	*LB66M220*													
9 7/16	LB66B151													
9 1/2	LB66B152													
9 15/16	LB66159													
10	LB66160				670000	345000								
10 7/16	LB66167	*280*	LB76280	23056LB	*2980000*	*1530000*	950	850	850	.25	1.00	2.7	.67	4.1
10 1/2	LB66168													
260	*LB66M260*													

● Speed limits are based on the following:

1. Type R seals properly aligned.
   a. For the type B seals, limit is 800 surface feet per minute (4.0 m/s) with good alignment.
   b. For type D8 seals, limit is 1500 surface feet per minute (7.6 m/s) with good alignment.
2. Proper operating internal clearance.
3. Adequate lubrication and maintenance (special lubricants and/or more frequent relubrication may be required).
4. Normal room temperature environment and no extraneous heat sources, such that bearing operating temperature does not exceed 100°C (212°F).
5. Equivalent radial load not greater than 7% of C.
6. Axial load, if any, not greater than 20% of radial load.

Additional information, page E-34.

■ D5 Pentac™ speed limits in the chart are based on pushing the Pentac™ seal against the housing face a distance of 1mm as specified by the service instructions. The Pentac™ seal can be pressed in a distance of 2mm for high contaminant environments. The speed limit at a 2mm "Push-In" distance should be limited to 80% of those listed in the chart.

Table 3 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

Adapter mounted	Direct shaft mounted	L_{10} Minimum life, hours	Radial load ratings, pounds														
			Speed, RPM														
			50	250	500	750	900	1200	1500	1800	2000	2500	3000	3500	4000	4500	5000
LB6823 LB6824 *LB68M40*	—	3000	10800	6640	5390	4770	4520	4150	3880	3670	3560	3330	3150	3010	2890	2790	2700
		8000	8020	4950	4020	3560	3370	3090	2890	2740	2650	2480	2350	2240	2150	2080	2010
		20000	6090	3760	3050	2700	2560	2350	2200	2080	2010	1880	1780	1700	1640	1580	1530
		40000	4950	3050	2480	2200	2080	1910	1780	1690	1640	1530	1450	1380	1330	1280	1240
		100000	3760	2320	1880	1670	1580	1450	1350	1280	1240	1160	1100	1050	1000	974	944
LB6827 LB6828 *LB68M45*	—	3000	11400	7020	5700	5050	4780	4390	4100	3880	3760	3520	3330	3180	3060	2950	2860
		8000	8480	5230	4250	3760	3560	3270	3060	2890	2800	2620	2480	2370	2280	2200	2130
		20000	6440	3970	3230	2860	2710	2480	2320	2200	2130	1990	1890	1800	1730	1670	1620
		40000	5230	3230	2620	2320	2200	2020	1890	1790	1730	1620	1530	1460	1410	1360	1310
		100000	3970	2450	1990	1760	1670	1530	1430	1360	1310	1230	1160	1110	1060	1030	998
LB6831 LB6832 *LB68M50*	—	3000	14000	8620	7000	6200	5870	5380	5030	4770	4620	4320	4090	3900	3750	3620	3510
		8000	10400	6420	5220	4620	4370	4010	3750	3550	3440	3220	3050	2910	2790	2700	2610
		20000	7910	4880	3960	3510	3320	3050	2850	2700	2610	2440	2310	2210	2120	2050	1990
		40000	6420	3960	3220	2850	2700	2470	2310	2190	2120	1990	1880	1800	1720	1660	1610
		100000	4880	3010	2440	2160	2050	1880	1760	1660	1610	1510	1430	1360	1310	1260	1220
LB6835 *LB68M60*	—	3000	19700	12100	9850	8720	8260	7580	7090	6710	6500	6080	5760	5500	5280		
		8000	14600	9040	7340	6500	6150	5640	5280	5000	4840	4530	4290	4090	3930		
		20000	11100	6870	5580	4940	4670	4290	4010	3800	3680	3440	3260	3110	2990		
		40000	9040	5580	4530	4010	3800	3480	3260	3080	2990	2790	2650	2530	2430		
		100000	6870	4240	3440	3050	2880	2650	2470	2340	2270	2120	2010	1910	1840		
LB6839 *LB68M65*	LB7875	3000	21500	13200	10800	9530	9020	8270	7740	7330	7100	6640	6290	6000			
		8000	16000	9870	8020	7100	6720	6160	5770	5460	5290	4950	4680	4470			
		20000	12200	7500	6090	5390	5110	4680	4380	4150	4020	3760	3560	3400			
		40000	9870	6090	4950	4380	4150	3800	3560	3370	3260	3050	2890	2760			
		100000	7500	4630	3760	3330	3150	2890	2700	2560	2480	2320	2200	2090			
LB6843 *LB68M70*	LB7880	3000	24100	14800	12100	10700	10100	9270	8670	8210	7950	7440	7040	6720			
		8000	17900	11100	8980	7950	7530	6910	6460	6120	5930	5540	5250	5010			
		20000	13600	8400	6820	6040	5720	5250	4910	4650	4500	4210	3990	3810			
		40000	11100	6820	5540	4910	4650	4260	3990	3770	3660	3420	3240	3090			
		100000	8400	5180	4210	3730	3530	3240	3030	2870	2780	2600	2460	2340			
LB6847 LB6848 *LB68M75*	LB7885	3000	30300	18700	15200	13400	12700	11700	10900	10300	10000	9360	8860				
		8000	22500	13900	11300	10000	9470	8690	8130	7690	7460	6970	6600				
		20000	17100	10600	8580	7600	7200	6600	6170	5850	5660	5300	5010				
		40000	13900	8580	6970	6170	5850	5360	5010	4750	4600	4300	4070				
		100000	10600	6520	5300	4690	4440	4070	3810	3610	3490	3270	3090				
LB6851 *LB68M80*	LB7890	3000	33100	20400	16600	14700	13900	12800	11900	11300	10900	10200	9690				
		8000	24700	15200	12400	10900	10400	9510	8890	8420	8160	7630	7220				
		20000	18700	11600	9390	8320	7870	7220	6750	6400	6200	5790	5490				
		40000	15200	9390	7630	6750	6400	5870	5490	5190	5030	4710	4460				
		100000	11600	7130	5790	5130	4860	4460	4170	3950	3820	3580	3390				
LB6855 LB6856 *LB68M90*	LB78100	3000	41400	25500	20700	18400	17400	15900	14900	14100	13700	12800					
		8000	30800	19000	15500	13700	13000	11900	11100	10500	10200	9540					
		20000	23400	14500	11700	10400	9840	9030	8440	7990	7750	7240					
		40000	19000	11700	9540	8440	7990	7330	6860	6490	6290	5880					
		100000	14500	8920	7240	6410	6070	5570	5210	4930	4780	4470					
LB6859 LB6863 LB6864 *LB68M100*	LB78110	3000	52800	32600	26400	23400	22200	20300	19000	18000	17400	16300					
		8000	39300	24300	19700	17400	16500	15200	14200	13400	13000	12200					
		20000	29900	18400	15000	13300	12500	11500	10800	10200	9870	9240					
		40000	24300	15000	12200	10800	10200	9350	8740	8280	8020	7500					
		100000	18400	11400	9240	8180	7740	7100	6640	6290	6090	5700					
LB6867 *LB68M110*	LB78120	3000	62100	38300	31100	27500	26100	23900	22400	21200	20500						
		8000	46300	28500	23200	20500	19400	17800	16700	15800	15300						
		20000	35100	21700	17600	15600	14800	13500	12700	12000	11600						
		40000	28500	17600	14300	12700	12000	11000	10300	9740	9440						
		100000	21700	13400	10900	9620	9110	8360	7810	7400	7170						

Continued on facing page.

Table 3 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

Basic unit number		L_{10} Minimum life, hours	Radial load ratings, pounds														
			Speed, RPM														
Adapter mounted	Direct shaft mounted		50	250	500	750	900	1200	1500	1800	2000	2500	3000	3500	4000	4500	5000
LB6871 LB6872 *LB68M115*	LB78130	3000	74000	45600	37100	32800	31100	28500	26700	25200	24500						
		8000	55100	34000	27600	24500	23200	21200	19900	18800	18200						
		20000	41900	25800	21000	18600	17600	16100	15100	14300	13800						
		40000	34000	21000	17000	15100	14300	13100	12300	11600	11200						
		100000	25800	15900	12900	11500	10900	9960	9310	8820	8540						
LB6879 LB6880 *LB68M125*	LB78140	3000	85900	53000	43000	38100	36100	33100	31000	29300							
		8000	64000	39500	32100	28400	26900	24700	23100	21800							
		20000	48600	30000	24400	21600	20400	18700	17500	16600							
		40000	39500	24400	19800	17500	16600	15200	14200	13500							
		100000	30000	18500	15000	13300	12600	11600	10800	10200							
LB6883 *LB68M135*	LB78150	3000	98300	60600	49300	43600	41300	37900	35400	33500							
		8000	73200	45200	36700	32500	30800	28200	26400	25000							
		20000	55600	34300	27900	24700	23400	21400	20100	19000							
		40000	45200	27900	22600	20100	19000	17400	16300	15400							
		100000	34300	21200	17200	15200	14400	13200	12400	11700							
LB6887 *LB68M140*	LB78160	3000	112000	68900	56000	49600	46900	43100	40300								
		8000	83300	51400	41700	36900	35000	32100	30000								
		20000	63200	39000	31700	28100	26600	24400	22800								
		40000	51400	31700	25700	22800	21600	19800	18500								
		100000	39000	24100	19600	17300	16400	15000	14100								
LB6895 LB6896 *LB68M150*	LB78170	3000	129000	79800	64800	57400	54300	49800	46600								
		8000	96400	59500	48300	42800	40500	37100	34700								
		20000	73200	45200	36700	32500	30800	28200	26400								
		40000	59500	36700	29800	26400	25000	22900	21400								
		100000	45200	27900	22600	20000	19000	17400	16300								
LB68103 LB68104 *LB68M160*	LB78180	3000	132000	81400	66100	58500	55400	50800									
		8000	98300	60600	49300	43600	41300	37900									
		20000	74700	46100	37400	33100	31400	28800									
		40000	60600	37400	30400	26900	25500	23400									
		100000	46100	28400	23100	20400	19400	17800									
LB68111 LB68112 *LB68M170*	LB78190	3000	140000	86200	70000	62000	58700	53800									
		8000	104000	64200	52200	46200	43700	40100									
		20000	79100	48800	39600	35100	33200	30500									
		40000	64200	39600	32200	28500	27000	24700									
		100000	48800	30100	24400	21600	20500	18800									
LB68115 *LB68M180*	LB78200	3000	155000	95800	77800	68900	65200	59800									
		8000	116000	71300	58000	51300	48600	44600									
		20000	87800	54200	44000	39000	36900	33900									
		40000	71300	44000	35800	31700	30000	27500									
		100000	54200	33400	27200	24100	22800	20900									
LB68120 LB68127 LB68128 *LB68M200*	LB78220	3000	189000	117000	94600	83800	79300	72800									
		8000	141000	86800	70500	62400	59100	54200									
		20000	107000	65900	53600	47400	44900	41200									
		40000	86800	53600	43500	38500	36500	33500									
		100000	65900	40700	33000	29300	27700	25400									
LB66135 LB66136 LB66143 LB66144 *LB66M220*	LB76240	3000	134000	83000	67400	59700	56500										
		8000	100000	61800	50200	44500	42100										
		20000	76100	47000	38200	33800	32000										
		40000	61800	38200	31000	27400	26000										
		100000	47000	29000	23500	20800	19700										
LB66151 LB66152 LB66159 LB66160 LB66167 LB66168 *LB66M260*	LB76280	3000	178000	110000	89400	79200	75000										
		8000	133000	82000	66600	59000	55900										
		20000	101000	62300	50600	44800	42400										
		40000	82000	50600	41100	36400	34500										
		100000	62300	38500	31200	27700	26200										

Operation in the high speed shaded areas may require oil lubrication.

Table 4 • Load ratings and speed limits

Basic unit number				Bearing size number	C_o Static load rating	C Basic load rating	Approximate speed limit RPM ●		e	$\frac{F_a}{F_r} <= e$		$\frac{F_a}{F_r} > e$	
Adapter mounted		Direct shaft mounted											
Shaft diameter inches	number	Bearing seat *mm*	number		pounds/ *newtons*	pounds/ *newtons*	oil	grease		X_1	Y_1	x_2	Y_2
1 7/16 1 1/2	LB6923 LB6924	*45*	LB7945	22309LB	40000 178000	35500 158000	4800	3800	.36	1.00	1.9	.67	2.8
1 11/16	LB6927	*50*	LB7950	22310LB	48000 214000	42500 189000	4300	3400	.36	1.00	1.9	.67	2.8
1 15/16 2	LB6931 LB6932	*55*	LB7955	22311LB	57000 254000	50000 222000	4000	3200	.36	1.00	1.9	.67	2.8
2 3/16	LB6935	*65*	LB7965	22313LB	80000 356000	65500 291000	3400	2600	.34	1.00	2.0	.67	3.0
2 7/16 2 1/2	LB6939 LB6940	*75*	LB7975	22315LB	98000 436000	83000 369000	3000	2200	.34	1.00	2.0	.67	3.0
2 11/16	LB6943	*80*	LB7980	22316LB	112000 498000	93000 414000	2800	2000	.34	1.00	2.0	.67	3.0
2 15/16	LB6947	*85*	LB7985	22317LB	122000 543000	102000 454000	2600	1900	.33	1.00	2.0	.67	3.0
3 3/16	22618-303	*90*	22318	22318LB	140000 623000	114000 507000	2400	1800	.33	1.00	2.0	.67	3.0
3 7/16 3 1/2	22620-307 22620-308	*100*	22320	22320LB	183000 814000	146000 649000	2200	1700	.34	1.00	2.0	.67	3.0
3 15/16 4	22622-315 22622-400	*110*	22322	22322LB	236000 1050000	180000 801000	2000	1600	.33	1.00	2.1	.67	3.1
4 3/16	22624-403	*120*	22324	22324LB	260000 1160000	204000 907000	1800	1400	.33	1.00	2.1	.67	3.1
4 7/16	22626-407	*130*	22326	22326LB	305000 1360000	236000 1050000	1700	1300	.33	1.00	2.1	.67	3.1
4 15/16 5	22628-415 22628-500	*140*	22328	22328LB	360000 1600000	275000 1220000	1500	1100	.34	1.00	2.0	.67	3.0
5 3/16	22630-503	*150*	22330	22330LB	405000 1800000	310000 1380000	1400	1000	.33	1.00	2.0	.67	3.0
5 7/16	22632-507	*160*	22332	22332LB	425000 1890000	325000 1450000	1300	950	.37	1.00	1.8	.67	2.7
5 15/16	22634-515	*170*	22334	22334LB	475000 2110000	360000 1600000	1300	950	.37	1.00	1.8	.67	2.7

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

● Speed limits are based on the following:

1. Type R seals properly aligned.
   a. For the type B seals, limit is 800 surface feet per minute (4.0 m/s) with good alignment.
   b. For type D8 seals, limit is 1500 surface feet per minute (7.6 m/s) with good alignment.
2. Proper operating internal clearance.
3. Adequate lubrication and maintenance (special lubricants and/or more frequent relubrication may be required).
4. Normal room temperature environment and no extraneous heat sources, such that bearing operating temperature does not exceed 100°C (212°F).
5. Equivalent radial load not greater than 7% of C.
6. Axial load, if any, not greater than 20% of radial load.

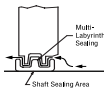
Additional information, page E-34.

Table 5 • Radial load ratings in pounds at various RPM for appropriate L_{10} life hours

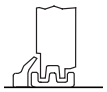
Basic unit number		L_{10} Minimum life, hours	Radial load ratings, pounds														
			Speed, RPM														
Adapter mounted	Direct shaft mounted		50	100	300	500	750	900	1000	1200	1500	1800	2000	2500	3000	3500	4000
LB6923 LB6924	LB7945	3000	18400	14900	10700	9200	8150	7720	7480	7080	6620	6270	6070	5680	5380	5130	4930
		8000	13700	11100	7990	6860	6070	5750	5570	5270	4930	4670	4520	4230	4010	3830	3670
		20000	10400	8440	6070	5210	4610	4370	4230	4010	3750	3550	3440	3210	3040	2910	2790
		40000	8440	6860	4930	4230	3750	3550	3440	3250	3040	2880	2790	2610	2470	2360	2270
LB6927	LB7950	8000	22000	17900	12800	11000	9760	9240	8950	8470	7920	7500	7270	6800	6440	6150	5900
		20000	16400	13300	9570	8210	7270	6880	6670	6310	5900	5590	5420	5070	4800	4580	4400
		40000	12400	10100	7270	6240	5520	5230	5070	4800	4490	4250	4110	3850	3640	3480	3340
		100000	10100	8210	5900	5070	4490	4250	4110	3900	3640	3450	3340	3130	2960	2830	2710
LB6931 LB6932	LB7955	3000	25900	21000	15100	13000	11500	10900	10500	9970	9320	8830	8550	8000	7570	7230	6950
		8000	19300	15700	11300	9660	8550	8100	7850	7430	6950	6580	6370	5960	5640	5390	5180
		20000	14600	11900	8550	7340	6500	6150	5960	5640	5280	5000	4840	4530	4290	4090	3930
		40000	11900	9660	6950	5960	5280	5000	4840	4580	4290	4060	3930	3680	3480	3320	3190
LB6935	LB7965	3000	33900	27500	19800	17000	15000	14200	13800	13100	12200	11600	11200	10500	9920	9470	
		8000	25200	20500	14700	12700	11200	10600	10300	9730	9100	8620	8350	7810	7390	7060	
		20000	19200	15600	11200	9610	8510	8060	7810	7390	6910	6540	6340	5930	5620	5360	
		40000	15600	12700	9100	7810	6910	6540	6340	6000	5620	5320	5150	4820	4560	4350	
LB6939 LB6940	LB7975	3000	42900	34900	25100	21500	19100	18000	17500	16500	15500	14700	14200	13300	12600		
		8000	32000	26000	18700	16000	14200	13400	13000	12300	11500	10900	10600	9890	9370		
		20000	24300	19700	14200	12200	10800	10200	9890	9370	8760	8290	8040	7520	7120		
		40000	19700	16000	11500	9890	8760	8290	8040	7610	7120	6740	6530	6100	5780		
LB6943	LB7980	3000	48100	39100	28100	24100	21300	20200	19600	18500	17300	16400	15900	14900			
		8000	35800	29100	20900	18000	15900	15100	14600	13800	12900	12200	11900	11100			
		20000	27200	22100	15900	13600	12100	11400	11100	10500	9820	9290	9000	8420			
		40000	22100	18000	12900	11100	9820	9290	9000	8520	7970	7550	7310	6840			
LB6947	LB7985	3000	52800	42900	30800	26400	23400	22200	21500	20300	19000	18000	17400	16300			
		8000	39300	31900	23000	19700	17400	16500	16000	15200	14200	13400	13000	12200			
		20000	29900	24300	17400	15000	13300	12500	12200	11500	10800	10200	9870	9240			
		40000	24300	19700	14200	12200	10800	10200	9870	9350	8740	8280	8020	7500			
22618	22318	3000	59000	47900	34400	29600	26200	24800	24000	22700	21300	20100	19500				
		8000	43900	35700	25700	22000	19500	18500	17900	16900	15800	15000	14500				
		20000	33400	27100	19500	16700	14800	14000	13600	12900	12000	11400	11000				
		40000	27100	22000	15800	13600	12000	11400	11000	10400	9770	9250	8960				
22620	22320	3000	75500	61300	44100	37900	33500	31700	30700	29100	27200	25800	25000				
		8000	56300	45700	32900	28200	25000	23600	22900	21700	20300	19200	18600				
		20000	42700	34700	25000	21400	19000	18000	17400	16500	15400	14600	14100				
		40000	34700	28200	20300	17400	15400	14600	14100	13400	12500	11800	11500				
22622	22322	3000	93100	75600	54400	46700	41300	39100	37900	35900	33600	31800	30800				
		8000	69400	56400	40500	34800	30800	29100	28200	26700	25000	23700	22900				
		20000	52700	42800	30800	26400	23400	22100	21500	20300	19000	18000	17400				
		40000	42800	34800	25000	21500	19000	18000	17400	16500	15400	14600	14200				
22624	22324	3000	106000	85700	61600	52900	46800	44300	43000	40700	38000	36000					
		8000	78600	63900	45900	39400	34900	33000	32000	30300	28300	26800					
		20000	59700	48500	34900	29900	26500	25100	24300	23000	21500	20400					
		40000	48500	39400	28300	24300	21500	20400	19700	18700	17500	16600					
22626	22326	3000	122000	99200	71300	61200	54200	51300	49700	47100	44000						
		8000	91000	73900	53100	45600	40400	38200	37000	35100	32800						
		20000	69100	56100	40400	34600	30700	29000	28100	26600	24900						
		40000	56100	45600	32800	28100	24900	23600	22800	21600	20200						
22628	22328	3000	142000	116000	83100	71300	63100	59800	57900	54800	51300						
		8000	106000	86100	61900	53100	47000	44500	43100	40900	38200						
		20000	80500	65400	47000	40400	35700	33800	32800	31000	29000						
		40000	65400	53100	38200	32800	29000	27500	26600	25200	23600						
22630	22330	3000	160000	130000	93700	80400	71200	67400	65300	61800							
		8000	119000	97000	69800	59900	53000	50200	48600	46100							
		20000	90800	73700	53000	45500	40300	38100	36900	35000							
		40000	73700	59900	43100	36900	32700	31000	30000	28400							
22632	22332	3000	173000	141000	101000	86900	76900	72800	70500	66800							
		8000	129000	105000	75400	64700	57300	54200	52600	49800							
		20000	98100	79700	57300	49200	43500	41200	39900	37800							
		40000	79700	64700	46500	39900	35400	33500	32400	30700							
22634	22334	3000	178000	145000	104000	89400	79200	75000	72700	68800							
		8000	133000	108000	77700	66600	59000	55900	54100	51200							
		20000	101000	82000	59000	50600	44800	42400	41100	38900							
		40000	82000	66600	47900	41100	36400	34500	33400	31600							

Operation in the high speed shaded areas may require oil lubrication.

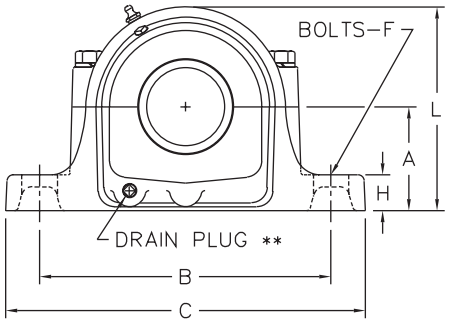
Spherical Roller Bearing Pillow Blocks
P-LB6800R, P-LB6800FR, P-LB6600FR

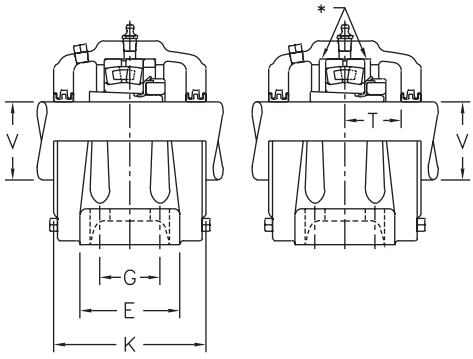


Triple-Ring R Seal (P-LB6800 R)
Three-point sealing with metal seal ring



D5 Pentac®Seal (P-LB6800 D5)
Five-point sealing with Kevlar® body lip seal plus metal seal ring





Fixed **Expansion**

Dimensions (inches/*mm*)

V Shaft diameter		Pillow block number	Bearing number	A	B		C	E	F	G	H	K	K	L	T	P	Unit wt.
					max.	min.			Bolts				□		■	●	(lbs./kgs.)
mm	inches																
	1 7/16	**P-LB6823R**	22209LBK	2 1/4	7	6 1/4	8 1/4	2 3/8	1/2	. . . .	13/16	3 5/8	4 3/8	4 3/8	1 1/16	6 1/4	11
	1 1/2	**P-LB6824R**															11
40		***P-LB68M40R***		*57.15*	*177.8*	*158.8*	*209.6*	*60.3*	*12*	*. . . .*	*20.6*	*92.1*	*111.1*	*111.1*	*27.0*	*158.8*	*5.0*
	1 11/16	**P-LB6827R**	22210LBK	2 1/2	7	6 1/2	8 1/4	2 3/8	1/2	. . . .	15/16	3 5/8	4 3/8	4 3/4	1 1/8	6 5/8	12
	1 3/4	**P-LB6828R**															12
45		***P-LB68M45R***		*63.50*	*177.8*	*165.1*	*209.6*	*60.3*	*12*	*. . . .*	*23.8*	*92.1*	*111.1*	*120.6*	*28.6*	*168.3*	*5.4*
	1 15/16	**P-LB6831R**	22211LBK	2 3/4	7 7/8	7 3/8	9 5/8	2 3/4	5/8	. . . .	15/16	3 7/8	4 13/16	5 1/4	1 3/16	7 1/4	14
	2	**P-LB6832R**															14
50		***P-LB68M50R***		*69.85*	*200.0*	*187.3*	*244.5*	*69.8*	*16*	*. . . .*	*23.8*	*98.4*	*122.2*	*133.4*	*30.2*	*184.2*	*6.4*
	2 3/16	**P-LB6835R**	22213LBK	3	9 1/2	8 1/8	11	3 1/4	5/8	. . . .	1	4 3/8	5 1/16	5 15/16	1 13/32	8 1/4	22
60		***P-LB68M60R***		*76.20*	*241.3*	*206.4*	*279.4*	*82.6*	*16*	*. . . .*	*25.4*	*111.1*	*128.6*	*150.8*	*35.7*	*209.6*	*10.0*
	2 7/16	**P-LB6839R**	22215LBK	3 1/4	9 5/8	8 5/8	11 1/4	3 1/8	5/8	. . . .	1 1/8	4 3/4	5 41/64	6 3/8	1 15/32	8 3/8	27
		P-LB6839FR							1/2	1 7/8							
		P-LB68M65R							*16*	*. . . .*							
65		*P-LB68M65FR*		*82.55*	*244.5*	*219.1*	*285.8*	*79.4*	*12*	*47.6*	*28.6*	*120.6*	*143.3*	*161.9*	*37.3*	*212.7*	*12.2*
	2 11/16	**P-LB6843R**	22216LBK	3 1/2	11	9 5/8	13	3 1/2	3/4	. . . .	1 1/4	5 1/4	6 11/64	7	1 1/2	9 1/2	38
		P-LB6843FR							5/8	2							
		P-LB68M70R							20	. . . .							
70		*P-LB68M70FR*		*88.90*	*279.4*	*244.5*	*330.2*	*88.9*	*16*	*50.8*	*31.8*	*133.4*	*156.8*	*177.8*	*38.1*	*241.3*	*17.2*
	2 15/16	**P-LB6847R**	22217LBK	3 3/4	11	9 7/8	13	3 1/2	3/4	. . . .	1 1/4	5	5 51/64	7 5/16	1 19/32	10	42
		P-LB6847FR							5/8	2							
	3	**P-LB6848R**							3/4	. . . .							
		P-LB6848FR							5/8	*2*							
		P-LB68M75FR		*95.25*	*279.4*	*250.8*	*330.2*	*88.9*	*20*	*. . . .*	*31.8*	*127.0*	*147.2*	*185.7*	*40.5*	*254.0*	*19.0*
75		*P-LB68M75FR*							*16*	*50.8*							
	3 3/16	**P-LB6851R**	22218LBK	4	11 3/4	10 1/4			3/4	. . . .							
		P-LB6851FR			11 5/8	10 3/8	13 3/4	3 7/8	5/8	2 1/8	1 5/16	5 7/8	7 1/64	7 15/16	1 3/4	10 1/2	47
		P-LB68M80R		*101.60*	*298.4*	*260.4*			*20*	*. . . .*	*33.3*	*149.2*	*178.2*	*201.6*	*44.4*	*266.7*	*21.3*
80		*P-LB68M80FR*			*295.3*	*263.5*	*349.2*	*98.4*	*16*	*54.0*							
	3 7/16	**P-LB6855R**	22220LBK	4 1/2	13 1/8	11 5/8	15 1/4	4 3/8	7/8	. . . .	1 1/2	6	6 61/64	8 7/8	1 29/32	11 3/4	71
		P-LB6855FR						4 1/2	3/4	2 3/8							
	3 1/2	**P-LB6856R**						4 3/8	7/8	. . . .							
		P-LB6856FR						4 1/2	3/4	2 3/8							
		P-LB68M90R						*111.1*	*24*	*. . . .*							
90		*P-LB68M90FR*		*114.30*	*333.4*	*295.3*	*387.4*	*114.3*	*20*	*60.3*	*38.1*	*152.4*	*176.6*	*225.4*	*48.4*	*298.4*	*30.8*
	3 11/16	**P-LB6859FR**	22222LBK	4 15/16	14 1/2	12 5/8	16 1/2	4 3/4	3/4	2 3/4	1 5/8	6 1/2	7 35/64	9 5/8	2 1/8	88	87
	3 15/16	**P-LB6863FR**														12 1/4	
	4	**P-LB6864FR**														87	
100		***P-LB68M100FR***		*125.41*	*368.3*	*320.7*	*419.1*	*120.6*	*20*	*69.8*	*41.3*	*165.1*	*191.7*	*244.5*	*54.0*	*311.2*	*39.5*
	4 3/16	**P-LB6867FR**	22224LBK	5 1/4	14 1/2	13 1/4	16 1/2	4 3/4	3/4	2 3/4	1 3/4	7 1/8	8 3/16	10 7/16	2 3/32	13 1/2	104
110		*P-LB68M110FR*		*133.35*	*368.3*	*336.6*	*419.1*	*120.6*	*20*	*69.8*	*44.4*	*181.0*	*208.0*	*265.1*	*57.9*	*342.9*	*47.2*
	4 7/16	**P-LB6871FR**	22226LBK	6	16	14 5/8	18 3/8	5 1/8	7/8	3 1/4	1 7/8	7 3/4	8 53/64	11 11/32	2 15/32	14 1/2	149
	4 1/2	**P-LB6872FR**															
115		*P-LB68M115FR*		*152.40*	*406.4*	*371.5*	*466.7*	*130.2*	*24*	*82.6*	*47.6*	*196.8*	*224.2*	*288.1*	*62.7*	*368.3*	*63.5*
	4 15/16	**P-LB6879FR**	22228LBK	6	17 1/8	16	20 1/8	5 7/8	1	3 3/8	1 15/16	7 3/4	8 39/64	11 13/16	2 5/8	15 1/2	167
	5	**P-LB6880FR**															
125		*P-LB68M125FR*		*152.40*	*435.0*	*406.4*	*511.2*	*149.2*	*24*	*85.7*	*49.2*	*196.8*	*220.7*	*300.0*	*66.7*	*393.7*	*71.2*

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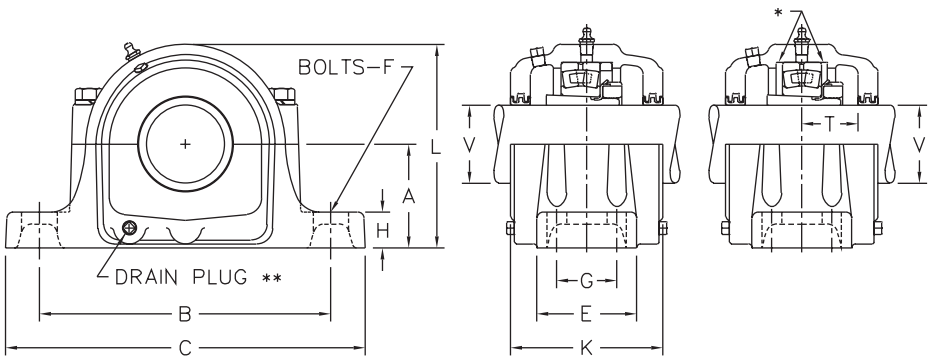


Fixed **Expansion**

Dimensions (inches/*mm*) - continued

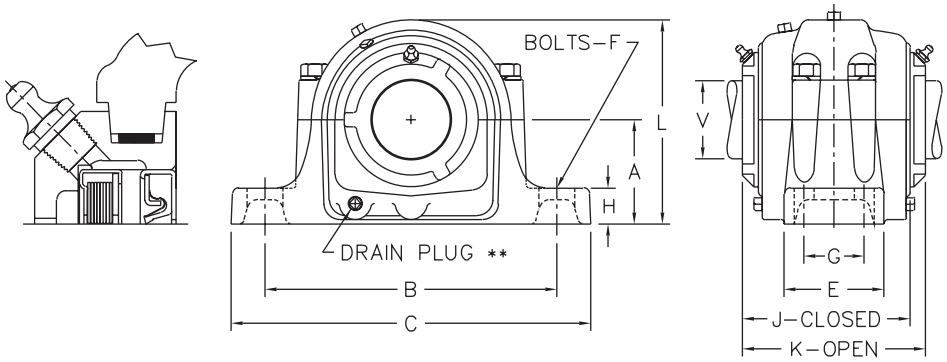
V Shaft diameter		Pillow block number	Bearing number	A	B		C	E	F	G	H	K	K	L	T	P	Unit wt.
					max.	min.			Bolts				□		■	●	(lbs./kgs.)
mm	inches																
	5 3/16	**P-LB6883FR**	22230LBK	6 5/16	18 1/4	17	21 1/4	6 1/4	1	3 3/4	2	8 1/8	9 17/64	12 9/16	2 3/4	16	187
135		*P-LB68M135FR*		*160.34*	*463.6*	*431.8*	*539.8*	*158.8*	*24*	*95.2*	*50.8*	*206.4*	*235.4*	*319.1*	*69.8*	*406.4*	*84.8*
	5 7/16	**P-LB6887FR**	22232LBK	6 11/16	19 1/4	17 3/8	22	6 1/4	1	3 3/4	2	8 1/2	9 35/64	13 3/8	2 31/32	17	221
140		*P-LB68M140FR*		*169.86*	*489.0*	*441.3*	*558.8*	*158.8*	*24*	*95.2*	*50.8*	*215.9*	*242.5*	*339.7*	*75.4*	*431.8*	*94.8*
	5 15/16	**P-LB6895FR**	22234LBK	7 1/16	21 5/8	19 3/8	24 3/4	6 3/4	1	4 1/4	2 1/8	9 1/4	10 5/16	14 1/4	3 1/8	18	280
	6	**P-LB6896FR**															
150		*P-LB68M150FR*		*179.39*	*549.3*	*492.1*	*628.6*	*171.4*	*24*	*108.0*	*54.0*	*235.0*	*261.9*	*362.0*	*79.4*	*457.2*	*119.8*
	6 7/16	**P-LB68103FR**	22236LBK	7 1/2	23 5/8	20 7/8	26 3/4	7 1/8	1	4 5/8	2 1/8	9 5/8	10 11/16	14 15/16	3 5/32	18 3/4	304
	6 1/2	**P-LB68104FR**															
160		*P-LB68M160FR*		*190.50*	*600.1*	*530.2*	*679.4*	*181.0*	*24*	*117.5*	*54.0*	*244.5*	*271.5*	*379.4*	*80.2*	*476.2*	*137.9*
	6 15/16	**P-LB68111FR**	22238LBK	7 7/8	24 3/8	21 5/8	28	7 1/2	1 1/4	4 1/2	2 3/8	10 1/4	11 3/16	15 13/16	3 5/16	20 1/2	370
	7	**P-LB68112FR**															
170		*P-LB68M170FR*		*200.02*	*619.1*	*549.3*	*711.2*	*190.5*	*30*	*114.3*	*60.3*	*260.4*	*284.2*	*401.6*	*84.1*	*520.7*	*167.8*
	7 3/16	P-LB68115FR	22240LBK	8 1/4	25	22 1/2	29 1/2	8	1 1/4	5	2 3/8	11	11 7/8	16 3/4	3 18/32	22 1/4	450
180		*P-LB68M180FR*		*209.55*	*635.0*	*571.5*	*749.3*	*203.2*	*30*	*127.0*	*60.3*	*279.4*	*301.6*	*425.4*	*89.7*	*565.2*	*204.1*
	7 1/2	**P-LB68120FR**	22244LBK	9 1/2	27 7/8	24 3/4	32 3/4	8 3/4	1 1/2	5 1/4	2 3/4	11 3/16	12 5/16	18 9/16	3 13/16	24 1/2	675
	7 15/16	**P-LB68127FR**															665
	8	**P-LB68128FR**															665
200		*P-LB68M200FR*		*241.30*	*708.0*	*628.6*	*831.8*	*222.2*	*36*	*133.4*	*69.8*	*284.2*	*312.7*	*471.5*	*96.8*	*622.3*	*301.6*
	8 7/16	**P-LB66135FR**	23048LBK	8 1/4	25	22 1/2	29 1/2	8	1 1/4	5	2 3/8	11	12 5/16	16 3/4	3 13/16	22 1/4	430
	8 1/2	P-LB66136FR															
	9	**P-LB66144FR**															
220		*P-LB66M220FR*		*209.55*	*635.0*	*571.5*	*749.3*	*203.2*	*30*	*127.0*	*60.3*	*279.4*	*312.7*	*425.4*	*96.8*	*565.2*	*195.0*
	9 7/16	P-LB66B151FR	23056LBK	9 1/2	27 7/8	24 3/4	32 3/4	8 3/4	1 1/2	5 1/4	2 3/4	11 3/4	13 1/16	19 1/16	4 1/4	24 1/2	550
	9 1/2	**P-LB66B152FR**															545
	9 15/16	**P-LB66159FR**															540
	10	**P-LB66160FR**															530
	10 7/16	P-LB66167FR															515
	10 1/2	**P-LB66168FR**															510
260		*P-LB66M260FR*		*241.30*	*708.0*	*628.6*	*831.8*	*222.2*	*36*	*133.4*	*69.8*	*298.4*	*331.8*	*484.2*	*108.0*	*622.3*	*247.2*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: for 4½" *(115 mm)* and smaller shafts, ⅛" PT; for all other shafts ¼" PT.
* Expansion type block provides ¼" *(6.4 mm)* total axial movement for 1¾" *(40 mm)* and smaller shafts. All larger sizes provide ⅜" *(9.5 mm)*. Fixed bearing is offset in relation to housing centerline.
** Drain plug tap size: for 3 3/16" *(80 mm)* and smaller shafts, ⅛" PT; for 3 7/16" *(90 mm)* through 6" *(150 mm)* shafts, ¼" PT; for all other shafts, ½" PT.
■ Recommended dimension from bearing centerline to shaft face for closed end unit. Minimum Extension of shaft beyond locknut, .06 inch.
● Recommended dimension for cap removal
Selection guide, pages E-7, E-8.
Load ratings, pages E-9 through E-12.
Additional information, page E-34.
□ Width for D5 Pentac™ 5 point sealing system.

Spherical Roller Bearing Pillow Blocks

P-LB6800D8, P-LB6800FD8, P-LB6600FD8

Two-piece Cast Iron Housing
2 or 4-bolt Base
Independently Flushable Seals
Self-aligning
Tapered Adapter Mounted
Grease Lubrication



Dimensions (inches/*mm*)

V Shaft diameter ▲	Pillow block number	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K	L	T ■	P ●	J	Unit wt. (lbs./kgs.)
1 7/16 1 1/2	**P-LB6823D8** P-LB6824D8	22209LBK	2 1/4 *57.15*	7 *177.8*	6 1/4 *158.8*	8 1/4 *209.6*	2 3/8 *60.3*	1/2 *12*	. . . .	13/16 *20.6*	5 *127.0*	4 3/8 *111.1*	1 1/16 *27.0*	6 1/4 *158.8*	4 7/16 *112.7*	12 *5.4*
1 11/16	**P-LB6827D8**	22210LBK	2 1/2 *63.50*	7 *177.8*	6 1/2 *165.1*	8 1/4 *209.6*	2 3/8 *60.3*	1/2 *12*	. . . .	15/16 *23.8*	4 15/16 *125.4*	4 3/4 *120.6*	1 1/8 *28.6*	6 5/8 *168.3*	4 13/32 *111.9*	13 *5.9*
1 15/16 2	**P-LB6831D8** P-LB6832D8	22211LBK	2 3/4 *69.85*	7 7/8 *200.0*	7 3/8 *187.3*	9 5/8 *244.5*	2 3/4 *69.8*	5/8 *16*	. . . .	15/16 *23.8*	5 5/16 *134.9*	5 1/4 *133.4*	1 3/16 *30.2*	7 1/4 *184.2*	4 23/32 *119.8*	16 *7.3*
2 3/16	**P-LB6835D8**	22213LBK	3 *76.20*	9 1/2 *241.3*	8 1/8 *206.4*	11 *279.4*	3 1/4 *82.6*	5/8 *16*	. . . .	1 *25.4*	5 5/8 *142.9*	5 15/16 *150.8*	1 13/32 *35.7*	8 1/4 *209.6*	5 1/8 *130.2*	24 *10.9*
2 7/16	**P-LB6839D8** **P-LB6839FD8**	22215LBK	3 1/4 *82.55*	9 5/8 *244.5*	8 5/8 *219.1*	11 1/4 *285.8*	3 1/8 *79.4*	5/8 1/2 *16* *12*	. . . . 1 7/8 . . . . *47.6*	1 1/8 *28.6*	5 15/16 *150.9*	6 3/8 *161.9*	1 15/32 *37.3*	8 3/8 *212.7*	5 17/32 *140.5*	30 *13.6*
2 11/16	P-LB6843D8	22216LBK	3 1/2 *88.90*	11 *279.4*	9 5/8 *244.5*	13 *330.2*	3 1/2 *88.9*	3/4 5/8 *20*	. . . . 2	1 1/4 *31.8*	6 9/16 *166.7*	7 *177.8*	1 1/2 *38.1*	9 1/2 *241.3*	6 1/32 *153.2*	42 *19.1*
2 15/16 3	**P-LB6847D8** **P-LB6847FD8** P-LB6848D8	22217LBK	3 3/4 *95.25*	11 *279.4*	9 7/8 *250.8*	13 *330.2*	3 1/2 *88.9*	3/4 5/8 3/4 5/8 *20*	. . . . 2 . . . . 2	1 1/4 *31.8*	6 3/8 *161.9*	7 5/16 *185.7*	1 19/32 *40.5*	10 *254.0*	5 11/16 *144.5*	47 *21.3*
3 3/16	P-LB6851D8 P-LB6851FD8	22218LBK	4 *101.60*	11 3/4 11 5/8 *298.4* *295.3*	10 1/4 10 3/8 *260.4* *263.5*	13 3/4 *349.2*	3 7/8 *98.4*	3/4 5/8 *20* *16*	. . . . 2 1/8 *54.0*	1 5/16 *33.3*	7 3/8 *187.3*	7 15/16 *201.6*	1 3/4 *44.4*	10 1/2 *266.7*	6 3/4 *171.4*	52 *23.6*
3 7/16	**P-LB6855D8** **P-LB6855FD8**	22220LBK	4 1/2 *114.30*	13 1/8 *333.4*	11 5/8 *295.3*	15 1/4 *387.4*	4 3/8 4 1/2 *111.1* *114.3*	7/8 3/4 *24* *20*	. . . . 2 3/8 . . . . *60.3*	1 1/2 *38.1*	7 5/16 *185.7*	8 7/8 *225.4*	1 29/32 *48.4*	11 3/4 *298.4*	6 21/32 *169.1*	79 *35.8*
3 11/16 3 15/16	P-LB6859FD8 **P-LB6863FD8**	22222LBK	4 15/16 *125.41*	14 1/2 *368.3*	12 5/8 *320.7*	16 1/2 *419.1*	4 3/4 *120.6*	3/4 *20*	2 3/4 *69.8*	1 5/8 *41.3*	7 15/16 *201.6*	9 5/8 *244.5*	2 1/8 *54.0*	12 1/4 *311.2*	7 7/32 *183.4*	98 *44.5*
4 3/16	P-LB6867FD8	22224LBK	5 1/4 *133.35*	14 1/2 *368.3*	13 1/4 *336.6*	16 1/2 *419.1*	4 3/4 *120.6*	3/4 *20*	2 3/4 *69.8*	1 3/4 *44.4*	8 9/16 *217.5*	10 7/16 *265.1*	2 9/32 *57.9*	13 1/2 *342.9*	7 31/32 *253.2*	116 *52.6*
4 7/16	**P-LB6871FD8**	22226LBK	6 *152.40*	16 *406.4*	14 5/8 *371.5*	18 3/8 *466.7*	5 1/8 *130.2*	7/8 *24*	3 1/4 *82.6*	1 7/8 *47.6*	9 7/32 *234.2*	11 19/32 *294.5*	2 15/32 *62.7*	14 1/2 *368.3*	8 31/64 *215.5*	165 *74.8*
4 15/16	P-LB6879FD8	22228LBK	6 *152.40*	17 1/8 *435.0*	16 *406.4*	20 1/8 *511.2*	5 7/8 *149.2*	1 *24*	3 3/8 *85.7*	1 15/16 *49.2*	8 15/16 *227.0*	11 13/16 *300.0*	2 5/8 *66.7*	15 1/2 *393.7*	8 7/32 *208.8*	184 *83.5*

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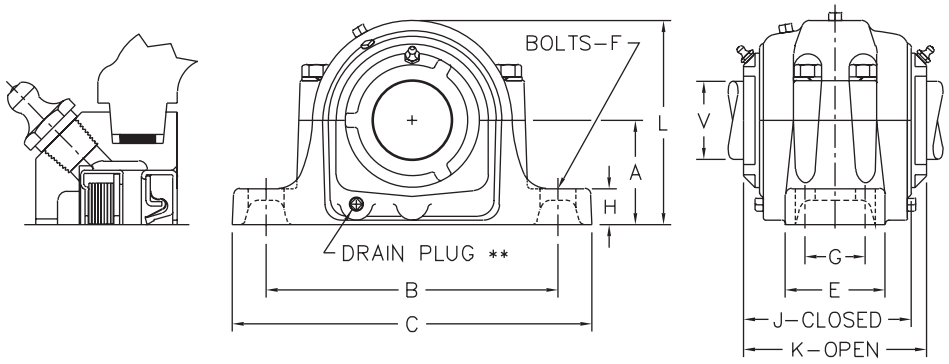


Dimensions (inches/*mm*) - continued

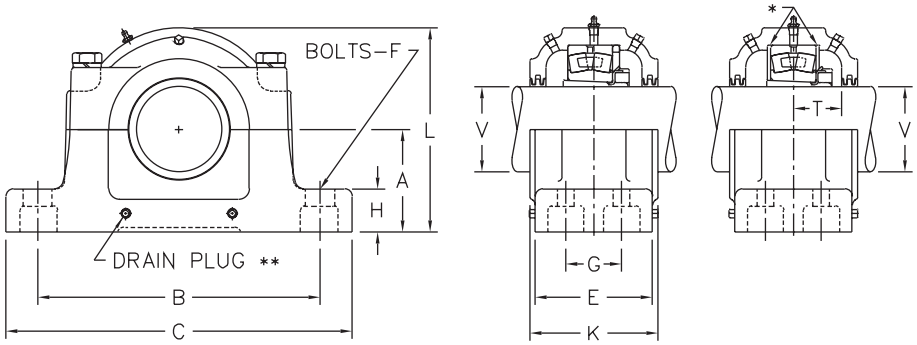
V Shaft diameter ▲	Pillow block number	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K	L	T ■	P ●	J	Unit wt. (lbs./kgs.)
5 7/16	**P-LB6887FD8**	22232LBK	6 11/16 *169.86*	19 1/4 *489.0*	17 3/8 *441.3*	22 *558.8*	6 1/4 *158.8*	1 *24*	3 3/4 *95.2*	2 *50.8*	9 13/16 *249.2*	13 3/8 *339.7*	2 31/32 *69.8*	17 *431.8*	9 5/32 *232.6*	244 *110.7*
5 15/16 6	**P-LB6895FD8** P-LB6896FD8	22234LBK	7 1/16 *179.39*	21 5/8 *549.3*	19 3/8 *492.1*	24 3/4 *628.6*	6 3/4 *171.4*	1 *24*	4 1/4 *108.0*	2 1/8 *54.0*	11 *279.4*	14 1/4 *362.0*	3 1/8 *79.4*	18 *457.2*	10 1/8 *257.2*	309 *140.2*
6 7/16 6 1/2	P-LB68103FD8 P-LB68104FD8	22236LBK	7 1/2 *190.50*	23 5/8 *600.1*	20 7/8 *530.2*	26 3/4 *679.4*	7 1/8 *181.0*	1 *24*	4 5/8 *117.5*	2 1/8 *54.0*	11 3/8 *288.9*	14 15/16 *379.4*	3 5/32 *80.2*	18 3/4 *476.2*	10 11/16 *271.5*	322 *146.1*
6 15/16 7	P-LB68111FD8 P-LB68112FD8	22238LBK	7 7/8 *200.02*	24 3/8 *619.1*	21 5/8 *549.3*	28 *711.2*	7 1/2 *190.5*	1 1/4 *30*	4 1/2 *114.3*	2 3/8 *60.3*	12 1/16 *306.4*	15 13/16 *401.6*	3 5/16 *84.1*	20 1/2 *520.7*	11 11/32 *288.1*	411 *186.4*
7 1/2 7 15/16 8	P-LB68120FD8 P-LB68127FD8 P-LB68128FD8	22244LBK	9 1/2 *241.30*	27 7/8 *708.0*	24 3/4 *628.6*	32 3/4 *831.8*	8 3/4 *222.2*	1 1/2 *36*	5 1/4 *133.4*	2 3/4 *69.8*	13 3/16 *335.0*	18 9/16 *471.5*	3 13/16 *96.8*	24 1/2 *622.3*	12 3/16 *309.6*	750 *340.2*
8 7/16 8 1/2 9	P-LB66135FD8 P-LB66136FD8 P-LB66144FD8	23048LBK	8 1/4 *209.55*	25 *635.0*	22 1/2 *571.5*	29 1/2 *749.3*	8 *203.2*	1 1/4 *30*	5 *127.0*	2 3/8 *60.3*	12 11/16 *322.3*	16 3/4 *425.4*	3 13/16 *96.8*	22 1/4 *565.2*	12 1/32 *305.6*	478 *216.8*
9 1/2 10 1/2	P-LB66B152FD8 P-LB66168FD8	23056LBK	9 1/2 *241.30*	27 7/8 *708.0*	24 3/4 *628.6*	32 3/4 *831.8*	8 3/4 *222.2*	1 1/2 *36*	5 1/4 *133.4*	2 3/4 *69.8*	14 7/16 *366.7*	19 1/16 *484.2*	4 1/4 *108.0*	24 1/2 *622.3*	13 9/32 *337.3*	605 *274.4*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Seal assembly lubrication fitting tap size: 1¾" and smaller shafts, ¼-28; all other ⅛" PT.
▲ Recommended shaft finish under D8 lip seals, 10-20 micro inches, obtain by straight plunge grinding or polishing with fine (000) Emery leaving no spiraling marks. Not required for low speed shafts.
△ Cast steel housing is standard.
Expansion type block provides ¼" *(6.4 mm)* total axial movement for 1¾" *(40 mm)* and smaller shafts. All larger shafts, ⅜" *(9.5 mm)*. Fixed bearing is offset in relation to housing centerline.
■ See cross section, page E-15; footnote, page E-16.
● Recommended dimension for cap removal
** Drain plug tap size: for 3 3/16" *(80 mm)* and smaller shafts, ⅛" PT; for 3 7/16" *(90 mm)* through 6" *(150 mm)* shafts, ¼" PT; for all other shafts, ½" PT.
Selection guide, pages E-7, E-8.
Load ratings, pages E-9 through E-12.
Additional information, page E-34.

Spherical Roller Bearing Pillow Blocks

PK-LB6800FR, PK-LB6600FR

Two-piece Cast Steel Housing
4-bolt Base
Fixed or Expansion
Self-aligning
Tapered Adapter Mounted
Grease or Oil Lubrication



Dimensions (inches/*mm*)

V Shaft diameter		Pillow block number	Bearing number	A	B		C	E	F	G	H	K	L	T	P	Unit wt. (lbs./kgs.)
					max.	min.			Bolts					■	●	
mm	inches															
	2 7/16	**PK-LB6839FR**	22215LBK	3 1/4	9 5/8	8 5/8	11 1/4	4 3/8	1/2	1 7/8	1 1/2	4 3/4	6 3/8	1 15/32	10 1/4	37
65		*PK-LB68M65FR*		*82.55*	*244.5*	*219.1*	*285.8*	*111.1*	*12*	*47.6*	*38.1*	*120.6*	*161.9*	*37.3*	*260.4*	*16.8*
	2 11/16	PK-LB6843FR	22216LBK	3 1/2	11	9 5/8	13	4 7/8	5/8	2	1 5/8	5 1/4	7	1 1/2	11	51
70		*PK-LB68M70FR*		*88.90*	*279.4*	*244.5*	*330.2*	*123.8*	*16*	*50.8*	*41.3*	*133.4*	*177.8*	*38.1*	*279.4*	*23.1*
	2 15/16	**PK-LB6847FR**	22217LBK	3 3/4	11	9 7/8	13	4 7/8	5/8	2	1 5/8	5 1/4	7 3/8	1 19/32	11 1/2	51
	3	**PK-LB6848FR**														
75		*PK-LB68M75FR*		*95.25*	*279.4*	*250.8*	*330.2*	*123.8*	*16*	*50.8*	*41.3*	*133.4*	*187.3*	*40.5*	*292.1*	*23.1*
	3 7/16	**PK-LB6855FR**	22220LBK	4 1/2	13 1/8	11 5/8	15 1/4	6	3/4	2 3/8	1 7/8	6 1/2	8 13/16	1 29/32	13 3/4	97
	3 1/2	PK-LB6856FR														
90		*PK-LB68M90FR*		*114.30*	*333.4*	*295.3*	*387.4*	*152.4*	*20*	*60.3*	*47.6*	*165.1*	*223.8*	*48.4*	*349.2*	*44.0*
	3 11/16	PK-LB6859FR	22222LBK	4 15/16	14 1/2	12 5/8	16 1/2	6 1/2	3/4	2 3/4	2	7	9 3/4	2 1/8	15 1/4	112
	3 15/16	**PK-LB6863FR**														
	4	**PK-LB6864FR**														
100		*PK-LB68M100FR*		*125.41*	*368.3*	*320.7*	*419.1*	*165.1*	*20*	*69.8*	*50.8*	*177.8*	*247.6*	*54.0*	*387.4*	*50.8*
	4 7/16	**PK-LB6871FR**	22226LBK	6	16	14 5/8	18 3/8	7 1/4	7/8	3 1/4	2 1/4	7 3/4	11 1/2	2 15/32	18 1/4	200
	4 1/2	**PK-LB6872FR**														196
115		*PK-LB68M115FR*		*152.40*	*406.4*	*371.5*	*466.7*	*184.2*	*24*	*82.6*	*57.2*	*196.8*	*292.1*	*62.7*	*463.6*	*88.9*
	4 15/16	**PK-LB6879FR**	22228LBK	6	17 1/8	16	20 1/8	6 7/8	1	3 3/8	2 1/2	7 1/2	11 15/16	2 5/8	19 1/4	207
	5	PK-LB6880FR														
125		*PK-LB68M125FR*		*152.40*	*435.0*	*406.4*	*511.2*	*174.6*	*24*	*85.7*	*63.5*	*190.5*	*303.2*	*66.7*	*489.0*	*93.9*
140	5 7/16	**PK-LB6887FR**	22232LBK	6 11/16	19 1/4	17 3/8	22	8	1	3 3/4	2 3/4	8 1/2	13 1/2	2 31/32	20 1/2	270
		PK-LB68M140FR		*169.86*	*489.0*	*441.3*	*558.8*	*203.2*	*24*	*95.2*	*69.8*	*215.9*	*342.9*	*75.4*	*520.7*	*122.5*
	5 15/16	**PK-LB6895FR**	22234LBK	7 1/16	21 5/8	19 3/8	24 3/4	8 3/4	1	4 1/4	3	9 1/4	14 1/4	3 1/8	22 1/4	368
	6	**PK-LB6896FR**														
150		*PK-LB68M150FR*		*179.39*	*549.3*	*492.1*	*628.6*	*222.2*	*24*	*108.0*	*76.2*	*235.0*	*362.0*	*79.4*	*565.2*	*166.9*
	6 7/16	**PK-LB68103FR**	22236LBK	7 1/2	23 5/8	20 7/8	26 3/4	9 1/8	1	4 5/8	3 1/4	9 5/8	14 15/16	3 5/32	23 1/4	390
	6 1/2	PK-LB68104FR														
160		*PK-LB68M160FR*		*190.50*	*600.1*	*530.2*	*679.4*	*231.8*	*24*	*117.5*	*82.6*	*244.5*	*379.4*	*80.2*	*590.6*	*176.9*
	6 15/16	**PK-LB68111FR**	22238LBK	7 7/8	24 3/8	21 5/8	28	9 3/4	1 1/4	4 1/2	3 1/4	10 1/4	15 13/16	3 5/16	25	470
	7	PK-LB68112FR														
170		*PK-LB68M170FR*		*200.02*	*619.1*	*549.3*	*711.2*	*247.6*	*30*	*114.3*	*82.6*	*260.4*	*401.6*	*84.1*	*635.0*	*213.2*
	7 1/2	**PK-LB68120FR**	22244LBK	9 1/2	27 5/8	25 7/8	32	12	1 3/4	7 1/4	4	12 5/8	18 11/16	3 13/16	29 1/4	875
	7 15/16	**PK-LB68127FR**														830
	8	**PK-LB68128FR**														830
200		*PK-LB68M200FR*		*241.30*	*701.7*	*657.2*	*812.8*	*304.8*	*48*	*184.2*	*101.6*	*320.7*	*474.7*	*96.8*	*743.0*	*376.5*
	8 1/2	PK-LB66136FR	23048LBK	8 1/4	25	22 1/2	29 1/2	10 3/8	1 1/4	5	3 1/2	11	16 1/2	3 13/16	26 1/2	562
	9	PK-LB66144FR														528
220		*PK-LB66M220FR*		*209.55*	*635.0*	*571.5*	*749.3*	*263.5*	*30*	*127.0*	*88.9*	*279.4*	*419.1*	*96.8*	*673.1*	*240.4*
	9 1/2	PK-LB66B152FR	23056LBK	9 1/2	27 5/8	25 7/8	32	12	1 3/4	7 1/4	4	12 5/8	18 11/16	4 1/4	29 1/4	800
	9 15/16	PK-LB66159FR														790
	10	PK-LB66160FR														780
	10 1/2	PK-LB66168FR														770
260		*PK-LB66M260FR*		*241.30*	*701.7*	*657.2*	*812.8*	*304.8*	*48*	*184.2*	*101.6*	*320.7*	*474.7*	*108.0*	*743.0*	*358.3*

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: ¼" PT.

* Expansion type block provides ¼" *(6.4 mm)* total axial movement for 1¾" *(40 mm)* and smaller shafts. All larger shafts, ⅜" *(9.5 mm)*. Fixed bearing is offset in relation to housing centerline.

**Drain plug tap size: for 6" (1*60 mm)* and smaller shafts, ¼" PT; for all other shafts, ½" PT.

■ Recommended dimension from bearing centerline to shaft face for closed end unit. Minimum Extension of shaft beyond locknut, .06 inch.

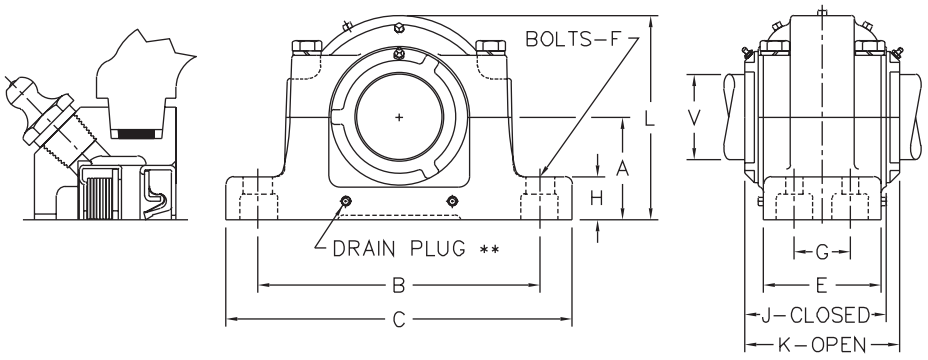
● Recommended dimension for cap removal

Selection guide, pages E-7, E-8.
Load ratings, pages E-9 through E-12.
Additional information, page E-34.

Spherical Roller Bearing Pillow Blocks

PK-LB6800FD8, PK-LB6600FD8

Two-piece Cast Steel Housing
4-bolt Base
Independently Flushable Seals
Self-aligning
Tapered Adapter Mounted
Grease Lubrication



Dimensions (inches/*mm*)

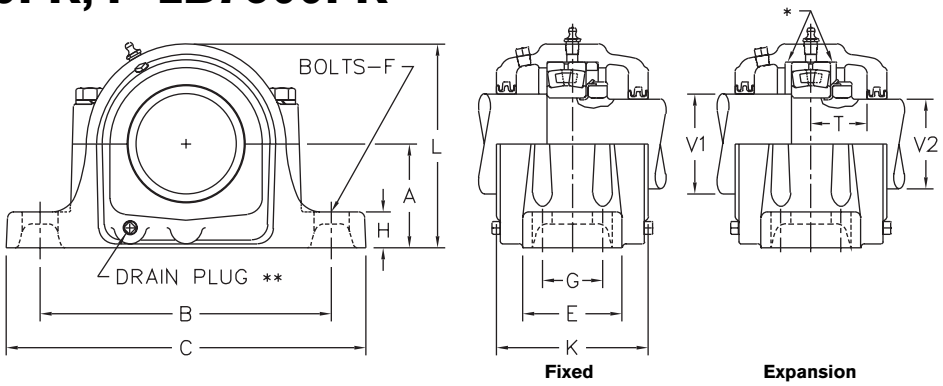
V Shaft diameter ▲	Pillow block number	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K	L	T ■	P ●	J	Unit wt. (lbs./kgs.)
2 7/16	PK-LB6839FD8	22215LBK	3 1/4 *82.55*	9 5/8 *244.5*	8 5/8 *219.1*	11 1/4 *285.8*	4 3/8 *111.1*	1/2 *12*	1 7/8 *47.6*	1 1/2 *38.1*	6 1/16 *154.0*	6 3/8 *161.9*	1 15/32 *37.3*	10 1/4 *260.4*	5 17/32 *140.5*	41 *18.6*
2 15/16 3	PK-LB6847FD8 PK-LB6848FD8	22217LBK	3 3/4 *95.25*	11 *279.4*	9 7/8 *250.8*	13 *330.2*	4 7/8 *123.8*	5/8 *16*	2 *50.8*	1 5/8 *41.3*	6 5/8 *168.3*	7 3/8 *187.3*	1 19/32 *40.5*	11 1/2 *292.1*	6 1/16 *154.0*	57 *25.9*
4 7/16	PK-LB6871FD8	22226LBK	6 *152.40*	16 *406.4*	14 5/8 *371.5*	18 3/8 *466.7*	7 1/4 *184.2*	7/8 *24*	3 1/4 *82.6*	2 1/4 *57.2*	9 1/4 *235.0*	11 1/2 *292.1*	2 15/32 *62.7*	18 1/4 *363.6*	8 5/8 *219.1*	222 *100.7*
4 15/16	PK-LB6879FD8	22228LBK	6 *152.40*	17 1/8 *435.0*	16 *406.4*	20 1/8 *511.2*	6 7/8 *174.6*	1 *24*	3 3/8 *85.7*	2 1/2 *63.5*	9 *228.6*	11 15/16 *303.2*	2 5/8 *66.7*	19 1/4 *489.0*	8 3/8 *212.7*	230 *104.3*
6 7/16	PK-LB68103FD8	22236LBK	7 1/2 *190.50*	23 5/8 *600.1*	20 7/8 *530.2*	26 3/4 *679.4*	9 1/8 *231.8*	1 *24*	4 5/8 *117.5*	3 1/4 *82.6*	11 3/8 *288.9*	14 15/16 *379.4*	3 5/32 *80.2*	23 1/4 *590.6*	10 11/16 *261.9*	433 *196.4*

Please consult for availability.
Seal assembly lubrication fitting tap size: 1/8" PT.
▲ Recommended shaft finish under D8 lip seals, 10-20 micro inches, obtain by straight plunge grinding or polishing with fine (000) Emery leaving no spiraling marks. Not required for low speed shafts.
Expansion type block provides 3/8" *(9.5 mm)* total axial movement. Fixed bearing is offset in relation to housing centerline (see cross-sections, page E-19).
■ See cross section and footnote, page E-19.
● Recommended dimension for cap removal.
** Drain plug tap size: for 6" and smaller shafts, 1/4" PT; for all other shafts, 1/2" PT.
Selection guide, pages E-7, E-8.
Load ratings, pages E-9 through E-12.
Additional information, page E-34.

Spherical Roller Bearing Pillow Blocks

P-LB7800R, P-LB7800FR, P-LB7600FR

Two-piece Cast Iron Housing
2 or 4-bolt Base
Fixed or Expansion
Self-aligning
Direct Shaft Mounted
Grease or Oil Lubrication



Fixed **Expansion**

Dimensions (inches/*mm*)

Bearing bore diameter	Shaft diameter V1	Shaft diameter V2	Pillow block number	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K □	L	T ■	P ●	Unit wt. (lbs./kgs.)
2.9528	3 7/16	2 13/16	P-LB7875R	22215LB	3 1/4	9 5/8	8 5/8	11 1/4	3 1/8	5/8	. . . .	1 1/8	4 3/4	6 3/8	1 15/32	8 3/8	35
P-LB7875FR										1/2	1 7/8						
75.000					*82.55*	*244.5*	*219.1*	*285.8*	*79.4*	16	. . . .	*28.6*	*120.6*	*161.9*	*37.3*	*212.7*	*15.9*
										12	*47.6*						
3.1496	3 5/8	3	P-LB7880R	22216LB	3 1/2	11	9 5/8	13	3 1/2	3/4	. . . .	1 1/4	5 1/4	7	1 1/2	9 1/2	35
P-LB7880FR										5/8	2						
80.000					*88.90*	*279.4*	*244.5*	*330.2*	*88.9*	*20*	. . . .	*31.8*	*133.4*	*177.8*	*38.1*	*241.3*	*15.9*
										16	*50.8*						
3.3465	3 15/16	3 3/16	P-LB7885R	22217LB	3 3/4	11	9 7/8	13	3 1/2	3/4	. . . .	1 1/4	5	7 5/16	1 19/32	10	40
P-LB7885FR										5/8	2						
85.000					*95.25*	*279.4*	*250.8*	*330.2*	*88.9*	*20*	. . . .	*31.8*	*127.0*	*185.7*	*40.5*	*254.0*	*18.1*
										16	*50.8*						
3.5433	4 1/8	3 3/8	P-LB7890R	22218LB	4	11 5/8	10 3/8	13 3/4	3 7/8	3/4	. . . .	1 5/16	5 7/8	7 15/16	1 3/4	10 1/2	42
P-LB7890FR										5/8	2 1/8						
90.000					*101.60*	*295.3*	*263.5*	*349.2*	*98.4*	*20*	. . . .	*33.3*	*149.2*	*201.6*	*44.4*	*266.7*	*19.1*
										16	*54.0*						
3.9370	4 1/2	3 13/16	P-LB78100R	22220LB	4 1/2	13 1/8	11 5/8	15 1/4	4 3/8	7/8	. . . .	1 1/2	6	8 7/8	1 29/32	11 3/4	62
P-LB78100FR									4 1/2	3/4	2 3/8						
100.000					*114.30*	*333.4*	*295.1*	*387.4*	*111.1*	*24*	. . . .	*38.1*	*152.4*	*225.4*	*48.4*	*298.4*	*28.1*
									114.3	*20*	*60.3*						
4.3307	4 7/8	4 3/16	P-LB78110FR	22222LB	4 15/16	14 1/2	12 5/8	16 1/2	4 3/4	3/4	2 3/4	1 5/8	6 1/2	9 5/8	2 1/8	12 1/4	78
110.000					*125.41*	*368.3*	*320.7*	*419.1*	*120.6*	*20*	*69.8*	*41.3*	*165.1*	*222.5*	*54.0*	*311.2*	*35.4*
4.7244	5 5/16	4 9/16	P-LB78120FR	22224LB	5 1/4	14 1/2	13 1/4	16 1/2	4 3/4	3/4	2 3/4	1 3/4	7 1/8	10 7/16	2 9/32	13 1/2	102
120.000					*133.35*	*368.3*	*336.6*	*419.1*	*120.6*	*20*	*69.8*	*44.4*	*181.0*	*265.1*	*57.9*	*342.9*	*46.3*
5.1181	5 7/8	4 15/16	P-LB78130FR	22226LB	6	16	14 5/8	18 3/8	5 1/8	7/8	3 1/4	1 7/8	7 3/4	11 19/32	2 15/32	14 1/2	141
130.000					*152.40*	*406.4*	*371.5*	*466.7*	*130.2*	*24*	*82.6*	*47.6*	*196.8*	*294.5*	*62.7*	*368.3*	*64.0*
5.5118	6 1/4	5 5/16	P-LB78140FR	22228LB	6	17 1/8	16	20 1/8	5 7/8	1	3 3/8	1 15/16	7 3/4	11 13/16	2 5/8	15 1/2	162
140.000					*152.40*	*435.0*	*406.4*	*511.2*	*149.2*	*24*	*85.7*	*49.2*	*196.8*	*300.0*	*66.7*	*393.7*	*73.5*
5.9055	6 5/8	5 3/4	P-LB78150FR	22230LB	6 5/16	18 1/4	17	21 1/4	6 1/4	1	3 3/4	2	8 1/8	12 9/16	2 3/4	16	182
150.000					*160.34*	*463.6*	*431.8*	*539.8*	*158.8*	*24*	*95.2*	*50.8*	*206.4*	*319.1*	*69.8*	*406.4*	*82.6*
6.2992	7	6 1/16	P-LB78160FR	22232LB	6 11/16	19 1/4	17 3/8	22	6 1/4	1	3 3/4	2	8 1/2	13 3/8	2 31/32	17	202
160.000					*169.86*	*489.0*	*441.3*	*558.8*	*158.8*	*24*	*95.2*	*50.8*	*215.9*	*339.7*	*75.4*	*431.8*	*91.6*
6.6929	7 7/16	6 7/16	P-LB78170FR	22234LB	7 1/16	21 5/8	19 3/8	24 3/4	6 3/4	1	4 1/4	2 1/8	9 1/4	14 1/4	3 1/8	18	240
170.000					*179.39*	*549.3*	*492.1*	*628.6*	*171.4*	*24*	*108.0*	*54.0*	*235.0*	*362.0*	*79.4*	*457.2*	*108.9*
7.0866	7 13/16	6 7/8	P-LB78180FR	22236LB	7 1/2	23 5/8	20 7/8	26 3/4	7 1/8	1	4 5/8	2 1/8	9 5/8	14 15/16	3 5/32	18 3/4	279
180.000					*190.50*	*600.1*	*530.2*	*679.4*	*181.0*	*24*	*117.5*	*54.0*	*244.5*	*379.4*	*80.2*	*476.2*	*126.6*
7.4803	8 3/8	7 1/4	P-LB78190FR	22238LB	7 7/8	24 3/8	21 5/8	28	7 1/2	1 1/4	4 1/2	2 3/8	10 1/4	15 13/16	3 5/16	20 1/2	345
190.000					*200.02*	*619.1*	*549.3*	*711.2*	*190.5*	*30*	*114.3*	*60.3*	*260.4*	*401.6*	*84.1*	*520.7*	*156.5*
7.8740	8 3/4	7 5/8	P-LB78200FR	22240LB	8 1/4	25	22 1/2	29 1/2	8	1 1/4	5	2 3/8	11	16 3/4	3 17/32	22 1/4	415
200.000					*209.55*	*635.0*	*571.5*	*749.3*	*203.2*	*30*	*127.0*	*60.3*	*279.4*	*425.4*	*89.7*	*565.2*	*188.2*
8.6614	9 9/16	8 5/16	P-LB78220FR	22244LB	9 1/2	27 7/8	24 3/4	32 3/4	8 3/4	1 1/2	5 1/4	2 3/4	11 3/16	18 9/16	3 13/16	24 1/2	620
220.000					*241.30*	*708.0*	*628.6*	*831.8*	*222.2*	*36*	*133.4*	*69.8*	*284.2*	*471.5*	*96.8*	*622.3*	*281.2*
9.4488	10 1/2	9 3/16	P-LB76240FR	23048LB	8 1/4	25	22 1/2	29 1/2	8	1 1/4	5	2 3/8	11	16 3/4	3 13/16	22 1/4	430
240.000					*209.55*	*635.0*	*571.5*	*749.3*	*203.2*	*30*	*127.0*	*60.3*	*279.4*	*425.4*	*96.8*	*565.2*	*195.0*
11.0236	12	10 3/4	P-LB76280FR	23056LB	9 1/2	27 7/8	24 3/4	32 3/4	8 3/4	1 1/2	5 1/4	2 3/4	11 3/4	19 1/16	4 1/4	24 1/2	595
280.000					*241.30*	*708.0*	*628.6*	*831.8*	*222.2*	*36*	*133.4*	*69.8*	*298.4*	*484.2*	*108.0*	*622.3*	*269.9*

Please consult for availability. Lubrication fitting tap size: for 3.5433" *(90 mm)* and smaller shafts, 1/8" PT, for all other shafts, 1/4" PT.

* Expansion type block provides 3/8" *(9.5 mm)* total axial movement. Fixed bearing is offset in relation to housing centerline.

** Drain plug tap size: for 3.5433" *(90 mm)* and smaller bores, 1/8" PT; for 3.9370" (100 mm) through 6.6929" *(170 mm)* bores, 1/4" PT; for all other bores, 1/2" PT.

□ See footnote, page E-16.

● Recommended dimension for cap removal.

■ Recommended dimension from bearing centerline to shaft face for closed end unit. Minimum extension of shaft beyond locknut, .06 inch.

Selection guide, pages E-7, E-8.

Load ratings, pages E-9 through E-12.

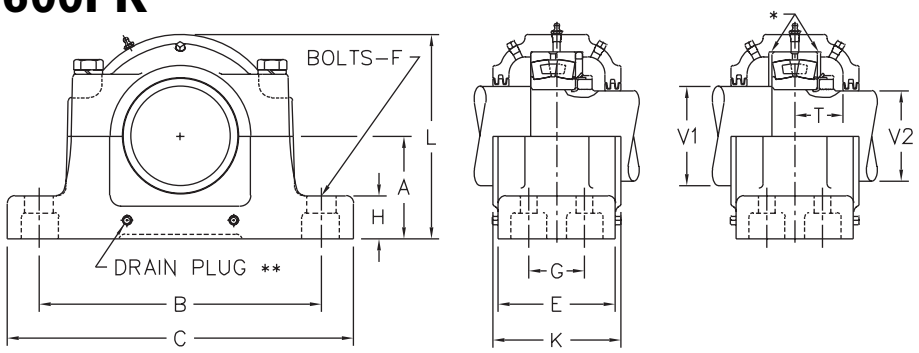
Additional information, page E-34.

Recommended bearing seat diameters, pages F-11, F-12.

Spherical Roller Bearing Pillow Blocks

PK-LB7800FR, PK-LB7600FR

Two-piece Cast Steel Housing
4-bolt Base
Fixed or Expansion
Self-aligning
Direct Shaft Mounted
Grease or Oil Lubrication



Fixed **Expansion**

Dimensions (inches/*mm*)

Bearing bore diameter	Shaft diameter V1	Shaft diameter V2	Pillow block number	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K	L	T ■	P ●	Unit wt. (lbs./kgs.)
2.9528 *75.000*	3 7/16	2 13/16	PK-LB7875FR	22215LB	3 1/4 *82.55*	9 5/8 *244.5*	8 5/8 *219.1*	11 1/4 *285.8*	4 3/8 *111.1*	1/2 *12*	1 7/8 *47.6*	1 1/2 *38.1*	4 3/4 *120.6*	6 3/8 *161.9*	1 15/32 *37.3*	10 1/4 *260.4*	35 *15.9*
3.1496 *80.000*	3 5/8	3	PK-LB7880FR	22216LB	3 1/2 *88.90*	11 *279.4*	9 5/8 *244.5*	13 *330.2*	4 7/8 *123.8*	5/8 *16*	2 *50.8*	1 5/8 *41.3*	5 1/4 *133.4*	7 *177.8*	1 1/2 *38.1*	11 *279.4*	48 *21.8*
3.3465 *85.000*	3 15/16	3 3/16	PK-LB7885FR	22217LB	3 3/4 *95.25*	11 *279.4*	9 7/8 *250.8*	13 *330.2*	4 7/8 *123.8*	5/8 *16*	2 *50.8*	1 5/8 *41.3*	5 1/4 *133.4*	7 3/8 *187.3*	1 19/32 *40.5*	11 1/2 *292.1*	50 *22.7*
3.9370 *100.000*	4 1/2	3 13/16	PK-LB78100FR	22220LB	4 1/2 *114.30*	13 1/8 *333.4*	11 5/8 *295.3*	15 1/4 *387.4*	6 *152.4*	3/4 *20*	2 3/8 *60.3*	1 7/8 *47.6*	6 1/2 *165.1*	8 13/16 *223.8*	1 29/32 *48.4*	13 3/4 *349.2*	85 *38.6*
4.3307 *110.000*	4 7/8	4 3/16	PK-LB78110FR	22222LB	4 15/16 *125.41*	14 1/2 *368.3*	12 5/8 *320.7*	16 1/2 *419.1*	6 1/2 *165.1*	3/4 *20*	2 3/4 *69.8*	2 *50.8*	7 *177.8*	9 3/4 *247.6*	2 1/8 *54.0*	15 1/4 *387.4*	105 *47.6*
5.1181 *130.000*	5 7/8	4 15/16	PK-LB78130FR	22226LB	6 16 *152.40*	14 5/8 *406.4*	18 3/8 *371.5*	7 1/4 *466.7*	7/8 *184.2*	3 1/4 *24*	2 1/4 *82.6*	7 3/4 *57.2*	11 1/2 *196.8*	2 15/32 *292.1*	18 1/4 *62.7*	187 *463.6*	 *84.8*
5.5118 *140.000*	6 1/4	5 5/16	PK-LB78140FR	22228LB	6 17/8 *152.40*	16 *435.0*	20 1/8 *406.4*	6 7/8 *511.2*	1 *174.6*	3 3/8 *24*	2 1/2 *85.7*	7 1/2 *63.5*	11 15/16 *190.5*	2 5/8 *303.2*	19 1/4 *66.7*	190 *489.0*	 *86.2*
6.2992 *160.000*	7	6 1/16	PK-LB78160FR	22232LB	6 11/16 *169.86*	19 1/4 *489.0*	17 3/8 *441.3*	22 *558.8*	8 *203.2*	1 *24*	3 3/4 *95.2*	2 3/4 *69.8*	8 1/2 *215.9*	13 1/2 *342.9*	2 31/32 *75.4*	20 1/2 *520.7*	250 *113.4*
6.6929 *170.000*	7 1/16	6 7/16	PK-LB78170FR	22234LB	7 1/16 *179.39*	21 5/8 *549.3*	19 3/8 *492.1*	24 3/4 *628.6*	8 3/4 *222.2*	1 *24*	4 1/4 *108.0*	3 *76.2*	9 1/4 *235.0*	14 1/4 *362.0*	3 1/8 *79.4*	22 1/4 *565.2*	344 *156.0*
7.0866 *180.000*	7 13/16	6 7/8	PK-LB78180FR	22236LB	7 1/2 *190.50*	23 5/8 *600.1*	20 7/8 *530.2*	26 3/4 *679.4*	9 1/8 *231.8*	1 *24*	4 5/8 *117.5*	3 1/4 *82.6*	9 5/8 *244.5*	14 15/16 *379.4*	3 5/32 *80.2*	23 1/4 *590.6*	365 *165.6*
7.4803 *190.000*	8 3/8	7 1/4	PK-LB78190FR	22238LB	7 7/8 *200.02*	24 3/8 *619.1*	21 5/8 *549.3*	28 *711.2*	9 3/4 *247.6*	1 1/4 *30*	4 1/2 *114.3*	3 1/4 *82.6*	10 1/4 *260.4*	15 13/16 *401.6*	3 5/16 *84.1*	25 *635.0*	450 *204.1*
8.6614 *220.000*	9 9/16	8 5/16	PK-LB78220FR	22244LB	9 1/2 *241.30*	27 7/8 *701.7*	25 5/8 *657.2*	32 *812.8*	12 *304.8*	1 3/4 *48*	7 1/4 *184.2*	4 *101.6*	12 5/8 *320.7*	18 11/16 *474.7*	3 13/16 *96.8*	29 1/4 *743.0*	770 *349.3*
9.4488 *240.000*	10 1/2	9 3/16	PK-LB76240FR	23048LB	8 1/4 *209.55*	25 *635.0*	22 1/2 *571.5*	29 1/2 *749.3*	10 3/8 *263.5*	1 1/4 *30*	5 *127.0*	3 1/2 *88.9*	11 *279.4*	16 1/2 *419.1*	3 13/16 *96.8*	26 1/2 *673.1*	530 *240.4*
11.0236 *280.000*	12	10 3/4	PK-LB76280FR	23056LB	9 1/2 *241.30*	27 5/8 *701.7*	25 7/8 *657.2*	32 *812.8*	12 *304.8*	1 3/4 *48*	7 1/4 *184.2*	4 *101.6*	12 5/8 *320.7*	18 11/16 *747.7*	4 1/4 *108.0*	29 1/4 *743.0*	745 *337.9*

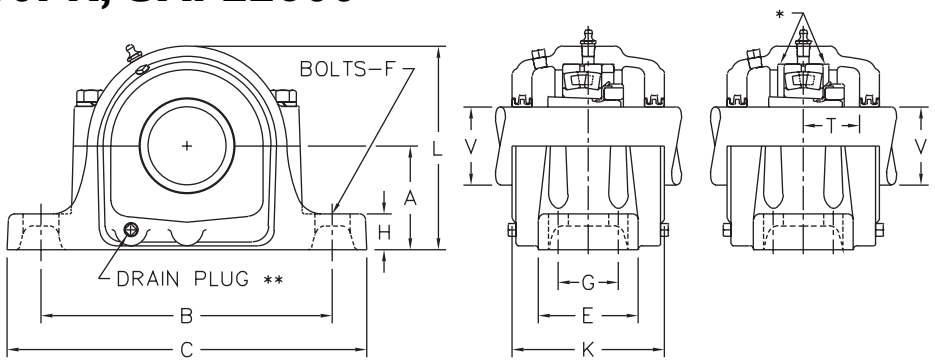
Please consult for availability.
Lubrication fitting tap size: 1/4" PT.
* Expansion type block provides 3/8" *(9.5 mm)* total axial movement. Fixed bearing is offset in relation to housing centerline.
** Drain plug tap size: for 6.6929" *(170 mm)* and smaller bores, 1/2" PT; for all other bores, 1/2" PT.
■ Recommended dimension from bearing centerline to shaft face for closed end unit. Minimum extension of shaft beyond locknut, .06 inch.
● Recommended dimension for cap removal.

Selection guide, pages E-7, E-8.
Load ratings, pages E-9 through E-12.
Additional information, page E-34.
Recommended bearing seat diameters, pages F-11, F-12.

Spherical Roller Bearing Pillow Blocks

P-LB6900R, P-LB6900FR, SAF22600

Two-piece Cast Iron Housing
2 or 4-bolt Base
Fixed or Expansion
Self-aligning
Tapered Adapter Mounted
Grease or Oil Lubrication



Fixed **Expansion**

Dimensions (inches/*mm*)

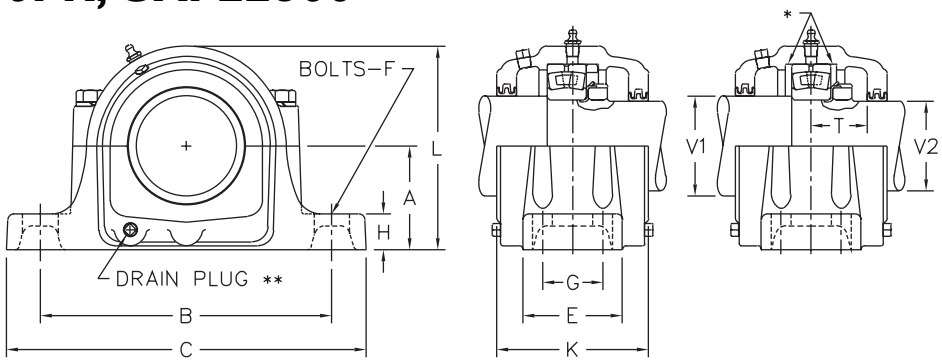
V Shaft diameter inches	Pillow block number	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K	L	T ■	P ●	Unit wt. (lbs./kgs.)
1 7/16 1 1/2	P-LB6923R P-LB6924R	22309LBK	2 3/4 *69.85*	8 *203.2*	7 1/4 *184.2*	9 5/8 *244.5*	2 3/4 *69.8*	5/8 *16*	.... 	1 *25.4*	4 1/8 *104.8*	5 3/8 *136.5*	1 5/16 *33.3*	7 1/2 *190.5*	20 *9.1*
1 11/16	P-LB6927R	22310LBK	3 *76.20*	9 *228.6*	7 3/4 *196.8*	10 5/8 *269.9*	2 3/4 *69.8*	5/8 *16*	.... 	1 1/8 *28.6*	4 1/2 *114.3*	5 7/8 *149.2*	1 15/32 *37.3*	7 7/8 *200.0*	23 *10.4*
1 15/16 2	P-LB6931R P-LB6932R	22311LBK	3 1/4 *82.55*	9 1/2 *241.3*	8 1/8 *206.4*	11 *279.4*	3 1/8 *79.4*	5/8 *16*	.... 	1 3/16 *30.2*	4 3/4 *120.6*	6 5/16 *160.3*	1 9/16 *39.7*	8 1/2 *215.9*	28 *12.7*
2 3/16	P-LB6935R P-LB6935FR	22313LBK	3 1/2 *88.90*	11 *279.4*	9 5/8 *244.5*	13 *330.2*	3 1/2 *88.9*	3/4 5/8 *20* *16*	.... 2 .... *50.8*	1 1/4 *31.8*	5 1/4 *133.4*	7 *177.8*	1 23/32 *43.7*	9 5/8 *244.5*	41 *18.6*
2 7/16 2 1/2	P-LB6939R P-LB6939FR P-LB6940R P-LB6940FR	22315LBK	4 *101.60*	11 5/8 *295.3*	10 3/8 *263.5*	13 3/4 *349.2*	3 7/8 *98.4*	3/4 5/8 *20* *16*	.... 2 1/8 .... *54.0*	1 5/16 *33.3*	5 7/8 *149.2*	7 15/16 *201.6*	1 15/16 *49.2*	10 1/2 *266.7*	52 *23.6*
2 11/16	P-LB6943R P-LB6943FR	22316LBK	4 1/4 *107.95*	12 5/8 *320.7*	10 5/8 *269.9*	14 1/4 *362.0*	3 7/8 *98.4*	3/4 5/8 *20* *16*	.... 2 1/4 *54.0*	1 5/16 *33.3*	6 1/8 *155.6*	8 3/8 *212.7*	2 *50.8*	11 1/4 *285.8*	59 *26.8*
2 15/16	P-LB6947R P-LB6947FR	22317LBK	4 1/2 *114.30*	13 1/8 *333.4*	11 5/8 *295.3*	15 1/4 *387.4*	4 3/8 *111.1*	7/8 3/4 *24* *20*	.... 2 3/8 .... *60.3*	1 1/2 *38.1*	6 1/2 *165.1*	8 7/8 *225.4*	2 1/2 *63.5*	11 3/4 *298.4*	71 *32.2*
3 3/16	SAF22618-303	22318LBK	4 3/4 *120.65*	13 1/2 *342.9*	12 *304.8*	15 1/2 *393.7*	4 3/8 *111.1*	3/4 *20*	2 1/4 *57.2*	2 *50.8*	6 7/8 *174.6*	9 1/4 *235.0*	2 7/32 *56.4*	12 1/4 *311.2*	97 *44.0*
3 7/16 3 1/2	SAF22620-307 SAF22620-308	22320LBK	5 1/4 *133.35*	14 1/2 *368.3*	13 1/4 *336.6*	16 1/2 *419.1*	4 3/4 *120.6*	3/4 *20*	2 3/4 *69.8*	1 3/4 *44.4*	7 1/8 *181.0*	10 7/16 *265.1*	2 7/16 *61.9*	13 1/2 *342.9*	111 *50.3*
3 15/16 4	SAF22622-315 SAF22622-400	22322LBK	6 *152.40*	16 *406.4*	14 5/8 *371.5*	18 3/8 *466.7*	5 1/8 *130.2*	7/8 *24*	3 1/4 *82.6*	1 7/8 *47.6*	7 3/4 *196.8*	11 11/16 *296.9*	2 21/32 *67.5*	14 1/2 *368.3*	149 *67.6*
4 3/16	SAF22624-403	22324LBK	6 5/16 *160.84*	18 1/4 *463.6*	17 *431.8*	21 1/4 *539.8*	6 1/4 *158.8*	1 *24*	3 3/4 *95.2*	2 1/2 *63.5*	8 3/8 *212.7*	12 1/2 *317.5*	2 13/16 *71.4*	16 *406.4*	225 *102.1*
4 7/16	SAF22626-407	22326LBK	6 11/16 *169.86*	19 1/4 *489.0*	17 3/8 *441.3*	22 *558.8*	6 1/4 *158.8*	1 *24*	3 3/4 *95.2*	2 5/8 *66.7*	8 3/4 *222.3*	13 5/16 *338.1*	3 5/16 *84.1*	17 *431.8*	228 *103.5*
4 15/16 5	SAF22628-415 SAF22628-500	22328LBK	7 1/16 *179.39*	21 5/8 *549.3*	19 3/8 *492.1*	24 3/4 *628.6*	6 3/4 *171.4*	1 *24*	4 1/4 *108.0*	2 3/4 *69.8*	9 5/8 *244.5*	14 3/16 *360.4*	3 1/4 *82.6*	18 *457.2*	330 *149.7*
5 3/16	SAF22630-503	22330LBK	7 1/2 *190.50*	23 5/8 *600.1*	20 7/8 *530.2*	26 3/4 *679.4*	7 1/8 *181.0*	1 *24*	4 5/8 *117.5*	3 *76.2*	9 3/4 *247.6*	14 7/8 *377.8*	3 7/16 *87.3*	18 3/4 *476.2*	375 *170.1*
5 7/16	SAF22632-507	22332LBK	7 7/8 *200.02*	24 3/8 *619.1*	21 5/8 *549.3*	28 *711.2*	7 1/2 *190.5*	1 1/4 *30*	4 1/2 *114.3*	3 1/8 *79.4*	10 3/4 *273.0*	15 11/16 *398.5*	3 5/8 *92.1*	20 1/2 *520.7*	430 *195.0*
5 15/16	SAF22634-515	22334LBK	8 1/4 *209.55*	25 *635.0*	22 1/2 *571.5*	29 1/2 *749.3*	8 *203.2*	1 1/4 *30*	5 *127.0*	3 3/8 *85.7*	11 1/4 *285.8*	16 1/2 *419.1*	3 3/4 *95.2*	22 1/4 *565.2*	515 *233.6*

Please consult for availability.
Lubrication fitting tap size: for 2 11/16" and smaller shafts, 1/8" PT; for all other shafts, 1/4" PT.
* Expansion type block provides 3/8" *(9.5 mm)* total axial movement. Fixed bearing is offset in relation to housing centerline.
** Drain plug tap size: for 2 11/16" *(70 mm)* and smaller shafts, 1/8" PT; for all other shafts, 1/4" PT.
■ Recommended dimension from bearing centerline to shaft face for closed end unit. Minimum extension of shaft beyond locknut, .06 inch.
● Recommended dimension for cap removal.
Selection guide, pages E-7, E-8.
Load ratings, pages E-13, E-14.
Additional information, page E-34.

Spherical Roller Bearing Pillow Blocks

P-LB7900R, P-LB7900FR, SAF22300

Two-piece Cast Iron Housing
2 or 4-bolt Base
Fixed or Expansion
Self-aligning
Direct Shaft Mounted
Grease or Oil Lubrication



Fixed **Expansion**

Dimensions (inches/*mm*)

Bearing bore diameter	Shaft diameter V1	Shaft diameter V2	Pillow block number ▲	Bearing number	A	B max.	B min.	C	E	F Bolts	G	H	K	L	T ■	P	Unit wt. (lbs./kgs.)
1.7717 *45.000*	2 1/8	1 11/16	P-LB7945R	22309LB	2 3/4 *69.85*	8 *203.2*	7 1/4 *184.2*	9 5/8 *244.5*	2 3/4 *69.8*	5/8 *16*	.... 	1 *25.4*	4 1/8 *104.8*	5 3/8 *136.5*	1 5/16 *33.3*	7 1/2 *190.5*	18 *8.2*
1.9685 *50.000*	2 3/8	1 7/8	P-LB7950R	22310LB	3 *76.20*	9 *228.6*	7 3/4 *196.8*	10 5/8 *269.9*	2 3/4 *69.8*	5/8 *16*	.... 	1 1/8 *28.6*	4 1/2 *114.3*	5 7/8 *149.2*	1 15/32 *37.3*	7 7/8 *200.0*	22 *10.0*
2.1654 *55.000*	2 9/16	2 1/16	P-LB7955R	22311LB	3 1/4 *82.55*	9 1/2 *241.3*	8 1/8 *206.4*	11 *279.4*	3 1/8 *79.4*	5/8 *16*	.... 	1 3/16 *30.2*	4 3/4 *120.6*	6 5/16 *160.3*	1 9/16 *39.7*	8 1/2 *215.9*	27 *12.2*
2.5591 *65.000*	3 1/16	2 7/16	P-LB7965R P-LB7965FR	22313LB	3 1/2 *88.90*	11 *279.4*	9 5/8 *244.5*	13 *330.2*	3 1/2 5/8 *88.9*	3/4 2 *20* *16*	.... *50.8*	1 1/4 *31.8*	5 1/4 *133.4*	7 *177.8*	1 23/32 *43.7*	9 5/8 *244.5*	39 *17.7*
2.9528 *75.000*	3 7/16	2 13/16	P-LB7975R P-LB7975FR	22315LB	4 *101.60*	11 5/8 *295.3*	10 3/8 *263.5*	13 3/4 *349.2*	3 7/8 *98.4*	3/4 5/8 *20* *16*	.... 2 1/8 .... *54.0*	1 5/16 *33.3*	5 7/8 *149.2*	7 15/16 *201.6*	1 15/16 *49.2*	10 1/2 *266.7*	50 *22.7*
3.1496 *80.000*	3 5/8	3	P-LB7980R P-LB7980FR	22316LB	4 1/4 *107.95*	12 5/8 *320.7*	10 5/8 *269.9*	14 1/4 *362.0*	3 7/8 *98.4*	3/4 5/8 *20* *16*	.... 2 1/8 .... *54.0*	1 5/16 *33.3*	6 1/8 *155.6*	8 3/8 *212.7*	2 *50.8*	11 1/4 *285.8*	58 *26.3*
3.3465 *85.000*	3 15/16	3 3/16	P-LB7985R P-LB7985FR	22317LB	4 1/2 *114.30*	13 1/8 *333.4*	11 5/8 *295.3*	15 1/4 *387.4*	4 3/8 *111.1*	7/8 3/4 *24* *20*	.... 2 3/8 .... *60.3*	1 1/2 *38.1*	6 1/2 *165.1*	8 7/8 *225.4*	2 1/2 *63.5*	11 3/4 *298.4*	71 *32.2*
3.5433 *90.000*	4 1/8	3 3/8	SAF22318	22318LB	4 3/4 *120.65*	13 1/2 *342.9*	12 *304.8*	15 1/2 *393.7*	4 3/8 *111.1*	3/4 *20*	2 1/4 *57.2*	2 *50.8*	6 7/8 *174.6*	9 3/16 *233.4*	2 7/32 *56.4*	12 1/4 *311.2*	94 *42.6*
3.9370 *100.000*	4 1/2	3 13/16	SAF22320	22320LB	5 1/4 *133.35*	14 1/2 *368.3*	13 1/4 *336.6*	16 1/2 *419.1*	4 3/4 *120.6*	3/4 *20*	2 3/4 *69.8*	1 3/4 *44.4*	7 1/8 *181.0*	10 7/16 *265.1*	2 7/16 *61.9*	13 1/2 *342.9*	118 *53.6*
4.3307 *110.000*	4 7/8	4 3/16	SAF22322	22322LB	6 *152.40*	16 *406.4*	14 5/8 *371.5*	18 3/8 *466.7*	5 1/8 *130.2*	7/8 *24*	3 1/4 *82.6*	1 7/8 *47.6*	7 3/4 *196.8*	11 11/16 *296.9*	2 21/32 *67.5*	14 1/2 *368.3*	147 *66.7*
4.7244 *120.000*	5 5/16	4 9/16	SAF22324	22324LB	6 5/16 *160.34*	18 1/4 *463.6*	17 *431.8*	21 1/4 *339.8*	6 1/4 *158.8*	1 *24*	3 3/4 *95.2*	2 1/2 *63.5*	8 3/8 *212.7*	12 1/2 *317.5*	2 13/16 *71.4*	16 *406.4*	215 *97.5*
5.1181 *130.000*	5 7/8	4 15/16	SAF22326	22326LB	6 11/16 *169.86*	19 1/4 *489.0*	17 3/8 *441.3*	22 *558.8*	6 1/4 *158.8*	1 *24*	3 3/4 *95.2*	2 5/8 *66.7*	8 3/4 *222.3*	13 5/16 *338.1*	3 5/16 *84.1*	17 *431.8*	215 *97.6*
5.5118 *140.000*	6 1/4	5 5/16	SAF22328	22328LB	7 1/16 *179.39*	21 5/8 *549.3*	19 3/8 *492.1*	24 3/4 *628.6*	6 3/4 *171.4*	1 *24*	4 1/4 *108.0*	2 3/4 *69.8*	9 3/8 *238.1*	14 3/16 *360.4*	3 1/4 *82.6*	18 *457.2*	320 *145.2*
5.9055 *150.000*	6 5/8	5 3/4	SAF22330	22330LB	7 1/2 *190.50*	23 5/8 *600.1*	20 7/8 *530.2*	26 3/4 *679.4*	7 1/8 *181.0*	1 *24*	4 5/8 *117.5*	3 *76.2*	9 3/4 *247.6*	14 7/8 *377.8*	3 7/16 *87.3*	18 3/4 *476.2*	350 *158.8*
6.2992 *160.000*	7	6 1/16	SAF22332	22332LB	7 7/8 *200.02*	24 3/8 *619.1*	21 5/8 *549.3*	28 *711.2*	7 1/2 *190.5*	1 1/4 *30*	4 1/2 *114.3*	3 1/8 *79.4*	10 3/4 *273.0*	15 11/16 *398.5*	3 5/8 *92.1*	20 1/2 *520.7*	410 *186.0*
6.6929 *170.000*	7 7/16	6 7/16	SAF22334	22334LB	8 1/4 *209.55*	25 *635.0*	22 1/2 *571.5*	29 1/2 *749.3*	8 *203.2*	1 1/4 *30*	5 *127.0*	3 3/8 *85.7*	11 1/4 *285.8*	16 1/2 *419.1*	3 3/4 *95.2*	22 1/4 *565.2*	485 *220.2*

Please consult for availability.

Lubrication fitting tap size: for 3.1496" *(80 mm)* and smaller bores, 1/8" PT; for all other bores, 1/4" PT.

* Expansion type block provides 3/8" *(9.5 mm)* total axial movement. Fixed bearing is offset in relation to housing centerline.

** Drain plug tap size: for 3.1496" *(80 mm)* and smaller bores, 1/8" PT; for 3.346" *(85 mm)* through 4.3307" *(110 mm)* bores, 1/4" PT; for 4.7244" *(120 mm)* through 6.2992" *(160 mm)* bores, 3/8" PT; for all other bores, 1/2" PT.

■ Recommended dimension from bearing centerline to shaft face for closed end unit. Minimum extension of shaft beyond locknut, .06 inch.

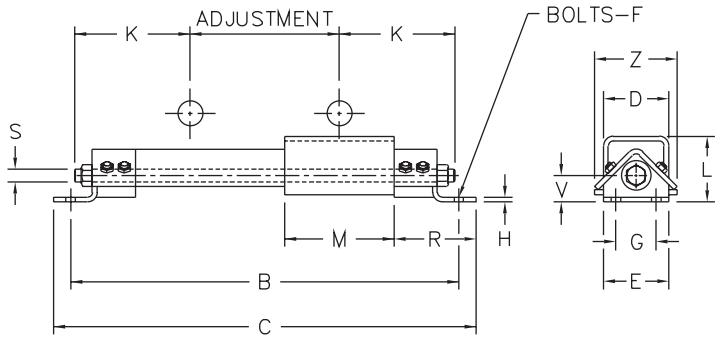
▲ SAF pillow blocks include locknut and lockwasher, for P-LB pillow blocks with locknut and lockwasher add suffix "T2" ie P-LB7945RT2.

Selection guide, pages E-7, E-8. Load ratings, pages E-13, E-14.
Additional information, page E-34.
Recommended bearing seat diameters, pages F-11, F-12.

Spherical Roller Bearing Takeups

LHD Type (Bearing Unit Not Included)

Welded Steel Frame
Protected Screw
P-LB6800 Bearing Unit Pillow Block
P-LB7800 Pillow Block



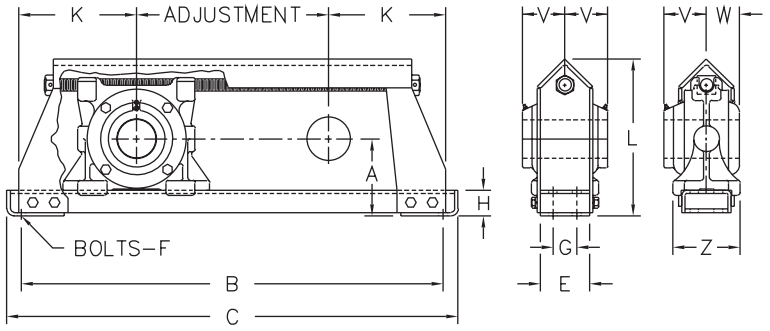
Shaft Sizes P-LB68 P-LB78 inches	Shaft Sizes P-LB68 P-LB78 *mm*	Takeup frame number	Adjust-ment	B	C	D	E	F Bolts	G	H	K	L	M	R	S rod dia.	V	Z
1 7/16 thru 2 3/16	. . .	**LHD20-12**	12	29	31	4	5	5/8	2 1/2	1/4	8 1/2	5 1/4	11	4	3/4	2	6 1/4
		LHD20-18	18	35	37												
		LHD20-24	24	41	43												
		LHD20-30	30	47	49	*101.6*	*127.0*	*16*	*63.5*	*6.4*	*215.9*	*133.4*	*279.4*	*101.6*		*50.8*	*158.8*
		LHD20-36	36	53	55												
		LHD20-48	48	65	67												
2 7/16 thru 3	*75 thru 85*	**LHD25-12**	12	32 3/4	35 1/4	5	5 1/2	5/8	3	3/8	10 3/8	6 1/4	13 1/4	5	1	2 9/16	7 1/8
		LHD25-18	18	38 3/4	41 1/4												
		LHD25-24	24	44 3/4	47 1/4												
		LHD25-30	30	50 3/4	53 1/4	*127.0*	*139.7*	*16*	*76.2*	*9.5*	*263.5*	*158.8*	*336.6*	*127.0*		*65.1*	*181.0*
		LHD25-36	36	56 3/4	59 1/4												
		LHD25-48	48	68 3/4	71 1/4												
3 3/16	*90*	LHD30-12	12	35 1/2	38 1/4	6	6 1/2	3/4	3	1/2	11 3/4	7	14 1/4	6	1	2 1/2	9
		LHD30-18	18	41 1/2	44 1/4												
		LHD30-24	24	47 1/2	50 1/4												
		LHD30-30	30	53 1/2	56 1/4	*152.4*	*165.1*	*20*	*76.2*	*12.7*	*298.4*	*177.8*	*362.0*	*152.4*		*63.5*	*228.6*
		LHD30-36	36	59 1/2	62 1/4												
		LHD30-48	48	71 1/2	74 1/4												
3 7/16 thru 3 1/2	*100*	LHD35-12	12	37 1/4	40	6	6 1/2	3/4	3	1/2	12 5/8	7	16	6	1 1/4	2 1/2	9
		LHD35-18	18	43 1/4	46												
		LHD35-24	24	49 1/4	52												
		LHD35-30	30	55 1/4	58	*152.4*	*165.1*	*20*	*76.2*	*12.7*	*320.7*	*177.8*	*406.4*	*152.4*		*63.5*	*228.6*
		LHD35-36	36	61 1/4	64												
		LHD35-48	48	73 1/4	76												
3 11/16 thru 4 1/2	*110 thru 130*	LHD40-12	12	41 1/4	44	7	6 1/2	3/4	3	1/2	14 5/8	7	20	6	1 1/2	2 1/2	9
		LHD40-18	18	47 1/4	50												
		LHD40-24	24	53 1/4	56												
		LHD40-30	30	59 1/4	62	*177.8*	*165.1*	*20*	*76.2*	*12.7*	*371.5*	*177.8*	*508.0*	*152.4*		*63.5*	*228.6*
		LHD40-36	36	65 1/4	68												
		LHD40-48	48	77 1/4	80												
4 15/16 thru 5 7/16	*140 thru 160*	LHD50-12	12	47	49 1/2	8 1/2	7	7/8	4	1/2	17 1/2	7 3/4	23 1/2	6 3/4	1 1/2	3/8	11 1/4
		LHD50-18	18	53	55 1/2												
		LHD50-24	24	59	61 1/2												
		LHD50-30	30	65	67 1/2	*215.9*	*177.8*	*24*	*101.6*	*12.7*	*444.5*	*196.8*	*596.9*	*171.4*		*85.7*	*285.8*
		LHD50-36	36	71	73 1/2												
		LHD50-48	48	83	85 1/2												

Bold face items are normally available from stock; please consult for availability of non-stock items.
Takeup frames can be furnished drilled to accommodate pillow block; order takeup frame drilled for " " pillow block, i.e. LHD25-12 drilled for P-LB6839R.
For load ratings, see rating table for pillow block to be used.
Additional information, page E-34.

Spherical Roller Bearing Takeups

DS-LB6800

Welded Steel Frame
Hinged Top
Protected Screw
Cast Iron Bearing Housing
Self-aligning
Tapered Adapter Mounted
Independently Flushable Seals
TD-LB6800D8 Takeup Unit

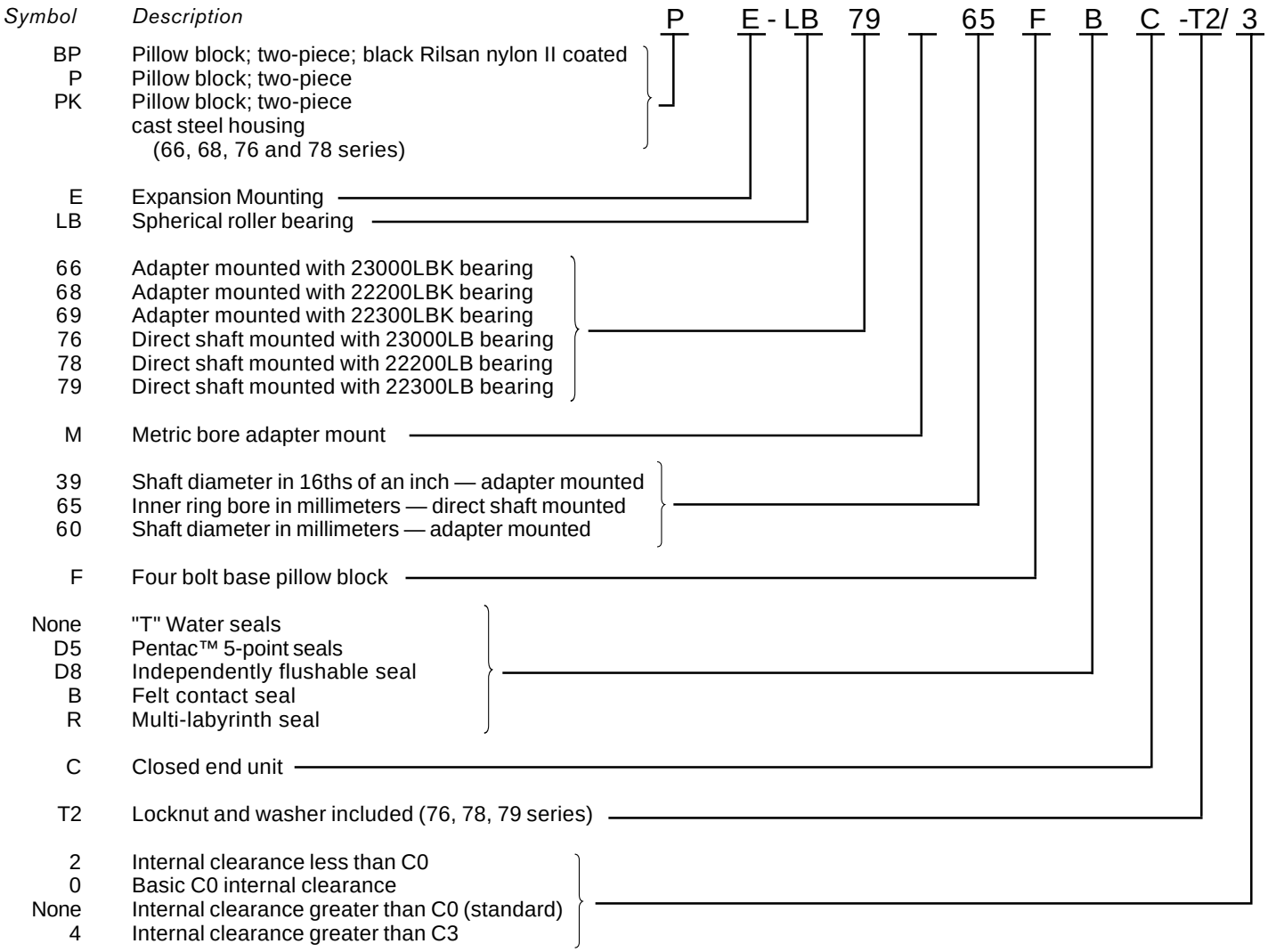


Shaft diameter	Adjustment #	Takeup number	Bearing number	A	B	C	E	F Bolts	G	H	K	L	V	W	Z.	Unit Wt. (lbs./kgs.)
2 7/16	12			5 1/8	30 1/2	32 1/2	4	5/8	2	2	9 1/4	10 7/8	3 15/32	2 19/32	5 5/8	94
	18				36 1/2	38 1/2										103
	24	**DS-LB6839-12**			42 1/2	44 1/2										111
	30	**DS-LB6839-18**	22215LBK		48 1/2	50 1/2										119
	304.8	**DS-LB6839-24**		*130.2*	*774.7*	*825.5*	*101.6*	*16*	*50.8*	*50.8*	*235.0*	*276.2*	*88.1*	*65.9*	*142.9*	*42.6*
	457.2	**DS-LB6839-30**			*927.1*	*977.9*										*46.7*
	609.6				*1079.5*	*1130.3*										*50.3*
	762.0				*1231.9*	*1282.7*										*54.0*
2 15/16	12			5 5/8	32	34 1/4	4	3/4	2	2	10	11 13/16	3 1/2	2 5/8	5 5/8	120
	18				38	40 1/4										130
	24	**DS-LB6847-12**			44	46 1/4										145
	30	**DS-LB6847-18**	22217LBK		50	52 1/4										155
	304.8	**DS-LB6847-24**		*142.9*	*812.8*	*870.0*	*101.6*	*20*	*50.8*	*50.8*	*254.0*	*300.0*	*88.9*	*66.7*	*142.9*	*54.4*
	457.2	**DS-LB6847-30**			*965.2*	*1022.4*										*59.0*
	609.6				*1117.6*	*1174.8*										*65.8*
	762.0				*1270.0*	*1327.2*										*70.3*
3 7/16	12			7	36	38 1/2	5	3/4	2 1/2	2 1/4	12	14 11/16	4 1/8	3 1/4	6 7/8	206
	18				42	44 1/2										218
	24	**DS-LB6855-12**			48	50 1/2										230
	30	**DS-LB6855-18**	22220LBK		54	56 1/2										242
	304.8	**DS-LB6855-24**		*177.8*	*914.4*	*977.9*	*127.0*	*20*	*63.5*	*57.2*	*304.8*	*373.1*	*104.8*	*82.6*	*174.6*	*93.4*
	457.2	DS-LB6855-30			*1066.8*	*1130.3*										*98.9*
	609.6				*1219.2*	*1282.7*										*104.3*
	762.0				*1371.6*	*1435.1*										*109.8*
3 15/16	12			7 1/2	36	38 1/2	5	3/4	2 1/2	2 1/4	12	15 11/16	4 3/8	3 1/2	6 7/8	255
	18				42	44 1/2										270
	24	**DS-LB6863-12**			48	50 1/2										285
	30	**DS-LB6863-18**	22222LBK		54	56 1/2										300
	304.8	**DS-LB6863-24**		*190.5*	*914.4*	*977.9*	*127.0*	*20*	*63.5*	*57.2*	*304.8*	*398.5*	*111.1*	*88.9*	*174.6*	*115.7*
	457.2	DS-LB6863-30			*1066.8*	*1130.3*										*122.5*
	609.6				*1219.2*	*1282.7*										*129.3*
	762.0				*1371.6*	*1435.1*										*136.1*
4 7/16	18			10	47	50 1/2	6	7/8	3	4	14 1/2	20 1/4	4 7/8	3 3/4	7 7/8	414
	24	**DS-LB6871-18**			53	56 1/2										432
	30	**DS-LB6871-24**	22226LBK		59	62 1/2										450
	457.2	**DS-LB6871-30**			*1193.8*	*1282.7*										*187.8*
	609.6			*254.0*	*1346.2*	*1435.1*	*152.4*	*24*	*76.2*	*101.6*	*368.3*	*514.4*	*123.8*	*95.2*	*200.0*	*196.0*
	762.0				*1498.6*	*1587.5*										*204.1*
4 15/16	18			10 1/2	49	52 1/2	6	1	3	4	15 1/2	21 1/8	4 3/4	3 27/32	7 7/8	475
	24	DS-LB6879-18			55	58 1/2										494
	30	DS-LB6879-24	22228LBK		61	64 1/2										515
	457.2	DS-LB6879-30			*1244.6*	*1333.5*										*215.5*
	609.6			*266.7*	*1397.0*	*1485.9*	*152.4*	*24*	*76.2*	*101.6*	*393.7*	*536.6*	*120.7*	*97.6*	*200.0*	*224.1*
	762.0				*1549.4*	*1638.3*										*233.6*
5 15/16	18			12 1/8	55 7/8	60 1/4	7 1/2	1 1/4	3 3/4	4	18 15/16	25 1/2	5 33/64	4 1/2	9 7/8	708
	24				61 7/8	66 1/4										726
	30	DS-LB6895-18			67 7/8	72 1/4										746
	42	DS-LB6895-24			79 7/8	84 1/4										784
	457.2	DS-LB6895-30	22234LBK		*1419.2*	*1530.4*										*321.1*
	609.6	DS-LB6895-42			*1571.6*	*1682.8*										*329.3*
	762.0			*308.0*	*1724.0*	*1835.2*	*190.5*	*30*	*95.2*	*101.6*	*481.0*	*647.7*	*140.1*	*114.3*	*250.8*	*338.4*
	1066.8				*2028.8*	*2140.0*										*355.6*

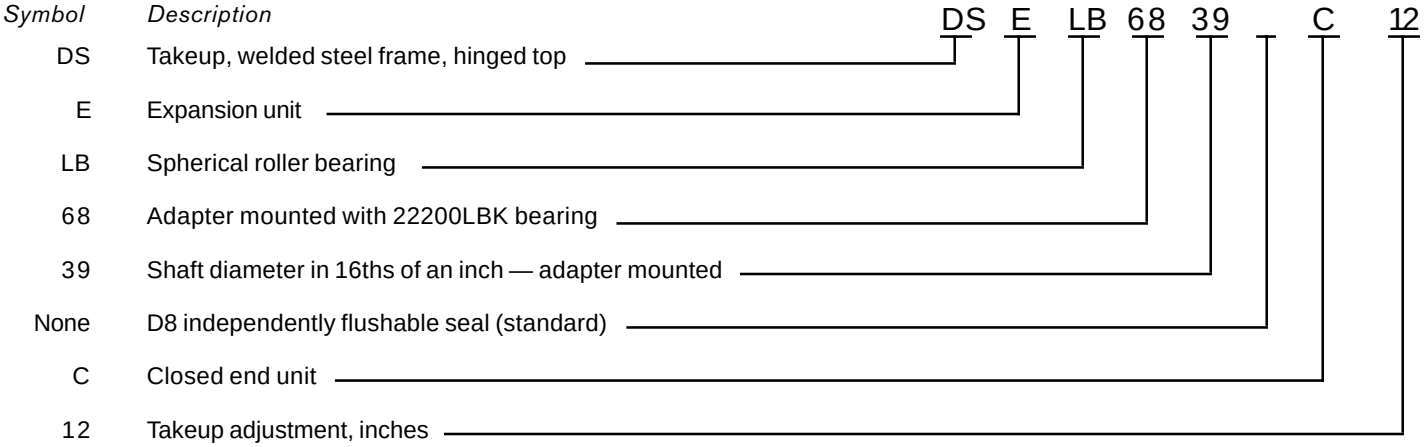
Bold face items are normally available from stock; please consult for availability of non-stock items.
Expansion types block provides 3/8" *(9.5 mm)* total axial movement. Fixed bearing is offset in relation to housing bore centerline.
Standard seal arrangement, D8 type.
4" channel (Dim E) has removable top construction (see page D-23).
Takeups with adjustment of 18" *(457.2 mm)* or more have center supporting pad welded to bottom of frame.
Selection guide, page E-7, E-8.
Load ratings, page E-9.
Additional information, page E-34.

Nomenclature
Series 6600, 6800, 6900, 7600, 7800, 7900

Pillow blocks



Takeups

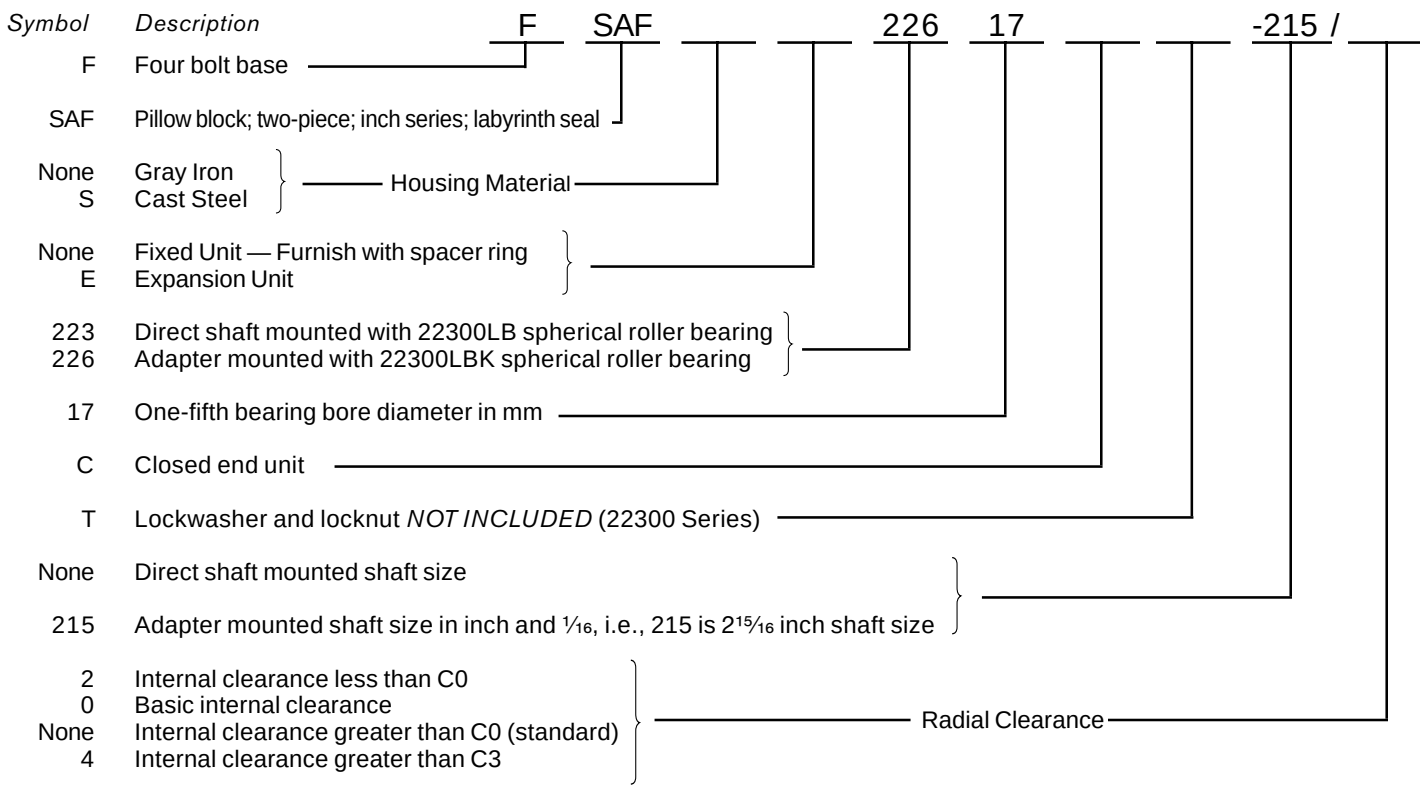


The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division, Rexnord Corp. should be consulted regarding optional features, availability, and the application requirements.

Nomenclature

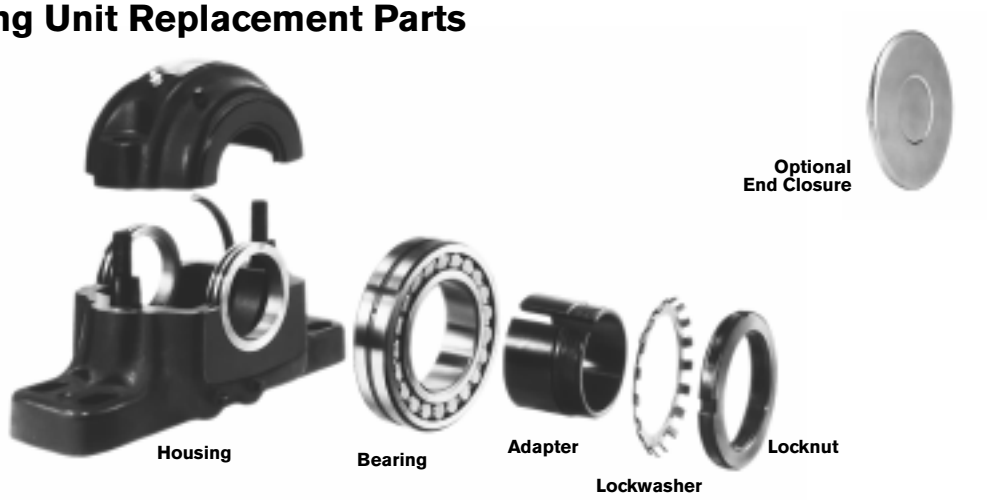
Series SAF22600, SAF22300

Pillow blocks



The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division, Rexnord Corp. should be consulted regarding optional features, availability, and the application requirements.

Spherical Roller Bearing Unit Replacement Parts
Series 6600, 6800



Pillow block number ▲	Shaft diameter inches	Spherical roller bearing number	Labyrinth seal number ■	Adapter assembly number	C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
P-LB6823R	1 7/16	22209LBK/W33/C3	LB6923-3R	H309023	6824-4	LB6924-6R	P-LB6823R-02
P-LB6824R	1 1/2		LB6924-3R	H309024			P-LB6824R-02
P-LB6827R	1 11/16	22210LBK/W33/C3	LB6927-3R	H310027	6828-4	LB6928-6R	P-LB6827R-02
P-LB6828R	1 3/4		LB6928-3R	H310028			P-LB6828R-02
P-LB6831R	1 15/16	22211LBK/W33/C3	LB6931-3RA	H311031	6924-4	LB6932-6R	P-LB6831R-02
P-LB6832R	2		LB6932-3R	H311032			P-LB6832R-02
P-LB6835R	2 3/16	22213LBK/W33/C3	LB6935-3RA	H313035	6932-4	LB6936-6R	P-LB6835R-02
P-LB6839R*	2 7/16	22215LBK/W33/C3	LB6839-3RA	H315039	6840-4	LB6840-6R	P-LB6839R-02*
P-LB6843R*	2 11/16	22216LBK/W33/C3	LB6843-3RA	H316043	6844-4	LB6844-6R	P-LB6843R-02*
P-LB6847R*	2 15/16	22217LBK/W33/C3	LB6847-3RA	H317047	6848-4	LB6848-6R	P-LB6847R-02*
P-LB6848R*	3		LB6848-3R	H318051			P-LB6848R-02*
P-LB6851R*	3 3/16	22218LBK/W33/C3	LB6851-3R	H320055	6852-4	LB6852-6R	P-LB6851R-02*
P-LB6855R*	3 7/16	22220LBK/W33/C3	LB6855-3RA	H320056	6856-4	LB6856-6R	P-LB6855R-02*
P-LB6856R*	3 1/2		LB6856-3R	H322063			P-LB6856R-02*
P-LB6859FR	3 11/16	22222LBK/W33/C3	LB6859-3R	H322064	6864-4	LB6864-6R	P-LB6859FR-02
P-LB6863FR	3 15/16		LB6863-3RA	H3124067			P-LB6863FR-02
P-LB6864FR	4		LB6864-3R	H3126071			P-LB6864FR-02
P-LB6867FR	4 3/16	22224LBK/W33/C3	LB6867-3R	H3126072	6868-4	LB6868-6R	P-LB6867FR-02
P-LB6871FR	4 7/16	22226LBK/W33/C3	LB6871-3RA	H3128079	6872-4	LB6872-6R	P-LB6871FR-02
P-LB6872FR	4 1/2		LB6872-3R	H3128080			P-LB6872FR-02
P-LB6879FR	4 15/16	22228LBK/W33/C3	LB6879-3R	H3130083	6880-4	LB6880-6R	P-LB6879FR-02
P-LB6880FR	5		LB6880-3R	H3132087			P-LB6880FR-02
P-LB6883FR	5 3/16	22230LBK/W33/C3	LB6883-3R	H3134095	6884-4	LB6884-6R	P-LB6883FR-02
P-LB6887FR	5 7/16	22232LBK/W33/C3	LB6887-3R	H3134096	6892-4	LB6888-6R	P-LB6887FR-02
P-LB6895FR	5 15/16	22234LBK/W33/C3	LB6895-3R	H3136103	6896-4	LB6896-6R	P-LB6895FR-02
P-LB6896FR	6		LB6896-3R	H3136104			P-LB6896FR-02
P-LB68103FR	6 7/16	22236LBK/W33/C3	LB68103-3R	H3138111	68104-4	LB68104-6R	P-LB68103FR-02
P-LB68104FR	6 1/2		LB68104-3R	H3138112			P-LB68104FR-02
P-LB68111FR	6 15/16	22238LBK/W33/C3	LB68111-3R	H3140115	68112-4	LB68112-6R	P-LB68111FR-02
P-LB68112FR	7		LB68112-3R	H3144120			P-LB68112FR-02
P-LB68115FR	7 3/16	22240LBK/W33/C3	LB68115-3R	H3144127	68116-4	LB68116-6R	P-LB68115FR-02
P-LB68120FR	7 1/2	22244LBK/W33/C3	LB68120-3R	SNW44-7 1/2	68128-4	LB68128-6R	P-LB68120FR-02
P-LB68127FR	7 15/16		LB68127-3R	SNW44-7 15/16			P-LB68127FR-02
P-LB68128FR	8		LB68128-3R	SNW44-8			P-LB68128FR-02
P-LB66135FR	8 7/16	23048LBK/W33/C3	LB66135-3R	SNP3048-8 7/16	66144-4	LB66144-6R	P-LB66135FR-02
P-LB66136FR	8 1/2		LB66136-3R	SNP3048-9 1/2			P-LB66136FR-02
P-LB66144FR	9		LB66144-3R	SNP3048-9			P-LB66144FR-02
P-LB66B151FR	9 7/16	23056LBK/W33/C3	LB66B151-3R	SNP3056-9 7/16	66168-4	LB66152-6R	P-LB66B151FR-02
P-LB66B152FR	9 1/2		LB66B152-3R	SNP3056-9 1/2			P-LB66B152FR-02
P-LB66159FR	9 15/16		LB66159-3R	SNP3056-9 15/16		LB66160-6R	P-LB66159FR-02
P-LB66160FR	10		LB66160-3R	SNP3056-10			P-LB66160FR-02
P-LB66167FR	10 7/16		LB66167-3R	SNP3056-10 7/16		LB66168-6R	P-LB66167FR-02
P-LB66168FR	10 1/2		LB66168-3R	SNP3056-10 1/2			P-LB66168FR-02

▲ For variations in type of housing, use prefix:
P—pillow block, cast iron
PK — pillow block, cast steel, 4-bolt base
E —Expansion mounting; C-spacer not required.

P-LB6839R-02

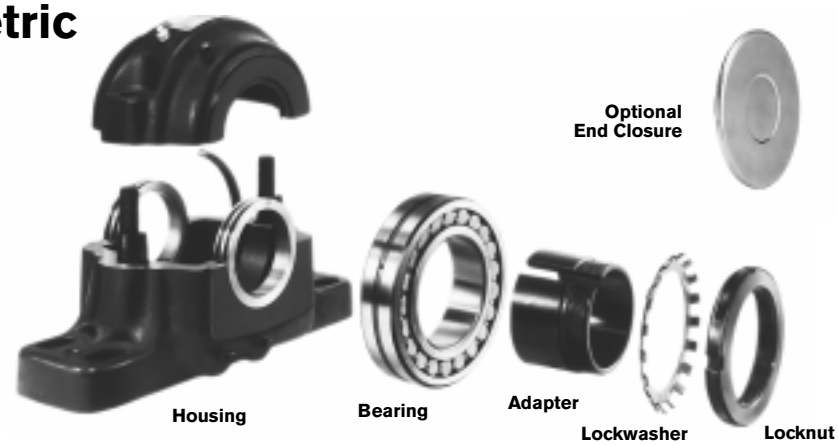
For construction features, use suffix:
F — 4-bolt base pillow block
M4 — Cast steel housing material.
C — End closure included

■ Labyrinth seals, suffix R, are furnished unless otherwise specified. For optional seals, use suffix B for contact type (4 halves required).

‡ Closed end unit (suffix C) requires one seal and one end closure.

* 2-bolt base listed. For 4-bolt base add suffix F; i.e., P-LB6839FR pillow block or P-LB6839FR-02 housing.

Spherical Roller Bearing Unit Replacement Parts
Series 66M00, 68M00 Metric



Pillow block number	Shaft diameter *mm*	Spherical roller bearing number	Labyrinth seal number	Adapter assembly number	C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
P-LB68M40R	*40*	*22209LBK/W33/C3*	*LB69M40-3R*	H309	6824-4	LB6928-6R	*P-LB68M40R-02*
P-LB68M45R	*45*	*22210LBK/W33/C3*	*LB69M45-3R*	H310	6828-4	LB6928-6R	*P-LB68M45R-02*
P-LB68M50R	*50*	*22211LBK/W33/C3*	*LB69M50-3R*	H311	6924-4	LB6932-6R	*P-LB68M50R-02*
P-LB68M60R	*60*	*22213LBK/W33/C3*	*LB69M60-3R*	H313	6932-4	LB69M60-6R	*P-LB68M60R-02*
*P-LB68M65R**	*65*	*22215LBK/W33/C3*	*LB68M65-3R*	H315	6840-4	LB68M65-6R	*P-LB68M65R-02**
*P-LB68M70R**	*70*	*22216LBK/W33/C3*	*LB68M70-3R*	H316	6844-4	LB6844-6R	*P-LB68M70R-02**
*P-LB68M75R**	*75*	*22217LBK/W33/C3*	*LB68M75-3R*	H317	6948-4	LB6848-6R	*P-LB68M75R-02**
*P-LB68M80R**	*80*	*22218LBK/W33/C3*	*LB68M80-3R*	H318	6852-4	LB6852-6R	*P-LB68M80R-02**
*P-LB68M90R**	*90*	*22220LBK/W33/C3*	*LB68M90-3R*	H320	6856-4	LB6856-6R	*P-LB68M90R-02**
P-LB68M100FR	*100*	*22222LBK/W33/C3*	*LB6863-3R*	H322	6864-4	LB6864-6R	*P-LB68M100FR-02*
P-LB68M110FR	*110*	*22224LBK/W33/C3*	*LB68M110-3R*	H3124	6868-4	LB6872-6R	*P-LB68M110FR-02*
P-LB68M115FR	*115*	*22226LBK/W33/C3*	*LB68M115-3R*	H3126	6872-4	LB6872-6R	*P-LB68M115FR-02*
P-LB68M125FR	*125*	*22228LBK/W33/C3*	*LB68M125-3R*	H3128	6880-4	LB6880-6R	*P-LB68M125FR-02*
P-LB68M135FR	*135*	*22230LBK/W33/C3*	*LB68M135-3R*	H3130	6884-4	LB6884-6R	*P-LB68M135FR-02*
P-LB68M140FR	*140*	*22232LBK/W33/C3*	*LB68M140-3R*	H3132	6892-4	LB6888-6R	*P-LB68M140FR-02*
P-LB68M150FR	*150*	*22234LBK/W33/C3*	*LB68M150-3R*	H3134	6896-4	LB6896-6R	*P-LB68M150FR-02*
P-LB68M160FR	*160*	*22236LBK/W33/C3*	*LB68M160-3R*	H3136	68104-4	LB68104-6R	*P-LB68M160FR-02*
P-LB68M170FR	*170*	*22238LBK/W33/C3*	*LB68M170-3R*	H3138	68112-4	LB68112-6R	*P-LB68M170FR-02*
P-LB68M180FR	*180*	*22240LBK/W33/C3*	*LB68M180-3R*	H3140	68116-4	LB68116-6R	*P-LB68M180FR-02*
P-LB68M200FR	*200*	*22244LBK/W33/C3*	*LB68M200-3R*	H3144	68128-4	LB68128-6R	*P-LB68M200FR-02*
P-LB66M220FR	*220*	*23048LBK/W33/C3*	*LB66M220-3R*	H3048	66144-4	LB66144-6R	*P-LB66M220FR-02*
P-LB66M260FR	*260*	*23056LBK/W33/C3*	*LB66M260-3R*	H3056	66168-4	LB66168-6R	*P-LB66M260FR-02*

▲ For variations in type of housing, use prefix:
P—pillow block, cast iron
PK — pillow block, cast steel, 4-bolt base
E —Expansion mounting; C-spacer not required.

P-LB68M40R-02

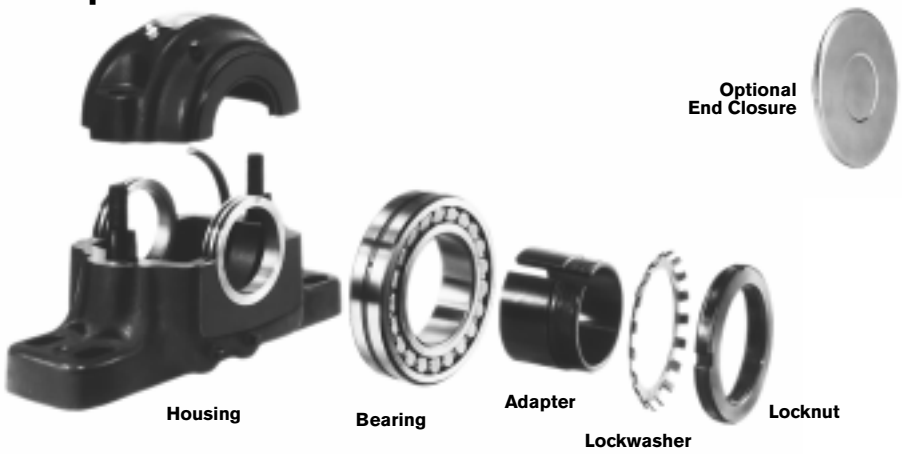
For construction features, use suffix:
F — 4-bolt base pillow block
M4 — Cast steel housing material.
C — End closure included

‡ Closed end unit (suffix C) requires one seal and one end closure.

* 2-bolt base listed. For 4-bolt base add suffix F; i.e., P-LB68M65FR pillow block or P-LB68M65FR-02 housing.

Spherical Roller Bearing Unit Replacement Parts

Series P-LB6900, SAF22600

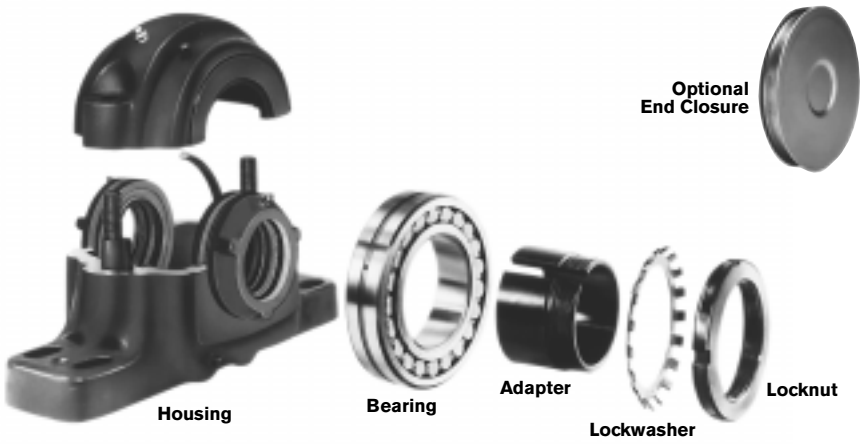


Pillow block number	Shaft diameter inches	Spherical roller bearing number	Labyrinth seal number	Adapter assembly number	C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
P-LB6923R	1 7/16	22309LBK/W33/C3	LB6923-3R	SNW109-1 7/16	6924-4	LB6924-6R	P-LB6923R-02
P-LB6924R	1 ½		LB6924-3R	SNW109-1 ½			P-LB6924R-02
P-LB6927R	1 11/16	22310LBK/W33/C3	LB6927-3R	SNW110-1 11/16	6928-4	LB6928-6R	P-LB6927R-02
P-LB6931R	1 15/16	22311LBK/W33/C3	LB6931-3RA	SNW111-1 15/16	6932-4	LB6932-6R	P-LB6931R-02
P-LB6932R	2		LB6932-3R	SNW111-2			P-LB6932R-02
P-LB6935R*	2 3/16	22313LBK/W33/C3	L6935-3R	SNW113-2 3/16	6844-4	LB6936-6R	P-LB6935R-02*
P-LB6939R*	2 7/16	22315LBK/W33/C3	LB6839-3RA	SNW115-2 7/16	6852-4	LB6840-6R	P-LB6939R-02*
P-LB6940R*	2 ½		LB6840-3R	SNW115-2 ½			P-LB6940R-02*
P-LB6943R*	2 11/16	22316LBK/W33/C3	LB6843-3RA	SNW116-2 11/16	6944-4	LB6844-6R	P-LB6943R-02*
P-LB6947R*	2 15/16	22317LBK/W33/C3	L6947-3R	SNW117-2 15/16	6856-4	LB6848-6R	P-LB6947R-02*
SAF22618-303	3 3/16	22318LBK/W33/C3	LB6851-3R	SNW118-3 3/16	L6956-4	LB6852-6R	SAF618-303-02
SAF22620-307	3 7/16	22320LBK/W33/C3	LB6855-3RA	SNW120-3 7/16	6868-4	LB6856-6R	SAF620-307-02
SAF22620-308	3 ½		LB6856-3R	SNW120-3 ½			SAF620-308-02
SAF22622-315	3 15/16	22322LBK/W33/C3	LB6863-3RA	SNW122-3 15/16	6964-4	LB6864-6R	SAF622-315-02
SAF22622-400	4		LB6864-3R	SNW122-4			SAF622-400-02
SAF22624-403	4 3/16	22324LBK/W33/C3	LB6867-3R	SNW124-4 3/16	L6968-4	LB6868-6R	SAF624-403-02
SAF22626-407	4 7/16	22326LBK/W33/C3	LB6871-3RA	SNW126-4 7/16	L6972-4	LB6872-6R	SAF626-407-02
SAF22628-415	4 15/16	22328LBK/W33/C3	LB6879-3R	SNW128-4 15/16	L6980-4	LB6880-6R	SAF628-415-02
SAF22628-500	5		LB6880-3R	SNW128-5			SAF628-500-02
SAF22630-503	5 3/16	22330LBK/W33/C3	LB6883-3R	SNW130-5 3/16	L6984-4	LB6884-6R	SAF630-503-02
SAF22632-507	5 7/16	22332LBK/W33/C3	LB6887-3R	SNW132-5 7/16	L6988-4	LB6888-6R	SAF632-507-02
SAF22634-515	5 15/16	22334LBK/W33/C3	LB6895-3R	SNW134-5 15/16	L6996-4	LB6896-6R	SAF634-515-02

‡ Closed end unit (suffix C) requires one seal and one end closure.

* 2-bolt base listed. For 4-bolt base add suffix F; i.e., P-LB6935FR pillow block or P-L6935FR-02 housing.

Spherical Roller Bearing Unit Replacement Parts
Series 6600D8, 6800D8



Pillow block number ▲	Shaft diameter inches	Spherical roller bearing number	Type DB Seal assembly number	Adapter assembly number	C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
P-LB6823D8	1 7/16	22209LBK/W33/C3	LB6923D8	SNW09-1 7/16	6824-4	LB6924D8-6	P-LB6823D8-02
P-LB6824D8	1 1/2		LB6924D8	SNW09-1 1/2			P-LB6824D8-02
P-LB6827D8	1 11/16	22210LBK/W33/C3	LB6927D8	SNW10-1 11/16	6828-4	LB6928D8-6	P-LB6827D8-02
P-LB6831D8	1 15/16	22211LBK/W33/C3	LB6931D8	SNW11-1 15/16	6924-4	LB6932D8-6	P-LB6831D8-02
P-LB6832D8	2	22213LBK/W33/C3	LB6932D8	SNW11-2	6932-4	LB6936D8-6	P-LB6832D8-02
P-LB6835D8	2 3/16		LB6935D8	SNW13-2 3/16			P-LB6835D8-02
P-LB6839D8*	2 7/16	22215LBK/W33/C3	LB6839D8	SNW15-2 7/16	6840-4	LB6840D8-6	P-LB6839D8-02*
P-LB6843D8*	2 11/16	22216LBK/W33/C3	LB6843D8	SNW16-2 11/16	6844-4	LB6840D8-6	P-LB6843D8-02*
P-LB6847D8*	2 15/16	22217LBK/W33/C3	LB6847D8	SNW17-2 15/16	6848-4	LB6848D8-6	P-LB6847D8-02*
P-LB6848D8*	3		LB6848D8	SNW17-3			P-LB6848D8-02*
P-LB6851D8*	3 3/16	22218LBK/W33/C3	LB6851D8	SNW18-3 3/16	6852-4	LB6852D8-6	P-LB6851D8-02*
P-LB6855D8*	3 7/16	22220LBK/W33/C3	LB6855D8	SNW20-3 7/16	6856-4	LB6856D8-6	P-LB6855D8-02*
P-LB6856D8*	3 1/2		LB6856D8	SNW20-3 1/2			P-LB6856D8-02*
P-LB6859FD8	3 11/16	22222LBK/W33/C3	LB6859D8	SNW22-3 11/16	6864-4	LB6868D8-6	P-LB6859FD8-02
P-LB6863FD8	3 15/16		LB6863D8	SNW22-3 15/16			P-LB6863FD8-02
P-LB6867FD8	4 3/16	22224LBK/W33/C3	LB6867D8	SNW24-4 3/16	6868-4	LB6868D8-6	P-LB6867FD8-02
P-LB6871FD8	4 7/16	22226LBK/W33/C3	LB6871D8	SNW26-4 7/16	6872-4	LB6880D8-6	P-LB6871FD8-02
P-LB6879FD8	4 15/16	22228LBK/W33/C3	LB6879D8	SNW28-4 15/16	6880-4	LB6880D8-6	P-LB6879FD8-02
P-LB6887FD8	5 7/16	22232LBK/W33/C3	LB6887D8	SNW32-5 7/16	6892-4	LB6888D8-6	P-LB6887FD8-02
P-LB6895FD8	5 15/16	22234LBK/W33/C3	LB6895D8	SNW34-5 15/16	6896-4	LB68104D8-6	P-LB6895FD8-02
P-LB6896FD8	6		LB6896D8	SNW34-6			P-LB6896FD8-02
P-LB68103FD8	6 7/16	22236LBK/W33/C3	LB68103D8	SNW36-6 7/16	68104-4	LB68104D8-6	P-LB68103FD8-02
P-LB68111FD8	6 15/16	22238LBK/W33/C3	LB68111D8	SNW38-6 15/16	68112-4	LB68112D8-6	P-LB68111FD8-02
P-LB68112FD8	7		LB68112D8	SNW38-7			P-LB68112FD8-02
P-LB68120FD8	7 1/2	22244LBK/W33/C3	L68120D8	SNW44-7 1/2	68128-4	LB68128D8-6	P-LB68120FD8-02
P-LB68127FD8	7 15/16		L68127D8	SNW44-7 15/16			P-LB68127FD8-02
P-LB68128FD8	8		L68128D8	SNW44-8			P-LB68128FD8-02
P-LB66135FD8	8 7/16	23048LBK/W33/C3	LB66135D8	SNP3048-8 7/16	66144-4	LB66144D8-6	P-LB66135FD8-02
P-LB66136FD8	8 1/2		LB66136D8	SNP3048-8 1/2			P-LB66136FD8-02
P-LB66144FD8	9		LB66144D8	SNP3048-9			P-LB66144FD8-02
P-LB66B152FD8	9 1/2	23056LBK/W33/C3	LB66152D8	SNP3056-9 1/2	66168-4	LB66168D8-6	P-LB66B152FD8-02
P-LB66168FD8	10 1/2		LB66168D8	SNP3056-10 1/2			P-LB66168FD8-02

▲ For variations in type of housing, use prefix:
P—pillow block, cast iron
PK—pillow block, cast steel, 4-bolt base
E—Expansion mounting;

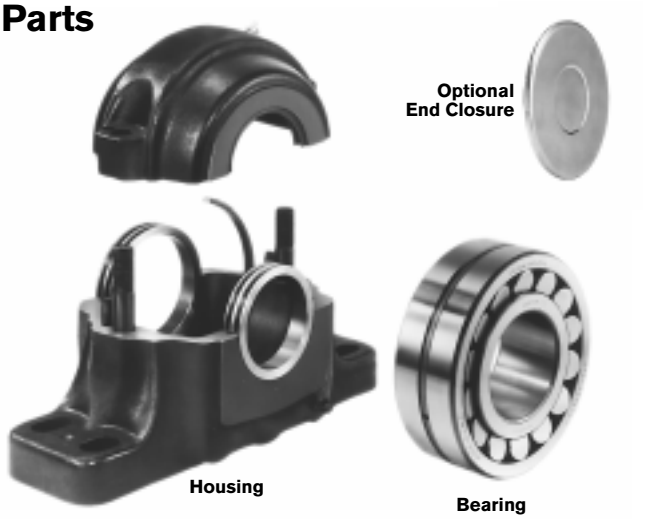
P-LB6839 D8-02

For construction features, use suffix:
F — 4-bolt base pillow block
M4 — Cast steel housing material.
C-spacer not required.

‡ Closed end unit (suffix C) requires one seal and one end closure.

* 2-bolt base listed. For 4-bolt base add suffix F; i.e., P-LB6839FD8 pillow block or P-LB6839FD8-02 housing.

Spherical Roller Bearing Unit Replacement Parts
Series 7600, 7800, P-LB7900, SAF22300



Series 7600, 7800

Pillow block number	Bore diameter, inches	Spherical roller bearing number	Labyrinth seal number		C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
			V1 shaft	V2 shaft			
P-LB7875R*	2.9528	22215LB/W33/C3	L7875-3R1	LB7875-3R2	6840-4	LB6844-6R	P-LB7875R-02*
P-LB7880R*	3.1496	22216LB/W33/C3	L7880-3R1	LB6848-3R	6844-4	LB6848-6R	P-LB7880R-02*
P-LB7885R*	3.3465	22217LB/W33/C3	L7885-3R1	L7885-3R2	6848-4	L7885-6R	P-LB7885R-02*
P-LB7890R*	3.5433	22218LB/W33/C3	LB6866-3R	L7890-3R2	6852-4	LB6852-6R	P-LB7890R-02*
P-LB78100R*	3.9370	22220LB/W33/C3	LB6872-3R	L78100-3R2	6856-4	L78100-6R	P-LB78100R-02*
P-LB78110FR	4.3307	22222LB/W33/C3	LB6878-3R	LB6867-3R	6864-4	LB6868-6R	P-LB78110FR-02
P-LB78120FR	4.7244	22224LB/W33/C3	LB68B85-3R	LB78120-3R2	6868-4	LB6872-6R	P-LB78120FR-02
P-LB78130FR	5.1181	22226LB/W33/C3	L78130-3R1	LB6879-3R	6872-4	LB6880-6R	P-LB78130FR-02
P-LB78140FR	5.5118	22228LB/W33/C3	L78140-3R1	LB68B85-3R	6880-4	LB6884-6R	P-LB78140FR-02
P-LB78150FR	5.9055	22230LB/W33/C3	L78150-3R1	L78150-3R2	6884-4	L78150-6R	P-LB78150FR-02
P-LB78160FR	6.2992	22232LB/W33/C3	LB68112-3R	LB78160-3R2	6892-4	LB6896-6R	P-LB78160FR-02
P-LB78170FR	6.6929	22234LB/W33/C3	L78170-3R1	LB68103-3R	6896-4	LB68104-6R	P-LB78170FR-02
P-LB78180FR	7.0866	22236LB/W33/C3	LB68125-3R	LB68110-3R	68104-4	LB68112-6R	P-LB78180FR-02
P-LB78190FR	7.4803	22238LB/W33/C3	L78190-3R1	LB68116-3R	68112-4	LB68116-6R	P-LB78190FR-02
P-LB78200FR	7.8740	22240LB/W33/C3	L78200-3R1	L78200-3R2	68116-4	L78200-6R	P-LB78200FR-02
P-LB78220FR	8.6614	22244LB/W33/C3	L78220-3R1	L78220-3R2	68128-4	L78220-6R	P-LB78220FR-02
P-LB76240FR	9.4488	23048LB/W33/C3	LB66168-3R	LB76240-3R2	66144-4	LB76240-6R	P-LB76240FR-02
P-LB76280FR	11.0236	23056LB/W33/C3	LB76280-3R1	LB76280-3R2	66168-4	LB76280-6R	P-LB76280FR-02

▲ For variations in type of housing, use prefix:
P—pillow block, cast iron
PK—pillow block, cast steel, 4-bolt base
E—Expansion mounting;

P-LB7875 _-02

For construction features, use suffix:
F — 4-bolt base pillow block
M4 — Cast steel housing material.
C-spacer not required.

‡ Closed end unit (suffix C) requires one seal and one end closure.

* 2-bolt base listed. For 4-bolt base add suffix F; i.e., P-LB7875FR pillow block or P-LB7875FR-02 housing.

Series P-LB7900, SAF22300

Pillow block number	Bore diameter, inches	Spherical roller bearing number	Labyrinth seal number		C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
			V1 shaft	V2 shaft			
P-LB7945R	1.7717	22309LB/W33/C3	LB6934-3R	LB6927-3R	6924-4	LB6928-6R	P-LB7945R-02
P-LB7950R	1.9685	22310LB/W33/C3	L7950-3R1	LB6930-3R	6928-4	LB6932-6R	P-LB7950R-02
P-LB7955R*	2.1654	22311LB/W33/C3	LB7955-3R1	LB6933-3R	6932-4	LB6936-6R	P-LB7955R-02*
P-LB7965R*	2.5591	22313LB/W33/C3	LB7965-3R1	LB6839-3RA	6844-4	LB6840-6R	P-LB7965R-02*
P-LB7975R*	2.9528	22315LB/W33/C3	L7875-3R1	LB7875-3R2	6852-4	LB6844-6R	P-LB7975R-02*
P-LB7980R*	3.1496	22316LB/W33/C3	L7880-3R1	LB6848-3R	6944-4	LB6848-6R	P-LB7980R-02*
P-LB7985R*	3.3465	22317LB/W33/C3	L7885-3R1	L7885-3R2	6856-4	L7885-6R	P-LB7985R-02*
SAF22318	3.5433	22318LB/W33/C3	LB6866-3R	L7890-3R2	L6956-4	LB6852-6R	SAF318-02
SAF22320	3.9370	22320LB/W33/C3	LB6872-3R	L78100-3R2	6868-4	L78100-6R	SAF320-02
SAF22322	4.3307	22322LB/W33/C3	LB6878-3R	LB6867-3R	6964-4	LB6868-6R	SAF322-02
SAF22324	4.7244	22324LB/W33/C3	LB68B85-3R	LB78120-3R2	L6968-4	LB6872-6R	SAF324-02
SAF22326	5.1181	22326LB/W33/C3	L78130-3R1	LB6879-3R	L6972-4	LB6880-6R	SAF326-02
SAF22328	5.5118	22328LB/W33/C3	L78140-3R1	LB68B85-3R2	L6980-4	LB6884-6R	SAF328-02
SAF22330	5.9055	22330LB/W33/C3	L78150-3R1	L78150-3R2	L6984-4	L78150-6R	SAF330-02
SAF22332	6.2992	22332LB/W33/C3	LB68112-3R	LB78160-3R2	L6988-4	LB6896-6R	SAF332-02
SAF22334	6.6929	22334LB/W33/C3	L78170-3R1	LB68103-3R	L6996-4	LB68104-6R	SAF334-02

‡ Closed end unit (suffix C) requires one seal assembly and one end closure.

* 2-bolt base listed. For 4-bolt base add suffix F; i.e., P-LB7955FR pillow block or P-L7955FR-02 housing.

Housing End Closures:

All pillow blocks and takeups are available with standard end closures, designated with the suffix C (i.e. PE-LB6847FRC). The end closure takes the place of one of the seals. For series 7600, 7800 and SAF22300 the end cap fits in the V2 side. On closed end units, shafting should not extend beyond the end of the adapter sleeve or locknut face more than ⅛".

Pillow Block Mounting:

Pillow blocks have cored mounting bolt holes suitable to clear the largest inch or metric bolt shown. Cast slots in pillow blocks are normally 1⁄16" wider than the specified mounting bolt nominal diameter. It is expected that plain washers will be used under the bolt head to span the slot width and aid torquing. Narrow (N) series washers per ANSI B18.22.1-1981 (previously designated SAE series) are recommended. If wide series washers are used, the full length of the slot may not be usable for positioning the unit.

Replacement Parts:

Bearings and seals can be replaced in these units. Replacement parts are listed on pages E-29 through E-33. When replacing bearings, be sure to use one with the same clearance specification. Metric locknuts and sleeves have different threads than inch locknuts and sleeves, and are not interchangeable.

Operation:

Units of these series are not prelubricated. The service instructions packed with each unit of replacement bearing provide guidelines for relubrication intervals and recommended lubricants. The type A or B felt contact seal should be limited to temperature less than 225°F *(107°C)* and to grease lubrication only.

These pillow blocks are designed for use with grease, static oil or circulating oil lubrication. With circulation systems, the standard drain holes will probably require enlarging.

Where significant thrust loads must be carried by adapter mounted bearings, the use of shaft shoulder rings is recommended to transmit the thrust from the bearings to the shaft. Consult Link-Belt Bearing Division.

Imposed radial loads should not exceed .25C. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Spherical roller bearings with other than standard clearance (C3) are frequently required due to application conditions. The nomenclature page (E-27) shows bearing clearance specifications. Spherical roller bearing clearances are listed on pages
F-15 and F-16.

Takeups:

Pillow blocks can be mounted on type LHD universal takeup frames illustrated on page E-25. Protected screw takeups type
DS-LB6800 are on page E-26.

Fixed and Expansion Units:

Important: The application of these spherical roller bearing units requires the use of one fixed and one expansion mounting on a shaft. For fixed pillow blocks, spacer rings are used which move the bearing to one side of the pillow block center line. Bearings should be centered in expansion units during mounting unless special application conditions dictate otherwise. To avoid premature failure, care should be taken not to force the bearings to thrust against or away from each other during mounting or operation. Expansion units are designated by adding the prefix "E". Example—PE-LB6863FR.

Shaft Fits and Tolerances:

For direct shaft mounted units Series 7600, 7800, 7900, and 22300 refer to Shaft Bearing Seat Diameters pages F-11 and F-12.

Shaft diameters for V1 and V2 shafts on 7600, 7800, 7900, and 22300 series and for adapter mounted units should be held to the following regular commercial tolerances:

Shaft Diameter	Recommended Tolerance
… through 2"	Nominal to –.003" *(–0.07 mm)*
2 1⁄16" through 4"	Nominal to –.004" *(–0.10 mm)*
4 1⁄16" through 6"	Nominal to –.005" *(–0.13 mm)*
6 1⁄16" through 13"	Nominal to –.006" *(–0.15 mm)*

Warning:

The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stop bars, etc., together with proper safety factors. When these conditions are unavoidable Link-Belt Bearing Division, Rexnord Corp. should be consulted.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Spherical Roller Bearings

Contents

Series 22200, 22300, 23000, 23100, 23200

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Shaft Diameters F-11
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Radial Clearances F-15
Additional Information F-17
Nomenclature F-18

Series 22200, 22300, 23000
Spherical Roller Bearings

Self-aligning and self-contained spherical roller bearings provide high capacity for heavy-duty and high-precision applications. They are used extensively on earth-moving equipment, vibrating screens, steel mill and paper mill equipment, embossing rolls, printing presses, and torque converters.

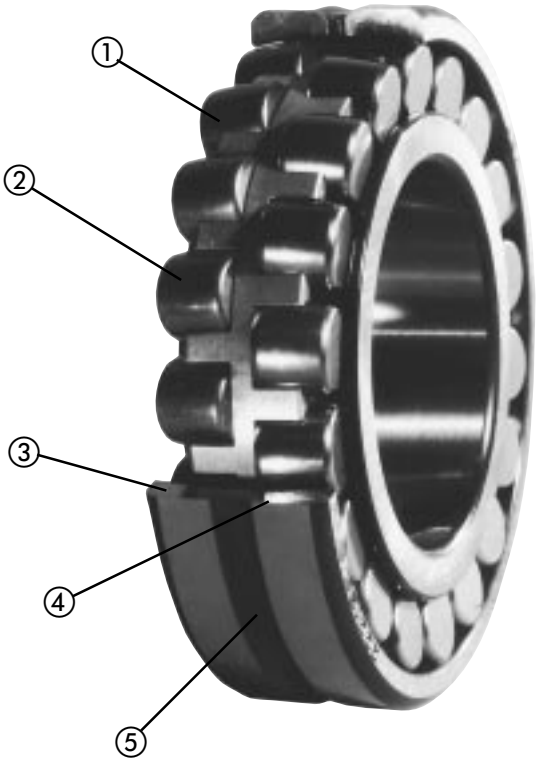
① Positive roller guidance is provided from rugged retainer design.

② Large high-capacity rollers for extended bearing life.

③ Controlled raceway curvatures afford precise osculation clearance preventing roller edge loading.

④ Micro-finished raceways assure smooth operation.

⑤ Outer ring groove and three symmetrically spaced holes for maximum lubrication access.



Spherical Roller Bearings

22200LB, 22200LBK

Double-row self-aligning spherical roller bearings with cylindrical or tapered bores for direct shaft mounting. Available with bores from *45 mm*, (1.7717") to *220 mm*, (8.6614"), inclusive.

22200LBK with Adapter Assembly

Double-row self-aligning spherical roller bearings with tapered bores for adapter mounting. Available for shaft sizes 1 7/16" through 8".

Load ratings on page F-5.
Dimensions on pages F-7 and F-8.
Additional information on page F-17.

Spherical Roller Bearings

22300LB, 22300LBK

Double-row self-aligning spherical roller bearings with cylindrical or tapered bores for direct shaft mounting. Available with bores *40 mm*, (1.5748") to *220 mm*, (8.6614"), inclusive.

22300LBK with Adapter Assembly

Double-row self-aligning spherical roller bearings with tapered bores for adapter mounting. Available for shaft sizes 1 3/16" through 7 15/16".

Load ratings on page F-6.
Dimensions on pages F-9 and F-10.
Additional information on pages F-17.

Spherical Roller Bearings

23000LB, 23000LBK

Double-row self-aligning spherical roller bearings with cylindrical or tapered bores for direct shaft mounting. Available with bores from *120 mm*, (4.7244") to *300 mm*, (11.8110"), inclusive.

23000LBK with Adapter Assembly

Double-row self-aligning spherical roller bearings with tapered bores for adapter mounting. Available for shaft sizes 4 3/16" through 11".

Load ratings, consult Link-Belt Bearings Division.
Dimensions on pages F-9 and F-10.
Additional information on page F-17.

Selection
Series 22200, 22300, 23000

To select a bearing, determine the applied radial load, the applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected. Spherical roller bearings are available in five series with cylindrical bores for direct shaft mounting and tapered bores for direct shaft or adapter mounting. Bearings in several series may fulfill the L_{10} life requirements. However, speed limit, minimum shaft diameter, thrust load, and space limitations may be determining factors in final selection.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA Standards STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000
Industrial—High reliability	—	—	120,000 to 300,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a spherical roller bearing.

a For radial load only:

$P = F_r$

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Select a spherical roller bearing having a basic load rating C equal to or greater than the required C from the appropriate series.

b For combined radial and thrust loads:

Select a spherical roller bearing with the appropriate characteristics and the desired shaft size, pages F-7 thru F-10.

Calculate the ratio of thrust load F_a to the radial load F_r.

$\frac{F_a}{F_r}$

Calculate the equivalent radial load P

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then $P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, consult the appropriate bearing rating tables, pages F-5 and F-6.

Calculate the required C

required C = $\left(\frac{C}{P}\right) P$ using $\left(\frac{C}{P}\right)$ from Step 2

Consult the bearing rating table to see if the selected bearing meets or exceeds the required C. The life expectancy of the selected bearing or other sizes and series of bearings can be calculated.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any selected or trial bearing:

Step 1 Determine the equivalent radial load P.

a For radial load only:

$P = F_r$

b For combined radial and thrust load:

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a$$

If $\frac{F_a}{F_r}$ is greater than e, then

$$P = X_2F_r + Y_2F_a$$

For values of e, X_1, Y_1, X_2, and Y_2, consult the appropriate bearing rating table, pages F-5 thru F-6.

Step 2 Calculate the ratio of the basic load rating C to the equivalent radial load.

$\frac{C}{P}$

Step 3 Approximate the bearing life from Table 1.

Life Adjustment

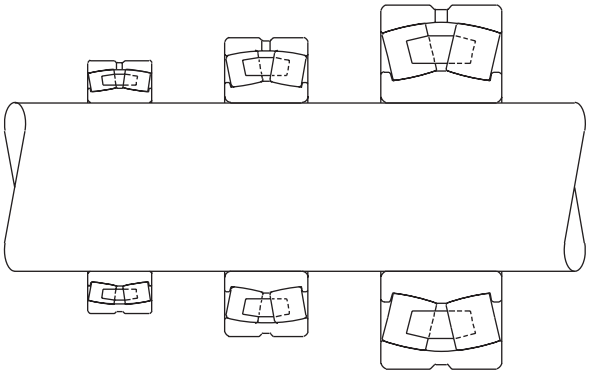
The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L_n' = a_1a_2a_3L_{10}$$

where L_n' = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Load Ratings
Series 22200LB, 22200LBK



Size Relationship

Load ratings and speed limits

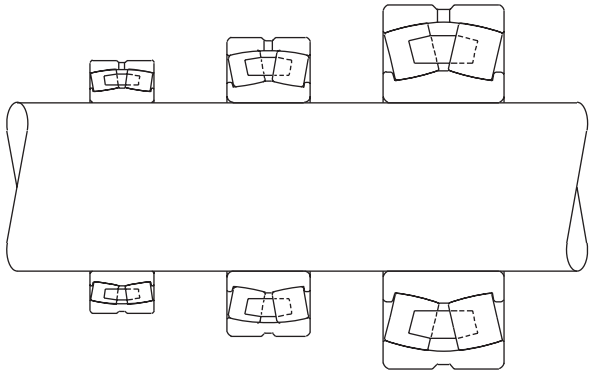
Bearing number		C_0 Static load rating		C Basic load rating		Speed Limit, rpm		e	$\frac{F_a}{F_r} <= e$		$\frac{F_a}{F_r} > e$	
Cylindrical bore	Tapered bore	*newtons*	pounds	*newtons*	pounds	Grease	Oil		X_1	Y_1	X_2	Y_2
22209LB	22209LBK	*105000*	23600	*92500*	20800	5300	6200	.26	1.00	2.6	.67	3.9
22210LB	22210LBK	*113000*	25500	*97900*	22000	5000	5500	.26	1.00	2.8	.67	4.2
22211LB	22211LBK	*145000*	32500	*120000*	27000	4500	5000	.23	1.00	2.9	.67	4.4
22212LB	22212LBK	*180000*	40500	*151000*	34000	4000	4500	.24	1.00	2.8	.67	4.2
22213LB	22213LBK	*207000*	46500	*169000*	38000	3800	4300	.24	1.00	2.8	.67	4.2
22214LB	22214LBK	*222000*	50000	*178000*	40000	3600	4000	.23	1.00	2.9	.67	4.4
22215LB	22215LBK	*236000*	53000	*185000*	41500	3400	3700	.22	1.00	3.1	.67	4.6
22216LB	22216LBK	*260000*	58500	*207000*	46500	3200	3500	.22	1.00	3.1	.67	4.7
22217LB	22217LBK	*327000*	73500	*260000*	58500	3000	3250	.22	1.00	3.0	.67	4.5
22218LB	22218LBK	*363000*	81500	*285000*	64000	2600	3000	.23	1.00	2.9	.67	4.3
22219LB	22219LBK	*400000*	90000	*316000*	71000	2400	2900	.24	1.00	2.9	.67	4.3
22220LB	22220LBK	*463000*	104000	*356000*	80000	2200	2800	.24	1.00	2.8	.67	4.2
22222LB	22222LBK	*587000*	132000	*454000*	102000	2000	2500	.25	1.00	2.7	.67	4.0
22224LB	22224LBK	*725000*	163000	*534000*	120000	1900	2300	.25	1.00	2.7	.67	4.0
22226LB	22226LBK	*872000*	196000	*636000*	143000	1800	2100	.26	1.00	2.6	.67	3.9
22228LB	22228LBK	*1010000*	228000	*738000*	166000	1700	1950	.25	1.00	2.7	.67	4.0
22230LB	22230LBK	*1200000*	270000	*845000*	190000	1600	1850	.25	1.00	2.7	.67	4.0
22232LB	22232LBK	*1380000*	310000	*961000*	216000	1500	1700	.26	1.00	2.6	.67	3.9
22234LB	22234LBK	*1530000*	345000	*1110000*	250000	1300	1600	.26	1.00	2.6	.67	3.9
22236LB	22236LBK	*1620000*	365000	*1130000*	255000	1300	1500	.25	1.00	2.7	.67	4.0
22238LB	22238LBK	*1850000*	415000	*1200000*	270000	1200	1400	.28	1.00	2.4	.67	3.6
22240LB	22240LBK	*2000000*	450000	*1330000*	300000	1100	1300	.29	1.00	2.3	.67	3.5
22244LB	22244LBK	*2450000*	550000	*1620000*	365000	1000	1200	.29	1.00	2.3	.67	3.5

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

Speed limits are based on the following:

1. Negligible seal torque (e.g., non-contact seals)
2. Proper operating internal clearance.
3. Adequate lubrication and maintenance (special lubricants and/or more frequent relubrication may be required).
4. Normal room temperature environment and no extraneous heat sources, such that bearing operating temperature does not exceed 100°C (212°F).
5. Equivalent radial load not greater than 7% of C.
6. Axial load, if any, not greater than 20% of radial load.
   Additional information, page F-17.

Load Ratings
Series 22300LB, 22300LBK



Size Relationship

Load ratings and speed limits

Bearing number		C_0 Static load rating		C Basic load rating		Speed Limit, rpm		e	$\frac{F_a}{F_r} <= e$		$\frac{F_a}{F_r} > e$	
Cylindrical bore	Tapered bore	*newtons*	pounds	*newtons*	pounds	Grease	Oil		X_1	Y_1	X_2	Y_2
22308LB	22308LBK	*145000*	32500	*129000*	29000	4500	5600	.36	1.00	1.9	.67	2.8
22309LB	22309LBK	*178000*	40000	*158000*	35500	3800	4800	.36	1.00	1.9	.67	2.8
22310LB	22310LBK	*214000*	48000	*189000*	42500	3600	4300	.36	1.00	1.9	.67	2.8
22311LB	22311LBK	*254000*	57000	*222000*	50000	3200	4000	.36	1.00	1.9	.67	2.8
22312LB	22312LBK	*302000*	68000	*260000*	58500	3000	3800	.35	1.00	1.9	.67	2.8
22313LB	22313LBK	*356000*	80000	*291000*	65500	2600	3400	.34	1.00	2.0	.67	3.0
22314LB	22314LBK	*378000*	85000	*320000*	72000	2400	3200	.34	1.00	2.0	.67	3.0
22315LB	22315LBK	*436000*	98000	*369000*	83000	2200	3000	.34	1.00	2.0	.67	3.0
22316LB	22316LBK	*498000*	112000	*414000*	93000	2000	2800	.34	1.00	2.0	.67	3.0
22317LB	22317LBK	*543000*	122000	*454000*	102000	1900	2600	.33	1.00	2.0	.67	3.0
22318LB	22318LBK	*623000*	140000	*507000*	114000	1800	2400	.33	1.00	2.0	.67	3.0
22319LB	22319LBK	*681000*	153000	*556000*	125000	1800	2400	.33	1.00	2.0	.67	3.0
22320LB	22320LBK	*814000*	183000	*649000*	146000	1700	2200	.34	1.00	2.0	.67	3.0
22322LB	22322LBK	*1050000*	236000	*801000*	180000	1600	2000	.33	1.00	2.1	.67	3.1
22324LB	22324LBK	*1160000*	260000	*907000*	204000	1400	1800	.33	1.00	2.1	.67	3.1
22326LB	22326LBK	*1360000*	305000	*1050000*	236000	1300	1700	.33	1.00	2.1	.67	3.1
22328LB	22328LBK	*1600000*	360000	*1220000*	275000	1100	1500	.34	1.00	2.0	.67	3.0
22330LB	22330LBK	*1800000*	405000	*1380000*	310000	1000	1400	.33	1.00	2.0	.67	3.0
22332LB	22332LBK	*1890000*	425000	*1450000*	325000	950	1300	.37	1.00	1.8	.67	2.7
22334LB	22334LBK	*2110000*	475000	*1600000*	360000	950	1300	.37	1.00	1.8	.67	2.7
22336LB	22336LBK	*2360000*	530000	*1730000*	390000	900	1200	.37	1.00	1.8	.67	2.7
22338LB	22338LBK	*2540000*	570000	*1850000*	415000	850	1100	.37	1.00	1.8	.67	2.7
22340LB	22340LBK	*2800000*	630000	*2070000*	465000	850	1100	.36	1.00	1.9	.67	2.8
22344LB	22344LBK	*3340000*	750000	*2360000*	530000	700	900	.35	1.00	2.0	.67	2.9

If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

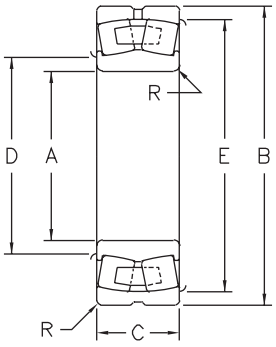
Speed limits are based on the following:

1. Negligible seal torque (e.g., non-contact seals)
2. Proper operating internal clearance.
3. Adequate lubrication and maintenance (special lubricants and/or more frequent relubrication may be required).
4. Normal room temperature environment and no extraneous heat sources, such that bearing operating temperature does not exceed 100°C (212°F).
5. Equivalent radial load not greater than 7% of C.
6. Axial load, if any, not greater than 20% of radial load.

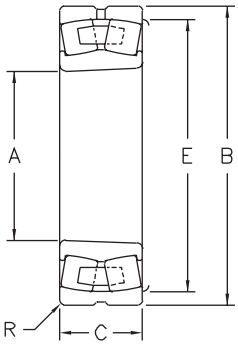
Additional information, page F-17.

Spherical Roller Bearings
22200LB, 22200LBK

Cylindrical or Tapered Bore
Roller Riding Retainers
Self-aligning
High Capacity



Cylindrical bore



Tapered bore

Dimensions

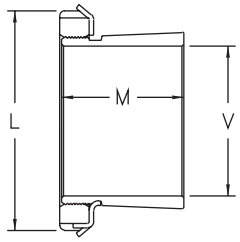
Bearing number		A		B		C		D		E		R		
Cylindrical bore	Tapered bore +	Bore diameter		Outside diameter		Width		Shaft shoulder diameter min.		Housing shoulder diameter max.		Housing & shaft fillet radius#		Unit weight
		mm	in.	*mm*	in.	*mm*	in.	*mm*	in.	*mm*	in.	*mm*	in.	lbs.
22209LB	**22209LBK**	*45.000*	1.7717	*85.000*	3.3465	*23.000*	.9055	*53*	2.1	*77*	3.0	*1.00*	.039	1.3
22210LB	**22210LBK**	*50.000*	1.9685	*90.000*	3.5433	*23.000*	.9055	*58*	2.3	*82*	3.2	*1.00*	.039	1.4
22211LB	**22211LBK**	*55.000*	2.1654	*100.000*	3.9370	*25.000*	.9843	*65*	2.6	*91*	3.6	*1.50*	.059	1.9
22212LB	22212LBK	*60.000*	2.3622	*110.000*	4.3307	*28.000*	1.1024	*70*	2.8	*101*	4.0	*1.50*	.059	2.6
22213LB	**22213LBK**	*65.000*	2.5591	*120.000*	4.7244	*31.000*	1.2205	*74*	2.9	*111*	4.4	*1.50*	.059	3.4
22214LB	22214LBK	*70.000*	2.7559	*125.000*	4.9213	*31.000*	1.2205	*79*	3.1	*116*	4.6	*1.50*	.059	3.7
22215LB	**22215LBK**	*75.000*	2.9528	*130.000*	5.1181	*31.000*	1.2205	*84*	3.3	*121*	4.8	*1.50*	.059	3.9
22216LB	**22216LBK**	*80.000*	3.1496	*140.000*	5.5118	*33.000*	1.2992	*90*	3.5	*129*	5.1	*2.00*	.079	4.9
22217LB	**22217LBK**	*85.000*	3.3465	*150.000*	5.9055	*36.000*	1.4173	*95*	3.7	*139*	5.5	*2.00*	.079	6.1
22218LB	**22218LBK**	*90.000*	3.5433	*160.000*	6.2992	*40.000*	1.5748	*100*	3.9	*149*	5.9	*2.00*	.079	7.6
22219LB	22219LBK	*95.000*	3.7402	*170.000*	6.6929	*43.000*	1.6929	*107*	4.2	*157*	6.2	*2.00*	.079	9.5
22220LB	**22220LBK**	*100.000*	3.9370	*180.000*	7.0866	*46.000*	1.8110	*112*	4.4	*167*	6.6	*2.00*	.079	11.4
22222LB	**22222LBK**	*110.000*	4.3307	*200.000*	7.8740	*53.000*	2.0866	*122*	4.8	*187*	7.4	*2.00*	.079	16.6
22224LB	**22224LBK**	*120.000*	4.7244	*215.000*	8.4646	*58.000*	2.2835	*132*	5.2	*203*	8.0	*2.00*	.079	20.2
22226LB	**22226LBK**	*130.000*	5.1181	*230.000*	9.0551	*64.000*	2.5197	*144*	5.7	*217*	8.5	*2.50*	.098	25.1
22228LB	**22228LBK**	*140.000*	5.5118	*250.000*	9.8425	*68.000*	2.6772	*154*	6.1	*236*	9.3	*2.50*	.098	32.4
22230LB	**22230LBK**	*150.000*	5.9055	*270.000*	10.6299	*73.000*	2.8740	*164*	6.5	*256*	10.1	*2.50*	.098	40.9
22232LB	**22232LBK**	*160.000*	6.2992	*290.000*	11.4173	*80.000*	3.1496	*174*	6.9	*276*	10.9	*2.50*	.098	52.0
22234LB	**22234LBK**	*170.000*	6.6929	*310.000*	12.2047	*86.000*	3.3858	*188*	7.4	*293*	11.5	*3.00*	.118	64.6
22236LB	**22236LBK**	*180.000*	7.0866	*320.000*	12.5984	*86.000*	3.3858	*199*	7.8	*303*	11.9	*3.00*	.118	67.4
22238LB	**22238LBK**	*190.000*	7.4803	*340.000*	13.3858	*92.000*	3.6220	*209*	8.2	*322*	12.7	*3.00*	.118	81.9
22240LB	**22240LBK**	*200.000*	7.8740	*360.000*	14.1732	*98.000*	3.8583	*218*	8.6	*342*	13.5	*3.00*	.118	95.0
22244LB	**22244LBK**	*220.000*	8.6614	*400.000*	15.7480	*108.000*	4.2520	*239*	9.4	*383*	15.1	*3.00*	.118	133.0

Bold face items are normally available from stock; please consult for availability of non-stock items.
\+ Tapered bore, 1:12 on diameter.
\# Largest fillet radius that will clear bearing corners.
Selection guide, pages F-3, F-4.
Load ratings, page F-5.
Additional information, page F-17.
Shaft and housing bearing seat diameters, pages F-11 through F-14.

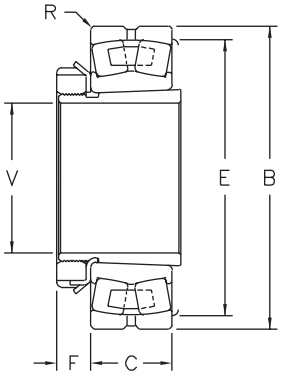
Spherical Roller Bearings

22200LBK

Adapter Mounted
Roller Riding Retainers
Self-aligning
High Capacity



SNW adapter assembly



Tapered bore bearing with SNW adapter assembly

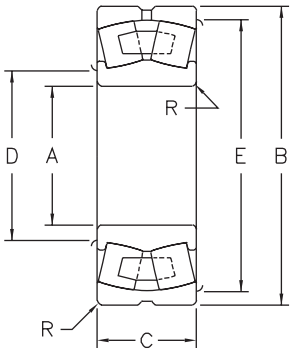
Adapter assembly dimensions

Bearing number Tapered bore +	Adapter assembly number	V Shaft diameter	L		F		M		Adapter weight
		in.	*mm*	in.	*mm*	in.	*mm*	in.	lbs.
22209LBK	**H309023, H309024**	1 7/16, 1 1/2	*65.0*	2.56	*11.3*	.44	*39.0*	1.54	.7
22210LBK	**H310027, H310028**	1 11/16, 1 3/4	*70.0*	2.76	*12.3*	.48	*42.0*	1.65	.8
22211LBK	**H311031, H311032**	1 15/16, 2	*75.0*	2.95	*12.5*	.49	*45.0*	1.77	.9
22212LBK	. . . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	—
22213LBK	**H313035**	2 3/16	*85.0*	3.35	*13.5*	.53	*50.0*	1.97	1.5
22214LBK	. . . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	—
22215LBK	**H315039**	2 7/16	*95.0*	3.86	*14.5*	.57	*55.0*	2.16	2.4
22216LBK	**H316043**	2 11/16	*105.0*	4.13	*16.8*	.66	*59.0*	2.32	2.4
22217LBK	**H317047, H317048**	2 15/16, 3	*110.0*	4.33	*17.8*	.70	*63.0*	2.48	3.0
22218LBK	**H318051**	3 3/16	*120.0*	4.72	*17.8*	.70	*65.0*	2.56	3.2
22219LBK	SNW19-3 5/16	3 5/16	*125.4*	4.94	*21.0*	.83	*70.2*	2.77	3.5
22220LBK	**H320055, H320056**	3 7/16, 3 1/2	*130.0*	5.12	*19.8*	.78	*71.0*	2.80	4.4
22222LBK	**H322059**	3 11/16	*145.0*	5.71	*20.8*	.82	*74.0*	3.03	5.0
	H322063, H322064	3 15/16, 4							
22224LBK	**H3124067**	4 3/16	*155.0*	6.10	*22.0*	.87	*92.0*	3.46	6.9
22226LBK	**H3126071, H3126072**	4 7/16, 4 1/2	*165.0*	6.50	*23.0*	.91	*92.0*	3.62	8.8
22228LBK	**H3128079, H3128080**	4 15/16, 5	*180.0*	7.09	*24.0*	.94	*97.0*	3.82	10.2
22230LBK	**H3130083**	5 3/16	*195.0*	7.68	*26.0*	1.02	*111.0*	4.37	13.2
22232LBK	**H3132087**	5 7/16	*210.0*	8.27	*27.5*	1.08	*119.0*	4.68	15.7
22234LBK	**H3134095, H3134096**	5 15/16, 6	*220.0*	8.66	*28.5*	1.12	*122.0*	4.80	17.8
22236LBK	**H3136103**	6 7/16	*230.0*	9.06	*29.5*	1.16	*131.0*	5.16	17.6
22238LBK	**H3138111, H3138112**	6 15/16, 7	*240.0*	9.45	*30.5*	1.20	*141.0*	5.55	18.6
22240LBK	**H3140115**	7 3/16	*250.0*	9.84	*31.5*	1.24	*150.0*	5.91	30.0
22244LBK	**H3144120, H3144127**	7 1/2, 7 15/16	*280.0*	11.02	*35.0*	1.38	*161.0*	6.34	33.0
	SNW44-8	8	*279.4*	11.00	*36.1*	1.42	*150.0*	5.91	31.0

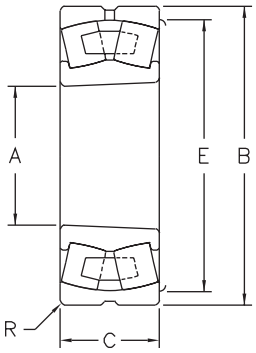
Bold face items are normally available from stock; please consult for availability of non-stock items.
\+ Tapered bore, 1:12 on diameter.
Selection guide, pages F-3, F-4.
Load ratings, page F-5.
Additional information, page F-17.
Housing bearing seat diameters, pages F-13 and F-14.

Spherical Roller Bearings
22300LB, 22300LBK, 23000LB, 23000LBK

Cylindrical or Tapered Bore
Roller Riding Retainers
Self-aligning
Extra High Capacity



Cylindrical bore



Tapered bore

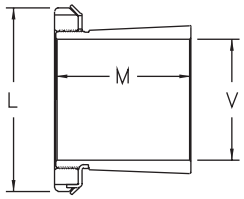
Dimensions

Bearing number		A		B		C		D		E		R		
Cylindrical bore	Tapered bore +	Bore diameter		Outside diameter		Width		Shaft shoulder diameter min.		Housing shoulder diameter max.		Housing & shaft fillet radius#		Unit weight
		mm	in.	*mm*	in.	*mm*	in.	*mm*	in.	*mm*	in.	*mm*	in.	lbs.
22308LB22308LBK	*40.000*	1.5748	*90.000*	3.5433	*33.000*	1.2992	*49*	1.9	*81*	3.2	*1.50*	.059	2.8	
22309LB22309LBK	*45.000*	1.7717	*100.000*	3.9370	*36.000*	1.4173	*55*	2.2	*91*	3.6	*1.50*	.059	3.1	
22310LB22310LBK	*50.000*	1.9685	*110.000*	4.3307	*40.000*	1.5748	*60*	2.4	*100*	3.9	*2.00*	.079	4.0	
22311LB22311LBK	*55.000*	2.1654	*120.000*	4.7244	*43.000*	1.6929	*66*	2.6	*110*	4.3	*2.00*	.079	5.2	
22312LB22312LBK	*60.000*	2.3622	*130.000*	5.1181	*46.000*	1.8110	*73*	2.9	*118*	4.6	*2.00*	.079	6.6	
22313LB22313LBK	*65.000*	2.5591	*140.000*	5.5118	*48.000*	1.8898	*78*	3.1	*128*	5.0	*2.00*	.079	7.9	
22314LB22314LBK	*70.000*	2.7559	*150.000*	5.9055	*51.000*	2.0079	*83*	3.3	*138*	5.4	*2.00*	.079	9.8	
22315LB22315LBK	*75.000*	2.9528	*160.000*	6.2992	*55.000*	2.1654	*88*	3.5	*148*	5.8	*2.00*	.079	11.9	
22316LB22316LBK	*80.000*	3.1496	*170.000*	6.6929	*58.000*	2.2835	*93*	3.7	*157*	6.2	*2.00*	.079	14.1	
22317LB22317LBK	*85.000*	3.3465	*180.000*	7.0866	*60.000*	2.3622	*100*	3.9	*166*	6.5	*2.50*	.098	16.3	
22318LB22318LBK	*90.000*	3.5433	*190.000*	7.4803	*64.000*	2.5197	*104*	4.1	*176*	6.9	*2.50*	.098	19.5	
22319LB22319LBK	*95.000*	3.7402	*200.000*	7.8740	*67.000*	2.6378	*109*	4.3	*186*	7.3	*2.50*	.098	22.6	
22320LB22320LBK	*100.000*	3.9370	*215.000*	8.4646	*73.000*	2.8740	*115*	4.5	*201*	7.9	*2.50*	.098	28.9	
22322LB22322LBK	*110.000*	4.3307	*240.000*	9.4488	*80.000*	3.1496	*124*	4.9	*226*	8.9	*2.50*	.098	40.0	
22324LB22324LBK	*120.000*	4.7244	*260.000*	10.2362	*86.000*	3.3858	*135*	5.3	*246*	9.7	*2.50*	.098	49.0	
22326LB22326LBK	*130.000*	5.1181	*280.000*	11.0236	*93.000*	3.6614	*149*	5.9	*262*	10.3	*3.00*	.118	62.5	
22328LB22328LBK	*140.000*	5.5118	*300.000*	11.8110	*102.000*	4.0157	*159*	6.3	*283*	11.1	*3.00*	.118	78.2	
22330LB22330LBK	*150.000*	5.9055	*320.000*	12.5984	*108.000*	4.2520	*169*	6.6	*303*	11.9	*3.00*	.118	92.0	
22332LB22332LBK	*160.000*	6.2992	*340.000*	13.3858	*114.000*	4.4882	*180*	7.1	*322*	12.7	*3.00*	.118	110.0	
22334LB22334LBK	*170.000*	6.6929	*360.000*	14.1732	*120.000*	4.7244	*188*	7.4	*342*	13.5	*3.00*	.118	129.0	
22336LB22336LBK	*180.000*	7.0866	*380.000*	14.9606	*126.000*	4.9606	*199*	7.8	*363*	14.3	*3.00*	.118	153.0	
22338LB22338LBK	*190.000*	7.4803	*400.000*	15.7480	*132.000*	5.1968	*213*	8.4	*379*	14.9	*4.00*	.157	176.0	
22340LB22340LBK	*200.000*	7.8740	*420.000*	16.5354	*138.000*	5.4331	*223*	8.8	*399*	15.7	*4.00*	.157	200.0	
22344LB22344LBK	*220.000*	8.6614	*460.000*	18.1102	*145.000*	5.7087	*243*	9.6	*439*	17.3	*4.00*	.157	287.0	
23048LB■ 23048LBK■	*240.000*	9.4488	*360.000*	14.1732	*92.000*	3.6220	*254*	10.0	*346*	13.6	*2.50*	.098	74.6	
23056LB■ 23056LBK■	*280.000*	11.0236	*420.000*	16.5354	*106.000*	4.1732	*299*	11.8	*402*	15.8	*3.00*	.118	117.6	
23060LB■ 23060LBK■	*300.000*	11.8110	*460.000*	18.1102	*118.000*	4.6457	*319*	12.6	*443*	17.4	*3.00*	.118	163.3	

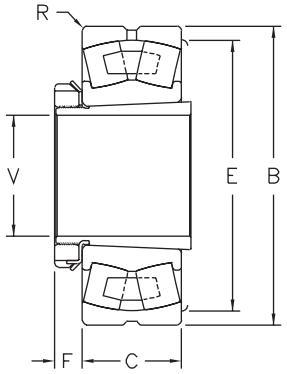
Bold face items are normally available from stock; please consult for availability of non-stock items.
\+ Tapered bore, 1:12 on diameter.
\# Largest fillet radius that will clear bearing corners.
Selection guide, pages F-3, F-4.
Load ratings, page F-6.
■ Load ratings, consult Link-Belt Bearing Division, Rexnord Corp.
Additional information, page F-17.
Shaft and housing bearing seat diameters, pages F-11 through F-14.

Spherical Roller Bearings
22300LBK, 23000LBK

Adapter Mounted
Roller Riding Retainers
Self-aligning
Extra High Capacity



SNW adapter assembly



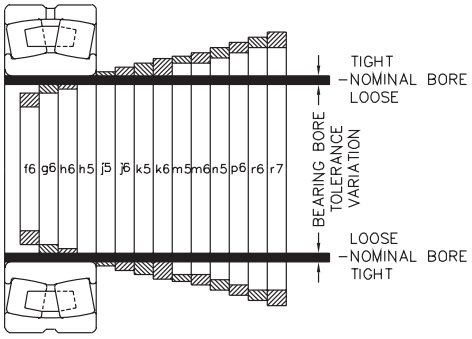
Tapered bore bearing with SNW adapter assembly

Adapter assembly dimensions

Bearing number Tapered bore +	Adapter assembly number ★	V Shaft diameter	L		F max.		M		Adapter weight
		in.	*mm*	in.	*mm*	in.	*mm*	in.	lbs.
22308LBK	SNW108	1 3/16	*57.2*	2.25	*13.1*	.52	*51.2*	2.02	1.3
22309LBK	H2309023	1 7/16	*65.0*	2.56	*11.3*	.44	*50.0*	1.97	1.4
	SNW109	1 1/2	*64.3*	2.53	*13.1*	.52	*54.4*	2.14	1.4
22310LBK	H2310027	1 11/16	*70.0*	2.76	*12.3*	.48	*55.0*	2.16	1.8
22311LBK	SNW111	1 15/16	*75.4*	2.97	*14.7*	.58	*63.9*	2.52	2.4
	H2311032	2	*75.0*	2.95	*12.5*	.49	*59.0*	2.32	2.4
22312LBK	SNW112	2 1/16	*80.2*	3.16	*15.5*	.61	*67.5*	2.66	3.0
22313LBK	H2313035	2 3/16	*85.0*	3.35	*13.5*	.53	*65.0*	2.56	3.6
22314LBK	SNW114	2 5/16	*92.1*	3.62	*16.3*	.64	*74.6*	2.94	4.4
22315LBK	H2315039, H2315040	2 7/16, 2 1/2	*95.0*	3.86	*14.5*	.57	*73.0*	3.87	5.4
22316LBK	H2316043	2 11/16	*105.0*	4.13	*16.8*	.66	*78.0*	3.07	6.4
22317LBK	H2317047	2 15/16	*110.0*	4.33	*17.8*	.70	*82.0*	3.23	7.4
22318LBK	H2318051	3 3/16	*120.0*	4.72	*17.8*	.70	*86.0*	3.39	8.8
22319LBK	SNW119	3 5/16	*125.4*	4.94	*21.0*	.83	*94.0*	3.70	10.2
22320LBK	H2320055	3 7/16	*130.0*	5.12	*19.8*	.78	*97.0*	3.82	13.1
	SNW120	3 1/2	*131.8*	5.19	*21.8*	.86	*100.8*	3.97	13.1
22322LBK	H2322063	3 15/16	*145.0*	5.71	*20.8*	.82	*105.0*	3.13	18.1
	SNW122	4	*145.2*	5.72	*23.4*	.92	*110.3*	4.34	18.1
22324LBK	SNW124	4 3/16	*155.6*	6.12	*24.2*	.95	*117.9*	4.64	22.2
22326LBK	SNW126	4 7/16	*171.4*	6.75	*25.8*	1.02	*126.6*	4.98	28.3
22328LBK	SNW128	4 15/16, 5	*180.2*	7.09	*27.4*	1.08	*135.3*	5.33	35.5
22330LBK	SNW130	5 3/16	*195.3*	7.69	*29.0*	1.14	*142.9*	5.62	41.7
22332LBK	SNW132	5 7/16	*204.8*	8.06	*30.6*	1.20	*150.4*	5.92	49.9
22334LBK	SNW134	5 15/16	*219.9*	8.66	*31.4*	1.23	*157.2*	6.19	58.5
22336LBK	SNW136	6 7/16	*230.2*	9.06	*32.1*	1.27	*163.9*	6.45	69.4
22338LBK	SNW138	6 15/16	*240.5*	9.47	*32.9*	1.30	*171.4*	6.75	79.8
22340LBK	SNW140	7 3/16	*250.0*	9.84	*34.5*	1.36	*180.2*	7.09	90.7
22344LBK	SNW144	7 15/16	*279.4*	11.00	*36.1*	1.42	*184.9*	7.28	130.2
23048LBK■	SNP3048	8 7/16, 8 15/16 ◆	*290.5*	11.44	*44.0*	1.73	*138.1*	5.44	32.0
23056LBK■	SNP3056	9 15/16, 10 1/2 ◆	*330.2*	13.00	*48.0*	1.89	*157.2*	6.19	45.5
23060LBK■	SNP3060	10 15/16, 11	*360.4*	14.19	*51.2*	2.02	*171.0*	6.73	59.0

Please consult for availability.
+ Tapered bore, 1:12 on diameter.
★ Specify shaft size when ordering SNW OR SNP adapter assembly, i.e., SNW108-1 3/16.
◆ SNP3048 adapter assemblies also available with 8 1/2" and 9" bores; SNP3056 adapter assemblies available with 9 7/16", 9 1/2" and 10 7/16" bores.
Selection guide, pages F-3, F-4.
Load ratings, page F-6.
■ Load ratings, consult Link-Belt Bearing Division, Rexnord Corp.
Additional information, page F-17.
Housing bearing seat diameters, pages F-13 and F-14.

Shaft Bearing Seat Diameters
For Spherical Roller Bearings



Bearing bore tolerances are in accord with the system of tolerancing established by the International Standards Organization (ISO) and adopted by the American Bearing Manufacturers Association (ABMA) and the American National Standards Institute (ANSI).

A system of limits and fits has been established by ISO for shafts. A portion of this system has been adopted by ABMA to provide flexibility in selecting shaft fits. Shaft fits are designated by a lower case letter and a number, such as h6. The letter indicates the location of the shaft tolerance limits with respect to the nominal bearing bore. The number indicates the size of the tolerance zone.

Shaft fits recommended for various types of applications are listed in the table at right. A graphic relationship of various shaft fits is illustrated in the figure at the left.

Many factors influence the proper fit on the bearing inner ring on a shaft. The magnitude of the load and its direction with respect to bearing inner or outer rings are generally the first factors considered in shaft fit selection. The effects of other factors such as vibration, shock, temperature, speed, etc. are of secondary importance but sometimes need to be considered. Where assembly or disassembly requirements are of prime importance special shaft fits may be required.

Appropriate diameter shafting is determined (as shown) from the tables below.

Class of fit and shaft diameters (inches/*μm*)

Bearing series 22200, 22300 23000	Nominal bearing bore and shaft diameter		Bearing bore tolerance □		Bearing/Shaft diameter fits▲									
					f6		g6		h6		h5		j5	
					Tolerance		Tolerance		Tolerance		Tolerance		Tolerance	
Basic size	inches	*mm*			Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.
08	1.5748	*40.000*	+.0000	–.0005	.0005L	–.0010	.0001T	–.0004	.0005T	+.0000	.0005T	+.0000	.0007T	+.0002
09	1.7717	*45.000*			.0016L	–.0016	.0010L	–.0010	.0006L	–.0006	.0004L	–.0004	.0002L	–.0002
10	1.9685	*50.000*	*+0*	*–12*	*13L*	*–25*	*3T*	*–9*	*12T*	*+0*	*12T*	*+0*	*18T*	*+6*
					41L	*–41*	*25L*	*–25*	*16L*	*–16*	*11L*	*–11*	*5L*	*–5*
11	2.1654	*55.000*												
12	2.3622	*60.000*			.0006L	–.0012	.0002T	–.0004	.0006T	+.0000	.0006T	+.0000	.0008T	+.0002
13	2.5591	*65.000*	+.0000	–.0006	.0019L	–.0019	.0011L	–.0011	.0007L	–.0007	.0005L	–.0005	.0003L	–.0003
14	2.7559	*70.000*	*+0*	*–15*	*15L*	*–30*	*5T*	*–10*	*15T*	*+0*	*15T*	*+0*	*21T*	*+6*
15	2.9528	*75.000*			*49L*	*–49*	*29L*	*–29*	*19L*	*–19*	*13L*	*–13*	*7L*	*–7*
16	3.1496	*80.000*												
17	3.3465	*85.000*												
18	3.5433	*90.000*			.0006L	–.0014	.0003T	–.0005	.0008T	+.0000	.0008T	+.0000	.0010T	+.0002
19	3.7402	*95.000*	+.0000	–.0008	.0023L	–.0023	.0014L	–.0014	.0009L	–.0009	.0006L	–.0006	.0004L	–.0004
20	3.9370	*100.000*	*+0*	*–20*	*16L*	*–36*	*8T*	*–12*	*20T*	*+0*	*20T*	*+0*	*26T*	*+6*
22	4.3307	*110.000*			*58L*	*–58*	*34L*	*–34*	*22L*	*–22*	*15L*	*–15*	*9L*	*–9*
24	4.7244	*120.000*												
26	5.1181	*130.000*												
28	5.5118	*140.000*			.0006L	–.0016	.0004T	–.0006	.0010T	+.0000	.....	.....	.0013T	+.0003
30	5.9055	*150.000*	+.0000	–.0010	.0026L	–.0026	.0016L	–.0016	.0010L	–.0010	.....	.....	.0005L	–.0004
32	6.2992	*160.000*	*+0*	*–25*	*18L*	*–43*	*11T*	*–14*	*25T*	*+0*	.....	.....	*32T*	*+7*
34	6.6929	*170.000*			*68L*	*–68*	*39L*	*–39*	*25L*	*–25*	.....	.....	*11L*	*–11*
36	7.0866	*180.000*												
38	7.4803	*190.000*			.0008L	–.0020	.0006T	–.0006	.0012T	+.0000	.....	.....	.....	.....
40	7.8740	*200.000*	+.0000	–.0012	.0032L	–.0032	.0018L	–.0018	.0012L	–.0012	.....	.....	.....	.....
44	8.6614	*220.000*	*+0*	*–30*	*20L*	*–50*	*15T*	*–15*	*30T*	*+0*	.....	.....	.....	.....
48	9.4488	*240.000*			*79L*	*–79*	*44L*	*–44*	*29L*	*–29*	.....	.....	.....	.....
52	10.2362	*260.000*			.0008L	–.0022	.0007T	–.0007	.0014T	+.0000	.....	.....	.....	.....
56	11.0236	*280.000*	+.0000	–.0014	.0034L	–.0034	.0019L	–.0019	.0012L	–.0012	.....	.....	.....	.....
60	11.8110	*300.000*	*+0*	*–35*	*21L*	*–56*	*18T*	*–17*	*35T*	*+0*	.....	.....	.....	.....
					88L	*–88*	*49L*	*–49*	*32L*	*–32*	.....	.....	.....	.....

1μm = .001 mm

■ For solid steel shafts.

★ C = basic load rating of bearing.

□ "The arithmetical mean of the largest and smallest single diameter to be within tolerance shown. Allowable deviations from mean diameter per ANSI/ABMA STD 20, latest printing."

Class of fit selection

Operating condition			Examples	Nominal shaft diameter		Class of fit ■	Remarks
				mm	inches		
Inner ring stationary in relation to direction of load	All loads	Inner ring has to be easily displaced	Wheel on stationary shaft	All diameters		g6	
		Inner ring does not have to be easily displaced	Tension pulleys and rope sheaves			h6	
Direction of load indeterminate or inner ring rotating in relation to direction of load.	Radial load		Electric apparatus, machine tools, pumps, ventilators, industrial trucks,	*<=40* *40–100* *100–200*	<=1.57 1.57—3.94 3.94—7.88	j6 k6 m6	When greater accuracy is required, use j5, k5 and m5 for j6, k6, and m6 respectively.
	Light load <=0.08C★						
	Normal load >0.08C★ <=0.18C★		Applications in general, electrical motors, turbines pumps, combustion engines, gear transmissions, woodworking machines	*<=40* *40–65* *65–100* *100–140* *140–280* *280–500* *>500*	<=1.57 1.57—2.56 2.56—3.94 3.94—5.52 5.52—11.10 11.10—19.7 >19.7	k5 m5 m6 n6 p6 r6 r7	
	Heavy load >0.18C★		Journal boxes for locomotives & other heavy rail vehicles, traction motors	*<=40* *40–65* *65–100* *100–140* *140–200* *>200*	<=1.57 1.57—2.56 2.56—3.94 3.94—5.52 5.52—7.88 >7.88	m5 m6 n6 p6 r6 r7	Greater internal clearance may be required

Bearing/Shaft diameter fits▲

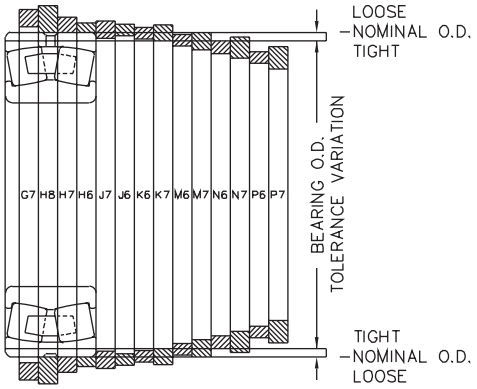
j6		k5		k6		m5		m6		n6		p6		r6	
Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance	
Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.
.0009T	+.0004	.0010T	+.0005	.0012T	+.0007	.0013T	+.0008	.0015T	+.0010	.0018T	+.0013	.....	.....	.....	.....
.0002L	–.0002	.0001T	+.0001	.0001T	+.0001	.0004T	+.0004	.0004T	+.0004	.0007T	+.0007	.....	.....	.....	.....
23T	*+11*	*25T*	*+13*	*30T*	*+18*	*32T*	*+20*	*37T*	*+25*	*45T*	*+33*	.....	.....	.....	.....
5L	*–5*	*2T*	*+2*	*2T*	*+2*	*9T*	*+9*	*9T*	*+9*	*17T*	*+17*	.....	.....	.....	.....
.0010T	+.0004	.0012T	+.0006	.0014T	+.0008	.0016T	+.0010	.0018T	+.0012	.0021T	+.0015	.0027T	+.021	.....	.....
.0003L	–.0003	.0001T	+.0001	.0001T	+.0001	.0005T	+.0005	.0005T	+.0005	.0008T	+.0008	.0014T	+.0014	.....	.....
22T	*+12*	*30T*	*+15*	*36T*	*+21*	*39T*	*+24*	*45T*	*+30*	*54T*	*+39*	*66T*	*+51*	.....	.....
7L	*–7*	*2T*	*+2*	*2T*	*+2*	*11T*	*+11*	*11T*	*+11*	*20T*	*+20*	*32T*	*+32*	.....	.....
.0013T	+.0005	.0015T	+.0007	.0018T	+.0010	.0019T	+.0011	.0022T	+.0014	.0027T	+.0019	.0033T	+.0025	.0037T	+.0029
.0004L	–.0004	.0001T	+.0001	.0001T	+.0001	.0005T	+.0005	.0005T	+.0005	.0010T	+.0010	.0016T	+.0016	.0020T	+.0020
33T	*+13*	*38T*	*+18*	*45T*	*+25*	*48T*	*+28*	*55T*	*+35*	*65T*	*+45*	*79T*	*+59*	*93T*	*+73*
9L	*–9*	*3T*	*+3*	*3T*	*+3*	*13T*	*+13*	*13T*	*+13*	*23T*	*+23*	*37T*	*+37*	*51T*	*+51*
.0016T	+.006	.0018T	+.0008	.0021T	+.0011	.0023T	+.0013	.0026T	+.0016	.0032T	+.0020	.0038T	+.0028	.0045T	+.0035
.0004L	–.0004	.0001T	+.0001	.0001T	+.0001	.0006T	+.0006	.0006T	+.0006	.0012T	+.0011	.0018T	+.0018	.0025T	+.0025
39T	*+14*	*46T*	*+21*	*53T*	*+28*	*58T*	*+33*	*65T*	*+40*	*77T*	*+52*	*93T*	*+68*	*115T*	*+90*
11L	*–11*	*3T*	*+3*	*3T*	*+3*	*15T*	*+15*	*15T*	*+15*	*27T*	*+27*	*43T*	*+43*	*65T*	*+65*
.0019T	+.0007	.0022T	+.0010	.0026T	+.0014	.0026T	+.0014	.0030T	+.0018	.0038T	+.0026	.0044T	+.0032	.0054T	+.0042
.0005L	–.0005	.0002T	+.0002	.0002T	+.0002	.0006T	+.0006	.0006T	+.0006	.0014T	+.0014	.0020T	+.0020	.0030T	+.0030
46T	*+16*	*54T*	*+24*	*63T*	*+33*	*67T*	*+37*	*76T*	*+46*	*90T*	*+60*	*109T*	*+79*	*136T*	*+106*
16L	*–16*	*4T*	*+4*	*4T*	*+4*	*17T*	*+17*	*17T*	*+17*	*31T*	*+31*	*50T*	*+50*	*77T*	*+77*
.0021T	+.0007	.0025T	+.0011	.0028T	+.0014	.0031T	+.0017	.0034T	+.0020	.0040T	+.0026	.0048T	+.0034	.0061T	+.0047
.0006L	–.0006	.0002T	+.0002	.0002T	+.0002	.0008T	+.0008	.0008T	+.0008	.0014T	+.0014	.0022T	+.0022	.0035T	+.0035
51T	*+16*	*62T*	*+27*	*71T*	*+36*	*78T*	*+43*	*87T*	*+52*	*101T*	*+66*	*123T*	*+88*	*161T*	*+126*
16L	*–16*	*4T*	*+4*	*4T*	*+4*	*20T*	*+20*	*20T*	*+20*	*34T*	*+34*	*56T*	*+56*	*94T*	*+94*

▲ Symbol L indicates a loose or clearance fit; Symbol T indicates a tight or interference fit.

The appropriate shaft diameter for any class of fit can be easily determined by applying the shaft tolerance to the nominal shaft diameter. Example: (Using basic bearing size 08 and fit class f6).

	inches		*mm*	
Nominal shaft diameter	= 1.5748	1.5748	= *40.000*	*40.000*
Shaft diameter tolerance	= – .0010	– .0016	= *– 0.025*	*– 0.041*
Resultant shaft diameter	= 1.5738	1.5732	= *39.975*	*39.959*

Housing Bearing Seat Diameters
For Spherical Roller Bearings



Bearing outside diameter tolerances are in accord with the system of tolerancing established by the International Standards Organization (ISO) and adopted by the American Bearing Manufacturers Association (ABMA) and the American National Standards Institute (ANSI).

A system of limits and fits has been established by ISO for shafts. A portion of this system has been adopted by ABMA to provide flexibility in selecting shaft fits. Housing fits are designated by a capital letter and a number, such as H7. The letter indicates the location of the housing bore tolerance limits with respect to the nominal bearing O.D. The number indicates the size of the tolerance zone.

Housing fits recommended for various types of applications are listed in the table at right. A graphic relationship of various housing fits is illustrated in the figure at the left. The class of fit is determined by nature of loading (oscillating, vibrating, reversing, etc.), axial movement requirements, temperature conditions, housing material and cross section of housing.

Shaft expansion increases bearing center distances and requires all but one bearing on a shaft to be movable axially in the housing. In most bearings the outer rings are subjected to stationary loads which permit a loose housing fit.

Operating temperature may affect the housing fit, as the housing may dissipate heat rapidly and not expand with the outer ring. However, the loose fit must never be greater than necessary. Excessive looseness results in less accurate shaft centering and additional ring deformation under load.

The appropriate housing bores are determined (as shown) from the tables below.

Class of fit and housing bores (inches/*μm*)

Bearing series				Nominal bearing O.D. and housing bore		Bearing O.D. tolerance □		Bearing/Shaft diameter fits▲									
								G7		H8		H7		H6		J7	
222 232	223	230	231					Tolerance		Tolerance		Tolerance		Tolerance		Tolerance	
								Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore
Basic Size				inches	*mm*												
09	..	..	..	3.3465	*85.000*			.0005L	+.0005	.0000	+.0000	.0000	+.0000	.0000	+.0000	.0005T	–.0005
10	08	..	..	3.5433	*90.000*			.00025L	+.0019	.0028L	+.0022	.0020L	+.0014	.0015L	+.0009	.0015L	+.0009
11	09	..	..	3.9370	*100.000*	+.0000	–.0006	*12L*	*+12*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*13T*	*–13*
12	10	..	..	4.3307	*110.000*												
13	11	..	..	4.7244	*120.000*	*+0*	*–15*	*62L*	*+47*	*69L*	*+54*	*50L*	*+35*	*37L*	*+22*	*37L*	*+22*
14	..	..	..	4.9312	*125.000*			.0006L	+.0006	.0000	+.0000	.0000	+.0000	.0000	+.0000	.0006T	–.0006
15	12	..	..	5.1181	*130.000*	+.0000	–.0008	.0030L	+.0022	.0033L	+.0025	.0024L	+.0016	.0018L	+.0010	.0018L	+.0010
16	13	..	..	5.5118	*140.000*	*+0*	*–20*	*14L*	*+14*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*14T*	*–14*
17	14	..	..	5.9055	*150.000*			*74L*	*+54*	*83L*	*+63*	*60L*	*+40*	*45L*	*+25*	*46L*	*+26*
18	15	..	..	6.2992	*165.000*			.0006L	+.0006	.0000	+.0000	.0000	+.0000	.0000	+.0000	.0006T	–.0006
19	16	..	..	6.6929	*170.000*	+.0000	–.0010	.0032L	+.0022	.0035L	+.0025	.0026L	+.0016	.0020L	+.0010	.0020L	+.0010
20	17	24	22	7.0866	*180.000*	*+0*	*–25*	*14L*	*+14*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*14T*	*–14*
								79L	*+54*	*88L*	*+63*	*65L*	*+40*	*50L*	*+25*	*51L*	*+26*
..	18	..	..	7.4803	*190.000*												
22	19	26	24	7.8740	*200.000*												
..	..	28	26	8.2677	*210.000*			.0006L	+.0006	.0000	+.0000	.0000	+.0000	.0000	+.0000	.0007T	–.0007
24	20	..	..	8.4646	*215.000*	+.0000	–.0012	.0036L	+.0024	.0040L	+.0028	.0030L	+.0018	.0024L	+.0012	.0023L	+.0011
..	..	30	28	8.8583	*225.000*	*+0*	*–30*	*15L*	*+15*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*16T*	*–16*
26	..	..	..	9.0551	*230.000*			*91L*	*+61*	*102L*	*+72*	*76L*	*+46*	*59L*	*+29*	*60L*	*+30*
..	22	32	..	9.4488	*240.000*												
28	..	..	30	9.8425	*250.000*												
..	24	34	..	10.2362	*260.000*												
30	..	..	32	10.6299	*270.000*			.0007L	+.0007	.0000	+.0000	.0000	+.0000	.0000	+.0000	.0007T	–.0007
..	26	36	34	11.0236	*280.000*	+.0000	–.0014	.0041L	+.0027	.0044L	+.0030	.0034L	+.0020	.0026L	+.0012	.0027L	+.0013
32	..	38	..	11.4173	*290.000*	*+0*	*–35*	*17L*	*+17*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*16T*	*–16*
..	28	..	36	11.8110	*300.000*			*104L*	*+69*	*116L*	*+81*	*87L*	*+52*	*67L*	*+32*	*71L*	*+36*
34	..	40	..	12.2047	*310.000*												
36	30	..	38	12.5984	*320.000*												
38	32	44	40	13.3858	*340.000*			.0007L	+.0007	.0000	+.0000	.0000	+.0000	.0000	+.0000	.007L	–.0007
40	34	48	..	14.1732	*360.000*	+.0000	–.0016	.0045L	+.0029	.0051L	+.0035	.0038L	+.0022	.0030L	+.0014	.0031L	+.0015
..	..	..	44	14.5669	*370.000*	*+0*	*–40*	*18L*	*+18*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*18T*	*–18*
..	36	..	..	14.9606	*380.000*			*115L*	*+75*	*129L*	*+89*	*97L*	*+57*	*76L*	*+36*	*79L*	*+39*
44	38	52	48	15.7480	*400.000*												
..	40	56	..	16.5354	*420.000*			.0008L	+.0008	.0000	+.0000	.0000	+.0000	.0000	+.0000	.0009T	–.0009
48	..	..	..	17.3228	*440.000*	+.0000	–.0018	.0051L	+.0033	.0056L	+.0038	.0043L	+.0025	.0034L	+.0016	.0034L	+.0016
..	44	60	..	18.1102	*460.000*	*+0*	*–45*	*20L*	*+20*	*0*	*+0*	*0*	*+0*	*0*	*+0*	*20T*	*–20*
								128L	*+83*	*142L*	*+97*	*108L*	*+63*	*85L*	*+40*	*88L*	*+43*

□ "The arithmetical mean of the largest and smallest single diameter to be within tolerance shown. Allowable deviations from mean diameter per ANSI/ABMA STD 20, latest printing."

1 μm = .001 mm

▲ Symbol L indicates a loose or clearance fit. Symbol T indicates a tight or interference fit.

The appropriate housing bore for any class of fit can be easily determined by applying the housing tolerance to the nominal housing bore.
Example: (Using basic bearing size 09 and fit class G7).

		inches			*mm*	
Nominal housing bore	=	3.3465	3.3465	=	*85.000*	*85.000*
Shaft bore tolerance	=	+ .0005	+ .0019	=	*+ 0.012*	*+ 0.047*
Resultant housing bore	=	3.3470	3.3484	=	*85.012*	*85.047*

Class of fit selection

Housing construction	Operating condition		Examples	Class of fit ■	Remarks
Housing not split radially	Housing rotating in relation to direction of load	Heavy loads on bearings in thin-walled housing	Supporting wheels in cranes, wheel hubs with roller bearings, crank bearings	P6◆	Outer ring not axially displaceable
		Normal and heavy loads	Wheel hubs with roller bearings, crank bearings	N6◆	
		Light loads	Conveyor rollers, rope sheaves, tension pulleys	M6◆	
	Direction of load indeterminate	Heavy shock loads	Electrical fraction motors		
		Heavy and normal loads where outer ring does not have to be axially displaceable	Electrical motors, pumps, crankshaft main bearings	K6◆	Outer ring, as a rule, not axially displaceable
		Normal and light loads where displaceability of outer ring is desirable	Electrical motors, pumps, crankshaft main bearings	J6◆	Outer ring, as a rule, axially displaceable
Housing split or housing not split radially	Housing stationary in relation to direction of load	Shock loads, a temporary complete unloading	Journal boxes for rail vehicles		
		All loads — Housing not split radially	Bearing applications in general, journal boxes for rail vehicles	H6◆	Outer ring easily displaceable axially
		All loads — Housing split radially	Line shafting	H7	
		Heat supplied through shaft	Dryer cylinders	G7	

Bearing/Housing diameter fits▲

J6		K6		K7		M6		M7		N6		N7		P7	
Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance		Tolerance	
Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore	Fit	Housing Bore
.0002T	–.0002	.0007T	–.0007	.0010T	–.0010	.0012T	–.0012	.0014T	–.0014	.0016T	–.0016	.0018T	–.0018	.0025T	–.0025
.0013L	+.0007	.0008L	+.0002	.0010L	+.0004	.0003L	–.0003	.0006L	+.0000	.0001T	–.0007	.0002L	–.0004	.0005T	–.0011
6T	*–6*	*18T*	*–18*	*25T*	*–25*	*28T*	*–28*	*35T*	*–35*	*38T*	*–38*	*45T*	*–45*	*59T*	*–59*
31L	*+16*	*19L*	*+4*	*25L*	*+10*	*9L*	*–6*	*15L*	*+0*	*1T*	*–16*	*5L*	*–10*	*9T*	*–24*
.0003T	.0003	.0008T	–.0008	.0011T	–.0011	.0013T	–.0013	.0016T	–.0016	.0019T	–.0019	.0022T	–.0022	.0028T	–.0028
.0015L	.0007	.0010L	+.0002	.0013L	+.0005	.0005L	–.0003	.0008L	+.0000	.0001T	–.0009	.0002L	–.0006	.0004T	–.0012
7T	*–7*	*21T*	*–21*	*28T*	*–28*	*33T*	*–33*	*40T*	*–40*	*45T*	*–45*	*52T*	*–52*	*68T*	*–68*
38L	*+18*	*24L*	*+4*	*32L*	*+12*	*12L*	*–8*	*20L*	*+0*	*0T*	*–20*	*8L*	*–12*	*8T*	*–28*
.0003T	–.0003	.0008T	–.0008	.0011T	–.0011	.0013T	–.0013	.0016T	–.0016	.0019T	–.0019	.0022T	–.0022	.0028T	–.0028
.0017L	+.0007	.0012L	+.0002	.0015L	+.0005	.0007L	–.0003	.0010L	+.0000	.0001L	–.0009	.0004L	–.0006	.0002T	–.0012
7T	*–7*	*21T*	*–21*	*28T*	*–28*	*33T*	*–33*	*40T*	*–40*	*45T*	*–45*	*52T*	*–52*	*68T*	*–68*
43L	*+18*	*29L*	*+4*	*37L*	*+12*	*17L*	*–8*	*25L*	*+0*	*5L*	*–20*	*13L*	*–12*	*3T*	*–28*
.0003T	–.0003	.0010T	–.0010	.0013T	–.0013	.0015T	–.0015	.0018T	–.0018	.0022T	–.0022	.0026T	–.0026	.0032T	–.0032
.0021L	+.0009	.0014L	+.0002	.0017L	+.0005	.0009L	–.0003	.0012L	+.0000	.0002L	–.0010	.0004L	–.0008	.0002T	–.0014
7T	*–7*	*24T*	*–24*	*33T*	*–33*	*37T*	*–37*	*46T*	*–46*	*51T*	*–51*	*60T*	*–60*	*79T*	*–79*
52L	*+22*	*35L*	*+5*	*43L*	*+13*	*22L*	*–8*	*30L*	*+0*	*8L*	*–22*	*16L*	*–14*	*3T*	*–33*
.0003T	–.0003	.0010T	–.0010	.0014T	–.0014	.0016T	–.0016	.0020T	–.0020	.0023T	–.0023	.0028T	–.0028	.0034T	–.0034
.0023L	+.0009	.0016L	+.0002	.0020L	+.0006	.0010L	–.0004	.0014L	+.0000	.0003L	–.0011	.0006L	–.0008	.0000	–.0014
7T	*–7*	*22T*	*–27*	*36T*	*–36*	*41T*	*–41*	*52T*	*–52*	*57T*	*–57*	*66T*	*–66*	*88T*	*–88*
60L	*+25*	*40L*	*+5*	*51L*	*+16*	*26L*	*–9*	*35L*	*+0*	*10L*	*–25*	*21L*	*–14*	*1T*	*–36*
.0003T	–.0003	.0012T	–.0012	.0016T	–.0016	.0018T	–.0018	.0022T	–.0022	.0026T	–.0026	.0030T	–.0030	.0039T	–.0039
.0027L	+.0011	.0018L	+.0002	.0022L	+.0006	.0012L	–.0004	.0016L	+.0000	.0004L	–.0012	.0008L	–.0008	.0001T	–.0017
7T	*–7*	*29T*	*–29*	*40T*	*–40*	*46T*	*–46*	*57T*	*–57*	*62T*	*–62*	*73T*	*–73*	*98T*	*–98*
69L	*+29*	*47L*	*+7*	*57L*	*+17*	*30L*	*–10*	*40L*	*+0*	*14L*	*–26*	*26L*	*–16*	*1T*	*–41*
.0003T	–.0003	.0012T	–.0012	.0018T	–.0018	.0020T	–.0020	.0025T	–.0025	.0028T	–.0028	.0034T	–.0034	.0044T	–.0044
.0031L	+.0013	.0022L	+.0004	.0025L	+.0007	.0014L	–.0004	.0018L	+.0000	.0006L	–.0012	.0009L	–.0009	.0001T	–.0019
7T	*–7*	*32T*	*–32*	*45T*	*–45*	*50T*	*–50*	*63T*	*–63*	*67T*	*–67*	*80T*	*–80*	*108T*	*–108*
78L	*+33*	*53L*	*+8*	*63L*	*+18*	*35L*	*–10*	*45L*	*+0*	*18L*	*–27*	*28L*	*–17*	*0*	*–45*

■ For cast iron or steel housings. For housings of light metal, select tolerances which give slightly tighter fits than those shown.

◆ Where wider tolerances are permissible P7, N7, M7, K7, J7 and H7 may be used for P6, N6, M6, K6, J6 and H6 respectively.

Radial Clearances

Cylindrical Bore Spherical Roller Bearings

Cylindrical bore bearings

Series 22200, 22300 23000		Internal clearance symbol							
		C2		C0(basic)		C3		C4	
Basic size	Bore *mm*	inches – *μm*							
08	*40*	.0006–.0012	*15–30*	.0012–.0018	*30–45*	.0018–.0024	*45–60*	.0024–.0032	*60–80*
09 10	*45* *50*	.0008–.0014	*20–35*	.0014–.0022	*35–55*	.0022–.0030	*55–75*	.0030–.0039	*75–100*
11 12 13	*55* *60* *65*	.0010–.0017	*25–40*	.0017–.0026	*40–65*	.0026–.0036	*65–90*	.0036–.0047	*90–120*
14 15 16	*70* *75* *80*	.0012–.0020	*30–50*	.0020–.0032	*50–80*	.0032–.0044	*80–110*	.0044–.0057	*110–145*
17 18 19 20	*85* *90* *95* *100*	.0014–.0025	*35–60*	.0025–.0039	*60–100*	.0039–.0053	*100–135*	.0053–.0071	*135–180*
22 24	*110* *120*	.0017–.0031	*40–80*	.0031–.0048	*80–120*	.0048–.0064	*120–160*	.0064–.0083	*160–210*
26 28	*130* *140*	.0020–.0038	*50–95*	.0038–.0057	*95–145*	.0057–.0075	*145–190*	.0075–.0095	*190–240*
30 32	*150* *160*	.0024–.0043	*60–110*	.0043–.0065	*110–165*	.0065–.0087	*165–220*	.0087–.0110	*220–280*
34 36	*170* *180*	.0026–.0047	*65–120*	.0047–.0071	*120–180*	.0071–.0095	*180–240*	.0095–.0122	*240–310*
38 40	*190* *200*	.0028–.0051	*70–130*	.0051–.0079	*130–200*	.0079–.0103	*200–260*	.0103–.0133	*260–340*
44	*220*	.0032–.0055	*80–140*	.0055–.0087	*140–220*	.0087–.0114	*220–290*	.0114–.0149	*290–380*
48	*240*	.0036–.0059	*90–150*	.0059–.0095	*150–240*	.0095–.0126	*240–320*	.0126–.0165	*320–420*
52 56	*260* *280*	.0039–.0067	*100–170*	.0067–.0103	*170–260*	.0103–.0138	*260–350*	.0138–.0180	*350–455*
60	*300*	.0044–.0075	*110–190*	.0075–.0110	*190–280*	.0110–.0145	*280–370*	.0145–.0197	*370–500*

1μm = .001 mm
C2 = Internal clearance less than C0
C0 = Basic internal clearance
C3 = Internal clearance greater than C0 (standard)
C4 = Internal clearance greater than C3

Radial Clearances

Tapered Bore Spherical Roller Bearings

Tapered bore bearings

Series 22200, 22300, 23000		Internal clearance symbol							
		C2		C0(basic)		C3		C4	
Basic size	Bore *mm*	inches – *µm*							
08	*40*	.0008–.0014	*20–35*	.0014–.0020	*35–50*	.0020–.0026	*50–65*	.0026–.0034	*65–85*
09 10	*45* *50*	.0012–.0018	*30–45*	.0018–.0024	*45–60*	.0024–.0032	*60–80*	.0032–.0041	*80–105*
11 12 13	*55* *60* *65*	.0014–.0022	*35–55*	.0022–.0030	*55–75*	.0030–.0039	*75–100*	.0039–.0049	*100–125*
14 15 16	*70* *75* *80*	.0018–.0028	*45–70*	.0028–.0037	*70–95*	.0037–.0049	*95–125*	.0049–.0061	*125–155*
17 18 19 20	*85* *90* *95* *100*	.0020–.0032	*50–80*	0032–.0044	*80–110*	.0044–.0057	*110–145*	.0057–.0075	*145–190*
22 24	*110* *120*	.0025–.0039	*60–100*	.0039–.0053	*100–135*	.0053–.0069	*135–175*	.0069–.0089	*175–225*
26 28	*130* *140*	.0030–.0047	*75–120*	.0047–.0063	*120–160*	.0063–.0081	*160–205*	.0081–.0102	*205-260*
30 32	*150* *160*	.0033–.0051	*85–130*	.0051–.0071	*130–180*	.0071–.0091	*180–230*	.0091–.0118	*230–300*
34 36	*170* *180*	.0037–.0055	*95–140*	.0055–.0079	*140–200*	.0079–.0102	*200–260*	.0102–.0134	*260–340*
38 40	*190* *200*	.0041–.0063	*105–160*	.0063–.0088	*160–220*	.0088–.0114	*220–290*	.0114–.0146	*290–370*
44	*220*	.0047–.0071	*120–180*	.0071–.0099	*180–250*	.0099–.0126	*250–320*	.0126–.0162	*320–410*
48	*240*	.0053–.0079	*135–200*	.0079–.0106	*200–270*	.0106–.0140	*270–355*	.0140–.0178	*355–450*
52 56	*260* *280*	.0059–.0087	*150–220*	.0087–.0118	*220–300*	.0118–.0156	*300–395*	.0156–.0195	*395–490*
60	*300*	.0065–.0094	*165–235*	.0094–.0130	*235–330*	.0130–.0169	*330–430*	.0169–.0213	*430–540*

1µm = .001 mm
C2 = Internal clearance less than C0
C0 = Basic internal clearance
C3 = Internal clearance greater than C0 (standard)
C4 = Internal clearance greater than C3

Additional Features:

Spherical roller bearings are available with varied combinations of standard features. The nomenclature, page F-18, explains the features available; clearance variations C2, C0, and C4; bearing outside diameter tolerances C40, W22, and C50; and variations as listed.

Where metric adapter sleeves are required they must be listed separately, as they are not interchangeable with inch sleeves and do not fit with inch locknuts.

Operation:

Spherical roller bearings are designed to be used with grease or oil lubrication. The service instructions packed with each bearing provide guidelines for lubrication, relubrication intervals and recommended lubricants.

Where significant thrust loads must be carried by adapter mounted bearings, the use of shaft shoulder rings is recommended to transmit the thrust from the bearings to the shaft.

Imposed radial loads should not exceed .25C. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Fixed and Expansion Mounting:

The normal application of spherical roller bearings requires the use of one fixed and one expansion mounting on a shaft. Unless vibratory loads are involved, expansion mounting of a spherical roller bearing is accomplished by allowing room for the bearing to shift axially in either direction in its housing. Care should always be taken not to force bearings to thrust against or away from each other during mounting or operation.

Shaft Fits and Tolerances:

Direct shaft mounting requires appropriate fits on bearing seals. Recommended fits and tolerances for bearing seals are shown on pages F-11 and F-12. Recommended fits and tolerances for bearing housings are on pages F-13 and F-14.

Shaft diameters for adapter mounted bearings should be held to the following regular commercial tolerances:

Shaft Diameter	Recommended Tolerance
1 3/16" through 2"	Nominal to –.003"
2 1/16" through 4"	Nominal to –.004"
4 1/16" through 6"	Nominal to –.005"
6 1/16" through 12"	Nominal to –.006"

Warning:

The reliability built into all Link-Belt bearings can be realized in service only when they are correctly selected and properly installed, protected and maintained.

The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories, as well as provisions for installation and maintenance, must follow good engineering principles.

Housings and covers must be designed to safely handle the radial and axial loads involved. Adequate space must be provided in the housing and covers for a supply of lubricant.

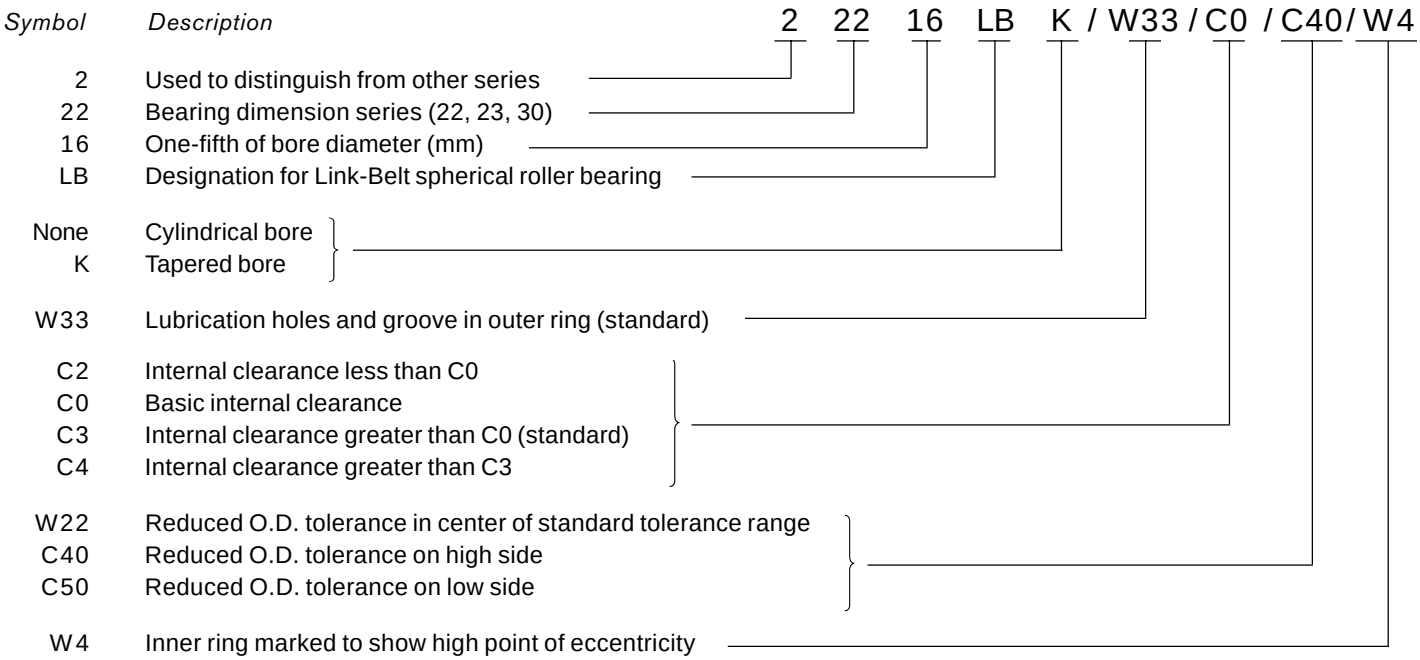
Seals must be provided that will satisfactorily cope with the environmental conditions.

Recommended fitting practices should be followed strictly to assure a successful mounting arrangement. Shaft and housing bore size tables are provided on pages F-11 through F-14 for various fitting practices.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in the proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Nomenclature
Series 22200, 22300, 23000

Spherical Roller Bearings



Symbol	*Description*
2	Used to distinguish from other series
22	Bearing dimension series (22, 23, 30)
16	One-fifth of bore diameter (mm)
LB	Designation for Link-Belt spherical roller bearing
None	Cylindrical bore
K	Tapered bore
W33	Lubrication holes and groove in outer ring (standard)
C2	Internal clearance less than C0
C0	Basic internal clearance
C3	Internal clearance greater than C0 (standard)
C4	Internal clearance greater than C3
W22	Reduced O.D. tolerance in center of standard tolerance range
C40	Reduced O.D. tolerance on high side
C50	Reduced O.D. tolerance on low side
W4	Inner ring marked to show high point of eccentricity

The nomenclature is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division, Rexnord Corp. should be consulted regarding optional features, availability, and the application requirements.

Cylindrical Roller Bearings

Contents

Series M1000, 1200, 1300, 1900, 5200, 5300, 7300

Introduction G-1
Pictorial Index G-3
Selection G-5
Ratings G-7
Dimensions G-15
Shaft Dimensions G-25
Housing Dimensions G-27
Additional Information G-31
Nomenclature G-32

Series N-EC 200E, 300E

Introduction G-33
Dimensions G-35
Nomenclature G-36

Series M1000, 1200, 1300, 1900, 5200, 5300, 7300

Cylindrical Roller Bearings

Metric series cylindrical roller bearings are manufactured to ABMA boundary dimensions. These bearings require minimum space and provide maximum rated capacity. Various configurations including separable inner or outer ring combinations offer ample application flexibility.

① Rings of high quality bearing steel for strength, toughness and durability.

② Microfinished raceways assure smooth operations.

③ Exclusive honed crown on roller profile for optimized raceway contact area and high capacity.

④ Structural design segmented retainer provides high strength, positive roller spacing and guidance.

⑤ One-piece formed steel retainer provides positive roller spacing and controlled roller guidance.

⑥ Polymeric retainer of glass fiber reinforced nylon 6/6 provides full roller guidance, superior lubrication and reduced noise.

Segmented Retainers

Rigid structural design segmented steel retainer provides high strength, positive roller spacing and guidance.

All contact surfaces are contoured to minimize the wiping action between retainer segments and rollers, assuring full roller lubrication. Precision spacer segments contact the rollers above and below pitch diameter resulting in low friction loss and positive roller control.

Polymeric Retainers

Made of glass fiber reinforced nylon 6/6, molded polymeric retainers provide close control of roller "drop," low noise, full roller guidance and superior lubrication, at a competitive price.

Extensive testing has established compatibility with a broad range of standard lubricants and satisfactory operation at sustained temperatures to 275°F.

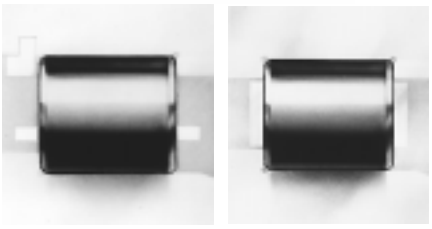
Formed Steel Retainers

One-piece deep coined formed steel retainer combines strength with positive roller spacing and roller guidance.

The retainer guides the rollers below the pitch line and provides control of roller drop. Line contact of rollers on guidance surfaces minimizes wiping action and promotes hydrodynamic lubrication.

Rollers

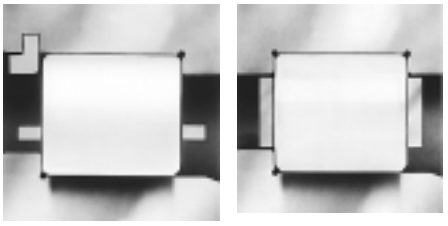
Exclusively crowned honed rollers provide optimized contact at the raceway. This assures efficient bearing performance under load, provides controlled stress distribution under all loads within the design capacity and compensates for shaft deflection.



Rings

Rings are manufactured from high quality bearing steel to enhance fatigue resistance, strength, toughness and hardenability.

Bearings and ring and roller assemblies for omitted-ring applications are ABMA standard boundary plan for bore, outside diameter, and width…standard tolerances are RBEC-1. Precision tolerances to RBEC-5 are available.



Optional Series and Configurations

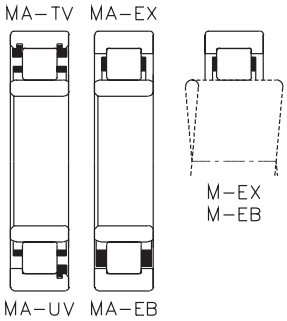
Series M cylindrical roller bearings are available in seven series with segmented retainers, five series with formed steel retainers, several series with polymeric retainers, and five series of the full roller complement type. Various configurations, including separable inner or outer ring combinations are offered.

Cylindrical Roller Bearings–Series M

Separable Cylindrical Inner Ring Type

MA ---- TV, MA ---- TAV
MA ---- UV, MA ---- UAV — Formed steel retainer
MA ---- EX, MA ---- EAX — Segmented steel retainer
MA ---- EB, MA ---- EAB — Polymeric retainer

Use where shaft location is not required; functions as an expansion bearing.



Outer Ring and Roller Assembly

M ------ TV, M ------ TAV
M ------ UV, M ------ UAV — Formed steel retainer
M ------ EX, M ------ EAX — Segmented steel retainer
M ------ EB, M ------ EAB — Polymeric retainer

Rollers are in direct contact with hardened shaft raceway.

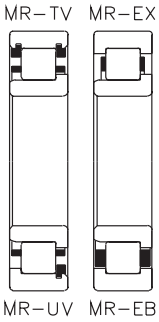
Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.

Separable Single-ribbed Inner Ring Type

MR ---- TV MR ---- TAV
MR ---- UV, MR ---- UAV — Formed steel retainer
MR ---- EX, MR ---- EAX — Segmented steel retainer
MR ---- EB, MR ---- EAB — Polymeric retainer

Use for one-direction shaft location.

Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.



Separable Inner Ring With End Plate

MSN --- EX, MSN --- EAX — Segmented steel retainer
MSN --- EB, MSN --- EAB — Polymeric retainer

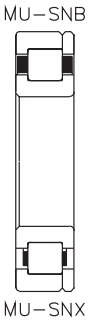
The inner ring and end plate operate as a two-ribbed inner ring when held in place axially on the shaft. Used for two-direction shaft location and moderate thrust loads.

Separable Outer Ring With End Plate

MU --- SNX, MU --- SNAX — Segmented steel retainer
MU --- SNB, MU --- SNAB — Polymeric retainer

The outer ring and end plate operate as a two-ribbed outer ring when held in place axially in the housing. Used for two-direction housing location and moderate thrust loads.

Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.

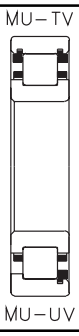


Non-separable Type Bearing

MU --- TV, MU --- TAV
MU --- UV, MU --- UAV — Formed steel retainer

Use as a locating bearing or when only one race is retained axially.

Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.



Separable Cylindrical Outer Ring

MU --- CX, MU --- CAX Segmented steel retainer
MU --- CB, MU --- CAB Polymeric retainer

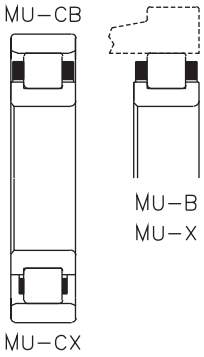
For applications and where an inner ring and roller sub-assembly is required; a non-locating or expansion type bearing.

Inner Ring and Roller Assembly

MU --- X Segmented steel retainer
MU --- B Polymeric retainer

Permits smaller housing bore. Rollers are in direct contact with hardened housing raceway.

Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.

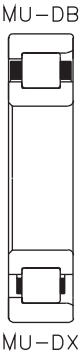


Separable Single-ribbed Outer Race

MU --- DX, MU --- DAX Segmented steel retainer
MU --- DB, MU --- DAB Polymeric retainer

Use for one-direction location and moderate thrust loads. For applications where an inner ring and roller sub-assembly is required.

Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.

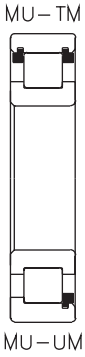


Non-separable, Full Complement Bearing

MU --- TM
MU --- UM
} Full roller complement

Use as a locating bearing or when only one race is retained axially. Full complement of rollers provide greater capacity than the same size bearing with a retainer.

Load ratings on pages G-7 through G-14.
Dimensions on pages G-15 through G-22.
Additional information on page G-31.

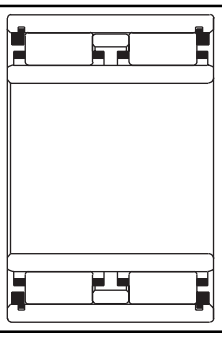


Separable Cylindrical Inner Ring Type Double Wide Series

MA62 --- TV

Double Row—Use where shaft location is not required and heavy loads; functions as expansion bearing.

Load ratings on pages G-23 and G-24.
Dimensions on pages G-23 and G-24.
Additional information on page G-31.



Selection
Cylindrical Roller Bearings

To select a bearing, determine the applied radial load, any applied thrust load, the desired Rating Life, and applicable operating conditions. The procedure shown here will aid in selecting a bearing to meet an L_{10} design life. The formulas for calculating life expectancy should be used to determine the Rating Life L_{10} for the bearing selected. Cylindrical roller bearings are available in various series with cylindrical bores for direct shaft mounting. Bearings in several series may fulfill the L_{10} life requirements. Speed limits, minimum shaft diameters, arrangement requirements and space limitations may be determining factors in final bearing selection.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ABMA STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

Cylindrical roller bearings are essentially radial bearings. Nevertheless those styles where integral ribs are in the proper location on inner and outer rings will also support thrust loading. In fact, most such styles do support incidental, axial locating loads. Whenever applied thrust loading is known to exist, the guidelines given for Thrust Loads on p. G-6 must be carefully followed.

Selection and life expectancy formulas shown here are also valid for inner ring and roller assemblies and for outer ring and roller assemblies provided they are run directly on bearing quality steel shafts or housings properly hardened and ground.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000
Continuous—high reliability	—	—	120,000 to 300,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a cylindrical roller bearing.
$P = F_r$
required $C = \left(\frac{C}{P}\right)P$ using $\left(\frac{C}{P}\right)$ from Step 2.

Select a cylindrical roller bearing of the desired type having a basic load rating C equal to or greater than the required C from the appropriate series. The life expectancy of other sizes and series of cylindrical roller bearings can be calculated. When thrust load is present, check the individual bearing thrust capacity and follow the requirements for lubrication under thrust conditions.

Step 4 Determine the permissible speed limit of the bearing through the following procedure:

Permissible speed limits are of practical value only when considered with other factors of bearing operation. Not every application functions satisfactorily at the listed speeds. Load, lubrication, and temperature factors influence the performance. Bearing operation at the listed speed limit demands excellent lubrication, moderate load, and reasonable temperature environment.

Permissible speed can be approximated from the limiting DN value, which is the product of the bearing bore in millimeters and the speed in RPM. The DN values shown below are nominal. For higher permissible speeds, consult Link-Belt Bearing Division, Rexnord Corporation.

DN value = Bearing bore (mm) x speed (RPM)

Bearing series	Limit of DN Value*
Series 1900, 1000, 1200, 1300 & 7300	
with segmented or polymeric retainer	450,000
with formed steel retainer	250,000
Series 5200, 6200, and 5300	
with segmented or polymeric retainer (5200, 5300 only)	330,000
with formed steel retainer	180,000
Full complement	150,000

*These values assume oil lubrication

Cylindrical Roller Bearings

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10} \qquad L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any pair of selected or trial bearings:

Step 1 Determine the equivalent radial load P.
$P = F_r$

Step 2 *Calculate* the ratio of the bearing basic load rating C to the equivalent radial load.
$\frac{C}{P}$

Step 3 Approximate the bearing life from Table 1.

Thrust Loads

The integral guiding ribs on standard cylindrical roller bearing inner and outer rings will support limited thrust loads. In addition, special tolerances and processing can be used to substantially increase axial load capacity. In either case, excellent lubrication (preferably with an EP lubricant) and a stabilizing radial load are required. For standard bearings, the allowable thrust load is estimated as

$$T_M = \frac{C_A}{3n^{0.3}}$$

where T_M = Maximum allowable thrust load, pounds (or newtons)
C_A = Load rating C (pounds or newtons) of the narrowest series for the given annulus (O.D. and bore) at 33⅓ RPM and $500L_{10}$ hours.
n = Operating speed, RPM

In addition, the thrust load should be no greater than 25% of the radial load. Where application conditions exceed either of these limits, Link-Belt Bearing Division should be consulted.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

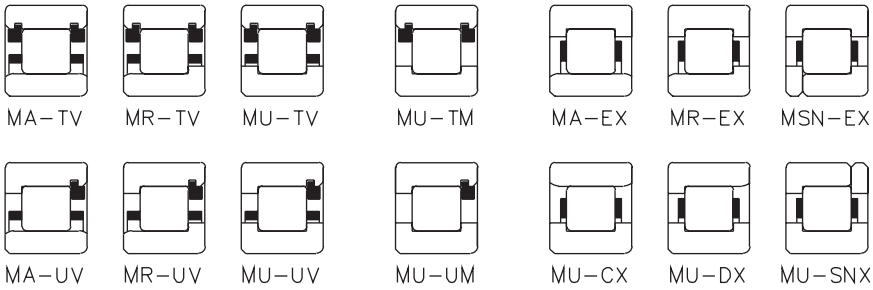
$$L_n = a_1 a_2 a_3 L_{10}$$

where L_n = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C), or misalignment greater than 0.0005 radians.. For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Series M

25mm, 30mm, 35mm, 40mm Bores



Separable **Non-Separable** **Non-Separable**

Formed steel retainer **Full roller complement** **Segmented steel retainer**

pounds/*newtons*

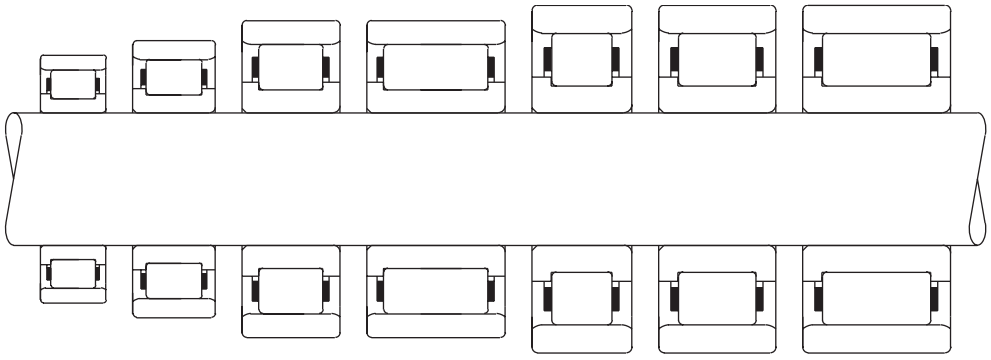
	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
Basic bearing number	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1205	4330	1120	52205280	1370 5220	6170	1600 6430	7020 1820	7630				
	19 200	*4 980*	*23 200*	*23 500*	*6 080*	*23 200*	*27 500*	*7 110*	*28 600*	*31 200*	*8 090*	*33 900*
5205	5930	1540	78307240	1880 7830	8460	2190 9640	9620 2490	11400				
	26 400	*6 830*	*34 800*	*32 200*	*8 340*	*34 800*	*37 600*	*9 750*	*42 900*	*42 800*	*11 100*	*50 900*
1305	6310	1630	66907710	2000 6690	8840	2290 8030	9920 2570	9370				
	28 100	*7 270*	*29 800*	*34 300*	*8 880*	*29 800*	*39 300*	*10 200*	*35 700*	*44 100*	*11 400*	*41 700*
7305	8070	2090	91809850	2550 9180	11300	2930 11000	12700	3280	12800			
	35 900	*9 300*	*40 800*	*43 800*	*11 400*	*40 800*	*50 200*	*13 000*	*49 000*	*56 400*	*14 600*	*57 100*
5305	9720	2520	11700	11900	3070	11700	13600	3530	14000	15300	3960	16300
	43 200	*11 200*	*51 900*	*52 800*	*13 700*	*51 900*	*60 500*	*15 700*	*62 300*	*68 100*	*17 600*	*72 500*
1206	5990	1550	71707320	1900 7170	8150	2110 8270	9340 2420	9930				
	26 700	*6 910*	*31 900*	*32 600*	*8 430*	*31 900*	*36 200*	*9 390*	*36 800*	*41 600*	*10 800*	*44 200*
5206	9040	2340	12200	11000	2860	12200	12300	3180	14000	14100	3650	16800
	40 200	*10 400*	*54 100*	*49 100*	*12 700*	*54 100*	*54 700*	*14 200*	*62 500*	*62 700*	*16 200*	*74 900*
1306	7970	2060	92709730	2520 9270	10300	2680 10000	12100	3130	12400			
	35 400	*9 180*	*41 200*	*43 300*	*11 200*	*41 200*	*45 900*	*11 900*	*44 700*	*53 700*	*13 900*	*55 000*
7306	10500	2720	13200	12800	3320	13200	13600	3530	14400	15900	4130	17700
	46 800	*12 100*	*58 900*	*57 100*	*14 800*	*58 900*	*60 600*	*15 700*	*63 800*	*70 700*	*18 400*	*78 700*
5306	12800	3320	17100	15700	4060	17100	16600	4310	18500	19400	5030	22800
	57 000	*14 800*	*76 100*	*69 600*	*18 000*	*76 100*	*74 000*	*19 200*	*82 400*	*86 400*	*22 400*	*101 000*
1207	6840	1770	80308350	2160 8030	9290	2410 9270	10700	2760	11100			
	30 400	*7 870*	*35 700*	*37 100*	*9 610*	*35 700*	*41 300*	*10 700*	*41 200*	*47 400*	*12 300*	*49 500*
5207	11300	2920	15300	13800	3570	15300	15300	3970	17700	17600	4560	21200
	50 200	*13 000*	*68 100*	*61 300*	*15 900*	*68 100*	*68 300*	*17 700*	*78 600*	*78 300*	*20 300*	*94 300*
1307	9840	2550	12000	12000	3110	12000	13500	3490	14000	15600	4040	17000
	43 800	*11 300*	*53 400*	*53 400*	*13 800*	*53 400*	*60 000*	*15 500*	*62 400*	*69 400*	*18 000*	*75 700*
7307	13800	3580	18700	16900	4380	18700	17900	4630	20100	20700	5350	24400
	61 500	*15 900*	*83 100*	*75 100*	*19 500*	*83 100*	*79 400*	*20 600*	*89 500*	*91 900*	*23 800*	*109 000*
5307	15900	4120	22400	19400	5030	22400	20500	5320	24100	23800	6150	29200
	70 800	*18 300*	*99 400*	*86 400*	*22 400*	*99 400*	*91 400*	*23 700*	*107 000*	*106 000*	*27 400*	*130 000*
1208	8270	2140	10200	10100	2620	10200	11200	2890	11600	12700	3290	13800
	36 800	*9 530*	*45 300*	*44 900*	*11 600*	*45 300*	*49 700*	*12 900*	*51 800*	*56 500*	*14 600*	*61 500*
5208	14300	3710	20700	17500	4530	20700	19400	5010	23600	22000	5700	28000
	63 800	*16 500*	*91 900*	*77 900*	*20 200*	*91 900*	*86 100*	*22 300*	*105 000*	*97 900*	*25 400*	*125 000*
1308	12600	3260	15200	15400	3980	15200	16300	4230	16400	19100	4940	20200
	56 000	*14 500*	*67 500*	*68 400*	*17 700*	*67 500*	*72 600*	*18 800*	*73 100*	*84 800*	*22 000*	*90 000*
7308	17900	4630	23800	21800	5660	23800	23200	6010	25800	27100	7020	31800
	79 600	*20 600*	*106 000*	*97 200*	*25 200*	*106 000*	*103 000*	*26 700*	*115 000*	*121 000*	*31 200*	*141 000*
5308	20000	5190	27600	24500	6330	27600	26000	6720	29900	30300	7860	36800
	89 100	*23 100*	*123 000*	*109 000*	*28 200*	*123 000*	*115 000*	*29 900*	*133 000*	*135 000*	*35 000*	*163 000*

See facing page for footnotes.

Ratings

Series M

45mm, 50mm, 55mm Bores



Size relationship

pounds/*newtons*

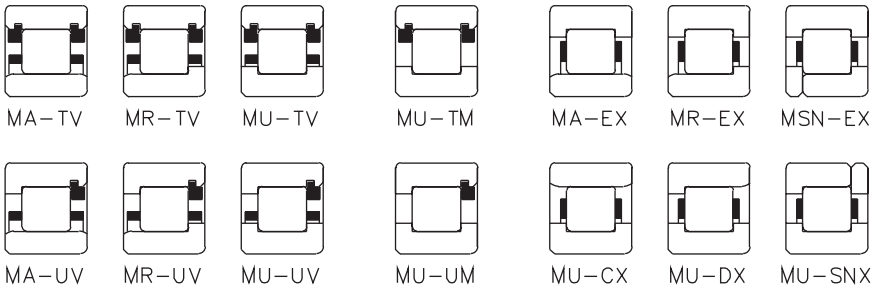
Basic bearing number	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1209	9670	2500	12900	11800	3060	12900	12900	3340	14500	14500	3750	16900
	43 000	*11 100*	*57 300*	*52 500*	*13 600*	*57 300*	*57 400*	*14 900*	*64 500*	*64 400*	*16 700*	*75 200*
5209	15600	4030	23800	19000	4920	23800	20800	5380	26700	23300	6040	31200
	69 200	*17 900*	*106 000*	*84 500*	*21 900*	*106 000*	*92 300*	*23 900*	*119 000*	*104 000*	*26 800*	*139 000*
1309	15900	4120	20400	19400	5040	20400	20600	5320	22000	23800	6160	26700
	70 800	*18 300*	*90 900*	*86 500*	*22 400*	*90 900*	*91 400*	*23 700*	*97 900*	*106 000*	*27 400*	*119 000*
7309	20300	5260	28000	24800	6430	28000	26200	6790	30100	30300	7860	36600
	90 400	*23 400*	*124 000*	*110 000*	*28 600*	*124 000*	*117 000*	*30 200*	*134 000*	*135 000*	*35 000*	*163 000*
5309	24800	6440	36200	30300	7860	36200	32100	8310	39000	37100	9610	47400
	111 000	*28 600*	*161 000*	*135 000*	*35 000*	*161 000*	*143 000*	*37 000*	*174 000*	*165 000*	*42 700*	*211 000*
1010	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	8840	2290	11100	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*39 300*	*10 200*	*49 400*	. . . . .	. . . . .	. . . . .
1210	9830	2550	13600	12000	3110	13600	13000	3380	15200	15100	3900	18400
	43 700	*11 300*	*60 600*	*53 400*	*13 800*	*60 600*	*58 000*	*15 000*	*67 700*	*67 000*	*17 300*	*82 000*
5210	15800	4100	25100	19300	5000	25100	21000	5440	28100	24200	6280	34000
	70 400	*18 200*	*112 000*	*85 900*	*22 300*	*112 000*	*93 400*	*24 200*	*125 000*	*108 000*	*27 900*	*151 000*
1310	18600	4810	24000	22700	5870	24000	23900	6200	25900	27700	7170	31400
	82 500	*21 400*	*107 000*	*101 000*	*26 100*	*107 000*	*107 000*	*27 600*	*115 000*	*123 000*	*31 900*	*140 000*
7310	24000	6220	33500	29300	7590	33500	31000	8030	36000	35900	9290	4380
	107 000	*27 700*	*149 000*	*130 000*	*33 800*	*149 000*	*138 000*	*35 700*	*160 000*	*159 000*	*41 300*	*195 000*
5310	29300	7600	43300	35800	9280	43300	37900	9810	46600	43800	11300	56600
	131 000	*33 800*	*193 000*	*159 000*	*41 300*	*193 000*	*169 000*	*43 600*	*207 000*	*195 000*	*50 500*	*252 000*
1911	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	6960	1800	9570	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*31 000*	*8 020*	*42 600*	. . . . .	. . . . .	. . . . .
1011	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	11200	2890	14300	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*49 800*	*12 900*	*63 400*	. . . . .	. . . . .	. . . . .
1211	11700	3040	16400	1430	3710	16400	15600	4030	18400	18000	4650	22300
	52 200	*13 500*	*73 200*	*63 700*	*16 500*	*73 200*	*69 200*	*17 900*	*81 800*	*79 900*	*20 700*	*99 000*
5211	19200	4960	30900	23400	6060	30900	25400	6590	34600	29400	7600	41900
	85 300	*22 100*	*138 000*	*104 000*	*27 000*	*138 000*	*113 000*	*29 300*	*154 000*	*131 000*	*33 800*	*186 000*
1311	21900	5680	28800	26800	6930	28800	26800	6930	28800	31000	8020	35000
	97 500	*25 300*	*128 000*	*119 000*	*30 800*	*128 000*	*119 000*	*30 800*	*128 000*	*138 000*	*35 700*	*156 000*
7311	29300	7590	41800	35800	9270	41800	35800	9270	41800	41400	10700	50800
	130 000	*33 800*	*186 000*	*159 000*	*41 200*	*186 000*	*159 000*	*41 200*	*186 000*	*184 000*	*47 700*	*226 000*
5311	38100	9860	58600	46500	12000	58600	46500	12000	58600	53800	13900	71100
	169 000	*43 900*	*260 000*	*207 000*	*53 500*	*260 000*	*207 000*	*53 500*	*260 000*	*239 000*	*61 900*	*316 000*

Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Ratings

Series M

60mm, 65mm, 70mm Bores



Separable **Non-Separable** **Non-Separable**

Formed steel retainer **Full roller complement** **Segmented steel retainer**

pounds/*newtons*

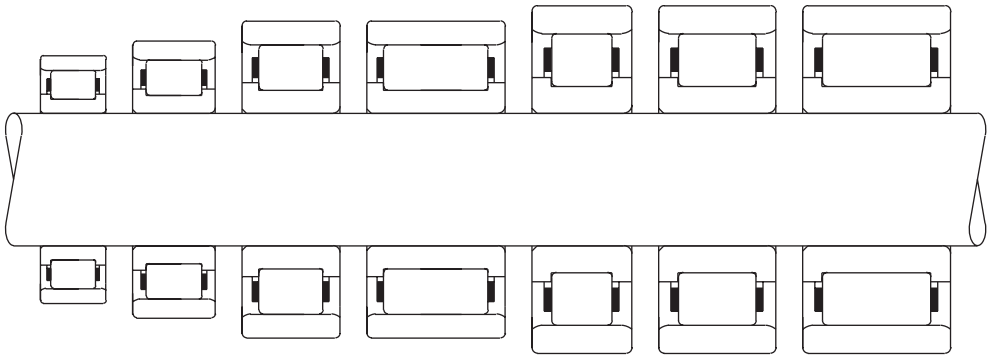
	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
Basic bearing number	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1912	.....	.....	.....	.....	.....	.....	7200	1870	10300	.....	.....	.....
	.....	.....	.....	.....	.....	.....	*32 000*	*8 300*	*45 600*	.....	.....	.....
1012	.....	.....	.....	.....	.....	.....	11700	3040	15600	.....	.....	.....
	.....	.....	.....	.....	.....	.....	*52 200*	*13 500*	*69 200*	.....	.....	.....
1212	14500	3760	19600	17700	4590	19600	19400	5020	22100	21700	5630	25800
	64 600	*16 700*	*87 400*	*78 900*	*20 400*	*87 400*	*86 100*	*22 300*	*98 300*	*96 700*	*25 000*	*115 000*
5212	24700	6390	38900	30100	7800	38900	32900	8520	43700	36900	9570	51000
	110 000	*28 400*	*173 000*	*134 000*	*34 700*	*173 000*	*146 000*	*37 900*	*194 000*	*164 000*	*42 600*	*227 000*
1312	24900	6450	32800	30400	7880	32800	32100	8330	35300	37200	9630	42900
	111 000	*28 700*	*146 000*	*135 000*	*35 000*	*146 000*	*143 000*	*37 000*	*157 000*	*165 000*	*42 800*	*191 000*
7312	32600	8450	46400	39800	10300	46400	42100	10900	50000	48700	12600	60700
	145 000	*37 600*	*206 000*	*177 000*	*45 900*	*206 000*	*187 000*	*48 500*	*222 000*	*217 000*	*56 100*	*270 000*
5312	43900	11400	68000	53600	13900	68000	56600	14700	73200	65500	17000	88900
	195 000	*50 500*	*302 000*	*238 000*	*61 700*	*302 000*	*252 000*	*65 200*	*326 000*	*291 000*	*75 500*	*395 000*
1913	.....	.....	.....	.....	.....	.....	7600	1970	11200	.....	.....	.....
	.....	.....	.....	.....	.....	.....	*33 800*	*8 750*	*50 000*	.....	.....	.....
1013	.....	.....	.....	.....	.....	.....	12000	3100	16300	.....	.....	.....
	.....	.....	.....	.....	.....	.....	*53 200*	*13 800*	*72 400*	.....	.....	.....
1213	16800	4360	24400	20500	5320	24400	21400	5540	25800	24700	6390	31200
	74 800	*19 400*	*109 000*	*91 400*	*23 700*	*109 000*	*95 100*	*24 600*	*115 000*	*110 000*	*28 400*	*139 000*
5213	26800	6930	44400	32700	8460	44400	34000	8810	46800	39300	10200	56700
	119 000	*30 800*	*197 000*	*145 000*	*37 600*	*197 000*	*151 000*	*39 200*	*208 000*	*175 000*	*45 200*	*252 000*
1313	30800	7970	41900	37600	9730	41900	37600	9730	41900	43400	11300	50900
	137 000	*35 400*	*186 000*	*167 000*	*43 300*	*186 000*	*167 000*	*43 300*	*186 000*	*193 000*	*50 100*	*226 000*
7313	39200	10100	57200	47800	12400	57200	47800	12400	57200	55300	14300	69400
	174 000	*45 100*	*254 000*	*213 000*	*55 100*	*254 000*	*213 000*	*55 100*	*254 000*	*246 000*	*63 700*	*309 000*
5313	54900	14200	88200	67000	17300	88200	67000	17300	88200	77500	20100	107000
	244 000	*63 200*	*392 000*	*298 000*	*77 200*	*392 000*	*298 000*	*77 200*	*392 000*	*345 000*	*89 300*	*476 000*
1914	.....	.....	.....	.....	.....	.....	10900	2810	15800	.....	.....	.....
	.....	.....	.....	.....	.....	.....	*48 300*	*12 500*	*70 400*	.....	.....	.....
1014	.....	.....	.....	.....	.....	.....	14600	3770	18600	.....	.....	.....
	.....	.....	.....	.....	.....	.....	*64 800*	*16 800*	*82 800*	.....	.....	.....
1214	18100	4700	26300	22100	5730	26300	24100	6230	29400	27900	7190	35600
	80 600	*20 900*	*117 000*	*98 500*	*25 500*	*117 000*	*107 000*	*27 700*	*131 000*	*124 000*	*32 000*	*158 000*
5214	29900	7750	50100	36600	9470	50100	39700	10300	56000	45900	11900	67800
	133 000	*34 500*	*223 000*	*163 000*	*42 100*	*223 000*	*177 000*	*45 800*	*249 000*	*204 000*	*52 800*	*302 000*
1314	35300	9130	48800	43000	11100	48800	43000	11100	48800	49800	12900	59200
	157 000	*40 600*	*217 000*	*191 000*	*49 600*	*217 000*	*191 000*	*49 600*	*217 000*	*221 000*	*57 400*	*263 000*
7314	43800	11300	64400	53500	13800	64400	53500	13800	64400	61800	16000	78200
	195 000	*50 400*	*287 000*	*238 000*	*61 600*	*287 000*	*238 000*	*61 600*	*287 000*	*275 000*	*71 300*	*348 000*
5314	57600	14900	91700	70400	18200	91700	70400	18200	91700	81400	21100	111000
	256 000	*66 400*	*408 000*	*313 000*	*81 100*	*408 000*	*313 000*	*81 100*	*408 000*	*362 000*	*93 800*	*495 000*

See facing page for footnotes.

Ratings

Series M

75mm, 80mm, 85mm Bores



Size relationship

pounds/*newtons*

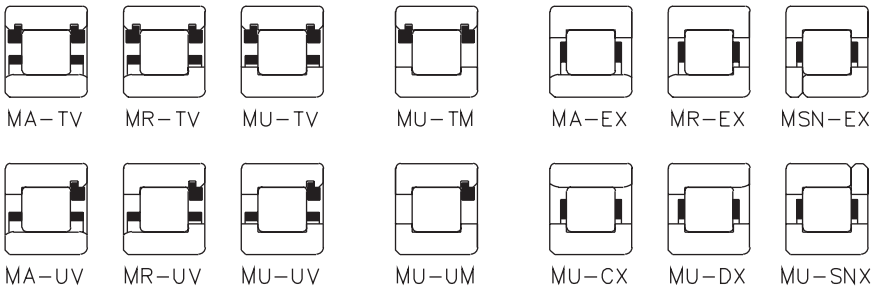
Basic bearing number	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1915	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	11200	2910	16900	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*50 000*	*13 000*	*75 200*	. . . . .	. . . . .	. . . . .
1015	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	15300	3970	20300	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*68 200*	*17 700*	*90 300*	. . . . .	. . . . .	. . . . .
1215	18800	4880	28000	23000	5960	28000	24900	6450	31100	28600	7390	37400
	83 800	*21 700*	*125 000*	*102 000*	*26 500*	*125 000*	*111 000*	*28 700*	*139 000*	*127 000*	*32 900*	*166 000*
5215	32500	8430	56600	39700	10300	56600	43000	11100	62900	49300	12800	75500
	145 000	*37 500*	*252 000*	*177 000*	*45 800*	*252 000*	*191 000*	*49 500*	*280 000*	*219 000*	*56 800*	*336 000*
1315	36600	9470	49700	44600	11600	49700	44600	11600	49700	51600	13400	60300
	163 000	*42 100*	*221 000*	*199 000*	*51 400*	*221 000*	*199 000*	*51 400*	*221 000*	*230 000*	*59 500*	*268 000*
7315	48500	12600	71500	59300	15400	71500	59300	15400	71500	68600	17800	86900
	216 000	*55 900*	*318 000*	*264 000*	*68 300*	*318 000*	*264 000*	*68 300*	*318 000*	*305 000*	*79 000*	*386 000*
5315	70900	18400	116000	86600	22400	116000	86600	22400	116000	100000	25900	141000
	315 000	*81 700*	*518 000*	*385 000*	*99 800*	*518 000*	*385 000*	*99 800*	*518 000*	*446 000*	*115 000*	*629 000*
1916	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	11600	3010	18000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*51 700*	*13 400*	*80 000*	. . . . .	. . . . .	. . . . .
1016	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	19200	4970	25800	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*85 300*	*22 100*	*115 000*	. . . . .	. . . . .	. . . . .
1216	20600	5330	30100	25100	6500	30100	27200	7040	33400	30200	7820	38400
	91 500	*23 700*	*134 000*	*112 000*	*28 900*	*134 000*	*121 000*	*31 300*	*149 000*	*134 000*	*34 800*	*171 000*
5216	36800	9540	63700	45000	11600	63700	48700	12600	70700	54000	14000	81300
	164 000	*42 400*	*283 000*	*200 000*	*51 800*	*283 000*	*216 000*	*56 100*	*315 000*	*240 000*	*62 300*	*362 000*
1316	41500	10800	57300	50700	13100	57300	50700	13100	57300	58700	15200	69600
	185 000	*47 900*	*255 000*	*226 000*	*58 400*	*255 000*	*226 000*	*58 400*	*255 000*	*261 000*	*67 600*	*309 000*
7316	55100	14300	82400	67300	17400	82400	67300	17400	82400	77900	20200	100000
	245 000	*63 500*	*367 000*	*299 000*	*77 500*	*367 000*	*299 000*	*77 500*	*367 000*	*346 000*	*89 700*	*445 000*
5316	73300	19000	119000	89400	23200	119000	89400	23200	119000	103000	26800	144000
	326 000	*84 400*	*528 000*	*398 000*	*103 000*	*528 000*	*398 000*	*103 000*	*528 000*	*460 000*	*119 000*	*642 000*
1917	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	13700	3550	20900	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*60 900*	*15 800*	*93 100*	. . . . .	. . . . .	. . . . .
1017	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	19700	5100	27000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*87 500*	*22 700*	*120 000*	. . . . .	. . . . .	. . . . .
1217	24800	6410	36700	30200	7830	36700	31500	8160	38700	36300	9410	46900
	110 000	*28 500*	*163 000*	*134 000*	*34 800*	*163 000*	*140 000*	*36 300*	*172 000*	*162 000*	*41 900*	*208 000*
5127	45300	11700	79700	55300	14300	79700	57600	14900	84100	66400	17200	102000
	201 000	*52 200*	*354 000*	*246 000*	*63 700*	*354 000*	*356 000*	*66 300*	*374 000*	*296 000*	*76 500*	*453 000*
1317	44600	11500	61200	54400	14100	61200	54400	14100	61200	63000	16300	74300
	198 000	*51 300*	*272 000*	*242 000*	*62 700*	*272 000*	*242 000*	*62 700*	*272 000*	*280 000*	*72 500*	*330 000*
7317	61700	16000	92900	75400	19500	92900	75400	19500	92900	87200	22600	113000
	275 000	*71 100*	*413 000*	*335 000*	*86 800*	*413 000*	*335 000*	*86 900*	*413 000*	*388 000*	*100 000*	*502 000*
5317	86300	22400	143000	105000	27300	143000	105000	27300	143000	122000	31600	174000
	384 000	*99 500*	*636 000*	*469 000*	*121 000*	*636 000*	*469 000*	*121 000*	*636 000*	*542 000*	*140 000*	*773 000*

Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Ratings

Series M

90mm, 95mm, 100mm Bores



Separable **Non-Separable** **Non-Separable**

Formed steel retainer **Full roller complement** **Segmented steel retainer**

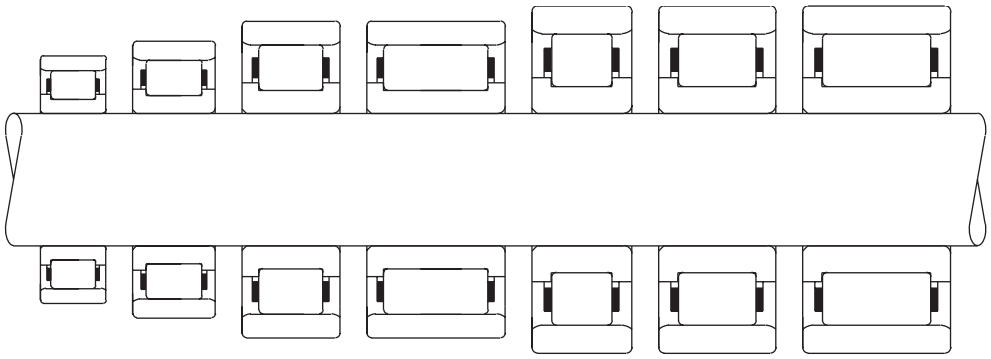
pounds/*newtons*

	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
Basic bearing number	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1918	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	14200	3670	22200	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*63 000*	*16 300*	*98 900*	. . . . .	. . . . .	. . . . .
1018	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	24900	6440	33500	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*111 000*	*28 600*	*149 000*	. . . . .	. . . . .	. . . . .
1218	28700	7440	42600	35100	9090	42600	38100	9880	47600	42600	11000	55100
	128 000	*33 100*	*190 000*	*156 000*	*40 400*	*190 000*	*170 000*	*43 900*	*212 000*	*189 000*	*49 000*	*245 000*
5218	51000	13200	89100	62300	16100	89100	67700	17500	99600	75500	19600	115000
	227 000	*58 700*	*396 000*	*277 000*	*71 700*	*396 000*	*301 000*	*78 000*	*443 000*	*336 000*	*87 000*	*513 000*
1318	52600	13600	74200	64200	16600	74200	64200	16600	74200	74200	19200	90100
	234 000	*60 600*	*330 000*	*285 000*	*73 900*	*330 000*	*285 000*	*73 900*	*330 000*	*330 000*	*85 500*	*401 000*
7318	69000	17900	105000	84300	21800	105000	84300	21800	105000	97500	25300	128000
	307 000	*79 500*	*469 000*	*375 000*	*97 100*	*469 000*	*375 000*	*97 100*	*469 000*	*434 000*	*112 000*	*569 000*
5318	88400	22900	145000	108000	27900	145000	108000	27900	145000	125000	32300	176000
	393 000	*102 000*	*644 000*	*480 000*	*124 000*	*644 000*	*480 000*	*124 000*	*644 000*	*556 000*	*144 000*	*783 000*
1919	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	14600	3790	23600	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*65 100*	*16 900*	*105 000*	. . . . .	. . . . .	. . . . .
1019	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	25500	6600	35100	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*113 000*	*29 400*	*156 000*	. . . . .	. . . . .	. . . . .
1219	33400	8650	50000	40800	10600	50000	42600	11000	53000	49500	12800	64700
	149 000	*38 500*	*222 000*	*181 000*	*47 000*	*222 000*	*189 000*	*49 000*	*236 000*	*220 000*	*57 000*	*288 000*
5219	58500	15200	103000	71400	18500	103000	74600	19300	109000	86700	22400	133000
	260 000	*67 400*	*457 000*	*318 000*	*82 300*	*457 000*	*332 000*	*85 900*	*484 000*	*386 000*	*99 800*	*592 000*
1319	55300	14300	80500	67600	17500	80500	67600	17500	80500	77400	20100	96600
	246 000	*63 700*	*358 000*	*300 000*	*77 800*	*358 000*	*300 000*	*77 800*	*358 000*	*344 000*	*89 200*	*430 000*
7319	75800	19600	121000	92600	24000	121000	92600	24000	121000	106000	27500	145000
	337 000	*87 400*	*537 000*	*412 000*	*107 000*	*537 000*	*412 000*	*107 000*	*537 000*	*472 000*	*122 000*	*644 000*
5319	93000	24100	157000	114000	29400	157000	114000	29400	157000	130000	33700	188000
	414 000	*107 000*	*698 000*	*505 000*	*131 000*	*698 000*	*505 000*	*131 000*	*698 000*	*579 000*	*150 000*	*838 000*
1920	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	17300	4470	25600	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*76 800*	*19 900*	*114 000*	. . . . .	. . . . .	. . . . .
1020	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	26100	6760	36700	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*116 000*	*30 100*	*163 000*	. . . . .	. . . . .	. . . . .
1220	36500	9470	54800	44600	11600	54800	46600	12100	58000	54100	14000	70900
	163 000	*42 100*	*244 000*	*198 000*	*51 400*	*244 000*	*207 000*	*53 700*	*258 000*	*241 000*	*62 400*	*315 000*
5220	65900	17100	117000	80500	20800	117000	84000	21800	124000	97700	25300	151000
	293 000	*76 000*	*520 000*	*358 000*	*92 700*	*520 000*	*374 000*	*96 800*	*551 000*	*434 000*	*113 000*	*674 000*
1320	60600	15700	88300	74000	19200	88300	74000	19200	88300	84800	22000	106000
	270 000	*69 800*	*393 000*	*329 000*	*85 300*	*393 000*	*329 000*	*85 300*	*393 000*	*377 000*	*97 700*	*472 000*
7320	82500	21400	131000	101000	26100	131000	101000	26100	131000	115000	29900	157000
	367 000	*95 000*	*584 000*	*448 000*	*116 000*	*584 000*	*448 000*	*116 000*	*584 000*	*513 000*	*133 000*	*700 000*
5320	111000	28700	192000	135000	35100	192000	135000	35100	192000	155000	40200	231000
	493 000	*128 000*	*855 000*	*602 000*	*156 000*	*855 000*	*602 000*	*156 000*	*855 000*	*691 000*	*179 000*	*1030 000*

Ratings

Series M

105mm, 110mm, 120mm Bores



Size relationship

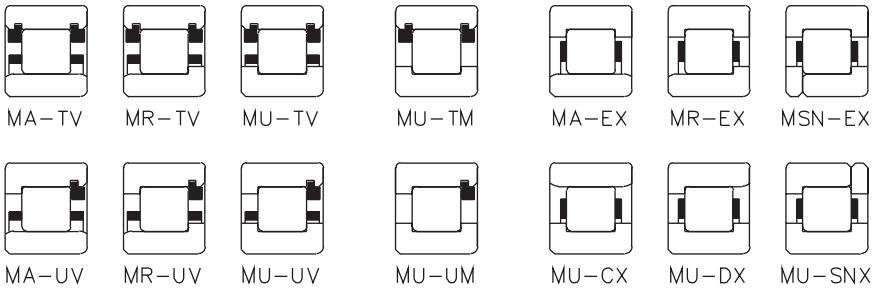
pounds/*newtons*

Basic bearing number	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1921	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	17900	4650	27300	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*79 800*	*20 700*	*121 000*	. . . . .	. . . . .	. . . . .
1021	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	31000	8040	45000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*138 000*	*35 800*	*200 000*	. . . . .	. . . . .	. . . . .
1221	38600	9990	57800	47100	12200	57800	49200	12700	61200	57200	14800	74800
	172 000	*44 400*	*257 000*	*210 000*	*54 300*	*257 000*	*219 000*	*56 600*	*272 000*	*254 000*	*65 800*	*333 000*
5221	73400	19000	132000	89600	23200	132000	93600	24200	140000	109000	28200	171000
	327 000	*84 600*	*588 000*	*399 000*	*103 000*	*588 000*	*416 000*	*108 000*	*622 000*	*484 000*	*125 000*	*760 000*
1321	71700	18600	108000	87500	22700	108000	87500	22700	108000	100000	26000	129000
	319 000	*82 500*	*479 000*	*389 000*	*101 000*	*479 000*	*389 000*	*101 000*	*479 000*	*446 000*	*116 000*	*575 000*
7321	90500	23400	145000	110000	28600	145000	110000	28600	145000	127000	32800	174000
	403 000	*104 000*	*647 000*	*491 000*	*127 000*	*647 000*	*491 000*	*127 000*	*647 000*	*563 000*	*146 000*	*776 000*
5321	118000	30500	204000	144000	37200	204000	144000	37200	204000	165000	42700	244000
	523 000	*136 000*	*906 000*	*639 000*	*165 000*	*906 000*	*639 000*	*165 000*	*906 000*	*734 000*	*190 000*	*1090 000*
1922	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	18200	4720	28200	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*81 000*	*21 000*	*125 000*	. . . . .	. . . . .	. . . . .
1022	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	35300	9150	50600	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*157 000*	*40 700*	*225 000*	. . . . .	. . . . .	. . . . .
1222	43600	11300	67300	53200	13800	67300	55400	14400	71100	61900	16000	82300
	194 000	*50 200*	*299 000*	*237 000*	*61 300*	*299 000*	*247 000*	*63 900*	*316 000*	*275 000*	*71 300*	*366 000*
5222	79900	20700	147000	97600	25300	147000	102000	26300	155000	113000	29400	179000
	356 000	*92 100*	*653 000*	*434 000*	*112 000*	*653 000*	*452 000*	*117 000*	*689 000*	*505 000*	*131 000*	*798 000*
1322	72800	18900	107000	88900	23000	107000	88900	23000	107000	102000	26400	129000
	324 000	*83 800*	*477 000*	*395 000*	*102 000*	*477 000*	*395 0000*	*102 000*	*477 000*	*453 000*	*117 000*	*572 000*
7322	99800	25800	161000	122000	31500	161000	122000	31500	161000	140000	36200	193000
	444 000	*115 000*	*715 000*	*542 000*	*140 000*	*715 000*	*542 000*	*140 000*	*715 000*	*621 000*	*161 000*	*858 000*
5322	138000	35700	244000	169000	43600	244000	169000	43600	244000	193000	50000	293000
	614 000	*159 000*	*1090 000*	*750 000*	*194 000*	*1090 000*	*750 000*	*194 000*	*1090 000*	*859 000*	*223 000*	*1300 000*
1924	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	23800	6160	37300	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*106 000*	*27 400*	*166 000*	. . . . .	. . . . .	. . . . .
1024	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	37000	9590	55100	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*165 000*	*42 700*	*245 000*	. . . . .	. . . . .	. . . . .
1224	49400	12800	77900	60300	15600	77900	62800	16300	82300	72500	18800	99600
	220 000	*56 900*	*347 000*	*268 000*	*69 500*	*347 000*	*279 000*	*72 400*	*366 000*	*323 000*	*83 500*	*443 000*
5224	97200	25200	186000	119000	30700	186000	124000	32000	196000	143000	36900	238000
	432 000	*112 000*	*827 000*	*528 000*	*137 000*	*827 000*	*550 000*	*142 000*	*873 000*	*634 000*	*164 000*	*1060 000*
1324	84600	21900	126000	103000	26700	126000	103000	26700	126000	118000	30700	151000
	376 000	*97 400*	*562 000*	*459 000*	*119 000*	*562 000*	*459 000*	*119 000*	*562 000*	*527 000*	*136 000*	*674 000*
7324	118000	30500	193000	144000	37300	193000	144000	37300	193000	165000	42700	232000
	524 000	*136 000*	*861 000*	*640 000*	*166 000*	*861 000*	*640 000*	*166 000*	*861 000*	*734 000*	*190 000*	*1030 000*
5324	170000	44100	310000	208000	53900	310000	208000	53900	310000	238000	61700	373000
	757 000	*196 000*	*1380 000*	*925 000*	*240 000*	*1380 000*	*925 000*	*240 000*	*1380 000*	*1060 000*	*275 000*	*1660 000*

Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Series M

130mm, 140mm, 150mm Bores



pounds/*newtons*

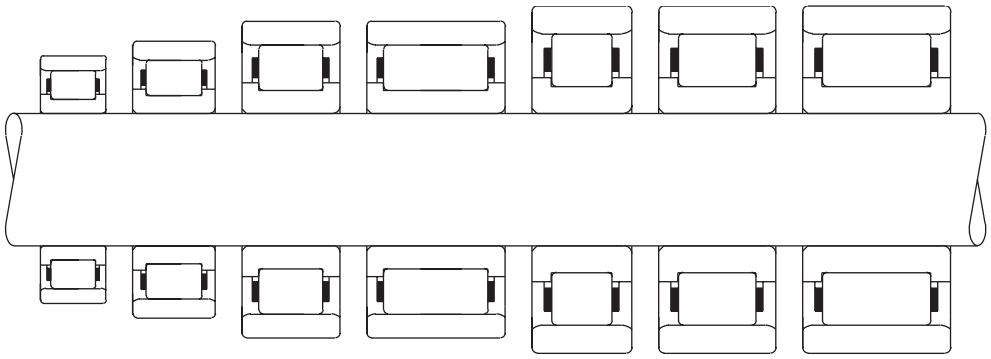
	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
Basic bearing number	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1926	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	30100	7800	47600	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*134 000*	*34 700*	*212 000*	. . . . .	. . . . .	. . . . .
1026	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	47500	12300	69100	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*211 000*	*54 700*	*307 000*	. . . . .	. . . . .	. . . . .
1226	55300	14300	85200	67500	17500	85200	67500	17500	85200	78500	20300	104000
	246 000	*63 700*	*379 000*	*300 000*	*77 800*	*379 000*	*300 000*	*77 800*	*379 000*	*349 000*	*90 400*	*463 000*
5226	104000	26900	192000	127000	32800	192000	127000	32800	192000	147000	38200	234000
	462 000	*120 000*	*852 000*	*564 000*	*146 000*	*852 000*	*564 000*	*146 000*	*852 000*	*655 000*	*170 000*	*1040 000*
1326	100000	25900	151000	122000	31700	151000	122000	31700	151000	140000	36300	182000
	446 000	*115 000*	*674 000*	*544 000*	*141 000*	*674 000*	*544 000*	*141 000*	*674 000*	*624 000*	*162 000*	*808 000*
7326	138000	35700	228000	168000	43600	228000	168000	43600	228000	193000	50000	274000
	613 000	*159 000*	*1020 000*	*749 000*	*194 000*	*1020 000*	*749 000*	*194 000*	*1020 000*	*858 000*	*222 000*	*1220 000*
5326	190000	49300	346000	232000	60200	346000	232000	60200	346000	267000	69000	415000
	847 000	*219 000*	*1540 000*	*1030 000*	*268 000*	*1540 000*	*1030 000*	*268 000*	*1540 000*	*1190 000*	*307 000*	*1850 000*
1928	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	31100	8060	50800	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*138 000*	*35 900*	*226 000*	. . . . .	. . . . .	. . . . .
1028	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	49900	12900	75100	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*222 000*	*57 400*	*334 000*	. . . . .	. . . . .	. . . . .
1228	61700	16000	95000	75300	19500	95000	75300	19500	95000	87600	22700	116000
	274 000	*71 100*	*422 000*	*335 000*	*86 800*	*422 000*	*335 000*	*86 800*	*422 000*	*390 000*	*101 000*	*516 000*
5228	129000	33400	244000	157000	40700	244000	157000	40700	244000	183000	47300	299000
	573 000	*148 000*	*1090 000*	*699 000*	*181 000*	*1090 000*	*699 000*	*181 000*	*1090 000*	*813 000*	*211 000*	*1330 000*
1328	111000	28800	170000	136000	35200	170000	136000	35200	170000	156000	40400	204000
	495 000	*128 000*	*756 000*	*605 000*	*157 000*	*756 000*	*605 000*	*157 000*	*756 000*	*693 000*	*180 000*	*907 000*
7328	158000	40800	266000	192000	49800	266000	192000	49800	266000	221000	57100	319000
	701 000	*182 000*	*1180 000*	*856 000*	*222 000*	*1180 000*	*856 000*	*222 000*	*1180 000*	*981 000*	*254 000*	*1420 000*
5328	209000	54200	383000	256000	66200	383000	256000	66200	383000	293000	75900	460000
	931 000	*241 000*	*1700 000*	*1140 000*	*295 000*	*1700 000*	*1140 000*	*295 000*	*1700 000*	*1300 000*	*338 000*	*2050 000*
1930	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	41800	10800	68600	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*186 000*	*48 100*	*305 000*	. . . . .	. . . . .	. . . . .
1030	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	56700	14700	85800	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*252 000*	*65 300*	*382 000*	. . . . .	. . . . .	. . . . .
1230	71000	18400	111000	86700	22500	111000	86700	22500	111000	101000	26100	135000
	316 000	*81 800*	*492 000*	*386 000*	*99 900*	*492 000*	*386 000*	*99 900*	*492 000*	*448 000*	*116 000*	*601 000*
5230	150000	38900	289000	183000	47500	289000	183000	47500	289000	213000	55200	354000
	668 000	*173 000*	*1290 000*	*815 000*	*211 000*	*1290 000*	*815 000*	*211 000*	*1290 000*	*948 000*	*245 000*	*1570 000*

See facing page for footnotes.

Ratings

Series M

160mm, 170mm, 180mm, 190mm, 200mm Bores



Size relationship

pounds/*newtons*

Basic bearing number	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable								
	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
1932	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	43200	11200	73100	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*192 000*	*49 800*	*325 000*	. . . . .	. . . . .	. . . . .
1032	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	65000	16800	99800	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*289 000*	*74 800*	*444 000*	. . . . .	. . . . .	. . . . .
1232	78300	20300	120000	95600	24800	120000	99800	25800	127000	112000	29000	148000
	348 000	*90 200*	*534 000*	*425 000*	*110 000*	*534 000*	*444 000*	*115 000*	*565 000*	*498 000*	*129 000*	*660 000*
5232	174000	45100	336000	213000	55100	336000	222000	57500	356000	249000	64600	415000
	775 000	*201 000*	*1490 000*	*946 000*	*245 000*	*1490 000*	*988 000*	*256 000*	*1580 000*	*1110 000*	*287 000*	*1850 000*
1934	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	43700	11300	75500	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*195 000*	*50 400*	*336 000*	. . . . .	. . . . .	. . . . .
1034	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	81400	21100	130000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*362 000*	*93 800*	*577 000*	. . . . .	. . . . .	. . . . .
1234	95700	24800	149000	117000	30300	149000	122000	31600	158000	137000	35500	184000
	426 000	*110 000*	*664 000*	*520 000*	*135 000*	*664 000*	*543 000*	*141 000*	*703 000*	*609 000*	*158 000*	*820 000*
5234	202000	52400	391000	247000	64000	391000	258000	66800	414000	290000	75000	483000
	900 000	*233 000*	*1740 000*	*1100 000*	*285 000*	*1740 000*	*1150 000*	*297 000*	*1840 000*	*1290 000*	*334 000*	*2150 000*
1936	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	56000	14500	93700	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*249 000*	*64 500*	*417 000*	. . . . .	. . . . .	. . . . .
1036	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	97900	25400	154000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*436 000*	*113 000*	*685 000*	. . . . .	. . . . .	. . . . .
1236	99600	25800	159000	122000	31500	159000	122000	31500	159000	136000	35300	186000
	443 000	*115 000*	*708 000*	*541 000*	*140 000*	*708 000*	*541 000*	*140 000*	*708 000*	*607 000*	*157 000*	*826 000*
5236	195000	50600	379000	239000	61800	379000	239000	61800	379000	268000	69400	442000
	870 000	*225 000*	*1690 000*	*1060 000*	*275 000*	*1690 000*	*1060 000*	*275 000*	*1690 000*	*1190 000*	*309 000*	*1970 000*
1938	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	56800	14700	97000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*253 000*	*65 500*	*431 000*	. . . . .	. . . . .	. . . . .
1038	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	100000	26000	161000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*446 000*	*115 000*	*716 000*	. . . . .	. . . . .	. . . . .
1238	143200	37000	239400	175400	45600	239400	190600	49300	267700	205000	53000	299000
	637 000	*164 900*	*1065000*	*780 000*	*203 000*	*1065000*	*848 000*	*219 500*	*1191000*	*912 000*	*236 000*	*1330000*
5238	242000	62800	489000	296000	76600	489000	296000	76600	489000	332000	86000	570000
	1080 000	*279 000*	*2170 000*	*1320 000*	*341 000*	*2170 000*	*1320 000*	*341 000*	*2170 000*	*1480 000*	*383 000*	*254 000*
1940	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	73700	19100	125000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*328 000*	*84 900*	*556 000*	. . . . .	. . . . .	. . . . .
1040	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	121000	31300	193000	. . . . .	. . . . .	. . . . .
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	*538 000*	*139 000*	*859 000*	. . . . .	. . . . .	. . . . .
1240	123000	31900	201000	150000	38900	201000	150000	38900	201000	175000	45200	246000
	547 000	*142 000*	*893 000*	*668 000*	*173 000*	*893 000*	*668 000*	*173 000*	*893 000*	*777 000*	*201 000*	*1090 000*
5240	270000	69900	551000	329000	85300	551000	329000	85300	551000	383000	99200	673000
	1200 000	*311 000*	*2450 000*	*1460 000*	*379 000*	*2450 000*	*1460 000*	*379 000*	*2450 000*	*1700 000*	*441 000*	*2990 000*

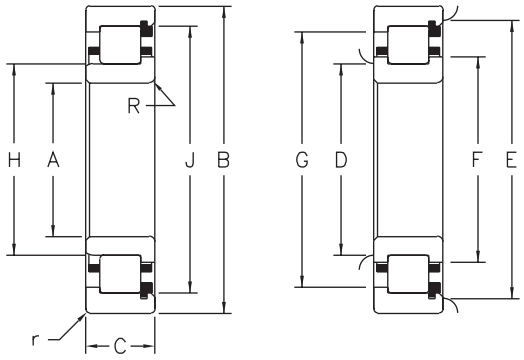
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Cylindrical Roller Bearings

Series M

25mm, 30mm, 35mm, 40mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain outer ring	E Max. housing shoulder dia. Ribbed outer ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1205		2.0472	.5906												
		52.000	*15.000*	1.20	1.26	1.85	1.76	1.351	1.691	1.2664	1.7659	.040	.040	1.2677	1.7646
5205		2.0472	.8125	*30.5*	*32.0*	*47.0*	*44.7*	*34.32*	*42.95*	*32.166*	*44.854*	*1.02*	*1.02*	*32.200*	*44.820*
		52.000	*20.638*												
1305	.9843	2.4409	.6693												
	25.000	*62.000*	*17.000*												
7305		2.4409	.8268	1.24	1.33	2.20	2.10	1.476	1.974	1.3375	2.1034	.040	.040	1.3388	2.1021
		62.000	*21.000*	*31.5*	*33.8*	*55.9*	*53.3*	*37.49*	*50.14*	*33.972*	*53.426*	*1.02*	*1.02*	*34.006*	*53.393*
5305		2.4409	1.0000												
		62.000	*25.400*												
1206		2.4409	.6299												
		62.000	*16.000*	1.42	1.49	2.22	2.12	1.609	2.027	1.4985	2.1289	.040	.040	1.4999	2.1275
5206		2.4409	.9375	*36.1*	*37.8*	*56.4*	*53.8*	*40.87*	*51.48*	*38.062*	*54.074*	*1.02*	*1.02*	*38.098*	*54.038*
		62.000	*23.812*												
1306	1.181	2.8346	.7480												
	30.000	*72.000*	*19.000*												
7306		2.8346	.9055	1.49	1.60	2.52	2.37	1.742	2.239	1.6016	2.3783	.060	.040	1.6029	2.3770
		72.000	*23.000*	*37.8*	*40.6*	*64.0*	*60.2*	*44.25*	*56.87*	*40.681*	*60.409*	*1.52*	*1.02*	*40.713*	*60.377*
5306		2.8346	1.1875												
		72.000	*30.162*												
1207		2.8346	.6693												
		72.000	*17.000*	1.64	1.73	2.57	2.45	1.862	2.343	1.7311	2.4595	.040	.040	1.7327	2.4579
5207		2.8346	1.0625	*41.6*	*43.9*	*65.3*	*62.2*	*47.29*	*59.51*	*43.970*	*62.471*	*1.02*	*1.02*	*44.011*	*62.430*
		72.000	*26.988*												
1307	1.3780	3.1496	.8268												
	35.000	*80.000*	*21.000*												
7307		3.1496	1.0236	1.72	1.84	2.81	2.67	1.995	2.538	1.8442	2.6749	.060	.060	1.8457	2.6734
		80.000	*26.000*	*43.7*	*46.7*	*71.4*	*67.8*	*50.67*	*64.46*	*46.843*	*67.942*	*1.52*	*1.52*	*46.880*	*67.905*
5307		3.1496	1.3750												
		80.000	*34.925*												
1208		3.1496	.7087												
		80.000	*18.000*	1.86	1.96	2.87	2.74	2.104	2.615	1.9657	2.7409	.060	.040	1.9673	2.7393
5208		3.1496	1.1875	*47.2*	*49.8*	*72.9*	*69.6*	*53.44*	*66.42*	*49.929*	*69.619*	*1.52*	*1.02*	*49.969*	*69.579*
		80.000	*30.162*												
1308	1.5748	3.5433	.9055												
	40.000	*90.000*	*23.000*												
7308		3.5433	1.1811	1.93	2.05	3.20	3.05	2.244	2.887	2.0590	3.0576	.060	.060	2.0606	3.0560
		90.000	*30.000*	*49.0*	*52.1*	*81.3*	*77.5*	*57.00*	*73.33*	*52.299*	*77.663*	*1.52*	*1.52*	*52.339*	*77.623*
5308		3.5433	1.4375												
		90.000	*36.512*												

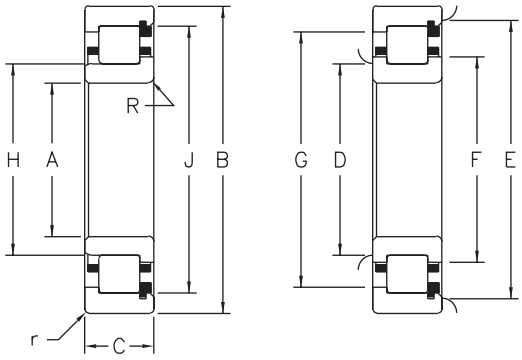
See facing page for footnotes.

Cylindrical Roller Bearings

Series M

45mm, 50mm, 55mm, Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain outer ring	E Max. housing shoulder dia. Ribbed outer ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1209		3.3465	.7480												
		85.000	*19.000*	2.08	2.18	3.08	2.95	2.324	2.827	2.1858	2.9523	.060	.040	2.1877	2.9504
5209		3.3465	1.1875	*52.8*	*55.4*	*78.2*	*74.9*	*59.03*	*71.80*	*55.519*	*74.988*	*1.52*	*1.02*	*55.568*	*74.939*
		85.000	30.162												
1309	1.7717	3.9370	.9843												
	45.000	*100.000*	*25.000*												
7309		3.9370	1.2205	2.20	2.33	3.56	3.38	2.532	3.208	2.3371	3.3899	.080	.060	2.3389	3.3881
		100.000	*31.000*	*55.9*	*59.2*	*90.4*	*85.8*	*64.31*	*81.48*	*59.362*	*86.103*	*2.03*	*1.52*	*59.408*	*86.058*
5309		3.9370	1.5625												
		100.000	*39.688*												
1010		3.1496	.6299	2.21	2.27	2.93	2.84	2.379	2.741	2.2788	2.8406	.060	.040	2.2808	2.8386
		80.000	*16.000*	*56.1*	*57.6*	*74.4*	*72.1*	*60.43*	*69.62*	*57.882*	*72.151*	*1.52*	*1.02*	*57.933*	*72.100*
1210		3.5433	.7874												
		90.000	*20.000*	*2.27*	*2.38*	*3.26*	*3.13*	*2.518*	*3.018*	*2.3803*	*3.1317*	*.060*	*.040*	*2.3823*	*3.1297*
5210		3.5433	1.1875	*57.6*	*60.4*	*82.8*	*79.5*	*63.96*	*76.66*	*60.460*	*79.545*	*1.52*	*1.02*	*60.511*	*79.494*
		90.000	*30.162*												
1310	1.9685	4.3307	1.0630												
	50.000	*110.000*	*27.000*												
7310		4.3307	1.2992	2.40	2.56	3.90	3.72	2.781	3.518	2.5648	3.7201	.080	.080	2.5667	3.7182
		110.000	*33.000*	*61.0*	*65.0*	*99.1*	*94.5*	*70.64*	*89.36*	*65.146*	*94.490*	*2.03*	*2.03*	*65.194*	*94.442*
5310		4.3307	1.7500												
		110.000	*44.450*												
1911		3.1496	.5118	2.36	2.43	2.96	2.88	2.530	2.789	2.4300	2.8889	.040	.040	2.4323	2.8866
		80.000	*13.000*	*59.9*	*61.7*	*75.2*	*73.2*	*64.26*	*70.84*	*61.722*	*73.378*	*1.02*	*1.02*	*61.780*	*73.320*
1011		3.5433	.7087	2.44	2.53	3.29	3.17	2.665	3.045	2.5392	3.1705	.060	.040	2.5415	3.1682
		90.000	*18.000*	*62.0*	*64.3*	*83.6*	*80.5*	*67.69*	*77.34*	*64.496*	*80.531*	*1.52*	*1.02*	*64.555*	*80.472*
1211		3.9370	.8268												
		100.000	*21.000*	2.52	2.63	3.60	3.46	2.785	3.328	2.6339	3.4653	.080	.060	2.6361	3.4631
5211	2.1654	3.9370	1.3125	*64.0*	*66.8*	*91.4*	*87.9*	*70.74*	*84.53*	*66.901*	*88.019*	*2.03*	*1.52*	*66.957*	*87.963*
	55.000	*100.000*	*33.338*												
1311		4.7244	1.1417												
		120.000	*29.000*												
7311		4.7244	1.4173	2.62	2.81	4.28	4.07	3.045	3.860	2.8123	4.0790	.080	.080	2.8144	4.0769
		120.000	*36.000*	*66.5*	*71.4*	*108.7*	*103.4*	*77.34*	*98.04*	*71.432*	*103.607*	*2.03*	*2.03*	*71.486*	*103.553*
5311		4.7244	1.9375												
		120.000	*49.212*												

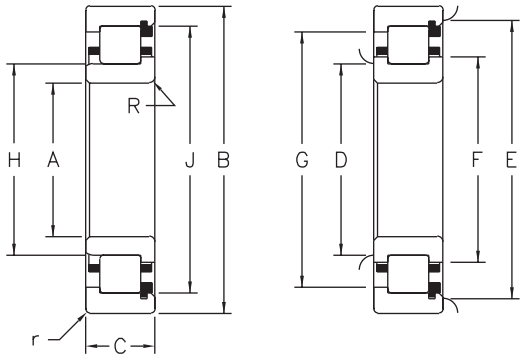
Please consult for availability.
▲ Largest fillet radius that will clear bearing corners.
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Cylindrical Roller Bearings

Series M

60mm, 65mm, 70mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain inner ring	E Max. housing shoulder dia. Ribbed inner ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1912		3.3465	.5118	2.56	2.63	3.16	3.08	2.730	2.989	2.6300	3.0890	.040	.040	2.6324	3.0866
		85.000	*13.000*	*65.0*	*66.8*	*80.3*	*78.2*	*69.34*	*75.92*	*66.802*	*78.461*	*1.02*	*1.02*	*66.863*	*78.400*
1012		3.7402	.7087	2.64	2.73	3.49	3.36	2.862	3.242	2.7362	3.3675	.060	.040	2.7385	3.3652
		95.000	*18.000*	*67.0*	*69.3*	*88.6*	*85.3*	*72.69*	*82.35*	*69.499*	*85.534*	*1.52*	*1.02*	*69.558*	*85.476*
1212		4.3307	.8661												
		110.000	*22.000*	2.73	2.84	3.99	3.84	3.029	3.681	2.8496	3.8489	.080	.060	2.8519	3.8466
5212	2.3622	4.3307	1.4375	*69.3*	*72.1*	*101.3*	*97.5*	*76.94*	*93.50*	*72.380*	*97.762*	*2.03*	*1.52*	*72.438*	*97.704*
	60.000	*110.000*	*36.512*												
1312		5.1181	1.2205												
		130.000	*31.000*												
7312		5.1181	1.4961	2.87	3.05	4.64	4.42	3.308	4.187	3.0532	4.4286	.100	.080	3.0554	4.4264
		130.000	*38.000*	*72.9*	*77.5*	*117.8*	*112.3*	*84.02*	*106.35*	*77.551*	*112.486*	*2.54*	*2.03*	*77.607*	*112.431*
5312		5.1181	2.1250												
		130.000	*53.975*												
1913		3.5433	.5118	2.76	2.82	3.36	3.28	2.925	3.184	2.8250	3.2841	.040	.040	2.8275	3.2816
		90.000	*13.000*	*70.1*	*71.6*	*85.3*	*83.3*	*74.30*	*80.87*	*71.755*	*83.416*	*1.02*	*1.02*	*71.818*	*83.353*
1013		3.9370	.7087	2.84	2.93	3.69	3.56	3.060	3.439	2.9332	3.5646	.060	.040	2.9356	3.5622
		100.000	*18.000*	*72.1*	*74.4*	*93.7*	*90.4*	*77.72*	*87.35*	*74.503*	*90.541*	*1.52*	*1.02*	*74.565*	*90.479*
1213		4.7244	.9055												
		120.000	*23.000*	3.03	3.16	4.33	4.16	3.360	3.986	3.1662	4.1655	.100	.060	3.1685	4.1632
5213	2.5591	4.7244	1.5000	*77.0*	*80.3*	*110.0*	*105.7*	*85.34*	*101.24*	*80.421*	*105.804*	*2.54*	*1.52*	*80.480*	*105.745*
	65.000	*120.000*	*38.100*												
1313		5.5118	1.2992												
		140.000	*33.000*												
7313		5.5118	1.5748	3.10	3.29	5.00	4.77	3.571	4.515	3.2943	4.7782	.100	.080	3.2966	4.7759
		140.000	*40.000*	*78.7*	*83.6*	*127.0*	*121.2*	*90.70*	*114.68*	*83.675*	*121.366*	*2.54*	*2.03*	*83.734*	*121.308*
5313		5.5118	2.3125												
		140.000	*58.738*												
1914		3.9370	.6299	2.99	3.07	3.72	3.63	3.182	3.520	3.0700	3.6326	.040	.040	3.0728	3.6298
		100.000	*16.000*	*75.9*	*78.0*	*94.5*	*92.2*	*80.82*	*89.41*	*77.978*	*92.268*	*1.02*	*1.02*	*78.050*	*92.196*
1014		4.3307	.7874	3.05	3.15	4.07	3.93	3.312	3.779	3.1570	3.9333	.080	.040	3.1597	3.9306
		110.000	*20.000*	*77.5*	*80.0*	*103.4*	*99.8*	*84.12*	*95.99*	*80.188*	*99.906*	*2.03*	*1.02*	*80.256*	*99.838*
1214		4.9213	.9449												
		125.000	*24.000*	3.22	3.33	4.55	4.39	3.528	4.213	3.3375	4.3912	.100	.060	3.3402	4.3885
5214	2.7559	4.9213	1.5625	*81.8*	*84.6*	*115.6*	*111.5*	*89.61*	*107.01*	*84.772*	*111.536*	*2.54*	*1.52*	*84.840*	*111.468*
	70.000	*125.000*	*39.688*												
1314		5.9055	1.3780												
		150.000	*35.000*												
7314		5.9055	1.6929	3.32	3.51	5.34	5.09	3.808	4.811	3.5115	5.0935	.125	.080	3.5141	5.0909
		150.000	*43.000*	*84.3*	*89.2*	*135.6*	*129.3*	*96.72*	*122.20*	*89.192*	*129.375*	*3.18*	*2.03*	*89.258*	*129.309*
5314		5.9055	2.5000												
		150.000	*63.600*												

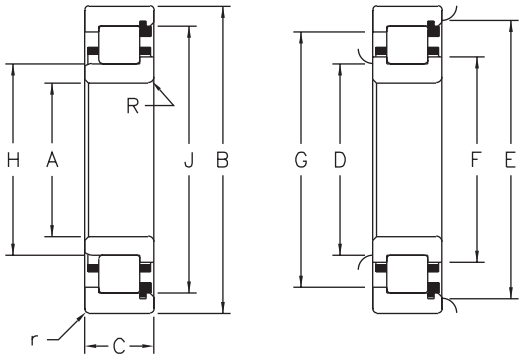
See facing page for footnotes.

Cylindrical Roller Bearings

Series M

75mm, 80mm, 85mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain inner ring	E Max. housing shoulder dia. Ribbed inner ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1915		4.1339	.6299	3.18	3.26	3.92	3.82	3.377	3.716	3.2650	3.8276	.040	.040	3.2678	3.8248
		105.000	*16.000*	*80.8*	*82.8*	*99.6*	*97.0*	*85.78*	*94.39*	*82.931*	*97.221*	*1.02*	*1.02*	*83.003*	*97.149*
1015		4.5276	.7874	3.25	3.35	4.27	4.13	3.510	3.977	3.3550	4.1314	.080	.040	3.3578	4.1286
		115.000	*20.000*	*82.6*	*85.1*	*108.4*	*104.9*	*89.15*	*101.02*	*85.217*	*104.938*	*2.03*	*1.02*	*85.288*	*104.867*
1215		5.1181	.9843												
		130.000	*25.000*	3.37	3.50	4.73	4.55	3.695	4.380	3.5045	4.5583	.100	.060	3.5073	4.5555
5215	2.9528	5.1181	1.6250	*85.6*	*88.9*	*120.1*	*115.6*	*93.85*	*111.25*	*89.014*	*115.781*	*2.54*	*1.52*	*89.085*	*115.710*
	75.000	*130.000*	*41.275*												
1315		6.2992	1.4567												
		160.000	*37.000*												
7315		6.2992	1.8110	3.56	3.77	5.74	5.47	4.096	5.172	3.7764	5.4778	.125	.080	3.7790	5.4752
		160.000	*46.000*	*90.4*	*95.8*	*145.8*	*138.9*	*104.04*	*131.37*	*95.920*	*139.136*	*3.18*	*2.03*	*95.987*	*139.070*
5315		6.2992	2.6875												
		160.000	*68.262*												
1916		4.3307	.6299	3.38	3.46	4.11	4.02	3.572	3.911	3.4600	4.0227	.040	.040	3.4629	4.0198
		110.000	*16.000*	*85.8*	*87.9*	*104.4*	*102.1*	*90.73*	*99.34*	*87.884*	*102.176*	*1.02*	*1.02*	*87.958*	*102.102*
1016		4.9213	.8661	3.48	3.59	4.63	4.47	3.768	4.309	3.5950	4.4523	.080	.040	3.5979	4.4493
		125.000	*22.000*	*88.4*	*91.2*	*117.6*	*113.5*	*95.71*	*109.45*	*91.313*	*113.088*	*2.03*	*1.02*	*91.387*	*113.012*
1216		5.5118	1.0236												
		140.000	*26.000*	3.59	3.75	5.09	4.90	3.968	4.700	3.7514	4.9078	.100	.080	3.7542	4.9050
5216	3.1496	5.5118	1.7500	*91.2*	*95.2*	*129.3*	*124.5*	*100.79*	*119.38*	*95.286*	*124.658*	*2.54*	*2.03*	*95.356*	*124.588*
	80.000	*140.000*	*44.450*												
1316		6.6929	1.5354												
		170.000	*39.000*												
7316		6.6929	1.9291	3.78	4.00	6.08	5.80	4.342	5.480	4.0014	5.8041	.125	.080	4.0041	5.8014
		170.000	*49.000*	*96.0*	*101.6*	*154.4*	*147.3*	*110.29*	*139.19*	*101.636*	*147.424*	*3.18*	*2.03*	*101.704*	*147.356*
5316		6.6929	2.6875												
		170.000	*68.262*												
1917		4.7244	.7087	3.63	3.72	4.48	4.35	3.851	4.231	3.7250	4.3574	.060	.040	3.7284	4.3540
		120.000	*18.000*	*92.2*	*94.5*	*113.8*	*101.5*	*97.82*	*107.47*	*94.615*	*110.678*	*1.52*	*1.02*	*94.702*	*110.591*
1017		5.1181	.8661	3.68	3.79	4.83	4.67	3.962	4.507	3.7920	4.6525	.080	.040	3.7955	4.6493
		130.000	*22.000*	*93.5*	*96.3*	*122.7*	*118.6*	*100.63*	*114.48*	*96.317*	*118.173*	*2.03*	*1.02*	*96.405*	*118.092*
1217		5.9055	1.1024												
		150.000	*28.000*	3.86	4.01	5.48	5.28	4.254	5.056	4.0160	5.2841	.125	.080	4.0193	5.2808
5217	3.3465	5.9055	1.9375	*98.0*	*101.8*	*139.2*	*134.1*	*108.05*	*128.42*	*102.006*	*134.216*	*3.18*	*2.03*	*102.090*	*134.132*
	85.000	*150.000*	*49.212*												
1317		7.0868	1.6142												
		180.000	*41.000*												
7317		7.0866	2.0079	4.05	4.27	6.47	6.19	4.655	5.852	4.2725	6.1977	.156	.100	4.2757	6.1945
		180.000	*51.000*	*102.9*	*108.4*	*164.3*	*157.2*	*118.24*	*148.64*	*108.522*	*157.422*	*3.96*	*2.54*	*108.604*	*157.340*
5317		7.0866	2.8750												
		180.000	*73.025*												

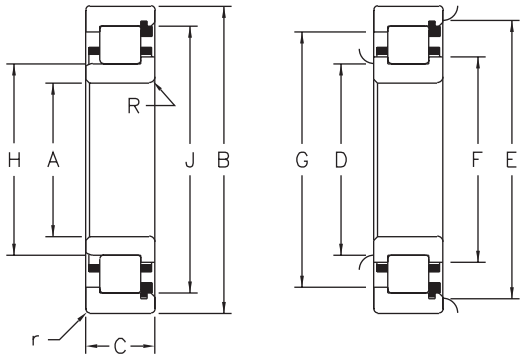
Please consult for availability.
▲ Largest fillet radius that will clear bearing corners.
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Cylindrical Roller Bearings

Series M

90mm, 95mm, 100mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain outer ring	E Max. housing shoulder dia. Ribbed outer ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1918		4.9213	.7087	3.82	3.92	4.67	4.55	4.046	4.446	3.9200	4.5526	.060	.040	3.9236	4.5490
		125.000	*18.000*	*97.0*	*99.6*	*118.6*	*115.6*	*102.77*	*112.92*	*99.568*	*115.636*	*1.52*	*1.02*	*99.660*	*115.544*
1018		5.5118	.9449	3.92	4.03	5.18	5.03	4.229	4.831	4.0300	5.0305	.100	.060	4.0335	5.0270
		140.000	*24.000*	*99.6*	*102.4*	*131.6*	*127.8*	*107.42*	*122.71*	*102.362*	*127.775*	*2.54*	*1.52*	*102.451*	*127.686*
1218		6.2992	1.811												
	3.5433	*160.000*	*30.000*	4.06	4.22	5.81	5.59	4.495	5.350	4.2212	5.5980	.125	.080	4.2246	5.5946
5218	*90.000*	6.2992	2.0625	*103.1*	*107.2*	*147.6*	*142.0*	*114.17*	*135.89*	*107.218*	*142.189*	*3.18*	*2.03*	*107.305*	*142.102*
		160.000	*52.388*												
1318		7.4803	1.6929												
		190.000	*43.000*												
7318		7.4803	2.1260	*4.26*	*4.48*	*6.80*	*6.51*	*4.895*	*6.148*	*4.4894*	*6.5121*	*.156*	*.100*	*4.4927*	*6.5088*
		190.000	*54.000*	*108.2*	*113.8*	*172.7*	*165.4*	*124.33*	*156.16*	*114.031*	*165.047*	*3.96*	*2.54*	*114.115*	*165.323*
5318		7.4803	2.8750												
		190.000	*73.025*												
1919		5.1181	.7087	4.02	4.11	4.87	4.74	4.241	4.622	4.1150	4.7476	.060	.040	4.1186	4.7440
		130.000	*18.000*	*102.1*	*104.4*	*123.7*	*120.4*	*107.72*	*117.40*	*104.521*	*120.589*	*1.52*	*1.02*	*104.613*	*120.497*
1019		5.7087	.9449	4.11	4.22	5.38	5.22	4.425	5.027	4.2260	5.2266	.100	.060	4.2296	5.2230
		145.000	*24.000*	*104.4*	*107.2*	*136.6*	*132.6*	*112.40*	*127.68*	*107.340*	*132.756*	*2.54*	*1.52*	*107.432*	*132.664*
1219		6.6929	1.2598												
	3.7402	*170.000*	*32.000*	4.29	4.46	6.18	5.95	4.765	5.688	4.4692	5.9544	.125	.080	4.4726	5.9510
5219	*95.000*	6.6929	2.1875	*109.0*	*113.3*	*157.0*	*151.1*	*121.03*	*144.48*	*113.518*	*151.242*	*3.18*	*2.03*	*113.604*	*151.156*
		170.000	*55.562*												
1319		7.8740	1.7717												
		200.000	*45.000*												
7319		7.8740	2.2047	4.53	4.80	7.16	6.83	5.215	6.468	4.8092	6.8319	.156	.100	4.8125	6.8286
		200.000	*56.000*	*115.1*	*121.9*	*181.9*	*173.5*	*132.46*	*164.29*	*122.154*	*173.530*	*3.96*	*2.54*	*122.238*	*173.446*
5319		7.8740	3.0625												
		200.000	*77.788*												
1920		5.5118	.7874	4.22	4.33	5.25	5.10	4.485	4.953	4.3305	5.1078	.060	.040	4.3342	5.1041
		140.000	*20.000*	*107.2*	*110.0*	*133.4*	*129.5*	*113.92*	*125.81*	*109.995*	*129.738*	*1.52*	*1.02*	*110.088*	*129.645*
1020		5.9055	.9449	4.31	4.42	5.58	5.42	4.627	5.220	4.4230	5.4236	.100	.060	4.4266	5.4200
		150.000	*24.000*	*109.5*	*112.3*	*141.7*	*137.7*	*117.52*	*132.59*	*112.344*	*137.759*	*2.54*	*1.52*	*112.435*	*137.668*
1220		7.0866	1.3386												
	3.9370	*180.000*	*34.000*	4.57	4.76	6.58	6.34	5.057	6.070	4.7640	6.3471	.156	.080	4.7675	6.3436
5220	*100.000*	7.0866	2.3750	*116.1*	*120.9*	*167.1*	*161.0*	*128.45*	*154.18*	*121.006*	*161.216*	*3.96*	*2.03*	*121.094*	*161.128*
		180.000	*60.325*												
1320		8.4646	1.8504												
		215.000	*47.000*												
7320		8.4646	2.3622	4.82	5.12	7.66	7.27	5.530	6.892	5.1246	7.2798	.187	1.00	5.1280	7.2764
		215.000	*60.000*	*122.4*	*130.0*	*194.6*	*184.6*	*140.46*	*175.06*	*130.165*	*184.907*	*4.75*	*2.54*	*130.251*	*184.821*
5320		8.4646	3.2500												
		215.000	*82.550*												

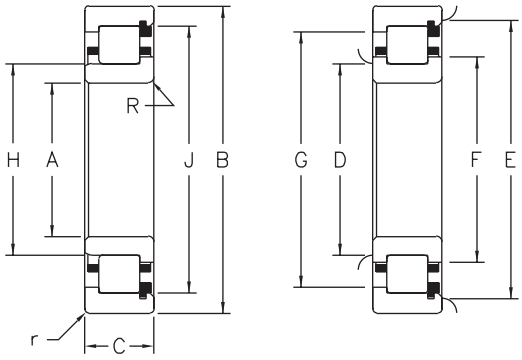
See facing page for footnotes.

Cylindrical Roller Bearings

Series M

105mm, 110mm, 120mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain outer ring	E Max. housing shoulder dia. Ribbed outer ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1921		5.7087	.7874	4.41	4.52	5.44	5.30	4.682	5.150	4.5274	5.3047	.060	.040	4.5311	5.3010
		145.000	*20.000*	*112.0*	*114.8*	*138.2*	*134.6*	*118.92*	*130.81*	*114.996*	*134.739*	*1.52*	*1.02*	*115.089*	*134.646*
1021		6.2992	1.0236	4.56	4.69	5.91	5.74	4.901	5.536	4.6910	5.7457	.100	.080	4.6947	5.7420
		160.000	*26.000*	*115.8*	*119.1*	*150.1*	*145.8*	*124.48*	*140.61*	*119.151*	*145.941*	*2.54*	*2.03*	*119.245*	*145.847*
1221		7.4803	1.4173												
		190.000	*36.000*	4.78	4.98	6.90	6.63	5.310	6.339	4.9811	6.6363	.156	.080	4.9847	6.6327
5221	4.1339	7.4803	2.5625	*121.4*	*126.5*	*175.3*	*168.4*	*134.87*	*161.01*	*126.520*	*168.562*	*3.96*	*2.03*	*126.611*	*168.470*
	105.000	*190.000*	*65.088*												
1321		8.8583	1.9291												
		225.000	*49.000*												
7321		8.8583	2.4803	5.04	5.36	8.01	7.61	5.794	7.211	5.3616	7.6164	.187	.100	5.3650	7.6130
		225.000	*63.000*	*128.0*	*136.1*	*203.4*	*193.3*	*147.17*	*183.16*	*136.185*	*193.456*	*4.75*	*2.54*	*136.270*	*193.370*
5321		8.8583	3.4375												
		225.000	*87.312*												
1922		5.9055	.7874	4.61	4.72	5.64	5.50	4.879	5.347	4.7242	5.5016	.060	.040	4.7280	5.4978
		150.000	*20.000*	*117.1*	*119.9*	*143.2*	*139.7*	*123.93*	*135.81*	*119.995*	*139.741*	*1.52*	*1.02*	*120.091*	*139.645*
1022		6.6929	1.1024	4.80	4.93	6.27	6.09	5.161	5.866	4.9350	6.0923	.100	.080	4.9387	6.0886
		170.000	*28.000*	*121.9*	*125.2*	*159.2*	*154.7*	*131.09*	*149.00*	*125.349*	*154.744*	*2.54*	*2.03*	*125.442*	*154.651*
1222		7.8740	1.4961												
		200.000	*38.000*	5.01	5.23	7.24	6.93	5.575	6.631	5.2343	6.9367	.156	.080	5.2379	6.9331
5222	4.3307	7.8740	2.7500	*127.2*	*132.8*	*183.9*	*176.0*	*141.60*	*168.43*	*132.951*	*176.192*	*3.96*	*2.03*	*133.042*	*176.101*
	110.000	*200.000*	*69.850*												
1322		9.4488	1.9685												
		240.000	*50.000*												
7322		9.4488	2.5591	5.35	5.71	8.55	8.12	6.200	7.692	5.7187	8.1235	.187	.100	5.7221	8.1201
		240.000	*65.000*	*135.9*	*145.0*	*217.2*	*206.2*	*157.48*	*195.38*	*145.255*	*206.337*	*4.75*	*2.54*	*145.341*	*206.251*
5322		9.4488	3.6250												
		240.000	*92.075*												
1924		6.4961	.8661	5.11	5.17	6.21	6.06	5.353	5.885	5.1771	6.0624	.080	.040	5.1810	6.0585
		165.000	*22.000*	*129.8*	*131.3*	*157.7*	*153.9*	*135.97*	*149.50*	*131.498*	*153.985*	*2.03*	*1.02*	*131.597*	*153.886*
1024		7.0866	1.1024	5.20	5.32	6.66	6.48	5.560	6.256	5.3290	6.4864	.125	.080	5.3328	6.4826
		180.000	*28.000*	*132.1*	*135.1*	*169.2*	*164.6*	*141.22*	*158.90*	*135.357*	*164.754*	*3.18*	*2.03*	*135.452*	*164.659*
1224		8.4646	1.5748												
		215.000	*40.000*	5.48	5.71	7.83	7.51	6.075	7.194	5.7141	7.5178	.187	.080	5.7178	7.5141
5224	4.7244	8.4646	3.0000	*139.2*	*145.0*	*198.9*	*190.8*	*154.30*	*182.73*	*145.138*	*190.952*	*4.75*	*2.03*	*145.232*	*190.858*
	120.000	*215.000*	*76.200*												
1324		10.2362	2.1654												
		260.000	*55.000*												
7324		10.2362	2.7953	5.82	6.18	9.26	8.78	6.700	8.315	6.1820	8.7816	.250	.100	6.1856	8.7780
		260.000	*71.000*	*147.8*	*157.0*	*135.2*	*223.0*	*170.18*	*211.20*	*157.023*	*223.053*	*6.35*	*2.54*	*157.115*	*222.961*
5324		10.2362	4.1250												
		260.000	*104.775*												

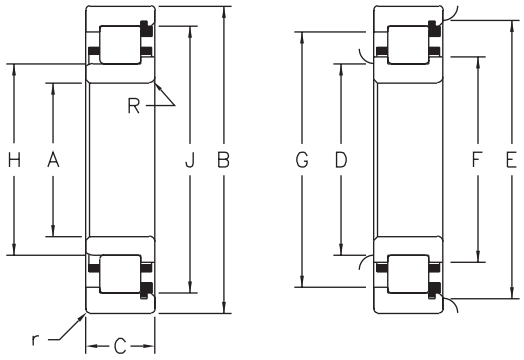
Please consult for availability.
▲ Largest fillet radius that will clear bearing corners.
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Cylindrical Roller Bearings

Series M

130mm, 140mm, 150mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain outer ring	E Max. housing shoulder dia. Ribbed outer ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1926		7.0866	.9449	5.48	5.60	6.76	6.60	5.804	6.417	5.6050	6.6065	.080	.060	5.6095	6.6020
		180.000	*24.000*	*139.2*	*142.2*	*171.7*	*167.6*	*147.42*	*162.99*	*142.367*	*167.085*	*2.03*	*1.52*	*142.481*	*167.691*
1026		7.8740	1.2992	5.63	5.81	7.41	7.18	6.085	6.913	5.8100	7.1878	.125	.080	5.8144	7.1834
		200.000	*33.000*	*143.0*	*147.6*	*188.2*	*182.4*	*154.56*	*175.59*	*147.574*	*182.570*	*3.18*	*2.03*	*147.686*	*182.458*
1226		9.0551	1.5748												
		230.000	*40.000*	5.87	6.10	8.42	8.12	6.485	7.761	6.1013	8.1250	.187	.100	6.1056	8.1207
5226	5.1181	9.0551	3.1250	*149.1*	*154.9*	*213.9*	*206.2*	*164.72*	*197.13*	*154.973*	*206.375*	*4.75*	*2.54*	*155.083*	*206.265*
	130.000	*230.000*	*79.375*												
1326		11.0236	2.2835												
		280.000	*58.000*												
7326		11.0236	2.9528	6.31	6.71	10.02	9.55	7.280	9.046	6.7140	9.5573	.250	.125	6.7181	9.5532
		280.000	*75.000*	*160.3*	*170.4*	*254.5*	*242.6*	*184.91*	*229.77*	*170.536*	*242.755*	*6.35*	*3.18*	*170.640*	*242.651*
5326		11.0236	4.3750												
		280.000	*111.125*												
1928		7.4803	.9449	5.87	6.00	7.15	7.00	6.200	6.803	6.0010	7.0027	.080	.060	6.0057	6.9980
		190.000	*24.000*	*149.1*	*152.4*	*181.6*	*177.8*	*157.48*	*172.80*	*152.425*	*177.868*	*2.03*	*1.52*	*152.544*	*177.749*
1028		8.2677	1.2992	6.05	6.20	7.80	7.58	6.478	7.307	6.2030	7.5810	.156	.080	6.2076	7.5764
		210.000	*33.000*	*153.7*	*157.5*	*198.1*	*192.5*	*164.54*	*185.60*	*157.556*	*192.557*	*3.96*	*2.03*	*157.673*	*192.440*
1228		9.8425	1.6535												
		250.000	*42.000*	6.36	6.63	9.15	8.83	7.050	8.440	6.6323	8.8353	.187	.100	6.6367	8.8309
5228	5.5118	9.8425	3.2500	*161.5*	*168.4*	*232.4*	*224.3*	*179.07*	*214.38*	*168.460*	*224.417*	*4.75*	*2.54*	*168.573*	*224.304*
	140.000	*250.000*	*82.550*												
1328		11.8110	2.4409												
		300.000	*62.000*												
7328		11.8110	3.2677	6.77	7.15	10.68	10.16	7.755	9.620	7.1529	10.1607	.312	.125	7.1571	10.1565
		300.000	*83.000*	*172.0*	*181.6*	*271.3*	*258.1*	*196.98*	*244.35*	*181.684*	*258.082*	*7.92*	*3.18*	*181.790*	*257.975*
5328		11.8110	4.5000												
		300.000	*114.300*												
1930		8.2677	1.1024	6.36	6.51	7.84	7.66	6.741	7.438	6.5100	7.6689	.125	.080	6.5153	7.6636
		210.000	*28.000*	*161.5*	*165.4*	*199.1*	*194.6*	*171.22*	*188.92*	*165.354*	*194.790*	*3.18*	*2.03*	*165.488*	*194.656*
1030		8.8583	1.3780	6.47	6.64	8.36	8.12	6.937	7.832	6.6410	8.1281	.156	.080	6.6463	8.1228
	5.9055	*225.000*	*35.000*	*164.3*	*168.6*	*212.3*	*206.2*	*176.20*	*198.93*	*168.681*	*206.454*	*3.96*	*2.03*	*168.816*	*206.319*
1230	*150.000*	10.6299	1.7717												
		270.000	*45.000*	6.86	7.14	9.88	9.52	7.600	9.095	7.1474	9.5218	.250	.100	7.1524	9.5168
5230		10.6299	3.5000	*174.2*	*181.4*	*251.0*	*241.8*	*193.04*	*231.01*	*181.544*	*241.854*	*6.35*	*2.54*	*181.672*	*241.726*
		270.000	*88.900*												

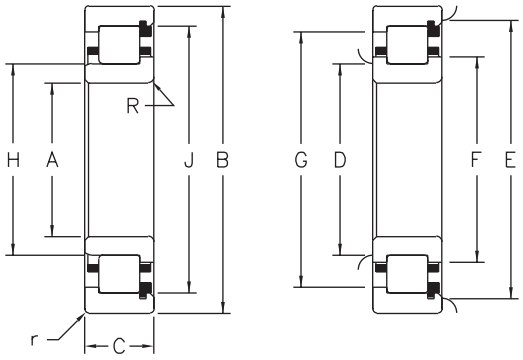
See facing page for footnotes

Cylindrical Roller Bearings

Series M

160mm, 170mm, 180mm, 190mm, 200mm Bores

Fully Crowned Rollers
Precision Ground Ribs
Contoured Roller Pockets
Rollers Individually Separated
Optional Full Complement



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. Shaft shoulder dia. Plain inner ring	D Min. Shaft shoulder dia. Ribbed inner ring	E Max. housing shoulder dia. Plain outer ring	E Max. housing shoulder dia. Ribbed outer ring	F Inner ring rib O.D.	G Outer ring rib I.D.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	Inner Ring & Roller Assembly Over Roller Dia.
1932		8.6614	1.1024	6.76	6.90	8.24	8.06	7.136	7.833	6.9050	8.0641	.125	.080	6.9105	8.0586
		220.000	*28.000*	*171.7*	*175.3*	*209.3*	*204.7*	*181.25*	*198.96*	*175.387*	*204.828*	*3.18*	*2.03*	*175.526*	*204.689*
1032		9.4488	1.4961	6.91	7.08	8.92	8.66	7.400	8.353	7.0840	8.6690	.156	.080	7.0894	8.6636
	6.2992	*240.000*	*38.000*	*175.5*	*179.8*	*226.6*	*220.0*	*187.96*	*212.17*	*179.934*	*220.193*	*3.96*	*2.03*	*180.071*	*220.056*
1232	*160.000*	11.4173	1.8898												
		290.000	*48.000*	7.31	7.62	10.61	10.22	8.105	9.757	7.6234	10.2246	.250	.100	7.6286	10.2194
5232		11.4173	3.8750	*185.7*	*193.5*	*269.5*	*259.6*	*205.87*	*247.83*	*193.634*	*259.705*	*6.35*	*2.54*	*193.767*	*259.572*
		290.000	*98.425*												
1934		9.0551	1.1024	7.15	7.30	8.63	8.45	7.531	8.228	7.3000	8.4593	.125	.080	7.3057	8.4536
		230.000	*28.000*	*181.6*	*185.4*	*219.2*	*214.6*	*191.29*	*208.99*	*185.420*	*214.866*	*3.18*	*2.03*	*185.564*	*214.722*
1034		10.2362	1.6535	7.41	7.61	9.61	9.31	7.965	8.969	7.6150	9.3193	.187	.080	7.6205	9.3138
	6.6929	*260.000*	*42.000*	*188.2*	*193.3*	*244.1*	*236.5*	*202.31*	*227.81*	*193.421*	*236.710*	*4.75*	*2.03*	*193.560*	*236.571*
1234	*170.000*	12.2047	2.0472												
		310.000	*52.000*	7.76	8.08	11.32	10.93	8.625	10.423	8.0899	10.9344	.250	.125	8.0952	10.9291
5234		12.2047	4.1250	*197.1*	*205.2*	*287.5*	*277.6*	*219.08*	*264.74*	*205.483*	*277.734*	*6.35*	*3.18*	*205.618*	*277.599*
		310.000	*104.775*												
1936		9.8425	1.2992	7.60	7.78	9.38	9.15	8.055	8.885	7.7800	9.1592	.156	.080	7.7858	9.1534
		250.000	*33.000*	*193.0*	*197.6*	*238.2*	*232.4*	*204.60*	*225.68*	*197.612*	*232.644*	*3.96*	*2.03*	*197.760*	*232.496*
1036		11.0236	1.8110	7.86	8.09	10.35	10.02	8.478	9.638	8.0940	10.0217	.187	.080	8.0997	10.0160
	7.0866	*280.000*	*46.000*	*199.6*	*205.5*	*262.9*	*254.5*	*215.34*	*244.80*	*205.588*	*254.551*	*4.75*	*2.03*	*205.733*	*254.406*
1236	*180.000*	12.5984	2.0472												
		320.000	*52.000*	8.17	8.51	11.74	11.36	9.050	10.849	8.5153	11.3600	.250	.125	8.5208	11.3545
5236		12.5984	4.2500	*207.5*	*216.2*	*298.2*	*288.5*	*229.87*	*275.56*	*216.289*	*288.544*	*6.35*	*3.18*	*216.428*	*288.405*
		320.000	*107.950*												
1938		10.2362	1.2992	7.99	7.17	9.78	9.55	8.453	9.283	8.1779	9.5578	.156	.080	8.1844	9.5513
		260.000	*33.000*	*202.9*	*182.1*	*248.4*	*242.6*	*214.71*	*235.79*	*207.719*	*242.768*	*3.96*	*2.03*	*207.884*	*242.603*
1038		11.4173	1.8110	8.25	8.48	10.74	10.41	8.895	10.009	8.4880	10.4164	.187	.080	8.4944	10.4100
	7.4803	*290.000*	*46.000*	*209.6*	*215.4*	*272.8*	*264.4*	*225.93*	*254.23*	*215.595*	*264.576*	*4.75*	*2.03*	*215.758*	*264.413*
1238	*190.000*	13.3858	2.1654												
		340.000	*55.000*	8.66	9.02	12.63	12.19	9.610	11.436	9.0266	12.1938	.312	.125	9.0326	12.1878
5238		13.3858	4.5000	*220.1*	*229.1*	*320.37*	*309.63*	*244.11*	*290.48*	*229.276*	*309.723*	*7.42*	*3.18*	*229.428*	*309.570*
		340.000	*114.300*												
1940		11.0236	1.4961	8.48	8.66	10.49	10.24	8.976	9.930	8.6600	10.2463	.187	.080	8.6667	10.2396
		280.000	*38.000*	*215.4*	*220.0*	*266.4*	*260.1*	*227.99*	*252.22*	*219.964*	*260.256*	*4.75*	*2.03*	*220.134*	*260.086*
1040		12.2047	2.0079	8.70	8.96	11.47	11.12	9.394	10.692	8.9640	11.1223	.187	.080	8.9705	11.1158
	7.8740	*310.000*	*51.000*	*221.0*	*227.6*	*291.3*	*282.4*	*238.61*	*271.58*	*227.686*	*282.506*	*4.75*	*2.03*	*227.850*	*282.342*
1240	*200.000*	14.1732	2.2835												
		360.000	*58.000*	9.15	9.53	13.17	12.70	10.135	12.134	9.5353	12.7028	.312	.125	9.5416	12.6965
5240		14.1732	4.7500	*232.4*	*242.1*	*334.5*	*322.6*	*257.43*	*308.20*	*242.197*	*322.651*	*7.92*	*3.18*	*242.357*	*322.491*
		360.000	*120.650*												

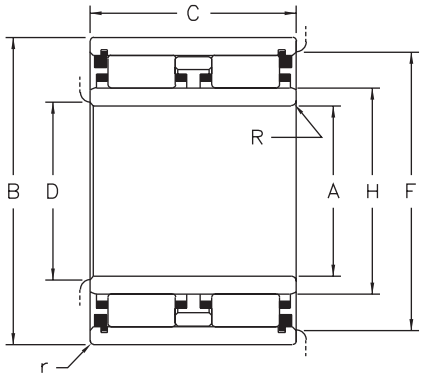
Please consult for availability.
▲ Largest fillet radius that will clear bearing corners.
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Cylindrical Roller Bearings

Series M

25 thru 60mm Bore

Double Row
Fully Crowned Rollers
Contoured Roller Pockets
Rollers Individually Separated



Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. shaft shoulder dia.	E Min. housing shoulder dia.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
6205	.9843	2.0472	1.6250	1.20	1.85	1.2664	1.7659	.040	.040	1.2677	10200	2640	15700
	25.000	*52.000*	*41.275*	*30.5*	*47.0*	*32.166*	*44.854*	*1.02*	*1.02*	*32.200*	*45400*	*11700*	*69900*
6206	1.1811	2.4409	1.8750	1.42	2.22	1.4985	2.1289	.040	.040	1.4999	15500	4010	24300
	30.000	*62.000*	*47.625*	*36.1*	*56.4*	*38.062*	*54.074*	*1.02*	*1.02*	*38.098*	*69000*	*17800*	*108000*
6207	1.3780	2.8346	2.1250	1.64	2.57	1.7311	2.4595	.040	.040	1.7327	19400	5020	30600
	35.000	*72.000*	*53.975*	*41.6*	*65.3*	*43.970*	*62.471*	*1.02*	*1.02*	*44.011*	*86300*	*22300*	*136000*
6208	1.5748	3.1496	2.3750	1.86	2.87	1.9657	2.7409	.060	.040	1.9673	24600	6370	41300
	40.000	*80.000*	*60.325*	*47.2*	*72.9*	*49.929*	*69.619*	*1.52*	*1.02*	*49.969*	*109000*	*28300*	*184000*
6209	1.7717	3.3465	2.3750	2.08	3.08	2.1858	2.9523	.060	.040	2.1877	26700	6910	47500
	45.000	*85.000*	*60.325*	*52.8*	*78.2*	*55.519*	*74.988*	*1.52*	*1.02*	*55.568*	*119000*	*30700*	*211000*
6210	1.9865	3.5433	2.3750	2.27	3.26	2.3803	3.1317	.060	.040	2.3823	27100	7020	50300
	50.000	*90.000*	*60.325*	*57.6*	*82.8*	*60.460*	*79.545*	*1.52*	*1.02*	*60.511*	*121000*	*31200*	*224000*
6211	2.1654	3.9370	2.6250	2.52	3.60	2.6339	3.4653	.080	.060	2.6361	32900	8520	61900
	55.000	*100.000*	*66.675*	*64.0*	*87.9*	*66.901*	*88.019*	*2.03*	*1.52*	*66.957*	*146000*	*37900*	*275000*
6212	2.3622	4.3307	2.8750	2.73	3.99	2.8496	3.8489	.080	.060	2.8519	42300	10900	77700
	60.000	*110.000*	*73.025*	*69.3*	*101.3*	*72.380*	*97.762*	*2.03*	*1.52*	*72.438*	*188000*	*48500*	*346000*

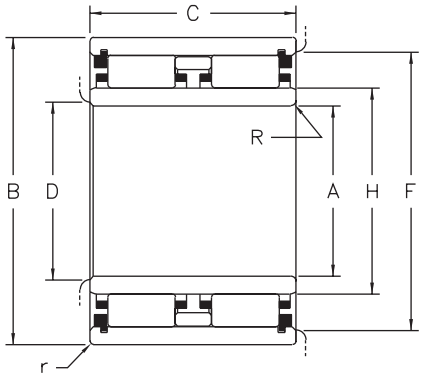
Please consult for availability.
▲ Largest fillet radius that will clear bearing corners.
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Cylindrical Roller Bearings

Series M

65 thru 95mm Bore

Double Row
Fully Crowned Rollers
Contoured Roller Pockets
Rollers Individually Separated



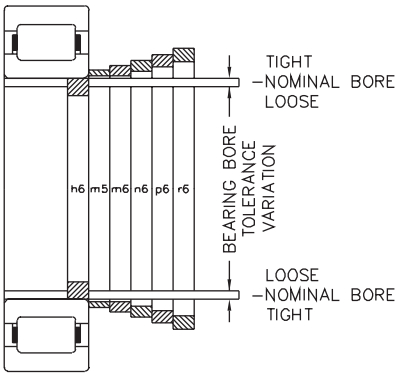
Dimensions (inches/*mm*)

Basic bearing number	A Bore diameter	B Outside diameter	C Width	D Min. shaft shoulder dia.	E Min. housing shoulder dia.	H Inner ring raceway O.D.	J Outer ring raceway I.D.	R Inner ▲	r Outer ▲	Outer Ring & Roller Assembly Under Roller Dia.	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C_0 Basic static load rating
6213	2.5591	4.7244	3.0000	3.03	4.33	3.1662	4.1655	.100	.060	3.1685	45900	11900	88700
	65.000	*120.000*	*76.200*	*77.00*	*110.0*	*80.421*	*105.804*	*2.54*	*1.52*	*80.480*	*204000*	*53000*	*395000*
6214	2.7559	4.9213	3.1250	3.22	4.55	3.3375	4.3912	.100	.060	3.3402	51300	13300	100000
	70.000	*125.000*	*79.375*	*81.8*	*115.6*	*84.772*	*111.536*	*2.54*	*1.52*	*84.840*	*228000*	*59200*	*445000*
6215	2.9528	5.1181	3.2500	3.37	4.73	3.5045	4.5583	.100	.060	3.5073	55800	14400	113000
	75.000	*130.000*	*82.550*	*85.6*	*120.1*	*89.014*	*115.781*	*2.54*	*1.52*	*89.085*	*248000*	*64100*	*503000*
6216	3.1496	5.5118	3.5000	3.59	5.09	3.7514	4.9078	.100	.080	3.7542	63100	16300	127000
	80.000	*140.000*	*88.900*	*91.2*	*129.3*	*95.286*	*124.658*	*2.54*	*2.03*	*95.356*	*281000*	*72500*	*565000*
6217	3.3465	5.9055	3.8750	3.86	5.48	4.0160	5.2841	.125	.080	4.0193	77600	20100	159000
	85.000	*150.000*	*98.425*	*98.0*	*101.8*	*102.006*	*134.216*	*3.18*	*2.03*	*102.090*	*345000*	*89400*	*708000*
6218	3.5433	6.2922	4.1250	4.06	5.81	4.2212	5.5980	.125	.080	4.2246	87400	22600	178000
	90.000	*160.000*	*104.775*	*103.1*	*147.6*	*107.218*	*142.189*	*3.18*	*2.03*	*107.305*	*389000*	*101000*	*792000*
6219	3.7402	6.6929	4.3750	4.29	6.18	4.4692	5.9544	.125	.080	4.4726	100000	25900	206000
	95.000	*170.000*	*111.125*	*109.0*	*157.0*	*113.518*	*151.242*	*3.18*	*2.03*	*113.604*	*445000*	*115000*	*917000*

Please consult for availability.
▲ Largest fillet radius that will clear bearing corners.
Selection guide, pages G-5, G-6.
Additional information, page G-31.
For shaft and housing bearing seat diameters, pages G-25 through G-30.

Shaft Bearing Seat Diameters

For Cylindrical Roller Bearings



Bearing bore tolerances are in accord with the system of tolerancing established by the International Standards Organization (ISO) and adopted by the American Bearing Manufacturers Association (ABMA) and the American National Standards Institute (ANSI).

A system of limits and fits has been established by ISO for shafts. A portion of this system has been adopted by ABMA to provide flexibility in selecting shaft fits. Shaft fits are designated by a lower case letter and a number, such as h6. The letter indicates the location of the shaft tolerance limits with respect to the nominal bearing bore. The number indicates the size of the tolerance zone.

Shaft fits recommended for various types of applications are listed in the table at right. A graphic relationship of various shaft fits is illustrated in the figure at the left.

Many factors influence the proper fit of the bearing inner ring on a shaft. The magnitude of the load and its direction with respect to bearing inner or outer rings are generally the first factors considered in shaft fit selection. The effects of other factors such as vibration, shock, temperature, speed, etc., are of secondary importance but sometimes need to be considered. Where assembly or disassembly requirements are of prime importance special shaft fits may be required.

Appropriate diameter shafting is determined (as shown) from the tables below.

Class of fit and shaft diameters (inches/μ*m*)

Bearing series 1000, 1200, 1300, 1900, 5200, 5300, 7300	Nominal bearing bore and shaft diameter		Bearing bore tolerance△		Bearing/Shaft diameter fits G			
					h6		m5	
					Tolerance		Tolerance	
Basic size	*mm*	inches	μm	inches	Fit	Shaft dia.	Fit	Shaft dia.
					.0004T	–.0000	.0011T	+.0007
04	*20.000*	.7874	+0	+.0000	.0005L	–.0005	.0003T	+.0003
05	*25.000*	.9843	*–10*	–.0004	*10T*	*+0*	*27T*	*+17*
06	*30.000*	1.1811			*13L*	*–13*	*8T*	*+8*
07	*35.000*	1.3780			.0005T	+.0000	.0013T	+.0008
08	*40.000*	1.5748	*+0*	+.0000	.0006L	–.0006	.0004T	+.0004
09	*45.000*	1.7717	*–12*	–.0005	*12T*	*+0*	*33T*	*+20*
10	*50.000*	1.9685			*16L*	*–16*	*9T*	*+9*
11	*55.000*	2.1654						
12	*60.000*	2.3622			.0006T	+.0000	.0016T	+.0010
13	*65.000*	2.5591	*+0*	+.0000	.0007L	+.0007	.0005T	+.0005
14	*70.000*	2.7559	*–15*	–.0006	*15T*	*+0*	*39T*	*+24*
15	*75.000*	2.9528			*19L*	*–19*	*11T*	*+11*
16	*80.000*	3.1496						
17	*85.000*	3.3465						
18	*90.000*	3.5433						
19	*95.000*	3.7402			.0008T	–.0000	.0019T	+.0011
20	*100.000*	3.9370	*+0*	+.0000	.0009L	–.0009	.0005T	+.0005
21	*105.000*	4.1339	*–20*	–.0008	*20T*	*+0*	*48T*	*+28*
22	*110.000*	4.3307			*22L*	*–22*	*13T*	*+13*
24	*120.000*	4.7244						
26	*130.000*	5.1181						
28	*140.000*	5.5118			.0010T	–.0000	.0023T	+.0013
30	*150.000*	5.9055	*+0*	+.0000	.0010L	–.0010	.0006T	+.0006
32	*160.000*	6.2992	–25	–.0010	*25T*	*+0*	*58T*	*+33*
34	*170.000*	6.6929			*25L*	*–25*	*15T*	*+13*
36	*180.000*	7.0866						
					.0012T	+.0000	.0026T	+.0014
38	*190.000*	7.4803	*+0*	+.0000	.0012L	–.0012	.0006T	+.0006
40	*200.000*	7.8740	*–30*	–.0012	*30T*	*+0*	*67T*	*+37*
					29L	*–29*	*17T*	*+17*

See facing page for footnotes.

Class of fit selection

Operating conditions ■	Nominal shaft dia.		Class of fit	Remarks
	mm	inches		
Inner ring stationary in relation to direction of load	*All diameters*		h6	Tap fit inner ring
Inner ring rotating in relation to direction of load (Normal load ≤=0.18C)●	*17-40*	0.67-1.57	m5	Press fit inner ring
	40-65	1.57-2.56	m6	
	65-140	2.56-5.52	n6	
	140-200	5.52-7.88	p6	
Inner ring rotating in relation to direction of load (Heavy load >.018C)●	*35-65*	1.37-2.56	n6	Heavy press fit inner ring
	65-140	2.56-5.52	p6	
	140-200	5.52-7.88	r6	

Bearing series 1000, 1200, 1300, 1900, 5200, 5300, 7300	Bearing/Shaft diameter fits ▲							
	m6		n6		p6		r6	
	Tolerance		Tolerance		Tolerance		Tolerance	
Basic size	Fit	Shaft dia.	Fit	Shaft dia.	Fit	Shaft dia.	Fit	Shaft dia.
04	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
05	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
06	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
07	.0015T	+.0010	.0018T	+.0013	. . . . .	. . . . .	. . . . .	. . . . .
thru	.0004T	+.0004	.0007T	+.0007	. . . . .	. . . . .	. . . . .	. . . . .
10	*38T*	*+25*	*46T*	*+33*	. . . . .	. . . . .	. . . . .	. . . . .
	9T	*+9*	*17T*	*+17*	. . . . .	. . . . .	. . . . .	. . . . .
11	.0018T	+.0012	.0021T	+.0015	.0027T	+.0021	. . . . .	. . . . .
thru	.0005T	+.0005	.0008T	+.0008	.0014T	+.0014	. . . . .	. . . . .
16	*45T*	*+30*	*54T*	*+39*	*66T*	*+51*	. . . . .	. . . . .
	11T	*+11*	*20T*	*+20*	*32T*	*+32*	. . . . .	. . . . .
17	.0022T	+.0014	.0027T	+.0019	.0033T	+.0025	.0037T	+.0029
thru	.0005T	+.0005	.0010T	+.0010	.0016T	+.0016	.0020T	+.0020
24	*55T*	*+35*	*65T*	*+45*	*79T*	*+59*	*96T*	*+76*
	13T	*+13*	*23T*	*+23*	*37T*	*+37*	*54T*	*+54*
26	.0026T	+.0016	.0032T	+.0022	.0038T	+.0028	.0045T	+.0035
thru	.0006T	+.0006	.0012T	+.0012	.0018T	+.0018	.0025T	+.0025
36	*65T*	*+40*	*77T*	*+52*	*93T*	*+68*	*118T*	*+93*
	15T	*+15*	*27T*	*+27*	*43T*	*+43*	*68T*	*+68*
	.0030T	+.0018	.0038T	+.0026	.0044T	+.0032	.0054T	+.0042
38	.0006T	+.0006	.0014T	+.0014	.0020T	+.0020	.0030T	+.0030
40	*76T*	*+46*	*90T*	*+60*	*109T*	*+79*	*136T*	*+106*
	17T	*+17*	*31T*	*+31*	*50T*	*+50*	*77T*	*+77*

▲ Symbol L indicates a loose or clearance fit. Symbol T indicates a tight or interference fit. The appropriate shaft diameter for any class of fit can be easily determined by applying the shaft tolerance to the nominal shaft diameter. Example: (Using basic bearing size 03 and fit class h6)

	inches		mm	
Nominal shaft diameter	= .6693	.6693	= *17.000*	*17.000*
Shaft diameter tolerance	= *+.0000*	*–.0004*	= *+ 0.000*	*– 0.010*
Resultant shaft diameter	= .6693	.6689	= 17.000	*16.989*

1μm = .001 mm

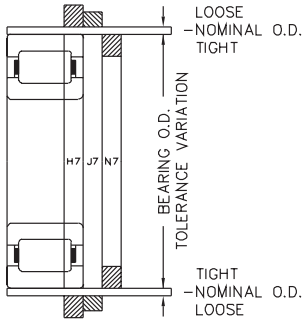
■ For solid steel shafts.

● C = Basic load rating of bearing.

△ The arithmetical mean of the largest and smallest single diameter to be within tolerance shown. Allowable deviations from mean diameter per ANSI/ABMA STD 20, latest printing.

Housing Bearing Seat Diameters

For Cylindrical Roller Bearings



Bearing outside diameter tolerances are in accord with the system of tolerancing established by the International Standards Organization (ISO) and adopted by the American Bearing Manufacturers Association (ABMA) and the American National Standards Institute (ANSI).

A system of limits and fits has been established by ISO for holes. A portion of this system has been adopted by ABMA to provide flexibility in selecting housing fits. Housing fits are designated by a capital letter and a number such as H7. The letter indicates the location of the housing bore tolerance limits with respect to the nominal bearing O.D. The number indicates the size of the tolerance zone.

Housing fits recommended for various types of applications are listed in the table at the right. A graphic relationship of various housing fits is illustrated in the figure at the left. The class of fit is determined by nature of loading (oscillating, vibrating, reversing, etc.), axial movement requirements, temperature conditions, housing material and cross section of housing.

Shaft expansion increases bearing center distances and requires all but one bearing on a shaft to be movable axially in the housing. In most bearings the outer rings are subjected to stationary loads which permit a loose housing fit.

Operating temperature may affect the housing fit, as the housing may dissipate heat rapidly and not expand with the outer ring. However, the loose fit must never be greater than necessary. Excessive looseness results in less accurate shaft centering and additional ring deformation under load.

The appropriate housing bores are determined (as shown) from the tables below.

Class of fit and housing bores (inches/μ*m*)

Bearing series				Nominal bearing O.D. and housing bore		Bearing O.D. tolerance△	Bearing/Housing diameter fits▲					
							H7		J7		N7	
							Tolerance		Tolerance		Tolerance	
1900	1000	1200 5200	1300 5300 7300				Fit	Housing bore	Fit	Housing bore	Fit	Housing bore
Basic size				*mm*	inches							
. . .	. . .	205	304	*52*	2.0472	+.0000	.0000	–.0000	.0004T	–.0004	.0002L	–.0003
. . .	. . .	206	305	*62*	2.4409	–.0005	.0017L	+.0012	.0013L	≠.0008	.0015T	–.0015
. . .	. . .	207	306	*72*	2.8346	*+0*	*0*	*–0*	*12T*	*–12*	*4L*	*–9*
911	010	208	307	*80*	3.1496	*–13*	*43L*	*+30*	*31L*	*–18*	*39T*	*–39*
912	. . .	209	. . .	*85*	3.3465							
913	011	210	308	*90*	3.5433							
. . .	012	. . .	. . .	*95*	3.7402	+.0000	.0000	–.0000	.0005T	–.0005	.0002L	–.0004
914	013	211	309	*100*	3.9370	–.0006	.0020L	+.0014	.0015L	+.0009	.0018T	–.0018
915	. . .	. . .	. . .	*105*	4.1339	*+0*	*0*	*–0*	*13T*	*–13*	*5L*	*–10*
916	014	212	310	*110*	4.3307	*–15*	*50L*	*+35*	*37L*	*+22*	*45T*	*–45*
. . .	015	. . .	. . .	*115*	4.5276							
917	. . .	213	311	*120*	4.7244							
918	016	214	. . .	*125*	4.9213							
919	017	215	312	*130*	5.1181	+.0000	.0000	–.0000	.0006T	–.0006	.0002L	–.0006
920	018	216	313	*140*	5.5118	–.0008	.0024L	+.0016	.0018L	+.0010	.0022T	–.0022
921	019	. . .	. . .	*145*	5.7087	*+0*	*0*	*–0*	*14T*	*–14*	*6L*	*–12*
922	020	217	314	*150*	5.9055	*–20*	*61L*	*+41*	*44L*	*+26*	*52T*	*–52*
. . .	021	218	315	*160*	6.2992	+.0000	.0000	–.0000	.0006T	–.0006	.0004L	–.0006
924	. . .	. . .	. . .	*165*	6.4961	–.0010	.0026L	+.0016	.0020L	+.0010	.0022T	–.0022
. . .	022	219	316	*170*	6.6929	*+0*	*0*	*–0*	*14T*	*–14*	*13L*	*–12*
926	024	220	317	*180*	7.0866	*–25*	*65L*	*+40*	*51L*	*+26*	*57T*	*–52*
928	. . .	221	318	*190*	7.4803							
. . .	026	222	319	*200*	7.8740							
930	028	. . .	. . .	*210*	8.2677							
. . .	. . .	224	320	*215*	8.4646	+.0000	.0000	–.0000	.0007T	–.0007	.0004L	–.0008
932	. . .	. . .	321	*220*	8.6614	–.0012	.0030L	+.0018	.0023L	+.0011	.0026T	–.0026
. . .	030	. . .	. . .	*225*	8.8583	*+0*	*0*	*–0*	*16T*	*–16*	*16L*	*–14*
934	. . .	226	322	*230*	9.0551	*–30*	*76L*	*+46*	*60L*	*+30*	*60T*	*–60*
. . .	032	. . .	. . .	*240*	9.4488							
936	. . .	228	. . .	*250*	9.8425							
938	034	. . .	324	*260*	10.2362							
. . .	. . .	230	. . .	*270*	10.6299	+.0000	.0000	–.0000	.0007T	–.0007	.0006L	–.0008
940	036	. . .	326	*280*	11.0236	–.0014	.0034L	+.0020	.0027L	+.0013	.0028T	–.0028
. . .	038	232	. . .	*290*	11.4173	*+0*	*0*	*–0*	*16T*	*–16*	*21L*	*–14*
. . .	. . .	. . .	328	*300*	11.8110	*–35*	*87*	*+52*	*71L*	*+36*	*66T*	*–66*
. . .	040	234	. . .	*310*	12.2047							
						+.0000	.0000	–.0000	.0007T	–.0007	.0008L	–.0008
. . .	. . .	236	330	*320*	12.5984	–.0016	.0038L	+.0022	.0030L	+.0014	.0030T	–.0030
. . .	. . .	238	. . .	*340*	13.3858	*+0*	*0*	*–0*	*8T*	*–18*	*24L*	*–16*
. . .	. . .	240	. . .	*360*	14.1732	*–40*	*97L*	*+57*	*79L*	*+39*	*73T*	*–73*

1 μ*m* = *.001 mm*

☐ Minimum housing bore is same as ABMA fit class; tolerance is within ABMA range.

■ Style A outer ring has oversize O.D. designed to give a heavy press fit with a tap fit housing bore. Inner ring to be press fit; see pages G-25, G-26 for values.

△ The arithmetical mean of the largest and smallest single diameter to be within tolerance shown. Allowable deviations from mean diameter per ANSI/ABMA STD 20, latest printing.

Class of fit selection

Operating conditions	Class of fit	Remarks
Housing stationary in relation to direction of load	H7	Push fit outer ring for non-separable bearing styles Mu…UV and MU…UM
Housing stationary in relation to direction of load	J7□	Tap fit outer ring
Housing rotating in relation to direction of load	N7□	Press fit outer ring
	■	Heavy press fit with Style A outer ring

Heavy press fit with style A outer ring (inches/μm)

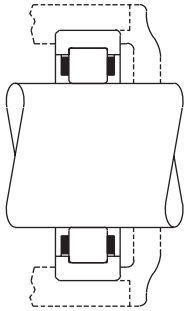
Bearing series 1900	1000	1200 5200	1300 5300 7300	Nominal bearing O.D. and housing bore Style A outer ring (Basic size) mm	inches	Bearing O.D. tolerance△	Bearing/Housing diameter fits▲ Tolerance Fit		Housing bore	
. . .	. . .	205	304	*52.024*	2.0482		.0000	*0*	–.0005	*–13*
							.0014T	*35T*	–.0014	*–35*
. . .	. . .	206	305	*62.029*	2.4421	+.0000 –.0005	.0001T	*2T*	–.0006	*–15*
							.0016T	*40T*	–.0016	*–40*
. . .	. . .	207	306	*72.032*	2.8359	*+0* *–13*	.0002T	*5T*	–.0007	*–18*
							.0017T	*43T*	–.0017	*–43*
911	010	208	307	*80.035*	3.1510		.0003T	*7T*	–.0008	*–20*
							.0018T	*45T*	–.0018	*–45*
912	. . .	209	. . .	*85.039*	3.3480		.0004T	*10T*	–.0010	*–25*
							.0020T	*50T*	–.0020	*–50*
913	011	210	308	*90.040*	3.5449		.0005T	*13T*	–.0011	*–28*
							.0021T	*53T*	–.0021	*–53*
. . .	012	. . .	. . .	*95.044*	3.7419	+.0000 –.0006	.0006T	*15T*	–.0012	*–30*
							.0022T	*56T*	–.0022	*–56*
914	013	211	309	*100.046*	3.9388	*+0* *–15*	.0007T	*18T*	–.0013	*–33*
							.0023T	*58T*	–.0023	*–58*
915	. . .	. . .	. . .	*105.049*	4.1358		.0008T	*20T*	–.0014	*–35*
							.0024T	*61T*	–.0024	*–61*
916	014	212	310	*110.056*	4.3329					
. . .	015	. . .	. . .	*115.057*	4.5298		.0009T	*23T*	–.0017	*–38*
917	. . .	213	311	*120.056*	4.7266		.0027T	*69T*	–.0027	*–69*
918	016	214	. . .	*125.059*	4.9236					
919	017	215	312	*130.058*	5.1204	+.0000 –.0008	.0009T	*23T*	–.0017	*–43*
920	018	216	313	*140.058*	5.5141		.0029T	*74T*	–.0029	*–74*
921	019	. . .	. . .	*145.067*	5.7113					
922	020	217	314	*150.066*	5.9081	*+0*	.0010T	*25T*	–.0018	*–45*
						–20	.0032T	*81T*	–.0032	*–81*
. . .	021	218	315	*160.071*	6.3020	+.0000				
924	. . .	. . .	. . .	*165.072*	6.4989	–.0010	.0010T	*25T*	–.0020	*–50*
. . .	022	219	316	*170.071*	6.6957	*+0*	.0034T	*86T*	–.0034	*–86*
926	024	220	317	*180.071*	7.0894	*–25*				
928	. . .	221	318	*190.076*	7.4833		.0011T	*28T*	–.0023	*–58*
							.0037T	*94T*	–.0037	*–94*
							.0012T	*30T*	–.0024	*–60*
. . .	026	222	319	*200.078*	7.8771		.0038T	*97T*	–.0038	*–97*
							.0013T	*33T*	–.0025	*–63*
930	028	. . .	. . .	*210.081*	8.2709	+.0000 –.0012	.0039T	*99T*	–.0039	*–99*
							.0013T	*33T*	–.0025	*–63*
. . .	. . .	224	320	*215.087*	8.4680		.0041T	*104T*	–.0041	*–104*
932	. . .	. . .	. . .	*220.088*	8.6649	*+0*	.0014T	*36T*	–.0026	*–66*
. . .	030	. . .	321	*225.090*	8.8618	*–30*	.0042T	*107T*	–.0042	*–107*
							.0015T	*38T*	–.0027	*–68*
934	. . .	226	. . .	*230.091*	9.0587		.0043T	*109T*	–.0043	*–109*
. . .	032	. . .	322	*240.096*	9.4526		.0015T	*38T*	–.0027	*–68*
936	. . .	228	. . .	*250.096*	9.8463		.0045T	*114T*	–.0045	*–114*
938	034	. . .	324	*260.101*	10.2402					
. . .	. . .	230	. . .	*270.101*	10.6339	+.0000 –.0014	.0015T	*38T*	–.0029	*–73*
940	036	. . .	326	*280.101*	11.0276		.0047T	*119T*	–.0047	*–119*
						+0	.0016T	*41T*	–.0030	*–76*
. . .	038	232	. . .	*290.109*	11.4216	*–35*	.0050T	*127T*	–.0050	*–127*
. . .	. . .	. . .	328	*300.111*	11.8154		.0017T	*43T*	–.0031	*–78*
. . .	040	234	. . .	*310.111*	12.2091		.0051T	*130T*	–.0051	*–130*
. . .	. . .	236	330	*320.121*	12.6032	+.0000	.0017T	*43T*	–.0033	*–83*
. . .	. . .	238	. . .	*340.121*	13.3906	–.0016	.0055T	*140T*	–.0055	*–140*
. . .	. . .	240	. . .	*360.124*	14.1781	*+0*	.0018T	*46T*	–.0043	*–86*
						–40	.0056T	*142T*	–.0056	*–142*

▲ Symbol L indicates a loose or clearance fit. Symbol T indicates a tight or interference fit. The appropriate housing bore for any class of fit can be easily determined by applying the housing tolerance to the nominal housing bore. Example: (Using basic bearing size 926 and fit class N7)

	inches			*mm*	
Nominal housing bore	= 7.0866	7.0866	=	*180.000*	*180.000*
Housing bore tolerance	= – .0006	– .0022	=	*– .012*	*– .052*
Resultant housing bore	= 7.0860	7.0844	=	*179.988*	*179.948*

Operation Without Inner Ring

For Cylindrical Roller Bearings



Outer ring and roller assembly

for Series M-EX, M-EAX, M-EB, M-EAB, M-TV, M-TAV, M-UV and M-UAV

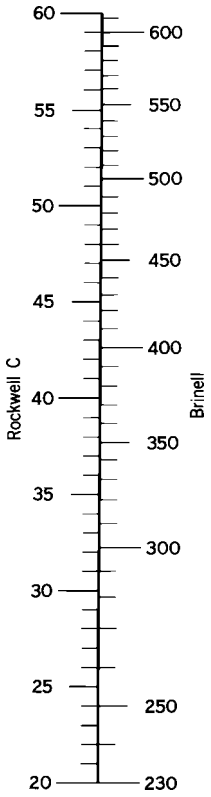
Cylindrical roller bearings with the inner ring omitted may be installed so that the rollers operate directly on the surface of the shaft.

This type of design is useful for applications where space is limited or a larger shaft is required. Surface hardness of shaft must be Rockwell C59 to C64 to achieve full bearing capacity. Where the required hardness cannot be attained, the bearing rating must be reduced accordingly. Where the shaft is case hardened, the combination of case depth and core hardness must be adequate. Consult Link-Belt Bearing Division, Rexnord Corp. for a specific recommendation. Shaft surface should be finished to a roughness value of 13 micro-inches, RMS, maximum *(.33 µm)*.

Maximum and minimum shaft diameter values for tap fit and press fit outer rings are listed below.

Hardness factor

If operation at rated capacity is desired when cylindrical roller bearings are used with either ring omitted, the surface on which the rollers operate must have a hardness of Rockwell□ C59 to C64 or equivalent Brinell■ hardness (see chart at right). If this hardness cannot be attained, the bearing C capacity must be reduced by a rating reduction factor determined from chart on facing page.



Bearing series	Shaft diameters for tap fit outer ring▲								Shaft diameter for press fit outer ring							
	1900		1000		1200-5200		1300-5300-7300		1900		1000		1200-5200		1300-5300-7300	
Basic size	(max-min)						inches		(max-min)							
03	. . . . .	. . . . .	.8757	.8753	.8725	.8721	.9803	.9799	. . . . .	. . . . .	.8750	.8746	.8718	.8714	.9796	.9792
04	.9769	.9765	1.0329	1.0325	1.1092	1.1087	1.1013	1.1008	.9762	.9758	1.0322	1.0318	1.1085	1.1080	1.1005	1.1000
05	1.1759	1.1754	1.2259	1.2254	1.2672	1.2667	1.3383	1.3378	1.1753	1.1748	1.2253	1.2248	1.2665	1.2660	1.3376	1.3371
06	1.3710	1.3705	1.4523	1.4518	1.4994	1.4989	1.6024	1.6019	1.3704	1.3699	1.4515	1.4510	1.4986	1.4981	1.6016	1.6011
07	1.6112	1.6107	1.6611	1.6606	1.7322	1.7317	1.8452	1.8447	1.6104	1.6099	1.6603	1.6598	1.7314	1.7309	1.8444	1.8439
08	1.8061	1.8056	1.8777	1.8772	1.9667	1.9662	2.0600	2.0595	1.8054	1.8049	1.8770	1.8765	1.9660	1.9655	2.0590	2.0585
09	2.0263	2.0258	2.0831	2.0825	2.1870	2.1864	2.3382	2.3376	2.0255	2.0250	2.0823	2.0817	2.1861	2.1855	2.3373	2.3367
10	2.2014	2.2008	2.2802	2.2796	2.3816	2.3810	2.5660	2.5654	2.2006	2.2000	2.2794	2.2788	2.3807	2.3801	2.5651	2.5645
11	2.4316	2.4310	2.5408	2.5402	2.6354	2.6348	2.8136	2.8130	2.4308	2.4302	2.5398	2.5392	2.6344	2.6338	2.8127	2.8121
12	2.6316	2.6310	2.7377	2.7371	2.8511	2.8505	3.0545	3.0538	2.6307	2.6301	2.7368	2.7362	2.8502	2.8496	3.0534	3.0527
13	2.8267	2.8261	2.9348	2.9341	3.1677	3.1670	3.2957	3.2950	2.8258	2.8252	2.9339	2.9332	3.1668	3.1661	3.2946	3.2939
14	3.0719	3.0712	3.1588	3.1581	3.3392	3.3385	3.5132	3.5125	3.0710	3.0703	3.1579	3.1572	3.3381	3.3374	3.5120	3.5113
15	3.2669	3.2662	3.3569	3.3562	3.5063	3.5056	3.7780	3.7772	3.2660	3.2653	3.3560	3.3553	3.5052	3.5045	3.7769	3.7761
16	3.4619	3.4612	3.5969	3.5962	3.7532	3.7525	4.0031	4.0023	3.4610	3.4603	3.5958	3.5951	3.7520	3.7513	4.0020	4.0012
17	3.7274	3.7267	3.7944	3.7936	4.0182	4.0174	4.2746	4.2738	3.7265	3.7258	3.7933	3.7925	4.0171	4.0163	4.2735	4.2727
18	3.9225	3.9217	4.0324	4.0316	4.2235	4.2227	4.4915	4.4907	3.9214	3.9206	4.0313	4.0305	4.2224	4.2216	4.4902	4.4894
19	4.1174	4.1166	4.2284	4.2276	4.4714	4.4706	4.8113	4.8105	4.1163	4.1155	4.2273	4.2265	4.4703	4.4695	4.8099	4.8091
20	4.3330	4.3322	4.4254	4.4246	4.7663	4.7655	5.1267	5.1258	4.3319	4.3311	4.4243	4.4235	4.7652	4.7644	5.1254	5.1245

For shaft diameters larger than above, consult Link-Belt Bearing Division.

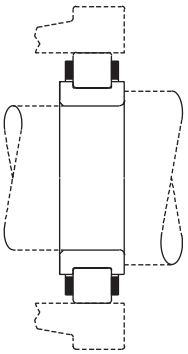
▲ Shaft diameter limits also apply to Style A outer ring bearings.

■ Hultgren 10 mm ball penetrator; 3000 kg load.

□ Brale penetrator; 150 kg load.

Operation Without Outer Ring

For Cylindrical Roller Bearings



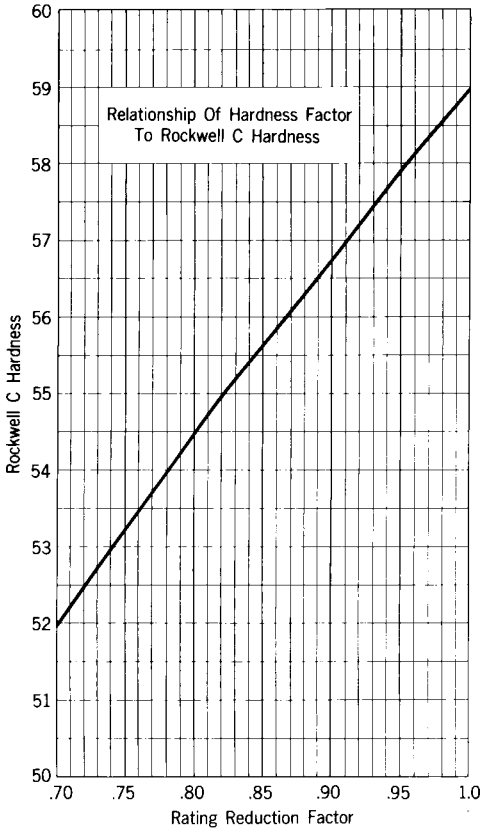
Inner ring and roller assembly

for Series MU-X, MU-B

Cylindrical roller bearings with the outer ring omitted may be installed so that the rollers operate directly on the hardened and ground surface of a bore in an alloy steel housing.

This type of design is useful for applications where space is limited and a smaller housing bore or a larger bearing and shaft are required. Housing surface hardness must be Rockwell□ C59 to C64 or Brinell■ equivalent to achieve full bearing capacity. Where the required hardness cannot be attained, the bearing rating must be reduced accordingly. See graph for rating reduction factor. Where the housing bore is case hardened, the combination of case depth and core hardness must be adequate. Consult Link-Belt Bearing Division, Rexnord Corp. for a specific recommendation. Housing surface should be finished to a roughness value of 13 micro-inches, A.A., maximum *(.33 µm)*.

Maximum and minimum housing bore values for tap fit and press fit inner rings are listed below.



Bearing series	Housing bore for tap fit inner ring								Housing bore for press fit inner ring							
	1900		1000		1200-5200		1300-5300-7300		1900		1000		1200-5200		1300-5300-7300	
Basic size	(max-min)						inches		(max-min)							
03	. . . . .	. . . . .	1.1992	1.1988	1.3708	1.3704	1.5402	1.5398	. . . . .	. . . . .	1.1996	1.1992	1.3712	1.3708	1.5406	1.5402
04	1.2689	1.2685	1.4383	1.4379	1.6075	1.6070	1.7305	1.7300	1.2694	1.2690	1.4388	1.4384	1.6080	1.6075	1.7309	1.7304
05	1.4680	1.4675	1.6314	1.6309	1.7656	1.7651	2.1031	2.1026	1.4686	1.4681	1.6320	1.6315	1.7661	1.7656	2.1036	2.1031
06	1.6631	1.6626	2.9090	1.9085	2.1285	2.1280	2.3780	2.3775	1.6637	1.6632	1.9096	1.9091	2.1291	2.1286	2.3785	2.3780
07	1.9346	1.9341	2.1594	2.1589	2.4591	2.4586	2.6745	2.6740	1.9353	1.9348	2.1600	2.1595	2.4597	2.4592	2.6751	2.6746
08	2.2116	2.2111	2.3760	2.3755	2.7405	2.7400	3.0572	3.0567	2.2123	2.2118	2.3767	2.3762	2.7411	2.7406	3.0578	3.0573
09	2.4317	2.4312	2.6430	2.6424	2.9517	2.9511	3.3894	3.3888	2.4325	2.4320	2.6438	2.6432	2.9526	2.9520	3.3902	3.3896
10	2.6068	2.6062	2.8400	2.8394	3.1311	3.1305	3.7195	3.7189	2.6077	2.6071	2.8409	2.8403	3.1319	3.1313	3.7203	3.7197
11	2.8881	2.8875	3.1697	3.1691	3.4646	3.4640	4.0784	4.0778	2.8892	2.8886	3.1707	3.1701	3.4656	3.4650	4.0793	4.0787
12	3.0882	3.0876	3.3668	3.3662	3.8481	3.8475	4.4280	4.4273	3.0893	3.0887	3.3678	3.3672	3.8491	3.8485	4.4289	4.4282
13	3.2832	3.2826	3.5639	3.5632	4.1649	4.1642	4.7775	4.7768	3.2843	3.2837	3.5649	3.5642	4.1658	4.1651	4.7758	4.7778
14	3.6316	3.6309	3.9323	3.9316	4.3902	4.3895	5.0926	5.0919	3.6329	3.6322	3.9337	3.9330	4.3915	4.3908	5.0938	5.0931
15	3.8266	3.8259	4.1304	4.1297	4.5573	4.5566	5.4770	5.4762	3.8280	3.8273	4.1317	4.1310	4.5585	4.5578	5.4782	5.4774
16	4.0217	4.0210	△	△	4.9068	4.9061	5.8033	5.8025	4.0230	4.0223	△	△	4.9081	4.9074	5.8045	5.8037
17	4.3561	4.3554	4.6515	4.6507	5.2829	5.2821	6.1966	6.1958	4.3578	4.3571	4.6772	4.6764	5.2845	5.2837	6.1981	6.1973
18	4.5512	4.5504	5.0292	5.0284	5.5968	5.5960	6.5109	6.5101	4.5529	4.5521	5.0309	5.0301	5.5984	5.5976	6.5124	6.5116
19	4.7463	4.7455	5.2253	5.2245	5.9532	5.9524	6.8308	6.8300	4.7480	4.7472	5.2269	5.2261	5.9548	5.9540	6.8322	6.8314
20	5.1064	5.1056	△	△	6.3459	6.3451	7.2787	7.2778	5.1082	5.1074	△	△	6.3474	6.3466	7.2802	7.2793

For housing bores larger than above, consult Link-Belt Bearing Division, Rexnord Corp.

△ For size, consult Link-Belt Bearing Division, Rexnord Corp.

■ Hultgren 10 mm ball penetrator; 3000 kg load.

□ Brale penetrator; 150 kg load.

Availability:

Not all series, sizes, configurations and special features of these cylindrical roller bearings are in regular production. A current list of sizes and types regularly available can be furnished. Others can be made available for production requirements.

Additional Features:

Cylindrical roller bearings are available with many combinations of standard features. The nomenclature page G-32 and the index pages G-3 and G-4 all describe standard features which result in cylindrical roller bearings being extremely versatile for specific applications.

For other mounting aids such as dowel coin holes and snap rings and grooves, consult Link-Belt Bearing Division.

Operation:

Cylindrical roller bearings are designed for grease or oil lubrication. Oil is most commonly used. Service instructions are available and provide guidelines for lubrication and recommended lubricants. Where significant thrust loads are to be carried, lubrication becomes more critical and Link-Belt Bearing Division should be consulted.

Imposed radial loads should not exceed .25C. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Fixed and Expansion Mounting:

The design of cylindrical roller bearings and the optional features permits fixed or expansion mounting by varying the number of ribs used with each bearing.

A bearing with no ribs on the ring (i.e. MA1200TV of MU1200CX) is an expansion type bearing as the roller set is free to shift axially on one raceway. The opposite bearing must then be a locating bearing. Many other arrangements are possible using these same principles. Care should always be taken not to force bearings to thrust against or away from each other during mounting or operation.

Fits and Tolerances:

Shaft and housing fits are listed on pages G-25 through G-30.

Operation without one or both rings:

Cylindrical rollers will run using correctly manufactured shafts or housings as raceways. For this procedure, consult Link-Belt Bearing Division.

Warning:

The reliability built into all Link-Belt bearings can be realized in service only when they are correctly selected and properly installed, protected and maintained.

The correct selection of bearings requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories as well as provisions for installation and maintenance must follow good engineering principles.

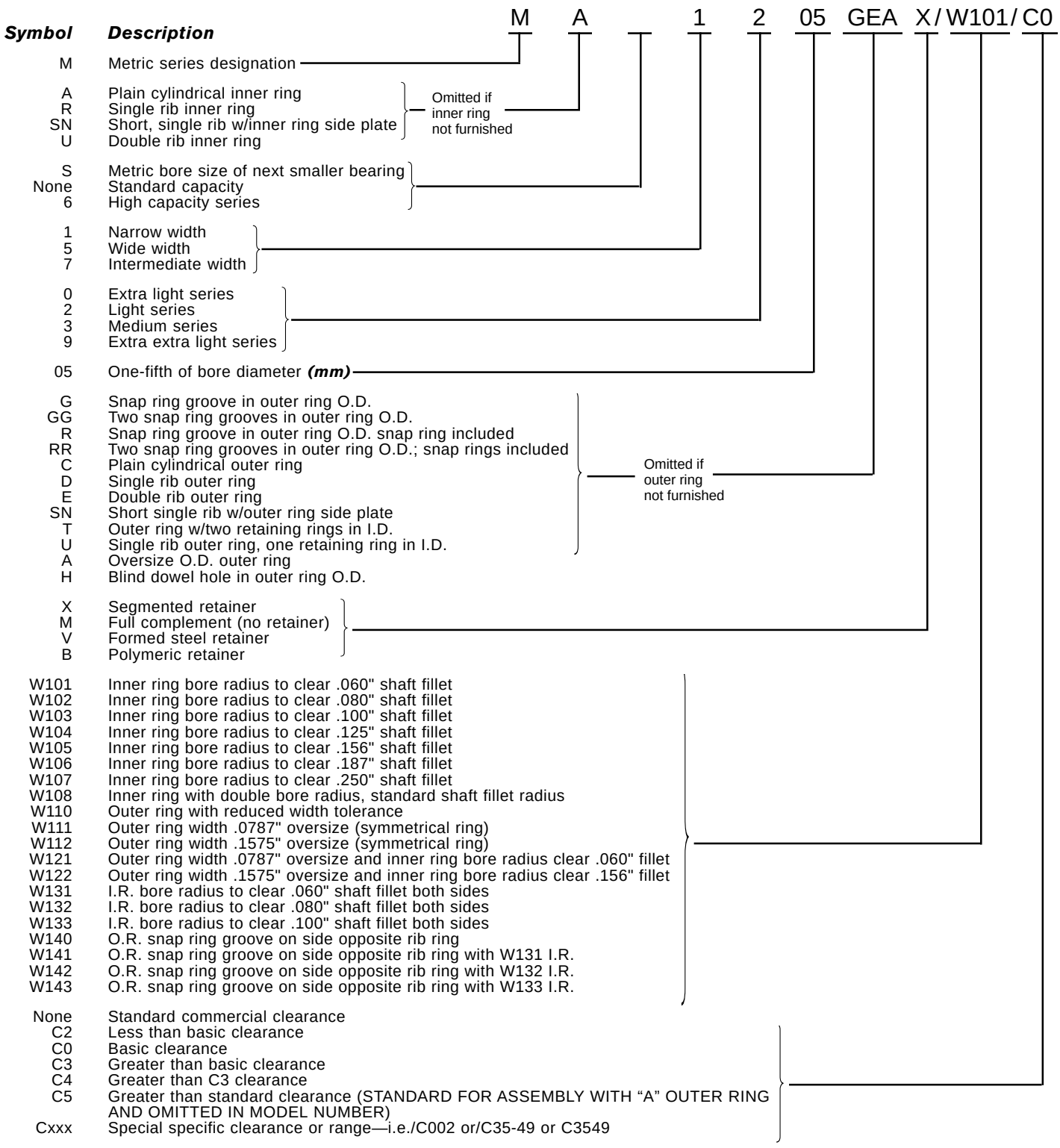
Housings and covers must be designed to safely handle the radial and axial loads involved. Adequate space must be provided in the housing and covers for a supply of lubricant.

Seals must be provided that will satisfactorily cope with the environmental conditions. Shaft O.D. size and housing bore size tables show recommended fitting practices, and should be followed strictly to assure a successful mounting arrangement.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service as well as serious personal injury or property damage.

Series M1000, 1200, 1300, 1900, 5200, 5300, 7300

Cylindrical Roller Bearing



Symbol	*Description*
M	Metric series designation
A	Plain cylindrical inner ring
R	Single rib inner ring
SN	Short, single rib w/inner ring side plate
U	Double rib inner ring
S	Metric bore size of next smaller bearing
None	Standard capacity
6	High capacity series
1	Narrow width
5	Wide width
7	Intermediate width
0	Extra light series
2	Light series
3	Medium series
9	Extra extra light series
05	One-fifth of bore diameter ***(mm)***
G	Snap ring groove in outer ring O.D.
GG	Two snap ring grooves in outer ring O.D.
R	Snap ring groove in outer ring O.D. snap ring included
RR	Two snap ring grooves in outer ring O.D.; snap rings included
C	Plain cylindrical outer ring
D	Single rib outer ring
E	Double rib outer ring
SN	Short single rib w/outer ring side plate
T	Outer ring w/two retaining rings in I.D.
U	Single rib outer ring, one retaining ring in I.D.
A	Oversize O.D. outer ring
H	Blind dowel hole in outer ring O.D.
X	Segmented retainer
M	Full complement (no retainer)
V	Formed steel retainer
B	Polymeric retainer
W101	Inner ring bore radius to clear .060" shaft fillet
W102	Inner ring bore radius to clear .080" shaft fillet
W103	Inner ring bore radius to clear .100" shaft fillet
W104	Inner ring bore radius to clear .125" shaft fillet
W105	Inner ring bore radius to clear .156" shaft fillet
W106	Inner ring bore radius to clear .187" shaft fillet
W107	Inner ring bore radius to clear .250" shaft fillet
W108	Inner ring with double bore radius, standard shaft fillet radius
W110	Outer ring with reduced width tolerance
W111	Outer ring width .0787" oversize (symmetrical ring)
W112	Outer ring width .1575" oversize (symmetrical ring)
W121	Outer ring width .0787" oversize and inner ring bore radius clear .060" fillet
W122	Outer ring width .1575" oversize and inner ring bore radius clear .156" fillet
W131	I.R. bore radius to clear .060" shaft fillet both sides
W132	I.R. bore radius to clear .080" shaft fillet both sides
W133	I.R. bore radius to clear .100" shaft fillet both sides
W140	O.R. snap ring groove on side opposite rib ring
W141	O.R. snap ring groove on side opposite rib ring with W131 I.R.
W142	O.R. snap ring groove on side opposite rib ring with W132 I.R.
W143	O.R. snap ring groove on side opposite rib ring with W133 I.R.
None	Standard commercial clearance
C2	Less than basic clearance
C0	Basic clearance
C3	Greater than basic clearance
C4	Greater than C3 clearance
C5	Greater than standard clearance (STANDARD FOR ASSEMBLY WITH “A” OUTER RING AND OMITTED IN MODEL NUMBER)
Cxxx	Special specific clearance or range—i.e./C002 or/C35-49 or C3549

The nomenclature is provided to indentify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, availability,and the application requirements.

Series N-EC 200E, 300E
Cylindrical Roller Bearings

The Link-Belt® N-EC series builds on a tradition of quality, service and reliability – the reasons so many engineering professionals have come to rely on Link-Belt bearings. The N-EC extra capacity cylindrical product line is U.S. manufactured to both ISO 9001 and QS 9000 quality standards. It is quality and availability your company and your customers can count on. The N-EC delivers – extra capacity bearings when you want them with the quality you have come to expect.

Other Standard Features:

① The Link-Belt Extra Capacity design performs at higher speeds and heavier loads with no increase in external bearing boundary dimensions. Where you need greater performance, the N-EC delivers.

② Bearing roller cages are made of high quality bronze alloys. The bronze roller cage offers a proven design with superior guidance, performance and durability. These features provide superior quiet performance and life in electric motor applications.

③ The Link-Belt N-EC line offers standard C0 or C3 increased clearance when your application requires it.

④ Precision machining tolerances to ISO 9001 and QS 9000 standards assure the interchangeability of bearing races and roller sets increasing your flexibility. This feature allows for reduced inventory and increased service when ring interchangeability can be used.

⑤ The N-EC product is available in our warehouse locations nationwide. Service and product availability you can expect from a U.S. based manufacturer is what the N-EC is all about.

Engineering Expertise

Decades of experience, extensive research and ongoing commitment to quality have resulted in the most sophisticated bearing technology on the market today. Link-Belt N-EC bearings perform beyond expectations because of these features:

Proven Pocket Design

An exclusive gothic arch roller pocket geometry contacts the roller at two points, resulting in superior hydrodynamic lubrication, providing high RPM capabilities.

Super Finish

Microfinished roller and raceways improve lubrication under high speeds and loads with proven and tested quiet operation.

Crowned Profile

The roller's outside diameter surface is crowned to optimize line contact. This equalizes load distribution and minimizes contact stress caused by minor misalignments.

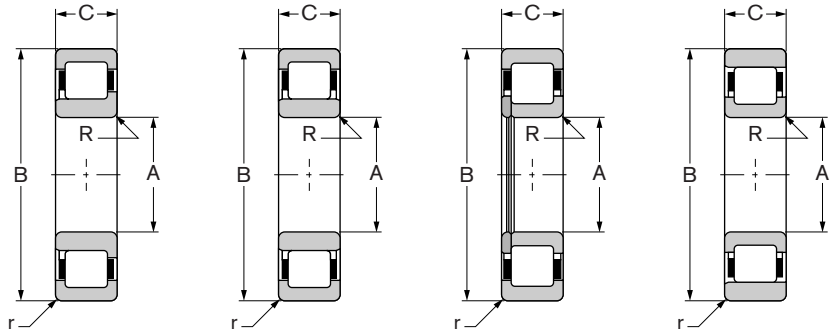
Improved Design

Roller end tolerances, ring rib design and finishes have been designed to improve bearing performance under heavy axial load conditions.

Tight Tolerances

All bearings are made to ISO Normal (RBEC-1) tolerances or higher if specified.

Cylindrical Roller Bearings
Series N-EC
200E



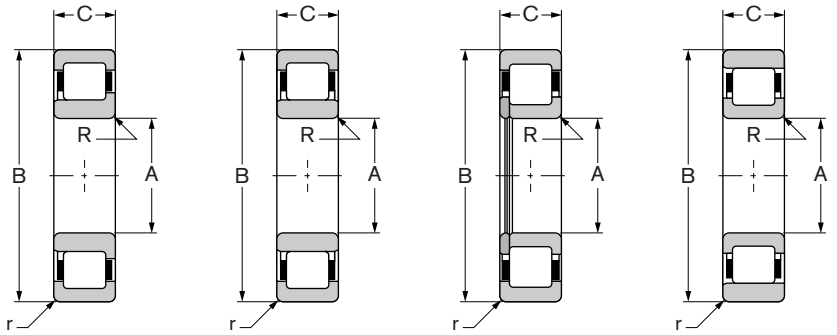
NJ NU NUP N

Dimensions (inches/***mm***) (pounds/***newtons)***

Basic bearing number	A Bore diameter	B Outside diameter	C Width	Basic load rating	Static load rating	R Inner ▲	r Outer ▲
205E	0.984 ***(25.00)***	2.047 ***(52.00)***	0.591 ***(15.00)***	6,492 ***(28,800)***	6,808 ***(30,200)***	0.039 ***(1.00)***	0.039 ***(1.00)***
206E	1.181 ***(30.00)***	2.441 ***(62.00)***	0.630 ***(16.00)***	8,566 ***(38,000)***	8,792 ***(39,000)***	0.039 ***(1.00)***	0.039 ***(1.00)***
207E	1.378 ***(35.00)***	2.835 ***(72.00)***	0.669 ***(17.00)***	11,136 ***(49,400)***	11,542 ***(51,200)***	0.043 ***(1.10)***	0.043 ***(1.10)***
208E	1.575 ***(40.00)***	3.150 ***(80.00)***	0.709 ***(18.00)***	12,151 ***(53,900)***	12,827 ***(56,900)***	0.043 ***(1.10)***	0.043 ***(1.10)***
209E	1.772 ***(45.00)***	3.346 ***(85.00)***	0.748 ***(19.00)***	13,661 ***(60,600)***	15,577 ***(69,100)***	0.043 ***(1.10)***	0.043 ***(1.10)***
210E	1.969 ***(50.00)***	3.543 ***(90.00)***	0.787 ***(20.00)***	15,352 ***(68,100)***	16,546 ***(73,400)***	0.043 ***(1.10)***	0.043 ***(1.10)***
211E	2.165 ***(55.00)***	3.937 ***(100.00)***	0.827 ***(21.00)***	18,959 ***(84,100)***	22,160 ***(98,300)***	0.059 ***(1.50)***	0.059 ***(1.50)***
212E	2.362 ***(60.00)***	4.331 ***(110.00)***	0.866 ***(22.00)***	21,957 ***(97,400)***	23,670 ***(105,000)***	0.059 ***(1.50)***	0.059 ***(1.50)***
213E	2.559 ***(65.00)***	4.724 ***(120.00)***	0.906 ***(23.00)***	24,166 ***(107,200)***	26,871 ***(119,200)***	0.059 ***(1.50)***	0.059 ***(1.50)***
214E	2.756 ***(70.00)***	4.921 ***(125.00)***	0.945 ***(24.00)***	26,984 ***(119,700)***	31,041 ***(137,700)***	0.059 ***(1.50)***	0.059 ***(1.50)***
215E	2.953 ***(75.00)***	5.118 ***(130.00)***	0.984 ***(25.00)***	29,644 ***(131,500)***	35,505 ***(157,500)***	0.059 ***(1.50)***	0.059 ***(1.50)***
216E	3.150 ***(80.00)***	5.512 ***(140.00)***	1.024 ***(26.00)***	32,913 ***(146,000)***	40,577 ***(180,000)***	0.079 ***(2.00)***	0.079 ***(2.00)***
217E	3.346 ***(85.00)***	5.906 ***(150.00)***	1.102 ***(28.00)***	40,803 ***(181,000)***	50,271 ***(223,000)***	0.079 ***(2.00)***	0.079 ***(2.00)***
218E	3.543 ***(90.00)***	6.299 ***(160.00)***	1.181 ***(30.00)***	42,200 ***(187,200)***	50,947 ***(226,000)***	0.079 ***(2.00)***	0.079 ***(2.00)***
219E	3.740 ***(95.00)***	6.693 ***(170.00)***	1.260 ***(32.00)***	51,398 ***(228,000)***	61,542 ***(273,000)***	0.083 ***(2.10)***	0.083 ***(2.10)***
220E	3.937 ***(100.00)***	7.087 ***(180.00)***	1.339 ***(34.00)***	57,710 ***(256,000)***	69,883 ***(310,000)***	0.083 ***(2.10)***	0.083 ***(2.10)***
221E	4.134 ***(105.00)***	7.480 ***(190.00)***	1.417 ***(36.00)***	60,460 ***(268,200)***	71,979 ***(319,300)***	0.083 ***(2.10)***	0.083 ***(2.10)***
222E	4.331 ***(110.00)***	7.847 ***(200.00)***	1.496 ***(38.00)***	66,344 ***(294,300)***	60,280 ***(267,400)***	0.083 ***(2.10)***	0.083 ***(2.10)***
224E	4.724 ***(120.00)***	8.465 ***(215.00)***	1.575 ***(40.00)***	77,299 ***(342,900)***	97,362 ***(431,900)***	0.083 ***(2.10)***	0.083 ***(2.10)***
226E	5.118 ***(130.00)***	9.055 ***(230.00)***	1.575 ***(40.00)***	81,064 ***(359,600)***	103,269 ***(458,100)***	0.118 ***(3.00)***	0.118 ***(3.00)***
228E	5.512 ***(140.00)***	9.499 ***(240.00)***	1.654 ***(42.00)***	88,593 ***(393,000)***	115,555 ***(512,600)***	0.118 ***(3.00)***	0.118 ***(3.00)***
230E	5.906 ***(150.00)***	10.630 ***(270.00)***	1.772 ***(45.00)***	100,947 ***(447,800)***	135,708 ***(602,000)***	0.118 ***(3.00)***	0.118 ***(3.00)***
232E	6.299 ***(160.00)***	11.417 ***(290.00)***	1.890 ***(48.00)***	113,436 ***(503,200)***	153,832 ***(682,400)***	0.118 ***(3.00)***	0.118 ***(3.00)***

Static and dynamic capacities are calculated in accordance with ISO76 and ISO281.
▲Largest fillet radius that will clear bearing corners.

Cylindrical Roller Bearings
Series N-EC
300E



NJ NU NUP N

Dimensions (inches/***mm***) (pounds/***newtons)***

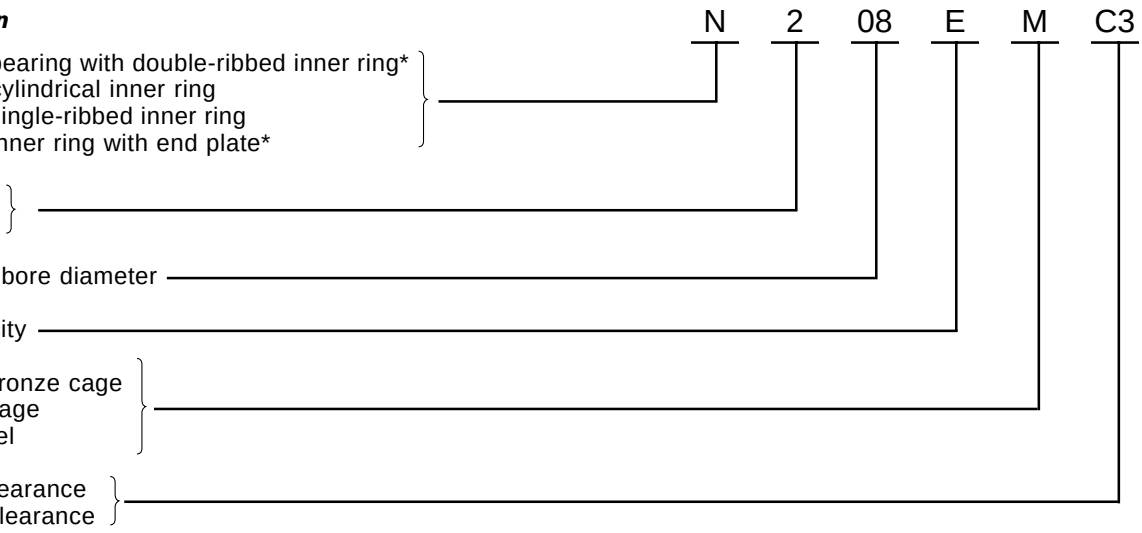
Basic bearing number	A Bore diameter	B Outside diameter	C Width	Basic load rating	Static load rating	R Inner ▲	r Outer ▲
305E	0.984 ***(25.00)***	2.441 ***(62.00)***	0.669 ***(17.00)***	9,197 ***(40,800)***	8,318 ***(36,900)***	0.043 ***(1.10)***	0.043 ***(1.10)***
306E	1.181 ***(30.00)***	2.835 ***(72.00)***	0.748 ***(19.00)***	11,587 ***(51,400)***	10,866 ***(48,200)***	0.043 ***(1.10)***	0.043 ***(1.10)***
307E	1.378 ***(35.00)***	3.150 ***(80.00)***	0.827 ***(21.00)***	15,780 ***(70,000)***	16,456 ***(73,000)***	0.059 ***(1.50)***	0.059 ***(1.50)***
308E	1.575 ***(40.00)***	3.543 ***(90.00)***	0.906 ***(23.00)***	19,838 ***(88,000)***	20,514 ***(91,000)***	0.059 ***(1.50)***	0.059 ***(1.50)***
309E	1.772 ***(45.00)***	3.937 ***(100.00)***	0.984 ***(25.00)***	22,543 ***(100,000)***	22,069 ***(97,900)***	0.059 ***(1.50)***	0.059 ***(1.50)***
310E	1.969 ***(50.00)***	4.331 ***(110.00)***	1.063 ***(27.00)***	26,826 ***(119,000)***	28,404 ***(126,000)***	0.079 ***(2.00)***	0.079 ***(2.00)***
311E	2.165 ***(55.00)***	4.724 ***(120.00)***	1.142 ***(29.00)***	31,447 ***(139,500)***	32,507 ***(144,200)***	0.079 ***(2.00)***	0.079 ***(2.00)***
312E	2.362 ***(60.00)***	5.118 ***(130.00)***	1.220 ***(31.00)***	35,843 ***(159,000)***	40,577 ***(180,000)***	0.083 ***(2.10)***	0.083 ***(2.10)***
313E	2.559 ***(65.00)***	5.512 ***(140.00)***	1.299 ***(33.00)***	41,614 ***(184,600)***	44,635 ***(198,000)***	0.083 ***(2.10)***	0.083 ***(2.10)***
314E	2.756 ***(70.00)***	5.906 ***(150.00)***	1.378 ***(35.00)***	46,889 ***(208,000)***	52,164 ***(231,400)***	0.083 ***(2.10)***	0.083 ***(2.10)***
315E	2.953 ***(75.00)***	6.299 ***(160.00)***	1.457 ***(37.00)***	55,455 ***(246,000)***	60,460 ***(268,200)***	0.083 ***(2.10)***	0.083 ***(2.10)***
316E	3.150 ***(80.00)***	6.693 ***(170.00)***	1.535 ***(39.00)***	59,761 ***(265,100)***	66,208 ***(293,700)***	0.083 ***(2.10)***	0.083 ***(2.10)***
317E	3.346 ***(85.00)***	7.087 ***(180.00)***	1.614 ***(41.00)***	67,403 ***(299,000)***	75,969 ***(337,000)***	0.118 ***(3.00)***	0.118 ***(3.00)***
318E	3.543 ***(90.00)***	7.480 ***(190.00)***	1.693 ***(43.00)***	72,362 ***(321,000)***	83,048 ***(368,400)***	0.118 ***(3.00)***	0.118 ***(3.00)***
319E	3.740 ***(95.00)***	7.847 ***(200.00)***	1.772 ***(45.00)***	77,209 ***(342,500)***	89,044 ***(395,000)***	0.118 ***(3.00)***	0.118 ***(3.00)***
320E	3.937 ***(100.00)***	8.465 ***(215.00)***	1.850 ***(47.00)***	89,089 ***(395,200)***	99,639 ***(442,000)***	0.118 ***(3.00)***	0.118 ***(3.00)***
321E	4.134 ***(105.00)***	8.858 ***(225.00)***	1.929 ***(49.00)***	99,549 ***(441,600)***	112,940 ***(501,000)***	0.118 ***(3.00)***	0.118 ***(3.00)***
322E	4.331 ***(110.00)***	9.499 ***(240.00)***	1.969 ***(50.00)***	105,884 ***(469,700)***	122,520 ***(543,500)***	0.118 ***(3.00)***	0.118 ***(3.00)***
324E	4.724 ***(120.00)***	10.236 ***(260.00)***	2.165 ***(55.00)***	121,664 ***(539,700)***	140,487 ***(623,200)***	0.118 ***(3.00)***	0.118 ***(3.00)***
326E	5.118 ***(130.00)***	11.024 ***(280.00)***	2.283 ***(58.00)***	141,569 ***(628,000)***	169,364 ***(751,300)***	0.157 ***(4.00)***	0.157 ***(4.00)***
328E	5.512 ***(140.00)***	11.811 ***(300.00)***	2.441 ***(62.00)***	129,261 ***(573,400)***	187,308 ***(830,900)***	0.157 ***(4.00)***	0.157 ***(4.00)***
330E	5.906 ***(150.00)***	12.598 ***(320.00)***	2.559 ***(65.00)***	176,172 ***(781,500)***	217,831 ***(966,300)***	0.157 ***(4.00)***	0.157 ***(4.00)***
332E	6.299 ***(160.00)***	13.386 ***(340.00)***	2.677 ***(68.00)***	198,738 ***(881,600)***	244,026 ***(1,082,500)***	0.157 ***(4.00)***	0.157 ***(4.00)***

Static and dynamic capacities are calculated in accordance with ISO76 and ISO281.
▲Largest fillet radius that will clear bearing corners.

Nomenclature
Series NE-C

Spherical Roller Bearings

Symbol	*Description*
N	Separable bearing with double-ribbed inner ring*
NU	Separable cylindrical inner ring
NJ	Separable single-ribbed inner ring
NUP	Separable inner ring with end plate*
2	200 Series
3	300 Series
08	One-fifth of bore diameter
E	Extra capacity
M	Machined bronze cage
P	Polymeric cage
V	Formed steel
C0	Standard clearance
C3	Increased clearance



* Consult factory for availability.

The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, availability, and the application requirements.

Spherical Roller Bearings

Contents
Series A20000

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A20000S
- Selection H-3
- Load Ratings H-5
- Dimensions H-6

A20000, A20000M
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- Dimensions H-11

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Nomenclature H-16

Series A20000
Spherical Roller Bearings

Self-aligning separable outer ring bearings of single row adjustable and double row adjustable or nonadjustable types for high capacity and minimum space requirements. These compact bearings feature the latest design refinements.

① Controlled raceway curvatures afford precise osculation clearance to avoid edge loading and provide high capacity.

② Roller guidance is provided by double contoured coined steel retainer pockets.

③ Large rollers for extended bearing life.

④ Micro-finished raceways assure smooth operation.

Rollers

Symmetrical roller design permits natural roller positioning and distribution of load in dynamic operation. Curvatures of roller contact surfaces are contoured to control stress distribution under all combinations of radial and thrust loads within design capacities.

Rings

The geometry and sections of the outer and inner rings and rollers result in high capacity and long bearing life. Controlled raceway curvatures on inner and outer rings and rollers afford precise osculation clearances preventing roller edge loading. Outer ring raceways are spherically finished to provide freedom of alignment under variable conditions.

Retainers

Double contoured deep coined pockets provide accurate roller guidance. Separate retainer for each row of rollers allows rollers to seek ultimate rolling path and operating angle for all radial/thrust load conditions.

Single Row Adjustable

A20000S

Single-row self-aligning adjustable spherical roller bearing for direct shaft mounting. Available with bores from 1.0000" ***(25.400 mm)*** to 4.1331" ***(104.981 mm)*** inclusive.

Dimensions on pages H-6.
Load ratings on pages H-5.
Additional information on page H-15.

Double Row Adjustable

A20000

Double-row self-aligning adjustable spherical roller bearing for direct shaft mounting. Available with bores from 1.0000" ***(25.400 mm)*** to 4.7236" ***(119.979 mm)*** inclusive.

Dimensions on pages H-11 and H-12.
Load ratings on pages H-9 and H-10.
Additional information on page H-15.

Double Row Non-Adjustable

A20000M

Double-row self-aligning nonadjustable spherical roller bearings for direct shaft mounting. Available with bores from 1.0000" ***(25.4 mm)*** to 4.1331" ***(104.981 mm)*** inclusive.

Dimensions on pages H-13 and H-14.
Load ratings on pages H-9 and H-10.
Additional information on page H-15.

Series A20000S

A20000S single row angular contact spherical roller bearings are suitable for a wide variety of mounting arrangements. In the application of these bearings, it is important to consider that radial loads produce a thrust reaction which must be opposed by another force…usually the thrust reaction from another bearing. This force maintains the bearing rings in their correct operating position. Normally, two single row angular contact bearings are mounted opposed to one another on a common shaft. As thrust or thrust reactions are always present, it is advisable to calculate both bearing lives concurrently.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ ABMA STD 11-1990. Ratings are based on fatigue life. The Rating Life L_{10} or fatigue life at 90% reliability is the usual basis for bearing selection.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection (pair of bearings)

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000
Continuous—high reliability	—	—	120,000 to 300,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Determine a required shaft diameter and make a temporary selection for each bearing to fit this shaft.

Step 4 Calculate each induced thrust reaction T_F from the radial loads F_r on each bearing.

$$T_F = \frac{0.5\ F_r}{Y_2}$$

This reaction is directed along the shaft and tends to separate the individual inner ring and roller assemblies from their outer rings.

Step 5 Calculate resultant bearing thrust load F_a.

$F_a = T_F + T$

T_F is the thrust reaction from the opposite single row angular contact bearing. The applied thrust load T is positive (+) if in the same direction as T_F, and negative (–) if in the opposite direction. If F_a is negative, substitute zero for F_a.

Step 6 Calculate the ratio of the resultant bearing thrust load F_a to the radial load F_r for each bearing.

$\frac{F_a}{F_r}$

Step 7 Calculate the equivalent radial load P for both trial bearings.

$$P = XF_r + YF_a$$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a \text{ where } \begin{cases} X_1 = 1.0 \\ Y_1 = 0 \end{cases}$$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$.

For values of e, X_2, and Y_2, see the bearing rating table, page H-5.

Step 8 Calculate the required C rating of each bearing to verify the trial selections.

required C = $\left(\frac{C}{P}\right)$ P using $\left(\frac{C}{P}\right)$ from Step 2

Consult the bearing rating table to see if the selected bearings meet or exceed the required C in each case.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
T = externally applied thrust load, pounds (or newtons)
T_F = bearing thrust reaction, pounds (or newtons)
X = radial factor
Y = thrust factor

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10} \qquad L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Life Expectancy (pair of bearings)

To calculate the Rating Life L_{10} of any pair of selected or trial bearings:

Step 1 Calculate each induced thrust reaction T_F from the radial loads F_r on each bearing.

$$T_F = \frac{0.5\ F_r}{Y_2}$$

This reaction is directed along the shaft and tends to separate the individual inner ring and roller assemblies from their outer rings.

Step 2 Calculate each resultant bearing thrust load F_a.
$F_a = T_F + T$
T_F is the thrust reaction from the opposite single row angular contact bearing. The applied thrust load T is positive (+) if in the same direction as T_F, and negative (–) if in the opposite direction. If F_a is negative, substitute zero for F_a.

Step 3 Calculate the ratio of the resultant bearing thrust load F_a to the radial load F_r for each bearing.

$$\frac{F_a}{F_r}$$

Step 4 Calculate the equivalent radial load P for both trial bearings. $P = XF_r + YF_r$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$$P = X_1F_r + Y_1F_a \text{ where } \begin{cases} X_1 = 1.0 \\ Y_1 = 0 \end{cases}$$

If $\frac{F_a}{F_r}$ is greater than e, then

$$P = X_2F_r + Y_2F_a.$$

For values of e, X_2, and Y_2 see the bearing rating table, page H-5.

Step 5 Calculate each ratio of the bearing basic load rating C to its equivalent radial load.

$$\frac{C}{P}$$

Step 6 Approximate life expectancy of each bearing from Table 1.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$$L_n = a_1a_2a_3L_{10}$$

where L_n = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Load Ratings
Series A20000S

Load ratings, weights and speed limits

Bearing number	Weight		C_0 Static load rating		C Basic load rating		Approximate speed limit RPM ●	e	X_2	Y_2
	kilograms	pounds	***newtons***	pounds	***newtons***	pounds				
A22100S	***0.2***	.5	***36 500***	8210	***33 300***	7480	7100	.51	.40	1.17
A22150S	***0.3***	.6	***46 600***	10500	***37 800***	8510	5700	.44	.40	1.37
A22196S	***0.5***	1.1	***73 800***	16600	***55 100***	12400	4500	.40	.40	1.49
A23225S	***0.6***	1.4	***98 800***	22200	***68 500***	15400	4000	.40	.40	1.49
A22262S	***0.9***	2.0	***136 100***	30600	***93 200***	21000	3500	.37	.40	1.61
A23275S	***2.1***	4.7	***187 700***	42200	***150 300***	33800	2850	.40	.40	1.49
A22300S	***1.4***	3.0	***159 200***	35800	***108 500***	24400	3100	.38	.40	1.59
A23300S	***2.3***	5.0	***201 500***	45300	***132 600***	29800	2650	.38	.40	1.57
A23334S	***2.0***	4.4								
A22413S	***4.1***	9.0	***395 100***	88800	***244 700***	55000	2100	.38	.40	1.60

Please consult for availability.

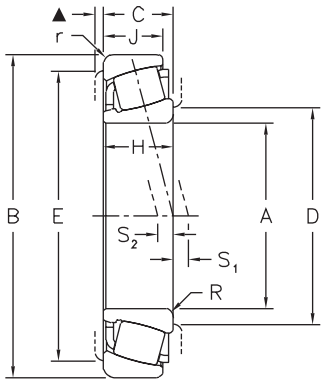
● For oil lubrication only. For grease lubrication, use 75% of these values.

Additional information, page H-15.

Spherical Roller Bearings

A20000S

Single Row
Adjustable
Self-aligning
Deep Coined Retainer
Double Contoured Roller Pocket



Dimensions (inches/***mm***)

Bearing number	A Bore diameter †	B Outside diameter ●	C Assembly width	D	E	H Inner	J Outer	R* Inner	r* Outer	S1	S2
				Shoulder diameter		Ring width		Fillet radius		Apex distance	
A22100S	1.0000 *25.400*	2.3750 *60.325*	.781 *19.84*	1.37 *34.8*	2.00 *50.8*	.793 *20.14*	.491 *12.47*	.046 *1.17*	.046 *1.17*	. . . .	.1870 *4.750*
A22150S	1.5000 *38.100*	2.8345 *71.996*	.670 *17.02*	1.81 *46.0*	2.50 *63.5*	.650 *16.51*	.546 *13.87*	.062 *1.57*	.062 *1.57*	. . . .	.0150 *0.381*
A22196S	1.9680 *49.987*	3.5433 *90.000*	.787 *19.99*	2.38 *60.4*	3.18 *80.8*	.787 *19.99*	.651 *16.54*	.078 *1.98*	.078 *1.98*	. . . .	.0240 *0.610*
A23225S	2.2500 *57.150*	3.9370 *100.000*	.828 *21.03*	2.65 *67.3*	3.50 *88.9*	.860 *21.84*	.693 *17.60*	.093 *2.36*	.062 *1.57*	. . . .	.0000 *0.000*
A22262S	2.6250 *66.675*	4.4677 *113.480*	.948 *24.08*	3.06 *77.7*	4.07 *103.4*	1.000 *25.40*	.690 *17.53*	.140 *3.56*	.062 *1.57*	. . . .	.0900 *2.286*
A23275S	2.7553 *69.985*	5.9045 *149.974*	1.188 *30.18*	3.42 *85.9*	5.25 *133.4*	1.188 *30.18*	.960 *24.38*	.080 *2.03*	.080 *2.03*	. . . .	.0000 *0.000*
A22300S	3.0000 *76.200*	5.1172 *129.977*	1.062 *26.97*	3.40 *86.4*	4.57 *116.1*	1.062 *26.97*	.928 *23.57*	.078 *1.98*	.078 *1.98*	. . . .	.0000 *0.000*
A23300S *A23334S*	3.0000 ***76.200*** 3.3457 *84.981*	5.9045 *149.974*	1.109 *28.17*	4.00 *101.6*	5.34 *135.6*	1.236 ***31.39*** 1.109 *28.17*	.925 *23.50*	.140 ***3.56*** .125 *3.18*	.125 *3.18*	.0475 *1.206*	. . . .
A22413S	4.1331 *104.981*	7.4792 *189.972*	1.419 *36.04*	4.50 *114.3*	6.63 *168.4*	1.419 *36.04*	1.265 *32.13*	.125 *3.18*	.125 *3.18*	.0680 *1.727*	. . . .

Bold face items normally available from stock; consult for availability of non-stock items.

▲ Housing recess: Recommended 3⁄16" ***(4.8 mm)***; minimum 1⁄16" ***(1.6 mm)***.

* Largest fillet radius that will clear bearing corners.

† Bore tolerance:
3.0000" ***(76.200 mm)*** diameter and smaller, +.0005" –.0000" ***(+0.013 –0.000 mm)***.
Over 3.0000" ***(76.200 mm)*** diameter, +.0010" –.0000" ***(+0.025 –0.000 mm)***.

● Outer ring O.D. tolerance: +.0010" –.0000" ***(+0.025 –0.000 mm)***.

Selection guide, pages H-3, H-4.
Load Ratings, page H-5.
Additional information, page H-15.

Series A20000, A20000M

In the A20000 series double row angular contact spherical roller bearings the outer rings are separable, and bearing clearance is adjustable by varying the axial position of one ring to the other. They are suitable for a wide variety of mounting arrangements. When mountings are designed for these bearings, provisions must be made to locate the two outer rings so that correct bearing clearance is attained.

In the A20000M series, the axial position is fixed by spacer rings sized to preadjusted bearing clearance ranges that correspond to ABMA recommended radial clearances for spherical roller bearings. When mounted, the outer rings must be held snugly against the spacer ring.

The selection procedures and rating formulas shown here are in agreement with The American Bearing Manufacturers Association Standards and ANSI/ ABMA STD 11-1990. Ratings are based on fatigue life. The L_{10} Rating Life or fatigue life at 90% reliability is the usual basis for bearing selection.

To assure a satisfactory bearing application, fitting practice, mounting, lubrication, sealing, static rating, housing strength, operating conditions and maintenance must be considered.

Bearing Selection

Step 1 Determine an appropriate L_{10} design life.

Type of service	Operating time, hours per year	Design life, years	L_{10} design life, hours
Light seasonal usage	500 to 750	3-5	3,000
Heavy seasonal usage	1,400 to 1,600	4-6	8,000
Industrial—8 hour shift	2,000	10	20,000
Industrial—16 hour shift	4,000	10	40,000
Industrial—continuous	8,700	10	80,000 to 100,000
Continuous—high reliability	—	—	120,000 to 300,000

Step 2 Determine a required $\left(\frac{C}{P}\right)$ from Table 1.

Step 3 Calculate the required C and select a spherical roller bearing.

a For radial load only:

$P = F_r$

required C = $\left(\frac{C}{P}\right)$ P using $\left(\frac{C}{P}\right)$ from Step 2

Select a spherical roller bearing from pages H-9 and H-10 having a basic load rating C equal to or greater than the required C.

b For combined radial and thrust loads:

Select a trial roller bearing with appropriate characteristics and the desired shaft size, pages H-9 and H-10.

Calculate the ratio of thrust load F_a to the radial load F_r.

$\frac{F_a}{F_r}$

Calculate the equivalent radial load P

$P = XF_r + YF_a$

if $\frac{F_a}{F_r}$ is equal to or less than e, then $P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then $P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, consult the appropriate bearing rating table, pages H-9 and H-10.

Calculate the required C

required C = $\left(\frac{C}{P}\right)$ P using $\left(\frac{C}{P}\right)$ from Step 2.

Consult the bearing rating tables, pages H-9 and H-10, to see if the selected bearing meets or exceeds the required C. If a smaller bearing meets, or nearly meets, the required C, its life expectancy can be calculated.

symbols for formulas:

C = basic load rating, pounds (or newtons)
C_o = static load rating, pounds (or newtons)
e = a reference value
F_a = thrust load, pounds (or newtons)
F_r = radial load, pounds (or newtons)
L_{10} = rating life, hours
n = speed, revolutions per minute
P = equivalent radial load, pounds (or newtons)
X = radial factor
Y = thrust factor

basic formulas:

$$\left(\frac{C}{P}\right) = \left(\frac{L_{10} \times n \times 60}{1{,}000{,}000}\right)^{3/10}$$

$$L_{10} = \frac{\left(\frac{C}{P}\right)^{10/3} \times 1{,}000{,}000}{n \times 60}$$

Table 1 • Relation of L_{10} life and speed to $\left(\frac{C}{P}\right)$

Bearing life, hours L_{10}	$\left(\frac{C}{P}\right)$ ratio								
	Speed, n								
	50	100	200	300	400	500	600	700	800
3000	1.93	2.38	2.93	3.31	3.61	3.86	4.07	4.27	4.44
4000	2.11	2.59	3.19	3.61	3.93	4.20	4.44	4.65	4.84
5000	2.25	2.77	3.42	3.86	4.20	4.50	4.75	4.97	5.18
6000	2.38	2.93	3.61	4.07	4.44	4.75	5.02	5.25	5.47
8000	2.59	3.19	3.93	4.44	4.84	5.18	5.47	5.73	5.96
10000	2.77	3.42	4.20	4.75	5.18	5.54	5.85	6.12	6.37
12000	2.93	3.61	4.44	5.02	5.47	5.85	6.18	6.47	6.73
14000	3.07	3.78	4.65	5.25	5.73	6.12	6.47	6.77	7.05
16000	3.19	3.93	4.84	5.47	5.96	6.37	6.73	7.05	7.34
18000	3.31	4.07	5.02	5.66	6.18	6.60	6.97	7.30	7.60
20000	3.42	4.20	5.18	5.85	6.37	6.81	7.20	7.54	7.85
25000	3.65	4.50	5.54	6.25	6.81	7.29	7.70	8.06	8.39
30000	3.86	4.75	5.85	6.60	7.20	7.70	8.13	8.51	8.86
35000	4.04	4.97	6.12	6.92	7.54	8.06	8.51	8.92	9.28
40000	4.20	5.18	6.37	7.20	7.85	8.39	8.86	9.28	9.66
45000	4.36	5.36	6.60	7.46	8.13	8.69	9.18	9.61	10.00
50000	4.50	5.54	6.81	7.70	8.39	8.97	9.48	9.92	10.30
60000	4.75	5.85	7.20	8.13	8.86	9.48	10.00	10.50	10.90
70000	4.97	6.12	7.54	8.51	9.28	9.92	10.50	11.00	11.40
80000	5.18	6.37	7.85	8.86	9.66	10.30	10.90	11.40	11.90
90000	5.36	6.60	8.13	9.18	10.00	10.70	11.30	11.80	12.30
100000	5.54	6.81	8.39	9.48	10.30	11.00	11.70	12.20	12.70
150000	6.25	7.70	9.48	10.70	11.70	12.50	13.20	13.80	14.40
200000	6.81	8.39	10.30	11.70	12.70	13.60	14.40	15.00	15.70
	Speed, n								
	900	1000	1200	1500	1800	2400	3000	3600	6000
3000	4.60	4.75	5.02	5.36	5.66	6.18	6.60	6.97	8.13
4000	5.02	5.18	5.47	5.85	6.18	6.73	7.20	7.60	8.86
5000	5.36	5.54	5.85	6.25	6.60	7.20	7.70	8.13	9.48
6000	5.66	5.85	6.18	6.60	6.97	7.60	8.13	8.59	10.00
8000	6.18	6.37	6.73	7.20	7.60	8.29	8.86	9.36	10.90
10000	6.60	6.81	7.20	7.70	8.13	8.86	9.48	10.00	11.70
12000	6.97	7.20	7.60	8.13	8.59	9.36	10.00	10.60	12.30
14000	7.30	7.54	7.96	8.51	8.99	9.80	10.50	11.10	12.90
16000	7.60	7.85	8.29	8.86	9.36	10.20	10.90	11.50	13.40
18000	7.88	8.13	8.59	9.18	9.70	10.60	11.30	11.90	13.90
20000	8.13	8.39	8.86	9.48	10.00	10.90	11.70	12.30	14.40
25000	8.69	8.97	9.48	10.10	10.70	11.70	12.50	13.20	15.40
30000	9.18	9.48	10.00	10.70	11.30	12.30	13.20	13.90	16.20
35000	9.61	9.92	10.50	11.20	11.80	12.90	13.80	14.60	17.00
40000	10.00	10.30	10.90	11.70	12.30	13.40	14.40	15.20	17.70
45000	10.40	10.70	11.30	12.10	12.80	13.90	14.90	15.70	18.30
50000	10.70	11.00	11.70	12.50	13.20	14.40	15.40	16.20	18.90
60000	11.30	11.70	12.30	13.20	13.90	15.20	16.20	17.10	20.00
70000	11.80	12.20	12.90	13.80	14.60	15.90	17.00	17.90	20.90
80000	12.30	12.70	13.40	14.40	15.20	16.50	17.70	18.70	21.80
90000	12.80	13.20	13.90	14.90	15.70	17.10	18.30	19.40	22.60
100000	13.20	13.60	14.40	15.40	16.20	17.70	18.90	20.00	23.30
150000	14.90	15.40	16.20	17.30	18.30	20.00	21.40	22.60	26.30
200000	16.20	16.70	17.70	18.90	20.00	21.80	23.30	24.60	28.70

Life Expectancy

To calculate the Rating Life L_{10} of any selected trial bearing:

or

Step1 Determine the equivalent radial load P.

a For radial load only:

$P = F_r$

b For combined radial and thrust load:

$P = XF_r + YF_a$

If $\frac{F_a}{F_r}$ is equal to or less than e, then

$P = X_1F_r + Y_1F_a$

If $\frac{F_a}{F_r}$ is greater than e, then

$P = X_2F_r + Y_2F_a$

For values of e, X_1, Y_1, X_2, and Y_2, consult the appropriate bearing rating table, pages H-9

and H-10.

Step2 Calculate the ratio of the bearing basic load rating C to its equivalent radial load.

$\frac{C}{P}$

Step3 Approximate the bearing life from Table 1.

Life Adjustment

The Rating Life, L_{10}, may be modified for some applications in accordance with the formula

$L_n' = a_1a_2a_3L_{10}$

where L_n' = Adjusted life for (100-n) % reliablility,
a_1 = Life adjustment factor for reliability
a_2 = Life adjustment factor for material and processing
a_3 = Life adjustment factor for operating conditions.

For most normal applications, all factors will be taken as 1, and the Rating Life used as the selection basis or life estimate. In addition, as long as standard catalog bearings are used, a_2 will be normally set equal to one. The factor a_3 covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a_3 significantly different than unity include speeds less than 20000 DN or greater than 200000 DN, temperatures below –40°F (–40°C) or above 275°F (135°C). For other possible conditions, as well as additional information on life adjustment factors, consult Link-Belt Bearing Division, Rexnord Corp.

Load Ratings
Series A20000, A20000M

A20000

A20000M

Load ratings, weights and speed limits

Bearing number	Weight		C_0 Static load rating			C Basic load rating			Approximate speed limit RPM ●	e	$\frac{F_a}{F_r}$ <= e		$\frac{F_a}{F_r}$ > e	
	kilograms	pounds	***newtons***		pounds	***newtons***		pounds			X_1	Y_1	X_2	Y_2
A22100	*0.4*	*1.0*	*66*	*100*	*14900*	*51*	*200*	*11500*	*7100*	*.51*	*1.00*	*1.32*	*.67*	*1.96*
A22100M	*0.4*	*1.0*												
A22112	*0.4*	*.9*												
A22112M	*0.4*	*.9*												
A22118	*0.6*	*1.3*	*80*	*500*	*18100*	*60*	*900*	*13700*	*6200*	*.48*	*1.00*	*1.40*	*.67*	*2.08*
A22118M	*0.6*	*1.4*												
A22125	*0.5*	*1.1*												
A22125M	*0.5*	*1.2*												
A22137	*0.6*	*1.3*	*93*	*200*	*20900*	*64*	*900*	*14600*	*5700*	*.44*	*1.00*	*1.54*	*.67*	*2.29*
A22137M	*0.6*	*1.4*												
A22150	*0.5*	*1.2*												
A22150M	*0.6*	*1.3*												
A22177	*0.9*	*2.0*	*127*	*700*	*28700*	*89*	*800*	*20200*	*4800*	*.45*	*1.00*	*1.51*	*.67*	*2.25*
A22177M	*0.9*	*2.0*												
A22196	*1.0*	*2.1*	*147*	*700*	*33200*	*94*	*300*	*21200*	*4500*	*.40*	*1.00*	*1.68*	*.67*	*2.50*
A22196M	*1.0*	*2.3*												
A23196	*1.4*	*3.1*	*189*	*000*	*42500*	*130*	*300*	*29300*	*4200*	*.45*	*1.00*	*1.50*	*.67*	*2.24*
A23196M	*1.5*	*3.3*												
A24196	*2.0*	*4.3*	*245*	*500*	*55200*	*164*	*600*	*37000*	*3850*	*.48*	*1.00*	*1.39*	*.67*	*2.07*
A24196M	*2.1*	*4.7*												
A23200	*1.4*	*3.2*	*197*	*500*	*44400*	*117*	*400*	*26400*	*4000*	*.40*	*1.00*	*1.68*	*.67*	*2.50*
A23200M	*1.5*	*3.3*												
A23225	*1.3*	*2.8*												
A23225M	*1.3*	*2.9*												
A24236	*1.8*	*3.9*	*238*	*000*	*53500*	*139*	*700*	*31400*	*3600*	*.38*	*1.00*	*1.80*	*.67*	*2.68*
A24236M	*2.0*	*4.3*												

See facing page for footnotes.

Load ratings, weights and speed limits

Bearing number	Weight		C_0 Static load rating			C Basic load rating			Approximate speed limit RPM ●	e	$\frac{F_a}{F_r} <= e$		$\frac{F_a}{F_r} > e$	
	kilograms	pounds	***newtons***		pounds	***newtons***		pounds			X_1	Y_1	X_2	Y_2
A22262	*1.9*	*4.2*	*272*	*700*	*61300*	*159*	*700*	*35900*	*3500*	*.37*	*1.00*	*1.81*	*.67*	*2.70*
A23262	*2.9*	*6.5*	*249*	*400*	*67300*	*194*	*400*	*43700*	*3250*	*.42*	*1.00*	*1.62*	*.67*	*2.42*
A23262M	*3.1*	*6.9*												
A23275	*4.2*	*9.3*	*375*	*000*	*84300*	*257*	*500*	*57900*	*2850*	*.40*	*1.00*	*1.67*	*.67*	*2.49*
A23275M	*4.4*	*9.8*												
A22275	*3.0*	*6.6*	*318*	*000*	*71500*	*185*	*900*	*41800*	*3100*	*.38*	*1.00*	*1.79*	*.67*	*2.67*
A22275M	*3.1*	*6.8*												
A22295	*2.7*	*6.0*												
A22295M	*2.8*	*6.2*												
A23334	*4.0*	*8.9*	*403*	*400*	*90700*	*226*	*800*	*51000*	*2650*	*.38*	*1.00*	*1.77*	*.67*	*2.64*
A23334M	*4.3*	*9.4*												
A22343	*4.3*	*9.4*	*516*	*000*	*116000*	*274*	*000*	*61600*	*2600*	*.43*	*1.00*	*1.57*	*.67*	*2.33*
A22343M	*4.4*	*9.8*												
A22351	*4.9*	*10.9*												
A22351M	*5.1*	*11.3*												
A22362	*4.7*	*10.4*												
A22362M	*4.9*	*10.8*												
A24374	*7.5*	*16.0*	*609*	*400*	*137000*	*351*	*800*	*79100*	*2200*	*.36*	*1.00*	*1.88*	*.67*	*2.79*
A22354	*9.6*	*21.1*	*790*	*200*	*178000*	*419*	*400*	*94300*	*2100*	*.38*	*1.00*	*1.80*	*.67*	*2.68*
A22354M	*10.0*	*22.1*												
A22400	*8.6*	*18.9*												
A22400M	*8.8*	*19.3*												
A22413	*8.4*	*18.6*												
A22413M	*8.7*	*19.1*												
A23472	*13.6*	*30.0*	*944*	*700*	*212000*	*520*	*400*	*117000*	*1800*	*.37*	*1.00*	*1.83*	*.67*	*2.72*

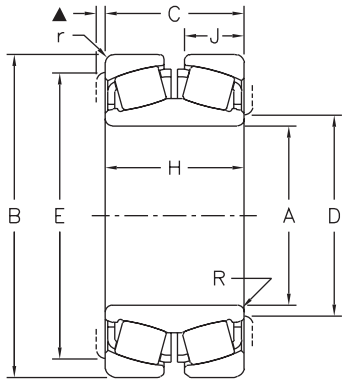
● For oil lubrication only. For grease lubrication, use 75% of these values.

Selection guide, pages H-7, H-8.
Dimensions on pages H-11 – H-14.
Additional information, page H-15.

Spherical Roller Bearings

A20000

Double Row
Adjustable
Self-aligning
Deep Coined Retainer
Double Contoured Roller Pocket



Dimensions (inches/***mm***)

Bearing number	A Bore diameter †	B Outside diameter ●	C Assembly width ‡	D	E	H Inner	J Outer	R* Inner	r* Outer
				Shoulder diameter		Ring width		Fillet radius	
A22100	1.0000								
	25.400	2.3750	1.188	1.31	2.00	1.188	.491	.046	.046
A22112	1.1250	***60.235***	***30.18***	***33.3***	***50.8***	***30.18***	***12.47***	***1.17***	***1.17***
	28.575								
A22118	1.1875								
	30.162	2.6250	1.312	1.50	2.31	1.312	.541	.046	.062
A22125	1.2500	***66.675***	***33.32***	***38.1***	***58.7***	***33.32***	***13.74***	***1.17***	***1.57***
	31.750								
A22137	1.3775								
	34.988	2.8345	1.310	1.68	2.50	1.310	.546	.046	.062
A22150	1.5000	***71.996***	***33.27***	***42.7***	***63.5***	***33.27***	***13.87***	***1.17***	***1.57***
	38.100								
A22177	1.7712	3.3464	1.578	2.00	2.87	1.578	.651	.080	.062
	44.988	***85.000***	***40.08***	***50.8***	***72.9***	***40.08***	***16.54***	***2.03***	***1.57***
A22196	1.9680	3.5433	1.526	2.25	3.18	1.526	.651	.062	.078
	49.987	***90.000***	***38.76***	***57.2***	***80.8***	***38.76***	***16.54***	***1.57***	***1.98***
A23196	1.9680	3.9370	1.656	2.25	3.50	1.656	.624	.093	.062
	49.987	***100.000***	***42.06***	***57.2***	***88.9***	***42.06***	***15.85***	***2.36***	***1.57***
A24196	1.9680	4.3299	2.062	2.18	3.83	2.062	.836	.062	.080
	49.987	***109.979***	***52.37***	***55.4***	***97.3***	***52.37***	***21.23***	***1.57***	***2.03***
A23200	2.0000								
	50.800	3.9370	1.656	2.50	3.50	1.656	.693	.093	.062
A23225	2.2500	***100.000***	***42.06***	***63.5***	***88.9***	***42.06***	***17.60***	***2.36***	***1.57***
	57.150								
A24236	2.3616	4.3307	1.750	2.68	3.87	1.750	.763	.062	.078
	59.985	***110.000***	***44.45***	***68.1***	***98.3***	***44.45***	***19.38***	***1.57***	***1.98***

See facing page for footnotes.

Dimensions (inches/***mm***)

Bearing number	A Bore diameter †	B Outside diameter ●	C Assembly width ‡	D	E	H Inner	J Outer	R★ Inner	r★ Outer
				Shoulder diameter		Ring width		Fillet radius	
A22262	2.6250	4.4677	1.716	3.00	4.07	1.716	.690	.140	.062
	66.675	***113.480***	***43.59***	***76.2***	***103.4***	***43.59***	***17.53***	***3.56***	***1.57***
A23262	2.6250	5.0000	2.188	2.90	4.44	2.188	.936	.078	.078
	66.675	***127.000***	***55.58***	***73.7***	***112.8***	***55.58***	***23.77***	***1.98***	***1.98***
A23275	2.7553	5.9045	2.375	3.19	5.25	2.375	.960	.080	.080
	69.985	***149.974***	***60.32***	***81.0***	***133.4***	***60.32***	***24.38***	***2.03***	***2.03***
A22275	2.7500							.080	
	69.850	5.1172	2.125	3.31	4.57	2.150	.928	***2.03***	.078
A22295	2.9522	***129.977***	***53.98***	***84.1***	***116.1***	***54.61***	***23.57***	.140	***1.98***
	74.986							***3.56***	
A23334	3.3457	5.9045	2.313	3.75	5.34	2.313	.925	.078	.125
	84.981	***149.974***	***58.75***	***95.2***	***135.6***	***58.75***	***23.50***	***1.98***	***3.18***
A22343	3.4375								
	87.312								
A22351	3.5100	6.0000	2.750	4.00	5.43	2.750	1.173	.078	.125
	89.154	***152.400***	***69.85***	***101.6***	***137.9***	***69.85***	***29.79***	***1.98***	***3.18***
A22362	3.6250								
	92.075								
A24374	3.7402	7.0866	2.677	4.19	6.38	2.677	1.152	.093	.125
	95.001	***180.000***	***68.00***	***106.4***	***162.0***	***68.00***	***29.26***	***2.36***	***3.18***
A22354	3.5425								
	89.980								
A22400	4.0000	7.4792	2.974	4.75	6.63	2.968	1.265	.125	.125
	101.600	***189.972***	***75.54***	***120.6***	***168.4***	***75.39***	***32.13***	***3.18***	***3.18***
A22413	4.1331								
	104.981								
A23472	4.7236	8.4634	3.437	5.37	7.50	3.437	1.511	.125	.125
	119.979	***214.970***	***87.30***	***136.4***	***190.5***	***87.30***	***38.38***	***3.18***	***3.18***

Bold face items normally available from stock; consult for availability of non-stock items.

▲ Housing recess: Recommended 3⁄16" ***(4.8 mm)***; minimum 1⁄16" ***(1.6 mm)***.

★ Largest fillet radius that will clear bearing corners.

● Outer ring O.D. tolerance: +.0010" –.0000" ***(+0.025 –0.000 mm)***.

† Bore tolerance:
2.5000" ***(63.500 mm)*** diameter and smaller, +.0005" –.0000" ***(+0.013 –0.000 mm)***.
Over 2.5000" ***(63.500 mm)*** diameter, +.0010" –.0000" ***(+0.025 –0.000 mm)***.

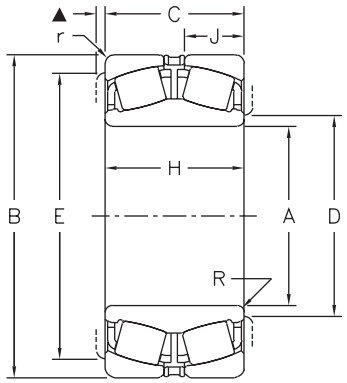
‡ Use shims, threaded cover, or spacer ring to provide for adjustment. Housing must allow clearance for this adjustment on dimension C: ±.035" ***(±0.89 mm)*** for 3.437" ***(87.30 mm)*** assembly width, and ±.025" ***(±0.64 mm)*** for all other widths.

Selection guide, pages H-7, H-8.
Load Ratings, pages H-9, H-10.
Additional information, page H-15.

Spherical Roller Bearings

A20000M

Double Row
Factory Adjusted
Self-aligning
Deep Coined Retainer
Double Contoured Roller Pocket



Dimensions (inches/***mm***)

Bearing number △	A Bore diameter †	B Outside diameter ●	C Assembly width	D	E	H Inner	J Outer	R★ Inner	r★ Outer
				Shoulder diameter		Ring width		Fillet radius	
A22100M	1.0000								
	25.400	2.3750	1.188	1.31	2.00	1.188	.491	.046	.046
A22112M	1.1250	***60.235***	***30.18***	***33.3***	***50.8***	***30.18***	***12.47***	***1.17***	***1.17***
	28.575								
A22118M	1.1875								
	30.162	2.6250	1.312	1.50	2.31	1.312	.541	.046	.062
A22125M	1.2500	***66.675***	***33.32***	***38.1***	***58.7***	***33.32***	***13.74***	***1.17***	***1.57***
	31.750								
A22137M	1.3775								
	34.988	2.8345	1.310	1.68	2.50	1.310	.546	.046	.062
A22150M	1.5000	***71.996***	***33.27***	***42.7***	***63.5***	***33.27***	***13.87***	***1.17***	***1.57***
	38.100								
A22177M	1.7712	3.3464	1.578	2.00	2.87	1.578	.651	.080	.062
	44.988	***85.000***	***40.08***	***50.8***	***72.9***	***40.08***	***16.54***	***2.03***	***1.57***
A22196M	1.9680	3.5433	1.526	2.25	3.18	1.526	.651	.062	.078
	49.987	***90.000***	***38.76***	***57.2***	***80.8***	***38.76***	***16.54***	***1.57***	***1.98***
A23196M	1.9680	3.9370	1.656	2.25	3.50	1.656	.624	.093	.062
	49.987	***100.000***	***42.06***	***57.2***	***88.9***	***42.06***	***15.85***	***2.36***	***1.57***
A24196M	1.9680	4.3299	2.062	2.18	3.83	2.062	.836	.062	.080
	49.987	***109.979***	***52.37***	***55.4***	***97.3***	***52.37***	***21.23***	***1.57***	***2.03***
A23200M	2.0000								
	50.800	3.9370	1.656	2.50	3.50	1.656	.693	.093	.062
A23225M	2.2500	***100.000***	***42.06***	***63.5***	***88.9***	***42.06***	***17.60***	***2.36***	***1.57***
	57.150								
A24236M	2.3616	4.3307	1.750	2.68	3.87	1.750	.763	.062	.078
	59.985	***110.000***	***44.45***	***68.1***	***98.3***	***44.45***	***19.38***	***1.57***	***1.98***

See facing page for footnotes.

Dimensions (inches/***mm***)

Bearing number △	A Bore diameter †	B Outside diameter ●	C Assembly width	D	E	H Inner	J Outer	R★ Inner	r★ Outer
				Shoulder diameter		Ring width		Fillet radius	
A23262M	2.6250 ***66.675***	5.0000 ***127.000***	2.188 ***55.58***	2.90 ***73.7***	4.44 ***112.8***	2.188 ***55.58***	.936 ***23.77***	.078 ***1.98***	.078 ***1.98***
A23275M	2.7553 ***69.985***	5.9045 ***149.974***	2.375 ***60.32***	3.19 ***81.0***	5.25 ***133.4***	2.375 ***60.32***	.960 ***24.38***	.080 ***2.03***	.080 ***2.03***
A22275M	2.7500 ***69.850***	5.1172 ***129.977***	2.125 ***53.98***	3.31 ***84.1***	4.57 ***116.1***	2.150 ***54.61***	.928 ***23.57***	.080 ***2.03***	.078 ***1.98***
A22295M	2.9522 ***74.986***							.140 ***3.56***	
A23334M	3.3457 ***84.981***	5.9045 ***149.974***	2.313 ***58.75***	3.75 ***95.2***	5.34 ***135.6***	2.313 ***58.75***	.925 ***23.50***	.078 ***1.98***	.125 ***3.18***
A22343M	3.4375 ***87.312***								
A22351M	3.5100 ***89.154***	6.0000 ***512.400***	2.750 ***69.85***	4.00 ***101.6***	5.43 ***137.9***	2.750 ***69.85***	1.173 ***29.79***	.078 ***1.98***	.125 ***3.18***
A22362M	3.6250 ***92.075***								
A22354M	3.5425 ***89.980***								
A22400M	4.0000 ***101.600***	7.4792 ***189.972***	2.974 ***75.54***	4.75 ***120.6***	6.63 ***168.4***	2.968 ***75.39***	1.265 ***32.13***	.125 ***3.18***	.125 ***3.18***
A22413M	4.1331 ***104.981***								

Bold face items normally available from stock; consult for availability of non-stock items.
▲ Housing recess: Recommended 3⁄16" ***(4.8 mm)***; minimum 1⁄16" ***(1.6 mm)***.
△ Complete part number includes clearance symbol i.e. A22100M/CO.
★ Largest fillet radius that will clear bearing corners.
● Outer ring O.D. tolerance: +.0010" –.0000" ***(+0.025 −0.000 mm)***.
† Bore tolerance:
2.5000" ***(63.500 mm)*** diameter and smaller, +.0005" –.0000" ***(+0.013 −0.000 mm)***.
Over 2.5000" ***(63.500 mm)*** diameter, +.0010" –.0000" ***(+0.025 −0.000 mm)***.

Selection guide, pages H-7, H-8.
Load Ratings, pages H-9, H-10.
Additional information, page H-15.

Recommended Fitting Practice: Inner ring fitting practice

Mounting method	Operation	Service	Shaft finish	Bearing Bore					
				Up to 3" inclusive			Over 3" thru 12" inclusive		
				Bearing bore, nominal	Fit	Shaft seat diameter, nominal	Bearing bore, nominal	Fit	Shaft seat diameter, nominal
Non-adjustable inner rings	Inner ring rotating with respect to load	Normal load (under 18% C), moderate shock,	Ground	+.0005 –.0000	.0005 tight .0015 tight	+.0015 +.0010	+.0010 –.0000	.0005 tight .0025 tight	+.0025 +.0015
		Heavy load, high speed, or shock	Unground or ground	+.0005 –.0000	.0010 tight .0025 tight	+.0025 –.0015	+.0010 –.0000	.0005 × Brg. Bore (in.) Tight Tol. ±.001	+.0005 × Brg. Bore (in.) Tol. +.001 –.000
Adjustable inner rings	Inner ring stationary with respect to load	Normal load (under 18% C), no shock	Unground	+.0005 –.0000	.0005 loose .0005 tight	+.0005 –.0000	+.0010 –.0000	.0010 loose .0010 tight	+.0010 –.0000
		Normal to heavy load, or shock	Ground	+.0005 –.0000	.0010 loose .0000	+.0000 –.0005	+.0010 –.0000	.0020 loose .0000	+.0000 –.0000
		Water spindle	Hardened ground	+.0005 –.0000	.0012 loose .0002 loose	–.0002 –.0007	+.0010 –.0000	.0022 loose .0002 loose	–.0002 –.0012

Outer ring fitting practice

Mounting method	Operation	Service	Bearing outside diameter								
			Up to 3" inclusive			Over 3" to 5" inclusive			Over 5" thru 12" inclusive		
			Bearing outside diameter, nominal	Fit	Housing seat diameter, nominal	Bearing outside diameter, nominal	Fit	Housing seat diameter, nominal	Bearing outside diameter, nominal	Fit	Housing seat diameter, nominal
Adjustable outer rings or A20000M (clamped only)	Outer ring stationary with respect to load	Steady load, no shock	+.0010 –.0000	.0020 loose .0000	+.0010 +.0020	+.0010 –.0000	.0020 loose .0000	+.0010 +.0020	+.0010 –.0000	.0020 loose .0000	+.0010 +.0020
		Heavy load, or shock	+.0010 –.0000	.0010 loose .0010 tight	+.0000 +.0010	+.0010 –.0000	.0010 loose .0010 tight	+.0000 +.0010	+.0010 –.0000	.0020 loose .0010 tight	+.0000 +.0020
Non-adjustable outer rings or A20000M (clamped only)	Outer ring rotating with respect to load	Normal load (under 18% C), no shock	+.0010 –.0000	.0005 tight .0025 tight	–.0015 –.0005	+.0010 –.0000	.0010 tight .0030 tight	–.0020 –.0010	+.0010 –.0000	.0010 tight .0030 tight	–.0020 –.0010
		Heavy load, or shock	+.0010 –.0000	.0020 tight .0040 tight	–.0030 –.0020	+.0010 –.0000	.0020 tight .0040 tight	–.0030 –.0020	+.0010 –.0000	.0020 tight .0040 tight	–.0030 –.0020

Operation:

Imposed radial loads should not exceed .25C. Where high radial loads, high speeds, thrust loads or vibratory loads are unavoidable, consult the Link-Belt Bearing Division.

Warning:

The reliability built into all Link-Belt bearings can be realized in service only when they are correctly selected and properly installed, protected and maintained.

The correct selection of bearings requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements, and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, seals, and accessories as well as provisions for installation and maintenance must follow good engineering principles.

Housings and covers must be designed to safely handle the radial and axial loads involved. Adequate space must be provided in the housing and covers for a supply of lubricant.

Seals must be provided that will satisfactorily cope with the environmental conditions.

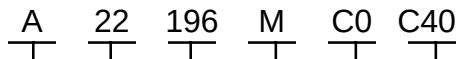
Shaft O.D. size and housing bore size tables show recommended fitting practices, and should be followed strictly to assure a successful mounting arrangement.

Service instructions are provided with shipments of bearings and are available on request. These instructions provide detailed information to aid in proper installation, operation, and maintenance, and should be carefully read and followed. Failure to do so may result in unsatisfactory service, as well as serious personal injury or property damage.

Nomenclature
Series A20000S, A20000, A20000M

Spherical Roller Bearings

Symbol	*Description*
A	Spherical roller bearing, separable outer ring(s)
22	Basic bearing series
23	Larger O.D. or greater load rating than series 22
24	Larger O.D. or greater load rating than series 23
196	Bore size in hundredths of an inch
None	Double row roller bearing; separable outer rings
M	Double row bearing; separable outer rings with spacer for preadjusted clearance
S	Single row roller bearing; adjustable
C2	Internal clearance less than C0
C0	Standard internal clearance
C3	Internal clearance greater than C0
W22	Reduced O.D. tolerance in center of tolerance range
C40	Reduced O.D. tolerance in high half of tolerance range
C50	Reduced O.D. tolerance in low half of tolerance range



(Series A20000M ONLY)

The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, availability, and the application requirements.

Sleeve Bearing Units and Takeups

Contents

Series 1000, 1100, 2-1200, 2-1300, 2-1400, 2-1500, F2200, DSB2800

Rigid Sleeve Bearing Units and Takeups

Introduction I-1
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Series 3200

Flex-block® Sleeve Bearing Units

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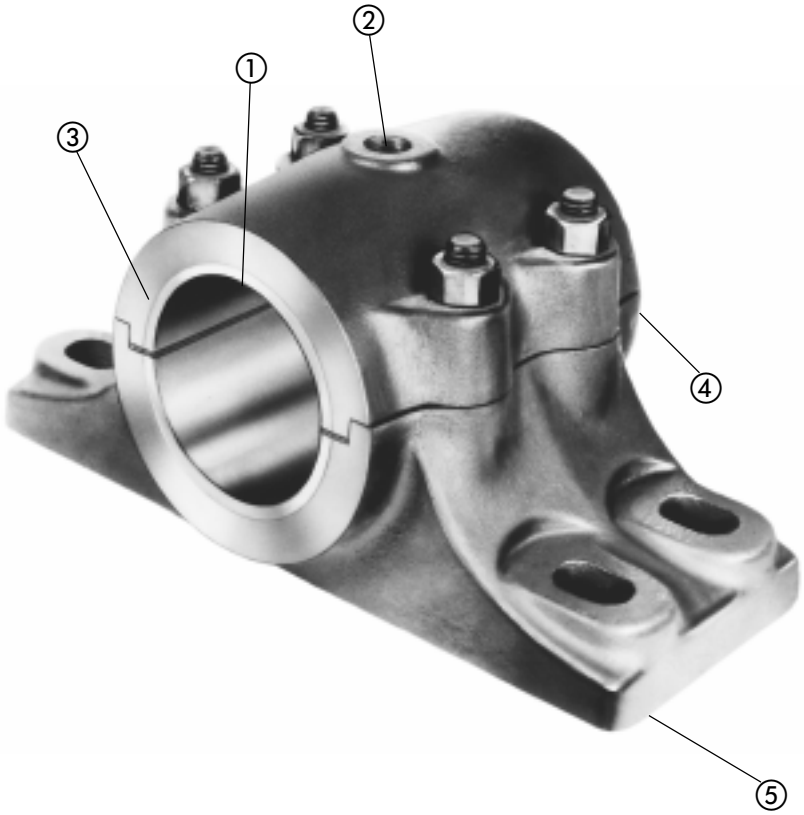
Series 1000, 1100, 2-1200, 2-1300, 2-1400, 2-1500, F2200, DSB2800

Rigid Sleeve Bearing Units and Takeups

Rigid sleeve bearing units provide compact and reliable usage in applications where continuous operation and uninterrupted service are required. Because the bearing material wears gradually, sudden breakdowns and costly maintenance, are minimized. Sleeve bearings can also operate extremely quietly. The standard bearing materials of babbitt, bronze and cast iron will handle a wide variety of applications such as on log decks, sewage treatment equipment, furnaces and ovens, quiet operating fans and blowers, power plant dampers and strokers, oscillating shaft applications and other general conveying and power transmission machinery.

① Bearing of babbitt or bronze is securely anchored in housing.
② Housing is drilled and tapped for grease cup or lubrication fitting; grooves distribute lubricant over loaded area.
③ Finished ends permit flush mounting of pulley, sprocket, or collar against bearing when required.
④ Two-piece pillow block has shims to provide for adjustment and compensate for wear.
⑤ Mounting surface is finished to provide firm seating on flat support.



One-piece Pillow Blocks

One-piece pillow blocks are recommended for general applications where it is unnecessary to remove a bearing cap. They are available with babbitt, bronze or plain bore cast iron bearings.

Two-piece Pillow Blocks

Two-piece pillow blocks are used whenever a bearing with a removable cap is required. They are available with babbitt or bronze bearings.

For heavy side pressures or angular loading, housings with gibbed joints provide greater strength. Cast steel housings are used where sudden shocks or heavy impact loads are encountered.

Flanged Units

Flanged units with square flanges have slotted mounting holes to make them interchangeable with most common ball and roller bearing bolting patterns. These units have either babbitt or bronze bearings.

Sleeve Bearing Materials

Babbitt Babbitt bearings are used for moderate speeds and loads and ambient temperatures up to 130°F ***(54°C)***. Babbitt has the ability to give excellent service with a minimum of maintenance.

Bronze Bronze bearings are recommended for heavier loads, impact, and temperatures beyond the limits of babbitt bearings. They can be operated at ambient temperatures up to 300°F ***(149°C)*** providing satisfactory lubrication is available. Bronze has excellent all-around bearing characteristics; it has a relatively low coefficient of friction and a remarkable resistance to shock and wear.

Series 1000, 1100, 2-1200, 2-1300, 2-1400, 2-1500, F2200, DSB2800

Pillow Blocks, Cast Iron, One-piece Housing

1000, 1000Z, 1100

Series 1000 babbitt bearing and 1000Z bronze bearing pillow blocks have 2 or 4-bolt base for shaft sizes ½" through 3 15⁄16". Series 1100 has a plain cast iron bore and 2 or 4-bolt base for shaft sizes ½" through 3 15⁄16".

Selection on pages I-5 and I-6.
Load ratings on pages I-7 and I-8.
Dimensions on pages I-9 and I-10.

BABBIT OR BRONZE BEARING

PLAIN IRON BEARING

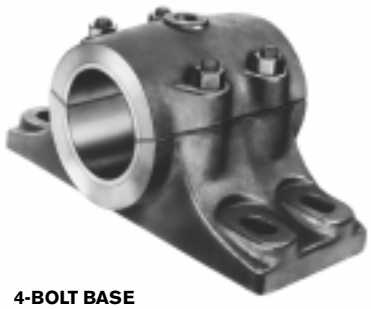
Pillow Blocks, Cast Iron, Two-piece Housing

2-1200, 2-1200Z, 2-1300

Series 2-1200 babbitt bearing and 2-1200Z bronze bearing pillow blocks have 2-bolt base for shaft sizes ⅞" through 3 15⁄16". Series 2-1300 babbitt bearing pillow blocks have 4-bolt base for shaft sizes 3 7⁄16" through 4 7⁄16".

Selection on pages I-5 and I-6.
Load ratings on pages I-7 and I-8.
Dimensions on pages I-11 and I-12.

2-BOLT BASE



4-BOLT BASE

Pillow Blocks, Cast Iron or Cast Steel, Gibbed Joint Two-piece Housing

2-1400, 2-1400Z, 2K1400Z

Series 2-1400 babbitt bearing pillow blocks have 4-bolt base for shaft sizes 1 15⁄16" through 10". Series 2-1400Z bronze bearing pillow blocks have 4-bolt base for shaft sizes 1 15⁄16" through 8", also available with cast steel housings for shaft sizes 1 15⁄16" through 12".

Selection on pages I-5 and I-6.
Load ratings on pages I-7 and I-8.
Dimensions on page I-13.

4-BOLT BASE

Pillow Blocks, Cast Iron or Cast Steel, Two-piece Housing, Angular Joint

2-1500, 2-1500Z

Series 2-1500 babbitt bearing pillow blocks have 4-bolt base for shaft sizes 1 15⁄16" through 9". Series 2-1500Z bronze bearing pillow blocks have 4-bolt base for shaft sizes 1 15⁄16" through 8".

Selection on pages I-5 and I-6.
Load ratings on pages I-7 and I-8.
Dimensions on page I-14.

4-BOLT BASE

Flanged Units, Cast Iron, One-piece Housing

F2200, F2200Z

Series F2200 babbitt bearing and F2200Z bronze bearing flanged units have 4-bolt square flanges for shaft sizes ¾" through 3 15⁄16".

Selection on pages I-5 and I-6.
Load ratings on pages I-7 and I-8.
Dimensions on page I-15.

Takeups, Steel Frames

Adjustable type takeups for conveyors and elevators. Welded or formed steel frames.

LC Universal Takeup Frames only.
Adjustable takeups for use with ball, roller, rigid sleeve and Flex-block® pillow blocks.

DSB 2800

Conveyor takeup with welded steel frame and hinged top for moderate to heavy service. Bearing bore parallel to base of frame. Shaft sizes 1 15⁄16" through 3 15⁄16". Babbitt bearings.

Selection on pages I-5 and I-6.
Load ratings on pages I-7 and I-8.
Dimensions on pages I-16 and I-28.

Rigid Sleeve Bearing Units

To select a rigid sleeve bearing, determine the applied radial load and the applicable operating conditions. The procedure shown here will aid in selecting an appropriate bearing.

The selection procedures and rating formulas used here are in agreement with industry standards for sleeve bearings established by the Mechanical Power Transmission Association. The bearing ratings apply when certain installation and operating conditions are met and when any other adverse ambient conditions such as high or low temperatures, extreme dirt or moisture, chemical contamination, shock or vibration loading direct or induced, oscillating shafts, intermittent operation and related factors are carefully considered.

The ratings used apply when the following conditions are met:

1. Align bearings with the shaft to provide uniform load distribution.
2. Normal running loads should not exceed the ratings shown in the tables. Starting and occasional peak loads should not exceed these ratings by more than 100%.
3. The direction of the load should not be within 30° ***(.53 radians)*** of either side of the grease groove and must further meet any load direction limitations imposed by Table 1.
4. The shaft finish through the bearing bore should be at least as smooth as that of normal commercial cold finished steel shafting (about 32 micro-inches or ***.82μm***). There should also be no machined or ground spiral lead on the shaft journal. Shafting should be within the diameter tolerances listed on page I-6.
5. Ambient temperatures should not exceed 130°F ***(54°C)*** for babbitt and 300°F ***(149°C)*** for bronze bearings. This temperature limit applies to shafts extending from ovens, high temperature fans, etc.
6. Sturdy, vibration-free supporting structures must be provided, along with adequate grease lubrication.

Sleeve Bearing Selection

Step 1

From Table 1, select the bearing material and housing series and material suitable for the radial load direction.

Step 2

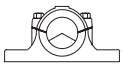
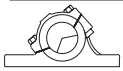
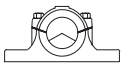
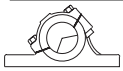
Refer to the radial load rating tables on pages I-7 and I-8 to determine the shaft diameter necessary to obtain the required radial rating at the given speed.

If the conditions described above cannot be met, the load should be increased by a service factor prior to selecting the bearing sizes from the tables shown on pages I-7 and I-8. The service factor may be as high as 2.0 for conditions to the left of the “stair-step” line, or as high as 3.0 for conditions to the right of the line. Consult Link-Belt Bearing Division, Rexnord Corp.

Step 3

To position a shaft axially or where light thrust loads are present provide thick bronze washers backed by a shaft collar or a machined shaft shoulder against the end of the bearing. The bearing ends are already machined.

Table 1 • Bearing material and unit type selection

Material		Recommended loading range, degrees, radius for pillow block or flanged unit ▲		Available shaft sizes, inches	Rigid unit series		
					Pillow block		Flanged Unit
Bearing	Housing				2-bolt	4-bolt	Square
Babbitt	Cast iron one-piece		300° ***5.2 rad***	½-2 15/16	1000		
				¾-3 15/16			F2200
				3 7/16-3 15/16		1000F	
	Cast iron two-piece		120° ***2.1 rad***	⅞-3 15/16	2-1200		
				3 7/16-4 15/16		2-1300	
			300° ***5.2 rad***	1 15/16-12		2-1400	
			□ 120° ***2.1 rad***	1 15/16-9		2-1500	
Bronze	Cast iron one-piece		300° ***5.2 rad***	½-2 15/16	1000Z		
				¾-3 15/16			F2200Z
				3 7/16-3 15/16		1000FZ	
	Cast iron two-piece		120° ***2.1 rad***	⅞-3 15/16	2-1200Z		
			300° ***5.2 rad***	3 7/16-8		2-1400Z	
			□ 120° ***2.1 rad***	1 15/16-8		2-1500Z	
	Cast steel two-piece		300° ***5.2 rad***	1 15/16-12		2K1400Z	

▲ Shaded portion of drawings represents recommended loading range with the grease groove horizontal and opposite the loaded area. For other positioning, consult Link-Belt Bearing Division, Rexnord Corp.

□ 300°(5.2 rad.) for housings with gibbed joint construction.

Rigid Sleeve Bearing Units

Sleeve Bearing Materials:

Plain bearings made of babbitt are universally accepted as providing reasonable capacity and dependable service, often under adverse conditions. Babbitt is a relatively soft bearing material and for this reason minimizes danger of scoring or damage to shafts or rotors. It can often be repaired quickly on the spot by rescraping, pouring of new metal, etc. Bearing operating temperature should not exceed 130°F ***(54°C)*** although occasional peaks to 200°F ***(93°C)*** may be tolerated. Babbitt bearings are usually restricted to applications involving light to moderate loads and mild shock.

Bronze bearings are suitable for heavier loads than babbitt (75% to 200% higher), depending upon specific conditions of load and speed. Bronze withstands higher shock loads and permits somewhat higher speed operation. It is usually restricted to 300°F ***(150°C)*** ambient temperature, although normal multi-purpose greases are limited to 200°-250°F ***(93°-121°C)*** operating temperature. Bronze is a harder material than babbitt and has a greater tendency to score or damage shafts in the event of malfunction such as lack of relubrication. Field repair of bronze bearings generally requires removing shims and scraping or replacement of bushings.

Cast iron bearings (series 1100) are low in cost and suitable for many slow-moving shafts and oscillating or reciprocating arms supporting relatively light loads. The lubricating characteristics of cast iron are attributed to the free graphite flakes present in the material. With the use of cast iron bearings, higher shaft clearance is usually utilized. Thus any large wear particles or debris will not join or seize the bearing. This material has been used to temperatures as high as 1000°F ***(538°C)*** under light loads and slow speed intermittent operations, where ordinary lubricants are ineffective.

Additional Features:

By the very nature of their design, all rigid sleeve bearing units are expansion type, in that the shaft journal is free to slide axially through the bore of the bearing. To fix a unit, a combination of shaft shoulders and/or thrust collars with bronze washers can be utilized.

Rigid sleeve bearing units have cored mounting bolt holes suitable for the inch or metric bolts listed.

Bearings can be replaced in units with bronze sleeves. Care should be taken when replacing bronze sleeves, split or solid, to firmly anchor the sleeve to the housing.

Operation:

Rigid sleeve bearing units are not prelubricated. The service instructions packed with shipments provide guidelines for initial lubrication and relubrication intervals. As lack of lubrication results in bearing and shaft wear, care must be taken to assure an adequate supply of correct lubricant, especially during initial startup and until satisfactory relubrication intervals are determined.

Very careful shaft alignment is necessary during installation. Shaft journals must turn freely without binding in the bearing or excessive heat and seizure can result. Any factor which may disrupt or remove the lubricant film should be eliminated as well. Sharp edges on the shaft or the bearing surface can act as scrapers to destroy lubricant films. Do not extend shaft keyways into bearing bores.

When rigid sleeve bearings must carry light to medium thrust loads, thrust washers of bronze should be placed against the already machined face of the bearing and backed by substantial thrust collars, shaft shoulders, machined gear, sprocket or sheave faces, etc.

Takeups:

Rigid sleeve bearing pillow blocks can be mounted on the universal takeup frame LC, illustrated on page I-28 and LHD universal takeup frame, illustrated on pages D-22 or E-25. Takeups DSB2800 are on page I-16. Alignment of rigid sleeve bearing takeups is difficult and must be carefully accomplished. Alignment must also be maintained during any further adjustment of the takeup after operation. Bolt takeup frames firmly to good supporting structure to prevent frame overload and distortion.

Shaft Tolerances:

Shaft diameters for rigid sleeve bearing units are usually held to the following regular commercial tolerances:

Shaft Diameters	*Recommended Tolerance*
through 2"	Nominal to –.003"
2 1/16" through 4"	Nominal to –.004"
4 1/16" through 6"	Nominal to –.005"
6 1/16" through 13"	Nominal to –.006"

Warning:

The reliability built in all Link-Belt bearings can be realized in service only when bearings are correctly selected, properly installed, protected and maintained.

The correct selection of rigid sleeve bearing mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements and maintenance be adequately considered. The selection of materials for and design of housings, shafting, fasteners, and accessories as well as provisions for installation and maintenance must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the line of force passes directly into the base, or so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, serious housing and fastener deflection or failure may occur.

Takeups are best located where loads are moderate and no shock loads are present. As many mounting arrangements are possible with takeups, proper safety factors must always be considered on all items of the system, including shafts, housings, fasteners, and adjusting screws.

Link-Belt Bearing Division, Rexnord Corp., should be consulted where unusual loading conditions exist.

Babbitt Rigid Sleeve Bearing Units

Radial load ratings for 10 to 300 RPM (pounds/***newtons***) ■▲

Shaft diameter, inches	Shaft speed, RPM															
	10		50		100		150		200		250		300	
½	100	***445***	100	***445***	100	***445***	95	***423***	95	***423***	95	***423***	95	***423***
⅝	150	***667***	150	***667***	145	***645***	145	***645***	140	***623***	140	***673***	135	***600***
¾	180	***801***	175	***778***	175	***778***	170	***756***	170	***756***	165	***734***	160	***712***
⅞	260	***1 157***	255	***1 134***	250	***1 112***	245	***1 090***	240	***1 068***	235	***1 045***	230	***1 023***
15/16	280	***1 246***	275	***1 223***	265	***1 179***	260	***1 157***	255	***1 134***	250	***1 112***	245	***1 090***
1	295	***1 312***	290	***1 290***	285	***1 268***	280	***1 246***	270	***1 201***	265	***1 179***	260	***1 157***
1⅛	415	***1 846***	410	***1 824***	400	***1 779***	390	***1 735***	380	***1 690***	370	***1 646***	355	***1 579***
1 3/16, 1¼	440	***1 957***	430	***1 913***	420	***1 868***	410	***1 824***	395	***1 757***	385	***1 713***	375	***1 668***
1 5/16, 1⅜	585	***2 602***	570	***2 535***	555	***2 469***	535	***2 380***	520	***2 313***	505	***2 246***	485	***2 157***
1 7/16, 1½	640	***2 847***	625	***2 780***	605	***2 691***	585	***2 602***	565	***2 513***	545	***2 424***	525	***2 335***
1 11/16, 1¾	875	***3 892***	850	***3 781***	820	***3 648***	785	***3 492***	755	***3 358***	720	***3 203***	690	***3 069***
1 15/16, 2	1150	***5 120***	1110	***4 940***	1060	***4 720***	1010	***4 490***	965	***4 292***	915	***4 070***	865	***3 848***
2 3/16, 2¼	1460	***6 490***	1400	***6 230***	1330	***5 920***	1260	***5 600***	1190	***5 290***	1120	***4 980***	1050	***4 670***
2 7/16, 2½	1800	***8 010***	1730	***7 690***	1630	***7 250***	1530	***6 810***	1430	***6 360***	1340	***5 960***	1240	***5 520***
2 11/16, 2¾	2190	***9 740***	2080	***9 250***	1950	***8 670***	1820	***8 100***	1690	***7 520***	1560	***6 940***	1150	***5 120***
2 15/16, 3	2600	***11 570***	2470	***10 990***	2300	***10 230***	2130	***9 470***	1960	***8 720***	1790	***7 960***	675	***3 002***
3 7/16, 3½	3550	***15 790***	3330	***14 810***	3060	***13 610***	2790	***12 410***	2520	***11 210***	1200	***5 340***		
3 15/16, 4	4640	***20 640***	4310	***19 170***	3910	***17 390***	3500	***15 570***	2760	***12 280***				
4 7/16, 4½	5870	***26 110***	5410	***24 060***	4830	***21 480***	4250	***18 900***	1410	***6 270***				
4 15/16, 5	7240	***32 210***	6600	***29 360***	5810	***25 840***	5010	***22 290***						
5 7/16, 5½	8750	***38 920***	7900	***35 140***	6840	***30 430***	4360	***19 390***						
5 15/16, 6	10410	***46 310***	9300	***41 370***	7910	***35 190***	2390	***10 630***						
6 7/16, 6½	12200	***54 270***	10790	***48 000***	9020	***40 120***								
6 15/16, 7	14120	***62 810***	12360	***54 980***	10150	***45 150***								
7 7/16, 7½	17270	***76 820***	14950	***66 500***	12050	***53 600***								
7 15/16, 8	18390	***81 800***	15750	***70 060***	10710	***47 640***								
9	20750	***92 300***	17360	***77 220***	4140	***18 420***								
10	22950	***102 090***	18760	***83 450***										
12	30700	***136 560***	23910	***106 360***										

For speeds lower than 10 RPM consult Link-Belt Bearing Division.

Radial load ratings for 350 to 1000 RPM (pounds/***newtons***) ▲

Shaft diameter, inches	Shaft speed, RPM															
	350		400		450		500		600		700		800		900		1000	
½	95	***423***	90	***400***	90	***400***	90	***400***	85	***378***	85	***378***	85	***378***	80	***356***	80	***356***
⅝	135	***600***	135	***600***	130	***587***	130	***587***	125	***556***	120	***534***	115	***512***	110	***489***	110	***489***
¾	160	***712***	155	***689***	155	***689***	150	***667***	145	***645***	140	***623***	130	***578***	125	***556***	120	***534***
⅞	225	***1001***	220	***979***	215	***956***	210	***934***	200	***890***	190	***845***	180	***801***	150	***667***		
15/16	*240*	*1068*	*235*	*1045*	*225*	*1001*	*220*	*979*	*210*	*934*	*200*	*890*	*185*	*823*	*105*	*467*		
1	250	***1112***	245	***1090***	240	***1068***	230	***1023***	220	***979***	205	***912***						
1⅛	345	***1535***	335	***1490***	325	***1446***	315	***1401***	295	***1312***	245	***1090***						
1 3/16, 1¼	360	***1601***	350	***1557***	340	***1512***	325	***1446***	305	***1357***	190	***845***						
1 5/16, 1⅜	470	***2091***	455	***2024***	435	***1935***	420	***1868***	345	***1535***								
1 7/16, 1½	500	***2224***	480	***2135***	460	***2046***	440	***1957***	205	***912***								
1 11/16, 1¾	*655*	*2914*	*625*	*2780*	*590*	*2624*	*340*	*1512*										
1 15/16, 2	815	***3625***	730	***3247***	335	***1490***												
2 3/16, 2¼	975	***4337***	410	***1824***														
2 7/16, 2½	*645*	*2869*																

■ Load ratings are based on industry standards established by the Mechanical Power Transmission Association.

▲ For plain bore Cast Iron Sleeve Bearing Units use radial load ratings at speeds to the left of the shaded area.

Bronze Rigid Sleeve Bearing Units

Radial load ratings for 10 to 300 RPM (pounds/***newtons***) ■

Shaft diameter, inches	Shaft speed, RPM															
	10		50		100		150		200		250		300			
½	200	***890***	200	***890***	200	***890***	195	***867***	195	***867***	195	***867***	195	***867***		
⅝	250	***1 112***	250	***1 112***	245	***1 090***	245	***1 090***	240	***1 090***	240	***1 068***	240	***1 068***		
¾	300	***1 334***	300	***1 334***	295	***1 312***	295	***1 312***	290	***1 290***	285	***1 268***	285	***1 268***		
⅞	435	***1 935***	430	***1 913***	425	***1 890***	420	***1 868***	415	***1 846***	410	***1 824***	405	***1 802***		
15⁄16	465	***2 068***	460	***2 046***	455	***2 024***	450	***2 002***	445	***1 979***	435	***1 935***	430	***1 913***		
1	495	***2 202***	490	***2 180***	485	***2 157***	480	***2 135***	470	***2 091***	465	***2 068***	460	***2 046***		
1⅛	700	***3 114***	690	***3 069***	680	***3 025***	670	***2 980***	660	***2 936***	650	***2 891***	640	***2 847***		
1 3⁄16, 1¼	735	***3 269***	730	***3 247***	715	***3 180***	705	***3 136***	695	***3 092***	680	***3 025***	670	***2 980***		
1 5⁄16, 1⅜	980	***4 359***	965	***4 293***	950	***4 226***	930	***4 137***	915	***4 070***	895	***3 981***	880	***3 914***		
1 7⁄16, 1½	1070	***4 760***	1050	***4 670***	1030	***4 580***	1010	***4 490***	995	***4 426***	975	***4 337***	955	***4 248***		
1 11⁄16, 1¾	1470	***6 540***	1440	***6 410***	1410	***6 270***	1370	***6 090***	1340	***5 960***	1310	***5 830***	1280	***5 690***		
1 15⁄16, 2	1920	***8 540***	1880	***8 360***	1830	***8 140***	1790	***7 960***	1740	***7 740***	1690	***7 520***	1640	***7 300***		
2 3⁄16, 2¼	2440	***10 850***	2390	***10 630***	2320	***10 320***	2240	***9 960***	2170	***9 650***	2100	***9 340***	2030	***9 030***		
2 7⁄16, 2½	3020	***13 430***	2940	***13 080***	2850	***12 680***	2750	***12 230***	2650	***11 790***	2560	***11 390***	2460	***10 940***		
2 11⁄16, 2¾	3660	***16 280***	3560	***15 840***	3430	***15 260***	3300	***14 680***	3170	***14 100***	3040	***13 520***	2620	***11 650***		
2 15⁄16, 3	4370	***19 440***	4230	***18 820***	4060	***18 060***	3890	***17 300***	3720	***16 550***	3550	***15 790***	2440	***10 850***		
3 7⁄16, 3½	5960	***26 510***	5740	***25 530***	5470	***24 330***	5200	***23 130***	4930	***21 930***	3610	***16 060***	1440	***6 410***		
3 15⁄16, 4	7790	***34 650***	7460	***33 180***	7060	***31 400***	6650	***29 580***	5910	***26 290***						
4 7⁄16, 4½	9860	***43 860***	9400	***41 810***	8820	***39 230***	8240	***36 650***	5400	***24 020***						
4 15⁄16, 5	12180	***54 180***	11540	***51 330***	10740	***47 770***	9950	***44 260***	4090	***18 190***						
5 7⁄16, 5½	14740	***65 570***	13880	***61 740***	12820	***57 030***	10340	***45 990***	1820	***8 100***						
5 15⁄16, 6	17530	***77 980***	16420	***73 040***	15040	***66 900***	9520	***42 350***								
6 7⁄16, 6½	20560	***91 460***	19150	***85 180***	17390	***77 350***	7900	***35 140***								
6 15⁄16, 7	23840	***106 050***	22070	***98 170***	19870	***88 390***	5350	***23 800***								
7 7⁄16, 7½	29170	***129 750***	26850	***119 430***	23950	***106 530***	1880	***8 360***								
7 15⁄16, 8	31090	***138 300***	28450	***126 550***	23410	***104 130***										
9	35150	***156 360***	31760	***141 280***	18540	***82 470***										
10	38950	***172 260***	34760	***154 620***	12220	***54 360***										
12	52300	***232 640***	45520	***202 480***												

For speeds lower than 10 RPM
consult Link-Belt Bearing Division, Rexnord Corp.

Radial load ratings for 350 to 1000 RPM (pounds/***newtons***)

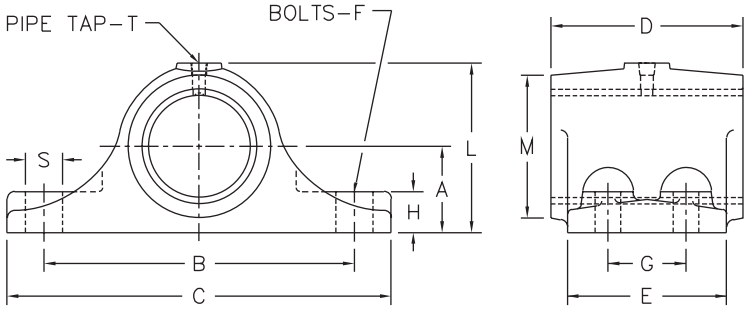
Shaft diameter, inches	Shaft speed, RPM															
	350		400		450		500		600		700		800		900	1000
½	195	***867***	190	***845***	190	***845***	190	***845***	185	***823***	185	***823***	185	***823***	180 ***800***	180 ***800***
⅝	235	***1045***	235	***1045***	235	***1045***	230	***1023***	225	***1001***	220	***979***	220	***979***	215 ***956***	210 ***934***
¾	280	***1246***	280	***1246***	275	***1223***	270	***1201***	265	***1179***	260	***1157***	255	***1134***	250 ***1112***	240 ***1068***
⅞	400	***1779***	395	***1757***	390	***1735***	385	***1713***	375	***1668***	365	***1624***	355	***1579***	325 ***1446***	245 ***1090***
15⁄16	*425*	*1890*	*420*	*1868*	*415*	*1846*	*410*	*1824*	*395*	*1757*	*385*	*1713*	*375*	*1668*	*295 1312*	*200 890*
1	450	***2002***	445	***1979***	440	***1957***	430	***1913***	420	***1868***	405	***1802***	360	***1601***	255 ***1134***	150 ***667***
1⅛	630	***2802***	620	***2758***	605	***2691***	595	***2647***	575	***2558***	525	***2335***	360	***1601***	195 ***867***	
1 3⁄16, 1¼	660	***2936***	645	***2869***	635	***2825***	625	***2780***	600	***2669***	485	***2157***	300	***1334***	115 ***512***	
1 5⁄16, 1⅜	865	***3848***	845	***3759***	830	***3692***	815	***3625***	735	***3269***	465	***2068***	195	***867***		
1 7⁄16, 1½	935	***4159***	915	***4070***	895	***3981***	875	***3892***	635	***2825***	315	***1401***				
1 11⁄16, 1¾	*1240*	*5520*	*1210*	*5380*	*1180*	*5250*	*930*	*4137*	*410*	*1824*						
1 15⁄16, 2	1590	***7070***	1500	***6670***	1110	***4940***	715	***3180***								
2 3⁄16, 2¼	1960	***8720***	1390	***6180***	830	***3692***										
2 7⁄16, 2½	1860	***8270***	1090	***4850***												
2 11⁄16, 2¾	*1580*	*7030*	*545*	*2424*												

■ Load ratings are based on industry standards established by the Mechanical Power Transmission Association.

Rigid Sleeve Bearing Pillow Blocks

1000, 1000Z

Cast Iron Housing
One-piece Design
2-bolt Base, 4-bolt Base
Babbitt or Bronze Bearing
Relubricatable



Dimensions (inches/***mm***)

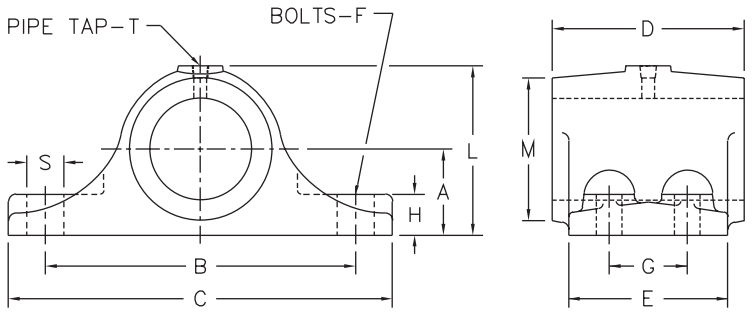
Style of base	Shaft diameter inches	Pillow block number Series 1000 babbitt	Pillow block number Series 1000Z bronze	A	B	C	D	E	F Bolts	G	H	L	M	S	T ■	Unit wt. (lbs.)
2-BOLT	½	1008	1008Z	¾ 19.05	2⅜ 60.3	3¼ 82.6	1⅜ 34.9	1 25.4	⅝ 8	. . . .	⅜ 9.5	1½ 38.1	1 3/16 30.2	½ 12.7	⅛	.8
	⅝ ¾	1010 *1012*	1010Z *1012Z*	⅞ 22.22	3 76.2	4¼ 108.0	2 50.8	1⅜ 34.9	⅜ 10	. . . .	½ 12.7	1¾ 44.4	1½ 38.1	⅝ 15.9	⅛	1.6 1.5
	⅞ 15/16 1	*1014* *1015* *1016*	1014Z 1015Z *1016Z*	1 25.40	3¼ 82.6	4½ 114.3	2 50.8	1⅜ 34.9	⅜ 10	. . . .	½ 12.7	1 31/32 50.0	1¾ 44.4	⅝ 15.9	⅛	1.9 1.7 1.6
	1⅛ 1 3/16 1¼	1018 *1019* *1020*	1018Z *1019Z* *1020Z*	1¼ 31.75	4 101.6	5¼ 133.4	2½ 63.5	1⅝ 41.3	⅜ 10	. . . .	⅝ 15.9	2⅜ 60.3	2 50.8	⅝ 15.9	⅛	2.6 2.5 2.4
	1⅜ 1 7/16 1½	**1022** *1023* *1024*	1022Z *1023Z* *1024Z*	1⅜ 34.92	5 127.0	6¾ 171.4	3 76.2	2 50.8	½ 12	. . . .	¾ 19.0	2 11/16 68.3	2⅜ 60.3	13/16 20.6	¼	4.5 4.3 4.1
	1 11/16 1¾	1027 *1028*	1027Z *1028Z*	1⅝ 41.28	5½ 139.7	7¼ 184.2	3½ 88.9	2¼ 57.2	½ 12	. . . .	¾ 19.0	3 3/16 81.0	2¾ 69.8	⅞ 22.2	¼	6.0 5.7
	1 15/16 2	*1031* *1032*	*1031Z* *1032Z*	1¾ 44.45	6 152.4	8 203.2	4 101.6	2¾ 69.8	⅝ 16	. . . .	⅞ 22.2	3½ 88.9	3⅛ 79.4	1 25.4	¼	8.5 8.3
	2 3/16	1035	1035Z	2 50.80	6½ 165.1	8½ 215.9	4½ 114.3	3 76.2	⅝ 16	. . . .	1 25.4	3⅞ 98.4	3⅜ 85.7	1 25.4	⅜	11.0
	2 7/16	*1039*	*1039Z*	2¼ 57.15	7 177.8	9¼ 235.0	5 127.0	3¼ 82.6	¾ 20	. . . .	1⅛ 28.6	4⅜ 111.1	3¾ 95.2	1⅛ 28.6	⅜	15.0
	2 15/16	*1047*	*1047Z*	2½ 63.50	8½ 215.9	11¼ 285.8	6 152.4	4 101.6	⅞ 24	. . . .	1¼ 31.8	5 127.0	4½ 114.3	1⅜ 34.9	⅜	26.0 25.0
4-BOLT	3 7/16	*1055F*	*1055FZ*	3 76.20	10 254.0	12½ 317.5	7 177.8	5 127.0	¾ 20	2¾ 69.8	1⅜ 34.9	6 152.4	5¼ 133.4	1¼ 31.8	½	39
	3 15/16	1063F	1063FZ	3¼ 82.55	11 279.4	13¾ 349.2	8 203.2	5½ 139.7	¾ 20	3 76.2	1½ 38.1	6 9/16 166.7	5⅞ 149.2	1⅜ 34.9	½	54

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole for lubrication. Grease cup or fitting not included.
Note: Approximate load ratings from babbitt ratings, page I-7.
Selection guide, pages I-5, I-6.
Additional information, page I-6.

Rigid Bearing Pillow Blocks

1100

Cast Iron Housing
One-piece Design
2-bolt Base, 4-bolt Base
Cast Iron Bearing
Relubricatable



Dimensions (inches/***mm***)

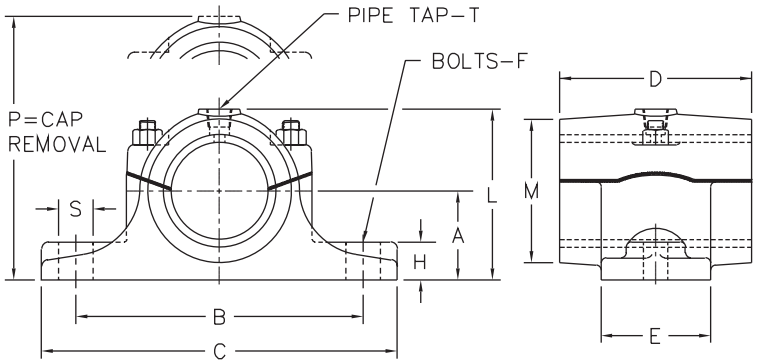
Style of base	Shaft diameter (inches)	Pillow block number Series 1100 cast iron	A	B	C	D	E	F Bolts	G	H	L	M	S	T ■	Unit wt. (lbs.)
2-BOLT	¾	1112	¾ ***19.05***	2⅜ ***60.3***	3¼ ***82.6***	1⅜ ***34.9***	1 ***25.4***	⅝ ***8***	....	⅜ ***9.5***	1½ ***38.1***	1¹³⁄₁₆ ***30.2***	½ ***12.7***	⅛	.6
	⅞	1114	⅞ ***22.22***	3 ***76.2***	4¼ ***108.0***	2 ***50.8***	1⅜ ***34.9***	⅜ ***10***	....	½ ***12.7***	1¾ ***44.4***	1½ ***38.1***	⅝ ***15.9***	⅛	1.4
	¹⁵⁄₁₆	1115													1.3
	1	*1116*													1.2
	1⅛	1118	1 ***25.40***	3¼ ***82.6***	4½ ***114.3***	2 ***50.8***	1⅜ ***34.9***	⅜ ***10***	....	½ ***12.7***	1³¹⁄₃₂ ***50.0***	1¾ ***44.4***	⅝ ***15.9***	⅛	1.6
	1³⁄₁₆	*1119*													1.5
	1¼	*1120*													1.4
	1⁷⁄₁₆	*1123*	1¼ ***31.75***	4 ***101.6***	5¼ ***133.4***	2½ ***63.5***	1⅝ ***41.3***	⅜ ***10***	....	⅝ ***15.9***	2⅜ ***60.3***	2 ***50.8***	⅝ ***15.9***	⅛	2.1
	1½	1124													2.0
	1¹¹⁄₁₆	*1127*	1⅜ ***34.92***	5 ***127.0***	6¾ ***171.4***	3 ***76.2***	2 ***50.8***	½ ***12***	....	¾ ***19.0***	2¹¹⁄₁₆ ***68.3***	2⅜ ***60.3***	¹³⁄₁₆ ***20.6***	¼	3.5
	1¾	1128													3.4
	1¹⁵⁄₁₆	*1131*	1⅝ ***41.28***	5½ ***139.7***	7¼ ***184.2***	3½ ***88.9***	2¼ ***57.2***	½ ***12***	....	¾ ***19.0***	3³⁄₁₆ ***81.0***	2¾ ***69.8***	⅞ ***22.2***	¼	5.0
	2	*1132*													4.9
	2³⁄₁₆	1135	1¾ ***44.45***	6 ***152.4***	8 ***203.2***	4 ***101.6***	2¾ ***69.8***	⅝ ***16***	....	⅞ ***22.2***	3½ ***88.9***	3⅛ ***79.4***	1 ***25.4***	⅜	6.8
	2⁷⁄₁₆	*1139*	2 ***50.80***	6½ ***165.1***	8½ ***215.9***	4½ ***114.3***	3 ***76.2***	⅝ ***16***	....	1 ***25.4***	3⅞ ***98.4***	3⅜ ***85.7***	1 ***25.4***	⅜	9.0
	2¹¹⁄₁₆	1143	2¼ ***57.15***	7 ***177.8***	9¼ ***235.0***	5 ***127.0***	3¼ ***82.6***	¾ ***20***	....	1⅛ ***28.6***	4⅜ ***111.1***	3¾ ***95.2***	1⅛ ***28.6***	⅜	12.0
	2¹⁵⁄₁₆	*1147*													11.0
	3⁷⁄₁₆	1155	2½ ***63.50***	8½ ***215.9***	11¼ ***285.8***	6 ***152.4***	4 ***101.6***	⅞ ***24***	....	1¼ ***31.8***	5 ***127.0***	4½ ***114.3***	1⅜ ***34.9***	½	19
4-BOLT	3¹⁵⁄₁₆	1163F	3 ***76.20***	10 ***254.0***	12½ ***317.5***	7 ***177.8***	5 ***127.0***	¾ ***20***	2¾ ***69.8***	1⅜ ***34.9***	6 ***152.4***	5¼ ***133.4***	1¼ ***31.8***	½	31

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole for lubrication. Grease cup or fitting not included.
Note: Approximate load ratings from babbitt ratings, page I-7.
Selection guide, pages I-5, I-6.
Additional information, page I-6.

Rigid Sleeve Bearing Pillow Blocks

2-1200, 2-1200Z

Cast Iron Housing
Two-piece Design
2-bolt Base
Babbitt or Bronze Bearing
Relubricatable



Dimensions (inches/***mm***)

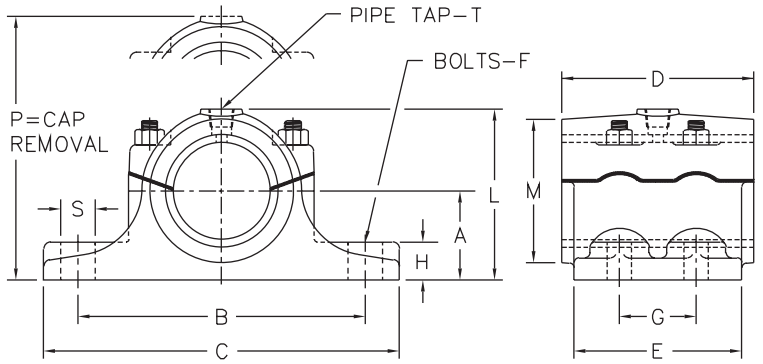
Shaft dia. inches	Pillow block △ number Series 2-1200 babbitt	Series 2-1200Z bronze	A	B	C	D	E	F Bolts	H	L	M	P	S	T ■	Unit wt. (lbs.)
7/8	*2-1214*	2-1214Z	1	3 5/8	4 3/4	2	1 3/8	3/8	9/16	2 1/16	1 13/16	3	9/16	1/8	1.9
15/16	*2-1215*	2-1215Z	***25.40***	***92.1***	***120.6***	***50.8***	***34.9***	***10***	***14.3***	***52.4***	***46.0***	***76.2***	***14.3***		1.8
1	*2-1216*	*2-1216Z*													1.7
1 1/16	2-1217	2-1217Z													2.6
1 1/8	*2-1218*	*2-1218Z*	1 1/4	4 1/8	5 1/4	2 1/2	1 5/8	3/8	5/8	2 7/16	2	3 1/2	5/8	1/8	2.5
1 3/16	*2-1219*	*2-1219Z*	***31.75***	***104.8***	***133.4***	***63.5***	***41.3***	***10***	***15.9***	***61.9***	***50.8***	***88.9***	***15.9***		2.4
1 1/4	*2-1220*	*2-1220Z*													2.3
1 5/16	2-1221	2-1221Z													4.1
1 3/8	*2-1222*	*2-1222Z*	1 3/8	4 7/8	6 1/4	3	2	1/2	3/4	2 11/16	2 5/16	3 7/8	11/16	1/4	4.0
1 7/16	*2-1223*	*2-1223Z*	***34.92***	***120.6***	***158.8***	***76.2***	***50.8***	***12***	***19.0***	***68.3***	***58.7***	***95.2***	***17.5***		4.0
1 1/2	*2-1224*	*2-1224Z*													3.8
1 9/16	2-1225	2-1225Z													6.8
1 5/8	2-1226	2-1226Z	1 1/2	5 1/4	6 3/4	3 1/2	2 1/4	1/2	13/16	3	2 11/16	4 3/8	3/4	1/4	6.4
1 11/16	*2-1227*	*2-1227Z*	***38.10***	***133.4***	***171.4***	***88.9***	***57.2***	***12***	***20.6***	***76.2***	***68.3***	***111.1***	***19.0***		6.0
1 3/4	*2-1228*	*2-1228Z*													5.6
1 15/16	*2-1231*	*2-1231Z*	1 3/4	6	7 1/2	4	2 1/2	5/8	15/16	3 7/16	3	4 7/8	13/16	1/4	8.5
2	*2-1232*	*2-1232Z*	***44.45***	***152.4***	***190.5***	***101.6***	***63.5***	***16***	***23.8***	***87.3***	***76.2***	***123.8***	***20.6***		8.0
2 3/16	*2-1235*	*2-1235Z*	1 7/8	6 1/2	8 1/2	4 1/2	2 3/4	5/8	1	3 3/4	3 3/8	5 1/4	1	3/8	11.0
2 1/4	2-1236	2-1236Z	***47.62***	***165.1***	***215.9***	***114.3***	***69.8***	***16***	***25.4***	***95.2***	***85.7***	***133.4***	***25.4***		11.0
2 7/16	*2-1239*	*2-1239Z*	2 1/8	7	8 7/8	5	3	5/8	1 1/8	4 3/16	3 3/4	5 3/4	1	3/8	14.0
2 1/2	*2-1240*	*2-1240Z*	***53.98***	***177.8***	***225.4***	***127.0***	***76.2***	***16***	***28.6***	***106.4***	***95.2***	***146.0***	***25.4***		13.0
2 11/16	2-1243	2-1243Z	2 1/4	7 3/4	10	5 1/2	3 1/4	3/4	1 3/16	4 1/2	4	6 3/8	1 1/8	3/8	19.0
			57.15	***196.8***	***254.0***	***139.7***	***82.6***	***20***	***30.2***	***114.3***	***101.6***	***161.9***	***28.6***		
2 15/16	*2-1247*	*2-1247Z*	2 1/2	8 1/2	10 3/4	6	3 1/2	3/4	1 5/16	4 7/8	4 1/4	6 3/4	1 1/8	3/8	23.0
3	*2-1248*	*2-1248Z*	***63.50***	***215.9***	***273.0***	***152.4***	***88.9***	***20***	***33.3***	***123.8***	***108.0***	***171.4***	***28.6***		22.0
3 7/16	*2-1255*	*2-1255Z*	2 7/8	9 1/4	12	7	4	7/8	1 1/2	5 5/8	5	7 5/8	1 3/8	1/2	35
			73.02	***235.0***	***304.8***	***177.8***	***101.6***	***24***	***38.1***	***142.8***	***127.0***	***193.7***	***34.9***		
3 15/16	*2-1263*	*2-1263Z*	3 1/8	10 1/2	13 1/2	8	4 1/2	1	1 5/8	6 3/16	5 5/8	8 1/2	1 1/2	1/2	48
			79.38	***266.7***	***342.9***	***203.2***	***114.3***	***24***	***41.3***	***157.2***	***142.9***	***215.9***	***38.1***		

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole for lubrication. Grease cup or fitting not included.
△ LHD sliding base takeup can be drilled for 2-1200 pillow blocks, see page D-22.
Selection guide, pages I-5, I-6.
Load ratings, pages I-7, I-8.
Additional information, page I-6.

Rigid Sleeve Bearing Pillow Blocks

2-1300

Cast Iron Housing
Two-piece Design
4-bolt Base
Babbitt Bearing
Relubricatable



Dimensions (inches/***mm***)

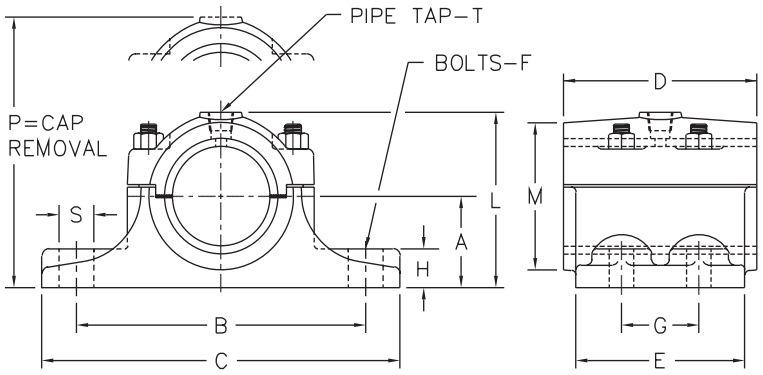
Style of cap	Shaft diameter (inches)	Pillow block number Series 2-1300 babbitt	A	B	C	D	E	F Bolts	G	H	L	M	P	S	T ■	Unit wt. (lbs.)
4-BOLT	3 7/16	*2-1355*	3¼ ***82.55***	10½ ***266.7***	13 ***330.2***	7 ***177.8***	5 ***127.0***	¾ ***20***	2¾ ***69.8***	1⅜ ***34.9***	6¼ ***158.8***	5¼ ***133.4***	8⅛ ***206.4***	1¼ ***31.8***	½	43
	3 15/16	*2-1363*	3½ ***88.90***	12 ***304.8***	14¾ ***374.6***	8 ***203.2***	5½ ***139.7***	¾ ***20***	3 ***76.2***	1½ ***38.1***	6 13/16 ***157.2***	5⅞ ***149.2***	9⅜ ***238.1***	1⅜ ***34.9***	½	61
	4 7/16	*2-1371*	4⅛ ***104.77***	13½ ***342.9***	16½ ***419.1***	9 ***228.6***	6¼ ***158.8***	⅞ ***24***	3½ ***88.9***	1¾ ***44.4***	7⅞ ***200.0***	6⅝ ***168.3***	10⅜ ***263.5***	1½ ***38.1***	½	92

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole for lubrication.
Grease cup or fitting not included.
Selection guide, pages I-5, I-6.
Load ratings, pages I-7, I-8.
Additional information, page I-6.

Rigid Sleeve Bearing Pillow Blocks

2-1400, 2-1400Z, 2K1400Z

Cast Iron or Cast Steel Housing
Two-piece Gibbed Joint Design
4-bolt Base
Babbitt or Bronze Bearing
Relubricatable



Dimensions (inches/***mm***)

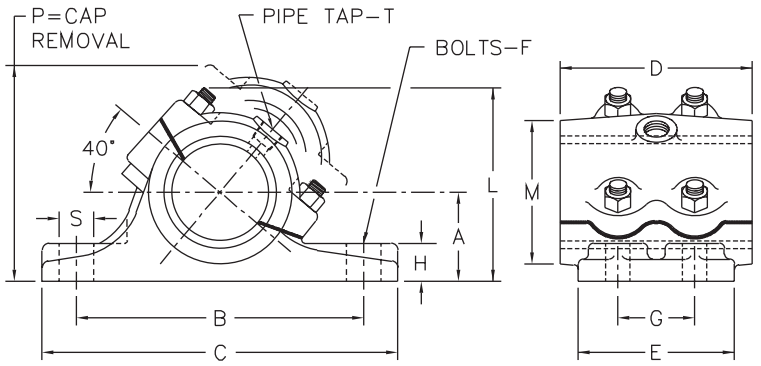
Style of cap	Shaft dia. inches	Pillow block number △ Cast Iron Series 2-1400 babbitt	Cast Iron Series 2-1400Z bronze	Cast steel Series 2K1400Z bronze	A	B	C	D	E	F Bolts	G	H	L	M	P	S	T ■	Unit wt. (lbs.) Cast iron	Cast steel
2-BOLT	1 15/16	*2-1431*	*2-1431Z*	*2K1431Z*	1¾ ***44.45***	6½ ***165.1***	8¼ ***209.6***	4 ***101.6***	3½ ***88.9***	½ ***12***	1¾ ***44.4***	⅞ ***22.2***	3 7/16 ***87.3***	3 ***76.2***	4½ ***114.3***	¾ ***19.0***	¼	10.0	11.0
	2 3/16	*2-1435*	*2-1435Z*	2K1435Z	1⅞ ***47.62***	6¾ ***171.4***	8½ ***215.9***	4½ ***114.3***	3½ ***88.9***	½ ***12***	1¾ ***44.4***	1 ***25.4***	3¾ ***95.2***	3⅜ ***85.7***	4 15/16 ***125.4***	¾ ***19.0***	⅜	14.0	15.0
	2 7/16	*2-1439*	*2-1439Z*	*2K1439Z*	2⅛ ***53.98***	8 ***203.2***	10¼ ***260.4***	5 ***127.0***	4 ***101.6***	⅝ ***16***	2 ***50.8***	1⅛ ***28.6***	4 3/16 ***106.4***	3¾ ***95.2***	5⅜ ***136.5***	1 ***25.4***	⅜	19.0	21.0
	2 11/16	2-1443	2-1443Z	2K1443Z	2¼ ***57.15***	8¼ ***209.6***	10½ ***266.7***	5½ ***139.7***	4¼ ***108.0***	⅝ ***16***	2¼ ***57.2***	1¼ ***31.8***	4½ ***114.3***	4 ***101.6***	6 ***152.4***	1 ***25.4***	⅜	25.0	28.3
	2 15/16	*2-1447*	*2-1447Z*	*2K1447Z*	2½ ***63.50***	8¾ ***222.2***	11 ***279.4***	6 ***152.4***	4½ ***114.3***	⅝ ***16***	2½ ***63.5***	1⅜ ***34.9***	4⅞ ***123.8***	4¼ ***108.0***	6⅞ ***174.6***	1 ***25.4***	⅜	30	34
4-BOLT	3 7/16	*2-1455*	*2-1455Z*	*2K1455Z*	3¼ ***82.55***	10½ ***266.7***	13 ***330.2***	7 ***177.8***	5 ***127.0***	¾ ***20***	2¾ ***69.8***	1⅜ ***34.9***	6¼ ***158.8***	5¼ ***133.4***	8 9/32 ***210.3***	1¼ ***31.8***	½	43	49
	3 15/16	*2-1463*	*2-1463Z*	*2K1463Z*	3½ ***88.90***	12 ***304.8***	14¾ ***374.6***	8 ***203.2***	5½ ***139.7***	¾ ***20***	3 ***76.2***	1½ ***38.1***	6 13/16 ***173.0***	5⅞ ***149.2***	9 13/16 ***249.2***	1⅜ ***34.9***	½	61	69
	4 7/16	*2-1471*	*2-1471Z*	*2K1471Z*	4⅛ ***104.78***	13½ ***342.9***	16½ ***419.1***	9 ***228.6***	6¼ ***158.8***	⅞ ***24***	3½ ***88.9***	1¾ ***44.4***	7⅞ ***200.0***	6⅝ ***168.3***	10¼ ***260.4***	1½ ***38.1***	½	92	104
	4 15/16	*2-1479*	*2-1479Z*	*2K1479Z*	4½ ***114.30***	15 ***381.0***	18 ***457.2***	10 ***254.0***	7 ***177.8***	⅞ ***24***	4 ***101.6***	1⅞ ***47.6***	8 9/16 ***217.5***	7¼ ***184.2***	11 3/16 ***284.2***	1⅝ ***41.3***	½	119	134
	5 7/16	*2-1487*	*2-1487Z*	*2K1487Z*	5 ***127.00***	15¾ ***400.0***	19¼ ***489.0***	11 ***479.4***	7¾ ***196.8***	1 ***24***	4½ ***114.3***	2 ***50.8***	9⅜ ***238.1***	7⅞ ***200.0***	12¼ ***311.2***	1¾ ***44.4***	½	166	187
	5 15/16	*2-1495*	*2-1495Z*	*2K1495Z*	5½ ***139.70***	16½ ***419.1***	20½ ***520.7***	12 ***304.8***	8½ ***215.9***	1⅛ ***30***	5 ***127.0***	2⅛ ***54.0***	10¼ ***260.4***	8½ ***215.9***	13⅞ ***352.4***	1⅞ ***47.6***	½	198	213
	6 7/16*	2-14103	2-14103Z	2K14103Z	6 ***152.40***	18 ***457.2***	22 ***558.8***	13 ***330.2***	9½ ***241.3***	1⅛ ***30***	5½ ***139.7***	2¼ ***57.2***	11 ***279.4***	9⅛ ***231.8***	15⅛ ***384.2***	1⅞ ***47.6***	½	260	294
	6½*	2-14104	2-14104Z	2K14104Z														255	287
	7	2-14112	2-14112Z	2K14112Z	6½ ***165.10***	19 ***482.6***	23 ***584.2***	14 ***355.6***	10 ***254.0***	1¼ ***30***	6 ***152.4***	2⅜ ***60.3***	11¾ ***298.4***	9¾ ***247.6***	15⅞ ***403.2***	2 ***50.8***	½	311	350
	7½*	2-14120	2-14120Z	2K14120Z	7 ***177.80***	21½ ***546.1***	26 ***660.4***	16 ***406.4***	11 ***279.4***	1⅜	6¾ ***171.4***	2½ ***63.5***	13 5/16 ***338.1***	11⅜ ***288.9***	17⅞ ***454.0***	2¼ ***57.2***	½	459	525
	8*	2-14128	2-14128Z	2K14128Z														425	478
	9*	.....	.....	2K14144Z	8 ***203.20***	23 ***584.2***	29 ***736.6***	16 ***406.4***	10½ ***266.7***	1½ ***36***	6 ***152.4***	2¾ ***69.8***	14⅞ ***377.8***	12½ ***317.5***	20⅜ ***517.5***	2¾ ***69.8***	½	482	530
	10*	.....	.....	2K14160Z	9 ***228.60***	25 ***635.0***	31 ***787.4***	16 ***406.4***	10½ ***266.7***	1¾ ***48***	6 ***152.4***	3 ***76.2***	16⅞ ***428.6***	14 ***355.6***	22⅞ ***581.0***	3 ***76.2***	½	592	650
	12*	.....	.....	2K14192Z	11 ***279.40***	29 ***736.6***	36 ***914.4***	18 ***457.2***	12½ ***317.5***	2 ***48***	7½ ***190.5***	3½ ***88.9***	20 ***508.0***	16 ***406.4***	27 ***685.8***	3½ ***88.9***	½	830	910

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole (two holes for shafts larger than 5") for lubrication.
Grease cup or fitting not included.
△ LHD sliding base takeup can be drilled for 2-1400 pillow blocks, for shaft sizes thru 3 15/16 see page D-22, for shaft sizes 4 7/16 thru 5 15/16 see page E-25.
* Cap is fastened with capscrews.
Selection guide, pages I-5, I-6.
Load ratings, pages I-7, I-8.
Additional information, page I-6.

Rigid Sleeve Bearing Pillow Blocks

2-1500, 2-1500Z

Cast Iron
Two-Piece Angular Joint Design
4-bolt Base
Babbitt or Bronze Bearing
Relubricatable



Dimensions (inches/***mm***)

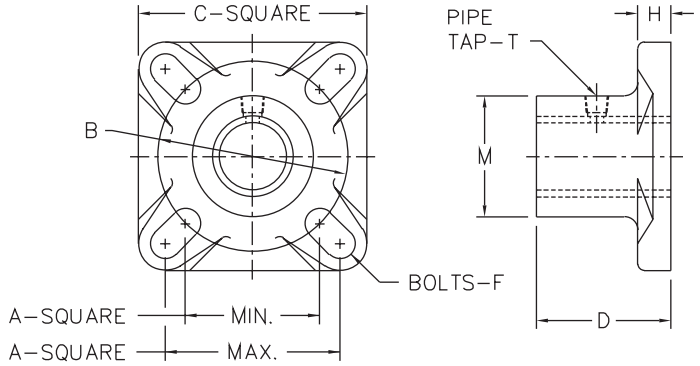
Style of cap	Shaft dia. inches	Pillow block number Cast Iron Series 2-1500 babbitt	Pillow block number Cast Iron Series 2-1500Z bronze	A	B	C	D	E	F Bolts	G	H	L	M	P	S	T ■	Unit wt. (lbs.)
2-BOLT	1 15/16	*2-1531*	*2-1531Z*	2¼ ***57.15***	6½ ***165.1***	8¼ ***209.6***	4 ***101.6***	3½ ***88.9***	½ ***12***	1¾ ***44.4***	⅞ ***22.2***	4½ ***114.3***	3 ***76.2***	5¼ ***133.4***	¾ ***19.0***	¼	10.0
	2 3/16	*2-1535*	*2-1535Z*	2½ ***63.50***	6¾ ***171.4***	8½ ***215.9***	4½ ***114.3***	3½ ***88.9***	½ ***12***	1¾ ***44.4***	1 ***25.4***	4⅞ ***123.8***	3⅜ ***85.7***	5¾ ***146.0***	¾ ***19.0***	⅜	14.0
	2 7/16	*2-1539*	*2-1539Z*	2¾ ***69.85***	8 ***203.2***	10¼ ***260.4***	5 ***127.0***	4 ***101.6***	⅝ ***16***	2 ***50.8***	1⅛ ***28.6***	5 5/16 ***134.9***	3¾ ***95.2***	6⅛ ***155.6***	1 ***25.4***	⅜	17.0
	2 11/16	*2-1543*	2-1543Z	3 ***76.20***	8¼ ***209.6***	10½ ***266.7***	5½ ***139.7***	4¼ ***108.0***	⅝ ***16***	2¼ ***57.2***	1¼ ***31.8***	6 ***152.4***	4 ***101.6***	7 ***177.8***	1 ***25.4***	⅜	27.0
	2 15/16	*2-1547*	*2-1547Z*	3¼ ***82.55***	8¾ ***222.2***	11 ***279.4***	6 ***152.4***	4½ ***114.3***	⅝ ***16***	2½ ***63.5***	1⅜ ***34.9***	6⅜ ***161.9***	4¼ ***108.0***	7½ ***190.5***	1 ***25.4***	⅜	29.0
4-BOLT	3 7/16	*2-1555*	*2-1555Z*	3½ ***88.90***	10½ ***266.7***	13 ***330.2***	7 ***177.8***	5 ***127.0***	¾ ***20***	2¾ ***69.8***	1½ ***38.1***	7⅛ ***181.0***	5¼ ***133.4***	9 ***228.6***	1¼ ***31.8***	½	43
	3 15/16	*2-1563*	*2-1563Z*	3¾ ***95.25***	12 ***304.8***	14¾ ***374.6***	8 ***203.2***	5½ ***139.7***	¾ ***20***	3 ***76.2***	1⅝ ***41.3***	8¼ ***209.6***	5⅞ ***149.2***	10¼ ***260.4***	1⅜ ***34.9***	½	60
	4 7/16	*2-1571*	*2-1571Z*	4⅛ ***104.78***	13½ ***342.9***	16½ ***419.1***	9 ***228.6***	6¼ ***158.8***	⅞ ***24***	3½ ***88.9***	1¾ ***44.4***	8⅞ ***225.4***	6⅝ ***168.3***	11 ***279.4***	1½ ***38.1***	½	87
	4 15/16	*2-1579*	*2-1579Z*	4½ ***114.30***	15 ***381.0***	18 ***457.2***	10 ***254.0***	7 ***177.8***	⅞ ***24***	4 ***101.6***	1⅞ ***47.6***	9¾ ***247.6***	7¼ ***184.2***	12 ***304.8***	1⅝ ***41.3***	½	119
	5 7/16	*2-1587*	*2-1587Z*	5 ***127.00***	15¾ ***400.0***	19¾ ***501.6***	11 ***479.4***	8 ***203.2***	1 ***24***	4½ ***114.3***	2 ***50.8***	10 13/16 ***274.6***	7⅞ ***200.0***	13½ ***342.9***	1⅞ ***47.6***	½	163
	5 15/16*	*2-1595*	*2-1595Z*	5½ ***139.70***	16½ ***419.1***	20½ ***520.7***	12 ***304.8***	8½ ***215.9***	1⅛ ***30***	5 ***127.0***	2⅛ ***54.0***	11 29/32 ***302.4***	8½ ***215.9***	14⅝ ***371.5***	1⅞ ***47.6***	½	192
	6½*	2-15104	2-15104Z	6 ***152.40***	18 ***457.2***	22 ***558.8***	13 ***330.2***	9½ ***241.3***	1⅛ ***30***	5½ ***139.7***	2¼ ***57.2***	11¾ ***298.4***	9⅛ ***231.8***	14¾ ***374.6***	1⅞ ***47.6***	½	255
	7*	2-15112	2-15112Z	6½ ***165.10***	19 ***482.6***	23 ***584.2***	14 ***355.6***	10 ***254.0***	1¼ ***30***	6 ***152.4***	2⅜ ***60.3***	13 11/16 ***347.7***	9¾ ***247.6***	16⅝ ***422.3***	2 ***50.8***	½	295
	8* 9*	2-15128	2-15128Z	8 ***203.20***	23 ***584.2***	29 ***736.6***	16 ***406.4***	10½ ***266.7***	1½ ***36***	6 ***152.4***	2¾ ***69.8***	16⅛ ***409.6***	12½ ***317.5***	22 ***558.8***	2¾ ***69.8***	½	575 546

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole (two holes for shafts larger than 5") for lubrication.
Grease cup or fitting not included.
* Cap is fastened with capscrews, and block has gibbed joint.
Selection guide, pages I-5, I-6.
Load ratings, pages I-7, I-8.
Additional information, page I-6.

Rigid Sleeve Bearing Flanged Units

F2200, F2200Z

Cast Iron Housing
One-piece Design
4-bolt Mounting
Square Flange
Babbitt or Bronze Bearing
Relubricatable



Dimensions (inches/***mm***)

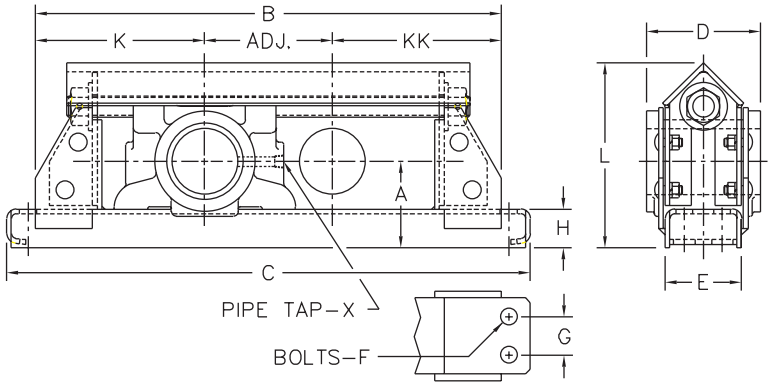
Shaft diameter	Flange unit number		A		B	C	D	F	H	M	T	Unit wt.
inches	Series F2200 babbitt	Series F2200Z bronze	Max.	Min.				Bolts			■	(lbs.)
¾	F2212	F2212Z	2½ ***63.5***	2⅛ ***54.0***	3 ***76.2***	3⅜ ***85.7***	1½ ***38.1***	⅜ ***10***	7/16 ***11.1***	1½ ***38.1***	⅛	1.7
⅞	F2214	F2214Z	2¾	2⅛	3	3¾	2	⅜	½	1⅞	⅛	2.5
15/16	F2215	F2215Z	***69.8***	***54.0***	***76.2***	***95.2***	***50.8***	***10***	***12.7***	***47.6***		2.5
1	*F2216*	*F2216Z*										2.4
1 3/16	*F2219*	*F2219Z*	3¼	2½	3 9/16	4¼	2½	½	⅝	2¼	⅛	3.7
1¼	F2220	F2220Z	***82.6***	***63.5***	***90.5***	***108.0***	***63.5***	***12***	***15.9***	***57.2***		3.6
1 7/16	*F2223*	*F2223Z*	4	2 29/32	4⅛	5⅛	3	½	¾	2½	¼	5.0
1½	*F2224*	*F2224Z*	***101.6***	***73.8***	***104.8***	***130.2***	***76.2***	***12***	***19.0***	***63.5***		4.8
1 11/16	F2227	F2227Z	4⅛	3 9/32	4⅝	5⅜	3½	½	¾	2⅞	¼	10.4
1¾	F2228	F2228Z	***104.8***	***83.3***	***117.5***	***136.5***	***88.9***	***12***	***19.0***	***73.0***		10.2
1 15/16	F2231	F2231Z	5⅛	3 23/32	5¼	6⅜	4	⅝	⅞	3¼	¼	10.6
2	*F2232*	*F2232Z*	***130.2***	***94.4***	***133.4***	***161.9***	***101.6***	***16***	***22.2***	***82.6***		10.3
2 3/16	*F2235*	*F2235Z*	5⅛ ***130.2***	4 1/16 ***103.2***	5¾ ***146.0***	6⅜ ***161.9***	4½ ***114.3***	⅝ ***16***	⅞ ***22.2***	3⅝ ***92.1***	¼	14.8
2 7/16	*F2239*	*F2239Z*	5⅝ ***142.9***	4 13/32 ***111.9***	6¼ ***158.8***	6⅞ ***174.6***	5 ***127.0***	⅝ ***16***	1 ***25.4***	4 ***101.6***	⅜	16.5
2 15/16	F2247	F2247Z	6	5 7/32	7⅜	7¾	6	¾	1⅛	4¾	⅜	27.0
3	*F2248*	*F2248Z*	***152.4***	***132.6***	***187.3***	***196.8***	***152.4***	***20***	***28.6***	***120.6***		26.3
3 7/16	*F2255*	*F2255Z*	6¾ ***171.4***	5 29/32 ***150.0***	8⅜ ***212.7***	8 9/16 ***217.5***	7 ***177.8***	¾ ***20***	1¼ ***31.8***	5½ ***139.7***	½	40.5
3 15/16	F2263	F2263Z	7⅝ ***193.7***	6 23/32 ***170.6***	9½ ***241.3***	9¾ ***247.6***	8 ***203.2***	⅞ ***24***	1½ ***38.1***	6⅜ ***161.9***	½	65

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ One pipe tapped hole for lubrication. Grease cup or fitting not included.
Selection guide, pages I-5, I-6.
Load ratings, pages I-7, I-8.
Additional information, page I-6.

Rigid Sleeve Bearing Takeups

DSB2800

Hinged or Removable Frame
Protected Screw
Babbitt Bearing
Relubricatable



Dimensions (inches/*mm*)

Style of top frame	Shaft dia. inches	Adjustment ▲ *mm*	Adjustment ▲ in.	Takeup number	A	B	C	D	E	F Bolts	G	H	K	KK	L	X ■	Radial factor □	Unit wt. (lbs.)
REMOVABLE	1 15/16	*304.8*	12	**DSB2831-12**	3¼	26½ *673.1*	29½ *749.3*	4	3	⅝	. . . .	1¾	7¾	7¾	7¼	¼	1.0	39
		457.2	18	DSB2831-18	*82.6*	32½ *825.5*	35½ *901.7*	*101.6*	*76.2*	*16*	. . . .	*44.4*	*196.8*	*196.8*	*184.2*			45
	2 3/16	*304.8*	12	DSB2835-12	3⅜	27½ *698.5*	29½ *749.3*	4	3	⅝	. . . .	1¾	7¾	7¾	7¼	⅜	1.0	42
		457.2	18	DSB2835-18	*85.7*	33½ *850.9*	35½ *901.7*	*114.3*	*76.2*	*16*	. . . .	*44.4*	*196.8*	*196.8*	*184.2*			48
	2 7/16	*304.8*	12	**DSB2839-12**	3½	28½ *723.9*	30½ *774.7*	5	3	¾	. . . .	1¾	8¼	8¼	7½	⅜	1.0	49
		457.2	18	**DSB2839-18**	*88.9*	34½ *876.3*	36½ *927.1*	*127.0*	*76.2*	*20*	. . . .	*44.4*	*209.6*	*209.6*	*190.5*			55
		609.6	24	DSB2839-24		40½ *1028.7*	42½ *1079.5*											60
	2 15/16	*304.8*	12	**DSB2847-12**	4⅛	30½ *774.7*	32½ *825.5*	6	4	⅝	2	2	9¼	9¼	8¾	⅜	1.0	72
		457.2	18	**DSB2847-18**	*104.8*	36½ *927.1*	38½ *977.9*	*152.4*	*101.6*	*16*	*50.8*	*50.8*	*235.0*	*235.0*	*222.2*			81
		609.6	24	DSB2847-24		42½ *1079.5*	44½ *1130.2*											89
	3 7/16	*304.8*	12	**DSB2855-12**	4½	32 *812.8*	34¼ *870.0*	7	4	¾	2	2	10	10	9 11/16	½	1.0	94
		457.2	18	DSB2855-18	*114.3*	38 *965.2*	40¼ *1022.4*	*177.8*	*101.6*	*20*	*50.8*	*50.8*	*254.0*	*254.0*	*246.1*			103
		609.6	24	DSB2855-24		44 *1117.6*	46¼ *1174.8*											111
HINGED	3 15/16	*304.8*	12	**DSB2863-12**	5	36 *914.4*	38½ *977.9*	8	5	¾	2½	2¼	12	12	10 15/16	½	1.0	138
		457.2	18	**DSB2863-18**	*127.0*	42 *1066.8*	44½ *1130.3*	*203.2*	*127.0*	*20*	*63.5*	*57.2*	*304.8*	*304.8*	*277.8*			150
		609.6	24	DSB2863-24		48 *1219.2*	50½ *1282.7*											160

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement bearing unit, specify takeup number without amount of adjustment, i.e., DSB2831.
▲ Takeups with adjustment of 18" *(457.2 mm)* or more have center supporting pad welded to bottom of frame.
□ For radial loads, multiply load rating from page I-8 by radial factor in last column.
■ One pipe tapped hole for lubrication. Grease cup or lubrication fitting not included.
Selection guide, pages I-5, I-6.
Load ratings, pages I-7, I-8.
Additional information, page I-6.

Replacement Bronze Bearings and Shims
Series 1000Z, F2200Z, 2-1200Z

Series 1000Z, F2200Z

Shaft diameter, inches	Sleeve bearing series	Replacement bearing number
½	1008Z	285Y222-101
⅝	1010Z	285Y222-104
¾	1012Z	285Y222-105
¾	F2212Z	285Y222-96
⅞	1014Z, F2214Z	285Y222-1
15⁄16	1015Z, F2215Z	285Y222-2
1	1016Z, F2216Z	285Y222-3
1⅛	1018Z	285Y222-4
1 3⁄16	1019Z, F2219Z	285Y222-5
1¼	1020Z, F2220Z	285Y222-6
1 7⁄16	1023Z, F2223Z	285Y222-9
1½	1024Z, F2224Z	285Y222-10
1 11⁄16	1027Z, F2227Z	285Y222-11
1¾	1028Z, F2228Z	285Y222-12
1 15⁄16	1031Z, F2231Z	285Y222-13
2	1032Z, F2232Z	285Y222-14
2 3⁄16	1035Z, F2235Z	285Y222-15
2 7⁄16	1039Z, F2239Z	285Y222-17
2 11⁄16	1043Z	285Y222-20
2 15⁄16	1047Z, F2247Z	285Y222-23
3	F2248Z	285Y222-24
3 7⁄16	1055Z, F2255Z	285Y222-25
3 15⁄16	1063Z, F2263Z	285Y222-27

Bronze replacement bearings are solid with lube groove. Provision should be made to lock the bearing to the housing.

Series 2-1200Z two-piece

Shaft diameter, inches	Sleeve bearing series	Replacement bearing number	Replacement shim	
			Number	Quantity
⅞	2-1214Z	285BY2-4	131Y954-1	2
15⁄16	2-1215Z	285BY2-5	131Y954-21	2
1	2-1216Z	285BY2-6	131Y954-21	2
1⅛	2-1218Z	285BY2-7	131Y954-2	2
1 3⁄16	2-1219Z	285BY2-8	131Y954-22	2
1¼	2-1220Z	285BY2-9	131Y954-22	2
1⅜	2-1222Z	285BY2-10	131Y954-23	4
1 7⁄16	2-1223Z	285BY2-11	131Y954-23	4
1½	2-1224Z	285BY2-12	131Y954-23	4
1 9⁄16	2-1225Z	285BY2-13	131Y954-24	4
1⅝	2-1226Z	285BY2-14	131Y954-24	4
1 11⁄16	2-1227Z	285BY2-15	131Y954-24	4
1¾	2-1228Z	285BY2-16	131Y954-24	4
1 15⁄16	2-1231Z	285BY2-17	131Y954-25	4
2	2-1232Z	285BY2-18	131Y954-25	4
2 3⁄16	2-1235Z	285BY2-19	131Y954-26	4
2¼	2-1236Z	285BY2-20	131Y954-26	4
2 7⁄16	2-1239Z	285BY2-22	131Y954-27	4
2½	2-1240Z	285BY2-24	131Y954-27	4
2 11⁄16	2-1243Z	285BY2-25	131Y954-28	4
2 15⁄16	2-1247Z	285BY2-29	131Y954-29	4
3	2-1248Z	285BY2-30	131Y954-29	4
3 7⁄16	2-1255Z	285BY2-32	131Y954-30	4
3 15⁄16	2-1263Z	285BY2-36	131Y954-31	4

Replacement bronze bearings are pre-split with lube groove.
Provision should be made to lock each bearing segment to the base and cap.
Replacement bronze bearings and shims must be ordered as individual items.

Replacement Bronze Bearings and Shims
Series 2-1400Z, 2K1400Z, 2-1500Z

Series 2-1400Z, 2K1400Z straight two-piece

Shaft diameter, inches	Sleeve bearing series	Replacement bearing number	Replacement shim	
			Number	Quantity per unit
1 15/16	2-1431Z, 2K1431Z	285BY3-1	131Y366-1	4
2 3/16	2-1435Z, 2K1435Z	285BY3-3	131Y366-3	4
2 7/16	2-1439Z, 2K1439Z	285BY3-7	131Y366-5	4
2 11/16	2-1443Z, 2K1443Z	285BY3-9	131Y366-7	4
2 15/16	2-1447Z, 2K1447Z	285BY3-13	131Y366-9	4
3 7/16	2-1455Z, 2K1455Z	285BY3-17	131Y366-11	6
3 15/16	2-1463Z, 2K1463Z	285BY3-19	131Y366-13	6
4 7/16	2-1471Z	285BY3-21	131Y366-15	8
4 7/16	2K1471Z	285BY3-22	131Y366-15	8
4 15/16	2-1479Z	285BY3-25	131Y366-17	8
4 15/16	2K1479Z	285BY3-26	131Y366-17	8
5 7/16	2-1487Z, 2K1487Z	285BY3-29	131Y366-18	12
5 15/16	2-1495Z, 2K1495Z	285BY3-31	131Y366-21	12
6 7/16	2-14103Z, 2K14103Z	285BY3-33	131Y366-22	12
6 1/2	2-14104Z, 2K14104Z	285BY3-34	131Y366-22	12
7	2-14112Z, 2K14112Z	285BY3-35	131Y366-25	12
7 1/2	2-14120Z, 2K14120Z	285BY3-36	131Y366-28	12
8	2-14128Z, 2K14128Z	285BY3-37	131Y366-30	12
9	2K14144Z	285BY3-38	131Y366-20	2
10	2K14160Z	285BY3-40	131Y366-24	2
12	2K14192Z	285BY3-41	131Y366-26	2

Series 2-1500Z angular two-piece

Shaft diameter, inches	Sleeve bearing series	Replacement bearing number	Replacement shim	
			Number	Quantity per unit
1 15/16	2-1531Z	285BY2-17	131Y954-25	4
2 3/16	2-1535Z	285BY2-19	131Y954-26	4
2 7/16	2-1539Z	285BY2-22	131Y954-27	4
2 11/16	2-1543Z	285BY2-25	131Y954-28	4
2 15/16	2-1547Z	285BY2-29	131Y954-29	4
3 7/16	2-1555Z	285BY2-33	131Y954-9	6
3 15/16	2-1563Z	285BY2-37	131Y954-10	6
4 7/16	2-1571Z	285BY2-40	131Y954-11	8
4 15/16	2-1579Z	285BY2-42	131Y954-12	8
5 7/16	2-1587Z	285BY2-44	131Y954-34	12
5 15/16	2-1595Z	285BY3-31	131Y366-21	12
6 1/2	2-15104Z	285BY3-34	131Y366-22	12
7	2-15112Z	285BY3-35	131Y366-25	12
8	2-15128Z	285BY3-37	131Y366-16	2

Replacement bronze bearings are pre-split with lube groove.
Provision should be made to lock each bearing segment to the base and cap.
Replacement bronze bearings and shims must be ordered as individual items.

Flex-block® Sleeve Bearing Units

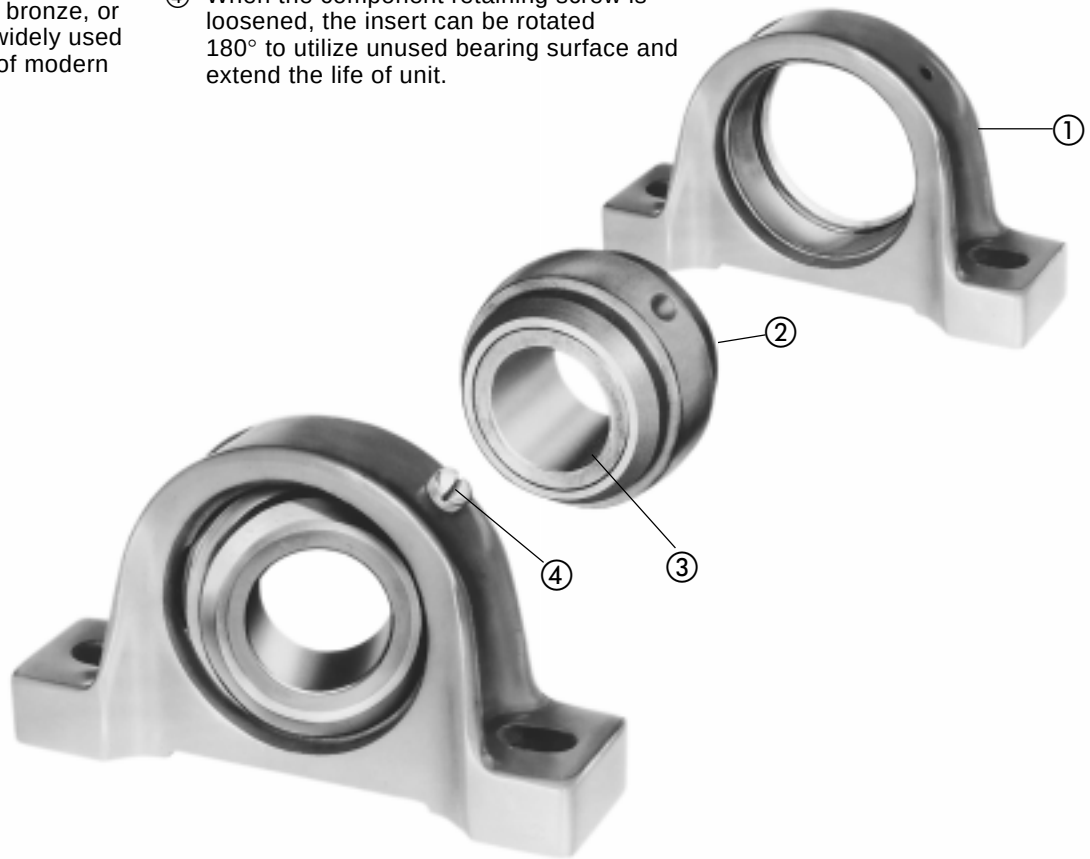
Flex-block sleeve bearing units are designed specifically for applications requiring alignable sleeve bearings — self-lubricating. Because the bearing material wears gradually under operation, sudden breakdowns and costly maintenance are minimized. The standard bearing insert materials of oil impregnated porous sintered bronze, or self-lubricating graphite are widely used for the extreme applications of modern industry.

① Sturdy one-piece housings, with machined mounting surfaces, are available as pillow blocks or flanged units.

② Component has machined spherical surface for proper seating in housing and for initial mounting alignment.

③ Bearing sleeve, pressed into component, is available in self-lubricating or oil impregnated material.

④ When the component retaining screw is loosened, the insert can be rotated 180° to utilize unused bearing surface and extend the life of unit.



Components, Bearings

Heart of the Flex-block bearing is the alignable insert into which is pressed a self-lubricating bearing. The component has a machined spherical surface that is alignable in the housing.

Two types of bearings are available:

1. Sintered bronze sleeve, oil impregnated, for operating temperatures to 200°F *(93°C)*.
2. Self-lubricating carbon-graphite sleeve, for temperatures to 700°F *(371°C)*.

One-piece Cast Iron Housings

Compact one-piece cast iron housings provide strength and superior rigidity. All units are designed with standard mounting dimensions and have finished mounting surfaces for proper installation stability. Pillow blocks have slotted bolt holes with ample space provided for drilling dowel pin holes. Flanged units have drilled mounting holes.

Pillow Blocks

3200P

Alignable pillow blocks have high-test iron housing, 2-bolt base, and self-lubricating or relubricatable bearing. For shaft sizes 5/8" through 3 15/16".

Load ratings on pages I-23 and I-24.
Dimensions on page I-25.
Additional information on page I-22.

Flanged Units — two bolt

3200FX and 3200F

Alignable flanged units have 2-bolt cast iron housing and self-lubricating or relubricatable bearing. For shaft sizes 5/8" through 1 3/4".

Load ratings on pages I-23 and I-24.
Dimensions on page I-26.
Additional information on page I-22.

Flanged Units — four bolt

Alignable flanged units have 4-bolt cast iron housing and self-lubricating or relubricatable bearing. For shaft sizes 5/8" through 3 7/16".

Load ratings on pages I-23 and I-24.
Dimensions on pages I-27.
Additional information on page I-22.

Flex-block® Sleeve Bearing Units

To select a Flex-block sleeve bearing, determine the applied radial load and the applicable operating conditions. The procedure shown here will aid in selecting an appropriate bearing.

The bearing ratings apply when certain installation and operating conditions are met and when any other adverse ambient conditions such as high or low temperatures, extreme dirt or moisture, chemical contamination, shock or vibration loading direct or induced, oscillating shafts, intermittent operation and related factors are carefully considered.

The ratings used apply when the following conditions are met:

1. Normal running loads should not exceed the ratings shown in the tables. Starting and occasional peak loads should not exceed these ratings by more than 100%.
2. The shaft finish through the bearing bore should be at least as smooth as commercial steel shafting which varies from 8 to 50 micro-inches *(0.2µm to 1.3µm)*. There also should be no machined or ground spiral lead on the shaft journal. For improved bearing performance the shaft finish should not exceed 12 micro-inches *(0.3µm)*. Shafting should also be within the diameter tolerances listed on page I-22.
3. Ambient temperatures should not be lower than 32°F *(0°C)* for T1 bearing material. The upper operating temperature limits are as follows:
   T1—200°F *(93°C)*
   T3—700°F *(371°C)*
4. Sturdy, vibration free supporting structures should be provided.
5. Flex-block units should not be exposed to severe dirt conditions.

Flex-block Selection

Step 1

Determine the maximum operating temperature of the application.

Step 2

From Table 1, select the bearing insert material.

Step 3

Refer to the radial load rating tables on pages I-23 and I-24 to determine the shaft diameter necessary to obtain the required radial load rating at the given speed.

Where short bearings are required, multiply the radial load by the short bearing factor before selecting the bearing.

Step 4

To position a shaft axially or where light thrust loads are present provide flat washers of the desired material backed by a shaft collar or a machined shaft shoulder against the end of the bearing. The bearing ends are already machined.

Table 1 • Bearing insert material selection

Bearing insert suffix	Bearing material	Type of lubrication	Type of unit	Available bore size
T1	Oil impregnated porous sintered bronze	oil	P FX F	5/8"—3 15/16" 5/8"—1 3/4" 5/8"—3 7/16"
T3	Machined carbon-graphite	self-lubricating	P FX F	5/8"—3 15/16" 5/8"—1 3/4" 5/8"—3 7/16"

Bearing insert suffix	Minimum temperature limit	Maximum temperature limit	Comments
T1	32°F *(0°C)*	200°F *(93°C)*	
T3	. . . .	700°F *(371°C)*	material somewhat brittle—handle with care—no significant shock loads

Flex-block® Sleeve Bearing Units

Flex-block Bearing Materials:

Sleeve bearing inserts made of T1 oil impregnated porous sintered bronze are universally accepted as providing reasonable capacity and dependable service. When lubricant is present damage to shafts or rotors is minimized. Additional SAE 40 oil can be periodically added to extend the bearing life. The T1 bearing operating temperature should not exceed 200°F *(93°C)*. Applications are restricted to those involving light to moderate loads and mild shock. Caution: Do not use stainless steel shaft.

T3 machined carbon graphite bearings are self-lubricating with material worn from the bearing. T3 bearing inserts are limited to a maximum operating temperature of 700°F *(371°C)*. The radial load applied, the shaft surface finish and the speed of operation determine the wear life of the bearing. As machined carbon graphite is somewhat brittle, care should be taken during handling and mounting to avoid chipping the corners, etc.

Additional Features:

By the very nature of their design all Flex-block sleeve bearing units are expansion type, in that the shaft journal is free to move axially through the bore of the bearing. To fix a unit, a combination of shaft shoulders and/or thrust collars with flat washers of the desired material can be utilized.

Flex-block pillow blocks have cored mounting bolt holes suitable for the inch or metric bolts listed. Flanged units have drilled mounting holes 1/32" *(0.8 mm)* larger than the largest inch bolt shown.

Bearings are not replaceable in the components. Replacement components can be ordered but generally the entire unit is replaced when required.

Two and four bolt flanged units can be supplied with regular or short bearings.

The short bearing inserts do not project beyond the housing mounting face. When the short bearing is selected, the applied radial load must be multiplied by the short bearing factor before selecting the bearing size.

End closures can be furnished but they require specially machined housings. When end closures are used, shafts should extend no more than 1/8" *(3.2 mm)* beyond the end of the bearing.

Operation:

Flex-block sleeve bearing units are self-lubricating and ready for operation. Being alignable, they are also easy to mount and careful shaft alignment is not required. However shaft journals must turn freely without binding in the bearing or excessive heat and seizure can result. Any factors which may disrupt or remove the lubricant film should be eliminated. Sharp edges on the shaft or the bearing surface can act as scrapers to destroy lubricant film. Do not extend shaft keyways into bearing bores.

Takeups:

Flex-block pillow blocks can be mounted on universal takeup frames LC illustrated on page I-28.

Shaft Tolerances:

Shaft diameters for Flex-block sleeve bearing units are usually held to the following regular commercial tolerances:

Shaft Diameters	Recommended Tolerance
5/8" through 2"	Nominal to –.003"
2 1/16" through 4"	Nominal to –.004"

Commercial shaft finish if free of nicks, burrs, scratches, etc. is generally satisfactory. Improved surface finish of 12 micro-inches *(0.3µm)* or less will extend wear life.

Caution: Do not use stainless steel shaft, if bearing insert T1 is used.

Warning:

The reliability built in all Link-Belt bearings can be realized in service only when bearings are correctly selected, properly installed, protected and maintained.

The correct selection of Flex-block sleeve bearing mounted units requires that the magnitude and nature of all loads, speeds, alignment, mounting, operating requirements and maintenance be adequately considered. The selection of materials for and design of shafting, fasteners, seals and accessories as well as provisions for installation and maintenance must follow good engineering principles.

Housings should not be used under tension loads except with adequate safety factors. For this reason pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible it is most important to mount a unit so that the line of force passes directly into the mounting surface, or so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the mounting surface, serious housing and fastener deflection or failure may occur.

Link-Belt Bearing Division, Rexnord Corp. should be consulted where unusual loading conditions exist.

Load Ratings

Flex-block® Sleeve Bearing Units

Radial load ratings for 10 to 300 RPM (pounds/*newtons*)■

Shaft diameter inches	Basic bearing number	Type bearing material	Shaft speed RPM 10 to 25		50		75		100		150		200		300		Short bearing factor
5/8	3210	T1	586	*2 607*	586	*2 607*	586	*2 607*	586	*2 607*	476	*2 117*	357	*1 588*	238	*1 059*	
11/16	3211	T3	296	*1 317*	296	*1 317*	296	*1 317*	296	*1 317*	240	*1 068*	180	*801*	120	*534*	. . .
3/4	3212	T1	940	*4 181*	940	*4 181*	940	*4 181*	940	*4 181*	638	*2 838*	479	*2 131*	318	*1 415*	
		T3	470	*2 091*	470	*2 091*	470	*2 091*	470	*2 091*	318	*1 415*	240	1 *068*	159	*707*	1.25
7/8	3214																
15/16	3215	T1	985	*4 381*	985	*4 381*	985	*4 381*	860	*3 825*	572	*2 544*	430	*1 913*	286	*1 272*	
1	3216	T3	493	*2 193*	493	*2 193*	493	*2 193*	430	*1 913*	287	*1 277*	215	*956*	144	*641*	. . .
1 1/8	3218	T1	1545	*6 870*	1545	*6 870*	1400	*6 230*	1050	*4 670*	701	*3 118*	527	*2 344*	350	*1 557*	
1 3/16	3219	T3	773	*3 438*	773	*3 438*	700	*3 114*	526	*2 340*	350	*1 557*	262	*1 165*	175	*778*	1.22
1 1/4	3220																
1 5/16	3221	T1	2110	*9 390*	2110	*9 390*	1720	*7 650*	1295	*5 760*	862	*3 834*	650	*2 891*	433	*1 926*	
1 3/8	3222	T3	1055	*4 690*	1055	*4 690*	860	*3 825*	646	*2 874*	430	*1 913*	323	*1 437*	215	*956*	1.42
1 7/16	3223																
1 1/2	3224	T1	3190	*14 900*	3190	*14 190*	2160	*9 610*	1630	7 *250*	1090	4 850	815	3 *625*	545	*2 424*	
		T3	1595	*7 100*	1595	*7 100*	1080	*4 800*	812	*3 612*	543	*2 415*	406	*1 806*	272	*1 210*	1.54
1 5/8	3226																
1 11/16	3227	T1	3450	*15 350*	3240	*14 410*	2160	*9 610*	1620	*7 210*	1090	*4 850*	815	*3 625*	545	*2 424*	
1 3/4	3228	T3	1725	*7 670*	1620	*7 210*	1080	*4 800*	812	*3 612*	543	*2 415*	406	*1 806*	272	*1 210*	1.42
1 15/16	3231	T1	4360	*19 390*	3440	*15 300*	2340	*10 410*	1720	*7 650*	1150	*5 120*	860	*3 825*	575	*2 558*	
		T3	2180	*9 700*	1720	*7 650*	1170	*5 200*	860	*3 825*	575	*2 558*	430	*1 913*	288	*1 281*	1.39
2	3232																
2 1/8	3234	T1	4750	*21 130*	3620	*16 100*	2420	*10 760*	1810	*8 050*	1210	*5 380*	910	*4 048*	608	*2 705*	
2 3/16	3235	T3	2375	*10 560*	1810	*8 050*	1210	*5 380*	908	*4 039*	606	*2 696*	454	*2 019*	303	*1 348*	1.47
2 1/4	3236	T1	6050	*26 910*	4110	*18 280*	2750	*12 200*	2050	*9 120*	1370	*6 090*	1030	*4 580*	687	*3 056*	
2 7/16	3239	T3	3025	*13 460*	2052	*9 130*	1375	*6 120*	1026	*4 560*	686	*3 051*	513	*2 282*	343	*1 526*	1.45
2 1/2	3240	T1	7500	*33 360*	4590	*20 420*	3050	*13 570*	2290	*10 190*	1530	*6 810*	1145	*5 090*	765	*3 403*	
2 11/16	3243	T3	3750	*16 680*	2290	*10 190*	1530	*6 810*	1145	*5 090*	764	*3 398*	573	*2 549*	382	*1 699*	1.51
2 3/4	3244	T1	9120	*40 570*	5070	*22 550*	3380	*15 030*	2530	*11 250*	1685	*7 500*	1265	*5 630*	844	*3 754*	
2 15/16	3247	T3	4560	*20 280*	2532	*11 260*	1690	*7 510*	1266	*5 630*	845	*3 759*	633	*2 816*	423	*1 882*	1.61
3 7/16	3255	T1	11500	*51 150*	5720	*25 440*	3820	*16 990*	2880	*12 810*	1925	*8 560*	1440	*6 410*	965	*4 293*	
		T3	5710	*25 410*	2860	*12 720*	1910	*8 500*	1440	*6 410*	963	*4 284*	720	*3 203*	483	*2 148*	1.31
3 15/16	3263	T1	15000	*66 720*	7500	*33 360*	5000	*22 240*	3730	*16 590*	2500	*11 120*	1870	*8 320*	1248	*5 550*	
		T3	7520	*33 450*	3750	*16 680*	2500	*11 120*	1865	*8 300*	1250	*5 560*	935	*4 159*	625	*2 780*	. . .

■ For speeds slower than 10 RPM or for oscillating shafts, consult Link-Belt Bearing Division, Rexnord Corp.

Radial load ratings for 400 to 2500 RPM (pounds/*newtons*)■

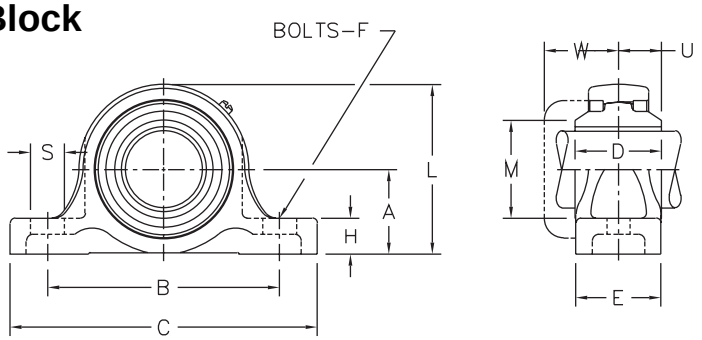
Shaft diameter inches	Basic bearing number	Type bearing material	Shaft speed RPM 400		500		750		1000		1500		2000		2500		Short bearing factor
5/8	3210	T1	180	*801*	144	*641*	96	*427*	71	*316*	48	*214*	36	*160*	29	*129*	
11/16	3211	T3	90	*400*	72	*320*	48	*214*	36	*160*	24	*107*	24	*80*	15	*67*	. . . .
3/4	3212	T1	238	*1 059*	191	*850*	128	*569*	96	*427*	64	*285*	48	*214*	38	*169*	
		T3	120	*534*	92	*409*	63	*280*	48	*214*	32	*142*	24	*107*	19	*84*	1.25
7/8	3214	T1	215	*956*	175	*778*	114	*507*	86	*383*	57	*254*	43	*191*	34	*151*	
15/16	3215	T3	108	*480*	86	*383*	57	*254*	43	*191*	29	*129*	22	*98*	. .	. . .	. . . .
1	3216																
1 1/8	3218	T1	263	*1 170*	211	*939*	140	*623*	105	*467*	70	*311*	53	*236*	42	*187*	
1 3/16	3219	T3	131	*583*	105	*467*	70	*311*	53	*236*	35	*156*	. .	. . .	. .	. . .	1.22
1 1/4	3220																
1 5/16	3221	T1	322	*1 432*	258	*1 148*	172	*765*	130	*578*	86	*383*	65	*289*	52	*231*	
1 3/8	3222	T3	162	*721*	130	*578*	86	*383*	65	*289*	43	*191*	. .	. . .	. .	. . .	1.42
1 7/16	3223																
1 1/2	3224	T1	408	*1 815*	325	*1 446*	216	*961*	163	*725*	109	*485*	82	*365*	65	*289*	
		T3	203	*903*	162	*721*	109	*485*	81	*360*	. . .	. . .	. .	. . .	. .	. . .	1.54
1 5/8	3226	T1	408	*1 815*	325	*1 446*	216	*961*	162	*721*	109	*485*	82	*365*			
1 11/16	3227	T3	203	*903*	162	*721*	109	*485*	81	*360*	. . .	. . .	. .	. . .			
1 3/4	3228																1.42
1 15/16	3231	T1	431	*1 917*	344	*1 530*	234	*1 041*	172	*765*	115	*512*					
		T3	215	*956*	172	*765*	115	*512*	. . .	. . . .	. . .	. . .					1.39
2	3232	T1	455	*2 024*	363	*1 615*	242	*1 076*	181	*805*	125	*556*					
2 1/8	3234	T3	227	*1 010*	182	*810*	121	*538*	. . .	. . . .	. . .	. . .					
2 3/16	3235																1.47
2 1/4	3236	T1	515	*2 291*	413	*1 837*	275	*1 223*	205	*912*	137	*609*					
2 7/16	3239	T3	257	*1 143*	205	*912*	137	*609*	. . .	. . . .	. . .	. . .					1.45
2 1/2	3240	T1	574	*2 553*	460	*2 046*	305	*1 357*	229	*1 019*							
2 11/16	3243	T3	287	*1 277*	229	*1 019*	153	*681*	. . .	. . . .							1.51
2 3/4	3244	T1	635	*2 825*	507	*2 255*	338	*1 503*	253	*1 125*							
2 15/16	3247	T3	317	*1 410*	253	*1 125*	. . .	. . . .	. . .	. . . .							1.61
3 7/16	3255	T1	725	*3 225*	580	*2 580*	382	*1 699*	290	*1 390*							
		T3	363	*1 615*	290	*1 290*	. . .	. . . .	. . .	. . . .							1.31
3 15/16	3263	T1	936	*4 164*	750	*3 336*	500	*2 224*									
		T3	468	*2 082*	. . .	. . . .	. . .	. . . .									. . . .

■ Load ratings are based on industry standards established by the Mechanical Power Transmission Association.

Flex-block® Sleeve Bearing Pillow Block

3200P

Cast Iron Housing
2-bolt Base
Alignable
T1 Sintered Bronze Bearing
T3 Carbon Graphite Bearing



Dimensions (inches/*mm*)

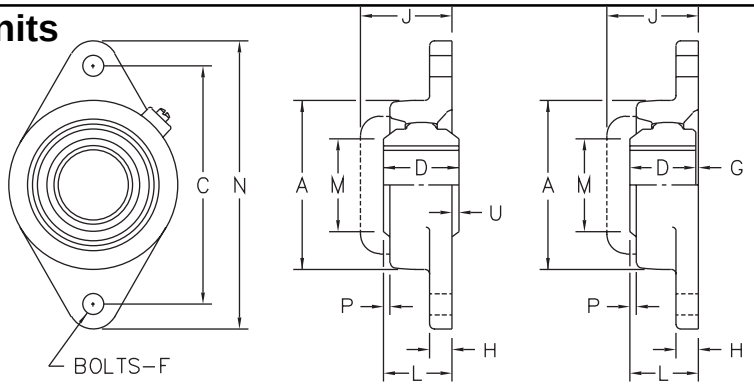
Shaft diameter inches	Pillow block number △ Basic pillow bearing number	Bearing sleeve suffix		A	B	C	D	E	F Bolts	H	L	M	S	U	W ‡	Unit wt. (lbs.)
5/8	3210P	T1	T3	1 3/16	3 1/2	4 5/8	15/16	1 1/2	3/8	1/2	2 11/32	1 1/8	3/4	15/32	1 13/64	1.3
1 1/16	3211P	T1	T3	*30.16*	*88.9*	*117.5*	*23.8*	*38.1*	*10*	*12.7*	*59.5*	*28.6*	*19.0*	*11.9*	*30.6*	1.2
3/4	3212P	T1	T3	1 5/16 *33.34*	3 7/8 *98.4*	5 1/8 *130.2*	1 1/4 *31.8*	1 1/2 *38.1*	3/8 *10*	1/2 *12.7*	2 19/32 *65.9*	1 3/16 *30.2*	1 1/16 *17.5*	5/8 *15.9*	1 19/64 *32.9*	1.8
7/8	3214P	T1	T3													2.1
15/16	3215P	T1	T3	1 7/16	4	5 3/8	1 1/8	1 5/8	3/8	9/16	2 7/8	1 9/16	1 1/16	9/16	1 9/32	2.0
1	**3216P**	**T1**	**T3**	*36.51*	*101.6*	*136.5*	*28.6*	*41.3*	*10*	*14.3*	*73.0*	*39.7*	*17.5*	*14.3*	*32.5*	1.9
1 1/8	3218P	T1	T3													2.8
1 3/16	3219P	T1	T3	1 11/16 *42.86*	4 5/8 *117.5*	6 5/16 *160.3*	1 3/8 *34.9*	1 3/4 *44.4*	1/2 *12*	1 1/16 *17.5*	3 5/16 *84.1*	1 7/8 *47.6*	1 5/16 *23.8*	1 1/16 *17.5*	1 29/64 *36.9*	2.7
1 1/4	3220P	T1	T3													4.5
1 15/16	3221P	T1	T3	1 7/8	4 15/16	6 3/8	1 11/16	1 7/8	1/2	1 3/16	3 11/16	2 1/8	1 3/16	27/32	1 35/64	4.4
1 3/8	3222P	T1	T3	*47.62*	*125.4*	*161.9*	*42.9*	*47.6*	*12*	*20.6*	*93.7*	*54.0*	*20.6*	*21.4*	*39.3*	4.3
1 7/16	**3223P**	**T1**	**T3**													4.1
1 1/2	**3224P**	**T1**	**T3**	2 *50.80*	5 3/8 *136.5*	7 1/16 *179.4*	2 1/8 *54.0*	1 7/8 *47.6*	1/2 *12*	1 3/16 *20.6*	4 *101.6*	2 1/8 *54.0*	1 5/16 *23.8*	1 1/16 *27.0*	1 41/64 *41.7*	5.3
1 5/8	3226P	T1	T3													6.4
1 11/16	**3227P**	**T1**	**T3**	2 1/8	5 5/8	7 1/4	2 1/8	2	1/2	1 3/16	4 5/16	2 7/16	7/8	1 1/16	1 21/32	6.3
1 3/4	**3228P**	**T1**	**T3**	*53.98*	*142.9*	*184.2*	*54.0*	*50.8*	*12*	*20.6*	*109.5*	*61.9*	*22.2*	*27.0*	*42.1*	6.1
1 15/16	**3231P**	**T1**	**T3**	2 1/4 *57.15*	6 3/16 *157.2*	7 7/8 *200.0*	2 1/4 *57.2*	2 1/8 *54.0*	5/8 *16*	7/8 *22.2*	4 1/2 *114.3*	2 9/16 *65.1*	1 5/16 *23.8*	1 1/8 *28.6*	1 25/32 *45.2*	7.2
2	3232P	T1	T3													9.2
2 1/8	3234P	T1	T3	2 1/2	6 3/4	9 1/16	2 3/8	2 3/8	5/8	1	5	2 7/8	1 5/16	1 3/16	2 1/64	9.0
2 3/16	**3235P**	**T1**	**T3**	*63.50*	*171.4*	*230.2*	*60.3*	*60.3*	*16*	*25.4*	*127.0*	*73.0*	*33.3*	*30.2*	*51.2*	8.8
2 1/4	3236P	T1	T3	2 11/16	7 1/2	9 1/2	2 11/16	2 1/2	5/8	1 1/8	5 7/16	3 1/4	1 1/16	1 11/32	2 7/64	13.4
2 7/16	**3239P**	**T1**	**T3**	*68.26*	*190.5*	*241.3*	*68.3*	*63.5*	*16*	*28.6*	*138.2*	*82.6*	*27.0*	*34.1*	*53.6*	13.2
2 1/2	3240P	T1	T3	3	8 1/8	10 1/2	3	2 7/8	3/4	1 5/16	6	3 9/16	1 3/16	1 1/2	2 1/16	17.1
2 11/16	3243P	T1	T3	*76.20*	*206.4*	*266.7*	*76.2*	*73.0*	*20*	*33.3*	*152.4*	*90.5*	*30.2*	*38.1*	*52.4*	16.5
2 3/4	3244P	T1	T3	3 1/4	8 7/8	11 3/4	3 5/16	3 1/4	3/4	1 3/8	6 1/2	3 3/4	1 5/16	1 21/32	2 7/32	22.5
2 15/16	**3247P**	**T1**	**T3**	*82.55*	*225.4*	*298.4*	*84.1*	*82.6*	*20*	*34.9*	*165.1*	*95.2*	*33.3*	*42.1*	*56.4*	21.9
3 7/16	3255P	T1	T3	3 3/4 *95.25*	10 *254.0*	13 *330.2*	3 3/4 *95.2*	3 1/2 *88.9*	7/8 *24*	1 5/8 *41.3*	7 7/8 *188.9*	4 7/16 *112.7*	1 5/8 *41.3*	1 7/8 *47.6*	2 1/2 *63.5*	32.5
3 15/16	3263P	T1	T3	4 7/16 *112.71*	11 7/8 *301.6*	15 1/4 *387.4*	4 15/16 *125.4*	4 3/8 *111.1*	7/8 *24*	1 13/16 *46.0*	8 15/16 *227.0*	4 7/8 *123.8*	1 7/8 *47.6*	2 15/32 *62.7*	3 1/64 *76.6*	59.7

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement insert number, omit housing suffix designation; i.e., 3210T1.
△ Order by number, as: 3212PT1.
‡ Width dimension for closed end unit.
Selection guide, pages I-21, I-22.
Load ratings, pages I-23, I-24.
Additional information, page I-22.

Flex-block® Sleeve Bearing Flanged Units

3200FX

Cast Iron Housing
2-bolt Mounting
Alignable
T1 Sintered Bronze Bearing
T3 Carbon Graphite Bearing



Dimensions (inches/*mm*)

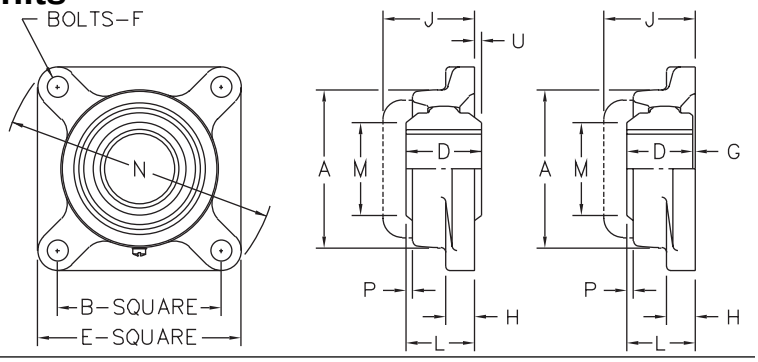
Shaft diameter inches	Flanged unit number △ Basic flange number	Bearing sleeve suffix		A	C Reg.	D Short		F Bolts	G	H	J ‡	L	M	N	P	U	Unit wt. (lbs.)
5/8	3210FX	T1	T3	2 1/8	3	15/16	. . . .	3/8	17/64	1/2	1 25/32	1 7/64	1 1/8	3 7/8	7/64	. . . .	1.0
11/16	3211FX	T1	T3	*54.0*	*76.2*	*23.8*	. . . .	*10*	*6.8*	*12.7*	*45.2*	*28.2*	*28.6*	*98.4*	*2.8*	. . . .	.9
3/4	3212FX	T1	T3	2 7/16	3 17/32	1 1/4	1 1/8	3/8	1/4	9/16	2 1/64	1 23/64	1 3/16	4 13/32	5/32	. . . .	1.2
				61.9	*89.7*	*31.8*	*28.6*	*10*	*6.4*	*14.3*	*51.2*	*34.5*	*30.2*	*111.9*	*4.0*	. . . .	
7/8	3214FX	T1	T3	2 11/16	3 57/64	1 1/8	. . . .	7/16	3/16	19/32	2	1 5/16	1 9/16	4 29/32	1/16	. . . .	1.7
15/16	3215FX	T1	T3	*68.3*	*98.8*	*28.6*	. . . .	*10*	*4.8*	*15.1*	*50.8*	*33.3*	*39.7*	*124.6*	*1.6*	. . . .	1.6
1	**3216FX**	**T1**	**T3**														1.5
1 1/8	3218FX	T1	T3	3 3/16	4 19/32	1 3/8	1 1/4	7/16	7/32	19/32	2 15/64	1 15/32	1 7/8	5 19/32	5/32	. . . .	2.5
1 3/16	3219FX	T1	T3	*81.0*	*116.7*	*34.9*	*31.8*	*10*	*5.6*	*15.1*	*56.7*	*37.3*	*47.6*	*142.1*	*4.0*	. . . .	2.3
1 1/4	3220FX	T1	T3														3.7
1 5/16	3221FX	T1	T3	3 5/8	5 1/8	1 11/16	1 1/2	1/2	5/32	5/8	2 23/64	1 21/32	2 1/8	6 1/8	1/4	1/32	3.6
1 3/8	3222FX	T1	T3	*92.1*	*130.2*	*42.9*	*38.1*	*12*	*4.0*	*15.9*	*59.9*	*42.1*	*54.0*	*155.6*	*6.4*	*0.8*	3.5
1 7/16	**3223FX**	**T1**	**T3**														3.3
1 1/2	**3224FX**	**T1**	**T3**	4	5 21/32	2 1/8	1 3/4	1/2	5/32	5/8	2 35/64	1 31/32	2 1/8	6 25/32	25/64	5/32	4.9
				101.6	*143.7*	*54.0*	*44.4*	*12*	*4.0*	*15.9*	*64.7*	*50.0*	*54.0*	*172.2*	*9.9*	*4.0*	
1 5/8	3226FX	T1	T3	4 1/4	5 27/32	2 1/8	1 13/16	1/2	5/32	5/8	2 9/16	1 31/32	2 7/16	7 3/32	3/8	5/32	6.2
1 11/16	**3227FX**	**T1**	**T3**	*108.0*	*148.4*	*54.0*	*46.0*	*12*	*4.0*	*15.9*	*65.1*	*50.0*	*61.9*	*180.2*	*9.5*	*4.0*	6.0
1 3/4	**3228FX**	**T1**	**T3**														5.9

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement insert number, omit housing suffix designation; i.e., 3210T1.
△ Order by number, as: 3216FXT3. For short sleeves add suffix S; i.e., 3220FXT1S.
‡ Width dimension for closed end unit.
Selection guide, pages I-21, I-22.
Load ratings, pages I-23, I-24.
Additional information, page I-22.

Flex-block® Sleeve Bearing Flanged Units

3200F

Cast Iron Housing
4-bolt Mounting
Alignable
T1 Sintered Bronze Bearing
T3 Carbon Graphite Bearing



Dimensions (inches/*mm*)

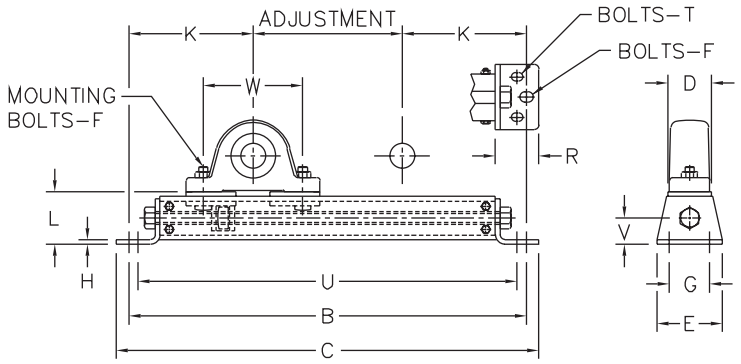
Shaft diameter inches	Flanged unit number △ Basic flange number	Bearing sleeve suffix		A	B	D Reg.	D Short	E	F Bolts	G	H	J ‡	L	M	N	P	U	Unit wt. (lbs.)
5/8	3210F	T1	T3	2 1/8	2 1/8	15/16	. . . .	3	3/8	17/64	1/2	1 25/32	1 7/64	1 1/8	3 7/8	7/64	. . .	1.2
1 1/16	3211F	T1	T3	*54.0*	*54.0*	*23.8*	. . . .	*76.2*	*10*	*6.8*	*12.7*	*45.2*	*28.2*	*28.6*	*98.4*	*2.8*	. . .	1.1
3/4	3212F	T1	T3	2 7/16	2 1/2	1 1/4	1 1/8	3 3/8	3/8	1/4	9/16	2 1/64	1 23/64	1 3/16	4 13/32	5/32	. . .	1.5
				61.9	*63.5*	*31.8*	*28.6*	*85.7*	*10*	*6.4*	*14.3*	*51.2*	*34.5*	*30.2*	*111.9*	*4.0*	. . .	
7/8	3214F	T1	T3	2 11/16	2 3/4	1 1/8	. . . .	3 3/4	7/16	3/16	19/32	2	1 5/16	1 9/16	4 29/32	1/16	. . .	2.1
15/16	3215F	T1	T3	*68.3*	*69.8*	*28.6*	. . . .	*95.2*	*10*	*4.8*	*15.1*	*50.8*	*33.3*	*39.7*	*124.6*	*1.6*	. . .	2.0
1	**3216F**	**T1**	**T3**															1.9
1 1/8	3218F	T1	T3	3 3/16	3 1/4	1 3/8	1 1/4	4 1/4	7/16	7/32	19/32	2 15/64	1 15/32	1 7/8	5 19/32	5/32	. . .	3.2
1 3/16	3219F	T1	T3	*81.0*	*82.6*	*34.9*	*31.8*	*108.0*	*10*	*5.6*	*15.1*	*56.7*	*37.3*	*47.6*	*142.1*	*4.0*	. . .	2.9
1 1/4	3220F	T1	T3															4.5
1 5/16	3221F	T1	T3	3 5/8	3 5/8	1 11/16	1 1/2	4 5/8	1/2	5/32	5/8	2 23/64	1 21/32	2 1/8	6 1/8	1/4	1/32	4.4
1 3/8	3222F	T1	T3	*92.1*	*92.1*	*17.5*	*38.1*	*117.5*	*12*	*4.0*	*15.9*	*59.9*	*42.1*	*54.0*	*155.6*	*6.4*	*0.8*	4.3
1 7/16	**3223F**	**T1**	**T3**															4.1
1 1/2	**3224F**	**T1**	**T3**	4	4	2 1/8	1 3/4	5 1/8	1/2	5/32	5/8	2 35/64	1 31/32	2 1/8	6 25/32	25/64	5/32	5.6
				101.6	*101.6*	*54.0*	*44.4*	*130.2*	*12*	*4.0*	*15.9*	*64.7*	*50.0*	*54.0*	*172.2*	*9.9*	*4.0*	
1 5/8	3226F	T1	T3	4 1/4	4 1/8	2 1/8	1 13/16	5 3/8	1/2	5/32	5/8	2 9/16	1 31/32	2 7/16	7 3/32	3/8	5/32	7.1
1 11/16	**3227F**	**T1**	**T3**	*108.0*	*104.8*	*54.0*	*46.0*	*136.5*	*12*	*4.0*	*15.9*	*65.1*	*50.0*	*61.9*	*180.2*	*9.5*	*4.0*	6.8
1 3/4	**3228F**	**T1**	**T3**															6.7
1 15/16	3231F	T1	T3	4 1/2	4 3/8	2 1/4	1 15/16	5 5/8	1/2	7/32	3/4	2 13/16	2 5/32	2 9/16	7 7/16	27/64	3/32	7.8
				114.3	*111.1*	*57.2*	*49.2*	*142.9*	*12*	*5.6*	*19.0*	*71.4*	*54.8*	*65.1*	*188.9*	*10.7*	*2.4*	
2	3232F	T1	T3	4 15/16	5 1/8	2 3/8	2	6 3/8	5/8	11/32	29/32	3 11/64	2 11/32	2 7/8	8 1/2	13/32	1/32	10.0
2 1/8	3234F	T1	T3	*125.4*	*130.2*	*60.3*	*50.8*	*161.9*	*16*	*8.7*	*23.0*	*80.6*	*59.5*	*73.0*	*215.9*	*10.3*	*0.8*	9.8
2 3/16	**3235F**	**T1**	**T3**															9.5
2 1/4	3236F	T1	T3	5 3/8	5 5/8	2 11/16	2 1/4	6 7/8	5/8	3/8	15/16	3 25/64	2 5/8	3 1/4	9 7/32	27/64	1/16	12.8
2 7/16	**3239F**	**T1**	**T3**	*136.5*	*142.9*	*68.3*	*57.2*	*174.6*	*16*	*9.5*	*23.8*	*86.1*	*66.7*	*82.6*	*234.2*	*10.7*	*1.6*	12.6
2 1/2	3240F	T1	T3	5 7/8	5 7/8	3	2 1/2	7 3/8	5/8	3/32	3/4	3 5/32	2 19/32	3 9/16	9 13/16	7/16	13/32	16.6
2 11/16	3243F	T1	T3	*149.2*	*149.2*	*76.2*	*63.5*	*187.3*	*16*	*2.4*	*19.0*	*80.2*	*65.9*	*90.5*	*249.2*	*11.1*	*10.3*	15.9
2 3/4	3244F	T1	T3	6 3/8	6	3 5/16	2 11/16	7 3/4	3/4	1/8	3/4	3 3/8	2 13/16	3 3/4	10 1/4	17/32	1/2	20.4
2 15/16	**3247F**	**T1**	**T3**	*161.9*	*152.4*	*84.1*	*68.3*	*196.8*	*20*	*3.2*	*19.0*	*85.7*	*71.4*	*95.2*	*260.4*	*13.5*	*12.7*	19.8
3 7/16	3255F	T1	T3	7 1/2	6 3/4	3 3/4	3 5/16	8 9/16	3/4	3/32	1	4 1/32	3 13/32	4 7/16	11 3/8	1/2	11/32	29.5
				190.5	*171.4*	*95.2*	*84.1*	*217.5*	*20*	*2.4*	*25.4*	*102.4*	*86.5*	*112.7*	*288.9*	*12.7*	*8.7*	

Bold face items are normally available from stock; please consult for availability of non-stock items.
For replacement insert number, omit housing suffix designation; i.e., 3210T1.
△ Order by number, as: 3216FT3. For short sleeves add suffix S; i.e., 3220FT1S.
‡ Width dimension for closed end unit.
Selection guide, pages I-21, I-22.
Load ratings, pages I-23, I-24.
Additional information, page I-22.

Universal Takeup Frames

LC

Bolted Steel Frames
2 or 4-bolt Frame Mounting
Bolt Centers Adjustable
Pillow Block Units Not Included



Dimensions (inches/*mm*)

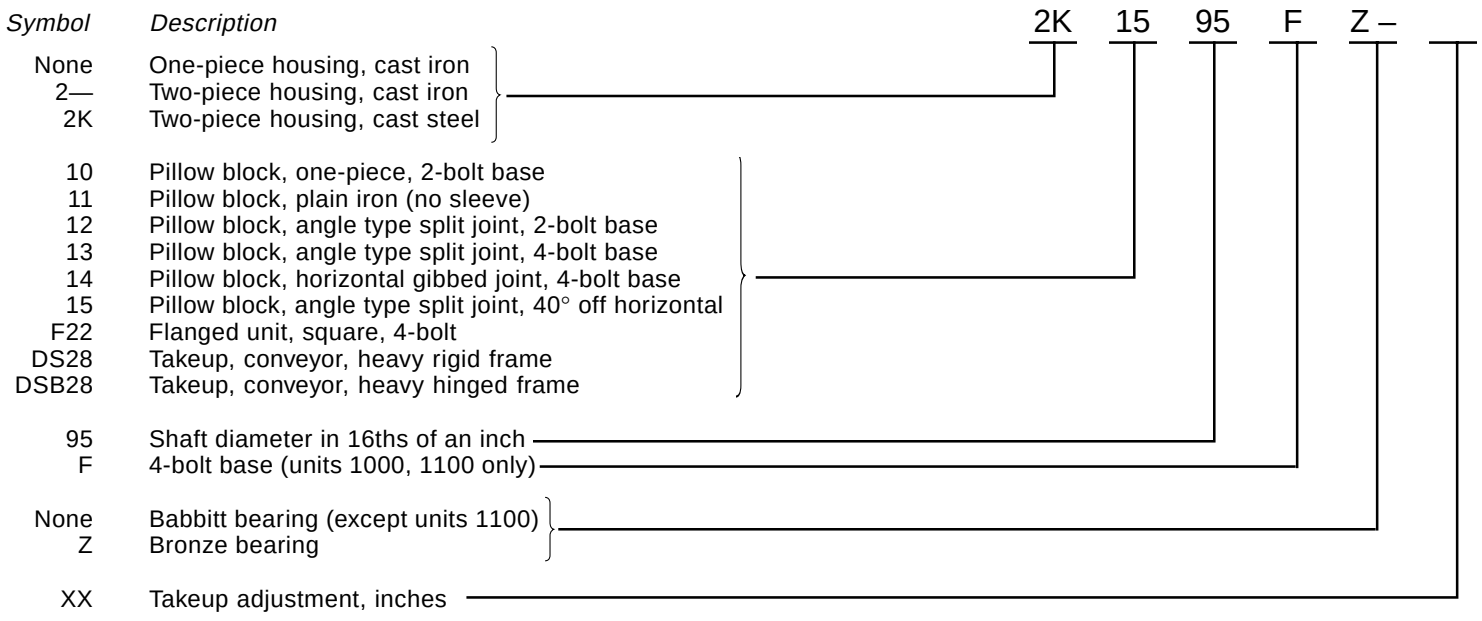
Unit mounting bolt diameter (F) and max shaft size (A) *mm*/inches	Adjustment	Takeup frame number	B	C	D	E	F Bolts	G	H	K	L	R	T Bolts	U	V	W ■ Bolt centers Min	W ■ Bolt centers Max	Z
10 ⅜ bolts *30* 1¼ shaft	6 *152.4*	**LC1-6**	16 *406.4*	17 *431.8*	1¾ *44.4*	2⅝ *66.7*	⅜ *10*	1⅝ *41.3*	3⁄16 *4.8*	5 *127.0*	2⅛ *54.0*	1¾ *44.4*	5⁄16 *8*	15¼ *387.4*				
	9 *228.6*	**LC1-9**	19 *482.6*	20 *508.0*										18¼ *463.6*	1¹⁄₁₆ *27*	3 *76.2*	5 *127.0*	15⁄16 *27.8*
	12 *304.8*	LC1-12	22 *558.8*	23 *584.2*										21¼ *539.8*				
12 ½ bolts *50* 1 15⁄16 shaft	6 *152.4*	**LC2-6**	19⅛ *485.8*	20¼ *514.4*	2⅜ *60.3*	3⅛ *79.4*	½ *12*	2⅛ *54.0*	¼ *6.4*	6⁹⁄₁₆ *166.7*	2¹¹⁄₁₆ *68.3*	2³⁄₁₆ *55.6*	⅜ *10*	18⅛ *460.4*				
	9 *228.6*	**LC2-9**	22⅛ *562.0*	23¼ *590.6*										21⅛ *536.6*	1¹¹⁄₃₂ *34.1*	3¾ *95.2*	7¼ *184.2*	1³⁄₃₂ *27.8*
	12 *304.8*	**LC2-12**	25⅛ *638.2*	26¼ *666.8*										24⅛ *612.8*				
	18 *457.2*	**LC2-18**	31⅛ *790.6*	32¼ *819.2*										30⅛ *765.2*				
16 ⅝ bolts *60* 2 7⁄16 shaft	9 *228.6*	**LC3-9**	25⁵⁄₁₆ *642.9*	26⁹⁄₁₆ *674.9*	3 *76.2*	4 *101.6*	⅝ *16*	2¾ *69.8*	5⁄16 *7.9*	8⁵⁄₃₂ *207.2*	3⁵⁄₁₆ *84.1*	2¾ *69.8*	½ *12*	24¹⁄₁₆ *611.2*	1⅝ *41.3*	4¼ *108.0*	9 *228.6*	1 13⁄32 *35.7*
	12 *304.8*	**LC3-12**	28⁵⁄₁₆ *719.1*	29⁹⁄₁₆ *750.9*										27¹⁄₁₆ *687.4*				
	18 *457.2*	**LC3-18**	34⁵⁄₁₆ *871.5*	35⁹⁄₁₆ *903.3*										33¹⁄₁₆ *839.8*				
	24 *609.6*	LC3-24	40⁵⁄₁₆ *1023.9*	41⁹⁄₁₆ *1055.7*										39¹⁄₁₆ *992.2*				

Bold face items are normally available from stock; please consult for availability of non-stock items.
■ Max W dimension can be exceeded, but overall adjustment reduces proportionately.
Use dimensions A, D, F, and W as limits for fitting and mounting Sleeve, Ball Bearing, and Roller Bearing pillow block units.
For load ratings, see pillow block unit to be used.

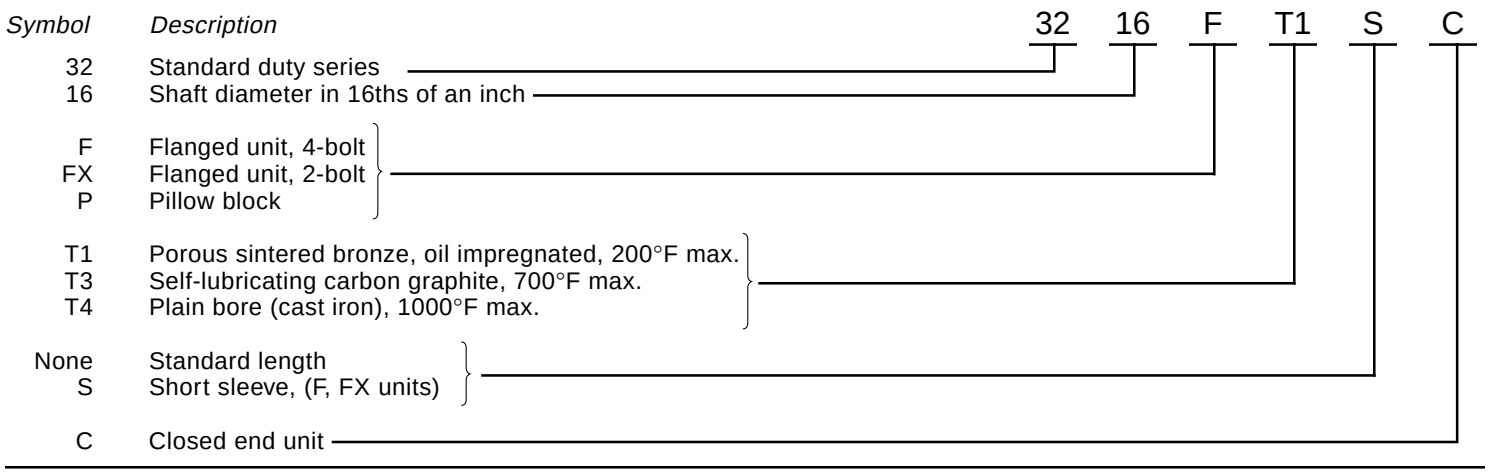
Nomenclature

Rigid Sleeve Bearing and Flex-Block® Units

Rigid Sleeve Bearing Units



Flex-block Sleeve Bearing Units



The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division, Rexnord Corp. should be consulted regarding optional features, availability, and the application requirements.

Bearing Number Index

Ball Bearings, Ball Bearing Units, Sleeve Bearings and Takeups

Corrosion Resistant
KF-S200E . . . B-13
KFX-S200E . . . B-13
KP-S200E . . . B-14
KLF-S200E . . . B-13
KLFX-S200E . . . B-13
KLP-S200E . . . B-14
TSP00 . . . B-57
TSPT00 . . . B-57
TQP00 . . . B-58
WF3-S200E . . . B-18
WPB3-S200E . . . B-19
WFX3-S200E . . . B-17
WP3-S200E . . . B-15
WPT3-S200E . . . B-16
WTH3-S200E . . . B-20

Hex bores
K200N . . . B-70
KB200N . . . B-70

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