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Bearing Number Index Appears on Last Page.

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.

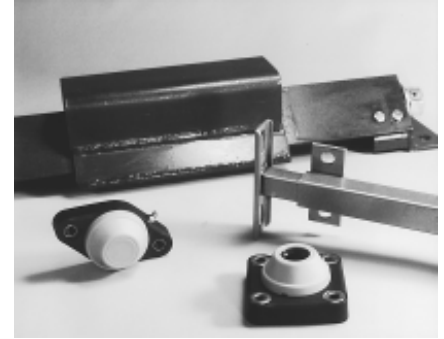
The result: Link-Belt order processing is faster, easier, and more accurate than any other power transmission equipment manufacturer's system.

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 or 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

Contents

Series 200

Ball Bearing Units and Takeups

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Series 200

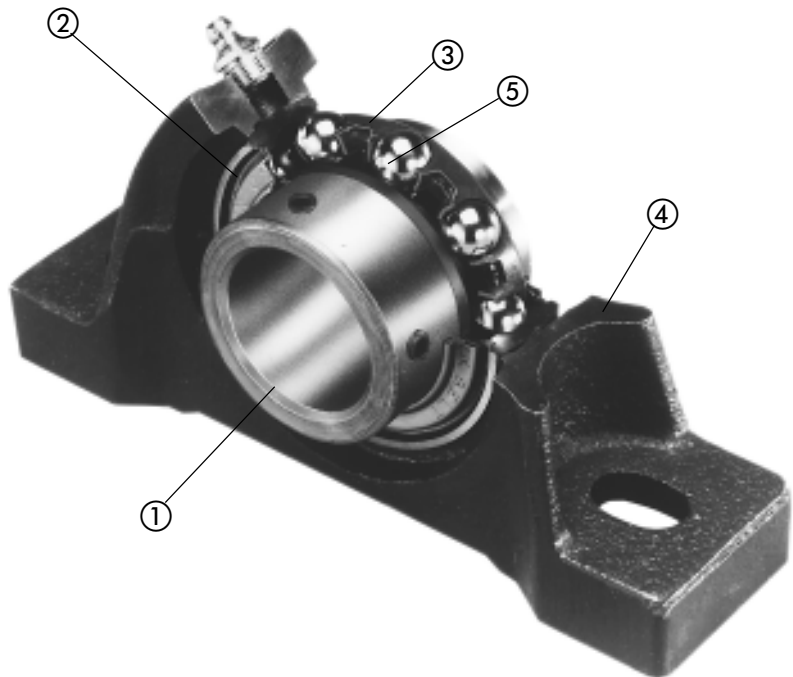
Collar Mounted Ball Bearings, Spring Locking Ball Bearings, Round, Square and Hex Bore Ball Bearings

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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

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 N SEAL



TYPE E3 SEAL

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.



TYPE E SEAL

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 $\frac{1}{2}$ " 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 $\frac{1}{2}$ " through $2\frac{3}{16}$ " (17-55 mm); 3-bolt units for shaft sizes $\frac{7}{8}$ " through $1\frac{7}{16}$ " (25-85 mm); 4-bolt units for shaft sizes $\frac{1}{2}$ " through $3\frac{1}{2}$ " (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 $\frac{7}{8}$ " 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 $\frac{1}{2}$ " through $2\frac{7}{16}$ " (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 $1\frac{5}{16}$ " through $2\frac{3}{16}$ " (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 $1\frac{15}{16}$ " through $3\frac{15}{16}$ " (50-100 mm).

NT3-U200N

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

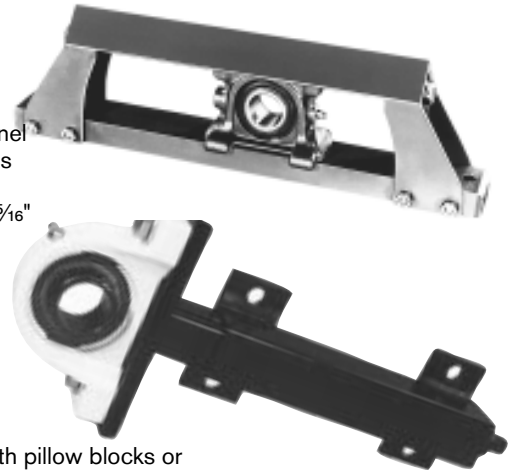
Conveyor takeup with welded steel channel frame for moderate service. Bearing bores are parallel to the base of the frame. Shaft sizes $1\frac{5}{16}$ " through $1\frac{15}{16}$ " (25-50 mm).

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.



Screw Conveyor Units

Double ball bearing trough end units and hanger bearing units.

FF200N

Four bolt square trough end flanged units for shaft sizes $1\frac{1}{2}$ " through $3\frac{7}{16}$ ", and spring locking mounting. Two ball bearings for taking screw thrust and external chain or belt loads.

HM3-U200E3, HM3-U200N

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

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 $1\frac{1}{2}$ " through $3\frac{7}{16}$ ".



Replacement Bearings

UG200NL, YG200NL

Wide inner ring deep groove single row ball bearings for shaft sizes $\frac{1}{2}$ " 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 $\frac{1}{2}$ " through $1\frac{15}{16}$ ", 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 $\frac{1}{2}$ " through $1\frac{7}{16}$ ". 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 $\frac{1}{2}$ " through $1\frac{15}{16}$ ", two, three, or four bolt mounting. Available with type E seal. Relubricatable.

Load ratings on pages B-11 and B-12.

Dimensions on pages B-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 $\frac{1}{2}$ " 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 $\frac{3}{4}$ " through $1\frac{15}{16}$ " 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 $\frac{1}{2}$ " through $2\frac{7}{16}$ ". 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 $\frac{1}{2}$ " through $1\frac{1}{4}$ " 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 $\frac{3}{4}$ " through $1\frac{1}{4}$ " 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 $\frac{1}{2}$ " through $2\frac{3}{16}$ " 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 $\frac{7}{8}$ " through $2\frac{3}{16}$ " 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

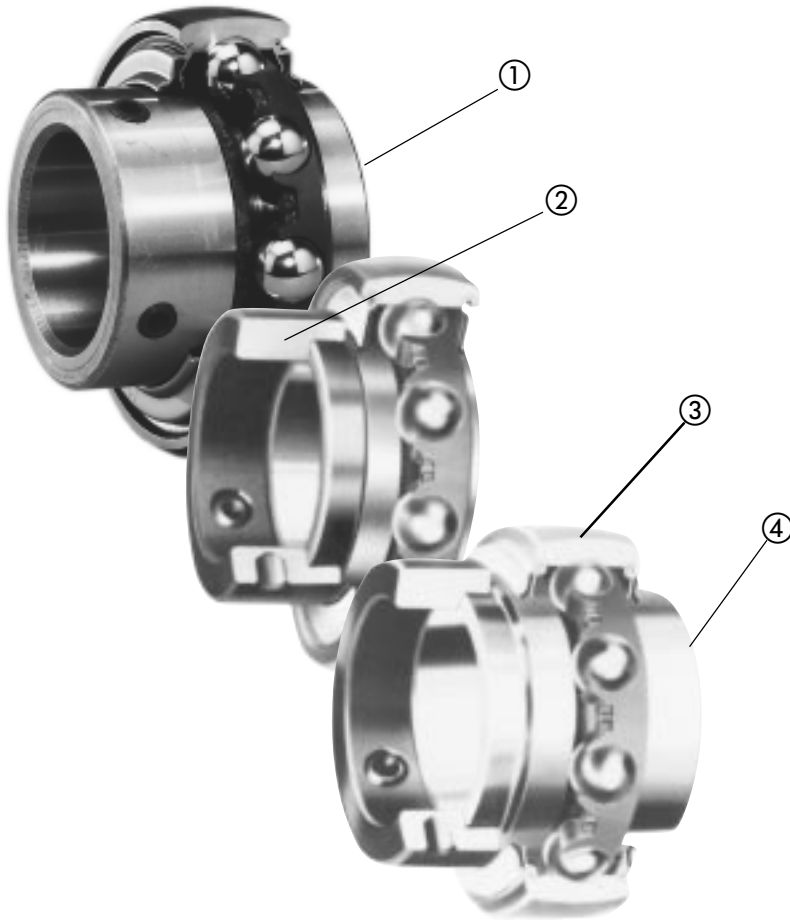
Spring Locking Ball Bearing

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 $\frac{7}{8}$ " through $2\frac{3}{16}$ ". 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 $\frac{7}{8}$ " through $1\frac{1}{2}$ ". 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 $\frac{5}{8}$ " through $1\frac{5}{8}$ " 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.*



Selection

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:

$$P = F_r$$

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

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:

$$P = F_r$$

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

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:

$$\text{Maximum } P = .56F_r + 2.30F_a$$

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

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

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

Determine X and Y from Table 2.

Calculate P for the trial bearing.

$$P = XF_r + YF_a$$

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

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.

Selection 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)
- L₁₀ = rating life, hours
- n = speed, revolutions per minute
- P = equivalent radial load, pounds (or newtons)
- X = radial factor
- Y = thrust factor

basic formulas:

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

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

Table 1 • Relation of L₁₀ 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 L₁₀ 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:

$$P = XF_r + YF_a \text{ using } X \text{ and } Y \text{ from Table 2 below.}$$

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, L₁₀, may be modified for some applications in accordance with the formula

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

where L_i = Adjusted life for (100-n) % reliability,

a₁ = Life adjustment factor for reliability

a₂ = Life adjustment factor for material and processing

a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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.

Load Ratings

Ball Bearings and Ball Bearing Units

Table 3 • Load ratings, speed limits and ball data

Bearing Size Number		C ₀ 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					Felt seals	N & E seals‡	H seals	E3 seals	inches		
		newtons	pounds	newtons	pounds							
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

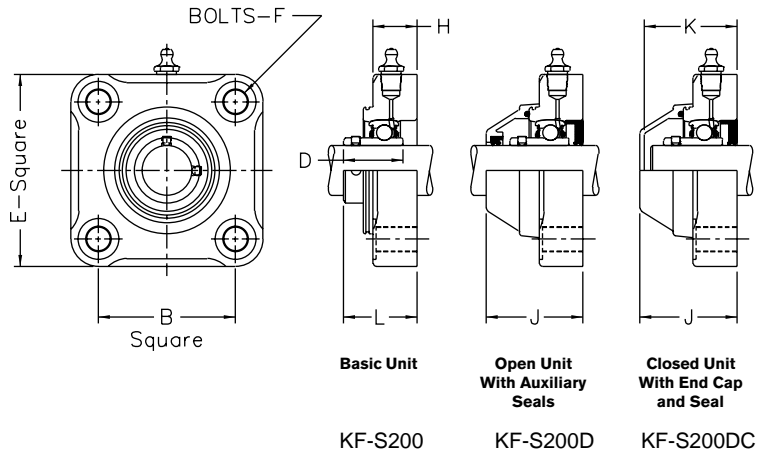
If the load P is greater than .15C for S200 and W200 or .25C all others, consult Link-Belt Bearing Division, Rexnord Corp.

● Based on grease lubrication and moderate load.
Additional information, page B-75.

‡ 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).

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

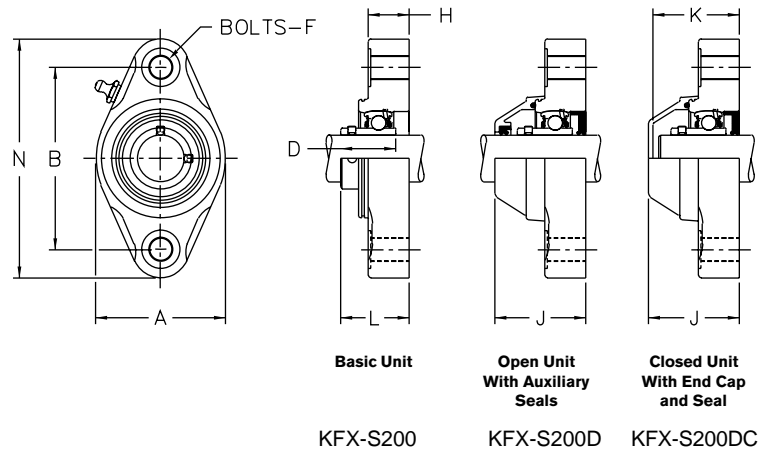


Dimensions (inches/mm)

Shaft Diameter		Flanged Unit Number		B	D	E	F Bolts	H	J	K	L	Replacement Bearing Number
mm	inches	Polyamide	Polypropylene▲									
25	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
		KF-S2M25	KLF-S2M25	70	30.17	98	10	22.5	49.5	47.5	37.3	SG2M25ELK82/99A
30	1 ³ / ₁₆ 1 ¹ / ₄	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 SG2E20ELK82/99A SG2M30ELK82/99A
		KF-S2E20	KLF-S2E20									
		KF-S2M30	KLF-S2M30									
35	1 ¹ / ₄ 1 ³ / ₈ 1 ⁷ / ₁₆	KF-S220	KLF-S220	3.622	1 ⁹ / ₁₆	4 ²³ / ₃₂	3/8	1 ¹ / ₆₄	2 ²¹ / ₆₄	2 ¹ / ₄	1 ⁷ / ₈	SG220ELK82/99A SG222ELK82/99A SG223ELK82/99A SG2M35ELK82/99A
		KF-S222	KLF-S222									
		KF-S223	KLF-S223									
		KF-S2M35	KLF-S2M35									
40	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 SG2M40ELK82/99A
		KF-S2M40	KLF-S2M40	102	42.87	131	10	30	65.5	62.5	52.4	

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



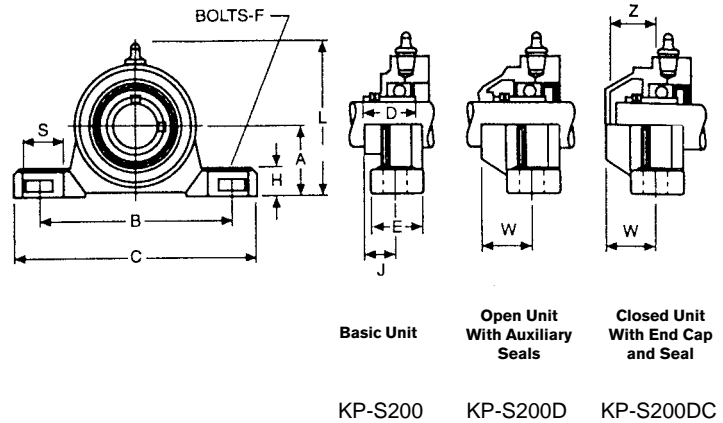
Dimensions (inches/mm)

Shaft Diameter		Flanged Unit Number		A	B	D	F Bolts	H	J	K	L	N	Replacement Bearing Number
mm	inches	Polyamide	Polypropylene▲										
20	3/4	KFX-S212	KLFX-S212	2 ⁷ / ₁₆	3.543	1 ¹ / ₈	3/8	5 ¹ / ₆₄	1 ¹³ / ₁₆	1 ¹¹ / ₁₆	1 ²³ / ₆₄	4 ⁹ / ₁₆	SG212ELK82/99A
		KFX-S2M20	KLFX-S2M20	62	90	28.58	10	20	46	43	34.3	116	SG2M20ELK82/99A
25	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 SG2M25ELK82/99A
		KFX-S2M25	KLFX-S2M25										
30	1 ³ / ₁₆ 1 ¹ / ₄	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 SG2E20ELK82/99A SG2M30ELK82/99A
		KFX-S2E20	KLFX-S2E20										
		KFX-S2M30	KLFX-S2M30										
35	1 ¹ / ₄ 1 ³ / ₈ 1 ⁷ / ₁₆	KFX-S220	KLFX-S220	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	SG220ELK82/99A SG222ELK82/99A SG223ELK82/99A SG2M35ELK82/99A
		KFX-S222	KLFX-S222										
		KFX-S223	KLFX-S223										
		KFX-S2M35	KLFX-S2M35										
40	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
		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	H	J	L	S	W	Z	Replacement Bearing Number
mm	inches	Polyamide	Polypropylene▲						Bolts							
20	3/4	KP-S212	KLP-S212	1 1/16	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
		<i>KP-S2M20</i>	<i>KLP-S2M20</i>	33.3	96.0	128.0	28.58	30	10	17	19	77	22.0	30.8	28.8	SG2M20ELK82/99A
25	1	KP-S216	KLP-S216	1 7/16	4 1 1/4	5 3 1/4	1 3/16	1 23/64	3/8	43/64	1 1/16	3 1 1/32	7/8	1 9/32	1 13/64	SG216ELK82/99A
		<i>KP-S2M25</i>	<i>KLP-S2M25</i>	36.5	106.0	140.0	30.17	34.5	10	17	20.6	85	22.0	32.7	30.7	SG2M25ELK82/99A
30	1 3/16 1 1/4	KP-S219	KLP-S219	1 11/16	4 49/64	6 27/64	1 1 1/32	1 27/64	1/2	25/32	6 1/64	3 55/64	1 5/16	1 3/8	1 19/64	SG219ELK82/99A
		KP-S2E20	KLP-S2E20													SG2E20ELK82/99A
		<i>KP-S2M30</i>	<i>KLP-S2M30</i>													SG2M30ELK82/99A
35	1 1/4 1 3/8 1 7/16	KP-S220	KLP-S220	1 7/8	4 3 1/32	6 37/64	1 1/8	1 33/64	1/2	25/32	1 7/64	4 1/4	1 5/16	1 9/16	1 15/32	SG220ELK82/99A
		KP-S222	KLP-S222													SG222ELK82/99A
		KP-S223	KLP-S223													SG223ELK82/99A
<i>KP-S2M35</i>	<i>KLP-S2M35</i>	SG2M35ELK82/99A														
40	1 1/2	KP-S224	KLP-S224	2	5 1 1/32	7 9/32	1 1 1/16	1 33/64	1/2	25/32	1 13/64	4 13/32	1 5/16	1 1 1/64	1 9/16	SG224ELK82/99A
		<i>KP-S2M40</i>	<i>KLP-S2M40</i>	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 1/8 parallel thread per ISO 7/1 latest revision. Note: 1/8" 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.

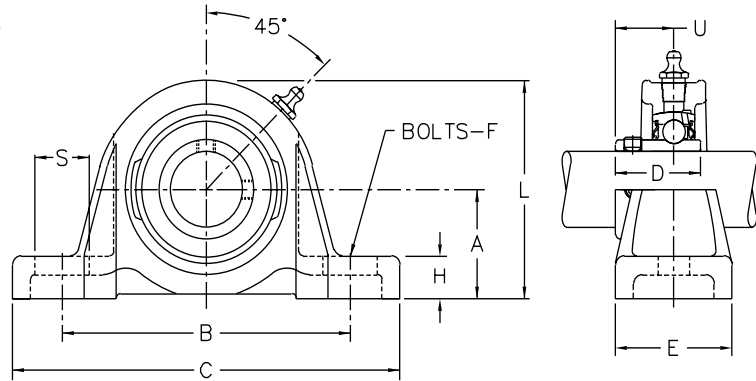
Load ratings for bearings and housings

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		
20	3/4	2210 lb	1480 lb	332 lb	175 lb		
		9830 N	6590 N			1475 N	778 N
25	1	2430 lb	1760 lb	365 lb	175 lb		
		10810 N	7830 N			1622 N	778 N
30	1 3/16 1 1/4	3380 lb	2530 lb	507 lb	330 lb		
		15030 N	11300 N			2254 N	1468 N
35	1 1/4 1 3/8 1 7/16	4470 lb	3440 lb	670 lb	330 lb		
		19880 N	15300 N			2982 N	1468 N
40	1 1/2	5640 lb	4460 lb	846 lb	500 lb		
		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. Polyamide 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														
20	3/4	WP3-S212E	15/16	37/8	5 1/8	1 1/8	1 1/2	3/8	1/2	2 19/32	1 1/16	3/4	1.5	SG212ELK82/99A	
		WP3-S2M20E	33.34	98.4	130.2	28.58	38.1	10	12.7	65.9	17.5	19.0	.68	SG2M20ELK82/99A	
25	7/8	WP3-S214E	17/16	4	5 3/8	1 3/16	1 5/8	3/8	9/16	2 7/8	1 1/16	1 3/16	1.7	SG214ELK82/99A	
	1 5/16	WP3-S215E												1.6	SG215ELK82/99A
	1	WP3-S216E												1.6	SG216ELK82/99A
		WP3-S2M25E												.73	SG2M25ELK82/99A
30	1 1/8	WP3-S218E	1 11/16	4 5/8	6 5/16	1 11/32	1 3/4	1/2	1 1/16	3 5/16	1 5/16	6 1/64	2.6	SG218ELK82/99A	
	1 3/16	WP3-S219E												2.6	SG219ELK82/99A
	1 1/4	WP3-S2E20E												2.6	SG2E20ELK82/99A
		WP3-S2M30E												1.18	SG2M30ELK82/99A
35	1 1/4	WP3-S220E	1 7/8	4 15/16	6 3/8	1 1/16	1 7/8	1/2	1 3/16	3 11/16	1 3/16	1 7/64	3.4	SG220ELK82/99A	
	1 3/8	WP3-S222E												3.4	SG222ELK82/99A
	1 7/16	WP3-S223E												3.3	SG223ELK82/99A
		WP3-S2M35E												1.50	SG2M35ELK82/99A
40	1 1/2	WP3-S224E	2	5 5/8	7 1/16	1 11/16	1 7/8	1/2	1 3/16	4	1 5/16	1 13/64	4.4	SG224ELK82/99A	
		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	
40	1 5/8	WP3-S226E	2 1/8	5 7/8	7 1/4	1 49/64	2	1/2	1 3/16	4 5/16	7/8	1 15/64	5.1	SG226ELK82/99A	
	1 11/16	WP3-S227E												5.0	SG227ELK82/99A
	1 3/4	WP3-S228E												4.9	SG228ELK82/99A
														2.22	
	1 15/16	WP3-S231E	2 1/4	6 3/16	7 7/8	1 51/64	2 1/8	5/8	7/8	4 1/2	1 5/16	1 17/64	5.8	SG231ELK82/99A	
			57.15	157.2	200.0	45.64	54.0	16	22.2	114.3	23.8	32.1	2.63		

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).

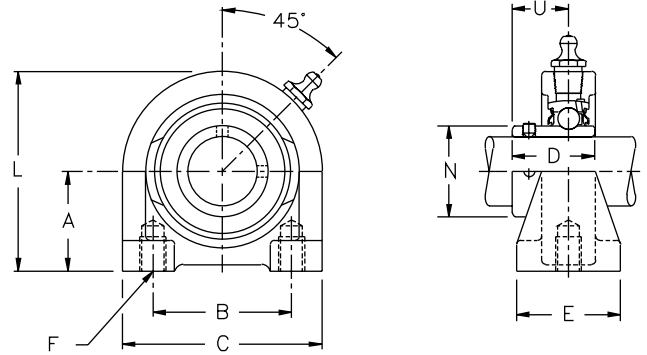
Selection guide, pages B-9, B-10.

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					
20	3/4	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	3/4	1.0	SG212ELK82/99A
		WPT3-S2M20E	33.34	50.80	73.0	28.58	38.1	-	12.7	65.9	28.6	19.0	.45	SG2M20ELK82/99A
25	7/8	WPT3-S214E	1 7/16	2	2 7/8	1 3/16	1 1/2	3/8-16	1/2	2 7/8	1 5/16	1 3/16	1.3	SG214ELK82/99A
	15/16	WPT3-S215E											1.3	SG215ELK82/99A
	1	WPT3-S216E											1.2	SG216ELK82/99A
		WPT3-S2M25E											36.51	50.80	73.0	30.17	38.1	-	12.7	73.0	33.3	20.6	.54	SG2M25ELK82/99A
30	1 1/8	WPT3-S218E	1 11/16	3	4	1 11/32	1 1/2	7/8-14	5/8	3 5/16	1 19/32	61/64	2.3	SG218ELK82/99A
	1 3/16	WPT3-S219E											2.3	SG219ELK82/99A
	1 1/4	WPT3-S2E20E											2.2	SG2E20ELK82/99A
		WPT3-S2M30E											42.86	76.20	101.6	34.13	38.1	-	15.9	84.1	40.5	24.2	1.00	SG2M30ELK82/99A
35	1 1/4	WPT3-S220E	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	SG220ELK82/99A
	1 3/8	WPT3-S222E											3.1	SG222ELK82/99A
	1 7/16	WPT3-S223E											3.0	SG223ELK82/99A
		WPT3-S2M35E											47.62	82.55
	1 5/16	WPT3-S231E	2 1/4	4	5 7/16	1 11/16	2	5/8-11	7/8	4 1/2	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, 1/8" PT.

† Tolerance, +.000" - .010" (+0.00 mm -0.25 mm).

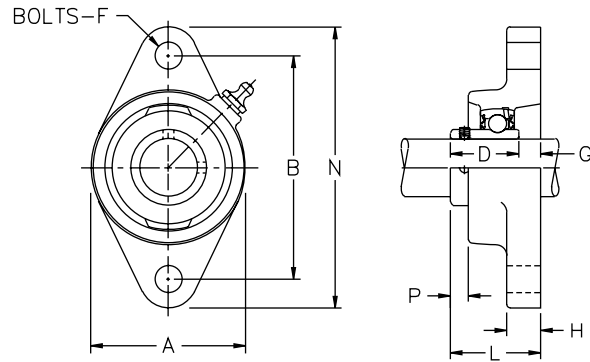
Selection guide, pages B-9, B-10.

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												
20	3/4	WFX3-S212E	27/16	317/32	1 1/8	3/8	23/64	9/16	1 31/64	4 13/32	9/32	1.1	SG212ELK82/99A
		WFX3-S2M20E	61.9	89.69	28.58	10	9.1	14.3	37.7	111.9	7.1	.50	SG2M20ELK82/99A
25	7/8	WFX3-S214E	2 11/16	3 57/64	1 3/16	7/16	3/8	1 9/32	1 9/16	4 29/32	5/16	1.5	SG214ELK82/99A
	19/16	WFX3-S215E										1.5	SG215ELK82/99A
	1	WFX3-S216E										1.4	SG216ELK82/99A
		WFX3-S2M25E										.64	SG2M25ELK82/99A
30	1 1/8	WFX3-S218E	3 3/16	4 19/32	1 11/32	7/16	25/64	1 9/32	1 47/64	5 19/32	27/64	2.2	SG218ELK82/99A
	1 3/16	WFX3-S219E										2.1	SG219ELK82/99A
	1 1/4	WFX3-S2E20E										2.1	SG2E20ELK82/99A
		WFX3-S2M30E										.95	SG2M30ELK82/99A
35	1 1/4	WFX3-S220E	3 5/8	5 1/8	1 9/16	1/2	23/64	5/8	1 59/64	6 1/8	33/64	2.8	SG220ELK82/99A
	1 3/8	WFX3-S222E										2.7	SG222ELK82/99A
	1 7/16	WFX3-S223E										2.6	SG223ELK82/99A
		WFX3-S2M35E										1.18	SG2M35ELK82/99A
40	1 1/2	WFX3-S224E	4	5 21/32	1 11/16	1/2	27/64	5/8	2 7/64	6 25/32	17/32	3.8	SG224ELK82/99A
		WFX3-S2M40E	101.6	143.67	42.87	12	10.7	15.9	53.6	172.2	1.5	1.73	SG2M40ELK82/99A
40	1 5/8	WFX3-S226E	4 1/4	5 27/32	1 49/64	1/2	3/8	5/8	2 9/64	7 3/32	39/64	4.4	SG226ELK82/99A
	1 11/16	WFX3-S227E										4.4	SG227ELK82/99A
	1 3/4	WFX3-S228E										4.3	SG228ELK82/99A
												1.95	
	1 15/16	WFX3-S231E	4 9/16	6 3/16	1 51/64	9/16	1 9/32	3/4	2 25/64	7 7/16	39/64	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, 1/8" PT.

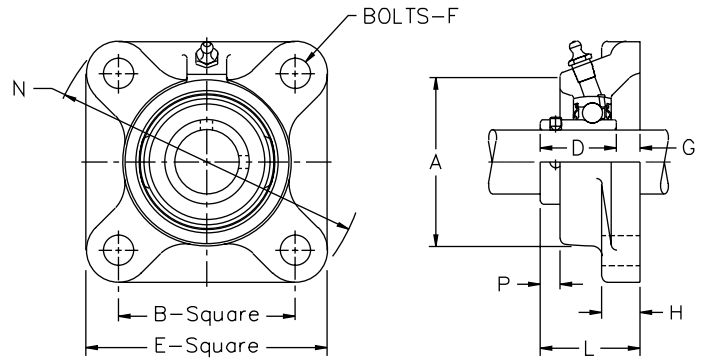
Selection guide, pages B-9, B-10.

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													
20	3/4	WF3-S212E	27/16	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
		WF3-S2M20E	61.9	63.50	28.58	85.7	10	9.1	14.3	37.7	111.9	7.1	.73	SG2M20ELK82/99A
25	7/8 15/16 1	WF3-S214E	2 11/16	2 3/4	1 9/16	3 3/4	7/16	3/8	1 9/32	1 9/16	4 29/32	5/16	2.0	SG214ELK82/99A
		1.9											SG215ELK82/99A	
		1.9											SG216ELK82/99A	
		.86											SG2M25ELK82/99A	
30	1 1/8 1 3/16 1 1/4	WF3-S218E	3 3/16	3 1/4	1 11/32	4 1/4	7/16	25/64	1 9/32	1 47/64	5 19/32	27/64	2.7	SG218ELK82/99A
		2.6											SG219ELK82/99A	
		2.6											SG2E20ELK82/99A	
		1.18											SG2M30ELK82/99A	
35	1 1/4 1 3/8 1 7/16	WF3-S220E	3 5/8	3 5/8	1 9/16	4 5/8	1/2	23/64	5/8	1 59/64	6 1/8	37/64	3.5	SG220ELK82/99A
		3.4											SG222ELK82/99A	
		3.3											SG223ELK82/99A	
		1.50											SG2M35ELK82/99A	
40	1 1/2	WF3-S224E	4	4	1 11/16	5 1/8	1/2	27/64	5/8	2 7/64	6 25/32	17/32	4.7	SG224ELK82/99A
		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
40	1 5/8 1 11/16 1 3/4	WF3-S226E	4 1/4	4 1/8	1 49/64	5 3/8	1/2	3/8	5/8	2 9/64	7 3/32	35/64	5.4	SG226ELK82/99A
		5.4											SG227ELK82/99A	
		5.3											SG228ELK82/99A	
		2.41												
115/16		WF3-S231E	4 1/2	4 3/8	1 51/64	5 5/8	1/2	1/2	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, 1/8" PT.

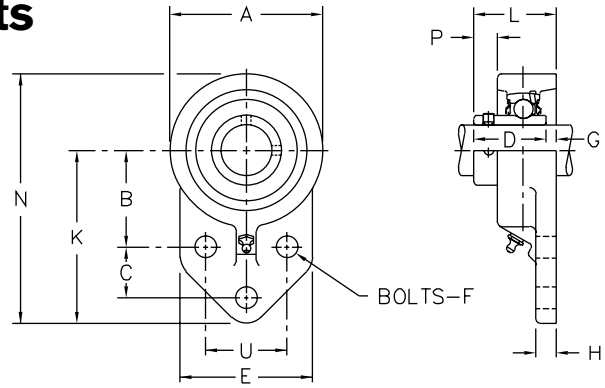
Selection guide, pages B-9, B-10.

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																
20	3/4	WFB3-S212E	2 1/2	1 11/16	7/8	1 1/8	2 3/8	3/8	7/32	5/18	3	1 11/32	4 1/4	1 1/32	1 1/2	1.2	SG212ELK82/99A
		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
25	7/8 15/16 1	WFB3-S214E	2 3/4	1 13/16	1 1/8	1 3/16	2 1/2	3/8	9/32	3/8	3 3/8	1 29/64	4 3/4	5/16	1 5/8	1.7	SG214ELK82/99A
		WFB3-S215E														1.7	SG215ELK82/99A
		WFB3-S216E														1.6	SG216ELK82/99A
		WFB3-S2M25E														0.72	SG2M25ELK82/99A
30	1 1/8 1 3/16 1 1/4	WFB3-S218E	3 1/4	2 1/16	1 1/4	1 11/32	2 3/4	3/8	9/32	3/8	3 3/4	1 5/8	5 3/8	3/8	1 7/8	2.2	SG218ELK82/99A
		WFB3-S219E														2.2	SG219ELK82/99A
		WFB3-S2E20E														2.1	SG2E20ELK82/99A
		WFB3-S2M30E														0.95	SG2M30ELK82/99A
35	1 1/4 1 3/8 1 7/16	WFB3-S220E	3 3/4	2 3/8	1 1/4	1 9/16	3 1/4	1/2	23/64	1/2	4 1/4	1 59/64	6 1/8	3 1/64	2	3.2	SG220ELK82/99A
		WFB3-S222E														3.2	SG222ELK82/99A
		WFB3-S223E														3.1	SG223ELK82/99A
		WFB3-S2M35E														1.41	SG2M35ELK82/99A

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

Lubrication fitting tap size, 1/4"-28 UNF.

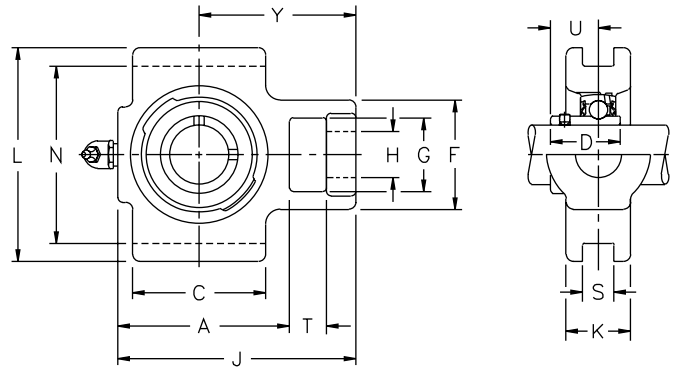
Selection guide, pages B-9, B-10.

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	Lip seals	A	C	D	F	G	H	J	K	L	N	S	T	U	Y	Unit wt. (lbs./kg)	Bearing no.		
												+0.000" -0.015" (+0.00 -0.38)	+0.005" -0.015" (+0.13 -0.38)							
20	WTH3-S212E WTH3-S2M20E		2 ²⁷ / ₃₂	2 ¹ / ₄	1 ¹ / ₈	1 ⁷ / ₈	1 ¹ / ₄	3 ⁴ / ₈	3 ³¹ / ₃₂	1 ¹ / ₁₆	3 ⁵ / ₈	3.000	.531	5 ⁵ / ₈	3 ⁴ / ₈	2 ²¹ / ₃₂	2.4	SG212ELK82/99A		
			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		
25	WTH3-S214E WTH3-S215E WTH3-S216E WTH3-S2M25E		2 ²⁹ / ₃₂	2 ¹ / ₄	1 ³ / ₁₆	1 ²⁷ / ₃₂	1 ¹ / ₄	3 ⁴ / ₈	4 ¹ / ₃₂	1 ³ / ₃₂	3 ⁵ / ₈	3.000	.531	5 ⁵ / ₈	1 ³ / ₁₆	2 ²¹ / ₃₂	2.7	SG214ELK82/99A		
			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	2.7	SG215ELK82/99A		
																		1.2	SG216ELK82/99A	
																				SG2M25ELK82/99A
30	WTH3-S218E WTH3-S219E WTH3-S2E20E WTH3-S2M30E		3 ¹¹ / ₃₂	2 ¹ / ₂	1 ¹¹ / ₃₂	2 ³ / ₁₆	1 ⁷ / ₁₆	7 ⁷ / ₈	4 ¹⁹ / ₃₂	1 ³ / ₃₂	4 ¹ / ₈	3.500	.531	5 ⁵ / ₈	6 ¹ / ₆₄	2 ²⁷ / ₃₂	3.2	SG218ELK82/99A		
			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	1.5	SG219ELK82/99A		
																				SG2E20ELK82/99A
																				SG2M30ELK82/99A
35	WTH3-S220E WTH3-S222E WTH3-S223E WTH3-S2M35E		3 ¹¹ / ₁₆	2 ³ / ₄	1 ⁹ / ₁₆	2 ⁵ / ₁₆	1 ⁷ / ₁₆	7 ⁷ / ₈	4 ¹⁹ / ₁₆	1 ³ / ₁₆	4 ¹ / ₈	3.500	.531	5 ⁵ / ₈	1 ⁷ / ₆₄	2 ³¹ / ₃₂	4.0	SG220ELK82/99A		
			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	1.8	SG222ELK82/99A		
																				SG223ELK82/99A
																				SG2M35ELK82/99A
40	WTH3-S224E WTH3-S2M40E		4 ⁹ / ₁₆	3 ¹ / ₄	1 ¹¹ / ₁₆	2 ²⁷ / ₃₂	1 ¹⁵ / ₁₆	1 ¹ / ₈	5 ⁹ / ₁₆	1 ³ / ₁₆	4 ³ / ₄	3.969	.688	3 ⁴ / ₈	1 ¹³ / ₆₄	3 ¹⁵ / ₃₂	5.3	SG224ELK82/99A		
			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		
40	WTH3-S226E WTH3-S227E WTH3-S228E		4 ⁹ / 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	3 ⁴ / ₈	1 ¹⁵ / ₆₄	3 ¹⁵ / ₃₂	5.3	SG226ELK82/99A		
			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	2.4	SG227ELK82/99A		
																				SG228ELK82/99A
40	WTH3-S231E		4 ⁹ / ₁₆	3 ³ / ₈	1 ⁵¹ / ₆₄	2 ⁷ / ₈	1 ¹⁵ / ₁₆	1 ¹ / ₈	5 ¹⁵ / ₁₆	1 ⁴⁹ / ₆₄	4 ³ / ₄	3.969	.688	3 ⁴ / ₈	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			

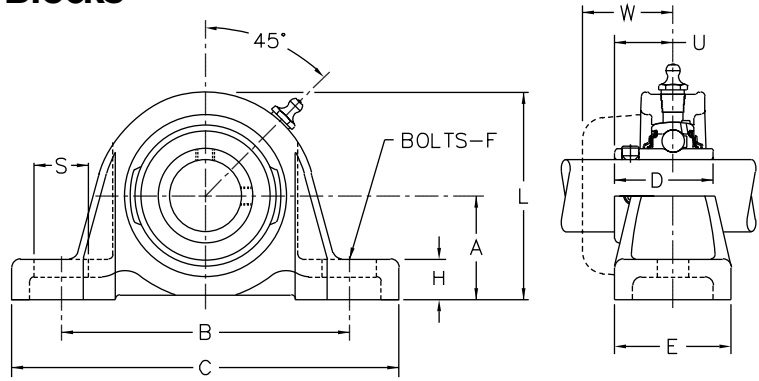
Bold face items are normally available from stock; please consult for availability of non-stock items.

Lubrication fitting tap size, 1/8" 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 OD.	S	U	W ◆	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip Seals	†											◆		
17	1/2	P3-U2B08N	1 1/16	3 1/2	4 5/8	1 3/32	1 1/2	3/8	1/2	2 11/32	...	3/4	4 1/4	1 13/64	1.1	UG2B08NL
	5/8	P3-U210N													1.0	UG210NL
	11/16	P3-U211N													1.0	UG211NL
		P3-U2M17N													0.5	UG2M17NL
20	3/4	P3-U212N	1 5/16	3 7/8	5 1/8	1 9/32	1 1/2	3/8	1/2	2 19/32	...	1 1/16	3/4	1 19/64	1.7	UG212NL
		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
25	7/8	P3-U214N △	1 7/16	4	5 3/8	1 29/64	1 5/8	3/8	9/16	2 7/8	...	1 1/16	5 1/4	1 9/32	1.9	UG214NL
	1 1/16	P3-U215N △													1.9	UG215NL
	1	P3-U216N △													1.8	UG216NL
		P3-U2M25N													0.9	UG2M25NL
30	1 1/8	P3-U218N	1 11/16	4 5/8	6 5/16	1 9/16	1 3/4	1/2	1 1/16	3 5/16	...	1 5/16	6 1/4	1 29/64	2.8	UG218NL
	1 3/16	P3-U219N													2.7	UG219NL
	1 1/4	P3-U2E20N													2.7	UG2E20NL
		P3-U2M30N													1.2	UG2M30NL
35	1 1/4	P3-U220N △	1 7/8	4 15/16	6 3/8	1 49/64	1 7/8	1/2	1 3/16	3 11/16	...	1 3/16	1 7/4	1 35/64	3.8	UG220NL
	1 3/8	P3-U222N △													3.7	UG222NL
	1 7/16	P3-U223N △													3.7	UG223NL
		P3-U2M35N													1.7	UG2M35NL
40	1 1/2	P3-U224N △	2	5 3/8	7 1/16	1 29/32	1 7/8	1/2	1 3/16	4	...	1 5/16	1 11/4	1 11/4	4.7	UG224NL
		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
45	1 5/8	P3-U226N △	2 1/8	5 5/8	7 1/4	2 1/32	2	1/2	1 3/16	4 5/16	...	7/8	1 5/8	1 21/32	5.4	UG226NL
	1 11/16	P3-U227N △													5.4	UG227NL
	1 3/4	P3-U228N △													5.3	UG228NL
		P3-U2M45N													2.3	UG2M45NL
50	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	...	1 5/16	1 17/64	1 25/32	6.1	UG231NL
	2	P3-U2E32N △													6.0	UG2E32NL
		P3-U2M50N													2.6	UG2M50NL
55	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 1/4	7.8	UG232NL
	2 3/16	P3-U235N △													7.7	UG235NL
		P3-U2M55N													3.5	UG2M55NL
60	2 1/4	P3-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 7/4	11.5	UG236NL
	2 3/8	P3-U238N													11.4	UG238NL
	2 1/16	P3-U239N													11.3	UG239NL
		P3-U2M60N													5.1	UG2M60NL
65	2 1/2	P3-U240N	3	8 1/8	10 1/2	2 11/16	2 7/8	3/4	1 1/16	6	4 3/16	1 3/16	1 11/16	2 1/16	16.2	UG240NL
	2 11/16	P3-U243N													15.6	UG243NL
		P3-U2M65N													6.8	UG2M65NL
75	2 3/4	P3-U244N	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 11/16	2 7/32	20.0	UG244NL
	2 15/16	P3-U247N													19.3	UG247NL
	3	P3-U2E48N													19.0	UG2E48NL
		P3-U2M75N													8.7	UG2M75NL
85	3 1/16	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
		P3-U2M85N													13.2	UG2M85NL
100	3 15/16	P3-U263N	4 7/16	11 7/8	15 1/4	4 1/4	4 1/4	7/8	1 19/16	8 7/8	5 15/16	1 7/8	2 37/64	3 1/4	50.4	UG263NL
	4	P3-U2E64N													49.9	UG2E64NL
		P3-U2M100N													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, 1/4"-28 UNF; for all other shafts, 1/8" 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.

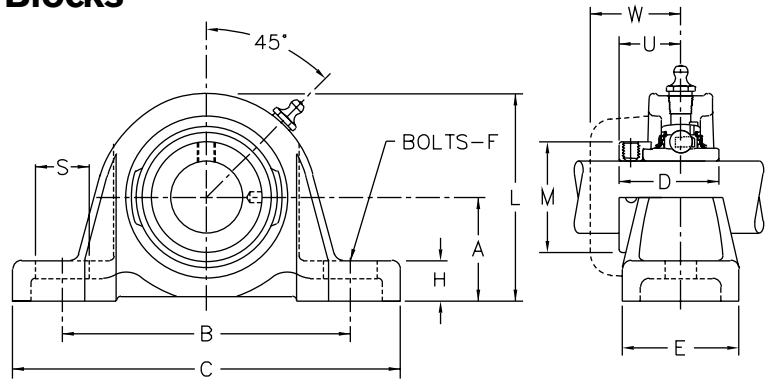
Load ratings, pages B-11, B-12.

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	H	L	M	S	U	W	Unit wt. (lbs./kg)	Bearing no.
inches	Lip Seals	†					Bolts						◆		
1/2 5/8 11/16	P3-Y2B08N	} 1 3/16 30.16	3 1/2 88.9	4 5/8 117.5	1 15/32 37.31	1 1/2 38.1	3/8 10	1/2 12.7	2 11/32 59.5	1 1/8 28.6	3/4 19.0	5 9/64 23.4	1 13/64 30.6	1.1 .50	YG2B08NL
	P3-Y210N														YG210NL
	P3-Y211N														YG211NL
3/4	P3-Y212N	} 1 5/16 33.34	3 3/8 98.4	5 1/8 130.2	1 23/32 43.66	1 1/2 38.1	3/8 10	1/2 12.7	2 19/32 65.9	1 1/16 33.3	1 1/16 17.5	1 3/64 26.6	1 13/64 32.9	1.8 .82	YG212NL
7/8 15/16 1	P3-Y214N △	} 1 7/16 36.51	4 101.6	5 3/8 136.5	1 3/4 44.45	1 5/8 41.3	3/8 10	9/16 14.3	2 7/8 73.0	1 1/2 38.1	1 1/16 17.5	1 1/16 27.0	1 19/32 32.5	2.0 .91	YG214NL
	P3-Y215N △														YG215NL
	P3-Y216N △														YG216NL
1 1/8 1 3/16 1 1/4	P3-Y218N	} 1 11/16 42.86	4 5/8 117.5	6 5/16 160.3	1 29/32 48.42	1 3/4 44.4	1/2 12	1 1/16 17.5	3 3/16 84.1	1 3/4 44.4	1 5/16 23.8	1 3/16 30.2	1 29/64 36.9	2.8 1.27	YG218NL
	P3-Y219N														YG219NL
	P3-Y2E20N														YG2E20NL
1 1/4 1 3/8 1 7/16	P3-Y220N △	} 1 7/8 47.62	4 15/16 125.4	6 3/8 161.9	2 1/64 51.20	1 7/8 47.6	1/2 12	1 3/16 20.6	3 11/16 93.7	2 3/16 55.6	1 3/16 20.6	1 3/32 32.5	1 39/64 39.3	4.0 1.82	YG220NL
	P3-Y222N △														YG222NL
	P3-Y223N △														YG223NL
1 1/2	P3-Y224N △	} 2 50.80	5 3/8 136.5	7 1/16 179.4	2 7/32 56.36	1 7/8 47.6	1/2 12	1 3/16 20.6	4 101.6	2 3/8 60.3	1 5/16 23.8	1 3/8 34.9	1 41/64 41.7	5.0 2.27	YG224NL
1 5/8 1 11/16 1 3/4	P3-Y226N △	} 2 1/8 53.98	5 5/8 142.9	7 1/4 184.2	2 7/32 56.36	2 50.8	1/2 12	1 3/16 20.6	4 5/16 109.5	2 1/2 63.5	7/8 22.2	1 3/8 34.9	1 21/32 42.1	5.7 2.59	YG226NL
	P3-Y227N △														YG227NL
	P3-Y228N △														YG228NL
1 15/16 2	P3-Y231N △	} 2 1/4 57.15	6 3/16 157.2	7 7/8 200.0	2 15/32 62.71	2 1/8 54.0	5/8 16	7/8 22.2	4 1/2 114.3	2 3/4 69.8	1 5/16 23.8	1 1/2 38.1	1 25/32 45.2	6.4 2.91	YG231NL
	P3-Y2E32N △														YG2E32NL
2 2 3/16	P3-Y232N △	} 2 1/2 63.50	6 3/4 171.4	9 1/16 230.2	2 13/16 71.44	2 3/8 60.3	5/8 16	1 25.4	5 127.0	3 76.2	1 5/16 33.3	1 23/32 43.6	2 1/64 51.2	8.4 3.81	YG232NL
	P3-Y235N △														YG235NL
2 1/4 2 3/8 2 7/16	P3-Y236N	} 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 5.27	YG236NL
	P3-Y238N														YG238NL
	P3-Y239N														YG239NL

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, 1/4"-28 UNF; for all other shafts, 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.

◆ Width dimension for closed end unit.

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

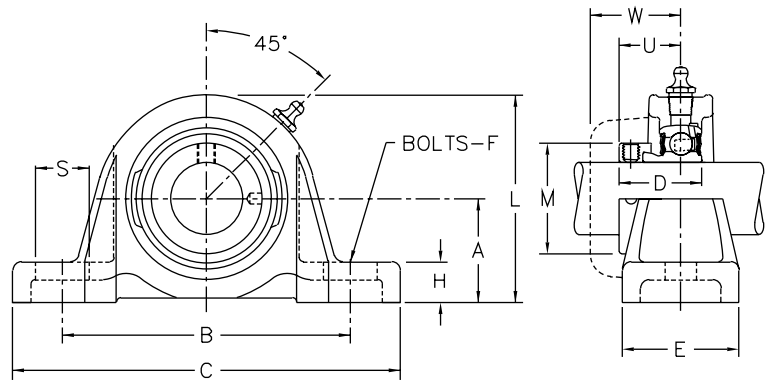
Load ratings, pages B-11, B-12.

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.													
1/2 5/8	P3-W2B08E	1 1/16	3 1/2	4 5/8	1 1/8	1 1/2	3/8	1/2	2 11/32	1 1/8	3/4	7/8	1 13/64	.9	.41	WG2B08EL												
	P3-W210E															WG210EL												
3/4	P3-W212E	1 5/16 33.34	3 7/8 98.4	5 1/8 130.2	1 7/32 30.96	1 1/2 38.1	3/8 10	1/2 12.7	2 19/32 65.9	1 5/16 33.3	1 1/16 17.5	59/64 23.4	1 19/64 32.9	1.6	.73	WG212EL												
7/8 15/16 1	P3-W214E	1 7/16	4	5 3/8	1 7/32	1 5/8	3/8	9/16	2 7/8	1 1/2	1 1/16	59/64	1 9/32	1.8	0.82	WG214EL												
	P3-W215E															36.51	101.6	136.5	30.96	41.3	10	14.3	73.0	38.1	17.5	23.4	32.5	WG215EL
	P3-W216E															WG216EL												
1 1/8 1 3/16 1 1/4	P3-W218E	1 11/16	4 5/8	6 5/16	1 13/32	1 3/4	1/2	1 1/16	3 5/16	1 3/4	1 5/16	1 3/64	1 29/64	2.5	1.14	WG218EL												
	P3-W219E															42.86	117.5	160.3	35.72	44.4	12	17.5	84.1	44.4	23.8	26.6	36.9	WG219EL
	P3-W2E20E															WG2E20EL												
1 1/4 1 3/8 1 7/16	P3-W220E	1 7/8	4 15/16	6 3/8	1 7/32	1 7/8	1/2	1 3/16	3 11/16	2 3/16	1 3/16	1 5/32	1 35/64	3.7	1.68	WG220EL												
	P3-W222E															47.62	125.4	161.9	38.89	47.6	12	20.6	93.7	55.6	20.6	29.4	39.3	WG222EL
	P3-W223E															WG223EL												
1 1/2	P3-W224E	2 50.80	5 3/8 136.5	7 1/16 179.4	1 23/32 43.66	1 7/8 47.6	1/2 12	1 3/16 20.6	4 101.6	2 3/8 60.3	1 5/16 23.8	1 9/32 32.5	1 41/64 41.7	4.6	2.09	WG224EL												
1 5/8 1 11/16 1 3/4	P3-W226E	2 1/8	5 5/8	7 1/4	1 23/32	2	1/2	1 3/16	4 5/16	2 1/2	7/8	1 9/32	1 21/32	5.0	2.27	WG226EL												
	P3-W227E															53.98	142.9	184.2	43.66	50.8	12	20.6	109.5	63.5	22.2	32.5	42.1	WG227EL
	P3-W228E															WG228EL												
1 15/16 2	P3-W231E	2 1/4	6 3/16	7 7/8	1 23/32	2 1/8	5/8	7/8	4 1/2	2 3/4	1 5/16	1 9/32	1 25/32	5.5	2.5	WG231EL												
	P3-W2E32E															57.15	157.2	200.0	43.66	54.0	16	22.2	114.3	69.8	23.8	32.5	45.2	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, 1/4"-28 UNF; for all other shafts, 1/8" PT.

† Tolerance, +.000" - .010" (+0.00 mm - 0.25 mm).

◆ Width dimension for closed end unit

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

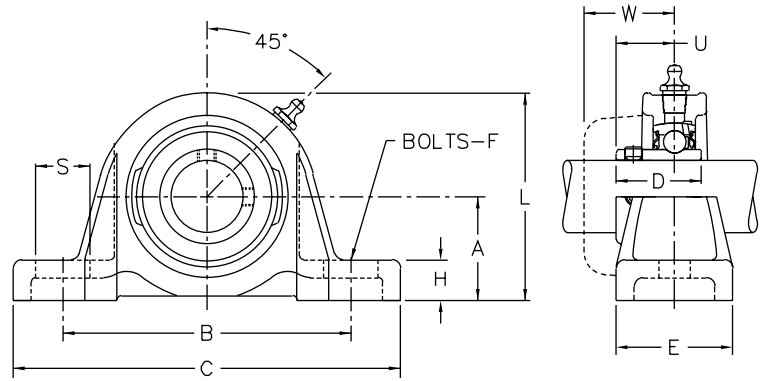
Load ratings, pages B-11, B-12.

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.
3/4	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	9/8 10	1/2 12.7	2 19/32 65.9	1 1/16 17.5	3/4 19.0	1 19/64 32.9	1.5 .68	SG212EL
7/8 1 5/16 1	P3-S214E P3-S215E P3-S216E	1 7/16 36.51	4 101.6	5 3/8 136.5	1 3/16 30.17	1 5/8 41.3	3/8 10	9/16 14.3	2 7/8 73.0	1 1/16 17.5	13/16 20.6	1 9/32 32.5	1.7 1.6 1.6 .73	SG214EL SG215EL SG216EL
1 1/8 1 3/16 1 1/4	P3-S218E P3-S219E P3-S2E20E	1 11/16 42.86	4 5/8 117.5	6 5/16 160.3	1 11/32 34.13	1 3/4 44.4	1/2 12	1 1/16 17.5	3 5/16 84.1	1 5/16 23.8	6 1/64 24.2	1 29/64 36.9	2.6 2.6 2.6 1.18	SG218EL SG219EL SG2E20EL
1 1/4 1 3/8 1 7/16	P3-S220E P3-S222E P3-S223E	1 7/8 47.62	4 15/16 125.4	6 3/8 161.9	1 9/16 39.67	1 7/8 47.6	1/2 12	1 9/16 20.6	3 11/16 93.7	1 3/16 20.6	1 7/64 28.2	1 39/64 39.3	3.4 3.4 3.3 1.50	SG220EL SG222EL SG223EL
1 1/2	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	1 9/16 20.6	4 101.6	1 5/16 23.8	1 13/64 30.6	1 41/64 41.7	4.4 2.00	SG224EL
1 5/8 1 11/16 1 3/4	P3-S226E P3-S227E P3-S228E	2 1/8 53.98	5 5/8 142.9	7 1/4 184.2	1 49/64 44.85	2 50.8	1/2 12	1 9/16 20.6	4 5/16 109.5	7/8 22.2	1 15/64 31.4	1 21/32 42.1	5.1 5.0 4.9 2.22	SG226EL SG227EL SG228EL
1 5/16	P3-S231E	2 1/4 57.15	6 3/16 157.2	7 7/8 200.0	1 51/64 45.64	2 1/8 54.0	5/8 16	7/8 22.2	4 1/2 114.3	1 5/16 23.8	1 17/64 32.1	1 29/32 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, 1/8" 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.

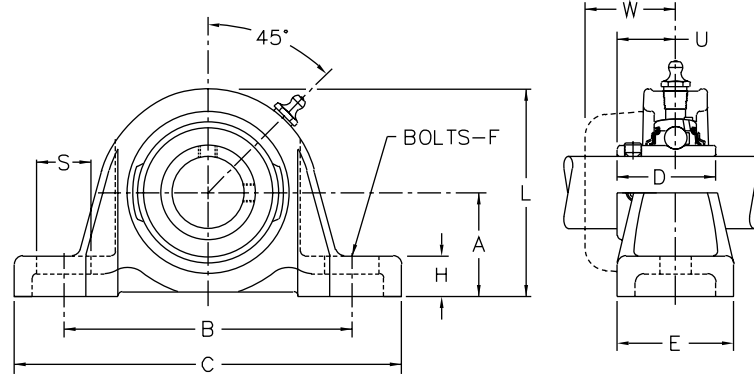
Load ratings, pages B-11, B-12.

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	H	L	S	U	W	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals	†					Bolts					◆		
17	1/2 5/8 11/16	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	4 1/64	1 13/64	1.0	UG2B08NL
		PL3-U210N												.9	UG210NL
		PL3-U211N												.9	UG211NL
		PL3-U2M17N												0.4	UG2M17NL
20	3/4	PL3-U212N	1 1/4	3 7/8	5 1/8	1 3/32	1 1/2	3/8	7/16	2 17/32	1 1/16	3/4	1 19/64	1.6	UG212NL
		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
25	7/8 19/16 1	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	5 1/64	1 9/32	1.8	UG214NL
		PL3-U215N△												1.8	UG215NL
		PL3-U216N△												1.7	UG216NL
		PL3-U2M25N												0.9	UG2M25NL
30	1 1/8 1 3/16 1 1/4	PL3-U218N	1 9/16	4 3/4	6 5/16	1 1/16	1 7/8	1/2	1 1/16	3 5/32	3/4	6 1/64	1 29/64	2.6	UG218NL
		PL3-U219N												2.5	UG219NL
		PL3-U2E20N												2.5	UG2E20NL
		PL3-U2M30N												1.1	UG2M30NL
35	1 1/4 1 3/8 1 7/16	PL3-U220N△	1 13/16	4 15/16	6 3/8	1 49/64	1 7/8	1/2	3/4	3 5/8	1 9/16	1 7/64	1 35/64	3.6	UG220NL
		PL3-U222N△												3.5	UG222NL
		PL3-U223N△												3.5	UG223NL
		PL3-U2M35N												1.6	UG2M35NL
40	1 1/2	PL3-U224N△	1 19/16	5 3/8	7 1/16	1 29/32	1 7/8	1/2	3/4	3 15/16	1 9/16	1 11/64	1 41/64	4.5	UG224NL
		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
45	1 5/8 1 11/16 1 3/4	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
		PL3-U227N△												5.2	UG227NL
		PL3-U228N△												5.1	UG228NL
		PL3-U2M45N												2.2	UG2M45NL
50	1 15/16 2	PL3-U231N△	2 3/16	6 3/16	7 7/8	2 3/32	2 1/8	5/8	1 3/16	4 7/16	1 5/16	1 17/64	1 25/32	5.9	UG231NL
		PL3-U2E32N△	5.8	UG2E32NL											
		PL3-U2M50N	2.5	UG2M50NL											
55	2 2 3/16	PL3-U232N△	2 7/16	6 3/4	9 1/16	2 1/4	2 3/8	5/8	1 5/16	4 15/16	1 5/16	1 13/32	2 1/64	7.4	UG232NL
		PL3-U235N△	7.3	UG235NL											
		PL3-U2M55N	3.2	UG2M55NL											
60	2 1/4 2 3/8 2 7/16	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
		PL3-U238N												11.0	UG238NL
		PL3-U239N												10.9	UG239NL
		PL3-U2M60N												4.9	UG2M60NL

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.

■ 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.

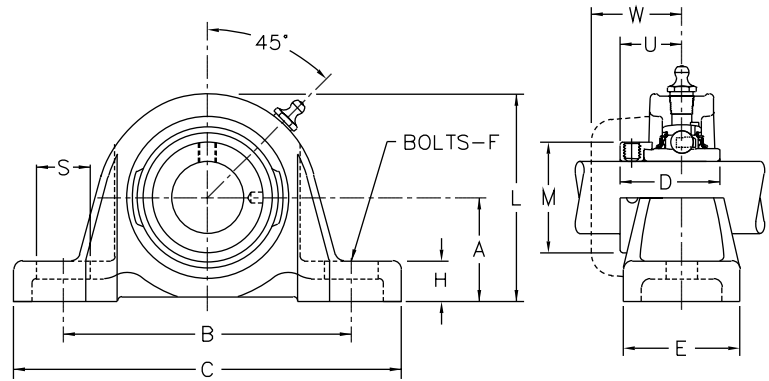
Load ratings, pages B-11, B-12.

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

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, 1/4"-28 UNF; for all other shafts, 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.

◆ Width dimension for closed end unit.

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

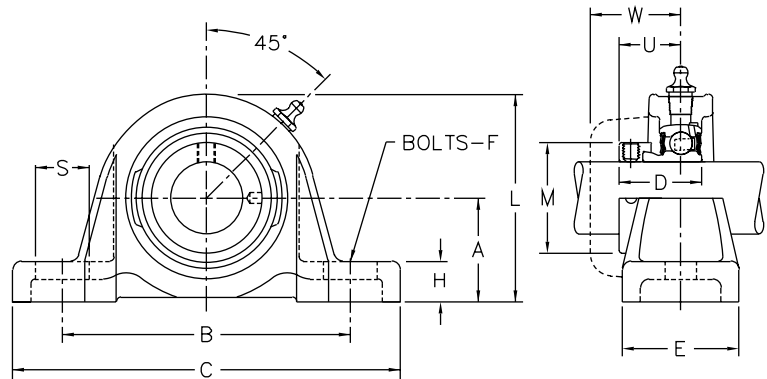
Load ratings, pages B-11, B-12.

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.
1/2 5/8	PL3-W2B08E	1 1/16	3 1/2	4 3/4	1 1/8	1 3/8	3	1/2	2 1/8	1 1/8	9/16	7/8	1 13/64	.9	WG2B08EL
	PL3-W210E														WG210EL
3/4	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 10	7/16 11.1	2 17/32 64.3	1 1/16 33.3	1 1/16 17.5	59/64 23.4	1 19/64 32.9	1.6 0.7	WG212EL
7/8 15/16 1	PL3-W214E	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 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
	PL3-W215E														WG215EL
	PL3-W216E														WG216EL
1 1/8 1 1/16 1 1/4	PL3-W218E	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	1 1/16 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
	PL3-W219E														WG219EL
	PL3-W2E20E														WG2E20EL
1 1/4 1 3/8 1 7/16	PL3-W220E	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 3/8 92.1	2 3/16 55.6	1 3/16 20.6	1 1/32 29.4	1 35/64 39.3	3.7 1.7	WG220EL
	PL3-W222E														WG222EL
	PL3-W223E														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	1 5/16 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	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
	PL3-W227E														WG227EL
	PL3-W228E														WG228EL
1 15/16 2	PL3-W231E	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	1 3/16 20.6	4 7/16 112.7	2 3/4 69.8	1 5/16 33.3	1 9/32 32.5	1 25/32 45.2	5.5 2.5	WG231EL
	PL3-W2E32E														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, 1/4"-28 UNF; for all other shafts, 1/8" PT.

† Tolerance, +.000" -0.010" (+0.00 mm -0.25 mm).

◆ Width dimensions for closed end unit.

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

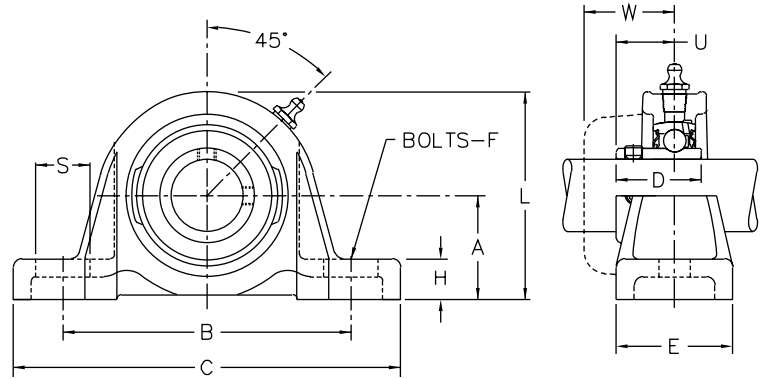
Load ratings, pages B-11, B-12.

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.
3/4	PL3-S212E	1 1/4 31.75	3 7/8 98.4	5 1/8 130.2	1 1/8 28.58	1 1/2 38.1	3/8 10	7/16 11.1	2 17/32 64.3	1 1/16 17.5	3/4 19.0	1 19/64 32.9	1.4 .64	SG212EL
7/8 15/16 1	PL3-S214E	1 5/16 33.34	4 1/8 104.8	5 1/2 139.7	1 3/16 30.17	1 3/4 44.4	3/8 10	5/8 15.9	2 11/16 68.3	9/16 14.3	1 3/16 20.6	1 1/32 32.5	1.9 1.8 1.8	SG214EL SG215EL SG216EL
	PL3-S215E													
	PL3-S216E													
1 1/8 1 3/16 1 1/4	PL3-S218E	1 9/16 39.69	4 3/4 120.6	6 5/16 160.3	1 11/32 34.13	1 7/8 47.6	1/2 12	1 1/16 17.5	3 5/32 80.2	3/4 19.0	6 1/64 24.2	1 29/64 36.9	2.6 2.6 2.5	SG218EL SG219EL SG2E20EL
	PL3-S219E													
	PL3-S2E20E													
1 1/4 1 3/8 1 7/16	PL3-S220E	1 13/16 46.04	4 15/16 125.4	6 3/8 161.9	1 9/16 39.67	1 7/8 47.6	1/2 12	3/4 19.0	3 5/8 92.1	1 3/16 20.6	1 7/64 28.2	1 35/64 39.3	3.4 3.3 3.3	SG220EL SG222EL SG223EL
	PL3-S222E													
	PL3-S223E													
1 1/2	PL3-S224E	1 15/16 49.21	5 3/8 136.5	7 1/16 179.4	1 11/16 42.87	1 7/8 47.6	1/2 12	3/4 19.0	3 15/16 100.0	1 9/16 23.8	1 13/64 30.6	1 41/64 41.7	4.2 1.91	SG224EL
1 5/8 1 11/16 1 3/4	PL3-S226E	2 1/16 52.39	5 5/8 142.9	7 1/4 184.2	1 49/64 44.85	2 50.8	1/2 12	3/4 19.0	4 1/4 108.0	7/8 22.2	1 15/64 31.4	1 21/32 42.1	5.1 5.0 5.0	SG226EL SG227EL SG228EL
	PL3-S227E													
	PL3-S228E													
1 5/16	PL3-S231E	2 3/16 55.56	6 3/16 157.2	7 7/8 200.0	1 9/64 45.64	2 1/8 54.0	5/8 16	1 3/16 20.6	4 7/16 112.7	1 9/16 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, 1/8" 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.

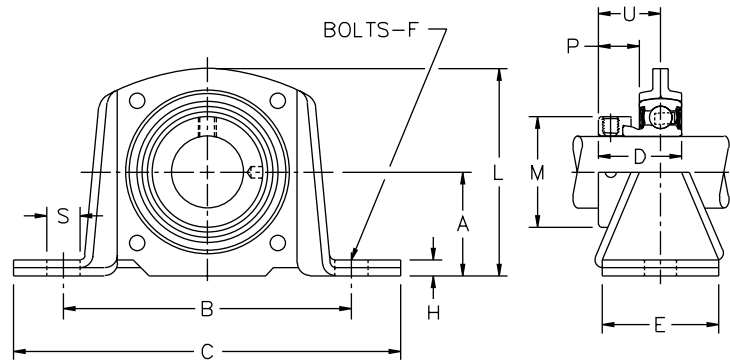
Load ratings, pages B-11, B-12.

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
1/2 5/8 11/16	PS-W2B08E	PS-Y2B08N	1 3/16	3 1/2	4 5/8	1 1/8	1 15/32	1 1/16	3/8	7/32	2 11/32	1 1/8	33/64	7/8	59/64	600	.7	.9
	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
	-----	PS-Y211N																
3/4	PS-W212E	PS-Y212N	1 5/16	3 7/8	5 1/8	1 7/32	1 23/32	1 1/8	3/8	7/32	2 5/8	1 5/16	9/16	59/64	1 3/4	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
7/8 15/16 1	PS-W214E	PS-Y214N	1 7/16	4 1/16	5 3/8	1 7/32	1 3/4	1 7/32	3/8	7/32	2 55/64	1 1/2	1/2	59/64	1 1/16	800	1.1	1.3
	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
	PS-W216E	PS-Y216N																
1 1/8 1 3/16 1 1/4	PS-W218E	PS-Y218N	1 11/16	4 49/64	6 5/16	1 13/32	1 29/32	1 1/16	1/2	5/16	3 5/16	1 3/4	49/64	1 3/4	1 3/16	985	1.7	2.0
	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
	PS-W2E20E	PS-Y2E20N																
1 1/4 1 3/8 1 7/16	PS-W220E	PS-Y220N	1 7/8	5 5/8	6 15/16	1 7/32	2 1/64	1 5/8	1/2	5/16	3 3/4	2 3/16	49/64	1 5/32	1 5/32	1300	2.4	2.7
	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
	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.

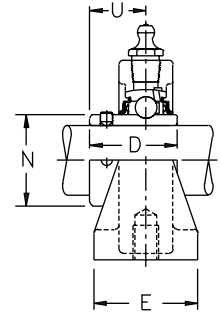
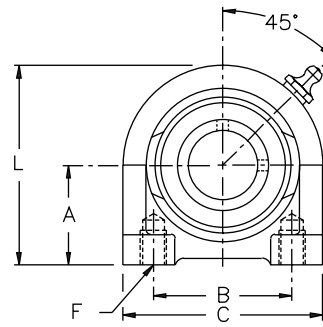
Additional information, page B-76.

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		L	N	U	Unit wt. (lbs./kg)	Bearing no.
							Tap	Min. Depth					
3/4	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 1 5/16 1	PT3-U214N △	1 7/16 36.51	2 50.80	2 7/8 73.0	1 23/64 34.53	1 1/2 38.1	3/8-16 -	1/2 12.7	2 7/8 73.0	1 5/16 33.3	5 1/4 20.2	1.5	UG214NL
	PT3-U215N △											1.4	UG215NL
	PT3-U216N △											1.4	UG216NL
1 1/8 1 3/16 1 1/4	PT3-U218N	1 11/16 42.86	3 76.20	4 101.6	1 9/16 39.69	1 1/2 38.1	7/16-14 -	5/8 15.9	3 5/16 84.1	1 19/32 40.5	6 1/4 24.2	2.5	UG218NL
	PT3-U219N											2.5	UG219NL
	PT3-U2E20N											2.4	UG2E20NL
1 1/4 1 3/8 1 7/16	PT3-U220N △	1 7/8 47.62	3 3/4 82.55	4 13/32 111.9	1 49/64 44.85	2 50.8	1/2-13 -	3/4 19.0	3 11/16 93.7	1 27/32 46.9	1 7/64 28.2	3.5	UG220NL
	PT3-U222N △											3.4	UG222NL
	PT3-U223N △											3.3	UG223NL
1 11/16 1 3/4	PT3-U227N	2 1/8 53.98	3 3/4 95.25	5 127.0	2 1/32 51.59	2 50.8	1/2-13 M12x1.75	7/8 22.2	4 1/4 108.0	2 9/32 57.94	1 15/64 31.4	4.9	UG227NL
	PT3-U228N											2.27	UG228NL
1 15/16 2	PT3-U231N △	2 1/4 57.15	4 101.60	5 7/16 138.1	2 3/32 48.42	2 50.8	5/8-11 -	7/8 22.2	4 1/2 114.3	2 19/32 62.7	1 17/64 32.1	5.6	UG231NL
	PT3-U2E32N △											5.5	UG2E32NL

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).

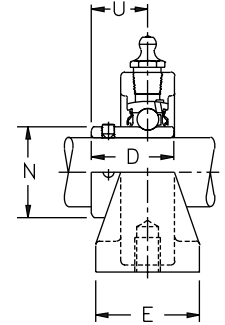
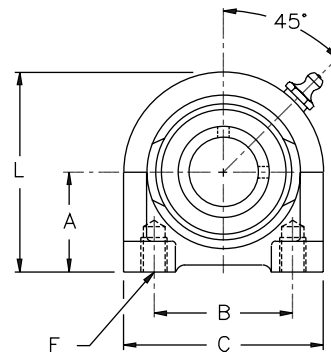
△ Available with E3 triple lip seals.

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		L	N	U	Unit Wt. (lbs./kg)	Bearing no.
							Tap	Min. Depth					
3/4	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 1 5/16 1	PT3-S214E	1 7/16 36.51	2 50.80	2 7/8 73.0	1 3/16 30.17	1 1/2 38.1	3/8-16 -	1/2 12.7	2 7/8 73.0	1 5/16 33.3	1 9/16 20.6	1.3	SG214EL
	PT3-S215E											1.3	SG215EL
	PT3-S216E											1.2	SG216EL
1 1/8 1 3/16 1 1/4	PT3-S218E	1 11/16 42.86	3 76.20	4 101.6	1 11/32 34.13	1 1/2 38.1	7/16-14 -	5/8 15.9	3 5/16 84.1	1 19/32 40.5	6 1/4 24.2	2.3	SG218EL
	PT3-S219E											2.3	SG219EL
	PT3-S2E20E											2.2	SG2E20EL
1 1/4 1 3/8 1 7/16	PT3-S220E	1 7/8 47.62	3 3/4 82.55	4 13/32 111.9	1 9/16 39.67	1 7/8 47.6	1/2-13 -	3/4 19.0	3 11/16 93.7	1 27/32 46.9	1 7/64 28.2	3.1	SG220EL
	PT3-S222E											3.1	SG222EL
	PT3-S223E											3.0	SG223EL
1 11/16 1 3/4	PT3-S227E	2 1/8 53.98	3 3/4 95.25	5 127.0	1 49/64 44.85	2 50.8	1/2-13 -	7/8 22.2	4 1/4 108.0	2 9/32 57.94	1 15/64 31.4	4.8	SG227EL
	PT3-S228E											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 19/32 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.

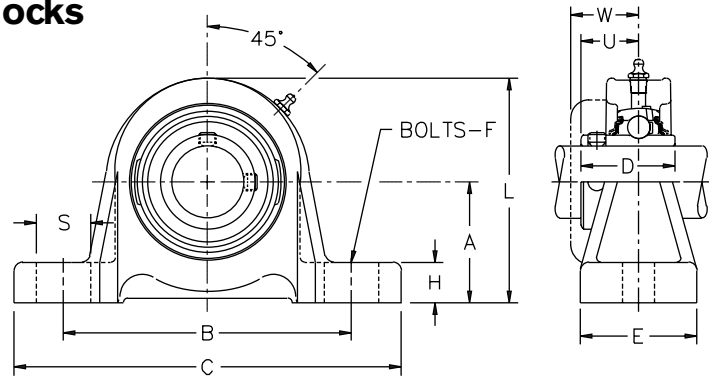
Load ratings, pages B-11, B-12.

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	H	L	S	U	W	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals	†					Bolts					◆		
30	1 1/8	PH3-U218N	2	5 1/2	7	1 1/16	1 15/16	1/2	1 1/16	3 5/8	7/8	6 1/4	1 25/64	3.8	UG218NL
	1 3/16	PH3-U219N												3.7	UG219NL
	1 1/4	PH3-U2E20N												3.7	UG2E20NL
		PH3-U2M30N												1.6	UG2M30NL
35	1 1/4	PH3-U220N	2 3/8	6 1/4	8 1/4	1 49/64	2 1/2	5/8	3/4	4 1/4	1 1/4	1 7/64	1 35/64	4.8	UG220NL
	1 3/8	PH3-U222N												4.7	UG222NL
	1 7/16	PH3-U223N												4.7	UG223NL
		PH3-U2M35N												2.2	UG2M35NL
45	1 5/8	PH3-U226N	2 3/8	6 5/8	8 1/4	2 1/32	2 3/8	5/8	3/4	4 9/16	1 5/16	1 15/64	1 21/32	7.9	UG226NL
	1 11/16	PH3-U227N												7.9	UG227NL
	1 3/4	PH3-U228N												7.8	UG228NL
		PH3-U2M45N												3.5	UG2M45NL
50	1 15/16	PH3-U231N	2 3/4	8 1/16	10 1/8	2 3/32	2 5/8	5/8	7/8	5	1 1/4	1 17/64	1 53/64	9.5	UG231NL
		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
55	2	PH3-U232N	3 1/8	8 7/8	11 3/8	2 1/4	3	5/8	7/8	5 5/8	1 1/8	1 13/32	2 1/64	13.2	UG232NL
	2 3/16	PH3-U235N												13.1	UG235NL
		PH3-U2M55N												5.9	UG2M55NL
60	2 1/4	PH3-U236N	3 1/8	8 7/8	11 3/8	2 1/2	3	3/4	7/8	5 7/8	1 1/4	1 9/16	2 7/64	14.4	UG236NL
	2 3/8	PH3-U238N												14.4	UG238NL
	2 7/16	PH3-U239N												14.3	UG239NL
		PH3-U2M60N												6.5	UG2M60NL

Please consult for availability.

Lubrication fitting tap size, 1/8" 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.

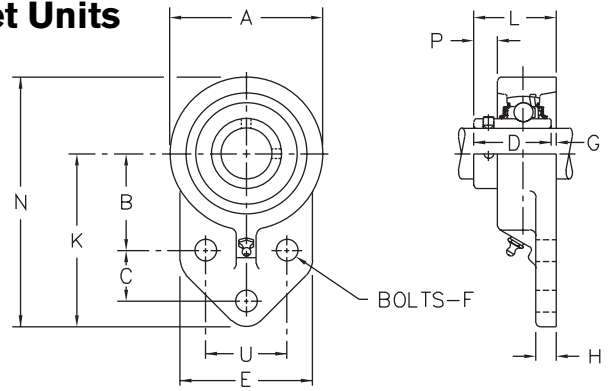
Load ratings, pages B-11, B-12.

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	Flanged unit number	A	B	C	D	E	F	G	H	K	L	N	P	U	Unit wt. (lbs./kg)	Bearing no.		
																	mm	inches	Bolts
20	FB3-U212N FB3-U2M20N	2½	1⅞	⅞	1⅝	2⅝	⅝	⅛	⅝	3	1⅞	4¼	1⅝	1½	1.4	UG212NL UG2M20NL		
25	FB3-U214N △	2¾	1⅞	1⅞	1⅝	2½	⅝	⅜	⅝	3⅝	1⅞	4¾	1⅝	1⅝	1.9	UG214NL		
	FB3-U215N △																1.9	UG215NL
	FB3-U216N △ FB3-U2M25N																1.8	UG216NL UG2M25NL
30	FB3-U218N	3¼	2⅞	1¼	1⅝	2¾	⅝	⅛	⅝	3¾	1⅝	5⅝	⅝	1⅝	2.6	UG218NL		
	FB3-U219N																2.5	UG219NL
	FB3-U2E20N FB3-U2M30N																2.5	UG2E20NL UG2M30NL
35	FB3-U220N △	3¾	2⅝	1¼	1⅝	3¼	½	⅝	½	4¼	1⅝	6⅝	⅜	2	3.5	UG220NL		
	FB3-U222N △																3.4	UG222NL
	FB3-U223N △ FB3-U2M35N																3.4	UG223NL 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.

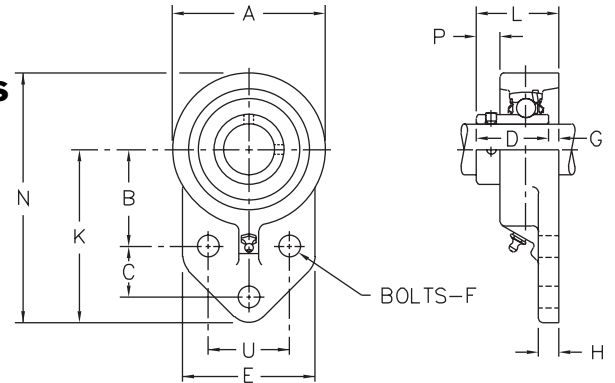
Additional information, page B-75.

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	Flanged unit number	A	B	C	D	E	F	G	H	K	L	N	P	U	Unit wt. (lbs./kg)	Bearing no.		
																	Inches	Bolts
¾	FB3-S212E	2½	1⅞	⅞	1⅝	2⅝	⅝	⅞	⅝	3	1⅞	4¼	1⅝	1½	1.2	SG212EL		
7/8	FB3-S214E	2¾	1⅞	1⅞	1⅝	2½	⅝	⅜	⅝	3⅝	1⅞	4¾	⅝	1⅝	1.7	SG214EL		
	FB3-S215E																1.7	SG215EL
	FB3-S216E																1.6	SG216EL
1		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			
1⅞	FB3-S218E	3¼	2⅞	1¼	1⅝	2¾	⅝	⅜	⅝	3¾	1⅝	5⅝	⅝	1⅝	2.2	SG218EL		
	FB3-S219E																2.2	SG219EL
	FB3-S2E20E																2.1	SG2E20EL
1¼		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	3¾	2⅝	1¼	1⅝	3¼	½	⅝	½	4¼	1⅝	6⅝	⅜	2	3.2	SG220EL		
	FB3-S222E																3.2	SG222EL
	FB3-S223E																3.1	SG223EL
1⅞		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.

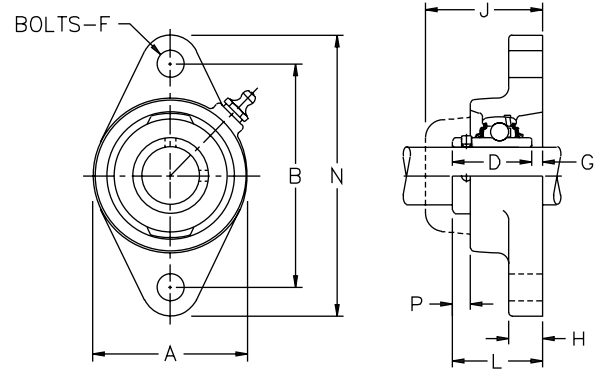
Load ratings, pages B-11, B-12.

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	G	H	J	L	N	P	Unit wt. (lbs./kg)	Bearing no.
mm	inches	Lip seals				Bolts			◆					
17	1/2	FX3-U2B08N	2 1/8	3	1 3/32	3/8	5/32	1/2	1 25/32	1 1/4	3 7/8	1/4	1.0	UG2B08NL
	5/8	FX3-U210N											.9	UG210NL
	1 1/16	FX3-U211N											.9	UG211NL
		FX3-U2M17N											0.5	UG2M17NL
20	3/4	FX3-U212N	2 7/16	3 17/32	1 9/32	3/8	1 3/64	9/16	2 1/64	1 31/64	4 13/32	9/32	1.2	UG212NL
		FX3-U2M20N	61.9	89.69	32.54	10	5.2	14.3	51.2	37.7	111.9	7.1	0.6	UG2M20NL
25	7/8	FX3-U214N△	2 1 1/16	3 57/64	1 23/64	7/16	3/16	1 9/32	2	1 35/64	4 29/32	1 9/64	1.6	UG214NL
	1 5/16	FX3-U215N△											1.6	UG215NL
	1	FX3-U216N△											1.5	UG216NL
		FX3-U2M25N											0.7	UG2M25NL
30	1 1/8	FX3-U218N	3 3/16	4 19/32	1 1/16	7/16	1 1/64	1 9/32	2 15/64	1 47/64	5 19/32	2 7/64	2.5	UG218NL
	1 3/8	FX3-U219N											2.4	UG219NL
	1 1/4	FX3-U2E20N											2.4	UG2E20NL
		FX3-U2M30N											1.0	UG2M30NL
35	1 1/4	FX3-U220N△	3 5/8	5 1/8	1 49/64	1/2	5/32	5/8	2 23/64	1 59/64	6 1/8	3 3/64	3.1	UG220NL
	1 3/8	FX3-U222N△											3.0	UG222NL
	1 7/16	FX3-U223N△											3.0	UG223NL
		FX3-U2M35N											1.4	UG2M35NL
40	1 1/2	FX3-U224N△	4	5 21/32	1 29/32	1/2	1 1/64	5/8	2 35/64	2 9/64	6 29/32	1/2	4.2	UG224NL
		FX3-U2M40N	101.6	143.67	48.42	12	4.4	15.9	64.7	52.8	172.2	12.7	1.9	UG2M40NL
45	1 5/8	FX3-U226N△	4 1/4	5 27/32	2 1/32	1/2	7/64	5/8	2 9/16	2 9/64	7 3/32	3 5/64	5.1	UG226NL
	1 11/16	FX3-U227N△											5.1	UG227NL
	1 3/4	FX3-U228N△											5.0	UG228NL
		FX3-U2M45N											2.2	UG2M45NL
50	1 15/16	FX3-U231N△	4 9/16	6 3/16	2 3/32	9/16	1 9/64	3/4	2 57/64	2 25/64	7 7/16	9/16	6.3	UG231NL
	2	FX3-U2E32N△											6.2	UG2E32NL
		FX3-U2M50N											2.8	UG2M50NL
55	2	FX3-U232N△	5	7 1/4	2 1/4	5/8	1 3/32	1 3/16	3 1/4	2 21/32	8 1/2	2 1/32	7.4	UG232NL
	2 3/16	FX3-U235N△											7.3	UG235NL
		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 1 1/16" (17 mm) and smaller shafts, 1/4"-28 UNF; for all other shafts, 1/8" 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.

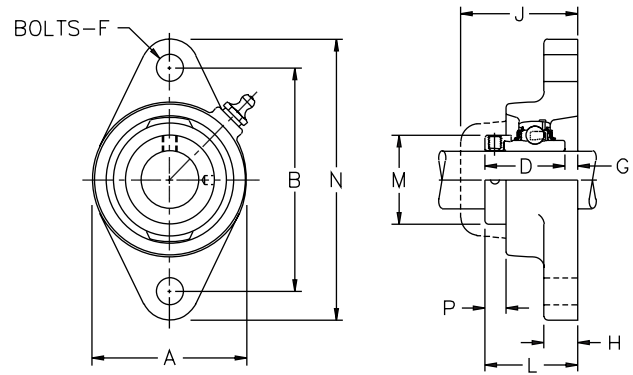
Load ratings, pages B-11, B-12.

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.
1/2 5/8 11/16	FX3-Y2B08N FX3-Y210N FX3-Y211N	2 1/8	3	1 15/32	3/8	1/16	1/2	1 25/32	1 17/32	1 1/8	3 7/8	3 3/64	1.0		YG2B08NL
		54.0	76.20	37.31	10	1.6	12.7	45.2	38.9	28.6	98.4	13.1	0.5		YG210NL
3/4	FX3-Y212N	2 7/16	3 17/32	1 23/32	3/8	1/16	9/16	2 1/4	1 51/64	1 5/16	4 13/32	3 7/64	1.3		YG212NL
		61.9	89.69	43.66	10	1.6	14.3	51.2	45.6	33.3	111.9	14.7	0.6		
7/8 15/16 1	FX3-Y214N△ FX3-Y215N△ FX3-Y216N△	2 11/16	3 57/64	1 3/4	7/16	1/16	1 9/32	2	1 13/16	1 1/2	4 29/32	3 5/64	1.7		YG214NL
		68.3	98.82	44.45	10	1.6	15.1	50.8	46.0	38.1	124.6	13.9	0.8		YG215NL
1 1/8 1 3/16 1 1/4	FX3-Y218N FX3-Y219N FX3-Y2E20N	3 3/16	4 19/32	1 29/32	7/16	1/16	1 9/32	2 15/64	1 31/32	1 3/4	5 19/32	2 1/32	2.5		YG218NL
		81.0	116.68	48.42	10	1.6	15.1	56.7	50.0	44.4	142.1	16.7	1.1		YG219NL
1 1/4 1 3/8 1 7/8	FX3-Y220N△ FX3-Y222N△ FX3-Y223N△	3 5/8	5 1/8	2 1/4	1/2	1/16	5/8	2 35/64	2 5/64	2 3/16	6 1/8	1 11/16	3.3		YG220NL
		92.1	130.18	51.20	12	1.6	15.9	59.9	52.8	55.6	155.6	17.5	1.5		YG222NL
1 1/2	FX3-Y224N△	4	5 21/32	2 7/32	1/2	1/16	5/8	2 39/64	2 9/32	2 3/8	6 25/32	4 5/64	4.5		YG224NL
		101.6	143.67	56.36	12	1.6	15.9	65.1	57.9	63.5	180.2	17.5	2.5		
1 5/8 1 11/16 1 3/4	FX3-Y226N△ FX3-Y227N△ FX3-Y228N△	4 1/4	5 27/32	2 7/32	1/2	1/16	5/8	2 9/16	2 9/32	2 1/2	7 3/32	1 11/16	5.4		YG226NL
		108.0	148.3	56.36	12	1.6	15.9	64.7	57.9	60.3	172.2	17.8	2.5		YG227NL
1 15/16 2	FX3-Y231N△ FX3-Y2E32N△	4 9/16	6 3/16	2 15/32	9/16	5/32	3/4	2 57/64	2 5/8	2 3/4	7 7/16	2 25/32	6.6		YG231NL
		115.9	157.16	62.71	14	4.0	19.0	73.4	66.7	69.8	188.9	19.8	3.0		YG2E32NL
2 2 3/16	FX3-Y232N△ FX3-Y235N△	5	7 1/4	2 13/16	5/8	5/32	1 1/16	3 1/4	2 31/32	3	8 1/2	3 1/32	8.0		YG232NL
		127.0	184.15	71.44	16	4.0	20.6	82.6	75.4	76.2	215.9	24.6	3.6		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, 1/4"-28 UNF; for all other shafts, 1/8" 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.

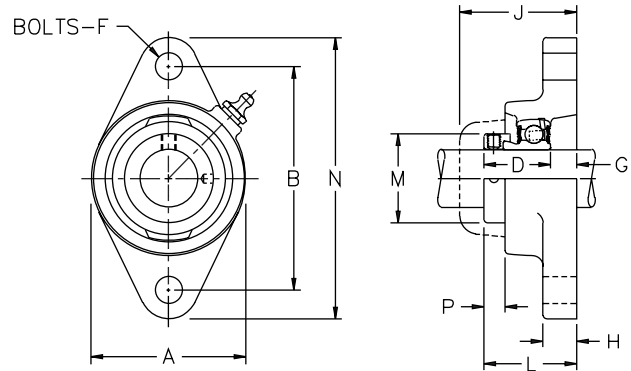
Load ratings, pages B-11, B-12.

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.
1/2 5/8	FX3-W2B08E FX3-W210E	2 1/8	3	1 1/8	3/8	23/64	1/2	1 25/32	1 31/64	1 1/8	3 7/8	1 5/32	.6	WG2B08EL
		54.0	76.20	28.58	10	9.1	12.7	45.2	37.7	28.6	98.4	11.9	0.3	WG210EL
3/4	FX3-W212E	2 7/16	3 17/32	1 7/32	3/8	7/16	9/16	2 1/64	1 21/32	1 5/16	4 13/32	2 9/64	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	WG212EL
7/8 15/16 1	FX3-W214E FX3-W215E FX3-W216E	2 11/16	3 97/64	1 7/32	7/16	29/64	19/32	2	1 43/64	1 1/2	4 29/32	2 7/64	1.4	WG214EL
		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 1/8 1 3/8 1 1/4	FX3-W218E FX3-W219E FX3-W2E20E	3 3/16	4 19/32	1 13/32	7/16	27/64	19/32	2 15/64	1 53/64	1 3/4	5 19/32	3 3/64	2.1	WG218EL
		81.0	116.68	35.72	10	10.7	15.1	56.7	64.4	44.4	142.1	13.1	1.0	WG219EL
1 1/4 1 3/8 1 7/16	FX3-W220E FX3-W222E FX3-W223E	3 3/8	5 1/8	1 17/32	1/2	7/16	5/8	2 23/64	1 31/32	2 3/16	6 1/8	9/16	3.0	WG220EL
		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 1/2	FX3-W224E	4	5 21/32	1 23/32	1/2	19/32	5/8	2 35/64	2 3/16	2 3/8	6 25/32	3 9/64	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	WG224EL
1 5/8 1 11/16 1 3/4	FX3-W226E FX3-W227E FX3-W228E	4 1/4	5 27/32	1 23/32	1/2	19/32	5/8	2 9/16	2 3/16	2 1/2	7 3/32	1 9/32	4.7	WG226EL
		108.0	148.43	43.66	12	11.9	15.9	65.1	55.6	63.5	180.2	15.1	2.1	WG227EL
1 15/16 2	FX3-W231E FX3-W2E32E	4 9/16	6 3/16	1 23/32	9/16	1 1/16	3/4	2 57/64	2 13/32	2 3/4	7 7/16	9/16	5.7	WG231EL
		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, 1/4"-28 UNF; for all other shafts, 1/8" PT.

◆ Width dimension for closed end unit.

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

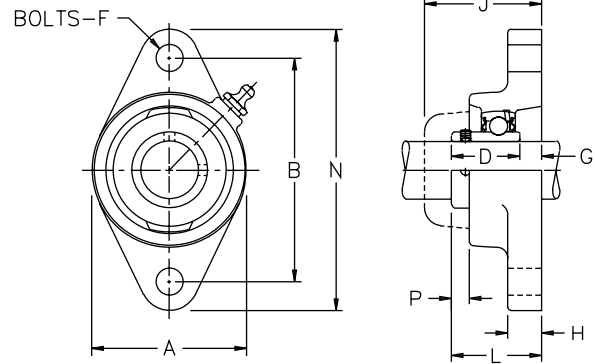
Load ratings, pages B-11, B-12.

Additional information, page B-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.
3/4	FX3-S212E	27/16 61.9	317/32 89.69	1 1/8 28.58	3/8 10	23/64 9.1	9/16 14.3	21/64 51.2	131/64 37.7	413/32 111.9	9/32 7.1	1.1 .50	SG212EL
7/8 15/16 1	FX3-S214E FX3-S215E FX3-S216E	21 1/16 68.3	357/64 98.82	1 3/16 30.17	7/16 10	3/8 9.5	19/32 15.1	2 50.8	19/16 39.7	429/32 124.6	5/16 7.9	1.5 1.5 1.4 .64	SG214EL SG215EL SG216EL
1 1/8 1 3/16 1 1/4	FX3-S218E FX3-S219E FX3-S2E20E	3 3/16 81.0	419/32 116.68	1 11/32 34.13	7/16 10	25/64 9.9	19/32 15.1	215/64 56.7	147/64 44.0	519/32 142.1	27/64 10.7	2.2 2.1 2.1 .95	SG218EL SG219EL SG2E20EL
1 1/4 1 3/8 1 7/16	FX3-S220E FX3-S222E FX3-S223E	3 3/8 92.1	5 1/8 130.18	1 9/16 39.69	1/2 12	23/64 9.1	5/8 15.9	223/64 59.9	159/64 48.8	6 1/8 155.6	33/64 13.1	2.8 2.7 2.6 1.18	SG220EL SG222EL SG223EL
1 1/2	FX3-S224E	4 101.6	5 21/32 143.67	1 11/16 42.87	1/2 12	27/64 10.7	5/8 15.9	235/64 64.7	27/64 53.6	6 25/32 172.2	17/32 13.5	3.8 1.73	SG224EL
1 5/8 1 11/16 1 3/4	FX3-S226E FX3-S227E FX3-S228E	4 1/4 108.0	5 27/32 148.43	1 49/64 44.85	1/2 12	3/8 9.5	5/8 15.9	29/16 65.1	29/64 54.4	7 3/32 180.2	35/64 13.9	4.4 4.4 4.3 1.95	SG226EL SG227EL SG228EL
1 5/16	FX3-S231E	4 9/16 115.9	6 3/16 157.16	1 51/64 45.64	9/16 14	19/32 15.1	3/4 19.0	257/64 73.4	225/64 60.7	77/16 188.9	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, 1/8" 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.

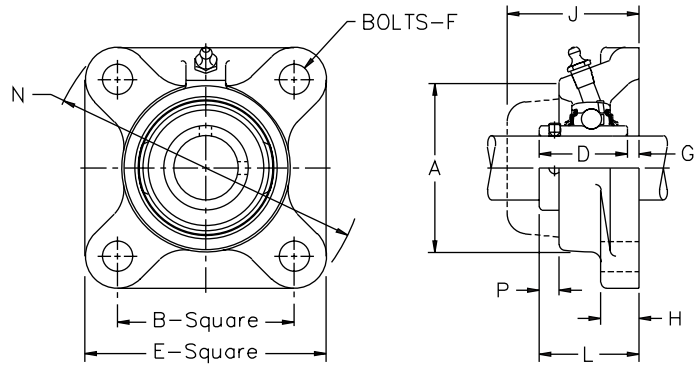
Load ratings, pages B-11, B-12.

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	G	H	J	L	M Collar O.D.	N	P	Unit wt. (lbs./kg)	Bearing no.	
																mm	inches	Lip seals
17	1/2 F3-U2B08N	2 1/8	2 1/8	1 3/32	3	3/8	5/32	1/2	1 25/32	1 1/4	...	3 7/8	1/4	1.1	UG2B08NL	
	5/8 F3-U210N														1.0	UG210NL
	1 1/16 F3-U211N														1.0	UG211NL
	F3-U2M17N														0.5	UG2M17NL
20	3/4 F3-U212N	2 7/16	2 1/2	1 3/32	3 3/8	3/8	1 3/64	9/16	2 1/64	1 31/64	...	4 1 3/32	9/32	1.5	UG212NL	
	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	
25	7/8 F3-U214N△	2 1 1/16	2 3/4	1 23/64	3 3/4	7/16	3/16	1 9/32	2	1 35/64	...	4 29/32	1 9/64	1.9	UG214NL	
	1 1/16 F3-U215N△														1.9	UG215NL
	1 F3-U216N△														1.8	UG216NL
	F3-U2M25N														0.9	UG2M25NL
30	1 1/8 F3-U218N	3 3/16	3 1/4	1 1/16	4 1/4	7/16	1 1/64	1 9/32	2 1 5/64	1 47/64	...	5 1 9/32	7/16	3.2	UG218NL	
	1 3/16 F3-U219N														3.1	UG219NL
	1 1/4 F3-U2E20N														3.1	UG2E20NL
	F3-U2M30N														1.3	UG2M30NL
35	1 1/4 F3-U220N△	3 5/8	3 5/8	1 49/64	4 5/8	1/2	5/32	5/8	2 23/64	1 59/64	...	6 1/8	3 3/64	4.0	UG220NL	
	1 3/8 F3-U222N△														3.9	UG222NL
	1 7/16 F3-U223N△														3.9	UG223NL
	F3-U2M35N														1.7	UG2M35NL
40	1 1/2 F3-U224N△	4	4	1 29/32	5 1/8	1/2	1 1/64	5/8	2 35/64	2 5/64	...	6 25/32	1/2	5.0	UG224NL	
	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	
45	1 5/8 F3-U226N△	4 1/4	4 1/8	2 1/32	5 3/8	1/2	7/64	5/8	2 9/16	2 5/64	...	7 3/32	3 5/64	6.2	UG226NL	
	1 11/16 F3-U227N△														6.2	UG227NL
	1 3/4 F3-U228N△														6.1	UG228NL
	F3-U2M45N														2.6	UG2M45NL
50	1 15/16 F3-U231N△	4 1/2	4 3/8	2 3/32	5 5/8	1/2	1 3/64	3/4	2 1 3/16	2 1 9/64	...	7 7/16	9/16	6.9	UG231NL	
	2 F3-U2E32N△														6.8	UG2E32NL
	F3-U2M50N														3.0	UG2M50NL
55	2 F3-U232N△	4 15/16	5 1/8	2 1/4	6 3/8	5/8	5/16	2 9/32	3 1 1/64	2 9/16	...	8 1/2	5/8	8.9	UG232NL	
	2 3/16 F3-U235N△														8.8	UG235NL
	FE-U2M55N														3.9	UG2M55NL
60	2 1/4 F3-U236N	5 3/8	5 5/8	2 1/2	6 7/8	5/8	1 1/32	1 9/16	3 25/64	2 27/32	...	9 7/32	4 1/64	11.9	UG236NL	
	2 3/8 F3-U238N														11.9	UG238NL
	2 1/2 F3-U239N														11.8	UG239NL
	F3-U2M60N														5.4	UG2M60NL
65	2 1/2 F3-U240N	5 7/8	5 7/8	2 1 1/16	7 3/8	5/8	3/32	3/4	3 5/32	2 25/32	4 3/16	9 1 3/16	5/8	14.7	UG240NL	
	2 11/16 F3-U243N														14.0	UG243NL
	F3-U2M65N														6.0	UG2M65NL
75	2 3/4 F3-U244N	6 3/8	6	2 7/8	7 3/4	3/4	3/32	3/4	3 3/8	2 3 1/32	4 5/8	10 1/4	1 1/16	18.0	UG244NL	
	2 15/16 F3-U247N														17.2	UG247NL
	3 F3-U2E48N														17.0	UG2E48NL
	F3-U2M75N														7.8	UG2M75NL
85	3 7/16 F3-U255N	7 1/2	6 3/4	3 9/16	8 9/16	3/4	3/32	1	4 1/32	3 2 1/32	5 3/16	11 3/8	3/4	26.0	UG255NL	
	3 1/2 F3-U2E56N														25.5	UG2E56NL
	F3-U2M85N														11.9	UG2M85NL

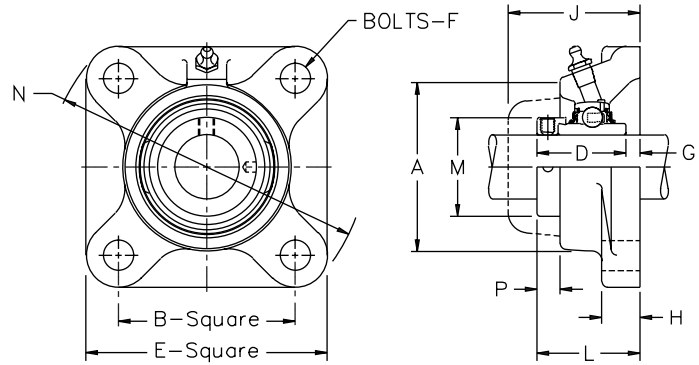
Bold face items are normally available from stock; please consult for availability of non-stock items.
 Shaft sizes over 2 7/16" have collars.
 Lubrication fitting tap size: for 1 1/16" (17 mm) and smaller shafts, 1/4"-28 UNF; for all other shafts, 1/8" PT.
 ■ N lip seals standard. H labyrinth seals 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	G	H	J	L	M	N	P	Unit wt. (lbs./kg)	Bearing no.													
														F Bolts														
3/4	F3-Y212N	27/16 61.9	2 1/2 63.50	1 29/32 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 1/16 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	1 9/32 15.1	2 50.8	1 13/16 46.0	1 1/2 38.1	4 29/32 124.6	3 5/64 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	1 9/32 15.1	2 15/64 56.7	1 31/32 50.0	1 3/4 44.4	5 19/32 142.1	2 1/32 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	1 1/16 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	4 5/64 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	1 1/16 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	5 1/64 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	2 9/32 23.0	3 11/64 80.6	2 7/8 73.0	3 76.2	8 1/2 215.9	1 5/16 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	1 5/16 23.8	3 25/64 86.1	3 1/8 79.4	3 9/16 84.1	9 7/32 234.2	1 5/16 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 1/16" and smaller shaft sizes, 1/4"-28 UNF; for all other shafts, 1/8" 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.

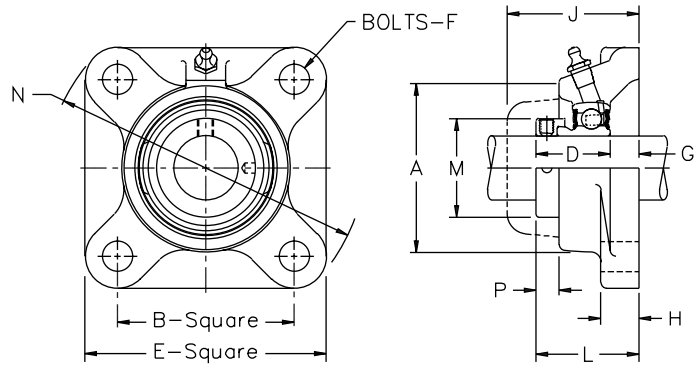
Load ratings, pages B-11, B-12.

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.
1/2 5/8	F3-W2B08E	2 1/8	2 1/8	1 1/8	3	3/8	23/64	1/2	1 25/32	1 31/64	1 1/8	3 7/8	1 5/32	.8	WG2B08EL
	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
3/4	F3-W212E	2 7/16	2 1/2	1 7/32	3 3/8	3/8	7/16	9/16	2 1/64	1 21/32	1 5/16	4 19/32	2 9/64	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	WG212EL
7/8 15/16 1	F3-W214E	2 11/16	2 3/4	1 7/32	3 3/4	7/16	2 9/64	1 9/32	2	1 43/64	1 1/2	4 29/32	2 7/64	1.8	WG214EL
	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
	F3-W216E														WG216EL
1 1/8 1 3/16 1 1/4	F3-W218E	3 3/16	3 1/4	1 13/32	4 1/4	7/16	2 7/64	1 9/32	2 15/64	1 53/64	1 3/4	5 19/32	3 9/64	2.9	WG218EL
	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
	F3-W2E20E														WG2E20EL
1 1/4 1 3/8 1 7/16	F3-W220E	3 5/8	3 3/8	1 17/32	4 5/8	1/2	7/16	5/8	2 23/64	1 31/32	2 3/16	6 1/8	9/16	3.7	WG220EL
	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
	F3-W223E														WG223EL
1 1/2	F3-W224E	4	4	1 23/32	5 1/8	1/2	1 5/32	5/8	2 35/64	2 3/16	2 3/8	6 29/32	3 9/64	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	WG224EL
1 5/8 1 11/16 1 3/4	F3-W226E	4 1/4	4 1/8	1 23/32	5 3/8	1/2	1 5/32	5/8	2 9/16	2 3/16	2 1/2	7 3/32	1 9/32	5.6	WG226EL
	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
	F3-W228E														WG228EL
1 15/16 2	F3-W231E	4 1/2	4 3/8	1 23/32	5 5/8	1/2	1 9/32	3/4	2 13/16	2 5/16	2 3/4	7 7/16	3 7/64	6.1	WG231EL
	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, 1/4"-28 UNF; for all other shafts, 1/8" PT.

◆ Width dimension for closed end unit.

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

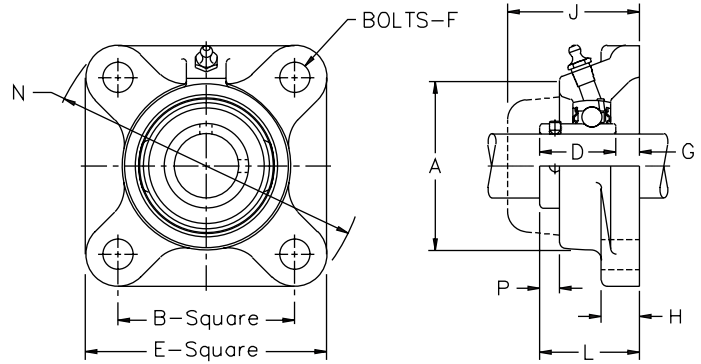
Load ratings, pages B-11, B-12.

Additional information, page B-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.
3/4	F3-S212E	27/16 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	21/64 51.2	131/64 37.7	413/32 111.9	9/32 7.1	1.6 .73	SG212EL
7/8 15/16 1	F3-S214E	2 11/16 68.3	2 3/4 69.85	1 3/16 30.17	3 3/4 95.2	7/16 10	3/8 9.5	19/32 15.1	2 50.8	1 9/16 39.7	429/32 124.6	5/16 7.9	2.0 1.9 1.9	SG214EL SG215EL SG216EL
	F3-S215E													
	F3-S216E													
1 1/8 1 3/16 1 1/4	F3-S218E	3 3/16 81.0	3 1/4 82.55	1 11/32 34.13	4 1/4 108.0	7/16 10	25/64 9.9	19/32 15.1	2 15/64 56.7	1 47/64 44.0	5 19/32 142.1	27/64 10.7	2.7 2.6 2.6	SG218EL SG219EL SG2E20EL
	F3-S219E													
	F3-S2E20E													
1 1/4 1 3/8 1 7/16	F3-S220E	3 5/8 92.1	3 3/8 92.08	1 9/16 39.67	4 5/8 117.5	1/2 12	23/64 9.1	5/8 15.9	2 23/64 59.9	1 59/64 48.8	6 1/8 155.6	37/64 14.7	3.5 3.4 3.3	SG220EL SG222EL SG223EL
	F3-S222E													
	F3-S223E													
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	1 7/32 13.5	4.7 2.13	SG224EL
1 5/8 1 11/16 1 3/4	F3-S226E	4 1/4 108.0	4 1/8 104.78	1 49/64 44.85	5 3/8 136.5	1/2 12	3/8 9.5	5/8 15.9	2 9/16 65.1	2 3/64 54.4	7 3/32 180.2	35/64 13.9	5.4 5.4 5.3	SG226EL SG227EL SG228EL
	F3-S227E													
	F3-S228E													
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, 1/8" 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.

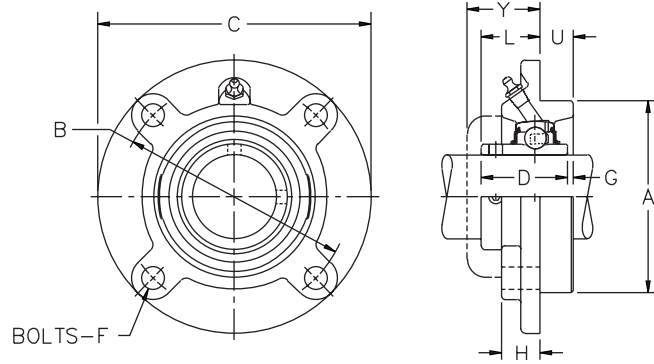
Load ratings, pages B-11, B-12.

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	G	H	L	M	U	Y	Unit wt.	Bearing
mm	inches	Lip seals	†				Bolts			Collar O.D.			◆	(lbs./kg)	no.
25	7/8	FC3-U214N △	3.000	3 3/8	4 3/8	1 23/64	3/8	0	5/8	55/64	...	1/2	1 3/8	3.0	UG214NL
	15/16	FC3-U215N △												3.0	UG215NL
	1	FC3-U216N												2.9	UG216NL
		<i>FC3-U2M25N</i>												1.3	<i>UG2M25NL</i>
30	1 1/8	FC3-U218N	3.375	4 1/8	5	1 9/16	7/16	0	1 3/16	1 3/4	...	27/64	1 1/4	4.6	UG218NL
	1 3/16	FC3-U219N												4.5	UG219NL
	1 1/4	FC3-U2E20N												4.5	UG2E20NL
		<i>FC3-U2M30N</i>												2.0	<i>UG2M30NL</i>
35	1 1/4	FC3-U220N △	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	4.7	UG220NL
	1 3/8	FC3-U222N △												4.6	UG222NL
	1 7/16	FC3-U223N △												4.6	UG223NL
		<i>FC3-U2M35N</i>												2.1	<i>UG2M35NL</i>
40	1 1/2	FC3-U224N △	3.625	4 3/8	5 1/4	1 29/32	7/16	1/2	1 1/32	1 19/32	...	15/32	1 15/16	4.3	UG224NL
		<i>FC3-U2M40N</i>	92.08	111.12	133.4	48.42	10	0.8	26.2	37.3	...	11.9	49.2	2.0	<i>UG2M40NL</i>
45	1 5/8	FC3-U226N △	4.250	5 1/8	6 1/8	2 1/32	1/2	0	1 1/16	1 1/16	...	15/32	1 63/64	6.3	UG226NL
	1 11/16	FC3-U227N △												6.3	UG227NL
	1 3/4	FC3-U228N △												6.2	UG228NL
		<i>FC3-U2M45N</i>												2.7	<i>UG2M45NL</i>
50	1 9/16	FC3-U231N △	4.500	5 3/8	6 3/8	2 3/32	1/2	1 1/64	1 13/64	1 1/4	...	5/8	2 5/32	7.4	UG231NL
		<i>FC3-U2M50N</i>	114.30	136.52	161.9	53.18	12	4.4	30.6	41.7	...	15.9	54.8	3.2	<i>UG2M50NL</i>
55	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
		<i>FC4-U2M55N</i>	114.30	136.52	161.9	57.15	12	0.8	26.2	42.1	...	15.9	57.5		<i>UG2M55NL</i>
55	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
		<i>FC3-U2M55N</i>												127.00	152.40	181.0	57.15	14	4.0	25.4	38.9	...	22.2	54.0		UG2M55NL
60	2 1/4	FC3-U236N	5.500	6 1/2	7 5/8	2 1/2	9/16	0	1	1 5/8	...	7/8	2 11/64	13.0	UG236NL
	2 3/8	FC3-U238N												11.0	UG238NL
	2 7/16	FC3-U239N												10.8	UG239NL
		<i>FC3-U2M60N</i>												139.70	165.10	193.7	63.50	14	0.0	25.4	41.3	...	22.2	55.2		UG2M60NL
65	2 1/2	FC3-U240N	6.375	7 1/2	8 3/4	2 11/16	5/8	3/16	1 1/16	1 13/16	4 3/16	1 1/16	2 3/16	17.0	UG240NL
	2 11/16	FC3-U243N												16.7	UG243NL
		<i>FC3-U2M65N</i>												161.92	190.50	222.2	68.26	16	4.8	30.2	46.0	106.4	27.0	55.6	7.7	UG2M65NL
75	2 3/4	FC3-U244N	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	17.9	UG244NL
	2 15/16	FC3-U247N												17.7	UG247NL
	3	FC3-U2E48N												17.5	UG2E48NL
		<i>FC3-U2M75N</i>												161.92	190.50	222.2	73.02	16	4.8	27.0	46.0	117.5	31.8	56.4	8.1	UG2M75NL
85	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
		<i>FC3-U2M85N</i>												187.32	219.08	260.4	90.49	20	0.0	41.3	61.1	131.8	29.4	70.6	15.6	UG2M85NL
100	3 15/16	FC3-U263N	8.120	9 3/8	10 7/8	4 1/4	3/4	0	2 1/8	3 3/8	5 15/16	1 1/8	3 9/16	42.0	UG263NL
	4	FC3-U2E64N												41.5	UG2E64NL
		<i>FC3-U2M100N</i>	206.25	238.12	276.2	107.95	20	0.0	54.0	79.4	150.8	28.6	90.5	19.0	<i>UG2M100NL</i>

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.

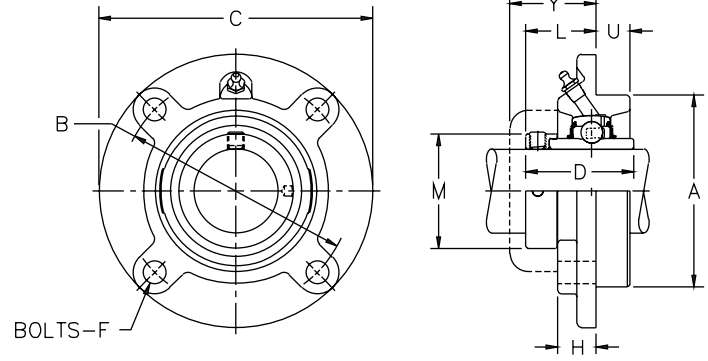
Load ratings, pages B-11, B-12.

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 ■	A †	B	C	D	F Bolts	H	L	M	U	Y ◆	Unit wt. (lbs./kg.)	Bearing no.
	Lip seals												
7/8 15/16 1	FC3-Y214N△	3.000 76.20	3 5/8 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
	FC3-Y215N△												YG215NL
	FC3-Y216N△												YG216NL
1 1/8 1 1/16 1 1/4	FC3-Y218N	3.375 85.72	4 1/8 104.78	5 127.0	1 29/32 48.42	7/16 10	1 9/16 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
	FC3-Y219N												YG219NL
	FC3-Y2E20N												YG2E20NL
1 1/4 1 3/8 1 7/16	FC3-Y220N△	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	1 5/32 11.9	1 59/64 48.8	4.9 2.2	YG220NL
	FC3-Y222N△												YG222NL
	FC3-Y223N△												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	1 5/32 11.9	1 15/16 49.2	4.6 2.1	YG224NL
1 5/8 1 11/16 1 3/4	FC3-Y226N△	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	1 5/32 11.9	1 63/64 50.4	6.6 3.0	YG226NL
	FC3-Y227N△												YG227NL
	FC3-Y228N△												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 1/8 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△	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
	FC3-Y235N△												YG235NL
2 1/4 2 3/8 2 7/16	FC3-Y236N	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 9/16 84.1	7/8 22.2	2 11/64 55.2	12.7 12.4 12.2	YG236NL
	FC3-Y238N												YG238NL
	FC3-Y239N												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, 1/4"-28 UNF; for all other sizes, 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.

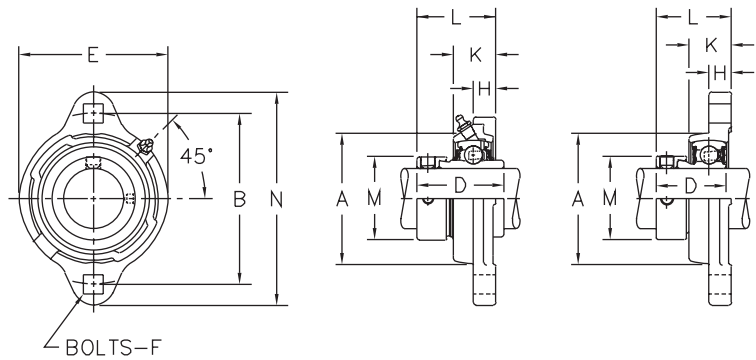
Additional information, page B-75.

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 ●		A	B	D		E		F Carriage bolt size	H	K	L		M	N	Unit wt. (lbs./kg.)	
	Non-relubricatable	Non-relubricatable			W200	Y200	Non-relubricatable	Relubricatable				W200	Y200			W200	Y200
1/2	FX-W2B08E	FX-Y2B08N	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 9/16	.5	.6
	FX-WG2B08E	FX-YG2B08N															
5/8	FX-W210E	FX-Y210N	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
	FX-WG210E	FX-YG210N															
1 1/16	-----	FX-Y211N	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
	-----	FX-YG211N															
3/4	FX-W212E	FX-Y212N	52.4	71.4	30.96	43.66	62.7	60.3	...	10.7	19.8	34.1	37.3	33.3	90.5	.7	.8
	FX-WG212E	FX-YG212N															
7/8	FX-W214E	FX-Y214N△	57.9	76.2	30.96	44.45	69.0	66.7	...	10.7	19.8	34.1	37.7	38.1	95.2	.8	1.0
	FX-WG214E	FX-YG214N△															
15/16	FX-W215E	FX-Y215N△	57.9	76.2	30.96	44.45	69.0	66.7	...	10.7	19.8	34.1	37.7	38.1	95.2	.8	1.0
	FX-WG215E	FX-YG215N△															
1	FX-W216E	FX-Y216N△	69.0	90.5	35.72	48.42	78.6	78.6	...	11.9	22.6	38.9	42.1	44.4	112.7	1.2	1.4
	FX-WG216E	FX-YG216N△															
1 1/8	FX-W218E	FX-Y218N	69.0	90.5	35.72	48.42	78.6	78.6	...	11.9	22.6	38.9	42.1	44.4	112.7	1.2	1.4
	FX-WG218E	FX-YG218N															
1 3/16	FX-W219E	FX-Y219N	69.0	90.5	35.72	48.42	78.6	78.6	...	11.9	22.6	38.9	42.1	44.4	112.7	1.2	1.4
	FX-WG219E	FX-YG219N															
1 1/4	FX-W2E20E	FX-Y2E20N	69.0	90.5	35.72	48.42	78.6	78.6	...	11.9	22.6	38.9	42.1	44.4	112.7	1.2	1.4
	FX-WG2E20E	FX-YG2E20N															
1 1/4	FX-W220E	FX-Y220N△	79.4	100.0	38.89	51.20	88.9	88.9	...	12.7	23.8	42.1	45.2	55.6	122.2	1.8	2.0
	FX-WG220E	FX-YG220N△															
1 3/8	FX-W222E	FX-Y222N△	79.4	100.0	38.89	51.20	88.9	88.9	...	12.7	23.8	42.1	45.2	55.6	122.2	1.8	2.0
	FX-WG222E	FX-YG222N△															
1 7/16	FX-W223E	FX-Y223N△	79.4	100.0	38.89	51.20	88.9	88.9	...	12.7	23.8	42.1	45.2	55.6	122.2	1.8	2.0
	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 3/4" and smaller shaft sizes, 10-32 UNF; for all other shafts, 1/4"-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

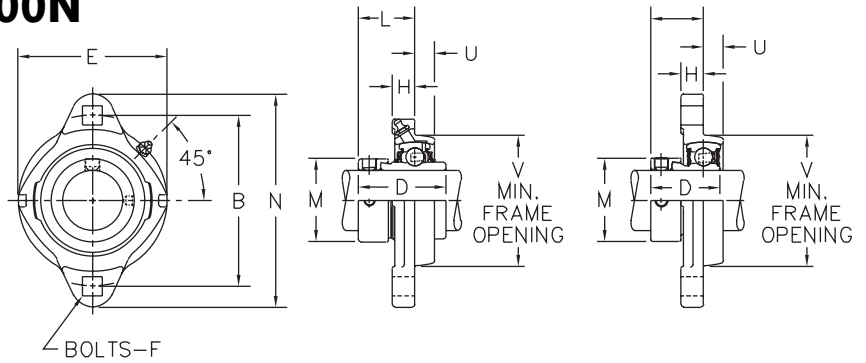
2-bolt (Carriage) Inboard Mounting

Alignable

Eccentric Cam Locking Collar

Optional Relubrication Feature

Extended and Wide Inner Ring



Dimensions (inches/mm)

Shaft dia. inches	Flanged unit number ●		B	D		E	F□ Carriage bolt size	H	L		M	N	U	V	Unit wt. (lbs./kg.)	
	Non-relubricatable Relubricatable	Non-relubricatable Relubricatable ■		W200 WG200	Y200 YG200				W200 WG200	Y200 YG200					W200 WG200	Y200 YG200
1/2	FXR-W2B08E	FXR-Y2B08N	2 1/2 63.5	1 1/8 28.58	1 15/32 37.31	2 3/16 55.6	1/4 ...	3/8 9.5	7/8 22.2	59/64 23.4	1 1/8 28.6	3 3/16 81.0	2 1/64 8.3	1 7/8 47.6	.5 0.2	.6 0.2
	FXR-WG2B08E	FXR-YG2B08N														
	FXR-W210E	FXR-Y210N														
5/8	FXR-WG210E	FXR-YG210N	2 3/4 69.9	1 3/4 44.45	2 23/32 69.0	5/16 ...	27/64 10.7	59/64 23.4	1 1/8 27.0	1 1/2 38.1	3 3/4 95.2	2 3/64 9.1	2 5/8 60.3	.8 0.4	1.0 0.5	
	FXR-W215E	FXR-YG215N△														
1 1/16	FXR-W216E	FXR-Y216N△	3 76.2	1 3/4 44.45	2 23/32 69.0	5/16 ...	27/64 10.7	59/64 23.4	1 1/8 27.0	1 1/2 38.1	3 3/4 95.2	2 3/64 9.1	2 5/8 60.3	.8 0.4	1.0 0.5	
	FXR-WG216E	FXR-YG216N△														
3/4	FXR-W212E	FXR-Y212N	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 3/16 90.5	2 3/64 9.1	2 5/32 54.8	.7 0.3	.8 0.4
	FXR-WG212E	FXR-YG212N														
7/8	FXR-W214E	FXR-Y214N△	3 76.2	1 3/32 30.96	1 3/4 44.45	2 23/32 69.0	5/16 ...	27/64 10.7	59/64 23.4	1 1/8 27.0	1 1/2 38.1	3 3/4 95.2	2 3/64 9.1	2 5/8 60.3	.8 0.4	1.0 0.5
	FXR-WG214E	FXR-YG214N△														
15/16	FXR-W215E	FXR-Y215N△	3 76.2	1 3/32 30.96	1 3/4 44.45	2 23/32 69.0	5/16 ...	27/64 10.7	59/64 23.4	1 1/8 27.0	1 1/2 38.1	3 3/4 95.2	2 3/64 9.1	2 5/8 60.3	.8 0.4	1.0 0.5
	FXR-WG215E	FXR-YG215N△														
1	FXR-W216E	FXR-Y216N△	3 76.2	1 3/32 30.96	1 3/4 44.45	2 23/32 69.0	5/16 ...	27/64 10.7	59/64 23.4	1 1/8 27.0	1 1/2 38.1	3 3/4 95.2	2 3/64 9.1	2 5/8 60.3	.8 0.4	1.0 0.5
	FXR-WG216E	FXR-YG216N△														
1 1/8	FXR-W218E	FXR-Y218N	3 9/16 90.5	1 13/32 35.72	1 29/32 48.42	3 3/32 78.6	3/8 ...	1 5/32 11.9	1 3/64 26.6	1 3/16 30.2	1 1/4 44.4	4 7/16 112.7	2 7/64 10.7	2 13/16 71.4	1.2 0.5	1.4 0.6
	FXR-WG218E	FXR-YG218N														
1 3/16	FXR-W219E	FXR-Y219N	3 9/16 90.5	1 13/32 35.72	1 29/32 48.42	3 3/32 78.6	3/8 ...	1 5/32 11.9	1 3/64 26.6	1 3/16 30.2	1 1/4 44.4	4 7/16 112.7	2 7/64 10.7	2 13/16 71.4	1.2 0.5	1.4 0.6
	FXR-WG219E	FXR-YG219N														
1 1/4	FXR-W2E20E	FXR-Y2E20N	3 9/16 90.5	1 13/32 35.72	1 29/32 48.42	3 3/32 78.6	3/8 ...	1 5/32 11.9	1 3/64 26.6	1 3/16 30.2	1 1/4 44.4	4 7/16 112.7	2 7/64 10.7	2 13/16 71.4	1.2 0.5	1.4 0.6
	FXR-WG2E20E	FXR-YG3E20N														
1 1/4	FXR-W220E	FXR-Y220N△	3 15/16 100.0	1 17/32 38.89	2 1/64 51.20	3 1/2 88.9	3/8 ...	1/2 12.7	1 5/32 29.4	1 1/32 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
	FXR-WG220E	FXR-YG220N△														
1 3/8	FXR-W222E	FXR-Y222N△	3 15/16 100.0	1 17/32 38.89	2 1/64 51.20	3 1/2 88.9	3/8 ...	1/2 12.7	1 5/32 29.4	1 1/32 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
	FXR-WG222E	FXR-YG222N△														
1 7/16	FXR-W223E	FXR-Y223N△	3 15/16 100.0	1 17/32 38.89	2 1/64 51.20	3 1/2 88.9	3/8 ...	1/2 12.7	1 5/32 29.4	1 1/32 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
	FXR-WG223E	FXR-YG223N△														

Please consult for availability.

Lubrication fitting tap size: for 3/4" and smaller shaft sizes, 10-32 UNF; for all other shafts, 1/4"-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.

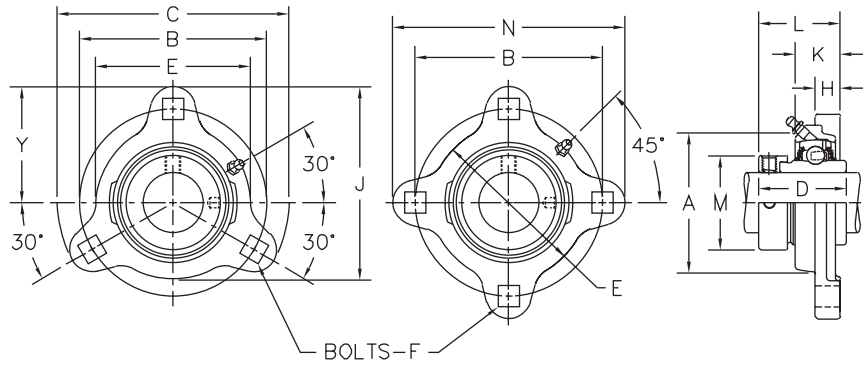
Additional information, page B-76.

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 ●				A															Unit wt. (lbs./kg.)																
		Non-relubricatable	Non-relubricatable	Non-relubricatable	Relubricatable	B	C	D		E	F		L			M	N	Y	W200	Y200																	
								W200	Y200		Carriage bolt size	H	K	W200	Y200			WG200	YG200																		
3-BOLT	1/2	F-W2B08E	F-Y2B08N	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-WG2B08E	F-YG2B08N																		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
		F-W210E	F-Y210N																		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 15/64	1 1/2	...	1 7/8	.8	1.0
	F-WG210E	F-YG210N	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																		
	5/8	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 15/64	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
	11/16	F-W216E	F-Y216N	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 15/64	1 1/2	...	1 7/8	.8	1.0																	
		F-WG216E	F-YG216N																		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
	3/4	F-W218E	F-Y218N	2 ²³ / ₃₂	2 13/16	3 3/16	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-WG218E	F-YG218N																		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
	7/8	F-W219E	F-Y219N	2 ²³ / ₃₂	2 13/16	3 3/16	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
15/16	F-W220E	F-Y220N	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-WG220E	F-YG220N																		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	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 1/8	F-W223E	F-Y223N	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-WG223E	F-YG223N																		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 1/4	F-W224E	F-Y224N	3 15/32	3 21/32	4 11/16	5 13/16	1 29/32	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 1/2	F-W226E	F-Y226N	3 11/16	3 13/16	4 3/4	5 7/8	1 29/32	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-WG226E	F-YG226N																		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 5/8	F-W227E	F-Y227N	3 11/16	3 13/16	4 3/4	5 7/8	1 29/32	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	3 11/16	3 13/16	4 3/4	5 7/8	1 29/32	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-WG228E	F-YG228N																		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 7/8	F-W231E	F-Y231N	3 7/8	4 1/16	5	6 1/8	1 29/32	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																		
	F-WG231E	F-YG231N																		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	
2	F-W232E	F-Y232N	3 7/8	4 1/16	5	6 1/8	1 29/32	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																		
	F-WG232E	F-YG232N																		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	

Bold face items are normally available from stock; please consult for availability of non-stock items.
 Lubrication fitting tap size: for 3/4" and smaller shaft sizes, 10-32 UNF; for all other shafts, 1/4"-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

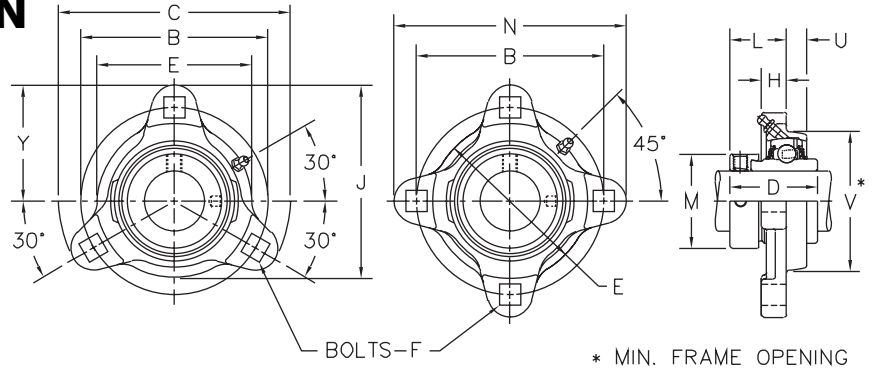
3 and 4-bolt (Carriage) Inboard Mounting

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 ●		B	C	D		E	F ■ Carriage bolt size	H	L		M	U	V	Y	Unit wt. (lbs./kg.)	
		Non-relubricatable	Non-relubricatable			W200 WG200	Y200 YG200				W200 WG200	Y200 YG200					W200 WG200	Y200 YG200
3-BOLT	1/2	FR-W2B08E	FR-Y2B08N	2 1/2	3 3/16	1 1/8	1 15/32	2 3/32	1/4	3/8	7/8	59/64	1 1/8	2 1/4	1 7/8	1 19/32	.5	.6
		FR-WG2B08E	FR-YG2B08N															
		FR-W210E	FR-Y210N															
	5/8	FR-WG210E	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
		FR-W211N	FR-Y211N															
		FR-WG211N	FR-YG211N															
	1 1/16	FR-W212E	FR-Y212N	71.4	90.5	30.96	43.66	60.3	...	10.7	23.4	26.6	33.3	9.1	54.8	45.2	0.3	0.4
		FR-WG212E	FR-YG212N															
		FR-W214E	FR-Y214N△															
	7/8	FR-WG214E	FR-YG214N△	3	3 3/4	1 7/32	1 3/4	2 5/8	5/16	27/64	59/64	1 1/16	1 1/2	2 3/64	2 3/8	1 7/8	.8	1.0
		FR-W215E	FR-Y215N△															
		FR-WG215E	FR-YG215N△															
1 5/16	FR-W216E	FR-Y216N△	76.2	95.2	30.96	44.45	66.7	...	10.7	23.4	27.0	38.1	9.1	60.3	47.6	0.4	0.5	
	FR-WG216E	FR-YG216N△																
	FR-W218E	FR-Y218N																
1 1/8	FR-WG218E	FR-YG218N	90.5	112.7	35.72	48.42	78.6	...	11.9	26.6	30.2	44.4	10.7	71.4	56.4	0.5	0.6	
	FR-W219E	FR-Y219N																
	FR-WG219E	FR-YG219N																
1 3/16	FR-W2E20E	FR-Y2E20N	90.5	112.7	35.72	48.42	78.6	...	11.9	26.6	30.2	44.4	10.7	71.4	56.4	0.5	0.6	
	FR-WG2E20E	FR-YG2E20N																
	FR-W220E	FR-Y220N△																
1 1/4	FR-WG220E	FR-YG220N△	3 15/16	4 13/16	1 17/32	2 1/4	3 1/2	3/8	1/2	1 5/32	1 9/32	2 3/16	7/16	3 7/32	2 13/32	1.8	2.0	
	FR-W222E	FR-Y222N△																
	FR-WG222E	FR-YG222N△																
1 3/8	FR-W223E	FR-Y223N△	700.0	122.2	38.89	51.20	88.9	...	12.7	29.4	32.5	55.6	11.1	81.8	61.1	0.8	0.9	
	FR-WG223E	FR-YG223N△																
	FR-W224E	FR-Y224N△																
1 1/2	FR-WG224E	FR-YG224N△	119.1	147.6	43.66	56.36	98.4	...	15.9	32.5	34.9	60.3	12.7	90.5	...	2.8	3.0	
	FR-W226E	FR-Y226N△																
	FR-WG226E	FR-YG226N△																
1 5/8	FR-W227E	FR-Y227N△	120.6	149.2	43.66	56.36	107.2	...	15.9	32.5	34.9	63.5	12.7	96.0	...	2.9	3.1	
	FR-WG227E	FR-YG227N△																
	FR-W228E	FR-Y228N△																
1 3/4	FR-WG228E	FR-YG228N△	120.6	149.2	43.66	56.36	107.2	...	15.9	32.5	34.9	63.5	12.7	96.0	...	2.9	3.1	
	FR-W231E	FR-Y231N△																
	FR-WG231E	FR-YG231N△																
1 15/16	FR-W2E32E	FR-Y2E32N△	127.0	155.6	43.66	62.7	113.5	...	15.9	32.5	38.1	69.8	12.7	100.8	...	3.1	3.6	
	FR-WG2E32E	FR-YG2E32N△																
	FR-W233E	FR-Y233N△																

Please consult for availability.

Lubrication fitting tap size: for 3/4" and smaller shaft sizes, 10-32 UNF; for all other shafts, 1/4"-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.

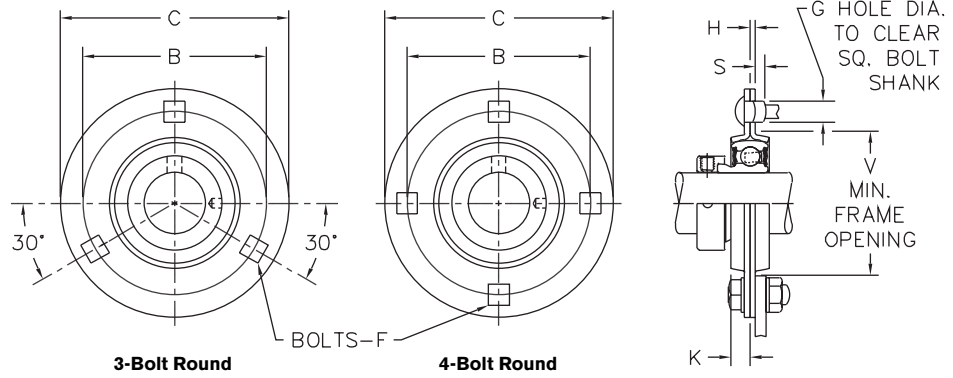
Load ratings, pages B-11, B-12.

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



Dimensions (inches/mm)

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

Please consult for availability.

■ Assembly requires two housing halves.

Additional information, page B-76.

Triangular Flanged Housings, 2-piece Formed Steel

MSTR

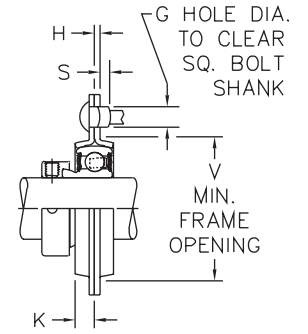
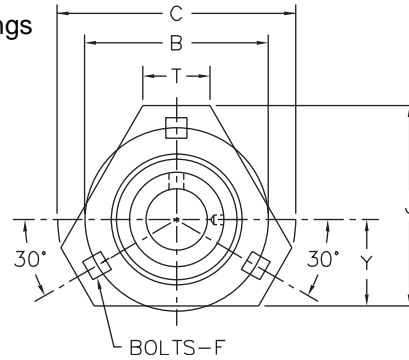
3-bolt (Carriage) Mounting

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				For round, square and hex bore bearings				B	C	F		H			S			Y	Radial load rating of housing assembly lbs/newtons			
	Shaft diameter		Bearing size number	Shaft size			Carriage bolt size	Hole nominal ±.005" ±0.13 mm			G	Stock thickness	J	K	N	Carriage bolt		T			V		
	mm	in.		Round bore	Square bore	Hex bore										Basic size bearing	Short shank					Long shank	
47MSTR	20	3/4	212 2M20	...	...	5/8 1 1/16	204	2 13/16 71.4	3 9/16 90.5	5/16	1 1/32 8.73	1/2 12.7	.083 2.11	3 76.2	5/16 7.9	3 76.2	.021	.115	1 1/16 27.0	2 3/16 55.6	1 5/16 33.3	700 3 110
52MSTR	25	7/8	214	...	...	7/8	205	3	3 3/4	5/16	1 1/32 8.73	1/2 12.7	.083 2.11	3 5/32 80.2	1 1/32 8.7	3 5/32 80.2	.021	.115	1 7/64 28.2	2 3/8 60.3	1 3/8 34.9	800 3 560
		1 5/16	215																				216	2M25
62MSTR	30	1 1/8	218	...	...	1	206	3 9/16 90.5	4 7/16 112.7	3/8	1 3/32 10.32	1 9/32 15.1	.104 2.64	3 11/16 93.7	1 1/32 8.7	3 11/16 93.7	.011	.104	3 1/32 24.6	2 13/16 71.4	1 1/2 38.1	1100 4 890
		1 3/16	219																				2E20
		1 1/4	220																				2M30

Please consult for availability.

■ Assembly requires two housing halves.

Additional information, page B-76.

Flanged Housings, 2-piece Formed Steel

MST

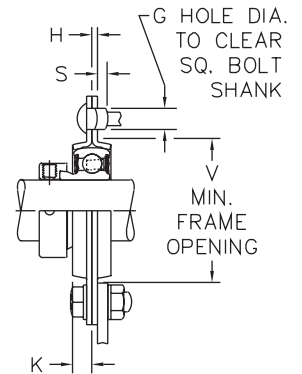
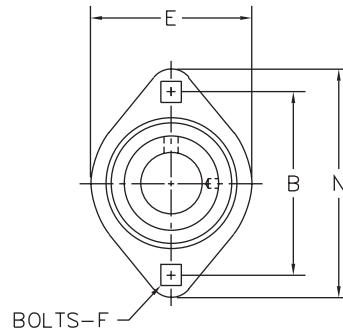
2-bolt (Carriage) Mounting

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		For round, square and hex bore bearings				B	E	F		G	H		K	N	S		V	Radial load rating of housing assembly lbs/newtons											
	Shaft diameter	Bearing size number	Shaft size			Basic size bearing			Carriage bolt size	Hole nominal ±.005" ±0.13 mm		Stock thickness	Carriage bolt																	
			Round bore	Square bore	Hex bore								Short shank			Long shank														
40MST	1/2	2B08	...	...	...	...	2 1/2	2 5/16	1/4	9/32	13/32	.075	9/32	3 3/16	.006	.100	1 15/16	600								
	5/8	210																	63.5	58.7	...	7.14	10.3	1.90	7.1	81.0	49.2	2 670
	11/16	211																												
	17	2M17																												
47MST	3/4	212	...	...	5/8	204	2 13/16	2 5/8	5/16	1 1/32	1/2	.083	5/16	3 3/16	.021	.115	2 3/16	700										
		2M20																	71.4	66.7	...	8.73	12.7	2.11	7.9	90.5	55.6	3 110
	20																													
52MST	7/8	214	...	...	7/8	205	3	2 5 1/64	5/16	1 1/32	1/2	.083	1 1/32	3 3/4	.021	.115	2 3/8	800										
	15/16	215																	76.2	71.0	...	8.73	12.7	2.11	8.7	95.2	60.3	3 560
	1	216																												
	25	2M25																												
62MST	1 1/8	218	...	...	1	206	3 3/16	3 3/16	3/8	1 3/32	1 9/32	.104	1 1/32	4 7/16	.011	.104	2 13/16	1100										
	1 3/16	219																	90.5	84.1	...	10.32	15.1	2.64	8.7	112.7	71.4	4 890
	1 1/4	2E20																												
	30	2M30																												

Please consult for availability.

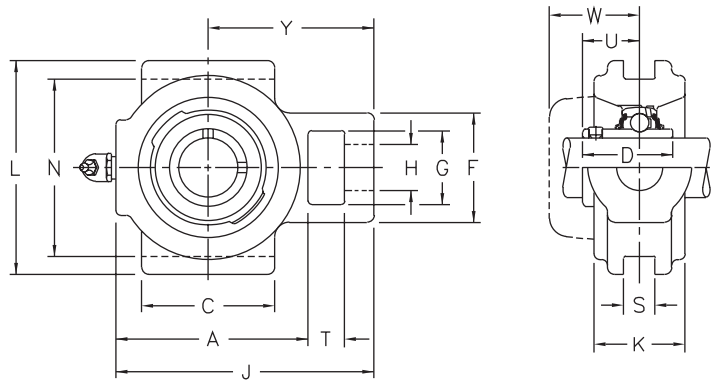
■ Assembly requires two housing halves.

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)

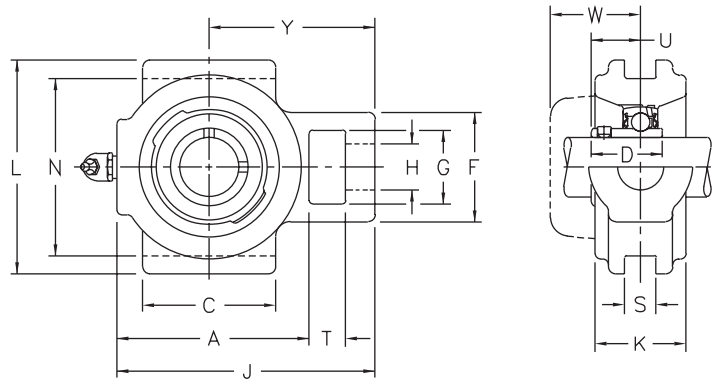
Shaft diameter	Takeup unit number	A	C	D	F	G	H	J	K	L	N	S	T	U	W	Y	Unit wt. (lbs./kg.)	Bearing no.
17	T3-U2B08N	23/16	17/8	13/32	11 1/16	1 1/16	9/16	3	13/16	2 1/4	1.875	.281	1/2	4 1/64	1 13/64	1 15/16	1.0	UG2B08NL UG210NL UG211NL UG2M17NL
	T3-U210N																	
	T3-U211N																	
	T3-U2M17N	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	
20	T3-U212N	2 1/2	17/8	19/32	11 1/16	1 1/16	9/16	3 5/16	1 5/16	2 5/8	2.125	.281	1/2	3/4	1 9/16	2 3/32	1.5	UG212NL UG2M20NL
	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	
25	T3-U214N	2 3/4	2	1 23/64	11 1/16	1 1/16	9/16	3 9/16	1	2 7/8	2.375	.281	1/2	5 1/64	1 9/16	2 7/32	2.0	UG214NL UG215NL UG216NL UG2M25NL
	T3-U215N																	
	T3-U216N																	
	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	
30	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	6 1/64	1 29/64	2 19/32	3.0	UG218NL UG219NL UG2E20NL UG2M30NL
	T3-U219N																	
	T3-U2E20N																	
	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	
35	T3-U220N	3 1 1/16	2 5/8	1 49/64	2	1 1/4	1 1/16	4 1 1/16	1 3/16	4	3.375	.406	5/8	1 7/64	1 35/64	2 7/8	3.5	UG220NL UG222NL UG223NL UG2M35NL
	T3-U222N																	
	T3-U223N																	
	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	
40	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 UG2M40NL
	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	
45	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 UG227NL UG228NL UG2M45NL
	T3-U227N																	
	T3-U228N																	
	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	
50	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 UG2M50NL
	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	
55	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 UG235NL UG2M55NL
	T3-U235N																	
	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	

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	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.
in.	Lip seals																	
3/4	T3-S212E	2 1/2	1 7/8	1 1/8	1 11/16	1 1/16	9/16	3 3/16	1 9/16	2 5/8	2.125	.281	1/2	3/4	1 5/16	2 3/32	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	
7/8 15/16 1	T3-S214E T3-S215E T3-S216E	2 3/4	2	1 3/16	1 11/16	1 1/16	9/16	3 3/16	1	2 7/8	2.375	.281	1/2	1 3/16	1 5/16	2 7/32	2.0	SG214EL SG215EL 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	
1 1/8 1 3/16 1 1/4	T3-S218E T3-S219E T3-S2E20E	3 1/4	2 3/8	1 11/32	1 7/8	1 1/8	5/8	4 3/16	1 3/32	3 1/2	2.875	.406	5/16	6 1/64	1 29/64	2 19/32	3.0	SG218EL SG219EL 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	
1 1/4 1 3/8 1 7/16	T3-S220E T3-S222E T3-S223E	3 11/16	2 5/8	1 9/16	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 3.4 3.4	SG220EL SG222EL 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	
1 1/2	T3-S224E	4 1/8	2 7/8	1 11/16	2	1 1/4	1 1/16	5 1/8	1 11/32	4 1/8	3.500	.406	5/8	1 13/64	1 41/64	3 1/8	4.5 2.6	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		
1 5/8 1 11/16 1 3/4	T3-S226E T3-S227E T3-S228E	4 5/8	3 1/8	1 49/64	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 5.3 5.2	SG226EL SG227EL 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	
1 15/16	T3-S231E	4 9/16	3 1/4	1 51/64	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 2.6	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		

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.

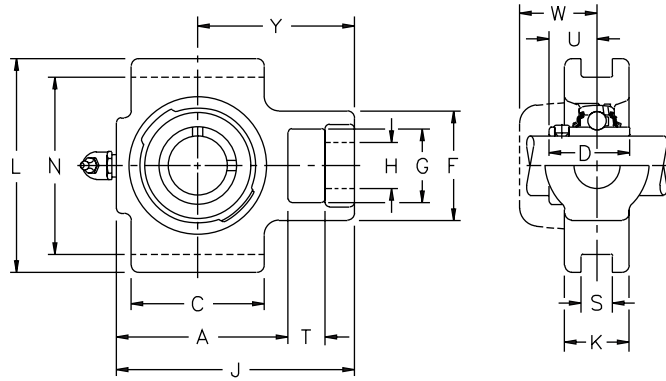
Load ratings, pages B-11, B-12.

Additional information, page B-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		T	U	W	Y	Unit wt. (lbs./kg.)	Bearing no.
											+0.000" -0.015" (+0.00 -0.38)	+0.005" -0.015" (+0.13 -0.38)						
inches	Lip seals																	
3/4	TH3-U212N	2 ²⁷ / ₃₂ 72.2	2 1/4 57.2	1 ⁹ / ₃₂ 32.54	1 7/8 47.6	1 1/4 31.8	3/4 19.0	3 ³¹ / ₃₂ 100.8	11/16 27.0	3 3/8 92.1	3.000 76.20	.531 13.49	5/8 15.9	3/4 19.0	1 5/16 33.3	2 ²¹ / ₃₂ 67.5	2.4 1.1	UG212NL
7/8 15/16 1	TH3-U214N TH3-U215N TH3-U216N	2 ²⁹ / ₃₂ 73.8	2 1/4 57.2	1 ²³ / ₆₄ 34.53	1 ²⁷ / ₃₂ 46.8	1 1/4 31.8	3/4 19.0	4 1/32 102.4	1 3/32 27.8	3 5/8 92.1	3.000 76.20	.531 13.49	5/8 15.9	5 1/64 20.2	1 5/16 33.3	2 ²¹ / ₃₂ 67.5	2.7 1.2	UG214NL UG215NL UG216NL
1 1/8 1 3/16 1 1/4	TH3-U218N TH3-U219N TH3-U2E20N	3 1/32 84.9	2 1/2 63.5	1 1/16 39.69	2 3/16 55.6	1 7/16 36.5	7/8 22.2	4 15/32 113.5	1 3/32 27.8	4 1/8 104.8	3.500 88.90	.531 13.49	5/8 15.9	5 1/64 24.2	1 ²⁹ / ₆₄ 36.9	2 ²⁷ / ₃₂ 72.2	3.2 1.5	UG218NL UG219NL UG2E20NL
1 1/4 1 3/8 1 7/16	TH3-U220N TH3-U222N TH3-U223N	3 1/16 93.7	2 3/4 69.8	1 ⁹ / ₆₄ 44.85	2 5/16 58.7	1 7/16 36.5	7/8 22.2	4 13/16 122.2	1 3/16 30.2	4 1/8 104.8	3.500 88.90	.531 13.49	5/8 15.9	1 7/64 28.2	1 ³⁵ / ₆₄ 39.3	2 ³¹ / ₃₂ 75.4	4.0 1.8	UG220NL UG222NL UG223NL
1 1/2	TH3-U224N	4 3/16 106.4	3 1/4 82.6	1 ²⁹ / ₃₂ 48.42	2 ²⁷ / ₃₂ 72.2	1 15/16 49.2	1 1/8 28.6	5 9/16 141.3	1 5/16 33.3	4 3/4 120.6	3.969 100.81	.688 17.48	3/4 19.0	1 11/64 29.8	1 ⁴¹ / ₆₄ 41.7	3 19/32 88.6	5.3 2.4	UG224NL
1 5/8 1 11/16 1 3/4	TH3-U226N TH3-U227N TH3-U228N	4 3/16 106.4	3 3/4 82.6	2 1/32 51.59	2 7/8 73.0	1 15/16 49.2	1 1/8 28.6	5 9/16 141.3	1 3/8 34.9	4 3/4 120.6	3.969 100.81	.688 17.48	3/4 19.0	1 15/64 31.4	1 ²¹ / ₃₂ 42.1	3 15/32 88.6	5.3 2.4	UG226NL UG227NL UG228NL
1 15/16 2	TH3-U231N TH3-U2E32N	4 9/16 115.9	3 3/8 85.7	2 3/32 53.18	2 7/8 73.0	1 15/16 49.2	1 1/8 28.6	5 15/16 150.8	1 ⁴³ / ₆₄ 42.5	4 3/4 120.6	3.969 100.81	.688 17.48	3/4 19.0	1 17/64 32.1	1 ²⁵ / ₃₂ 45.2	3 19/32 91.3	6.6 3.0	UG231NL UG2E32NL
2 2 3/16	TH3-U232N TH3-U235N	5 1/16 138.1	4 101.6	2 1/4 57.15	3 19/32 91.3	2 1/2 63.5	1 3/8 34.9	7 7/16 188.9	1 3/4 44.4	5 7/8 149.2	5.094 129.39	1.062 26.97	1 1/4 31.8	1 13/32 35.7	2 1/64 51.2	4 ²⁹ / ₃₂ 119.8	13.5 6.1	UG232NL UG235NL
2 1/4 2 3/8 2 7/16	TH3-U236N TH3-U238N TH3-U239N	5 1/16 138.1	4 101.6	2 1/2 63.50	3 19/32 91.3	2 1/2 63.5	1 3/8 34.9	7 7/16 188.9	2 1/16 52.4	5 7/8 149.2	5.094 129.39	1.062 26.97	1 1/4 31.8	1 1/16 39.7	2 7/64 53.6	4 ²⁹ / ₃₂ 119.8	12.9 5.9	UG236NL UG238NL UG239NL

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.

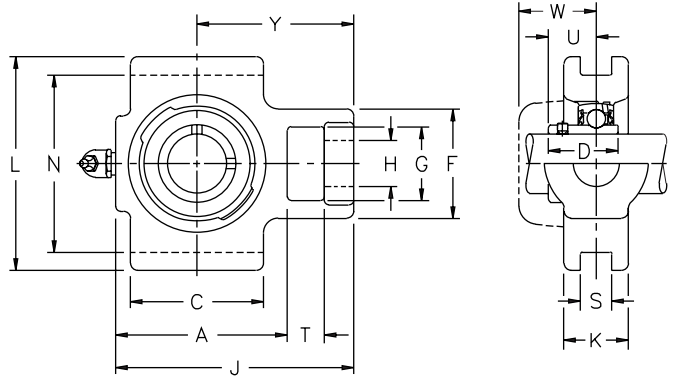
Load ratings, pages B-11, B-12.

Additional information, page B-75.

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																	
3/4	TH3-S212E	2 ²⁷ / ₃₂ 72.2	2 1/4 57.2	1 1/8 28.58	1 7/8 47.6	1 1/4 31.8	3/4 19.0	3 ³¹ / ₃₂ 100.8	1 1/16 27.0	3 5/8 92.1	3.000 76.20	.531 13.49	5/8 15.9	3/4 19.0	1 5/16 33.3	2 ²¹ / ₃₂ 67.5	2.4 1.1	SG212EL
7/8	TH3-S214E	2 ²⁹ / ₃₂ 73.8	2 1/4 57.2	1 3/16 30.17	1 ²⁷ / ₃₂ 46.8	1 1/4 31.8	3/4 19.0	4 1/32 102.4	1 3/32 27.8	3 5/8 92.1	3.000 76.20	.531 13.49	5/8 15.9	1 3/16 20.6	1 5/16 33.3	2 ²¹ / ₃₂ 67.5	2.7 1.2	SG214EL
15/16	TH3-S215E																	SG215EL
1	TH3-S216E																	SG216EL
1 1/8	TH3-S218E	3 ¹¹ / ₃₂ 84.9	2 1/2 63.5	1 ¹¹ / ₃₂ 34.13	2 3/16 55.6	1 7/16 36.5	7/8 22.2	4 ¹⁵ / ₃₂ 113.5	1 3/32 27.8	4 1/8 104.8	3.500 88.90	.531 13.49	5/8 15.9	6 ¹ / ₆₄ 24.2	1 ²⁹ / ₆₄ 36.9	2 ²⁷ / ₃₂ 72.2	3.2 1.5	SG218EL
1 3/16	TH3-S219E																	SG219EL
1 1/4	TH3-S2E20E																	SG2E20EL
1 1/4	TH3-S220E	3 ¹¹ / ₃₂ 93.7	2 3/4 69.8	1 9/16 39.67	2 5/16 58.7	1 7/16 36.5	7/8 22.2	4 ¹³ / ₃₂ 122.2	1 3/16 30.2	4 1/8 104.8	3.500 88.90	.531 13.49	5/8 15.9	1 7/64 28.2	1 ³⁵ / ₆₄ 39.3	2 ³¹ / ₃₂ 75.4	4.0 1.8	SG220EL
1 3/8	TH3-S222E																	SG222EL
1 7/16	TH3-S223E																	SG223EL
1 1/2	TH3-S224E	4 ³ / ₁₆ 106.4	3 1/4 82.6	1 ¹¹ / ₁₆ 42.87	2 ²⁷ / ₃₂ 72.2	1 ¹⁵ / ₁₆ 49.2	1 1/8 28.6	5 ⁹ / ₁₆ 141.3	1 5/16 33.3	4 3/4 120.6	3.969 100.81	.688 17.48	3/4 19.0	1 13/64 30.6	1 41/64 41.7	3 ¹⁵ / ₃₂ 88.6	5.3 2.4	SG224EL
1 5/8	TH3-S226E	4 ³ / ₁₆ 106.4	3 1/4 82.6	1 ⁴⁹ / ₆₄ 44.85	2 7/8 73.0	1 ¹⁵ / ₁₆ 49.2	1 1/8 28.6	5 ⁹ / ₁₆ 141.3	1 3/8 34.9	4 3/4 120.6	3.969 100.81	.688 17.48	3/4 19.0	1 15/64 31.4	1 ²¹ / ₃₂ 42.1	3 ¹⁵ / ₃₂ 88.6	5.3 2.4	SG226EL
1 11/16	TH3-S227E																	SG227EL
1 3/4	TH3-S228E																	SG228EL
1 15/16	TH3-S231E	4 ³ / ₁₆ 115.9	3 3/8 85.7	1 ⁵¹ / ₆₄ 45.64	2 7/8 73.0	1 ¹⁵ / ₁₆ 49.2	1 1/8 28.6	5 ¹⁵ / ₁₆ 150.8	1 43/64 42.5	4 3/4 120.6	3.969 100.81	.688 17.48	3/4 19.0	1 17/64 32.1	1 ²⁵ / ₃₂ 45.2	3 ¹⁹ / ₃₂ 91.3	6.6 3.0	SG231EL

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.

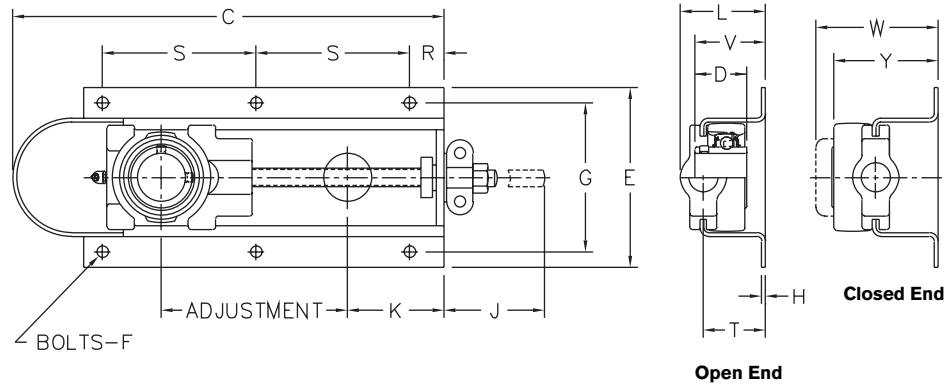
Load ratings, pages B-11, B-12.

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 in.	Adjust- ment	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.																																				
25	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 1/8	1 5/16	3 37/64	2 27/32	7.5	TA3-U215N																																				
	12	TAS3-U216N-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-U216N																		
	18	TAS3-U2M25N-6																																					TA3-U2M25N																	
30	6	TAS3-U218N-6	15	1 9/16	6 1/4	3/8	5 1/4	3/16	8 9/16	3 1/16	2 7/8	2 3/32	1 5/8	4 7/8	2 1/8	2 1/32	4 19/64	3 1/2	11.0	TA3-U218N																																				
	12	TAS3-U218N-12																			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																		
	18	TAS3-U219N-6																																					TA3-U2M30N																	
	6	TAS3-U219N-6																			15	1 49/64	6 1/4	3/8	5 1/4	3/16	8 9/16	3 3/4	2 7/8	2 7/16	1 5/8	4 7/8	2 1/8	2 3/16	4 7/16	3 39/64	13.5	TA3-U220N																		
	12	TAS3-U219N-12																																					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
	18	TAS3-U2M35N-6																																																						
6	TAS3-U220N-6	15	1 29/32	7 7/8	3/8	6 5/8	1/4	11 1/4	4 1/2	3 3/8	2 11/16	1 5/8	5 5/8	2 3/4	3 1/16	5 5/32	4 3/8	24.0	TA3-U224N																																					
12	TAS3-U220N-12																			283 1/4																			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	
18	TAS3-U2M40N-9																																																							TA3-U2M40N
6	TAS3-U223N-6																			15	2 1/32	7 7/8	3/8	6 5/8	1/4	11 1/16	4 5/8	3 3/8	2 7/8	1 5/8	5 5/8	2 3/4	3 1/16	5 7/16	4 1/2	25.5	TA3-U227N																			
12	TAS3-U223N-12																																					283 1/4	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	
18	TAS3-U2M45N-9																																																							TA3-U2M45N
6	TAS3-U228N-6	19 1/4	2 3/32	7 7/8	3/8	6 5/8	1/4	11 1/4	4 5/8	3 3/8	3 3/8	1 5/8	5 5/8	2 3/4	3 1/16	5 19/32	4 17/32	23.0	TA3-U231N																																					
12	TAS3-U228N-12																																					283 1/4	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	
18	TAS3-U2M50N-9																																																							TA3-U2M50N
6	TAS3-U232N-6																			21 1/8	2 1/4	8 1/4	1/2	7 7/8	1/4	11 1/16	5 1/2	4 1/4	3 1/2	2 1/2	5 5/8	3 3/4	3 1/16	6 9/16	5 1/16	32.3	TA3-U232N																			
12	TAS3-U232N-12																																					30 3/8	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	
18	TAS3-U235N-9																																																							TA3-U235N
6	TAS3-U235N-6	21 1/8	2 1/4	8 1/4	1/2	7 7/8	1/4	11 1/16	5 1/2	4 1/4	3 1/2	2 1/2	5 5/8	3 3/4	3 1/16	6 9/16	5 1/16	29.9	TA3-U235N																																					
12	TAS3-U235N-12																																					30 3/8	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	
18	TAS3-U2M55N-9																																																							TA3-U2M55N
6	TAS3-U2M55N-6																			21 1/8	2 1/4	8 1/4	1/2	7 7/8	1/4	11 1/16	5 1/2	4 1/4	3 1/2	2 1/2	5 5/8	3 3/4	3 1/16	6 9/16	5 1/16	39.0	TA3-U235N																			
12	TAS3-U2M55N-12																																					30 3/8	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	
18	TAS3-U2M55N-18																																																							TA3-U2M55N

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.

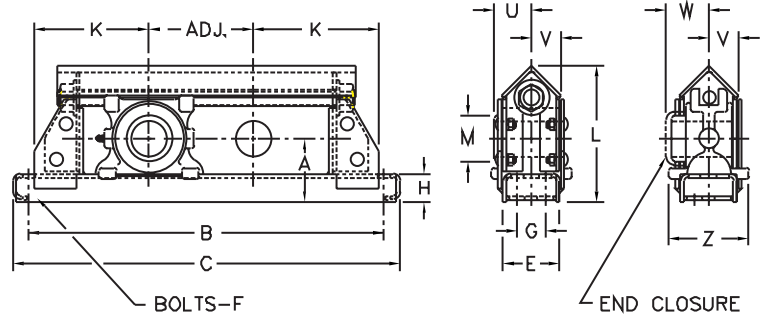
Load ratings, pages B-11, B-12.

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	Adjustment	Takeup number	A	B	C	E	F Bolts	G	H	K	L	M	U	V	W	Z	Unit wt. (lbs./kg.)	Unit no.
1 1/16	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	5 5/64	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	
	457.2	TDS3-U2M50N-18		825.5	876.3												21.3	
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 1 1/16	...	1 13/32	5 5/64	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	
	457.2	TDS3-U2M55N-18		850.9	901.7												23.1	
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 1/16	3 1/32	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	
457.2	TDS3-U2M60N-18	876.3	927.1	28.6														
609.6	TDS3-U2M60N-24	1028.7	1079.5	33.6														
762.0	TDS3-U2M60N-30	1181.1	1231.9	38.6														
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	
457.2	TDS-U2M75N-18	927.1	977.9	38.6														
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 15/16	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	
457.2	TDS-U2M85N-18	965.2	1022.4	49.0														
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 5/64	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	
457.2	TDS-U2M100N-18	1066.8	1130.3	83.9														
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

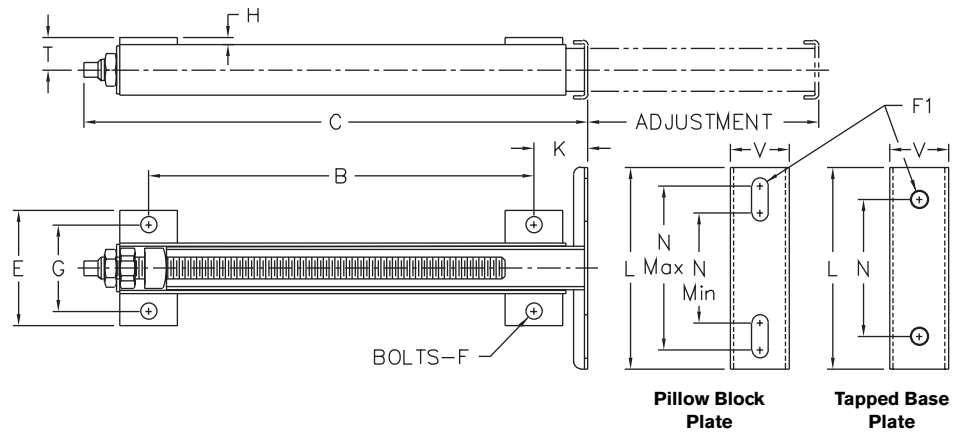
AISI 304 Stainless Steel

Pillow Block Mounting or

Tapped Base Pillow Block Mounting

Pillow Block and Tapped Base

Pillow Block Units Not Included



Basic Series No.	Adjustment	B	C	E	F Bolts	G	H	K	T	Adj. Screw		Unit wt. lbs.	
										Sq. Drive	THD	Steel	Stainless
100	3	3 ⁹ / ₁₆	6 ⁷ / ₈	3 ¹ / 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		F1 Bolts	L	N		V
		Steel	Stainless			Min.	Max.	
100	1/2 Thru 1	TP100-3	TSP100-3	3/8	5 ¹ / ₄	2 ¹ / ₁₆	4 ⁵ / ₁₆	1 ¹ / ₂
		TP100-6	TSP100-6					
		TP100-9	TSP100-9					
250	1 ¹ / ₈ Thru 1 ³ / ₄	TP250-3	TSP250-3	1/2	7	3 ¹ / ₁₆	5 ¹¹ / ₁₆	2 ¹ / ₃₂
		TP250-6	TSP250-6					
		TP250-9	TSP250-9					
		TP250-12	TSP250-12					
300	1 ¹ / ₁₆ Thru 2 ⁷ / ₁₆	TP300-6	TSP300-6	5/8	10	5 ⁹ / ₁₆	8 ¹¹ / ₁₆	2 ²⁷ / ₃₂
		TP300-9	TSP300-9					
		TP300-12	TSP300-12					
		TP300-18	TSP300-18					
400	2 ¹ / ₂ Thru 3 ¹ / ₂	TP400-12	-----	3/4	14	8 ¹ / ₂	11 ³ / ₄	3 ¹ / ₂
		TP400-18	-----					
		TP400-24	-----					

Tapped Base Mounting■

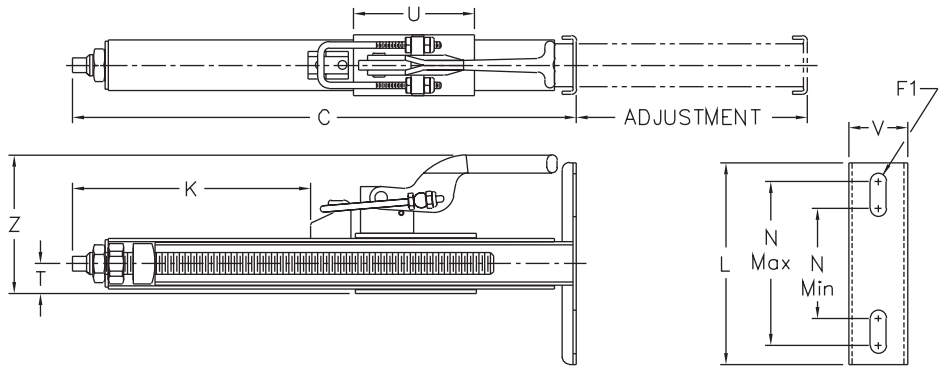
Shaft dia.	T-Frame		F1 Bolts	L	N	V
	Steel	Stainless				
3/4 Thru 1	TPT100-3	TSPT100-3	3/8	3	2	1 ¹ / ₂
	TPT100-6	TSPT100-6				
	TPT100-9	TSPT100-9				
1 ¹ / ₈ Thru 1 ¹ / ₄	TPT2501-3	TSPT2501-3	7/16	4	3	1 ¹ / ₂
	TPT2501-6	TSPT2501-6				
	TPT2501-9	TSPT2501-9				
	TPT2501-12	TSPT2501-12				
1 ¹ / ₄ Thru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

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.*	Adjustment	C	F1	K	L	N		T	U	V	Z	Adj. Screw		Unit wt. lbs.
							Min.	Max.					Sq Drive	THD	
1/2 Thru 1	TQP100-6	6	10 5/8	3/8	3 7/8	5 1/4	2 15/16	4 5/16	3/4	3	1 1/2	3 7/16	3/8	5/8-11	4.0
	TQP100-9	9	14 3/8		5 7/8					5					5.0
1 1/8 Thru 1 3/4	TQP250-6	6	11 1/2		1 9/16					4					7.0
	TQP250-9	9	14 1/2	1/2	3 1/16	7	3 3/16	5 1/16	1	6	2 1/32	4 7/8	1/2	3/4-10	8.2
	TQP250-12	12	17 1/2		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.

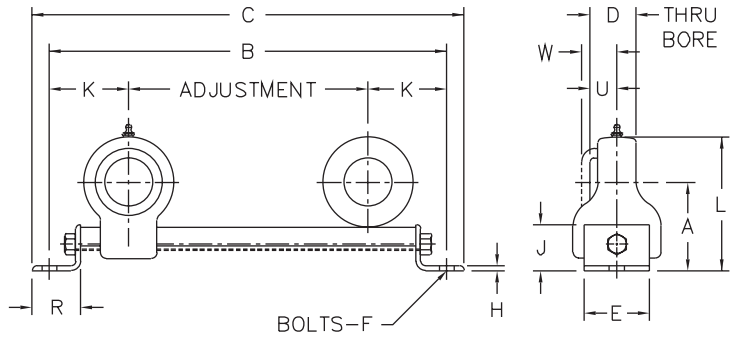
Load ratings, pages B-11, B-12.

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		Adjustment	Takeup number	A	B	C	D	E	F Bolts	H	J	K	L	R	U	W	Unit wt. (lbs./kg.)	
mm	in.																	
25	1 ⁵ / ₁₆	6	NT3-U215N-6	} 2 ³ / ₄	10 ⁷ / ₈	12 ¹ / ₄	1 ²³ / ₆₄	1 ³ / ₄	1/2	3/16	1 1/2	27/16	4 ³ / ₁₆	2	5 ¹ / ₆₄	1 ⁹ / ₃₂	4.5	
	1	NT3-U216N-6	4.5															
	152.4	NT3-U2M25N-6	2.0															
30	1 ³ / ₁₆	6	NT3-219N-6	} 3	10 ⁷ / ₈	12 ¹ / ₄	1 ¹ / ₁₆	1 ³ / ₄	1/2	3/16	1 1/2	27/16	4 ¹¹ / ₁₆	2	6 ¹ / ₆₄	1 ¹⁵ / ₃₂	5.0	
	152.4	NT3-U2M30N-6	2.3															
	76.2	39.69	44.4														12	4.8	38.1	61.9	119.1	50.8	24.2	37.3
35	1 ⁷ / ₁₆	9	NT3-U223N-9	} 3 ¹¹ / ₁₆	14 ¹ / ₂	16 ¹ / ₂	1 ⁴⁹ / ₆₄	2 ¹ / ₄	1/2	1/4	2	2 ³ / ₄	5 ⁹ / ₁₆	2 ¹ / ₂	1 ⁷ / ₆₄	1 ⁹ / ₁₆	9.5	
		12	NT3-U223N-12														10.0	
	228.6	304.8	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
			304.8	NT3-U2M35N-12														4.5
			444.5	495.3														
50	1 ¹⁵ / ₁₆	9	NT3-U231N-9	} 4 ²¹ / ₃₂	16	18 ¹ / ₂	2 ³ / ₃₂	3 ¹ / ₄	5/8	5/16	2 1/2	3 1/2	6 ²⁹ / ₃₂	3	1 ¹⁷ / ₆₄	1 ²⁵ / ₃₂	18.0	
		12	NT3-U231N-12														19.0	
	228.6	304.8	18	NT3-U231N-18	} 118.3	406.4	469.9	53.18	82.6	16	7.9	63.5	88.9	175.4	76.2	32.1	45.2	8.6
			228.6	NT3-U2M50N-9														8.2
			304.8	NT3-U2M50N-12														8.6
457.2	NT3-U2M50N-18	9.5																

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

Lubrication fitting tap size, 1/8" PT.

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

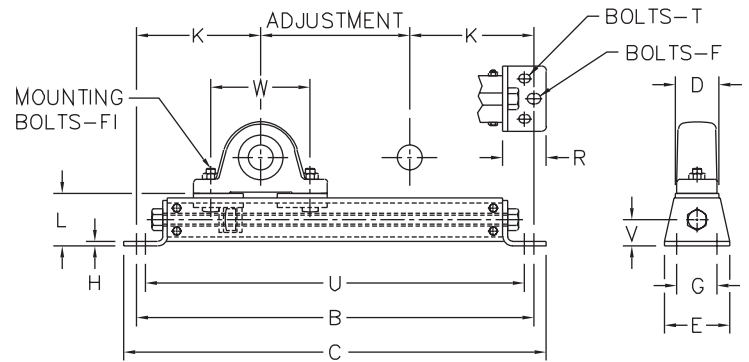
Load ratings, pages B-11, B-12.

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		Takeup frame number	Adjustment	B	C	D	E	F	G	H	K	L	R	T	U	V	W					
	Bolt dia. (F') and max. shaft size (A)																	Bolts	Bolts	Min.	Max.		
																						in.	mm
P3-U216N P3-U2M25N PL3-U216N PL3-U2M25N	3/8 bolts	10	LC1-6 LC1-9 LC1-12	6	16	17	1 3/4	2 5/8	3/8	1 5/8	3/16	5	2 1/8	1 3/4	5/16	8	15 1/4	18 1/4	21 1/4	1 1/16	3	5 15/16	
12				22	23	44.5																	66.7	10	41.3	4.8	127.0	54.0	44.5	8	387.4	436.6	539.8
P3-U231N P3-U2M50N PL3-U231N PL3-U2M50N PH3-U219N PH3-U2M30N	1/2 bolts	12	LC2-6 LC2-9 LC2-12 LC2-18	6	19 1/8	20 1/4	2 3/8	3 1/8	1/2	2 1/8	1/4	6 9/16	2 11/16	2 3/16	3/8	10	18 1/8	21 1/8	24 1/8	30 1/8	1 1/32	3 3/4	7 1/4
12				25 1/8	26 1/4	60.3																		79.4	12	54.0	6.4	166.7	68.3	55.6	10	460.4	536.6	612.8	765.2
P3-U239N P3-U2M60N PL3-U235N PL3-U2M55N PH3-U235N PH3-U2M55N	5/8 bolts	16	LC3-9 LC3-12 LC3-18 LC3-24	9	25 5/16	26 9/16	3	4	5/8	2 3/4	5/16	8 5/32	3 3/16	2 3/4	1/2	12	24 1/16	27 1/16	33 1/16	39 1/16	1 5/8	4 1/4	9
12				28 5/16	29 9/16	76.2																		101.6	16	69.8	7.9	207.2	84.1	69.8	12	611.2	687.4	839.8	992.2
	2 1/16 bolts	60	LC3-18 LC3-24	18	34 5/16	35 5/16	228.6	642.9	674.7	304.8	719.1	750.9	457.2	871.5	903.3	609.6	1023.9	1055.7					
24				40 5/16	41 9/16																		

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.

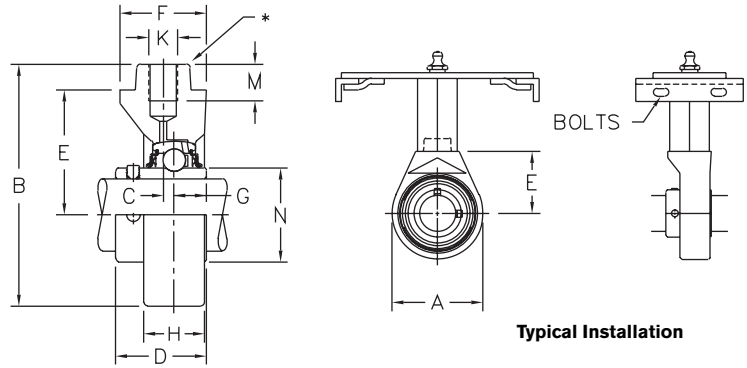
Load ratings, pages B-11, B-12.

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



Dimensions (inches/mm)

Shaft diameter	Hanger unit number	A	B	C	D	E ±0.015" ±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	7⁄8-9 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	7⁄8-9 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	1½-12 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; 2⁷/₁₆"-3", 1¾" square, 3⁷/₁₆", 2½" square.

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

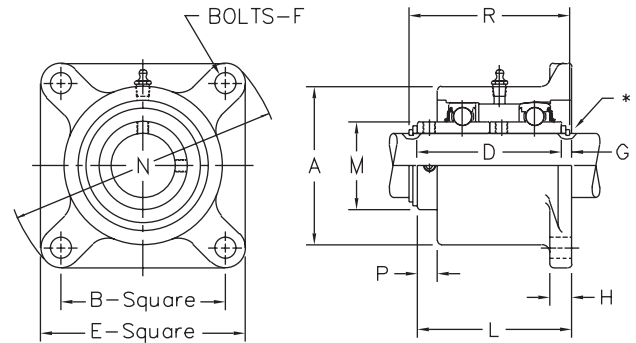
Load ratings, pages B-11, B-12.

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	Flanged unit number	Replacement bearing number	A	B	D	E	F	G	H	L	M	N	P	R	Unit wt. (lbs./kg.)
inches	Lip seals	■					Bolts								
1½	FF 224N	UR224A	4 101.6	4 101.60	3 ¹³ / ₁₆ 96.84	5½ 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 ¹⁹ / ₁₆ 125.4	5½ 130.17	4½ 114.30	6 ⁵ / ₈ 161.9	5/8 16	5/16 7.9	1 ¹ / 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	1 ¹ / ₁₆ 17.5	5 ⁵ / ₁₆ 134.9	...	9 ⁷ / ₃₂ 234.2	1 ⁹ / ₃₂ 15.1	5 ¹⁷ / ₃₂ 140.5	20.8 9.4
2¾	FF 244N	UR244A	6 ³ / ₈ 161.9	6 152.40	5¾ 146.05	7¾ 196.8	¾ 20	5/16 7.9	¾ 19.0	6 ¹ / ₁₆ 154.0	4 ⁵ / ₈ 117.5	10¼ 260.4	1 ¹ / 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	7½ 180.98	8 ⁹ / ₁₆ 217.5	¾ 20	½ 12.7	1 25.4	7 ⁵ / ₈ 193.7	5 ³ / ₁₆ 131.8	11 ³ / ₈ 288.9	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 2⁷/₁₆" 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 the shaft diameter)	2½	.125
2 ⁷ / ₁₆	1227		3	.125
2¾ to 3	5224		3½	.125
3 ⁷ / ₁₆	5531		4 ¹ / ₁₆	.140

Spring Locking Ball Bearings

U200NL, UB200NL

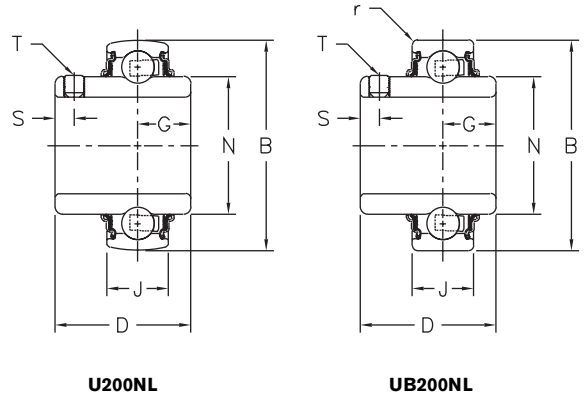
Spherical or Cylindrical O.D.

Sealed

Spring Locking

Non-relubricatable

Wide Inner Ring



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.				
17	1/2	U2B08NL	UB2B08NL	+0.0006 -0.0000	1.5748	1 3/32	.4531	.4724	.5118	.941	.024	.15	10-32
	5/8	U210NL	UB210NL										
	11/16	U211NL	UB211NL										
		U2M17NL	UB2M17NL										
20	3/4	U212NL	UB212NL	+0.0007 -0.0000	1.8504	1 3/32	.5313	.5512	.5906	1.121	.039	.19	1/4-28
		U2M20NL	UB2M20NL	+0.018 -0.0000	47.000	32.54	13.494	14.000	15.000	28.47	1.00	4.8	
25	7/8	U214NL△	UB214NL△	+0.0007 -0.0000	2.0472	1 23/64	.5625	.5906	.5906	1.313	.039	.22	1/4-28
	15/16	U215NL△	UB215NL△										
	1	U216NL△	UB216NL△										
		U2M25NL	UB2M25NL										
30	1 1/8	U218NL	UB218NL	+0.0007 -0.0000	2.4409	1 1/16	.6094	.6299	.7087	1.587	.039	.22	1/4-28
	1 1/16	U219NL	UB219NL										
	1 1/4	U2E20NL	UB2E20NL										
		U2M30NL	UB2M30NL										
35	1 1/4	U220NL△	UB220NL△	+0.0008 -0.0000	2.8346	1 49/64	.6563	.6693	.7480	1.847	.039	.25	5/16-24
	1 3/8	U222NL△	UB222NL△										
	1 7/16	U223NL△	UB223NL△										
		U2M35NL	UB2M35NL										
40	1 1/2	U224NL△	UB224NL△	+0.0008 -0.0000	3.1496	1 29/32	.7344	.7087	.8661	2.083	.039	.32	5/16-24
		U2M40NL	UB2M40NL	+0.020 -0.0000	80.000	48.42	18.653	18.000	22.000	52.91	1.00	8.1	
45	1 5/8	U226NL△	UB226NL△	+0.0008 -0.0000	3.3465	2 1/32	.7969	.7480	.8661	2.281	.039	.32	5/16-24
	1 11/16	U227NL△	UB227NL△										
	1 3/4	U228NL△	UB228NL△										
		U2M45NL	UB2M45NL										
50	1 5/8	U231NL△	UB231NL△	+0.0008 -0.0000	3.5433	2 3/32	.8261	.7874	.8661	2.475	.039	.38	3/8-24
	2	U2E32NL△	UB2E32NL△										
		U2M50NL	UB2M50NL										
55	2	U232NL△	UB232NL△	+0.0009 -0.0000	3.9370	2 1/4	.8438	.8268	.9843	2.749	.059	.38	3/8-24
	2 3/16	U235NL△	UB235NL△										
		U2M55NL	UB2M55NL										
60	2 1/4	U236NL	UB236NL	+0.0009 -0.0000	4.3307	2 1/2	.9375	.8661	1.0630	3.012	.059	.38	3/8-24
	2 3/8	U238NL	UB238NL										
	2 7/16	U239NL	UB239NL										
		U2M60NL	UB2M60NL										

Please consult for availability.

◆ Max fillet radius of housing to clear bearing corner.

□ Bearing O.D. tolerance; for 1 1/2" and smaller shaft, +.0000"-.0005" (+0.000 mm -0.013 mm); 1 5/8" thru 2 11/16" shafts, +.0000"-.0006" (+0.000 mm -0.015 mm); 2 1/2" thru 3 1/2" 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

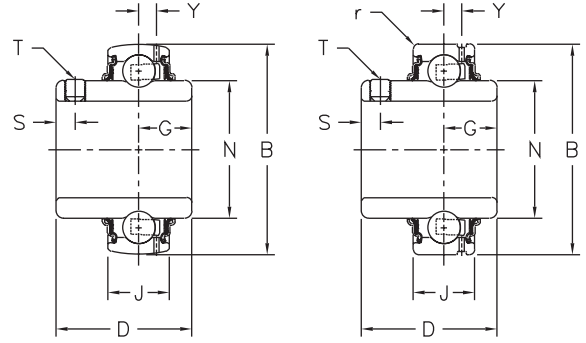
Spherical or Cylindrical O.D.

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 Collar O.D.	N	r ◆	S	T Tap Size	Y
mm	inches	Spherical O.D.	Cylindrical O.D.					Cyl. O.D.	Spher. O.D.						
17	1/2	UG2B08NL	UBG2B08NL	+0.0006 -0.0000	1.5748	1 3/32	.4531	.4724	.5118941	.024	.15	10-32	.129
	5/8	UG210NL	UBG210NL												
	11/16	UG211NL	UBG211NL												
		UG2M17NL	UBG2M17NL												
20	3/4	UG212NL	UBG212NL	+0.0007 -0.0000	1.8504	1 9/32	.5313	.5512	.5906	...	1.121	.039	.19	1/4-28	.137
		UG2M20NL	UBG2M20NL	+0.018 -0.0000	47.000	32.54	13.494	14.000	15.000	...	28.47	1.00	4.8		3.48
25	7/8	UG214NL △	UBG214NL△	+0.0007 -0.0000	2.0472	1 23/64	.5625	.5906	.5906	...	1.313	.039	.22	1/4-28	.140
	15/16	UG215NL △	UBG215NL△												
	1	UG216NL △	UBG216NL△												
		UG2M25NL	UBG2M25NL												
30	1 1/8	UG218NL	UBG218NL	+0.0007 -0.0000	2.4409	1 9/16	.6094	.7087	.7087	...	1.587	.039	.22	1/4-28	.202
	1 3/16	UG219NL	UBG219NL												
	1 1/4	UG2E20NL	UBG2E20NL												
		UG2M30NL	UBG2M30NL												
35	1 1/4	UG220NL △	UBG220NL△	+0.0008 -0.0000	2.8346	1 49/64	.6563	.7480	.7480	...	1.847	.039	.25	5/16-24	.239
	1 3/8	UG222NL △	UBG222NL△												
	1 7/16	UG223NL △	UBG223NL△												
		UG2M35NL	UBG2M35NL												
40	1 1/2	UG224NL △	UBG224NL△	+0.0008 -0.0000	3.1496	1 29/32	.7344	.8268	.8661	...	2.083	.039	.32	5/16-24	.253
		UG2M40NL △	UBG2M40NL△	+0.020 -0.0000	80.000	48.42	18.653	21.000	22.000	...	52.91	1.00	8.1		6.43
45	1 5/8	UG226NL △	UBG226NL△	+0.0008 -0.0000	3.3465	2 1/32	.7969	.8661	.8661	...	2.281	.039	.32	5/16-24	.254
	1 11/16	UG227NL △	UBG227NL△												
	1 3/4	UG228NL △	UBG228NL△												
		UG2M45NL	UBG2M45NL												
50	1 15/16	UG231NL △	UBG231NL△	+0.0008 -0.0000	3.5433	2 3/32	.8281	.9055	.8661	...	2.475	.039	.38	3/8-24	.268
	2	UG2E32NL △	UBG2E32NL△												
		UG2M50NL	UBG2M50NL												
55	2 3/16	UG232NL △	UBG232NL△	+0.0009 -0.0000	3.9370	2 1/4	.8438	.9843	.9843	...	2.749	.059	.38	3/8-24	.295
		UG235NL △	UBG235NL△												
		UG2M55NL	UBG2M55NL												
60	2 1/4	UG236NL	UBG236NL	+0.0009 -0.0000	4.3307	2 1/2	.9375	1.0630	1.0630	...	3.012	.059	.38	3/8-24	.330
	2 3/8	UG238NL	UBG238NL												
	2 7/16	UG239NL	UBG239NL												
		UG2M60NL	UBG2M60NL												
65	2 1/2	UG240NL	...	+0.0009 -0.0000	4.7244	2 11/16	1.0000	...	1.0630	4 3/16	3.331343
	2 11/16	UG243NL	...												
		UG2M65NL	...												
75	2 3/4	UG244NL	...	+0.0009 -0.0000	5.1181	2 7/8	1.0625	...	1.1417	4 5/8	3.624367
	2 15/16	UG247NL	...												
	3	UG2E48NL	...												
		UG2M75NL	...												
85	3 7/16	UG255NL	...	+0.0011 -0.0000	5.9055	3 9/16	1.4375	...	1.3386	5 3/16	4.158415
	3 1/2	UG2E56NL	...												
		UG2M85NL	...												
100	3 15/16	UG263NL	...	+0.0011 -0.0000	7.0866	4 1/4	1.6719	...	1.5748	5 15/16	4.913504
	4	UG2E64NL	...												
		UG2M100NL	...												

See footnotes on facing page.

Collar Mounted Ball Bearings

Y200NL, YB200NL

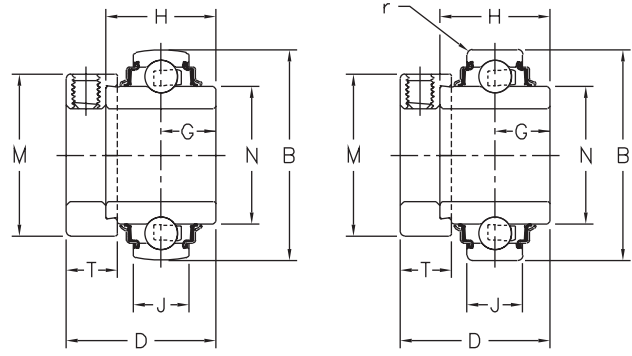
Spherical or Cylindrical O.D.

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.				
1/2	Y2B08NL	YB2B08NL	W2B08-5S	+0.0006 -0.0000 +0.015-0.000	1.5748	1 15/32	.5469	1.0938	.4724	.5118	1 1/8	.941	.024	17/32
5/8	Y210NL	YB210NL	W210-5S		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											
3/4	Y212NL	YB212NL	W212-5S	+0.0007 -0.0000 +0.018 -0.000	1.8504	1 23/32	.6719	1.3438	.5512	.5906	1 1/16	1.121	.039	18/32
					47.000	43.66	17.066	34.131	14.000	15.000	33.3	28.47	1.00	13.5
7/8	Y214NL△	YB214NL△	W214-5S	+0.0007 -0.0000 +0.018 -0.000	2.0472	1 3/4	.6875	1.3750	.5906	.5906	1 1/2	1.313	.039	17/32
15/16	Y215NL△	YB215NL△	W215-5S		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											
1 1/8	Y218NL	YB218NL	W218-5S	+0.0007 -0.0000 +0.018 -0.000	2.4409	1 29/32	.7188	1.4375	.6299	.7087	1 3/4	1.587	.039	5/8
1 1/16	Y219NL	YB219NL	W219-5S		62.000	48.42	18.256	36.513	16.000	18.000	44.4	40.31	1.00	15.9
1 1/4	Y2E20NL	YB2E20NL	W2E20-5S											
1 1/4	Y220NL△	YB220NL△	W220-5S	+0.0008 -0.0000 +0.020 -0.000	2.8346	2 1/64	.7422	1.4844	.6693	.7480	2 3/16	1.847	.039	1 1/16
1 3/8	Y222NL△	YB222NL△	W222-5S		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											
1 1/2	Y224NL△	YB224NL△	W224-5S	+0.0008 -0.0000 +0.020 -0.000	3.1496	2 7/32	.8438	1.6875	.7087	.8661	2 3/8	2.083	.039	23/32
					80.000	56.36	21.431	42.863	18.000	22.000	60.3	52.91	1.00	18.2
1 5/8	Y226NL△	YB226NL△	W226-5S	+0.0008 -0.0000 +0.020 -0.000	3.3465	2 7/32	.8438	1.6875	.7480	.8661	2 1/2	2.281	.039	23/32
1 11/16	Y227NL△	YB227NL△	W227-5S		85.000	56.36	21.431	42.863	19.000	22.000	63.5	57.94	1.00	18.2
1 3/4	Y228NL△	YB228NL△	W228-5S											
1 15/16	Y231NL△	YB231NL△	W231-5S	+0.0008 -0.0000 +0.020 -0.000	3.5433	2 15/32	.9688	1.9375	.7874	.8661	2 3/4	2.475	.039	23/32
2	Y2E32NL△	YB2E32NL△	W2E32-5S		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	+0.0009 -0.0000 +0.023 -0.000	3.9370	2 13/16	1.0938	2.1875	.8268	.9843	3	2.749	.059	1 3/16
2 3/16	Y235NL△	YB235NL△	W235-5S		100.000	71.44	27.781	55.563	21.000	25.000	76.2	69.82	1.50	20.6
2 1/4	Y236NL	YB236NL	W236-5S	+0.0009 -0.0000 +0.023 -0.000	4.3307	3 1/16	1.2188	2.4375	.8661	1.0630	3 1/4	3.012	.059	7/8
2 3/8	Y238NL	YB238NL	W238-5S		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 1 1/2" and smaller shaft, +.0000" -0.0005" (+0.000 mm -0.013 mm); all others +.0000" -0.0006" (+0.000 mm -0.015 mm).

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

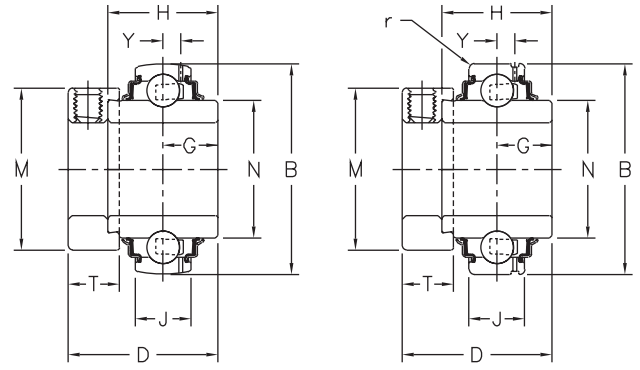
Load ratings, pages B-11, B-12.

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 ■		Collar number	Bore tolerance	B □	D	G	H	J		M	N	r ◆	Y
	Spherical O.D.	Cylindrical O.D.							Cyl. O.D.	Spher. O.D.				
1/2	YG2B08NL	YBG2B08NL	W2B08-5S	+0.006 -0.000	1.5748	1 15/32	.5469	1.0938	.4724	.5118	1 1/8	.941	.024	.129
5/8	YG210NL	YBG210NL	W210-5S		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		+0.015 -0.000									
3/4	YG212NL	YBG212NL	W212-5S	+0.007 -0.000	1.8504	1 23/32	.6719	1.3438	.5512	.5906	1 1/16	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
7/8	YG214NL △	YBG214NL△	W214-5S	+0.007 -0.000	2.0472	1 3/4	.6875	1.3750	.5906	.5906	1 1/2	1.313	.039	.140
15/16	YG215NL △	YBG215NL△	W215-5S		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		+0.018 -0.000									
1 1/8	YG218NL	YBG218NL	W218-5S	+0.007 -0.000	2.4409	1 29/32	.7188	1.4375	.7087	.7087	1 3/4	1.587	.039	.202
1 1/16	YG219NL	YBG219NL	W219-5S		62.000	48.42	18.256	36.513	18.000	18.000	44.5	40.31	1.00	5.13
1 1/4	YG2E20NL	YBG2E20NL	W2E20-5S		+0.018 -0.000									
1 1/4	YG220NL △	YBG220NL△	W220-5S	+0.008 -0.000	2.8346	2 1/64	.7422	1.4844	.7480	.7480	2 3/16	1.847	.039	.239
1 3/8	YG222NL △	YBG222NL△	W222-5S		72.000	51.20	18.852	37.703	19.000	19.000	55.6	46.91	1.00	6.07
1 1/2	YG223NL △	YBG223NL△	W223-5S		+0.020 -0.000									
1 1/2	YG224NL △	YBG224NL△	W224-5S	+0.008 -0.000	3.1496	2 7/32	.8438	1.6875	.8268	.8661	2 3/8	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
1 5/8	YG226NL △	YBG226NL△	W226-5S	+0.008 -0.000	3.3465	2 7/32	.8438	1.6875	.8661	.8661	2 1/2	2.281	.039	.254
1 11/16	YG227NL △	YBG227NL△	W227-5S		85.000	56.36	21.431	42.863	22.000	22.000	63.5	57.94	1.00	6.45
1 3/4	YG228NL △	YBG228NL△	W228-5S		+0.020 -0.000									
1 15/16	YG231NL △	YBG231NL△	W231-5S	+0.008 -0.000	3.5433	2 15/32	.9688	1.9375	.9055	.8661	2 3/4	2.475	.039	.268
2	YG2E32NL △	YBG2E32NL△	W2E32-5S		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	+0.009 -0.000	3.9370	2 13/16	1.0938	2.1875	.9843	.9843	3	2.749	.059	.295
2 3/16	YG235NL △	YBG235NL△	W235-5S		100.000	71.44	27.781	55.563	25.000	25.000	76.2	69.82	1.50	7.49
2 1/4	YG236NL	YBG236NL	W236-5S	+0.009 -0.000	4.3307	3 1/16	1.2188	2.4375	1.0630	1.0630	3 1/4	3.012	.059	.330
2 3/8	YG238NL	YBG238NL	W238-5S		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		+0.023 -0.000									

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 1 1/2" and smaller shaft, +.0000" -0.0005" (+0.000 mm -0.013 mm); all others +.0000" -0.0006" (+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.

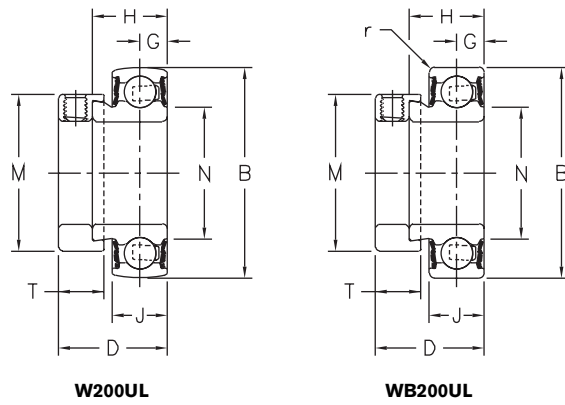
Load ratings, pages B-11, B-12.

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.												
1/2	W2B08EL	WB2B08EL	W2B08-5S	+0.006 -0.000 +0.015 -0.000	1.5748	1 1/8	.2559	.7500	.5118	1 1/8	.879	.024	17/32	
5/8	W210EL	WB210EL	W210-5S		40.000	28.57	6.500	19.050	13.000	28.6	22.33	0.61	13.5	
3/4	W212EL	WB212EL	W212-5S	+0.007 -0.000 +0.018 -0.000	1.8504	1 7/32	.2953	.8437	.5906	1 5/16	1.013	.039	17/32	
					47.000	30.96	7.500	21.430	15.000	33.3	25.73	1.00	13.5	
7/8	W214EL	WB214EL	W214-5S	+0.007 -0.000 +0.018 -0.000	2.0472	1 7/32	.2953	.8437	.5906	1 1/2	1.210	.039	17/32	
15/16	W215EL	WB215EL	W215-5S			52.000	30.96	7.500	21.430	15.000	38.1	30.73	1.00	13.5
1	W216EL	WB216EL	W216-5S											
1 1/8	W218EL	WB218EL	W218-5S	+0.007 -0.000 +0.018 -0.000	2.4409	1 13/32	.3543	.9375	.7087	1 3/4	1.587	.039	5/8	
1 1/16	W219EL	WB219EL	W219-5S			62.000	35.71	9.000	23.812	18.000	44.4	40.31	1.00	15.9
1 1/4	W2E20EL	WB2E20EL	W2E20-5S											
1 1/4	W220EL	WB220EL	W220-5S	+0.008 -0.000 +0.020 -0.000	2.8346	1 17/32	.3740	1.0000	.7480	2 3/16	1.847	.039	1 1/16	
1 3/8	W222EL	WB222EL	W222-5S			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											
1 1/2	W224EL	WB224EL	W224-5S	+0.008 -0.000 +0.020 -0.000	3.1496	1 23/32	.4330	1.1875	.8661	2 3/8	2.083	.039	23/32	
					80.000	43.66	11.000	30.162	22.000	60.3	52.91	1.00	18.2	
1 5/8	W226EL	WB226EL	W226-5S	+0.008 -0.000 +0.020 -0.000	3.3465	1 23/32	.4330	1.1875	.8661	2 1/2	2.109	.039	23/32	
1 11/16	W227EL	WB227EL	W227-5S			85.000	43.66	11.000	30.162	22.000	63.5	53.57	1.00	18.2
1 3/4	W228EL	WB228EL	W228-5S											
1 15/16	W231EL	WB231EL	W231-5S	+0.008 -0.000 +0.020 -0.000	3.5433	1 23/32	.4330	1.1875	.8661	2 3/4	2.306	.039	23/32	
2	W2E32EL	WB2E32EL	W2E32-5S			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 1 1/2" and smaller shaft, +.0000" -0.0005" (+0.000 mm -0.013 mm); all others +.0000" -0.0006" (+0.000 mm -0.015 mm).

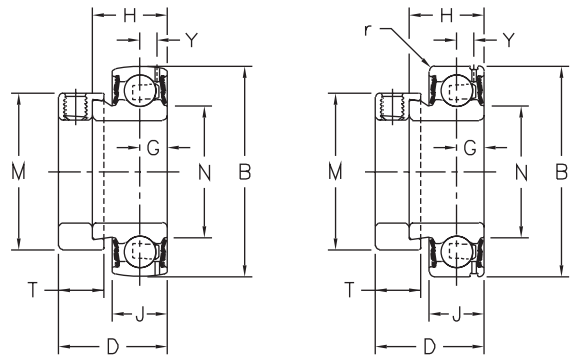
Selection guide, pages B-9, B-10.

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		Collar number	Bore tolerance	B □	D	G	H	J	M	N	r ◆	T	Y
	Spherical O.D.	Cylindrical O.D.												
1/2 5/8	WG2B08EL	WBG2B08EL	W2B08-5S	+0.0006 -0.0000 +0.015 -0.000	1.5748 40.000	1 1/8 28.57	.2559 6.500	.7500 19.050	.5118 13.000	1 1/8 28.6	.879 22.33	.024 0.61	17/32 13.5	.129 3.28
		WBG210EL	W210-5S											
3/4	WG212EL	WBG212EL	W212-5S	+0.0007 -0.0000 +0.018 -0.000	1.8504 47.000	1 7/32 30.96	.2953 7.500	.8437 21.430	.5906 15.000	1 9/16 33.3	1.013 25.73	.039 1.00	17/32 13.5	.137 3.48
7/8 1 1/16 1	WG214EL WG215EL WG216EL	WBG214EL	W214-5S	+0.0007 -0.0000 +0.018 -0.000	2.0472 52.000	1 7/32 30.96	.2953 7.500	.8437 21.430	.5906 15.000	1 1/2 38.1	1.210 30.73	.039 1.00	17/32 13.5	.140 3.56
		WBG215EL	W215-5S											
		WBG216EL	W216-5S											
1 1/8 1 1/16 1 1/4	WG218EL WG219EL WG220EL	WBG218EL	W218-5S	+0.0007 -0.0000 +0.018 -0.000	2.4409 62.000	1 13/32 35.71	.3543 9.000	.9375 23.812	.7087 18.000	1 3/4 44.4	1.587 40.31	.039 1.00	5/8 15.9	.202 5.13
		WBG219EL	W219-5S											
		WBG220EL	W220-5S											
1 1/4 1 3/8 1 7/16	WG220EL WG222EL WG223EL	WBG220EL	W220-5S	+0.0008 -0.0000 +0.020 -0.000	2.8346 72.000	1 17/32 38.89	.3740 9.500	1.0000 25.400	.7480 19.000	2 3/16 55.6	1.847 46.91	.039 1.00	1 1/16 17.5	.239 6.07
		WBG222EL	W222-5S											
		WBG223EL	W223-5S											
1 1/2	WG224EL	WBG224EL	W224-5S	+0.0008 -0.0000 +0.020 -0.000	3.1496 80.000	1 23/32 43.66	.4330 11.000	1.1875 30.162	.8661 22.000	2 3/8 60.3	2.083 52.91	.039 1.00	2 3/32 18.2	.253 6.43
1 5/8 1 11/16 1 3/4	WG226EL WG227EL WG228EL	WBG226EL	W226-5S	+0.0008 -0.0000 +0.020 -0.000	3.3465 85.000	1 23/32 43.66	.4330 11.000	1.1875 30.162	.8661 22.000	2 1/2 63.5	2.109 53.57	.039 1.00	2 3/32 18.2	.254 6.45
		WBG227EL	W227-5S											
		WBG228EL	W228-5S											
1 15/16 2	WG231EL WG2E32EL	WBG231EL	W231-5S	+0.0008 -0.0000 +0.020 -0.000	3.5433 90.000	1 23/32 43.66	.4330 11.000	1.1875 30.162	.8661 22.000	2 3/4 69.8	2.306 58.57	.039 1.00	2 3/32 18.2	.268 6.81
		WBG2E32EL	W2E32-5S											

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 1 1/2" and smaller shaft, +.0000" -0.0005" (+0.000 mm -0.013 mm); all others +.0000" -0.0006" (+0.000 mm -0.015 mm).

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

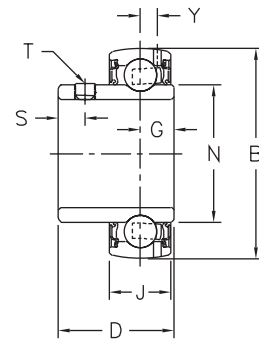
Load ratings, pages B-11, B-12.

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
3/4	SG212EL	+0.0007 -0.0000 — —	1.8504 47.000	1 1/8 28.58	.3750 9.525	.5906 15.000	1.116 28.35	.24 6.1	10-32 —	.137 3.48
7/8 1 1/16 1	SG214EL SG215EL SG216EL	+0.0007 -0.0000 — —	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
1 1/8 1 3/16 1 1/4	SG218EL SG219EL SG2E20EL	+0.0007 -0.0000 — —	2.4409 62.000	1 11/32 34.13	.3910 9.931	.7087 18.000	1.587 40.31	.32 8.1	1/4-28 —	.202 5.13
1 1/4 1 3/8 1 7/16	SG220EL SG222EL SG223EL	+0.0008 -0.0000 — —	2.8346 72.000	1 9/16 39.67	.4530 11.506	.7480 19.000	1.847 46.91	.34 8.6	1/4-28 —	.239 6.07
1 1/2	SG224EL	+0.0008 -0.0000 — —	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
1 5/8 1 11/16 1 3/4	SG226EL SG227EL SG228EL	+0.0008 -0.0000 — —	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	+0.0008 -0.0000 — —	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 1 1/2" and smaller shaft, +0.0000" -0.0005" (+0.000 mm -0.013 mm); all others +0.0000" -0.0006" (+0.000 mm -0.015 mm).

◆ Max fillet radius of housing to clear bearing corner.

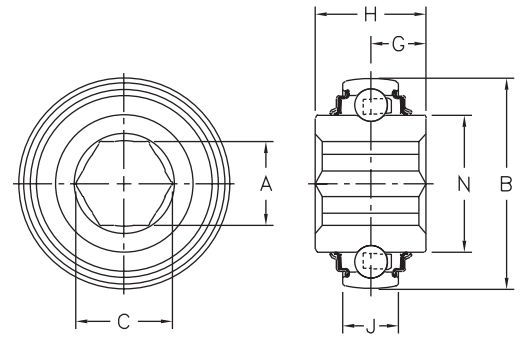
Selection guide, pages B-9, B-10.

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)

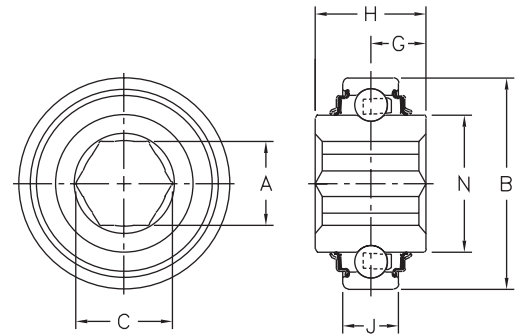
Hex shaft size, inches	Bearing number	Industry number	A		B		C	G	H	J	N				
			Across flats	Tolerance	Outside diameter	Tolerance									
1/16	11K204N	(204KRRB2)	.695		1.8504		.797	.412	.8250	.5906	1.121				
			17.65		47.000		20.24		10.48			20.955	15.000	28.47	
			.876		2.0472		1.010		.500			1.0000	.5906	1.313	
7/8	14K205N	(205KRRB2)	22.25		52.000	+0.000	25.65	12.70	25.400	15.000	33.35				
			1.001		2.4409		-0.005		1.153			.472	.9449	.7087	1.587
			25.43		62.000		+0.000		29.29			12.00	24.000	18.000	40.31
1	16K206N	(206KRRB6)	1.126	+0.005	2.8346	-0.013	1.299	.742	1.4844	.7480	1.847				
			28.60		72.000		32.99		18.85			37.704	19.000	46.91	
			1.251		3.1496		1.450		.718			1.4375	.7087	2.083	
1 1/4	20K5-208E3△	(W208PPB16)	31.78	+0.13	80.000		36.83	18.26	36.512	18.000	52.91				
			1.501		3.3465		+0.000		1.732			.591	1.1811	.8661	2.281
			38.13		85.000		-0.006		43.99			15.00	30.000	22.000	57.94
1 1/2	24K209N	(209KRRB2)	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									
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	
			.695		1.8504		.797		.412			.8250	.5512	1.121	
1/16	11KB204N	(204KRR2)	17.65		47.000	+0.000	20.24	10.48	20.955	14.000	28.47				
			.876		2.0472		-0.005		1.010			.500	1.0000	.5906	1.313
			22.25		52.000		+0.000		25.65			12.70	25.400	15.000	33.35
1	16KB206N	(206KRR6)	1.001	+0.005	2.4409	-0.013	1.153	.472	.9449	.6299	1.587				
			25.43		62.000		29.29		12.00			24.000	16.000	40.31	
			1.126		2.8346		1.299		.742			1.4844	.6693	1.847	
1 1/8	18KB207N	(207KRR9)	28.60	+0.13	72.000		32.99	18.85	37.704	17.000	46.91				
			1.501		3.3465		+0.000		1.732			.591	1.1811	.7480	2.281
			31.78		85.000		-0.006		43.99			15.00	30.000	19.000	57.94
1 1/2	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.

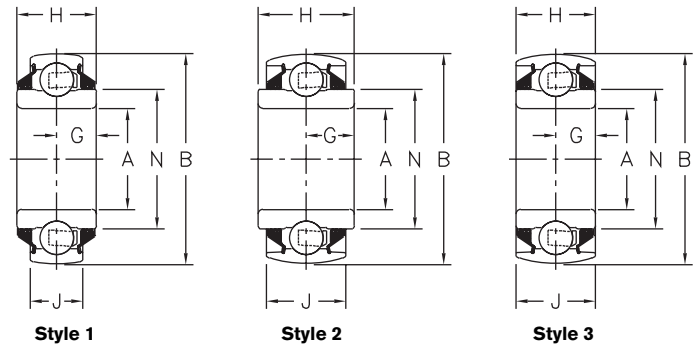
Selection guide, pages B-9, B-10.

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



Dimensions (inches/mm)

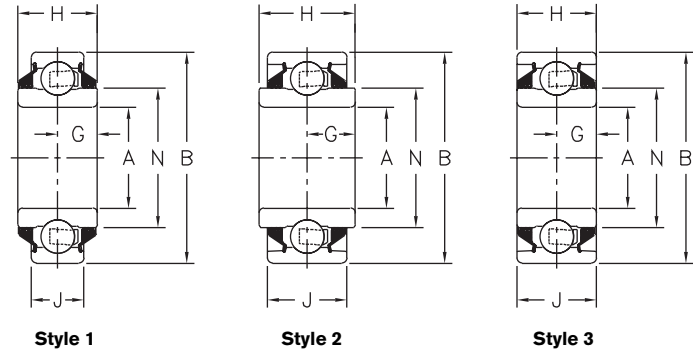
Shaft diameter <i>mm inches</i>	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N
				Bearing bore	Tolerance + .0000" +0.000 mm	Outside diameter	Tolerance + .0000" +0.000 mm				
7/8	14R4-208E3	(W208PPB14)	2	.890	-.010	3.438	‡	.719	1.4375	1.1875	2.083
				22.61	- 0.25	87.32		18.26	36.512	30.162	52.91
1 1/16	19R208E3	(W208PPB7)	1	1.1880	-.0005	3.1496	-0.0005	.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	-0.013	.594	1.1875	1.1875	2.083
				30.175	- 0.013	80.000		15.08	30.162	30.162	52.91
1 1/2	24R6-208E3	(W208PPB2)	2	1.5005	-.0005	3.1496	-0.013	.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	-0.013	.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	-0.013	.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	-0.0006	.594	1.1875	1.1875	2.281
				45.000	- 0.013	85.000		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 5/16	31R3-210E3	(W210PPB2)	3	1.9380	-.0005	3.5433	-0.015	.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	-0.015	.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, $\pm .005"$ (± 0.13 mm). Center portion of O.D. is cylindrical.

Round Bore Ball Bearings

Cylindrical O.D.
Triple Lip Seals
Non-relubricatable



Dimensions (inches/mm)

Shaft diameter <i>mm inches</i>	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N
				Bearing bore	Tolerance + .0000" +0.000 mm	Outside diameter	Tolerance + .0000" +0.000 mm				
1 3/16	19RB208E3	(W208PP7)	1	1.1880	-0.0005	3.1496	-0.013	.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	-0.0005	3.1496	-0.013	.594	1.1875	1.1875	2.083
				30.175		80.000		15.08	30.162	30.162	52.91
1 1/2	24RB6-208E3	(W208PP2)	2	1.5005	-0.0005	3.1496	-0.013	.844	1.6875	1.1875	2.083
				38.113		80.000		21.43	42.862	30.162	52.91
1 1/2	24RB8-208E3	(W208PP10)	1	1.5005	-0.013	3.1496	-0.013	.844	1.6875	.8268	2.083
				38.113		80.000		21.43	42.862	21.000	52.91
1 5/16	31RB3-210E3	(W210PP2)	3	1.9380	-0.0006	3.5433	-0.015	.594	1.1875	1.1875	2.475
				49.225		90.000		15.08	30.162	30.162	62.86
2 3/16	35RB3-211E3	(W211PP2)	3	2.1880	-0.0006	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.

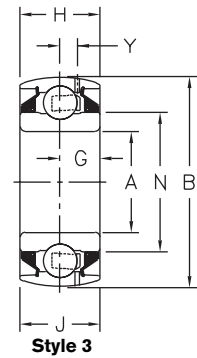
Selection guide, pages B-9, B-10.

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

Additional information, page B-77.

Round Bore Ball Bearings

Alignable Spherical O.D.
Triple Lip Seals
Relubricatable



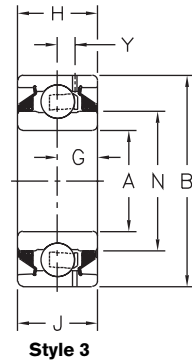
Dimensions (inches/mm)

Shaft diameter inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N	Y
				Bearing bore	Tolerance +.0000" +0.000 mm	Outside diameter	Tolerance +.0000" +0.000 mm					
1 $\frac{3}{8}$	22RG3-210E3	(GW210PPB3)	3	1.4065	-.0005	3.5433	-0.0006 -0.015	.594	1.1875	1.1875	2.475	.255
				35.725	-0.013	90.000							15.08	30.162	30.162	62.86	6.48
1 $\frac{1}{2}$	24RG3-209E3	(GW209PPB4)	3	1.535	-.010	3.3465		.594	1.1875	1.1875	2.281	.248
				38.99	-0.25	85.000						
1 $\frac{5}{8}$	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		.594	1.1875	1.1875	2.281	.248
				45.000	-0.013	85.000						
1 $\frac{3}{4}$	28RG3-210E3	(GW210PPB5)	3	1.785	-.010	3.5433		.594	1.1875	1.1875	2.475	.255
				45.34	-0.25	90.000						
1 $\frac{15}{16}$	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 $\frac{3}{16}$	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



Dimensions (inches/mm)

Shaft diameter inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N	Y
				Bearing bore	Tolerance +.0000" +0.000 mm	Outside diameter	Tolerance +.0000" +0.000 mm					
1 $\frac{3}{8}$	22RBG3-210E3	(GW210PP3)	3	1.4065	-.0005	3.5433	-0.0006 -0.015	.594	1.1875	1.1875	2.475	.255
				35.725	-0.013	90.000							15.08	30.162	30.162	62.86	6.48
1 $\frac{5}{8}$	26RBG3-211E3	(GW211PP4)	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
1 $\frac{15}{16}$	31RBG3-210E3	(GW210PP2)	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 $\frac{3}{16}$	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.

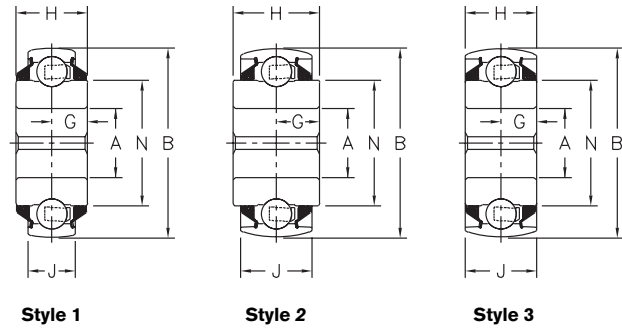
Selection guide, pages B-9, B-10.

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



Dimensions (inches/mm)

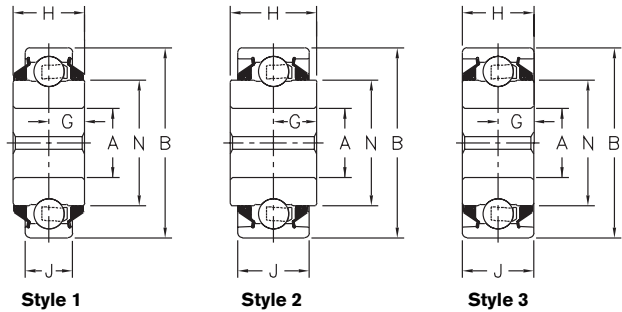
Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N
				Bearing bore	Tolerance	Outside diameter	Tolerance +.0000" +0.000 mm				
7/8	14S4-208E3	(W208PPB11)	2	.905	±.005 ±0.13	3.438	‡	.719	1.4375	1.1875	2.083
				22.99		87.32		18.26	36.512	30.162	52.91
1	16S5-208E3	(W208PPB6)	1	1.030		3.1496	-0.0005	.719	1.4375	.7087	2.083
				26.76		80.000		18.26	36.512	18.000	52.91
1	16S2-208E3	(W208PPB9)	2	1.030		3.1496	-0.013	.719	1.4375	1.1875	2.083
				26.76		80.000		18.26	36.512	30.162	52.91
1 1/8	18S5-2E08E3	(W208PPB5)	1	1.185		3.1496	-0.0005	.719	1.4375	.7087	2.083
				30.10		80.000		18.26	36.512	18.000	52.91
1 1/8	18S2-2E08E3	(W208PPB8)	2	1.185		3.1496	-0.013	.719	1.4375	1.1875	2.083
				30.10		80.000		18.26	36.512	30.162	52.91
1 1/8	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	
1 1/4	20S2-209E3	(W209PPB5)	2	1.280	3.3465	-0.0006	.719	1.4375	1.1875	2.281	
				32.51	85.000		18.26	36.512	30.162	57.94	
1 1/4	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	
1 1/2	24S3-211E3	(W211PPB3)	3	1.530	3.9370	-0.0006	.656	1.3125	1.3125	2.749	
				38.86	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.

Square Bore Ball Bearings

Cylindrical O.D.
Triple Lip Seals
Non-relubricatable



Dimensions (inches/mm)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N
				Bearing bore	Tolerance	Outside diameter	Tolerance +.0000" +0.000 mm				
7/8	14SB5-208E3	(W208PP13)	1	.905	±.005 ±0.13	3.1496	-0.0005	.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	-0.013	.719	1.4375	.7087	2.083
				26.76		80.000		18.26	36.512	18.000	52.91
1	16SB2-208E3	(W208PP9)	2	1.030		3.1496	-0.0005	.719	1.4375	1.1875	2.083
				26.76		80.000		18.26	36.512	30.162	52.91
1 1/8	18SB5-2E08E3	(W208PP5)	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
1 1/8	18SB2-2E08E3	(W208PP8)	2	1.185		3.1496	-0.0006	.719	1.4375	1.1875	2.083
				30.10		80.000		18.26	36.512	30.162	52.91
1 1/2	24SB3-211E3	(W211PP3)	3	1.530	3.9370	-0.015	.656	1.3125	1.3125	2.749	
				38.96	100.000		16.67	33.338	33.338	69.82	

Please consult for availability.

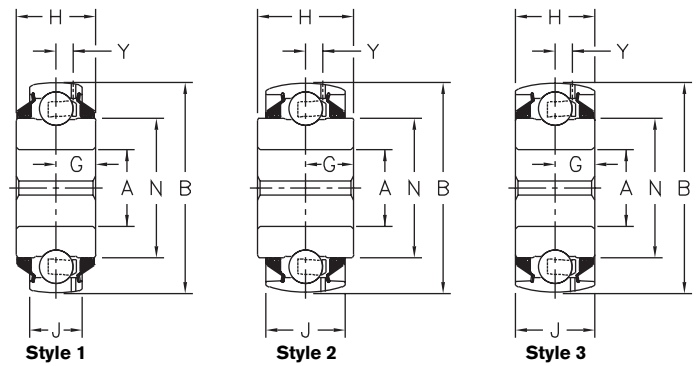
Selection guide, pages B-9, B-10.

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

Additional information, page B-77.

Square Bore Ball Bearings

Alignable Spherical O.D.
Triple Lip Seals
Relubricatable



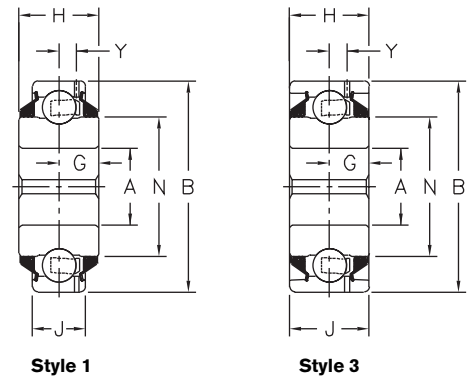
Dimensions (inches/mm)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N	Y
				Bearing bore	Tolerance	Outside diameter	Tolerance					
1	16SG5-208E3	(GW208PPB6)	1	1.030	±.005	3.1496	+0.000	.719	1.4375	.8661	2.083	.253
				26.16		80.000			18.26	36.512	22.000	52.91	6.43
1 1/8	18SG5-2E08E3	(GW208PPB5)	1	1.185	±0.13	3.1496	-0.005	.719	1.4375	.8661	2.083	.253
				30.10		80.000			18.26	36.512	22.000	52.91	6.43
1 1/8	18SG2-2E08E3	(GW208PPB8)	2	1.185	±0.13	3.1496	±0.013	.719	1.4375	1.1875	2.083	.253
				30.10		80.000			18.26	36.512	30.162	52.91	6.43
1 1/4	20SG5-209E3	(GW209PPB8)	1	1.280	±0.13	3.3465	+0.000	.719	1.4375	.8661	2.281	.254
				32.51		85.000			18.26	36.512	22.000	57.94	6.45
1 1/2	24SG3-211E3	(GW211PPB3)	3	1.530	±0.13	3.9370	+0.000	.656	1.3125	1.3125	2.749	.267
				38.86		100.000			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



Dimensions (inches/mm)

Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N	Y
				Bearing bore	Tolerance	Outside diameter	Tolerance					
1 1/4	20SBG5-209E3	(GW209PP8)	1	1.280	±.005	3.3465	+0.000	.719	1.4375	.8661	2.281	.254
				32.51		85.000			18.26	36.512	22.000	57.94	6.45
1 1/2	24SBG3-211E3	(GW211PP3)	3	1.530	±0.13	3.9370	+0.000	.656	1.3125	1.3125	2.749	.267
				38.86		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.

Additional Information

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 $\frac{1}{8}$ " (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 $\frac{1}{32}$ " (0.8 mm) larger than the largest inch shown. Cast slots in pillow blocks are normally $\frac{1}{16}$ " 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 $+200^{\circ}\text{F}$ (-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
$\frac{1}{2}$ "-2"	Nominal to $-.0005$ "
$2\frac{1}{16}$ "-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.

Additional Information

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 $\frac{1}{32}$ " (0.8 mm) larger than the largest inch shown. Cast slots in pillow blocks are normally $\frac{1}{16}$ " 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 $+200^{\circ}\text{F}$ (-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
$\frac{1}{2}$ "—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
1/2" — 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

Symbol	Description	PL	3	U	2	E	20	H	C	K75	
F	Flanged unit, 3 and 4 bolt	}	}	}	}	}	}	}	}	}	
FB	Flanged bracket, 3 bolt										
FF	Flanged screw conveyor unit, 4-bolt										
FC	Flanged cartridge unit, 4-bolt round										
FX	Flanged unit, 2-bolt										
HM	Hanger, screw conveyor unit										
P	Pillow block, standard backing										
PH	Pillow block, high backing										
PL	Pillow block, low backing										
PT	Pillow block, tapped base										
3	Integral bearing seals } For standard duty units										
U	Wide inner ring, spring locking, relubricatable			}							
Y	Wide inner ring, eccentric cam locking collar, relubricatable										
2	Series 200 ball bearing designation				}						
B	Inner ring bore equal to a bore of preceding smaller bearing group										
E	Inner ring bore equal to a bore of following larger bearing group										
20	Shaft diameter, in sixteenths of an inch					}					
M50	Shaft diameter, metric series, in millimeters										
H	Floating labyrinth seals						}				
N	Single lip seals										
E3	Triple lip seals										
C	Closed end unit								}		
K75	Nickel plated housing										

Intermediate Duty Ball Bearing Units

Symbol	Description	W	F	U	G	2	E	20	N	K75	
W	DURA-KLEAN housing	}	}	}	}	}	}	}	}	}	
F	Flanged unit, 3 and 4 bolt										
FB3	Flanged bracket, 3 bolt										
FR	Flanged unit, 3 and 4-bolt, inboard mounting										
FS	Flanged unit, 3 and 4-bolt round, formed steel										
FSA	Flanged unit, 3-bolt triangular, formed steel										
FSX	Flanged unit, 2-bolt, formed steel										
FX	Flanged unit, 2-bolt										
FXR	Flanged unit, 2-bolt inboard mounting										
PS	Pillow block, formed steel housing										
P3	Pillow block, standard backing										
PL3	Pillow block, low backing										
S	Extended inner ring, spring locking			}							
U	Wide inner ring, spring locking										
Y	Wide inner ring, eccentric cam locking collar										
W	Extended inner ring, eccentric cam locking collar										
None	Non-relubricatable bearing			}							
G	Relubricatable bearing										
2	Series 200 ball bearing designation					}					
B	Inner ring bore equal to a bore of preceding smaller bearing group										
E	Inner ring bore equal to a bore of following larger bearing group										
20	Shaft size in sixteenths of an inch						}				
M30	Shaft diameter, metric series, in millimeters										
E	Molded single lip seals							}			
H	Floating labyrinth seals										
N	Single lip seals										
U	Contact seals (W200 only)										
E3	Triple lip seals										
K75	Nickel plated housing										

Continued next page.

Klean-Gard Units

Symbol	Description	K	FX - S	2	E	20	DC
K	Polyamide housing material	}	}	}	}	}	}
KL	Polypropylene housing material						
F	Four bolt flanged housing	}	}	}	}	}	}
FX	Two bolt flanged housing						
P	Pillow Block						
S	Extended inner ring, spring locking						
2	Series 200 ball bearing designation						
E	Inner ring bore equal to a bore of following larger bearing group						
20	Shaft size in sixteenths of an inch	}	}	}	}	}	}
M30	Shaft diameter, metric series, in millimeters						
None	Open end unit, basic unit	}	}	}	}	}	}
C	Closed end unit, no auxiliary seals						
D	Open end unit, end cap with seals and rear auxiliary dual lip seal						
DC	Closed end unit, end cap and rear auxiliary dual lip seal						

Ball Bearing Takeup Units

Symbol	Description	TDS	3 - U	2	39	N	C - 18
T	Takeup unit, standard slot	}	}	}	}	}	}
TH	Takeup unit, wide slot						
TAS	Conveyor takeup, formed steel frame						
TDS	Conveyor takeup, hinged top, welded steel frame						
TGS	Conveyor elevator takeup, welded steel frame						
NT	Conveyor takeup, welded channel frame						
LC	Universal conveyor takeup frame, welded steel light duty frames only						
3	Bearing design, integral seals						
U	Wide inner ring, spring locking						
2	Series 200 ball bearing designation						
39	Shaft diameter, in sixteenths of an inch	}	}	}	}	}	}
M60	Shaft diameter, metric series, in millimeters						
N	Single lip seals						
C	Closed end unit						
18	Takeup adjustment, inches						

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

Symbol	Description	U	B	G	2	B	08	H	L
S	Extended inner ring, spring locking	}	}	}	}	}	}	}	}
U	Wide inner ring, spring locking								
Y	Wide inner ring, eccentric cam collar								
W	Inner ring extended one side only, eccentric cam collar								
None	O.D. of outer ring is spherical	}	}	}	}	}	}	}	}
B	O.D. of outer ring is cylindrical								
None	Non-relubricatable	}	}	}	}	}	}	}	}
G	Relubricatable (two holes in outer ring @ 180°)								
2	Series 200 ball bearing designation								
B	Inner ring bore equal to a bore of preceding smaller bearing group	}	}	}	}	}	}	}	}
E	Inner ring bore equal to a bore of following larger bearing group								
08	Shaft diameter in sixteenths of an inch	}	}	}	}	}	}	}	}
M17	Shaft diameter, metric series, in millimeters								
E	Molded single lip seals	}	}	}	}	}	}	}	}
U	Contact seals (W200 only)								
N	Lip seals								
H	Floating labyrinth seals								
E3	Triple lip seals								
L1	Bearing without collar	}	}	}	}	}	}	}	}
L	Bearing with collar/set screws								

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

Symbol	Description	31	R	B	G	3	-	2	10	E3
None	Bore is basic metric size	}	}	}	}	}	}	}	}	}
31	Shaft size in sixteenths of an inch									
R	Bearing bore is round	}	}	}	}	}	}	}	}	}
S	Bearing bore is square									
K	Bearing bore is hex									
None	O.D. of outer ring is spherical	}	}	}	}	}	}	}	}	}
B	O.D. of outer ring is cylindrical									
None	Non-relubricatable	}	}	}	}	}	}	}	}	}
G	Relubricatable (two holes in outer ring @ 180°)									
None	Metric width outer ring; basic inch width inner ring	}	}	}	}	}	}	}	}	}
2	Basic inch width outer ring; intermediate inch width inner ring									
3	Basic inch width outer ring; basic inch width inner ring									
4	Basic inch width outer ring; unground spherical O.D. with flat ground cylindrical center; intermediate inch width inner ring									
5	Metric width outer ring; intermediate inch width inner ring									
6	Basic inch width outer ring; wide inch width inner ring									
7	Wide metric width outer ring; intermediate inch width inner ring									
8	Wide metric width outer ring; wide inch width inner ring									
2	Series 200 ball bearing designation	}	}	}	}	}	}	}	}	}
E	Bore is .031 inch oversize									
10	One fifth of basic mm bore size	}	}	}	}	}	}	}	}	}
None	Non-metallic retainer									
J	Formed steel retainer, two-piece	}	}	}	}	}	}	}	}	}
N	Single lip seals									
E3	Triple lip seals									

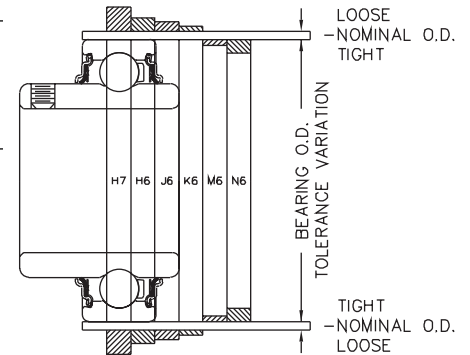
The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features, 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 heavy loads	N6	Outer ring not axially displaceable
		Light loads	M6	
	Direction of load indeterminate	Heavy shock loads	K6	Outer ring, as a rule not axially displaceable
		Normal and heavy loads where outer ring does not have to be axially displaceable		
Housing split or not split radially	Housing stationary in relation to direction of loads	Normal and light loads where displaceability of outer ring is desirable	J6	Outer ring, as a rule, axially displaceable
		Shock loads, temporary complete unloading	H6	Outer ring is easily displaceable axially
		All loads			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 Δ	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			
2M17	211	...	40	1.5748	+0.000	.0000	-0.0000	.00000	-0.0000	.0002T	-0.0002	.0005T	-0.0005	.0008T	-0.0008	.0011T	-0.0011
2M20	212	204	47	1.8504	-0.0005	.0015L	+0.0010	.0011L	+0.0006	.0009L	+0.0004	.0006L	+0.0001	.0003L	-0.0002	.0000	-0.0005
					+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
2M25	216	205	52	2.0472	+0.000	.0000	-0.0000	.0000	-0.0000	.0002T	-0.0002	.0006T	-0.0006	.0010T	-0.0010	.0013T	-0.0013
2M30	219	206	62	2.4409	-0.0005	.0017L	+0.0012	.0012L	+0.0007	.0010L	+0.0005	.0006L	+0.0001	.0002L	-0.0003	.0001T	-0.0006
2M35	223	207	72	2.8346	+0	0	-0	0	-0	5T	-5	15T	-15	25T	-25	33T	-43
2M40	225	208	80	3.1496	-13	43L	+30	30L	+17	26L	+13	15L	+2	5L	-8	2T	-15
2M45	228	209	85	3.3465	+0.000	.0000	-0.0000	.0000	-0.0000	.0002T	-0.0002	.0007T	-0.0007	.0012T	-0.0012	.0016T	-0.0016
2M50	231	210	90	3.5433	-0.0006	.0020L	+0.0014	.0015L	+0.0009	.0013L	+0.0007	.0008L	+0.0002	.0003L	-0.0003	.0001T	-0.0007
2M55	235	211	100	3.9370	+0	0	-0	0	-0	5T	-5	18T	-18	30T	-30	40T	-40
2M60	239	...	110	4.3307	-15	50L	+35	38L	+23	33L	+18	20L	+5	8L	-8	3T	-18

Please consult for availability.

1 μm = .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
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

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Series 300

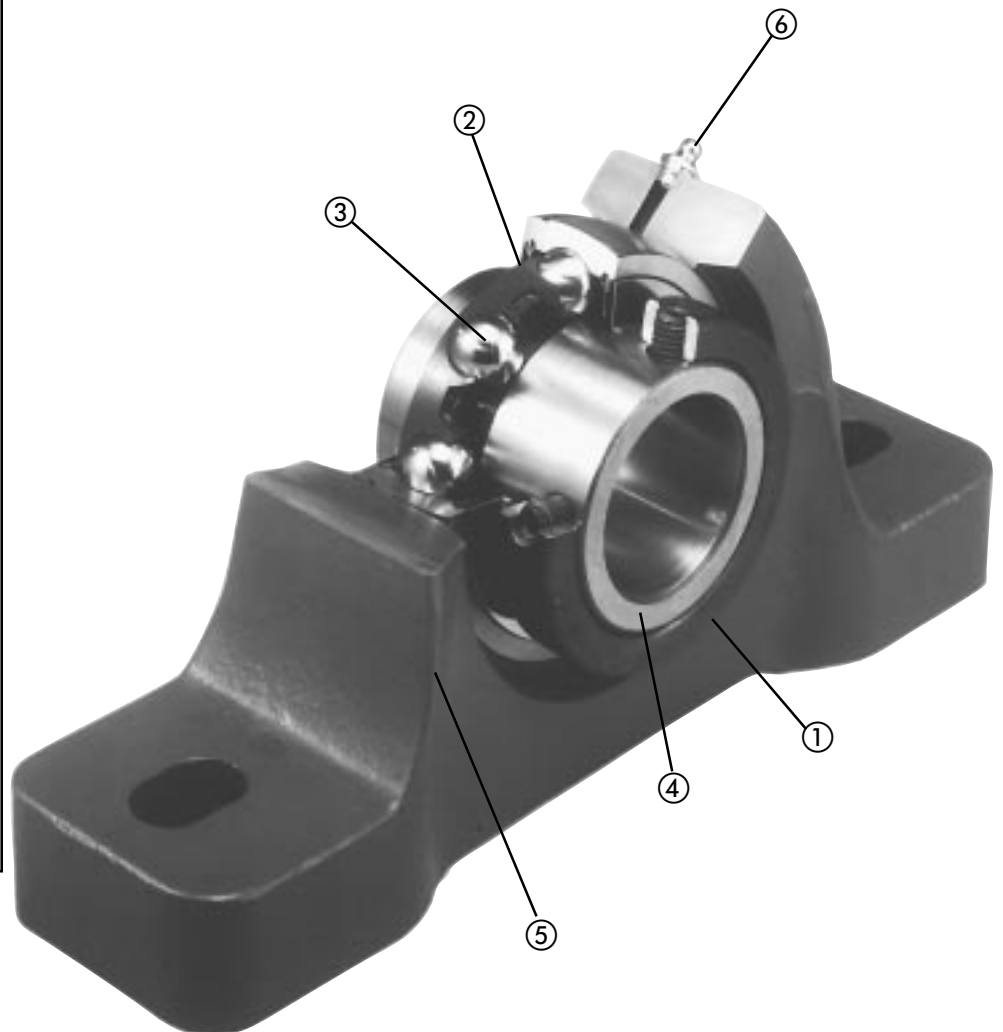
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Series 300

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 $\frac{3}{4}$ " through $3\frac{15}{16}$ ". High backing units for shaft sizes from $\frac{7}{8}$ " through $3\frac{15}{16}$ ". 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 $\frac{3}{4}$ " through $3\frac{15}{16}$ ". 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 $\frac{3}{4}$ " through $3\frac{15}{16}$ ". 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 $\frac{3}{4}$ " through $3\frac{15}{16}$ ". 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 $\frac{7}{8}$ " through $2\frac{15}{16}$ ". 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 $\frac{3}{4}$ " through $3\frac{15}{16}$ ". 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.



Selection Series 300

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:

$$P = F_r$$

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

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:

$$P = F_r$$

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

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:

$$\text{Maximum } P = .56F_r + 2.30F_a$$

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

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

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

Determine X and Y from Table 2.

Calculate P for the trial bearing.

$$P = XF_r + YF_a$$

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

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.

Selection Series 300

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)
- L₁₀ = rating life, hours
- n = speed, revolutions per minute
- P = equivalent radial load, pounds (or newtons)
- X = radial factor
- Y = thrust factor

basic formulas:

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

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

Table 1 • Relation of L₁₀ 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	

Bearing life, hours L ₁₀	$\left(\frac{C}{P}\right)$ ratio									
	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 L₁₀ 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

F _a Nd ²	e	F _a F _r ≤ e		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. Nd² values are given in Table 3, p. C-7.

Life Adjustment

The Rating Life, L₁₀, 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) % reliability,

a₁ = Life adjustment factor for reliability

a₂ = Life adjustment factor for material and processing

a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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.

Load Ratings Series 300

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								
		newtons	pounds	newtons	pounds												
3/4	312	7 890	1770	12 370	2780	10950	3/8	7	.984								
7/8 15/16 1	314 315 316	10 900	2450	16 460	3700	9350	7/16	7	1.34								
1 1/8 1 3/16	318 319									15 700	3530	21 660	4870	8300	31/64	8	1.88
1 1/4 1 3/8 1 7/16	320 322 323																
1 1/2	324	24 000	5390	31 230	7020	7200	19/32	8	2.82								
1 5/8 1 11/16 1 3/4	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	3/4	8	4.50
2 2 1/8 2 3/16	332 334 335									44 600	10000	55 200	12400	4950	13/16	8	5.28
2 1/4 2 7/16	336 339	51 900	11700	62 700	14100	4450	7/8	8	6.12								
2 11/16 2 3/4	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	1 1/8	8	10.1								
3 7/16 3 1/2	355 356									107 200	24100	109 400	24600	3100	1 1/4	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.

Load Ratings Series 300

Table 4 • Radial load ratings in pounds at various RPM for appropriate L₁₀ 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
¾	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 15/16 1	314 315 316	3000	.....	.....	.....	897	834	782	741	712	682	660	623	579	542	527	490	460	438	419	380	
		8000	.....	.....	815	712	645	601	567	538	516	493	475	449	419	394	382	353	332	317	303	281
		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 1 3/16	318 319	3000	.....	.....	.....	1170	1090	1020	974	935	896	867	818	760	711	692	643	604	575	550	511	
		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 1 3/8 1 7/16	320 322 323	3000	.....	.....	.....	1390	1290	1210	1150	1100	1050	1020	967	898	840	817	760	713	679	650	604	
		8000	.....	.....	1260	1100	1001	932	881	834	800	765	737	696	650	610	593	547	515	490	469	435
		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 1 11/16 1 3/4	326 327 328	3000	.....	.....	.....	2210	2050	1920	1820	1750	1680	1620	1530	1420	1330	1290	1200	1130	1070	1030	952	
		8000	.....	.....	2010	1750	1590	1480	1390	1320	1260	1210	1160	1100	1030	967	939	867	816	776	743	687
		20000	.....	1850	1480	1280	1170	1090	1030	976	930	898	867	816	757	714	690	639	601	572	548	508
		40000	1860	1480	1170	1030	930	868	817	774	742	713	687	649	602	566	549	509	479	455	436	406
1 15/16	331	3000	.....	.....	.....	2580	2400	2250	2130	2040	1960	1890	1790	1660	1550	1510	1400	1320	1250	1200	1120	
		8000	.....	.....	2340	2040	1850	1720	1630	1540	1480	1410	1360	1280	1200	1120	1090	1010	952	906	867	816
		20000	.....	2160	1720	1500	1370	1270	1200	1130	1080	1040	1010	952	883	833	805	745	702	667	640	601
		40000	2170	1720	1370	1200	1080	1010	953	904	866	832	802	757	703	660	641	594	558	530	509	479
2 2 1/8 2 3/16	332 334 335	3000	.....	.....	.....	2990	2780	2600	2470	2370	2270	2200	2070	1920	1800	1750	1620	1530	1450	1380	1310	
		8000	.....	.....	2720	2370	2150	2000	1890	1790	1710	1640	1580	1490	1390	1300	1270	1170	1100	1040	980	920
		20000	.....	2510	2000	1740	1590	1480	1390	1310	1250	1210	1170	1100	1020	965	933	863	812	773	733	693
		40000	2520	2000	1590	1390	1250	1170	1100	1040	1003	964	929	877	813	764	742	687	646	614	584	544
2 1/4 2 7/16	336 339	3000	.....	.....	.....	3400	3160	2960	2810	2690	2580	2500	2360	2190	2050	1990	1850	1730	1630	1530	1430	
		8000	.....	.....	3090	2690	2440	2270	2140	2030	1950	1860	1790	1690	1580	1480	1440	1330	1250	1160	1060	980
		20000	.....	2850	2270	1970	1810	1680	1580	1500	1420	1380	1330	1250	1160	1090	1060	981	923	873	823	773
		40000	2860	2270	1810	1580	1420	1330	1250	1180	1140	1090	1050	996	924	868	843	781	734	684	634	584
2 11/16 2 3/4	343 344	3000	.....	.....	.....	4340	4030	3780	3580	3440	3290	3190	3010	2790	2610	2540	2360	2230	2130	2030	1930	
		8000	.....	.....	3940	3440	3110	2900	2740	2590	2480	2380	2290	2160	2020	1890	1840	1690	1590	1490	1390	1290
		20000	.....	3640	2900	2520	2300	2140	2020	1910	1820	1760	1690	1590	1480	1390	1350	1250	1150	1050	950	850
		40000	3650	2900	2300	2020	1820	1700	1600	1510	1450	1390	1340	1270	1170	1100	1070	995	925	855	785	715
2 5/8	347	3000	.....	.....	.....	4770	4440	4160	3940	3780	3620	3510	3310	3070	2870	2790	2590	2460	2360	2260	2160	
		8000	.....	.....	4340	3780	3430	3190	3010	2850	2730	2610	2520	2380	2220	2080	2020	1860	1760	1660	1560	1460
		20000	.....	4000	3190	2770	2530	2360	2220	2100	2000	1930	1860	1750	1630	1530	1480	1370	1270	1170	1070	970
		40000	4020	3190	2530	2220	2000	1870	1750	1660	1590	1530	1480	1390	1290	1210	1180	1090	1010	930	850	770
3 3 3/16	348 351	3000	.....	.....	.....	5090	4730	4430	4200	4030	3860	3740	3520	3270	3060	2980	2760	2630	2530	2430	2330	
		8000	.....	.....	4620	4030	3650	3400	3210	3040	2910	2790	2680	2530	2360	2220	2150	1990	1890	1790	1690	1590
		20000	.....	4260	3400	2950	2700	2510	2360	2240	2130	2060	1990	1870	1730	1630	1580	1460	1360	1260	1160	1060
		40000	4280	3400	2700	2360	2130	1990	1870	1770	1700	1630	1570	1480	1380	1290	1250	1160	1060	960	860	760
3 7/16 3 1/2	355 356	3000	.....	.....	.....	5930	5510	5170	4900	4700	4500	4350	4110	3810	3570	3470	3230	3060	2960	2860	2760	
		8000	.....	.....	5390	4700	4260	3960	3740	3540	3400	3250	3120	2950	2760	2680	2510	2310	2210	2110	2010	1910
		20000	.....	4970	3960	3440	3150	2930	2760	2610	2490	2400	2320	2180	2020	1900	1840	1710	1610	1510	1410	1310
		40000	4990	3960	3150	2760	2490	2320	2180	2070	1980	1900	1830	1730	1600	1510	1460	1330	1230	1130	1030	930
3 15/16	363	3000	.....	.....	.....	7230	6720	6300	5970	5730	5490	5310	5010	4650	4350	4230	4030	3860	3760	3660	3560	
		8000	.....	.....	6570	5730	5190	4830	4560	4320	4140	3960	3810	3600	3360	3150	3060	2860	2760	2660	2560	2460
		20000	.....	6060	4830	4200	3840	3570	3360	3180	3030	2930	2820	2660	2460	2320	2240	2060	1960	1860	1760	1660
		40000	6090	4830	3840	3360	3030	2830	2660	2520	2420	2320	2240	2110	1960	1840	1780	1640	1540	1440	1340	1240

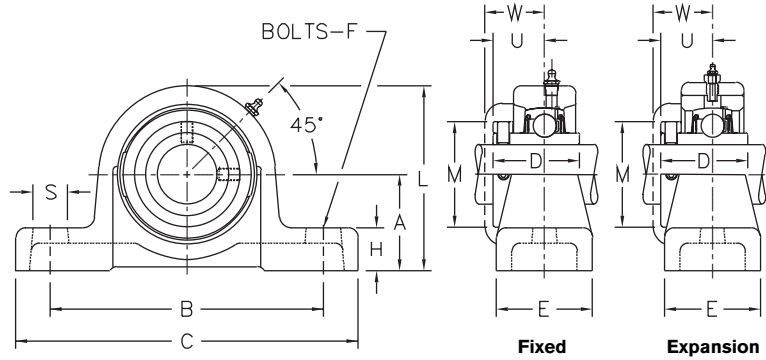
Operation in the high speed shaded areas requires frequent relubrication.

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 Δ		A	B	C	D	E	F	H	L		M	S	U	W	Total axial expansion ◆	Unit wt. (lbs./kg.)	Bearing no.
	Fixed	Expansion	+ .000" - .010" + 0.00 - 0.25 mm							Fixed	Expansion							
3/4	P-U312	PE-U312	1 5/8 41.28	5 127.0	6 1/2 165.1	1 13/16 37.31	1 3/4 44.4	1/2 12	1 13/16 20.6	3 1/16 77.8	3 3/16 81.0	1 5/8 41.3	7/8 22.2	27/32 21.4	1 3/64 26.6	3/16 4.8	3.0 1.4	UG312L
7/8 1 1/16 1	P-U314 P-U315 P-U316	PE-U314 PE-U315 PE-U316	1 7/8 47.62	5 1/2 139.7	7 177.8	1 43/64 42.46	2 50.8	1/2 12	7/8 22.2	3 3/16 90.5	3 23/32 94.4	2 50.8	7/8 22.2	63/64 25.0	1 15/64 31.4	3/16 4.8	4.0 1.8	UG314L UG315L UG316L
1 1/8 1 3/16	P-U318 P-U319	PE-U318 PE-U319	2 1/8 53.98	6 7/16 163.5	8 1/4 209.6	1 59/64 48.82	2 1/4 57.2	1/2 12	1 5/16 23.8	4 1/16 103.2	4 1/4 108.0	2 5/16 58.7	1 1/16 27.0	1 1/64 29.0	1 13/32 35.7	3/16 4.8	5.9 2.7	UG318L UG319L
1 1/4 1 3/8 1 7/16	P-U320 P-U322 P-U323	PE-U320 PE-U322 PE-U323	2 3/8 60.32	7 3/8 187.3	9 1/4 235.0	2 3/32 53.18	2 3/8 60.3	5/8 16	1 25.4	4 1/2 114.3	4 11/16 119.1	2 9/16 65.1	1 1/8 28.6	1 1/4 31.8	1 1/2 38.1	3/16 4.8	7.5 3.4	UG320L UG322L UG323L
1 1/2	P-U324	PE-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	5 7/32 132.6	3 1/16 77.8	1 1/4 31.8	1 29/64 35.3	1 39/64 40.9	3/16 4.8	11.5 5.2	UG324L
1 5/8 1 11/16 1 3/4	P-U326 P-U327 P-U328	PE-U326 PE-U327 PE-U328	2 7/8 73.02	8 1/4 209.6	10 1/4 260.4	2 19/32 65.88	3 76.2	5/8 16	1 1/16 33.3	5 1/2 139.7	5 5/8 142.9	3 1/4 82.6	1 1/8 28.6	1 39/64 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	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 1/8 34.9	6 152.4	6 7/32 158.0	3 7/16 87.3	1 1/8 28.6	1 43/64 42.5	1 31/32 50.0	3/16 4.8	17.2 7.8	UG331L
2 2 1/8 2 3/16	P-U332 P-U334 P-U335	PE-U332 PE-U334 PE-U335	3 1/2 88.90	10 1/4 260.4	12 5/8 320.7	3 1/16 77.79	3 3/8 85.7	3/4 20	1 1/2 38.1	6 5/8 168.3	6 13/16 173.0	3 15/16 100.0	1 1/4 31.8	1 27/32 46.8	2 3/16 55.6	3/16 4.8	21.5 9.8	UG332L UG334L UG335L
2 1/4 2 7/16	P-U336 P-U339	PE-U336 PE-U339	3 3/8 92.08	11 1/4 285.8	13 3/4 349.2	3 5/16 84.14	3 1/2 88.9	3/4 20	1 5/8 41.3	7 1/8 181.0	7 3/16 182.6	4 3/16 106.4	1 3/8 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 2 3/4	P-U343 P-U344	PE-U343 PE-U344	4 101.60	11 13/16 300.0	14 5/8 371.5	3 13/16 96.84	3 3/4 95.2	7/8 24	1 5/8 41.3	7 3/4 196.8	7 15/16 201.6	4 3/4 120.6	1 5/8 41.3	2 1/4 57.2	2 5/8 66.7	1/4 6.4	39.0 17.7	UG343L UG344L
2 15/16	P-U347	PE-U347	4 1/4 107.95	12 304.8	15 1/8 384.2	4 3/32 103.98	4 101.6	7/8 24	1 3/4 44.4	8 3/8 212.7	8 3/8 212.7	4 15/16 125.4	1 5/8 41.3	2 3/8 60.3	2 3/4 69.8	1/4 6.4	44.5 20.2	UG347L
3 3 3/16	P-U348 P-U351	PE-U348 PE-U351	4 9/16 115.89	12 1/4 311.2	15 5/8 390.5	4 13/32 111.92	4 5/16 105.6	7/8 24	1 15/16 49.2	9 228.6	9 228.6	5 1/16 144.5	1 5/8 41.3	2 19/32 65.9	3 76.2	3/8 9.5	53.0 24.0	UG348L UG351L
3 7/16 3 1/2	P-U355 P-U356	PE-U355 PE-U356	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	10 1/16 255.6	6 152.4	1 5/8 41.3	2 29/32 73.8	3 3/32 83.3	3/8 9.5	70.0 31.8	UG355L UG356L
3 15/16	P-U363	PE-U363	5 11/16 144.46	14 1/2 368.3	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	1 1/2 38.1	3 3/32 83.3	3 1/16 93.7	3/8 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 27/16" and smaller shafts, 1/4"-28 UNF; for other expansion units and all fixed units, 1/8" PT.

Δ 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.

□ Dimension E for PE-U326 thru PE-U328 is 2 3/4", PE-U336 and PE-U339 is 3 3/4".

Selection guide, pages C-5, C-6.

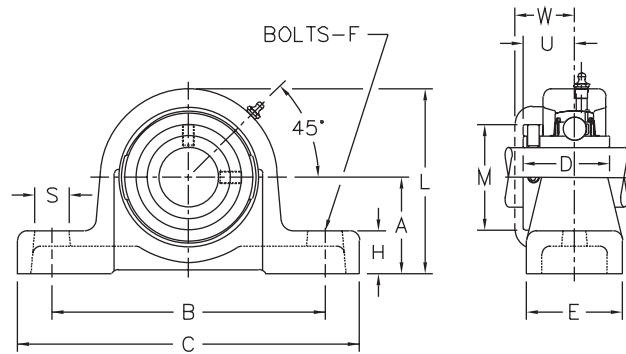
Load ratings, pages C-7, C-8.

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 Δ	A + .000" - .010" + 0.00 - 0.25mm	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	2 50.80	5 1/2 139.7	7 177.8	1 3/64 42.46	2 50.8	1/2 12	7/8 22.2	3 1/16 93.7	2 50.8	7/8 22.2	6 3/64 25.0	1 15/64 31.4	4.2 1.9	UG314L
	P2-U315														UG315L
	P2-U316														UG316L
1 1/8 1 3/16	P2-U318	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 1/64 29.0	1 13/32 35.7	6.5 2.9	UG318L
	P2-U319														UG319L
1 1/4 1 3/8 1 7/16	P2-U320	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	1 5/16 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
	P2-U322														UG322L
	P2-U323														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	3 1/8 79.38	9 228.6	11 279.4	2 19/32 65.88	3 76.2	5/8 16	1 1/16 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
	P2-U327														UG327L
	P2-U328														UG328L
1 5/16	P-U331★	3 1/8 79.38	8 7/8 225.4	11 1/8 282.6	2 13/16 71.44	3 3/8 79.4	5/8 16	1 3/8 34.9	6 152.4	3 7/16 87.3	1 1/8 28.6	1 49/64 42.5	1 31/32 50.0	17.2 7.8	UG331L
2 2 1/8 2 3/16	P2-U332	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
	P2-U334														UG334L
	P2-U335														UG335L
2 1/4 2 7/16	P2-U336	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 9/16 106.4	1 3/8 34.9	1 15/16 49.2	2 7/16 61.9	31.1 14.1	UG336L
	P2-U339														UG339L
2 11/16 2 3/4	P2-U343	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
	P2-U344														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★	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 3/8 41.3	2 19/32 65.9	3 76.2	53.0 24.0	UG348L
	P-U351★														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 3/32 83.3	70.0 31.8	UG355L
3 15/16	P-U363★	5 11/16 144.46	14 1/2 368.3	17 9/16 439.7	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 3/32 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.

Δ 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.

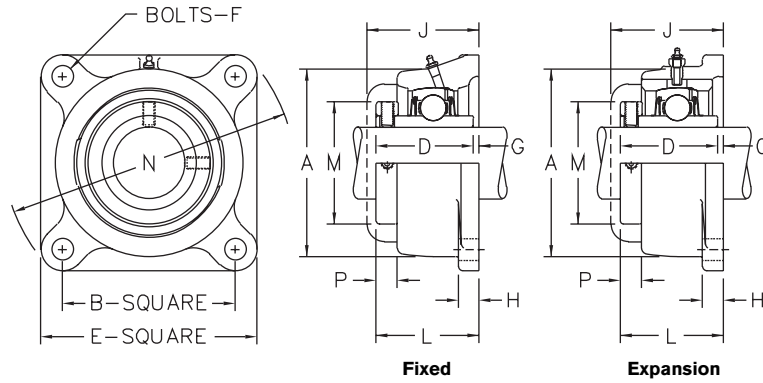
Load ratings, pages C-7, C-8.

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 Δ		A		B	D	E	F	G	H	J	L	M	N	P	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
	Fixed	Expansion	Fixed	Expansion														
3/4	F-U312	...	2 ³ / ₄ 69.8	3 ¹ / ₁₆ 77.8	2 ⁷ / ₈ 73.02	1 ¹⁵ / ₃₂ 37.31	3 ⁷ / ₈ 98.4	7 ¹ / ₁₆ 10	1/8 3.2	1/2 12.7	1 ⁵ / ₆₄ 45.6	1 ¹⁹ / ₃₂ 40.5	1 ⁵ / ₈ 41.3	5 ¹ / ₁₆ 128.6	1 ⁵ / ₆₄ 6.0	...	2.5 1.1	UG312L
7/8	F-U314	FE-U314	3 ¹ / ₄	3 ¹ / ₁₆	3 ¹ / ₂	1 ⁴³ / ₆₄	4 ⁵ / ₈	1/2	1/8	9/16	2 ³ / ₆₄	1 ⁵ / ₆₄	2	6 ¹ / ₁₆	1 ⁹ / ₆₄	3/16	4.0	UG314L
1 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	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	UG316L
1 ¹ / ₈	F-U318	FE-U318	3 ⁵ / ₈	4 ¹ / ₈	3 ¹³ / ₁₆	1 ⁵⁹ / ₆₄	4 ¹⁵ / ₁₆	1/2	1/8	5/8	2 ⁵ / ₁₆	2 ³ / ₆₄	2 ⁵ / ₁₆	6 ¹⁷ / ₃₂	2 ⁵ / ₆₄	3/16	4.7	UG318L
1 ¹³ / 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
1 ¹ / ₄	F-U320	FE-U320	4 ¹ / ₁₆	4 ¹⁵ / ₃₂	4	2 ³ / ₃₂	5 ¹ / ₈	1/2	5/32	5/8	2 ¹ / ₂	2 ¹ / ₄	2 ⁹ / ₁₆	6 ²⁵ / ₃₂	7/16	9/32	6.0	UG320L
1 ³ / ₈	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	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	UG323L
1 ¹ / ₂	F-U324	FE-U324	4 ⁹ / ₁₆ 115.9	5 127.0	4 ⁵ / ₈ 117.48	2 ⁵ / ₁₆ 58.74	6 152.4	5/8 16	5/32 4.0	5/8 15.9	2 ¹ / ₁₆ 68.3	2 ¹⁵ / ₃₂ 62.7	3 ¹ / ₁₆ 77.8	7 ²⁹ / ₃₂ 200.8	1/2 12.7	9/32 7.1	8.5 3.8	UG324L
1 ⁵ / ₈	F-U326	FE-U326	5	5 ¹ / ₂	4 ⁷ / ₈	2 ¹⁹ / ₃₂	6 ¹ / ₄	5/8	5/32	1 ¹ / ₁₆	3 ³ / ₆₄	2 ³ / ₄	3 ¹ / ₄	8 ⁹ / ₃₂	3 ⁵ / 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
1 ³ / ₄	F-U328	FE-U328	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	UG328L
1 ¹⁵ / ₁₆	F-U331	FE-U331	5 ¹ / ₂ 139.7	5 ¹⁵ / ₁₆ 150.8	5 ¹ / ₈ 130.18	2 ¹³ / ₁₆ 71.44	6 ¹ / ₂ 165.1	5/8 16	5/32 4.0	1 ¹ / ₁₆ 17.5	3 ¹ / ₆₄ 82.9	2 ³ / ₃₂ 75.4	3 ⁷ / ₁₆ 87.3	8 ⁵ / ₈ 219.1	3 ⁷ / ₆₄ 14.7	3/16 4.8	12.2 5.5	UG331L
2	F-U332	FE-U332	6	6 ³ / ₈	5 ³ / ₄	3 ¹ / ₁₆	7 ⁷ / ₁₆	3/4	5/32	3/4	3 ⁹ / ₁₆	3 ⁷ / ₃₂	3 ¹⁵ / ₁₆	9 ¹ / ₁₆	2 ¹ / ₃₂	3/16	16.5	UG332L
2 ¹ / ₈	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	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	UG335L
2 ¹ / ₄	F-U336	FE-U336	6 ³ / ₈	6 ¹³ / ₁₆	6	3 ⁵ / ₁₆	7 ⁷ / ₈	3/4	5/32	3/4	3 ³ / ₃₂	3 ¹⁵ / ₃₂	4 ³ / ₁₆	10 ¹ / ₈	2 ¹ / 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 ¹ / ₁₆	F-U343	FE-U343	7 ⁷ / ₁₆	7 ³ / ₄	7	3 ¹³ / ₁₆	8 ⁷ / ₈	7/8	5/32	7/8	4 ¹ / ₃₂	3 ³ / ₃₂	4 ³ / ₄	11 ²⁹ / ₃₂	3/4	1/4	30.0	UG343L
2 ³ / ₄	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	7 ⁷ / ₈ 200.0	8 ¹ / ₄ 209.6	7 ¹ / ₄ 184.15	4 ³ / ₃₂ 103.98	9 ¹ / ₁₆ 230.2	7/8 24	7/32 5.6	7/8 22.2	4 ¹ / ₁₆ 119.1	4 ⁹ / ₁₆ 109.5	4 ¹⁵ / ₁₆ 125.4	12 ¹ / ₁₆ 306.4	7/8 22.2	1/4 6.4	33.5 15.2	UG347L
3 ⁷ / ₁₆	F-U355	FE-U355	9 ¹ / ₄	9 ⁷ / ₈	8 ¹ / ₂	4 ¹⁵ / ₁₆	11	1	7/32	1 ¹ / ₄	5 ¹⁷ / ₃₂	5 ⁹ / ₃₂	6	14 ¹⁷ / ₃₂	1	3/8	58.0	UG355L
3 ¹ / ₂	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	10 ⁵ / ₈ 263.5	10 ¹⁵ / ₁₆ 277.8	9 ¹ / ₂ 241.30	5 ⁹ / ₁₆ 141.29	12 ¹ / ₈ 308.0	1 ¹ / ₈ 30	7/32 5.6	1 ¹ / ₈ 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	3/8 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 2⁷/₁₆" and smaller shafts, 1/4"-28 UNF; for other expansion units and all fixed units, 1/8" PT.

Δ 1¹/₈ thru 2¹⁵/₁₆ 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.

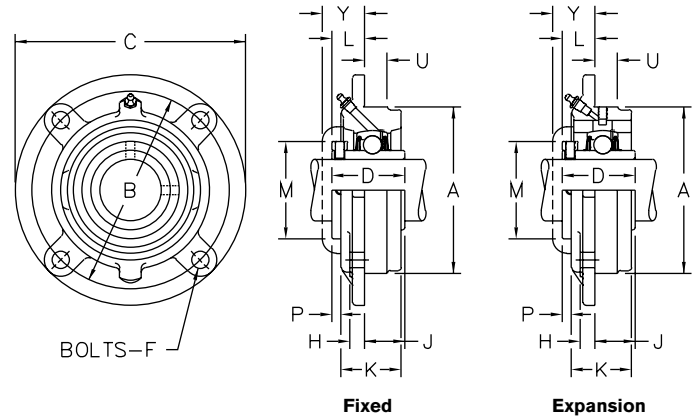
Load ratings, pages C-7, C-8.

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



Dimensions (inches/mm)

Shaft diameter inches	Flanged cartridge unit number Δ		A †	B	C	D	F Bolts	H	J	K	L	M	P	U	Y \blacklozenge	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
	Fixed	Expansion																
3/4	FC-U312	...	3.125 79.38	3 3/4 95.25	4 1/2 114.3	1 15/32 37.31	5/16 8	7/16 11.1	1 3/16 20.6	1 7/32 31.0	2 1/32 16.7	1 5/8 41.3	1 3/64 5.2	1/2 12.7	55/64 21.8	...	3.0 1.4	UG312L
7/8 1 19/16 1	FC-U314	...	3.688 93.68	4 1/2 114.30	5 3/8 136.5	1 49/64 42.46	3/8 10	7/16 11.1	7/8 22.2	1 5/16 33.3	5/64 20.2	2 50.8	1 9/64 7.5	5/8 15.9	1 3/64 26.6	...	4.5 2.0	UG314L UG315L UG316L
	FC-U315	...																
	FC-U316	...																
1 1/8 1 3/16	FC-U318	...	4.125 104.78	5 127.00	6 152.4	1 59/64 48.82	7/16 10	7/16 11.1	3 1/32 24.6	1 7/16 36.5	6 1/64 24.2	2 5/16 58.7	2 5/64 9.9	5/8 15.9	1 7/32 31.0	...	6.0 2.7	UG318L UG319L
	FC-U319	...																
1 1/4 1 3/8 1 7/16	FC-U320	FCE-U320	4.500 114.30	5 3/8 136.52	6 3/8 161.9	2 3/32 53.18	7/16 10	7/16 11.1	1 3/32 27.8	1 9/16 39.7	1 25.4	2 9/16 65.1	7/16 11.1	5/8 15.9	1 1/4 31.8	1/4 6.4	7.5 3.4	UG320L UG322L UG323L
	FC-U322	FCE-U322																
	FC-U323	FCE-U323																
1 1/2	FC-U324	FCE-U324	5.000 127.00	6 152.40	7 1/8 181.0	2 5/16 58.74	1/2 12	1/2 12.7	1 11/64 29.8	1 23/32 43.6	1 1/64 29.0	3 1/16 77.8	1/2 12.7	5/8 15.9	1 23/64 34.5	1/4 6.4	10.0 4.5	UG324L
1 5/8 1 11/16 1 3/4	FC-U326	FCE-U326	5.500 139.70	6 1/2 165.10	7 3/8 193.7	2 19/32 65.88	1/2 12	1/2 12.7	1 19/64 32.9	1 59/64 48.8	1 19/64 32.9	3 1/4 82.6	3 5/64 13.9	3/4 19.0	1 19/32 40.5	1/4 6.4	12.2 5.5	UG326L UG327L UG328L
	FC-U327	FCE-U327																
	FC-U328	FCE-U328																
1 15/16	FC-U331	FCE-U331	6.000 152.40	7 177.80	8 1/8 206.4	2 19/16 71.44	1/2 12	9/16 14.3	1 25/64 35.3	2 1/8 54.0	1 27/64 36.1	3 7/16 87.3	9/16 14.3	7/8 22.2	1 23/32 43.6	1/4 6.4	15.0 6.8	UG331L
2 2 1/8 2 3/16	FC-U332	FCE-U332	6.375 161.92	7 3/8 193.68	9 228.6	3 1/16 77.79	5/8 16	5/8 15.9	1 17/32 38.9	2 9/32 57.9	1 17/32 38.9	3 15/16 100.0	2 1/32 16.7	1 5/16 23.8	1 7/8 47.6	1/4 6.4	19.5 8.8	UG332L UG334L UG335L
	FC-U334	FCE-U334																
	FC-U335	FCE-U335																
2 1/4 2 7/16	FC-U336	FCE-U336	6.875 174.62	8 1/8 206.38	9 1/2 241.3	3 3/16 84.14	5/8 16	5/8 15.9	1 11/16 42.9	2 15/32 62.7	1 5/8 41.3	4 3/16 106.4	2 1/32 16.7	1 5/16 23.8	2 1/8 54.0	1/4 6.4	23.5 10.6	UG336L UG339L
	FC-U339	FCE-U339																
2 11/16 2 3/4	FC-U343	FCE-U343	7.750 196.85	9 228.60	10 3/8 263.5	3 3/16 96.84	5/8 16	3/4 19.0	1 19/16 49.2	2 27/32 72.2	1 7/8 47.6	4 3/4 120.6	2 5/32 19.8	1 1/8 28.6	2 1/4 57.2	1 3/32 10.3	32.5 14.7	UG343L UG344L
	FC-U344	FCE-U344																
2 15/16	FC-U347	FCE-U347	8.250 209.55	9 1/2 241.30	10 7/8 276.2	4 3/32 103.98	5/8 16	3/4 19.0	2 3/32 53.2	3 1/8 79.4	2 50.8	4 15/16 125.4	3/4 19.0	1 1/8 28.6	2 3/8 60.3	1 3/32 10.3	37.0 16.8	UG347L
3 7/16 3 1/2	FC-U355	FCE-U355	9.875 250.82	11 3/8 288.92	12 7/8 327.0	4 15/16 125.41	3/4 20	7/8 22.2	2 17/32 64.3	3 11/16 93.7	2 13/32 61.1	6 152.4	1 25.4	1 1/4 31.8	2 25/32 70.6	1 3/32 10.3	64.0 29.0	UG355L UG356L
	FC-U356	FCE-U356																
3 15/16	FC-U363	FCE-U363	11.000 279.40	12 1/2 317.50	14 355.6	5 1/16 141.29	3/4 20	7/8 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	1 3/8 34.9	3 3/16 81.0	1 3/32 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, 1/4"-28; all other shafts, 1/8" PT.

† Tolerance: +.000" - .002" (+0.00 -0.05 mm). Bore tolerance for mounting: +.002" - .000" (+0.05 -0.00 mm).

Δ 1 1/8 thru 2 15/16 shaft diameters also available with dual contact lip seals, add suffix N; i.e. P-U319N

\blacklozenge Width dimension for closed end unit.

Selection guide, pages C-5, C-6.

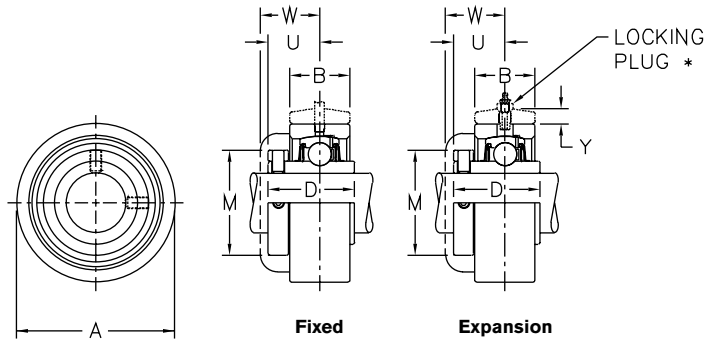
Load ratings, pages C-7, C-8.

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 Δ		A †	B	D	M	U	W ◆	Y	Total axial expansion	Unit wt. (lbs./kg.)	Bearing no.
	Fixed	Expansion										
3/4	C-U312	CE-U312	2.469 62.71	1 ⁵ / ₃₂ 29.37	1 ¹⁵ / ₃₂ 37.31	1 ¹ / ₈ 41.3	2 ⁷ / 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	6 ³ / ₆₄ 25.0	1 ¹⁵ / ₆₄ 31.4	3/8 9.5	3/16 4.8	2.0 0.9	UG314L UG315L UG316L
15/16	C-U315	CE-U315										
1	C-U316	CE-U316										
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	1 ³ / ₃₂ 10.3	3/16 4.8	2.7 1.2	UG318L UG319L
1 ³ / ₁₆	C-U319	CE-U319										
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 UG322L UG323L
1 ³ / ₈	C-U322	CE-U322										
1 ⁷ / ₁₆	C-U323	CE-U323										
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 UG327L UG328L
1 ¹¹ / ₁₆	C-U327	CE-U327										
1 ³ / ₄	C-U328	CE-U328										
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	1 ⁹ / 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 UG334L UG335L
2 ¹ / ₈	C-U334	CE-U334										
2 ³ / ₁₆	C-U335	CE-U335										
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	2 ³ / ₃₂ 18.2	3/16 4.8	12.0 5.4	UG336L UG339L
2 ⁷ / ₁₆	C-U339	CE-U339										
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	1 ³ / ₁₆ 20.6	1/4 6.4	17.0 7.7	UG343L UG344L
2 ³ / ₄	C-U344	CE-U344										
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	1 ³ / 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 ¹ / ₁₆ 144.5	2 ¹⁹ / ₃₂ 65.9	3 76.2	1 25.4	3/8 9.5	26.9 12.2	UG348L UG351L
3 ³ / ₁₆	C-U351	CE-U351										
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 ³ / ₃₂ 83.3	1 25.4	3/8 9.5	35.5 16.1	UG355L UG356L
	C-U356	CE-U356										
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 ¹ / 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 2⁷/₁₆" and smaller shafts, 1/4"-28 UNF; for other expansion units and all fixed units, 1/8" PT.

* Locking plug thread sizes: for 2⁷/₁₆" 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).

Δ 1¹/₈ thru 2¹⁵/₁₆ 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.

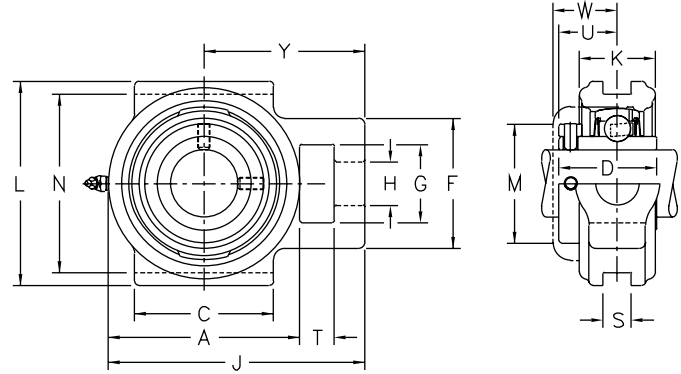
Load ratings, pages C-7, C-8.

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 Δ	A	C	D	F	G	H	J	K	L	M	N		T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.																		
												+0.000" -0.015" +0.00 -0.38 mm	S +0.000" -0.015" +0.00 -0.38 mm																								
7/8 15/16 1	T-U314	35/16	2 1/4	1 43/64	2	1 1/4	3/4	4 3/8	1 3/8	3 3/8	2	3.000	.531	5/8	63/64	1 15/64	2 3/4	3.2	UG314L																		
	T-U315																			84.1	57.2	42.46	50.8	31.8	19.0	111.1	34.9	92.1	50.8	76.20	13.49	15.9	25.0	31.4	69.8	1.4	UG315L
	T-U316																																				
1 1/4 1 3/8 1 7/8	T-U320	4	2 3/4	2 3/32	2 3/8	1 7/16	7/8	5 1/4	1 5/8	4 1/8	2 1/16	3.500	.531	5/8	1 1/4	1 1/2	3 1/4	5.5	UG320L																		
	T-U322																			101.6	69.8	53.18	60.3	36.5	22.2	133.4	41.3	104.8	65.1	88.90	13.49	15.9	31.8	38.1	82.6	2.5	UG322L
	T-U323																																				
1 1/2	T-U324	4 5/8	3 1/4	2 5/16	3 3/16	1 5/16	1 1/8	6 1/8	1 25/32	4 7/8	3 1/16	4.125	.687	3/4	1 25/64	1 39/64	3 13/16	8.5	UG324L																		
		117.5	82.6	58.74	81.0	49.2	28.6	155.6	45.2	123.8	77.8	104.78	17.45	19.0	35.3	40.9	96.8	3.8																			
1 5/16	T-U331	5 1/2	4	2 13/16	3 3/4	2 1/4	1 1/4	7 3/8	2 3/16	5 7/8	3 7/16	5.125	.812	1	1 43/64	1 31/32	4 5/8	13.7	UG331L																		
		139.7	101.6	71.44	95.2	57.2	31.8	187.3	55.6	149.2	87.3	130.18	20.62	25.4	42.5	50.0	117.5	6.2																			
2 2 1/8 2 3/8	T-U332	5 13/16	4 1/8	3 1/16	3 3/4	2 1/4	1 1/4	7 3/4	2 3/8	6 1/4	3 15/16	5.500	.812	1	1 27/32	2 3/16	4 27/32	17.2	UG332L																		
T-U334	147.6																			104.8	77.79	95.2	57.2	31.8	196.8	60.3	158.8	100.0	139.70	20.62	25.4	46.8	55.6	123.0	7.8	UG334L	
T-U335																																					UG335L
2 1/4 2 7/16	T-U336	6 1/4	4 1/2	3 5/16	4 1/8	2 1/2	1 3/8	8 5/8	2 3/16	6 3/4	4 3/16	6.000	1.062	1 3/8	1 15/16	2 7/16	5 7/16	20.0	UG336L																		
T-U339	158.8																			114.3	84.14	104.8	63.5	34.9	219.1	65.1	171.4	106.4	152.40	26.97	34.9	49.2	61.9	138.1	9.1	UG339L	
2 15/16	T-U347	8	5 3/4	4 3/32	4 3/4	2 3/4	1 5/8	10 1/2	3 1/4	8 1/4	4 15/16	7.500	1.312	1 1/4	2 3/8	2 3/4	6 1/2	37.5	UG347L																		
		203.2	146.0	103.98	120.6	69.8	41.3	266.7	82.6	209.6	125.4	190.50	33.32	31.8	60.3	69.8	165.1	17.0																			

Please consult for availability.

Lubrication fitting tap size: 1/8" PT.

Δ 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.

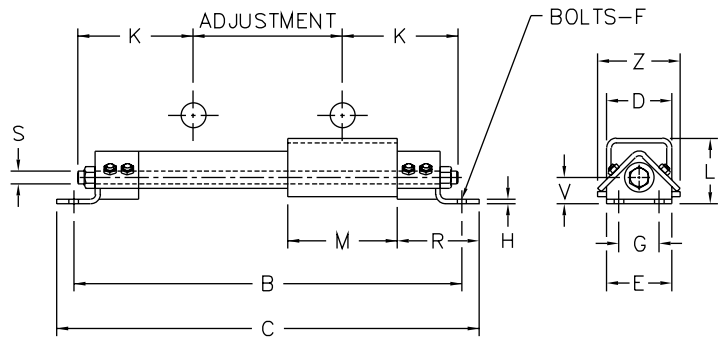
Heavy Duty Ball Bearing Takeups

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	Adjustment	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	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												
	LHD20-36	36	53	55												
	LHD20-48	48	65	67												
2 Thru 2 3/16	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												
	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 3/4	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												
	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	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												
	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	7	6 1/2	3/4	3	1/2	14 5/8	7	20	6	1 1/2	2 1/8	9 13/16
	LHD40-18	18	47 1/4	50												
	LHD40-24	24	53 1/4	56												
	LHD40-30	30	59 1/4	62												
	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.

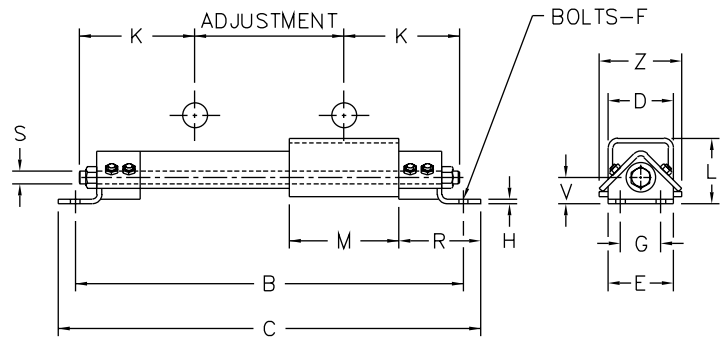
Load ratings, pages C-7, C-8.

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
3/4	<i>UG312L</i>		2.0472		1 15/32	5/8	.7874	1 1/8	1.194	1 1/32
			52.000		37.31	15.88	20.000	41.3	30.33	8.7
				+0.000 -0.0005						
7/8	<i>UG314L</i>	+0.0018 -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	+0.0008 -0.000	2.8346		1 59/64	2 5/32	.9449	2 5/16	1.708	1/2
1 3/16	UG319L	+0.0020 -0.000	72.000	+0.000 -0.0005	48.82	19.84	24.000	58.7	43.38	12.7
1 1/4	UG320L			+0.000 -0.013						
1 3/8	UG322L	+0.0008 -0.000	3.1496		2 3/32	2 7/32	1.0236	2 9/16	1.946	1/2
1 7/16	UG323L	+0.0020 -0.000	80.000		53.18	21.43	26.000	65.1	49.43	12.7
1 1/2	UG324L	+0.0008 -0.000	3.5433	+0.000 -0.0006	2 5/16	5 9/64	1.1024	3 1/16	2.204	9/16
		+0.0020 -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		3.9370		2 19/32	1 3/64	1.1811	3 1/2	2.443	5/8
1 3/4	UG328L	+0.0009 -0.000	100.000		65.88	26.59	30.000	82.6	62.05	15.9
1 15/16	UG331L	+0.0023 -0.000	4.3307	+0.000 -0.0006	2 13/16	1 9/64	1.2598	3 7/16	2.701	2 1/32
			110.000	+0.000 -0.015	71.44	28.97	32.000	87.3	68.60	16.7
2	UG332L									
2 1/8	UG334L	+0.0009 -0.000	4.7244		3 1/16	1 7/32	1.3386	3 15/16	2.959	3/4
2 3/16	UG335L	+0.0023 -0.000	120.000		77.79	30.96	34.000	100.0	75.16	19.0
2 1/4	UG336L	+0.0009 -0.000	5.1181		3 5/16	1 3/8	1.4173	4 3/16	3.216	3/4
2 7/16	UG339L	+0.0023 -0.000	130.000	+0.000 -0.0008	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	4 3/4	3.732	7/8
2 3/4	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
		+0.0011 -0.000	160.000	+0.000 -0.0010	103.98	43.66	43.000	125.4	101.35	22.2
3	<i>UG348L</i>	+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	<i>UG355L</i>		7.4806		4 15/16	2 1/32	1.9291	6	4.763	1 1/8
3 1/2	<i>UG356L</i>	+0.0011 -0.000	190.000	+0.000 -0.0012	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 5/32	2.1654	7	5.339	1 1/4
			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 Information

Series 300

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 $\frac{1}{8}$ " (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 $\frac{1}{32}$ " (0.8 mm) larger than the largest inch bolt shown. Cast slots in pillow blocks are normally $\frac{1}{16}$ " 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 $+93^{\circ}\text{C}$).

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
$\frac{1}{2}$ "-2"	Nominal to $-.0005$ "
$2\frac{1}{8}$ "- $3\frac{15}{16}$ "	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

Symbol	Description	P	E	-U	3	K	23	F	N	C	17H	4
C	Cartridge unit	}	}	}	}	}	}	}	}	}	}	}
F	Flanged unit; 4 bolt square											
FC	Flanged cartridge unit; 4 bolt round											
P	Pillow block; standard backing											
PL	Pillow block; low backing											
P2	Pillow block; high backing											
T	Takeup unit, slotted guides											
E	Expansion unit											
U	Bearing sealed unit, spring locking, relubricatable			}								
Y	Bearing sealed unit, eccentric cam locking collar, relubricatable											
3	300 series designation											
K	Adapter mounted											
23	Shaft diameter in 16ths on an inch											
F	Four bolt base pillow block											
none	Steel clad clearance seal							}				
N	Molded double lip seal											
C	Closed end unit											
17H	Grease designation											
4	Clearance, other than standard											

Replacement Ball Bearing

Symbol	Description	UG	3	K	47	N	L
UG	Wide inner ring, bearing seals, spring locking collar	}	}	}	}	}	}
YG	Wide inner ring, bearing seals, eccentric cam locking collar						
3	300 series designation						
K	Adapter mounted						
47	Shaft diameter in 16ths of an inch						
none	Steel clad clearance seal					}	
N	Molded double lip seal						
L	Bearing assembly with collar and bearing seals						}
L1	Bearing assembly without collar and with bearing seals						

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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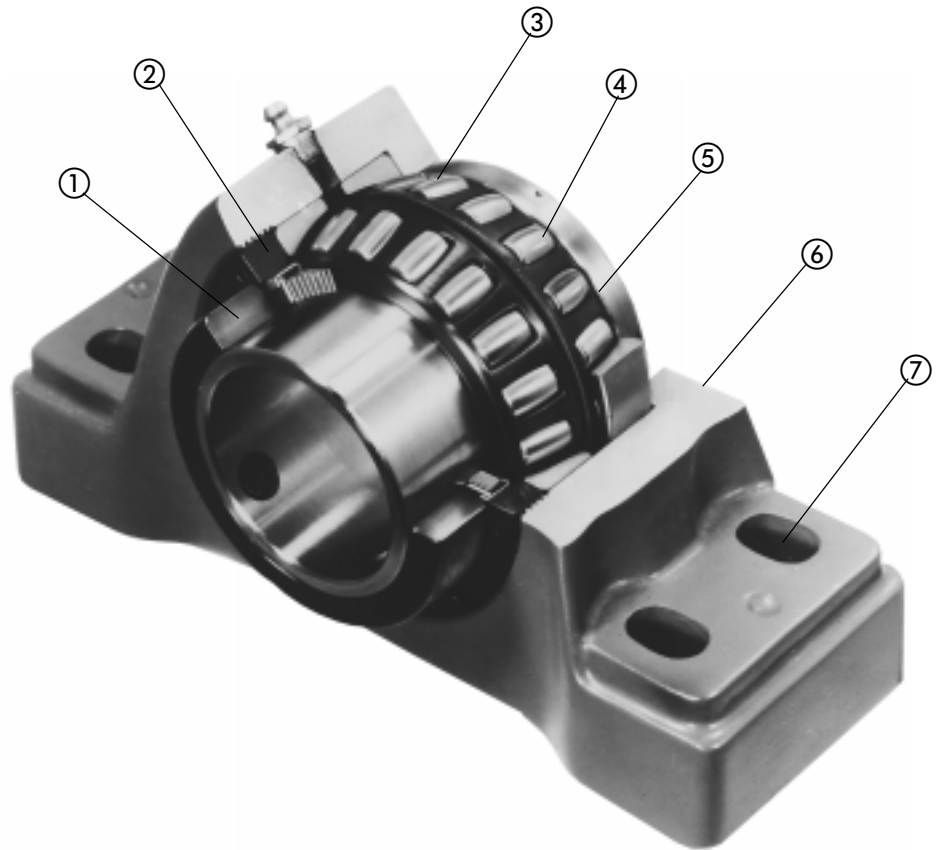
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Series B22400 Spherical Roller Bearing Units and Takeups

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 $\pm 2^\circ$ 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 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 1⁵/₁₆" through 4" and 30 mm through 100 mm, 4-bolt base pillow blocks for shaft sizes 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 25 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 1⁵/₁₆" through 4⁷/₁₆" 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 1³/₁₆" 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.



Selection

Series B22400

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:

$$P = F_r$$

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

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

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

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.

Selection Series B22400

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)
- L₁₀ = 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 L₁₀ 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

Bearing life, hours L ₁₀	$\left(\frac{C}{P}\right)$ ratio								
	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 L₁₀ 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, X₁, Y₁, X₂, and Y₂, 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, L₁₀, 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) % reliability,
a₁ = Life adjustment factor for reliability
a₂ = Life adjustment factor for material and processing
a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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 B22400

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 ● H and E seals	e	F _a /F _r ≤ e		F _a /F _r > e	
mm	inches		newtons	pounds	newtons	pounds			X ₁	Y ₁	X ₂	Y ₂
25	1	B22416 B224M25	66 100	14900	51 200	11500	3500	.51	1.00	1.32	.67	1.96
	1 3/16	B22419 B22420 B224M30										
30	1 1/4	B22423 B22424 B224M35	80 500	18100	60 900	13700	3000	.48	1.00	1.40	.67	2.08
	1 7/16	B22423 B22424 B224M35										
35	1 1/2	B224B24 B22426 B22427 B22428 B224M40	127 700	28700	89 800	20200	2350	.45	1.00	1.51	.67	2.25
	1 5/8	B224B28 B22431 B22432 B224M45 B225M50										
40	1 3/4	B22435 B22436 B224M55	147 700	33200	94 300	21200	2150	.40	1.00	1.68	.67	2.50
	1 15/16	B22435 B22436 B224M55										
45	2	B224B36 B22439 B22440 B224M60	197 500	44400	117 400	26400	1950	.40	1.00	1.68	.67	2.50
	50	B224B36 B22439 B22440 B224M60										
55	2 1/4	B22443 B22444 B22447 B22448 B224M65 B224M70 B224M75	238 000	53500	139 700	31400	1750	.38	1.00	1.80	.67	2.68
	60	B22443 B22444 B22447 B22448 B224M65 B224M70 B224M75										
65	2 3/8	B22451 B22455 B22456 B224M80 B224M85	318 000	71500	185 900	41800	1500	.38	1.00	1.79	.67	2.67
	70	B22451 B22455 B22456 B224M80 B224M85										
75	2 7/8	B22459 B22463 B22464 B224M90 B224M100	403 400	90700	226 800	51000	1250	.38	1.00	1.77	.67	2.64
	80	B22459 B22463 B22464 B224M90 B224M100										
85	3 1/16	B22459 B22463 B22464 B224M90 B224M100	609 400	137000	351 800	79100	1100	.36	1.00	1.88	.67	2.79
	90	B22459 B22463 B22464 B224M90 B224M100										
100	3 1/8	B22459 B22463 B22464 B224M90 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.

Load Ratings

Series B22400

Table 3 • Radial load ratings in pounds at various RPM for appropriate L₁₀ 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
25	1	B22416 B224M25	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
			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
30	1 ¹ / ₁₆ 1 ¹ / ₄	B22419 B22420 B224M30	8000	3080	2640	2390	2210	2140	2030	1900	1800	1740	1630	1540	
			20000	3250	2640	2340	2010	1810	1690	1630	1540	1440	1370	1320	1240	1170	
			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	
35	1 ⁷ / ₁₆ 1 ¹ / ₂	B22423 B22424 B224M35	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		
40	1 ¹ / ₂ 1 ⁵ / ₈ 1 ¹¹ / ₁₆ 1 ³ / ₄	B224B24 B22426 B22427 B22428 B224M40	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			
45 50	1 ³ / ₄ 1 ¹⁵ / ₁₆ 2	B224B28 B22431 B22432 B224M45 B225M50	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			
55	2 ³ / ₁₆ 2 ¹ / ₄	B22435 B22436 B224M55	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				
60	2 ¹ / ₄ 2 ⁷ / ₁₆ 2 ¹ / ₂	B224B36 B22439 B22440 B224M60	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					
65 70 75	2 ¹¹ / ₁₆ 2 ³ / ₄ 2 ¹⁵ / ₁₆ 3	B22443 B22444 B22447 B22448 B224M65 B224M70 B224M75	8000	.....	.....	.....	9410	8070	7300	6770	6550	6200	5800		
			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					
80 85	3 ³ / ₁₆ 3 ⁷ / ₁₆ 3 ¹ / ₂	B22451 B22455 B22456 B224M80 B224M85	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						
90 100	3 ¹¹ / ₁₆ 3 ¹⁵ / ₁₆ 4	B22459 B22463 B22464 B224M90 B224M100	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							

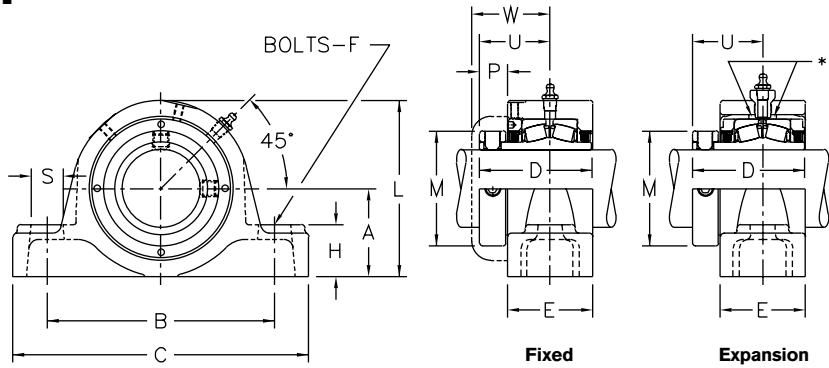
For radial load ratings of 4³/₁₆" through 5" (110 mm through 125 mm), see series B22500 page D-34.

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



Dimensions (inches/mm)

Shaft dia. mm inches	Pillow block number		A †	B	C	D	E	F Bolts	H ■	L		M	P	S	U	W ◆	Unit wt. (lbs./kg.)
	Fixed	Expansion								Fixed	Expansion						
1 25	P-B22416H <i>P-B224M25H</i>	PE-B22416H <i>PE-B224M25H</i>	1 ¹ / ₁₆ 39.67	4 ³ / ₈ 111.1	5 ¹⁵ / ₁₆ 150.8	2 ⁹ / ₁₆ 65.09	2 ¹ / ₁₆ 52.4	3 ³ / ₈ 10	7 ⁷ / ₈ 22.2	3 ¹ / ₈ 79.4	3 ⁵ / ₁₆ 84.1	2 50.8	1 ⁷ / ₃₂ 13.5	5 ⁵ / ₈ 15.9	1 ⁹ / ₁₆ 39.7	1 ²⁹ / ₃₂ 48.4	5 2.1
1 ³ / ₁₆ 1 ¹ / ₄ 30	P-B22419H <i>P-B224M30H</i>	PE-B22419H <i>PE-B224M30H</i>	1 ³ / ₄ 44.45	4 ³ / ₄ 120.6	6 ⁵ / ₁₆ 160.3	2 ¹¹ / ₁₆ 68.26	2 ³ / ₁₆ 55.6	3 ³ / ₈ 10	1 ¹ / ₁₆ 27.0	3 ¹ / ₂ 88.9	3 ⁵ / ₈ 92.1	2 ³ / ₁₆ 55.6	1 ⁷ / ₃₂ 13.5	5 ⁵ / ₈ 15.9	1 ⁵ / ₈ 41.3	1 ³¹ / ₃₂ 50.0	6 6 2.9
1 ⁷ / ₁₆ 1 ¹ / ₂ 35	P-B22423H <i>P-B224M35H</i>	PE-B22423H <i>PE-B224M35H</i>															1 ⁷ / ₈ 47.62
1 ⁵ / ₈ 1 ¹¹ / ₁₆ 1 ³ / ₄ 40	P-B22426H <i>P-B224M40H</i>	PE-B22426H <i>PE-B224M40H</i>	2 ¹ / ₈ 53.98	5 ¹ / ₂ 139.7	7 ³ / ₈ 187.3	3 ¹ / ₈ 79.38	2 ¹ / ₂ 63.5	1 ¹ / ₂ 12	1 ⁵ / ₁₆ 33.3	4 ¹ / ₄ 108.0	4 ³ / ₈ 111.1	2 ³ / ₄ 69.8	2 ¹ / ₃₂ 16.7	1 ³ / ₁₆ 20.6	1 ²⁹ / ₃₂ 48.4	2 ¹ / ₄ 57.2	10 10 10 4.7
1 ¹⁵ / ₁₆ 2 45 50	P-B22431H <i>P-B224M45H</i>	PE-B22431H <i>PE-B224M45H</i>															2 ¹ / ₄ 57.15
2 ³ / ₁₆ 2 ¹ / ₄ 55	P-B22435H <i>P-B224M55H</i>	PE-B22435H <i>PE-B224M55H</i>	2 ¹ / ₂ 63.50	6 ³ / ₄ 171.4	8 ⁷ / ₈ 225.4	3 ⁵ / ₁₆ 84.14	2 ⁹ / ₁₆ 65.1	5 ⁵ / ₈ 16	1 ⁵ / ₈ 41.3	5 127.0	5 127.0	3 ³ / ₈ 85.7	2 ⁵ / ₃₂ 19.8	1 ⁵ / ₁₆ 23.8	2 ¹ / ₁₆ 52.4	2 ⁷ / ₁₆ 61.9	14 14 6.5
2 ⁷ / ₁₆ 2 ¹ / ₂ 60	P-B22439H <i>P-B224M60H</i>	PE-B22439H <i>PE-B224M60H</i>															2 ³ / ₄ 69.85
2 ¹¹ / ₁₆ 2 ³ / ₄ 2 ¹⁵ / ₁₆ 3 65 70 75	P-B22443H <i>P-B224M65H</i>	PE-B22443H <i>PE-B224M65H</i>	3 ¹ / ₄ 82.55	8 ¹ / ₈ 206.4	10 ⁷ / ₁₆ 265.1	4 101.60	3 ³ / ₁₆ 81.0	3 ⁴ / ₈ 20	2 57.2	7 ¹ / ₂ 163.5	7 ¹ / ₂ 163.5	4 ³ / ₁₆ 106.4	2 ⁷ / ₃₂ 21.4	1 ¹ / ₁₆ 27.0	2 ⁷ / ₁₆ 61.9	2 ²⁵ / ₃₂ 70.6	29 29 27 27 13.2 13.0 12.5
3 ³ / ₁₆ 3 ⁷ / ₁₆ 3 ¹ / ₂ 80 85	P-B22451H <i>P-B224M80H</i>	PE-B22451H <i>PE-B224M80H</i>															3 ³ / ₄ 95.25
3 ¹¹ / ₁₆ 3 ¹⁵ / ₁₆ 4 90 100	P-B22459H <i>P-B224M90H</i>	PE-B22459H <i>PE-B224M90H</i>	4 ¹ / ₄ 107.95	11 ³ / ₄ 298.4	15 ¹ / ₄ 387.4	5 ¹ / ₁₆ 128.59	4 101.6	1 24	2 ⁵ / ₈ 66.7	8 ¹ / ₂ 215.9	8 ¹ / ₂ 215.9	5 ²⁹ / ₃₂ 150.0	1 ¹ / ₁₆ 27.0	2 ¹ / ₄ 57.2	3 ¹ / ₁₆ 77.8	3 ⁷ / ₁₆ 87.3	61 59 59 28.7 26.9
3 ¹⁵ / ₁₆ 4	PL-B22463H <i>PL-B22464H</i>	— —															4 ¹ / ₈ 104.78

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).

■ Dimension H for PE-B22439H and PE-B22440H is 1 3/4"; Dimension H for PE-B22443H thru PE-B22448H is 2 1/4".

◆ Width dimension for closed end unit.

Selection guide, page D-5, D-6.

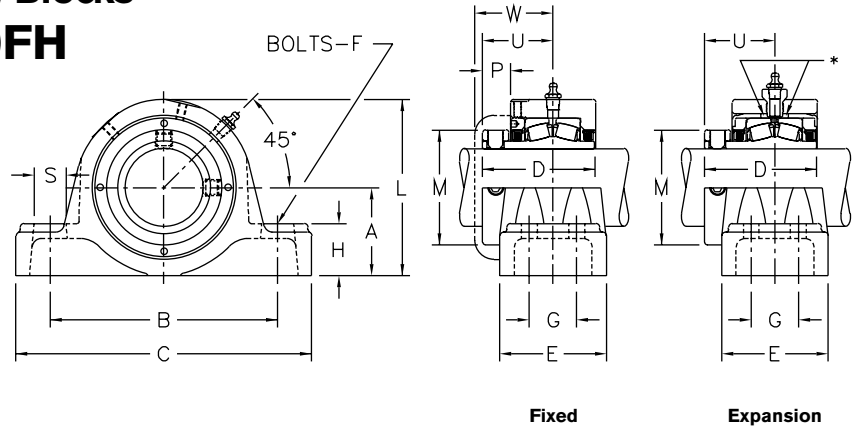
Load ratings, pages D-7, D-8.

Additional information, page D-68.

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



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															
45	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	1 ³ / ₁₆	1 ²⁹ / ₃₂	2 ⁹ / ₃₂	13
	2	P-B22432FH	PE-B22432FH															13
		<i>P-B224M45FH</i>	<i>PE-B224M45FH</i>															6.3
	50	<i>P-B224M50FH</i>	<i>PE-B224M50FH</i>															5.9
55	2 ³ / ₁₆	P-B22435FH	PE-B22435FH	2 ¹ / ₂	6 ³ / ₄	8 ⁷ / ₈	3 ³ / ₁₆	3 ¹ / ₄	1/2	1 ¹¹ / ₁₆	1 ⁵ / ₈	5	3 ³ / ₈	2 ⁵ / ₃₂	1 ³ / ₁₆	2 ¹ / ₁₆	2 ⁷ / ₁₆	15
	2 ¹ / ₄	P-B22436FH	PE-B22436FH															15
		<i>P-B224M55FH</i>	<i>PE-B224M55FH</i>															6.9
	60	<i>P-B224M60FH</i>	<i>PE-B224M60FH</i>															
65	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	2 ⁷ / ₃₂	1 ³ / ₁₆	2 ³ / ₁₆	2 ⁹ / ₁₆	19
	2 ¹ / ₂	P-B22440FH	PE-B22440FH															19
		<i>P-B224M60FH</i>	<i>PE-B224M60FH</i>															8.6
	60	<i>P-B224M60FH</i>	<i>PE-B224M60FH</i>															
70	2 ¹ / 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	2 ⁷ / ₃₂	1 ⁵ / 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
75		<i>P-B224M65FH</i>	<i>PE-B224M65FH</i>	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	<i>P-B224M70FH</i>	<i>PE-B224M70FH</i>															13.5
	75	<i>P-B224M75FH</i>	<i>PE-B224M75FH</i>															13.0
80	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	1 ⁵ / 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
		<i>P-B224M80FH</i>	<i>PE-B224M80FH</i>															20.5
85		<i>P-B224M85FH</i>	<i>PE-B224M85FH</i>	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	20.0
90	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
		<i>P-B224M90FH</i>	<i>PE-B224M90FH</i>															32.1
100		<i>P-B224M100FH</i>	<i>PE-B224M100FH</i>	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	30.3
110	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
		<i>P-B225M110FH</i> °	<i>PE-B225M110FH</i> °															40.7
115		<i>P-B225M115FH</i> °	<i>PE-B225M115FH</i> °	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	39.5
125	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
		<i>P-B225M125FH</i> °	<i>PE-B225M125FH</i> °															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.

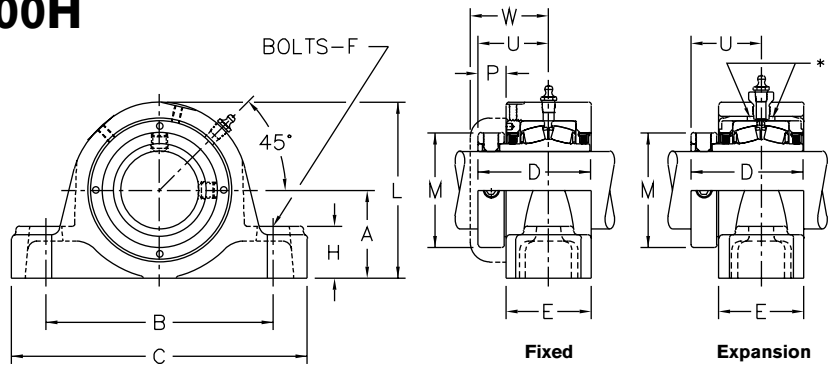
Load ratings, pages D-7, D-8.

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 inches	Pillow block number		A †	B		C	D	E	F Bolts	H	L	M	P	U	W ◆	Unit wt. (lbs./kg.)	
	Fixed	Expansion		min.	max.												
35	1 ⁷ / ₁₆	EP-B22423H <i>EP-B224M35H</i>	EPE-B22423H <i>EPE-B224M35H</i>	1 ⁷ / ₈ 47.62	4 ³ / ₄ 120.6	6 152.4	7 ³ / ₈ 187.3	2 ⁷ / ₈ 73.02	2 ¹ / ₄ 57.2	1/2 12	1 ¹ / ₈ 28.6	3 ⁷ / ₈ 98.4	2 ¹ / ₂ 63.5	2 ¹ / ₃₂ 16.7	1 ²⁵ / ₃₂ 45.2	2 ³ / ₁₆ 55.6	8 3.1
	1 ¹ / ₂ 1 ⁵ / ₈ 1 ¹¹ / ₁₆	EP-B22424H EP-B22426H EP-B22427H	EPE-B22424H EPE-B22426H EPE-B22427H	2 ¹ / ₈ 53.98	5 ¹ / ₄ 133.4	6 ¹ / ₂ 165.1	7 ⁷ / ₈ 200.0	3 ³ / ₈ 79.38	2 ¹ / ₂ 63.5	1/2 12	1 ¹ / ₄ 31.8	4 ³ / ₈ 111.1	2 ³ / ₄ 69.8	2 ¹ / ₃₂ 16.7	1 ²⁹ / ₃₂ 48.4	2 ¹ / ₄ 57.2	12 11 11
1 ³ / ₄ 1 ⁵ / ₁₆ 2	EP-B22428H EP-B22431H EP-B22432H	EPE-B22428H EPE-B22431H EPE-B22432H	5.4														
45 50	<i>EP-B224M45H</i> <i>EP-B224M50H</i>	<i>EPE-B224M45H</i> <i>EPE-B224M50H</i>	57.15 154.0														184.2 225.4	79.38 63.5	16 33.3	115.9 74.6	16.7 16.7	48.4 57.9	5.5 5.2
55	2 ³ / ₁₆	EP-B22435H <i>EP-B224M55H</i>	EPE-B22435H <i>EPE-B224M55H</i>	2 ¹ / ₂ 63.50	6 ⁹ / ₁₆ 166.7	8 203.2	9 ⁹ / ₈ 244.5	3 ³ / ₁₆ 84.14	2 ⁹ / ₁₆ 65.1	5/8 16	1 ¹ / ₂ 38.1	5 127.0	3 ³ / ₈ 85.7	2 ²⁹ / ₃₂ 19.8	2 ¹ / ₁₆ 52.4	2 ⁷ / ₁₆ 61.9	15 6.6
	2 ¹ / ₄ 2 ⁷ / ₁₆ 2 ¹ / ₂	EP-B22436H EP-B22439H EP-B22440H	EPE-B22436H EPE-B22439H EPE-B22440H	2 ³ / ₄ 69.85	6 ¹⁵ / ₁₆ 176.2	8 ³ / ₄ 222.2	10 ¹ / ₂ 266.7	3 ¹ / ₂ 88.90	2 ¹¹ / ₁₆ 68.3	5/8 16	1 ⁵ / ₈ 41.3	5 ¹ / ₂ 139.7	3 ⁵ / ₈ 92.1	2 ⁷ / ₃₂ 21.4	2 ³ / ₁₆ 55.6	2 ⁹ / ₁₆ 65.1	18 17 17
60	<i>EP-B224M60H</i>	<i>EPE-B224M60H</i>	8.2														
65	2 ¹¹ / ₁₆ 2 ³ / ₄ 2 ¹⁵ / ₁₆ 3	EP-B22443H EP-B22444H EP-B22447H EP-B22448H	EPE-B22443H EPE-B22444H EPE-B22447H EPE-B22448H	3 ¹ / ₈ 79.38	7 ¹³ / ₁₆ 198.4	9 ³ / ₄ 247.6	11 ¹³ / ₁₆ 300.0	4 101.60	3 ³ / ₁₆ 81.0	3/4 20	1 ⁷ / ₈ 47.6	6 ⁵ / ₁₆ 160.3	4 ³ / ₁₆ 106.4	2 ⁷ / ₃₂ 21.4	2 ⁷ / ₁₆ 61.9	2 ²⁵ / ₃₂ 70.6	29 29 27 27
	70 75	<i>EP-B224M65H</i> <i>EP-B224M70H</i> <i>EP-B224M75H</i>	<i>EPE-B224M65H</i> <i>EPE-B224M70H</i> <i>EPE-B224M75H</i>														13.5 13.3 12.8
80	3 ³ / ₁₆ 3 ⁷ / ₁₆ 3 ¹ / ₂	EP-B22451H EP-B22455H EP-B22456H	EPE-B22451H EPE-B22455H EPE-B22456H	3 ³ / ₄ 95.25	9 ⁹ / ₁₆ 236.5	11 ¹ / ₁₆ 287.3	13 ¹³ / ₁₆ 350.8	4 ³ / ₈ 111.12	3 ¹ / ₂ 88.9	7/8 24	2 ¹ / ₄ 57.2	7 ¹ / ₂ 190.5	5 127.0	1 ⁵ / ₁₆ 23.8	2 ²¹ / ₃₂ 67.5	3 76.2	44 43 42
	85	<i>EP-B224M80H</i> <i>EP-B224M85H</i>	<i>EPE-B224M80H</i> <i>EPE-B224M85H</i>														20.0 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.

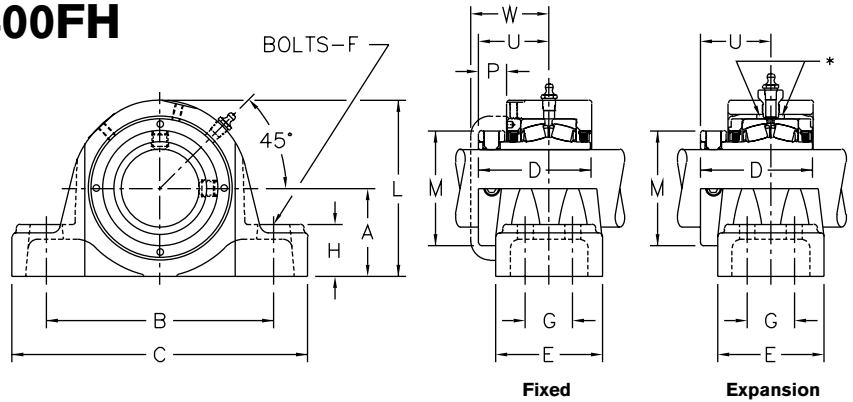
Load ratings, pages D-7, D-8.

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 inches	Pillow block number		A †	B		C	D	E	F Bolts	G	H	L	M	P	U	W ◆	Unit wt. (lbs./kg.)																
	Fixed	Expansion		min.	max.																												
60	2 1/4	EP-B224B36FH	EPE-B224B36FH	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	21															
	2 7/16	EP-B22439FH	EPE-B22439FH															2 3/4	6 15/16	8 3/4	10 1/2	3 1/2	3 3/8	5/8	1 7/8	1 5/8	5 1/2	3 3/8	27/32	2 3/16	2 9/16	20	
	2 1/2	EP-B22440FH	EPE-B22440FH																													20	
		EP-B224M60FH	EPE-B224M60FH																													8.8	
65	2 11/16	EP-B22443FH	EPE-B22443FH	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	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 29/32	31	
	2 15/16	EP-B22447FH	EPE-B22447FH																													29	
	3	EP-B22448FH	EPE-B22448FH																													29	
		EP-B224M65FH	EPE-B224M65FH																													14.0	
70	EP-B224M70FH	EPE-B224M70FH																13.8															
75	EP-B224M75FH	EPE-B224M75FH																13.3															
80	3 3/16	EP-B22451FH	EPE-B22451FH	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	47															
	3 7/16	EP-B22455FH	EPE-B22455FH															3 3/4	9 9/16	11 1/16	13 13/16	4 3/8	4 3/4	3/4	2 3/8	2 1/4	7 1/2	5	1 5/16	2 21/32	3	46	
	3 1/2	EP-B22456FH	EPE-B22456FH																													45	
		EP-B224M80FH	EPE-B224M80FH																														21.3
	85	EP-B224M85FH	EPE-B224M85FH																														20.8
90	3 11/16	P-B22459FH	PE-B22459FH	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	69															
	3 5/16	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	
		P-B224M90FH	PE-B224M90FH																														32.1
100	P-B224M100FH	PE-B224M100FH																30.3															
110	4 3/16	P-B22567FH [○]	PE-B22567FH [○]	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	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	
		P-B225M110FH [○]	PE-B225M110FH [○]																														40.7
	115	P-B225M115FH [○]	PE-B225M115FH [○]																														39.5
125	4 15/16	P-B22579FH[○]	PE-B22579FH[○]	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	129															
	5	P-B22580FH[○]	PE-B22580FH[○]															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	128	
		P-B225M125FH [○]	PE-B225M125FH [○]																														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.

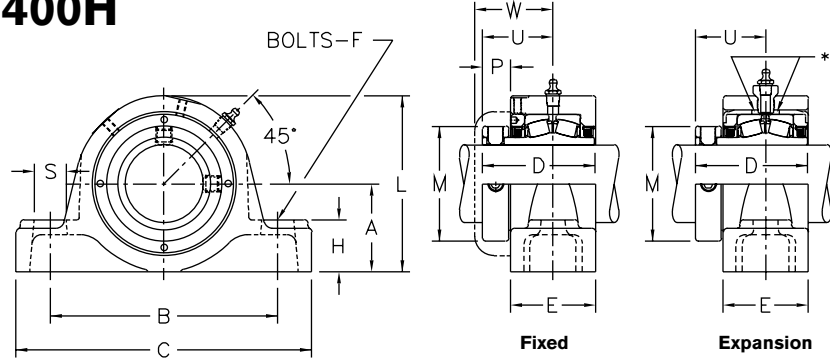
Load ratings, pages D-7, D-8.

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 Bolts	H	L		M	P	S	U	W ◆	Unit wt. (lbs./kg.)
mm	inches	Fixed	Expansion								Fixed	Expansion						
30	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	1 7/32	5/8	1 5/8	1 31/32	7
	1 1/4	PK-B22420H	...															7
		<i>PK-B224M30H</i>	...															3.2
35	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	2 1/32	1 3/16	1 25/32	2 3/16	7
	1 1/2	PK-B22424H	PKE-B22424H															7
		<i>PK-B224M35H</i>	<i>PKE-B224M35H</i>															3.4
40	1 5/8	PK-B22426H	PKE-B22426H	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	2 1/32	1 3/16	1 29/32	2 1/4	10
	1 11/16	PK-B22427H	PKE-B22427H															10
	1 3/4	PK-B22428H	PKE-B22428H															10
	<i>PK-B224M40H</i>	<i>PKE-B224M40H</i>	4.8															
45	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	2 1/32	1 5/16	1 29/32	2 9/32	12
	2	PK-B22432H	PKE-B22432H															12
		<i>PK-B224M45H</i>	<i>PKE-B224M45H</i>															5.8
		<i>PK-B224M50H</i>	<i>PKE-B224M50H</i>	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
55	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	2 5/32	1 5/16	2 1/16	2 7/16	16
	2 1/4	PK-B22436H	PKE-B22436H															16
		<i>PK-B224M55H</i>	<i>PKE-B224M55H</i>															7.1
60	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	2 7/32	1 5/16	2 3/16	2 9/16	19
	2 1/2	PK-B22440H	PKE-B22440H															18
		<i>PK-B224M60H</i>	<i>PKE-B224M60H</i>															8.6
65	2 11/16	PK-B22443H	PKE-B22443H	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	2 7/32	1 1/16	2 7/16	2 25/32	30
	2 3/4	PK-B22444H	PKE-B22444H															30
	2 15/16	PK-B22447H	PKE-B22447H															29
	3	PK-B22448H	PKE-B22448H	28														
		<i>PK-B224M65H</i>	<i>PKE-B224M65H</i>	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	13.7
		<i>PK-B224M70H</i>	<i>PKE-B224M70H</i>	70														13.5
		<i>PK-B224M75H</i>	<i>PKE-B224M75H</i>	75														13.0
80	3 3/16	PK-B22451H	PKE-B22451H	3 3/4	10	13	4 3/8	3 7/16	7/8	2 1/4	7 1/2	7 1/2	5	1 5/16	1 5/8	2 21/32	3	45
	3 7/16	PK-B22455H	PKE-B22455H															43
	3 1/2	PK-B22456H	PKE-B22456H															43
		<i>PK-B224M80H</i>	<i>PKE-B224M80H</i>	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
		<i>PK-B224M85H</i>	<i>PKE-B224M85H</i>	85														19.7
90	3 11/16	PK-B22459H	PKE-B22459H	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	64
	3 15/16	PK-B22463H	PKE-B22463H															62
	4	PK-B22464H	PKE-B22464H															62
		<i>PK-B224M90H</i>	<i>PKE-B224M90H</i>	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
		<i>PK-B224M100H</i>	<i>PKE-B224M100H</i>	100														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.

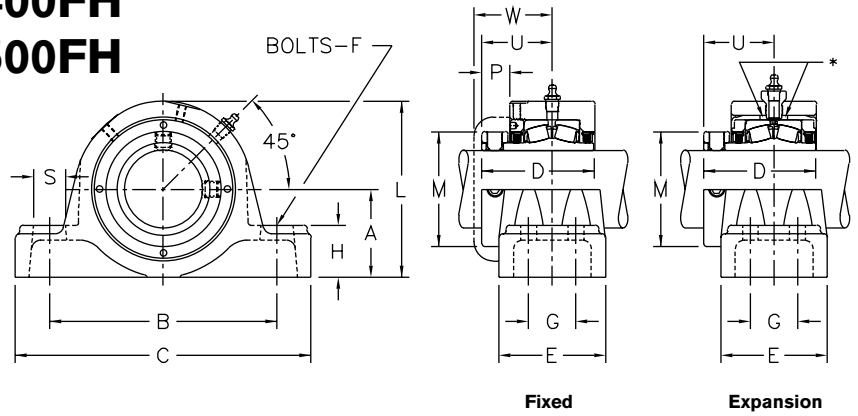
Additional information, page D-68.

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



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															
45	1 ¹⁵ / ₁₆	PK-B22431FH	PKE-B22431FH	2 ¹ / ₄	6 ¹ / ₄	8 ³ / ₈	3 ³ / ₈	3 ³ / ₁₆	1/2	1 ¹⁹ / ₃₂	1 ³ / ₈	4 ⁹ / ₁₆	2 ¹⁵ / ₁₆	2 ¹ / ₃₂	1 ⁹ / ₁₆	1 ²⁹ / ₃₂	2 ⁹ / ₃₂	13
	2	PK-B22432FH	PKE-B22432FH															13
	50	PK-B224M45FH	PKE-B224M45FH															6.1
55	2 ³ / ₁₆	PK-B22435FH	PKE-B22435FH	2 ¹ / ₂	6 ³ / ₄	8 ⁷ / ₈	3 ³ / ₁₆	3 ¹ / ₄	1/2	1 ¹¹ / ₁₆	1 ⁵ / ₈	5	3 ³ / ₈	2 ⁵ / ₃₂	1 ⁹ / ₁₆	2 ¹ / ₁₆	2 ⁷ / ₁₆	16
	2 ¹ / ₄	PK-B22436FH	PKE-B22436FH															16
	55	PK-B224M55FH	PKE-B224M55FH															7.3
60	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 ¹ / ₄	1 ³ / ₄	5 ¹ / ₂	3 ³ / ₈	2 ⁷ / ₃₂	1 ⁹ / ₁₆	2 ³ / ₁₆	2 ⁹ / ₁₆	20
	2 ¹ / ₂	PK-B22440FH	PKE-B22440FH															20
	60	PK-B224M60FH	PKE-B224M60FH															9.3
65	2 ¹¹ / ₁₆	PK-B22443FH	PKE-B22443FH	3 ³ / 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	2 ⁷ / ₃₂	1 ⁵ / 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															13.7
	70	PK-B224M70FH	PKE-B224M70FH															13.5
80	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	1 ⁵ / 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
85	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	
	PK-B224M85FH	PKE-B224M85FH															21.5	
	85	PK-B224M85FH															PKE-B224M85FH	21.5
90	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															35.2
100	PK-B224M100FH	PKE-B224M100FH	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	33.5	
	100	PK-B224M100FH															PKE-B224M100FH	33.5
	100	PK-B224M100FH															PKE-B224M100FH	33.5
110	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 [○]															43.0
115	PK-B225M115FH [○]	PKE-B225M115FH [○]	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	41.7	
	115	PK-B225M115FH [○]															PKE-B225M115FH [○]	41.7
	115	PK-B225M115FH [○]															PKE-B225M115FH [○]	41.7
125	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 ¹ / ₃₂	1 ¹ / ₂	3 ³ / ₈	4	125
	5	PK-B22580FH	PKE-B22580FH [○]															124
	125	PK-B225M125FH [○]	PKE-B225M125FH [○]															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.

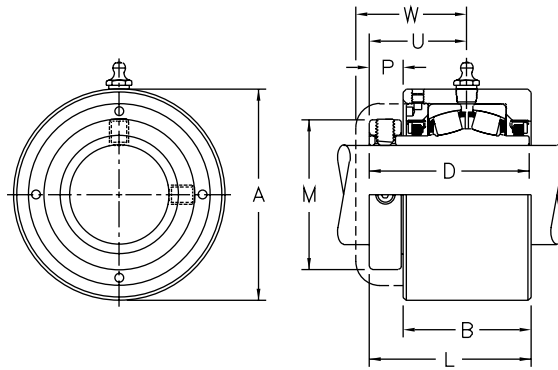
Load ratings, pages D-7, D-8.

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

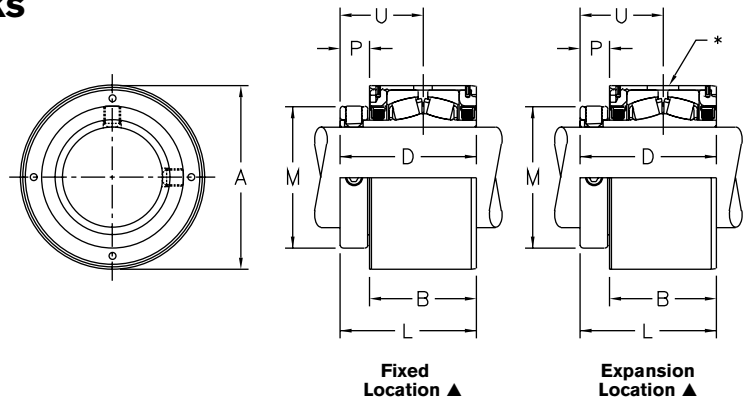
Load ratings, pages D-7, D-8.

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



Dimensions (inches/mm)

Shaft dia.		Cartridge unit number ▲	A †	B	D	L	M	P	U	Unit wt. (lbs./kg.)									
mm	inches																		
25	1	CSE-B22416H CSE-B224M25H	2.665 67.69	2 50.80	2 ⁹ / ₁₆ 65.09	2 ⁹ / ₁₆ 65.1	2 50.8	9 ¹ / ₁₆ 14.3	1 ⁹ / ₁₆ 39.7	3 1.3									
	30	1 ³ / ₁₆	CSE-B22419H CSE-B22420H CSE-B224M30H	2.915 74.04	2 ¹ / ₈ 53.98	2 ¹¹ / ₁₆ 68.26	2 ¹¹ / ₁₆ 68.3	2 ³ / ₁₆ 55.6	9 ¹ / ₁₆ 14.3	1 ⁵ / ₈ 41.3	4 4								
1 ¹ / ₄		1.7																	
35		1 ⁷ / ₁₆									CSE-B22423H CSE-B22424H CSE-B224M35H	3.124 79.35	2 ³ / ₁₆ 55.56	2 ⁷ / ₈ 73.02	2 ⁷ / ₈ 73.0	2 ¹ / ₂ 63.5	1 ¹ / ₁₆ 17.5	1 ²⁹ / ₃₂ 45.2	4 4
	1 ¹ / ₂	1.8																	
	40	1 ⁵ / ₈	CSE-B22426H CSE-B22427H CSE-B22428H CSE-B224M40H	3.636 92.35	2 ⁷ / ₁₆ 61.91	3 ¹ / ₈ 79.38	3 ¹ / ₈ 79.4	2 ³ / ₄ 69.8	1 ¹ / ₁₆ 17.5	1 ²⁹ / ₃₂ 48.4									6 5 5
1 ¹¹ / ₁₆		2.5																	
1 ³ / ₄		2.6 2.3																	
45											1 ¹⁵ / ₁₆	CSE-B22431H CSE-B22432H CSE-B224M45H CSE-B224M50H	3.833 97.36	2 ²⁵ / ₆₄ 60.72	3 ¹ / ₈ 79.38	3 ¹ / ₈ 79.4	2 ¹⁵ / ₁₆ 74.6	1 ¹ / ₁₆ 17.5	1 ²⁹ / ₃₂ 48.4
	2																		
	50	2.6 2.3																	
55	2 ³ / ₁₆	CSE-B22435H CSE-B22436H CSE-B224M55H	4.227 107.36	2 ¹ / ₂ 63.50	3 ⁵ / ₁₆ 84.14	3 ⁵ / ₁₆ 84.1	3 ³ / ₈ 85.7	1 ³ / ₁₆ 20.6	2 ¹ / ₁₆ 52.4	7 7									
	2 ¹ / ₄									3.2									
	60									2 ⁷ / ₁₆	CSE-B22439H CSE-B22440H CSE-B224M60H	4.621 117.37	2 ⁵ / ₈ 66.68	3 ¹ / ₂ 88.90	3 ¹ / ₂ 88.9	3 ⁵ / ₈ 92.1	7 ⁷ / ₈ 22.2	2 ³ / ₁₆ 55.6	8 8
2 ¹ / ₂		3.9																	
65		2 ¹¹ / ₁₆	CSE-B22443H CSE-B22444H CSE-B22447H CSE-B22448H CSE-B224M65H	5.407	3 ¹ / ₈	4	4	4 ¹ / ₁₆	7 ⁷ / ₈	2 ⁷ / ₁₆									14 14 13 13
		2 ³ / ₄																	6.6 6.4
	2 ¹⁵ / ₁₆																		
70	3	CSE-B224M70H	137.34	79.38	101.60	101.6	106.4	22.2	61.9	6.4									
75		CSE-B224M75H								5.9									
80	3 ³ / ₁₆	CSE-B22451H CSE-B22455H CSE-B22456H CSE-B224M80H	6.194	3 ⁷ / ₁₆	4 ³ / ₈	4 ³ / ₈	5	1 ⁵ / ₁₆	2 ²¹ / ₃₂	20 18 18									
	3 ⁷ / ₁₆										9.0 8.6								
	3 ¹ / ₂																		
85		CSE-B224M85H	157.33	87.31	111.12	111.1	127.0	23.8	67.5	8.6									
90	3 ¹¹ / ₁₆	CSE-B22459H CSE-B22463H CSE-B22464H	7.375	4	5 ¹ / ₁₆	5 ¹ / ₁₆	5 ²⁹ / ₃₂	1 ¹ / ₁₆	3 ¹ / ₁₆	33 31 31									
	3 ¹⁵ / ₁₆																		
	4																		
	100										15.9 14.1								
100		CSE-B224M100H	187.32	101.60	128.59	128.6	150.0	27.0	77.8	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 4³/₁₆" 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 3¹/₁₆" (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.

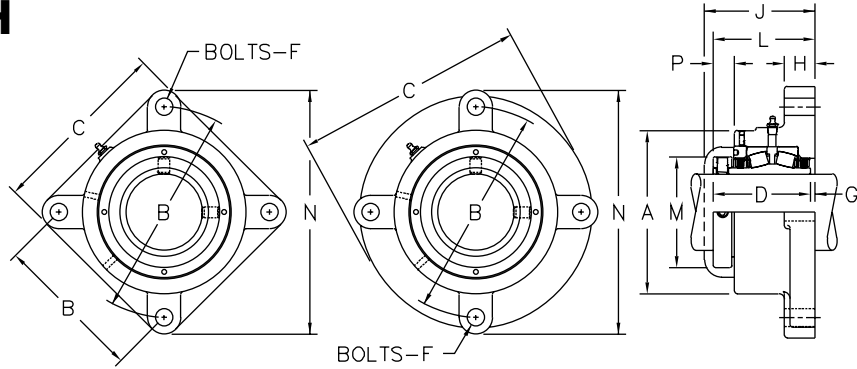
Load ratings, pages D-7, D-8.

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. mm	Flanged unit number		A		B		C ▲	D	F Bolts		G ●	H	J ◆	L ●	M	N	P ●	Unit wt. (lbs./kg.)		
		Fixed	Expansion	Fixed	Exp	Circle	Square														
3-BOLT ROUND	25	1	F-B22416H <i>F-B224M25H</i>	FE-B22416H <i>FE-B224M25H</i>	27/8	3/4	4 1/8	...	4 3/4	29/16	3/8	1/32	9/16	2 15/16	2 19/32	2	5 1/8	17/32	3		
					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		
	30	1 3/16	F-B22419H <i>F-B224M30H</i>	FE-B22419H <i>FE-B224M30H</i>	3 1/8	3 1/2	4 1/2	...	5 1/8	2 11/16	3/8	1/32	1 9/32	3 1/16	2 23/32	2 3/16	5 1/2	17/32	13.5	6	
		1 1/4																			79.4
	35	1 7/16	F-B22423H <i>F-B224M35H</i>	FE-B22423H <i>FE-B224M35H</i>	3 7/16	3 3/4	5	...	5 7/8	2 7/8	1/2	1/32	5/8	3 3/16	2 29/32	2 1/2	6 1/4	2 1/32	16.7	7	
		1 1/2																			87.3
	4-BOLT ROUND	40	1 5/8	F-B22426H <i>F-B224M40H</i>	FE-B22426H <i>FE-B224M40H</i>	3 15/16	4 1/4	5 1/2	3 57/64	6 3/8	3 1/8	1/2	1/32	5/8	3 1/2	3 3/32	2 3/4	6 3/4	2 1/32	16.7	9
			1 11/16																		
		45	1 5/8	F-B22431H <i>F-B224M45H</i>	FE-B22431H <i>FE-B224M45H</i>	4 1/4	4 1/2	5 3/4	4 1/16	6 11/16	3 3/8	1/2	1/16	1 1/16	3 3/16	3 3/16	2 15/16	7	2 1/32	16.7	10
			2																		
50		2 1/16	F-B22432H <i>F-B224M50H</i>	FE-B22432H <i>FE-B224M50H</i>	4 1/4	4 1/2	5 3/4	4 1/16	6 11/16	3 3/8	1/2	1/16	1 1/16	3 3/16	3 3/16	2 15/16	7	2 1/32	16.7	10	
		2																			108.0
4-BOLT ROUND		55	2 3/16	F-B22435H <i>F-B224M55H</i>	FE-B22435H <i>FE-B224M55H</i>	4 7/8	4 7/8	6 3/8	4 1/2	7 3/8	3 5/16	5/8	3/32	1 1/16	3 25/32	3 13/32	3 3/8	7 3/4	2 5/32	19.8	14
			2 1/4																		
		60	2 7/16	F-B22439H <i>F-B224M60H</i>	FE-B22439H <i>FE-B224M60H</i>	5 1/8	5 3/8	6 3/4	4 9/64	7 3/4	3 1/2	5/8	3/32	3/4	3 31/32	3 19/32	3 3/8	8 1/8	2 7/32	21.4	17
			2 1/2																		
	65	2 11/16	F-B22443H <i>F-B224M65H</i>	FE-B22443H <i>FE-B224M65H</i>	6 1/4	6 1/4	7 7/8	5 9/16	9 1/8	4	3/4	3/32	7/8	4 7/16	4 3/32	4 3/16	9 1/2	2 7/32	21.4	17	
		2 3/4																			158.8
	70	2 15/16	F-B22447H <i>F-B224M70H</i>	FE-B22447H <i>FE-B224M70H</i>	6 1/4	6 1/4	7 7/8	5 9/16	9 1/8	4	3/4	3/32	7/8	4 7/16	4 3/32	4 3/16	9 1/2	2 7/32	21.4	17	
		3																			158.8
	75	3	F-B22448H <i>F-B224M75H</i>	FE-B22448H <i>FE-B224M75H</i>	6 1/4	6 1/4	7 7/8	5 9/16	9 1/8	4	3/4	3/32	7/8	4 7/16	4 3/32	4 3/16	9 1/2	2 7/32	21.4	17	
		3																			158.8
4-BOLT SQUARE	80	3 3/16	F-B22451H <i>F-B224M80H</i>	FE-B22451H <i>FE-B224M80H</i>	7 3/8	7 3/8	9 1/2	6 29/32	8 5/8	4 3/8	3/4	3/16	1 3/8	4 29/32	4 9/16	5	1 17/16	1 5/16	23.8	41	
		3 7/16																			187.3
	85	3 1/2	F-B22456H <i>F-B224M85H</i>	FE-B22456H <i>FE-B224M85H</i>	7 3/8	7 3/8	9 1/2	6 29/32	8 5/8	4 3/8	3/4	3/16	1 3/8	4 29/32	4 9/16	5	1 17/16	1 5/16	23.8	41	
		3 1/2																			187.3
	90	3 11/16	F-B22459H <i>F-B224M90H</i>	FE-B22459H <i>FE-B224M90H</i>	8 1/8	8 3/8	10 3/4	7 39/64	9 3/4	5 1/16	7/8	5/32	1 1/2	5 5/8	5 7/32	5 29/32	12 29/32	1 1/2	11 1/2	26.2	57
		3 15/16																			
	100	4	F-B22464H <i>F-B224M100H</i>	FE-B22464H <i>FE-B224M100H</i>	8 1/8	8 3/8	10 3/4	7 39/64	9 3/4	5 1/16	7/8	5/32	1 1/2	5 5/8	5 7/32	5 29/32	12 29/32	1 1/2	11 1/2	26.2	57
		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.

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 3 3/16" and larger shaft.

◆ Width dimension for closed end unit.

Selection guide, pages D-5, D-6.

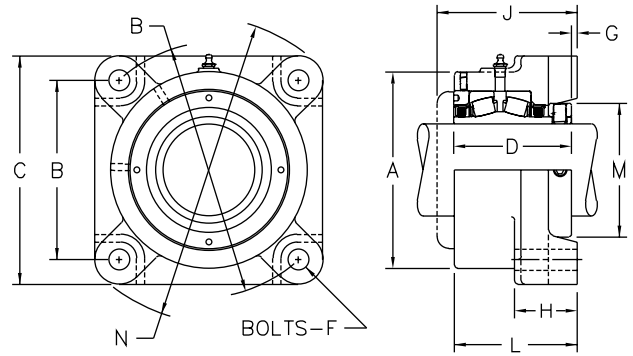
Load ratings, pages D-7, D-8.

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 Bolts	G	H	J ◆	L	M	N	Unit wt. (lbs./kg.)
mm	inches			Circle	Square										
35	17/16	EFR-B22423H <i>EFR-B224M35H</i>	3/4 95.2	4 ⁶¹ / ₆₄ 125.81	3 1/2 88.9	4 ⁵ / ₈ 117.5	2 7/8 73.02	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 3.4
	40	1 1/2	EFR-B224B24H EFR-B22426H EFR-B22427H <i>EFR-B224M40H</i>	4 1/4 108.0	5 ⁵³ / ₆₄ 148.03	4 1/8 104.8	5 1/2 139.7	3 3/8 79.38	1/2 12	1/8 3.2	1 3/8 34.9	4 ⁹ / ₃₂ 108.7	3 ³ / ₃₂ 83.3	2 3/4 69.8	7 ⁷ / ₃₂ 183.4	11
1 5/8		11													
1 11/16		10													
45	1 3/4	EFR-B224B28H EFR-B22431H EFR-B22432H <i>EFR-B224M45H</i> <i>EFR-B224M50H</i>	4 1/2 114.3	6 ³ / ₁₆ 157.18	4 ³ / ₈ 111.1	5 1/2 139.7	3 3/8 79.38	1/2 12	1/8 3.2	1 7/16 36.5	4 ⁵ / ₁₆ 109.5	3 ³ / ₃₂ 83.3	2 ¹⁵ / ₁₆ 74.6	7 ⁵ / ₁₆ 185.7	5.3
	1 15/16														11
	2														10
55	2 ³ / ₁₆	EFR-B22435H <i>EFR-B224M55H</i>	5 127.0	6 ⁵⁷ / ₆₄ 175.03	4 ⁷ / ₈ 123.8	6 1/4 158.8	3 ³ / ₁₆ 84.14	5/8 16	1/8 3.2	1 1/2 38.1	4 ³ / ₈ 117.5	3 ¹ / ₃₂ 88.1	3 ³ / ₈ 85.7	8 ³ / ₃₂ 210.3	15 7.1
	60	2 1/4	EFR-B224B36H EFR-B22439H EFR-B22440H <i>EFR-B224M60H</i>	5 ³ / ₈ 136.5	7 ¹ / ₃₂ 192.89	5 ³ / ₈ 136.5	6 3/4 171.4	3 1/2 88.90	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
2 7/16		17													
2 1/2		17													
65	2 11/16	EFR-B22443H EFR-B22444H EFR-B22447H EFR-B22448H <i>EFR-B224M65H</i> <i>EFR-B224M70H</i> <i>EFR-B224M75H</i>	6 1/4 158.8	8 ³ / ₆₄ 215.49	6 152.4	7 ⁷ / ₈ 193.7	4 101.60	3/4 20	3/16 4.8	1 13/16 46.0	5 ¹ / ₃₂ 137.3	4 ⁷ / ₃₂ 107.2	4 ⁹ / ₁₆ 106.4	10 1/8 257.2	26
	2 3/4														25
	2 5/16														24
	3														24
80	3 ³ / ₁₆	EFR-B22451H EFR-B22455H <i>EFR-B224M80H</i> <i>EFR-B224M85H</i>	7 ³ / ₈ 187.3	9 ⁹ / ₆₄ 251.23	7 177.8	8 3/4 222.2	4 ³ / ₈ 111.12	3/4 20	3/32 2.4	1 15/16 49.2	5 ³ / ₄ 146.0	4 ¹ / ₃₂ 113.5	5 127.0	11 ²¹ / ₃₂ 296.1	42
	3 7/16														41
	3 1/2														40
90	3 11/16	EFR-B22459H EFR-B22463H EFR-B22464H <i>EFR-B224M90H</i> <i>EFR-B224M100H</i>	8 ³ / ₈ 212.7	10 ⁶ / ₆₄ 278.21	7 ³ / ₄ 196.8	9 ³ / ₄ 247.6	5 1/16 128.59	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	58
	3 5/16														56
	4														56
100															27.2 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.

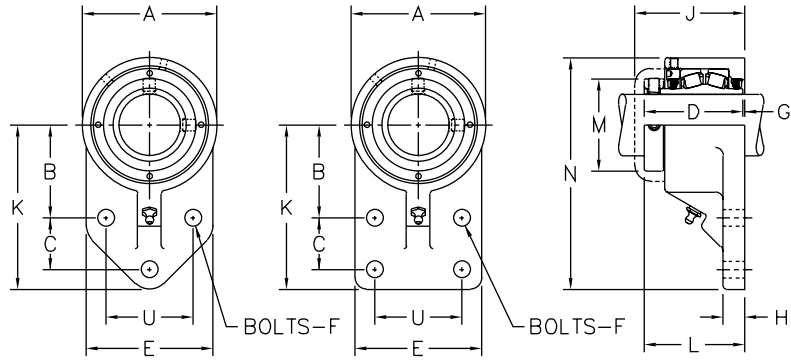
Load ratings, pages D-7, D-8.

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.		Flanged bracket unit number	A	B	C	D	E	F	G	H	J	K	L	M	N	U	Unit wt. (lbs./kg.)	
	mm	inches																	
3-BOLT	35	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	
			<i>FB-B224M35H</i>															2.9	
	45	2	1 ¹⁵ / ₁₆	FB-B22431H	4 ¹ / ₄	2 ¹⁵ / ₁₆	1 ³ / 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
				FB-B22432H															10.0
				<i>FB-B224M45H</i>															4.4
50			<i>FB-B224M50H</i>	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	4.3	
		60	2 ⁷ / ₁₆	FB-B22439H	5 ³ / ₈	3 ³ / ₄	1 ¹ / 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
	<i>FB-B224M60H</i>		8.1																
4-BOLT	65	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	
	70	3		FB-B22448H	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	28.0
				<i>FB-B224M65H</i>															13.7
				<i>FB-B224M70H</i>															13.5
75			<i>FB-B224M75H</i>															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 1¹/₂ and smaller shafts, 1/4"-28 UNF; for all other shafts, 1/8" PT.

All units available with type E lip seals.

◆ Width dimension for closed end unit.

Selection guide, pages D-5, D-6.

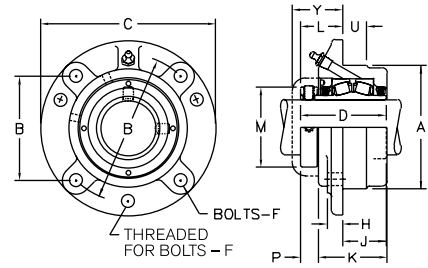
Load ratings, pages D-7, D-8.

Additional information, page D-68.

Spherical Roller Bearing Flanged 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 Bolts	H	J	K	L	M	P	U	Y ◆	Unit wt. (lbs./kg.)
mm	inches			Circle	Square												
25	1	FC-B22416H <i>FC-B224M25H</i>	3.000 76.20	3 ⁵ / ₈ 92.08	2 ⁹ / ₁₆ 65.1	4 ³ / ₈ 111.1	2 ⁹ / ₁₆ 65.09	5 ¹ / ₁₆ 8	7 ¹ / ₁₆ 11.1	1 ¹ / ₄ 31.8	2 ¹ / ₃₂ 51.6	1 ⁹ / ₃₂ 32.5	2 50.8	1 ⁷ / ₃₂ 13.5	5 ⁸ / ₁₆ 15.9	1 ⁵ / ₈ 41.3	4 1.6
	30	1 ³ / ₁₆ 1 ¹ / ₄	FC-B22419H FC-B22420H <i>FC-B224M30H</i>	3.375 85.72	4 ¹ / ₈ 104.78	2 ⁹ / ₆₄ 74.2	5 127.0	2 ¹ / ₁₆ 68.26	3 ⁸ / ₁₆ 10	7 ¹ / ₁₆ 11.1	1 ²⁵ / ₆₄ 35.3	2 ⁵ / ₃₂ 54.8	1 ⁹ / ₃₂ 32.5	2 ³ / ₁₆ 55.6	1 ⁷ / ₃₂ 13.5	3 ⁴ / ₁₆ 19.0	1 ⁵ / ₈ 41.3	5 5 2.2
35		1 ⁷ / ₁₆ 1 ¹ / ₂	FC-B22423H FC-B22424H <i>FC-B224M35H</i>	3.625 92.08	4 ³ / ₈ 111.12	3 ³ / ₃₂ 78.6	5 ¹ / ₄ 133.4	2 ⁷ / ₈ 73.02	3 ⁸ / ₁₆ 10	1 ² / ₂ 12.7	1 ²⁵ / ₆₄ 35.3	2 ⁷ / ₃₂ 56.4	1 ⁹ / ₃₂ 37.3	2 ¹ / ₂ 63.5	2 ¹ / ₃₂ 16.7	3 ⁴ / ₁₆ 19.0	1 ⁷ / ₈ 47.6	6 6 2.6
	40	1 ⁵ / ₈ 1 ¹ / ₁₆ 1 ³ / ₄	FC-B22426H FC-B22427H FC-B22428H <i>FC-B224M40H</i>	4.250 107.95	5 ¹ / ₈ 130.18	3 ³ / ₈ 92.1	6 ¹ / ₈ 155.6	3 ¹ / ₈ 79.38	7 ¹ / ₁₆ 10	1 ² / ₂ 12.7	1 ¹⁹ / ₃₂ 40.5	2 ¹⁵ / ₃₂ 62.7	1 ¹⁷ / ₃₂ 38.9	2 ³ / ₄ 69.8	2 ¹ / ₃₂ 16.7	7 ⁸ / ₁₆ 22.2	1 ⁷ / ₈ 47.6	9 9 9 3.8
45 50		1 ¹⁵ / ₁₆ 2	FC-B22431H FC-B22432H <i>FC-B224M45H</i> <i>FC-B224M50H</i>	4.500 114.30	5 ³ / ₈ 136.52	3 ⁵ / ₆₄ 96.4	6 ³ / ₈ 161.9	3 ¹ / ₈ 79.38	7 ¹ / ₁₆ 10	9 ¹ / ₁₆ 14.3	1 ¹⁹ / ₃₂ 40.5	2 ¹⁵ / ₃₂ 62.7	1 ¹⁷ / ₃₂ 38.9	2 ¹⁵ / ₁₆ 74.6	2 ¹ / ₃₂ 16.7	7 ⁸ / ₁₆ 22.2	1 ²⁹ / ₃₂ 48.4	9 9 4.0 4.3
	55	2 ³ / ₁₆ 2 ¹ / ₄	FC-B22435H FC-B22436H <i>FC-B224M55H</i>	5.000 127.00	6 152.40	4 ¹ / ₄ 107.9	7 ¹ / ₈ 181.0	3 ⁵ / ₁₆ 84.14	1 ² / ₂ 12	9 ¹ / ₁₆ 14.3	1 ²¹ / ₃₂ 42.1	2 ¹⁷ / ₃₂ 64.3	1 ²¹ / ₃₂ 42.1	3 ³ / ₈ 85.7	2 ⁵ / ₃₂ 19.8	1 25.4	2 ¹ / ₃₂ 51.6	12 12 5.6
60		2 ⁷ / ₁₆ 2 ¹ / ₂	FC-B22439H FC-B22440H <i>FC-B224M60H</i>	5.500 139.70	6 ¹ / ₂ 165.10	4 ¹ / ₂ 116.7	7 ⁷ / ₈ 193.7	3 ¹ / ₂ 88.90	1 ² / ₂ 12	5 ⁸ / ₁₆ 15.9	1 ¹¹ / ₁₆ 42.9	2 ²¹ / ₃₂ 67.5	1 ¹⁹ / ₁₆ 46.0	3 ³ / ₈ 92.1	7 ⁸ / ₁₆ 22.2	1 25.4	2 ⁵ / ₃₂ 54.8	16 16 7.2
	65 70 75	2 ¹¹ / ₁₆ 2 ³ / ₄ 2 ¹⁵ / ₁₆ 3	FC-B22443H <i>FC-B22444H</i> FC-B22447H FC-B22448H <i>FC-B224M65H</i> <i>FC-B224M70H</i> <i>FC-B224M75H</i>	6.375 161.92	7 ¹ / ₂ 190.50	5 ¹ / ₆₄ 134.5	8 ³ / ₄ 222.2	4 101.60	5 ⁸ / ₁₆ 16	3 ⁴ / ₁₆ 19.0	2 ¹ / ₃₂ 51.6	3 ³ / ₃₂ 80.2	1 ³ / ₃₂ 50.0	4 ³ / ₁₆ 106.4	2 ⁷ / ₃₂ 21.4	1 ¹ / ₄ 31.8	2 ⁵ / ₁₆ 58.7	25 25 24 24 11.6 11.4 11.0
80 85		3 ³ / ₁₆ 3 ⁷ / ₁₆ 3 ¹ / ₂	FC-B22451H FC-B22455H <i>FC-B22456H</i> <i>FC-B224M80H</i> <i>FC-B224M85H</i>	7.375 187.32	8 ⁵ / ₈ 219.08	6 ³ / ₃₂ 154.8	10 ¹ / ₄ 260.4	4 ³ / ₈ 111.12	3 ⁴ / ₁₆ 20	1 ⁵ / ₁₆ 23.8	1 ¹⁵ / ₁₆ 49.2	3 ³ / ₈ 85.8	2 ⁷ / ₁₆ 61.9	5 127.0	1 ⁵ / ₁₆ 23.8	1 ¹ / ₄ 31.8	2 ²⁵ / ₃₂ 70.6	38 37 36 17.4 16.9
	90 100	3 ¹¹ / ₁₆ 3 ¹³ / ₁₆ 4	FC-B22459H FC-B22463H FC-B22464H <i>FC-B224M90H</i> <i>FC-B224M100H</i>	8.125 206.38	9 ³ / ₈ 238.12	6 ⁵ / ₈ 168.3	10 ⁷ / ₈ 276.2	5 ¹ / ₁₆ 128.59	3 ⁴ / ₁₆ 20	1 ¹ / ₈ 28.6	2 ¹³ / ₃₂ 61.1	3 ³ / ₃₂ 101.1	2 ²¹ / ₃₂ 67.5	5 ²⁹ / ₃₂ 150.0	1 ¹ / ₃₂ 26.2	2 50.8	3 ¹ / ₁₆ 77.8	52 50 50 24.6 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, 1/4-28 UNF; for all others, 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.

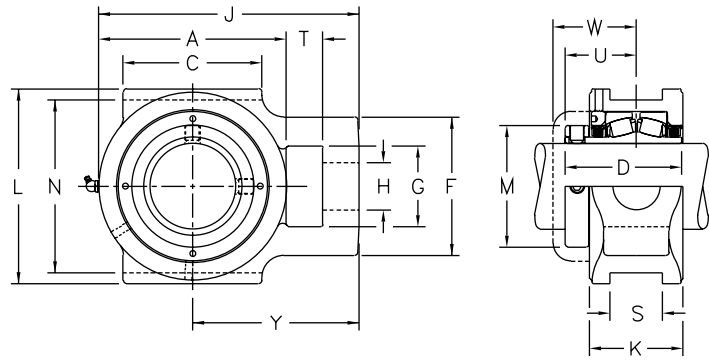
Load ratings, pages D-7, D-8.

Additional information, page D-68.

Spherical Roller Bearing Takeup Units

T-B22400H

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



Dimensions (inches/mm)

Shaft dia.		Takeup unit number	A	C	D	F	G	H	J	K	L	M	N □	S □	T	U	W ◆	Y	Unit wt. (lbs./kg.)
mm	inches																		
25	1	T-B22416H	2 ¹⁵ / ₁₆	2 ¹ / ₄	2 ⁹ / ₁₆	2	1 ¹ / ₄	1 ³ / ₁₆	4	2 ¹ / ₁₆	3 ⁵ / ₈	2	3.000	.531	5 ⁸ / ₁₆	1 ⁹ / ₁₆	1 ²⁹ / ₃₂	2 ⁹ / ₁₆	4.4
		<i>T-B224M25H</i>	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
30	1 ³ / ₁₆ 1 ¹ / ₄	T-B22419H	3 ¹ / ₄	2 ¹ / ₂	2 ¹ / ₁₆	2 ⁵ / ₁₆	1 ⁷ / ₁₆	7 ⁸ / ₁₆	4 ⁷ / ₁₆	2 ³ / ₁₆	4 ¹ / ₈	2 ³ / ₁₆	3.500	.531	5 ⁸ / ₁₆	1 ⁵ / ₈	1 ³¹ / ₃₂	2 ¹³ / ₁₆	5.7
		T-B22420H																	5.6
		<i>T-B224M30H</i>	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
35	1 ⁷ / ₁₆ 1 ¹ / ₂	T-B22423H	3 ¹ / ₂	2 ³ / ₄	2 ⁷ / ₈	2 ³ / ₈	1 ⁷ / ₁₆	7 ⁸ / ₁₆	4 ³ / ₄	2 ¹ / ₄	4 ¹ / ₈	2 ¹ / ₂	3.500	.531	5 ⁸ / ₁₆	1 ²⁹ / ₃₂	2 ³ / ₁₆	3	6.4
		T-B22424H																	6.4
		<i>T-B224M35H</i>	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
40	1 ⁵ / ₈ 1 ¹¹ / ₁₆ 1 ³ / ₄	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 / ₁₆	1 ²⁹ / ₃₂	2 ¹ / ₄	3 ⁵ / ₈	9.7
		T-B22427H																	9.5
		T-B22428H																	9.5
		<i>T-B224M40H</i>	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
45 50	1 ¹⁵ / ₁₆ 2	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 / ₁₆	1 ²⁹ / ₃₂	2 ⁹ / ₃₂	3 ³ / ₄	9.9
		T-B22432H																	9.7
		<i>T-B224M45H</i> <i>T-B224M50H</i>	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 4.7
55	2 ³ / ₁₆ 2 ¹ / ₄	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
		T-B22436H																	14.1
		<i>T-B224M55H</i>	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
60	2 ⁷ / ₁₆ 2 ¹ / ₂	T-B22439H	5 ⁵ / ₁₆	4	3 ¹ / ₂	4 ¹ / ₈	2 ¹ / ₂	1 ³ / ₈	7 ¹³ / ₁₆	2 ¹¹ / ₁₆	5 ⁷ / ₈	3 ³ / ₈	5.125	1.063	1 ¹ / ₄	2 ³ / ₁₆	2 ⁹ / ₁₆	5 ¹ / ₃₂	18.0
		T-B22440H																	17.8
		<i>T-B224M60H</i>	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
65 70 75	2 ¹¹ / ₁₆ 2 ³ / ₄ 2 ¹⁵ / ₁₆ 3	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 ²⁹ / ₃₂	5 ²⁹ / ₃₂	13.6
		T-B22444H																	13.5
		T-B22447H																	13.0
		T-B22448H																	12.9
		<i>T-B224M65H</i> <i>T-B224M70H</i> <i>T-B224M75H</i>	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	6.6 6.4 5.9
80 85	3 ⁷ / ₁₆ 3 ¹ / ₂	T-B22455H	7 ⁸ / ₁₆	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
		T-B22456H																	43.1
		<i>T-B224M80H</i> <i>T-B224M85H</i>	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 20.0
90 100	3 ¹⁵ / ₁₆ 4	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
		T-B22464H																	76
		<i>T-B224M90H</i> <i>T-B224M100H</i>	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 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" (-0.15" (+0.13 mm -0.38 mm)).

◆ Width dimension for closed end unit.

Selection guide, pages D-5, D-6.

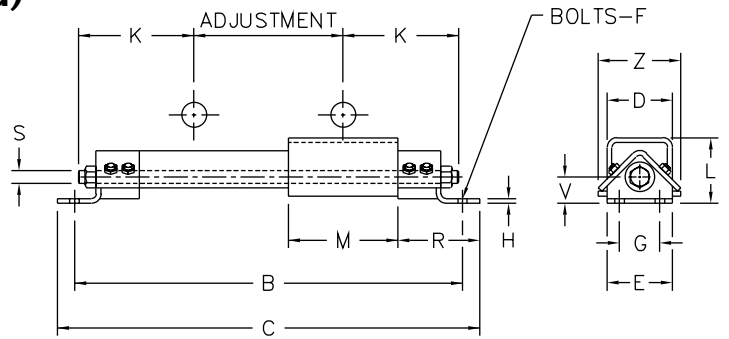
Load ratings, pages D-7, D-8.

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)

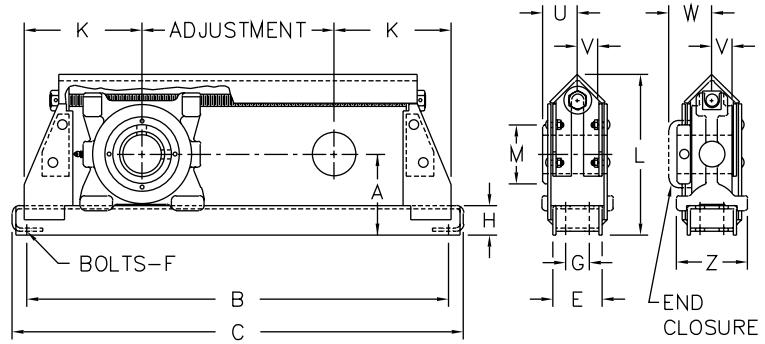
Shaft Sizes			Takeup frame number	Adjustment	B	C	D	E	F	G	H	K	L	M	R	S	V	Z
P-B224 PK-B224 P-B226 PK-B226	EP-B224 EP-B225 EP-B226	P-B225																	Bolts	Rod Dia.
1 ¹ / ₁₆ thru 2 ¹ / ₂	1 ⁷ / ₁₆ thru 2 ¹ / ₂	1 ⁷ / ₁₆ thru 2 ⁷ / ₁₆	LHD20-12	12	29	31	4	5	5/8	2 ¹ / ₂	1/4	8 ¹ / ₂	5 ¹ / ₄	11	4	3/4	2	6 ¹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

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)

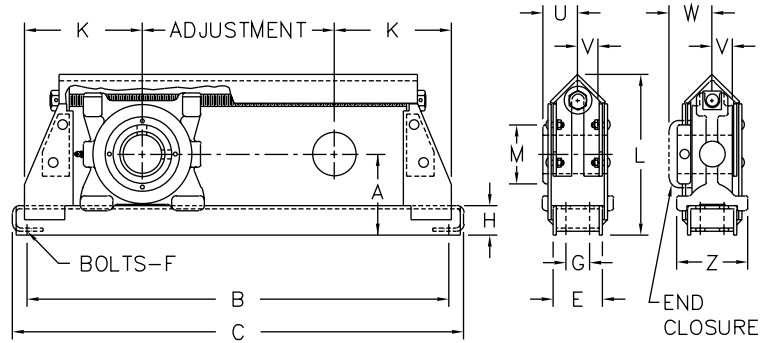
Shaft dia. mm inches	Adjustment ▲	Takeup unit number	A	B	C	E	F Bolts	G	H	K	L	M	U	V	W ◆	Z	Unit wt. (lbs./kg.)
1 15/16	12	DS-B22431H-12	3 15/16	26 1/2	28 1/2	3	5/8	...	1 3/4	7 1/4	8 1/4	2 15/16	1 29/32	1 1/4	2 9/32	4 1/8	43
	18	DS-B22431H-18		32 1/2	34 1/2												49
	24	DS-B22431H-24		38 1/2	40 1/2												54
45	304.8	<i>DS-B224M45H-12</i>	100	673.1	723.9	76.2	16	...	44.4	184.2	209.6	74.6	48.4	31.8	57.9	104.8	19.5
	457.2	<i>DS-B224M45H-18</i>		825.5	876.3												22.2
	609.6	<i>DS-B224M45H-24</i>		977.9	1028.7												24.5
50	304.8	<i>DS-B224M50H-12</i>	106.4	698.5	749.3	76.2	16	...	44.4	196.8	220.7	85.7	52.4	32.5	61.9	104.8	19.5
	457.2	<i>DS-B224M50H-18</i>		850.9	901.7												22.2
	609.6	<i>DS-B224M50H-24</i>		1003.3	1054.1												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 1 1/16	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
55	304.8	<i>DS-B224M55H-12</i>	111.1	723.9	774.7	76.2	20	...	44.4	209.6	231.8	92.1	55.6	34.9	65.1	104.8	22.2
	457.2	<i>DS-B224M55H-18</i>		876.3	927.1												24.9
	609.6	<i>DS-B224M55H-24</i>		1028.7	1079.5												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
60	304.8	<i>DS-B224M60H-12</i>	111.1	723.9	774.7	76.2	20	...	44.4	209.6	231.8	92.1	55.6	34.9	65.1	104.8	24.9
	457.2	<i>DS-B224M60H-18</i>		876.3	927.1												27.2
	609.6	<i>DS-B224M60H-24</i>		1028.7	1079.5												29.9
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
65	304.8	<i>DS-B224M65H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M65H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M65H-24</i>		1079.5	1130.3												44.4
70	304.8	<i>DS-B224M70H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M70H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M70H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4
75	304.8	<i>DS-B224M75H-12</i>	130.2	774.7	825.5	101.6	16	50.8	50.8	235.0	269.9	106.4	61.9	41.3	70.6	130.2	36.3
	457.2	<i>DS-B224M75H-18</i>		927.1	977.9												40.4
	609.6	<i>DS-B224M75H-24</i>		1079.5	1130.3												44.4

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

For replacement bearing numbers, see pages D-62 through D-65.

◆ Width dimension for closed end unit.

Continued on facing page.



Dimensions (inches/mm)

Shaft dia. mm 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	107 116 124 132
	18	DS-B22455H-18		38	40 1/4												
	24	DS-B22455H-24		44	46 1/4												
	30	DS-B22455H-30		50	52 1/4												
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 52.6 56.2 59.9
	457.2	DS-B224M80H-18		965.2	1022.4												
	609.6	DS-B224M80H-24		1117.6	1174.8												
	762.0	DS-B224M80H-30		1270.0	1327.2												
85	304.8	DS-B224M85H-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 87.1 91.6 96.2
	457.2	DS-B224M85H-18		1066.8	1130.3												
	609.6	DS-B224M85H-24		1219.2	1282.7												
	762.0	DS-B224M85H-30		1371.6	1435.1												
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	180 192 202 212
	18	DS-B22463H-18		42	44 1/2												
	24	DS-B22463H-24		48	50 1/2												
	30	DS-B22463H-30		54	56 1/2												
90	304.8	DS-B224M90H-12	190.5	914.4	977.9	127.0	20	63.5	57.2	304.8	398.5	155.6	85.7	85.7	95.2	174.6	108.0 113.4 119.3
	457.2	DS-B224M90H-18		1066.8	1130.3												
	609.6	DS-B224M90H-24		1219.2	1282.7												
	762.0	DS-B224M90H-30		1371.6	1435.1												
100	304.8	DS-B224M100H-12	190.5	914.4	977.9	127.0	20	63.5	57.2	304.8	398.5	155.6	85.7	85.7	95.2	174.6	108.0 113.4 119.3
	457.2	DS-B224M100H-18		1066.8	1130.3												
	609.6	DS-B224M100H-24		1219.2	1282.7												
	762.0	DS-B224M100H-30		1371.6	1435.1												
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	238 250 263
	24	DS-B22571H-24 °		48	50 1/2												
	30	DS-B22571H-30°		54	56 1/2												
	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	108.0 113.4 119.3
609.6	DS-B225M110H-24°	1219.2	1282.7														
762.0	DS-B225M110H-30°	1371.6	1435.1														
457.2	DS-B225M115H-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	108.0 113.4 119.3
609.6	DS-B225M115H-24°		1219.2	1282.7													
762.0	DS-B225M115H-30°		1371.6	1435.1													
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	184.2 192.3 200.0
609.6	DS-B225M125H-24°	1346.2		1435.1													
762.0	DS-B225M125H-30°	1498.6		1587.5													
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	184.2 192.3 200.0
609.6	DS-B225M125H-24°		1346.2	1435.1													
762.0	DS-B225M125H-30°		1498.6	1587.5													

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

For replacement bearing numbers, see pages D-62 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.

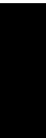
○ Series DS-B22500H takeups have two spring locking collars (bearing dimensions, page D-40, load rating, pages D-33, D-34, selection guide, pages D-31, D-32.

Selection guide, pages D-5, D-6.

Load ratings, pages D-7, D-8.

Additional information, page D-68.

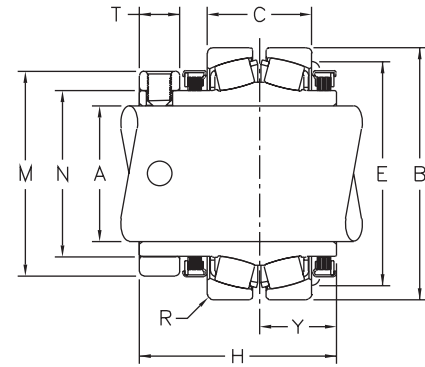
Notes:



Replacement Spherical Roller Bearings

B22400HL

Self-aligning
Spring Locking Collar



Dimensions (inches/mm)

Shaft Sizes	Bearing number *	A		B	C	E Shoulder diameter	H	M	N	R Housing fillet	T	Y	Unit wt. (lbs./kg.)	
		mm	inches	+0.0010" -0.000"	±0.025" ±0.64mm ‡									
1	B22416HL		1.0000	2.3750	1.188	2	2 ⁹ / ₁₆	2	1.307	.046	½	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 ¹ / ₁₆ 1 ¹ / ₄	B22419HL		1.1875	2.6250	1.312	2 ⁵ / ₁₆	2 ¹¹ / ₁₆	2 ³ / ₁₆	1.532	.062	½	1 ¹ / ₁₆	1.8	
	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 1 ¹ / ₂	B22423HL		1.4375	2.8345	1.310	2 ¹ / ₂	2 ⁷ / ₈	2 ¹ / ₂	1.745	.062	5 ⁸ / ₁₆	1 ³ / ₃₂	2.2	
	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 1 ⁵ / ₈ 1 ¹¹ / ₁₆ 1 ³ / ₄	B224B24HL		1.5000	3.3464	1.578	2 ⁷ / ₈	3 ¹ / ₈	2 ³ / ₄	2.027	.062	5 ⁸ / ₁₆	1 ⁷ / ₃₂	3.3	
	B22426HL		1.6250											3.2
	B22427HL		1.6875											3.0
	B22428HL		1.7500											1.6
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 1 ¹⁵ / ₁₆ 2	B224B28HL		1.7500	3.5433	1.526	3 ³ / ₁₆	3 ¹ / ₈	2 ¹⁵ / ₁₆	2.307	.078	5 ⁸ / ₁₆	1 ⁷ / ₃₂	3.5	
	B22431HL		1.9375											3.3
	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 2 ¹ / ₄	B22435HL		2.1875	3.9370	1.656	3 ¹ / ₂	3 ⁵ / ₁₆	3 ³ / ₈	2.620	.062	¾	1 ¹ / ₄	4.7	
	B22436HL		2.2500											4.5
	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 2 ⁷ / ₁₆ 2 ¹ / ₂	B224B36HL		2.2500	4.3307	1.750	3 ⁷ / ₈	3 ¹ / ₂	3 ⁵ / ₈	2.901	.078	1 ³ / ₁₆	1 ¹ / ₁₆	5.9	
	B22439HL		2.4375											5.7
	B22440HL		2.5000											5.7
	B224M60HL	60.000												110.000	44.45	98.4	88.90	92.1	73.69	1.98	20.6	33.34	2.8
2 ¹¹ / ₁₆ 2 ³ / ₄ 2 ¹⁵ / ₁₆ 3	B22443HL		2.6875	5.1172	2.125	4 ⁷ / ₃₂	4	4 ³ / ₁₆	3.370	.078	1 ³ / ₁₆	1 ¹ / ₁₆	10.3	
	B22444HL		2.7500											10.1
	B22447HL		2.9375											9.0
	B22448HL		3.0000											8.7
	B224M65HL	65.000												129.977	53.98	115.1	101.60	106.4	85.60	1.98	20.6	39.69	4.8
70	B224M70HL	70.000											4.6	
75	B224M75HL	75.000											4.1	
3 ³ / ₁₆ 3 ⁷ / ₁₆ 3 ¹ / ₂	B22451HL		3.1875	5.9045	2.313	5 ¹¹ / ₃₂	4 ³ / ₈	5	3.975	.125	2 ⁷ / ₃₂	1 ²³ / ₃₂	14.4	
	B22455HL		3.4375											12.8
	B22456HL		3.5000											12.4
	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 ¹ / ₁₆ 3 ¹⁵ / ₁₆ 4	B22459HL		3.6875	7.0856	2.750	6 ³ / ₈	5 ¹ / ₁₆	5 ²⁹ / ₃₂	4.561	.125	3 ¹ / ₃₂	2	25.2	
	B22463HL		3.9375											23.2
	B22464HL		4.0000											22.6
	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 4³/₁₆" 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.

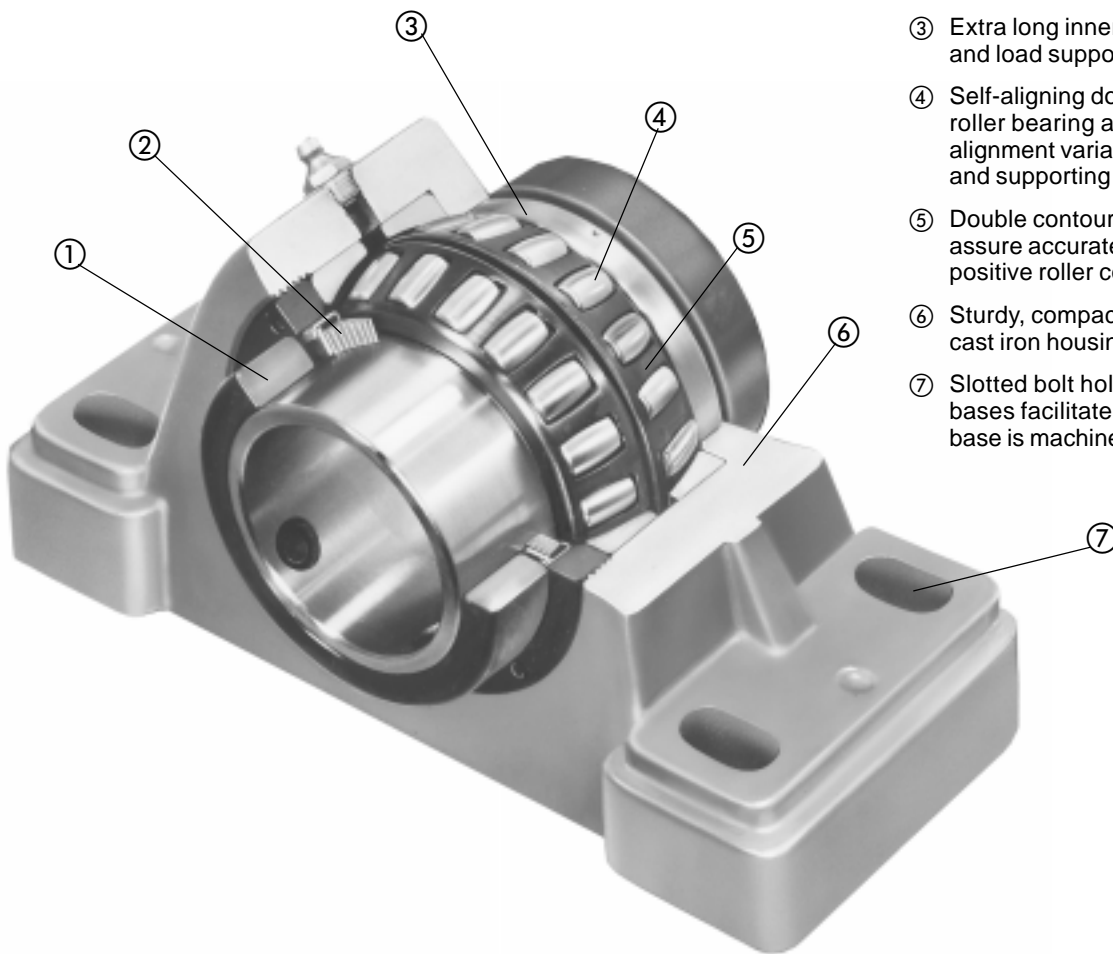
Load ratings, pages D-7, D-8.

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 $\pm 2^\circ$ 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*

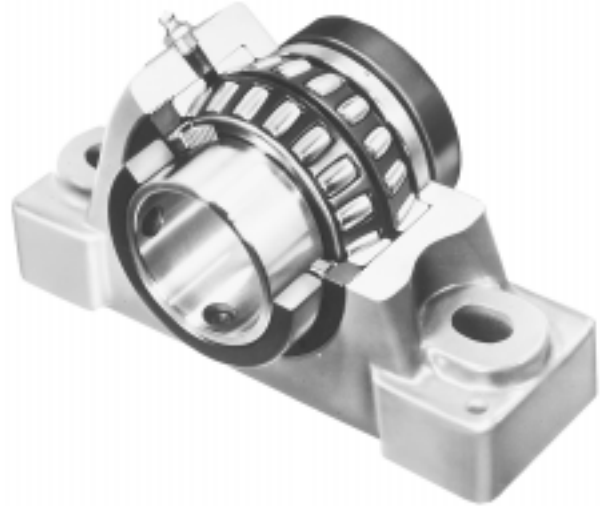
Self-aligning 2-bolt base pillow blocks for shaft sizes $1\frac{7}{16}$ " through $2\frac{15}{16}$ ", and 4-bolt base pillow blocks for shaft sizes $1\frac{15}{16}$ " through 5". Metric bores of 110, 115, and 125 mm available. Bearings have extra long inner ring and two spring locking collars. Units 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

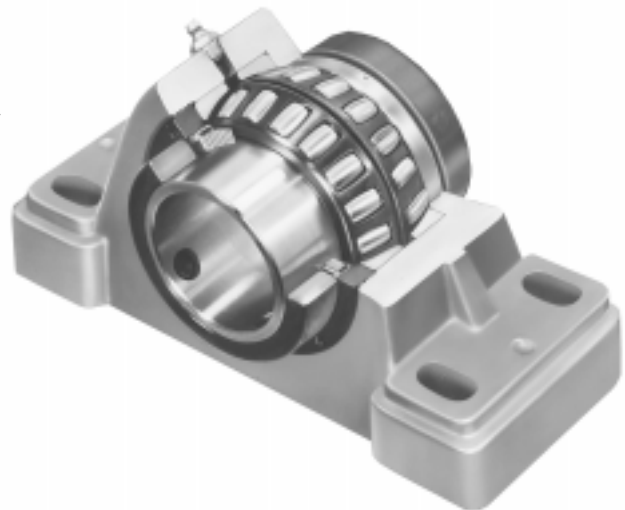
PK-B22500FH, PKE-B22500FH

Self-aligning 4-bolt base pillow blocks. Cast steel housing for shaft sizes $4\frac{3}{16}$ " 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, $1\frac{7}{16}$ " 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 $1\frac{7}{16}$ " 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 $1\frac{15}{16}$ " through $3\frac{15}{16}$ ". 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 $1\frac{7}{16}$ " 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.



Selection

Series B22500

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:

$$P = F_r$$

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

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

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

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.

Selection Series B22500

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)
- L₁₀ = 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 L₁₀ 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 L₁₀ 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, X₁, Y₁, X₂, and Y₂, 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, L₁₀, may be modified for some applications in accordance with the formula

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

where L_h = Adjusted life for (100-n) % reliability,
a₁ = Life adjustment factor for reliability
a₂ = Life adjustment factor for material and processing
a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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 B22500

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 ● H and E seals	e	F _a /F _r ≤ e		F _a /F _r > e	
mm	inches		newtons	pounds	newtons	pounds			X ₁	Y ₁	X ₂	Y ₂
17/16		B22523	93 200	20900	64 900	14600	2750	.44	1.00	1.54	.67	2.29
111/16		B22527	127 700	28700	89 800	20200	2350	.45	1.00	1.51	.67	2.25
115/16		B22531	147 700	33200	94 300	21200	2150	.40	1.00	1.68	.67	2.50
2		B22532	197 500	44400	117 400	26400	1950	.40	1.00	1.68	.67	2.50
23/16		B22535										
27/16		B22539	238 000	53500	139 700	31400	1750	.38	1.00	1.80	.67	2.68
211/16		B22543	318 000	71500	185 900	41800	1500	.38	1.00	1.79	.67	2.67
215/16		B22547										
37/16		B22555	403 400	90700	226 800	51000	1250	.38	1.00	1.77	.67	2.64
315/16		B22563	609 400	137000	351 800	79100	1100	.36	1.00	1.88	.67	2.79
4		B22564										
43/16		B22567	790 200	178000	419 400	94300	1000	.38	1.00	1.80	.67	2.68
47/16		B22571										
41/2		B22572										
110		B225M110										
115		B225M115										
415/16		B22579	944 700	212000	520 400	117000	900	.37	1.00	1.83	.67	2.72
5		B22580										
125		B225M125										

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.

Load Ratings

Series B22500

Table 3 • Radial load ratings in pounds at various RPM for appropriate L₁₀ life hours

Shaft diameter		Bearing size number	L ₁₀ Minimum life, hours	Radial load ratings, pounds												
mm	inches			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 2 ³ / ₁₆	B22532 B22535	}	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	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 2 ¹⁵ / ₁₆	B22543 B22547	}	8000			9410	8070	7300	6770	6550	6200	5800				
			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 4	B22563 B22564	}	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 ³ / ₁₆ 4 ⁷ / ₁₆ 4 ¹ / ₂ 110 115	B22567 B22571 B22572 B225M110 B225M115	}	8000			21200	18200	16400	15200	14800						
			20000		22400	18200	16100	13800	12500	11600	11200					
			40000	22400	18200	14800	13100	11200	10100	9420	9120					
			100000	17000	13800	11200	9950	8530	7710	7150	6930					
4 ⁹ / ₁₆ 5 125	B22579 B22580 B225M125	}	8000			26300	22500	20400	18900							
			20000		27800	22500	20000	17100	15500	14300						
			40000	27800	22500	18300	16200	13900	12600	11700						
			100000	21100	17100	13900	12300	10500	9580	8880						

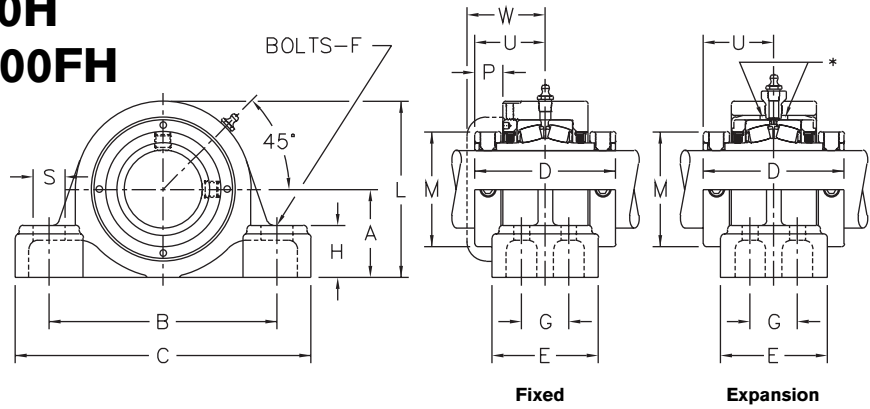
If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

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



Dimensions (inches/mm)

Shaft dia.		Pillow block number Δ		A	B	C	D	E	F	G	H	L	M	P	S	U	W	Unit wt.
mm	inches	Fixed	Expansion	†					Bolts								◆	(lbs./kg.)
2-bolt base																		
17/16	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 3/32	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																20
				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	-
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 3/8	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																37
				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	-
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																22
				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	-
2 7/16	P-B22539FH	PE-B22539FH		3	8 1/4	10 3/4	4 3/8	4 3/8	5/8	2 5/8	2 1/8	5 7/8	3 3/8	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 7/8	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																36
				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	-
3 7/16	P-B22555FH	PE-B22555FH		4	11 1/2	14 1/4	5 5/8	5	3/4	3	2 1/2	7 31/32	5	1 5/16	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																76
				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	-
4 9/16	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-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 3/8	4	129
115	P-B22580FH[▲]	PE-B22580FH[▲]																128
	P-B225M110FH[▲]	PE-B225M110FH[▲]																40.7
	P-B225M115FH[▲]	PE-B225M115FH[▲]		39.5														
125	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 3/8	4	129
	P-B22580FH[▲]	PE-B22580FH[▲]																128
	P-B225M125FH[▲]	PE-B225M125FH[▲]		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.

Δ 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.

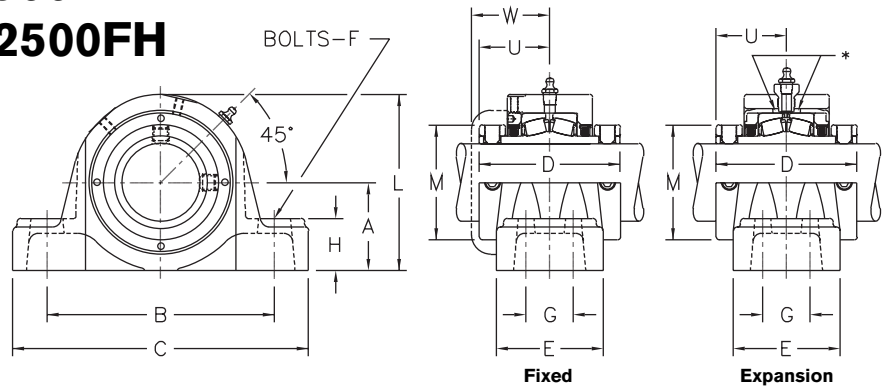
Spherical Roller Bearing Pillow Blocks

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

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.

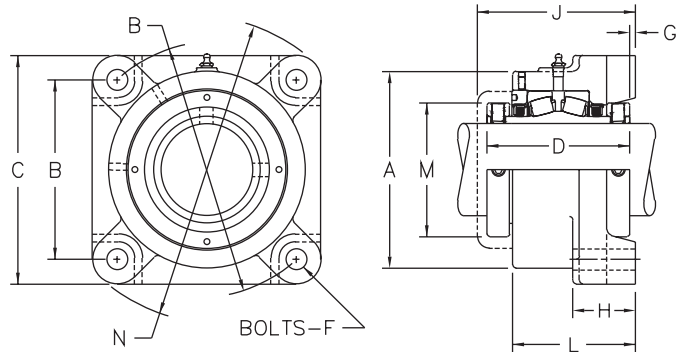
Additional information, page D-68.

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.
17/16	EF-B22523H	33/4 95.2	31/2 88.9	45/8 117.5	39/16 90.49	1/2 12	1/16 1.6	11/4 31.8	41/32 102.4	231/32 75.4	21/2 63.5	61/16 154.0	8 -
111/16	EF-B22527H	41/4 108.0	41/8 104.8	51/2 139.7	313/16 96.84	1/2 12	1/8 3.2	13/8 34.9	49/32 108.7	39/32 83.3	23/4 69.8	77/32 183.4	11 -
115/16	EF-B22531H	41/2 114.3	43/8 111.1	51/2 139.7	313/16 96.84	1/2 12	1/8 3.2	17/16 36.5	45/16 109.5	39/32 83.3	215/16 74.6	75/16 185.7	12 -
23/16	EF-B22535H	5 127.0	47/8 123.8	61/4 158.8	41/8 104.78	5/8 16	1/8 3.2	11/2 38.1	45/8 117.5	315/32 88.1	33/8 85.7	89/32 210.3	16 -
27/16	EF-B22539H	53/8 136.5	53/8 136.5	63/4 171.4	43/8 111.12	5/8 16	3/16 4.8	111/16 42.9	415/16 125.4	323/32 94.5	35/8 92.1	831/32 227.8	18 -
211/16 215/16	EF-B22543H EF-B22547H	61/4 158.8	6 152.4	75/8 193.7	47/8 123.82	3/4 20	3/16 4.8	113/16 46.0	513/16 137.3	47/32 107.3	43/16 106.4	101/8 275.2	28 26 -
37/16	EF-B22555H	73/8 187.3	7 177.8	83/4 222.2	55/16 134.94	3/4 20	3/32 2.4	115/16 49.2	53/4 146.0	415/32 113.5	5 127.0	1121/32 296.1	44 -
315/16 4	EF-B22563H EF-B22564H	85/8 212.7	73/4 196.8	93/4 247.6	61/8 155.58	7/8 24	3/32 2.4	23/16 55.6	65/8 168.3	53/16 131.8	529/32 150.0	1231/32 329.4	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.

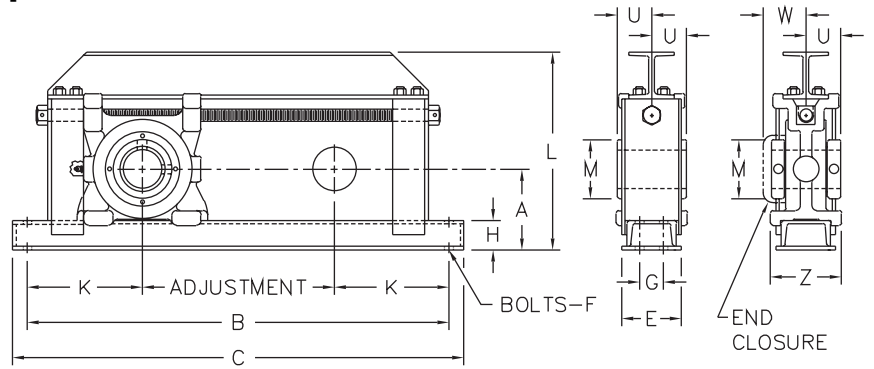
Load ratings, pages D-33, D-34.

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	3 ¹⁵ / ₁₆ 100.0	27 ¹ / ₂	698.5	29 ¹ / ₂	749.3	3 ¹ / ₂ 88.9	5/8	...	1 ³ / ₄	7 ³ / ₄	10 ⁵ / ₁₆	2 ¹⁵ / ₁₆	1 ²⁹ / ₃₂	2 ⁹ / ₃₂	4 ¹ / ₈	78		
	18	457.2		33 ¹ / ₂	850.9	35 ¹ / ₂	901.7			...	44.4	196.8	269.9	74.6	48.4	57.9	104.8	88		
	24	609.6		39 ¹ / ₂	1003.3	41 ¹ / ₂	1054.1			...	...	...	...	...	...	...	...	98
2 ³ / ₁₆	12	304.8	4 ⁷ / ₁₆ 112.7	27 ¹ / ₂	698.5	29 ¹ / ₂	749.3	4 ¹ / ₂ 114.3	5/8	...	2	7 ³ / ₄	11 ¹ / ₄	3 ³ / ₈	2 ¹ / ₁₆	2 ⁷ / ₁₆	5 ¹ / ₄	83		
	18	457.2		33 ¹ / ₂	850.9	35 ¹ / ₂	901.7			...	50.8	196.8	285.8	85.7	52.4	61.9	133.4	93		
	24	609.6		39 ¹ / ₂	1003.3	41 ¹ / ₂	1054.1			...	...	...	...	...	...	...	...	103
2 ⁷ / ₁₆	12	304.8	4 ⁵ / ₈ 117.5	28 ¹ / ₂	723.9	30 ¹ / ₂	774.7	4 ¹ / ₂ 114.3	3/4	...	2	8 ¹ / ₄	12 ¹³ / ₁₆	3 ⁵ / ₈	2 ³ / ₁₆	2 ⁹ / ₁₆	5 ¹ / ₄	105		
	18	457.2		34 ¹ / ₂	876.3	36 ¹ / ₂	927.1			...	50.8	209.6	325.4	92.1	55.6	65.1	133.4	118		
	24	609.6		40 ¹ / ₂	1028.7	42 ¹ / ₂	1079.5			...	...	...	...	...	...	...	...	132
2 ¹ / ₂	12	304.8	5 ¹ / ₈ 130.2	30 ¹ / ₂	774.7	32 ¹ / ₂	825.5	4 ¹ / ₂ 114.3	5/8	2	2	9 ¹ / ₄	13 ¹⁵ / ₁₆	4 ³ / ₁₆	2 ⁷ / ₁₆	2 ²⁹ / ₃₂	5 ¹ / ₄	125		
	18	457.2		36 ¹ / ₂	927.1	38 ¹ / ₂	977.9			...	50.8	50.8	235.0	354.0	106.4	61.9	70.6	133.4	140	
	24	609.6		42 ¹ / ₂	1079.5	44 ¹ / ₂	1130.3			155	
	30	762.0		48 ¹ / ₂	1231.9	50 ¹ / ₂	1282.7			170	
	36	914.4		54 ¹ / ₂	1384.3	56 ¹ / ₂	1435.1			185	
3 ⁷ / ₁₆	12	304.8	5 ⁵ / ₈ 142.9	32	812.8	34 ¹ / ₄	870.0	4 ¹ / ₂ 114.3	3/4	2	2	10	15 ¹ / ₁₆	5	2 ² / ₃₂	3	5 ⁵ / ₈	146		
	18	457.2		38	965.2	40 ¹ / ₄	1022.4			...	50.8	50.8	254.0	382.6	127.0	67.5	76.2	142.9	162	
	24	609.6		44	1117.6	46 ¹ / ₄	1174.8			178	
	30	762.0		50	1270.0	52 ¹ / ₄	1327.2			194	
	36	914.4		56	1422.4	58 ¹ / ₄	1479.6			210	
3 ¹ / ₂	12	304.8	7 177.8	36	914.4	38 ¹ / ₂	977.9	5 ¹ / ₂ 139.7	3/4	2 ¹ / ₂	2 ¹ / ₄	12	17 ¹ / ₁₆	5 ²⁹ / ₃₂	3 ¹ / ₁₆	3 ⁷ / ₁₆	6 ⁷ / ₈	260		
	18	457.2		42	1066.8	44 ¹ / ₂	1130.3			...	20	63x5	57.2	304.8	433.4	150.0	77.8	87.3	174.6	278
	24	609.6		48	1219.2	50 ¹ / ₂	1282.7			296
	30	762.0		54	1371.6	56 ¹ / ₂	1435.1			314
	36	914.4		60	1524.0	62 ¹ / ₂	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, 1/8" PT.

All units available with type E lip seals.

◆ Width dimension for closed end unit.

Selection guide, pages D-31, D-32.

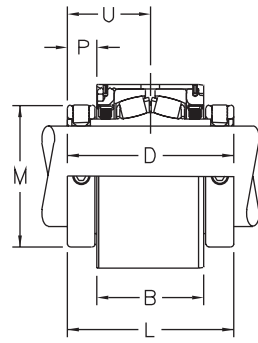
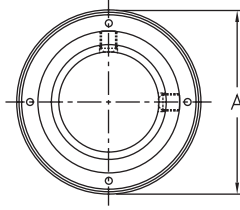
Load ratings, pages D-33, D-34.

Additional information, page D-68.

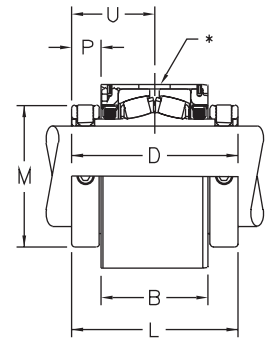
Spherical Roller Bearing Cartridge Units

CSE-B22500H

Steel Housing
Fixed or Expansion
Self-aligning
Two Spring Locking Collars
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									
17/16		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	1 ¹ / ₁₆ 17.5	1 ²⁵ / ₃₂ 45.2	4.2 —
11 ¹ / 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	1 ¹ / ₁₆ 17.5	1 ²⁹ / ₃₂ 48.4	5.6 —
1 ⁵ / 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	1 ¹ / ₁₆ 17.5	1 ²⁹ / ₃₂ 48.4	6.1 —
2		CSE-B22532H	4.227 107.36	2 ¹ / ₂ 63.50	4 ¹ / ₈ 104.78	4 ¹ / ₈ 104.8	3 ³ / ₈ 85.7	1 ³ / ₁₆ 20.6	2 ¹ / ₁₆ 52.4	9.0 8.7
2 ³ / ₁₆		CSE-B22535H								
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 ⁷ / ₈ 22.2	2 ³ / ₁₆ 55.6	10.1 —
2 ¹ / ₁₆		CSE-B22543H	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 ⁷ / ₈ 22.2	2 ⁷ / ₁₆ 61.9	16.4 15.3
2 ¹⁵ / ₁₆		CSE-B22547H								
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	1 ⁵ / ₁₆ 23.8	2 ²¹ / ₃₂ 67.5	21.1 —
3 ¹⁵ / ₁₆		CSE-B22563H	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		CSE-B22564H								
4 ³ / ₁₆		CSE-B22567H	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
4 ⁷ / ₁₆		CSE-B22571H								
4 ¹ / ₂		CSE-B22572H								
110		CSE-B225M110H	197.33	115.89	171.45	171.4	155.6	27.8	85.7	— —
115		CSE-B225M115H								
4 ¹⁵ / ₁₆		CSE-B22579H	8.753	4 ⁷ / ₈	7 ¹ / ₄	7 ¹ / ₄	6 ⁷ / ₈	1 ³ / ₁₆	3 ³ / ₈	55.3 54.7
5		CSE-B22580H								
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.

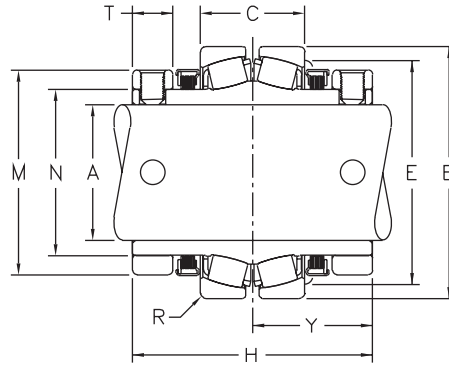
Additional information, page D-68.

Replacement Spherical Roller Bearings

B22500HL

Self-aligning

Two Spring Locking Collars



Dimensions (inches/mm)

Shaft Sizes <i>mm</i> inches	Bearing number *	A		B	C	E Shoulder diameter	H	M	N	R Housing fillet	T	Y	Unit wt. (lbs./kg.)
		<i>mm</i> +0.025 -0.000	inches +0.0010" -0.0000"	+0.025 -0.000 <i>mm</i>	±.025" ±0.64 <i>mm</i> ‡								
1 ⁷ / ₁₆	B22523HL		1.4375	2.8345 71.996	1.310 33.27	2 ¹ / ₂ 63.5	3 ³ / ₁₆ 90.49	2 ¹ / ₂ 63.5	1.745 44.32	.062 1.57	5 ¹ / 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 ¹ / 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 ¹ / ₈ 15.9	1 ²⁹ / ₃₂ 48.42	3.8 -
2 2 ³ / ₁₆	B22532HL B22535HL		2.0000 2.1875	3.9370 100.000	1.656 42.06	3 ¹ / ₂ 88.9	4 ¹ / ₈ 104.78	3 ³ / ₈ 85.7	2.620 66.55	.062 1.57	3 ¹ / ₄ 19.0	2 ¹ / ₁₆ 52.39	6.2 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 ³ / ₈ 92.1	2.901 73.69	.078 1.98	1 ³ / ₁₆ 20.6	2 ³ / ₁₆ 55.56	7.2 -
2 ¹¹ / ₁₆ 2 ¹⁵ / ₁₆	B22543HL B22547HL		2.6875 2.9375	5.1172 129.977	2.125 53.98	4 ¹⁷ / ₃₂ 115.1	4 ⁷ / ₈ 123.82	4 ³ / ₁₆ 106.4	3.370 85.60	.078 1.98	1 ³ / ₁₆ 20.6	2 ⁷ / ₁₆ 61.91	11.6 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	2 ⁷ / ₃₂ 21.4	2 ²¹ / ₃₂ 67.47	15.7 -
3 ¹⁵ / ₁₆ 4	B22563HL B22564HL		3.9375 4.0000	7.0856 179.974	2.750 69.85	6 ³ / ₈ 161.9	6 ¹ / ₈ 155.58	5 ²⁹ / ₃₂ 150.0	4.561 115.85	.125 3.18	3 ¹ / ₃₂ 24.6	3 ¹ / ₁₆ 77.79	26.9 26.4
4 ³ / ₁₆ 4 ⁷ / ₁₆ 4 ¹ / ₂	B22567HL B22571HL B22572HL		4.1875 4.4375 4.5000	7.4792	2.974	6 ⁵ / ₈	6 ³ / ₄	6 ¹ / ₈	5.000	.125	1	3 ³ / ₈	38.2 36.0 35.3
110 115	<i>B225M110HL</i> <i>B225M115HL</i>	110.000 115.000		189.972	75.54	168.3	171.45	155.6	127.00	3.18	25.4	85.72	16.3 16.0
4 ¹⁵ / ₁₆ 5 125	B22579HL B22580HL <i>B225M125HL</i>		4.9375 5.0000 125.000	8.4634	3.437	7 ¹ / ₂	7 ¹ / ₄	6 ⁷ / ₈	5.594	.125	1 ³ / ₃₂	3 ³ / ₈	41.6 40.7 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.

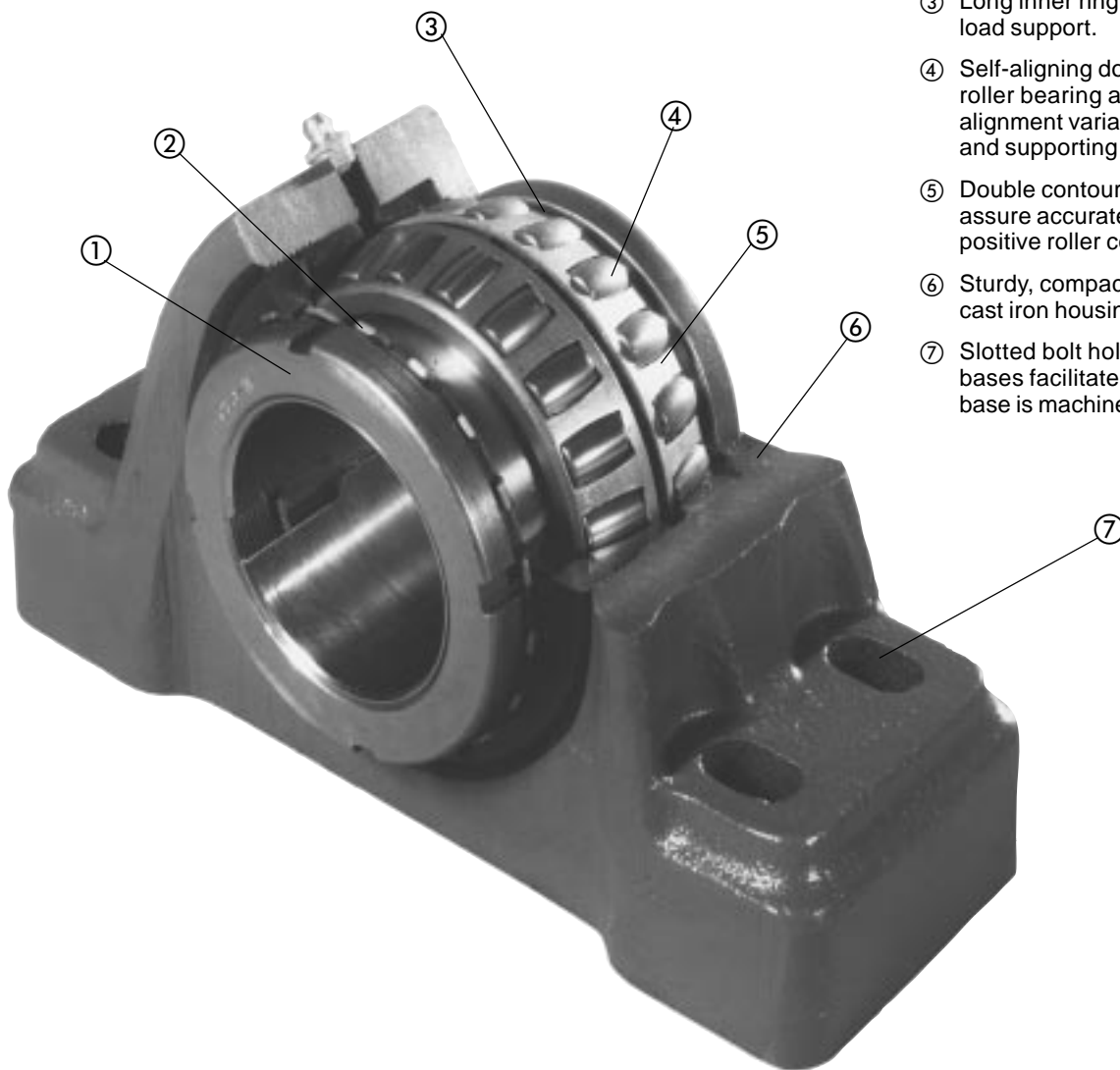
Additional information, page D-68.

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 $\pm 2^\circ$ 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 $\frac{7}{16}$ " through 3 $\frac{15}{16}$ " and 4-bolt base pillow blocks for shaft sizes 1 $\frac{15}{16}$ " through 4 $\frac{15}{16}$ ". 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 $\frac{7}{16}$ " through 3 $\frac{15}{16}$ ", 4-bolt base pillow blocks for shaft sizes 1 $\frac{15}{16}$ " through 4 $\frac{15}{16}$ ". 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 $\frac{7}{16}$ " through 3 $\frac{15}{16}$ ". 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 $\frac{7}{16}$ " through 3 $\frac{15}{16}$ ". 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 $1\frac{7}{16}$ " through $3\frac{15}{16}$ ". 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 $1\frac{7}{16}$ " through $3\frac{15}{16}$ ". 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 $1\frac{7}{16}$ " through $4\frac{15}{16}$ ".

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:

$$P = F_r$$

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

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

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

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.

Selection

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)
- L₁₀ = 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 L₁₀ 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 L₁₀ 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, X₁, Y₁, X₂, and Y₂, 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, L₁₀, 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) % reliability,
a₁ = Life adjustment factor for reliability
a₂ = Life adjustment factor for material and processing
a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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 ● H and E seals	e	F _a /F _r ≤ e		F _a /F _r > e	
		newtons	pounds	newtons	pounds			X ₁	Y ₁	X ₂	Y ₂
		17/16	B22623	93 200	20900			64 900	14600	2750	.44	1.00	1.54	.67	2.29
115/16	B22631	147 700	33200	94 300	21200	2150	.40	1.00	1.68	.67	2.50
23/16	B22635	197 500	44400	117 400	26400	1950	.40	1.00	1.68	.67	2.50
27/16	B22639	238 000	53500	139 700	31400	1750	.38	1.00	1.80	.67	2.68
211/16 215/16	B22643 B22647	318 000	71500	185 900	41800	1500	.38	1.00	1.79	.67	2.67
37/16	B22655	403 400	90700	226 800	51000	1250	.38	1.00	1.77	.67	2.64
315/16	B22663	609 400	137000	351 800	79100	1100	.36	1.00	1.88	.67	2.79
47/16	B22671	790 200	178000	419 400	94300	1000	.38	1.00	1.80	.67	2.68
415/16	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 L₁₀ 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 ⁹ / 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 2 ¹³ / ₁₆	B22643 B22647	8000	....	....	....	9410	8070	7300	6770	6550	6200	5800					
		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 ¹³ / 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	B22671	8000	....	....	....	21200	18200	16400	15200	14800							
		20000	....	....	....	22400	18200	15100	13800	12500	11600	11200					
		40000	....	40000	....	22400	18200	14800	13100	11200	10100	9420	9120				
		100000	....	....	....	17000	13800	11200	9950	8530	7710	7150	6930				
4 ⁹ / ₁₆	B22679	8000	....	....	....	26300	22500	20400	18900								
		20000	....	....	....	27800	22500	20000	17100	15500	14300						
		40000	....	40000	....	27800	22500	18300	16200	13900	12600	11700					
		100000	....	....	....	2100	17100	13900	12300	10500	9580	8880					

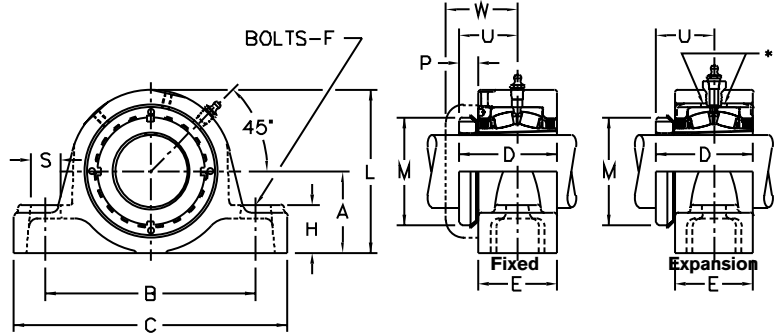
If the load P is greater than .25C, consult Link-Belt Bearing Division, Rexnord Corp.

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 Δ		A †	B	C	D ●	E	F Bolts	H ■	L		M	P ●	S	U ●	W ◆	Unit wt. (lbs./kg.)
	Fixed	Expansion								Fixed	Expansion						
17/16	P-B22623H	PE-B22623H	17/8 47.62	5 127.0	67/8 174.6	2.708 68.78	2 1/4 57.2	1/2 12	1 1/16 30.2	3 11/16 93.7	3 7/8 98.4	2 1/4 57.2	9/16 14.3	1 3/16 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	1 5/16 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	2 1/32 16.7	1 5/16 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	1 5/16 23.8	2 3/64 52.0	2 9/16 65.1	17 7.7
2 11/16	P-B22643H	PE-B22643H	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
2 15/16	P-B22647H	PE-B22647H															13.2
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	1 9/16 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.

* Expansion unit allows axial movement of 3/16" (4.8 mm) in either direction from centered position shown.

† Tolerance, $\pm .005$ " (± 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.

Δ LHD Sliding Base Takeup can be drilled for P-B22600H pillow blocks, see page D-22

● Dimensions based on unmounted condition.

Selection guide, page D-45, D4-6.

Load ratings, pages D-47, D-48. All units available

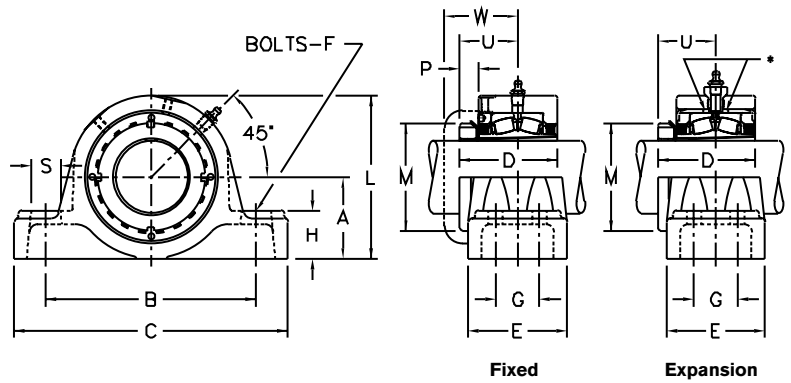
Additional information, page D-69.

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



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 ⁵ / ₁₆	P-B22631FH	PE-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	4 ³ / ₆₄ 17.1	1 ³ / ₁₆ 20.6	1 ⁵⁵ / ₆₄ 47.2	2 ⁹ / ₃₂ 57.9	13 5.9
2 ³ / ₁₆	P-B22635FH	PE-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	2 ¹ / ₃₂ 16.7	1 ³ / ₁₆ 20.6	1 ⁹ / ₃₂ 30.7	2 ⁷ / ₁₆ 61.9	15 6.8
2 ⁷ / ₁₆	P-B22639FH	PE-B22639FH	2 ³ / ₄ 69.85	7 ⁷ / 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	4 ³ / ₆₄ 17.1	1 ³ / ₁₆ 20.6	2 ³ / ₆₄ 52.0	2 ⁹ / ₁₆ 65.1	19 8.6
2 ¹ / ₁₆	P-B22643FH	PE-B22643FH	3 ¹ / ₄ 82.55	8 ¹ / ₈ 206.4	10 ⁷ / ₁₆ 265.1	3.863 98.12	3 ³ / ₄ 95.2	5/8 16	1 ⁷ / ₈ 47.6	2 ¹ / ₄ 57.2	6 ⁷ / ₁₆ 163.5	4 ⁵ / ₃₂ 105.6	3/4 19.1	1 ⁵ / ₁₆ 23.8	2 ¹⁹ / ₆₄ 58.3	2 ²⁵ / ₃₂ 70.6	30 29
2 ¹⁵ / ₁₆	P-B22647FH	PE-B22647FH															13.6 13.2
3 ⁷ / ₁₆	P-B22655FH	PE-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	43 19.5
3 ¹⁵ / ₁₆	P-B22663FH	PE-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	1 ⁵ / ₁₆ 23.8	1 ¹ / ₄ 31.8	2 ¹⁵ / ₁₆ 74.6	3 ⁷ / ₁₆ 87.3	67 30.3
4 ⁷ / ₁₆	P-B22671FH	PE-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 / ₈ 84.9	3 ³ / ₄ 95.2	88 39.9
4 ¹⁵ / ₁₆	P-B22679FH	PE-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 ²¹ / ₃₂ 92.9	4 101.6	128 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.

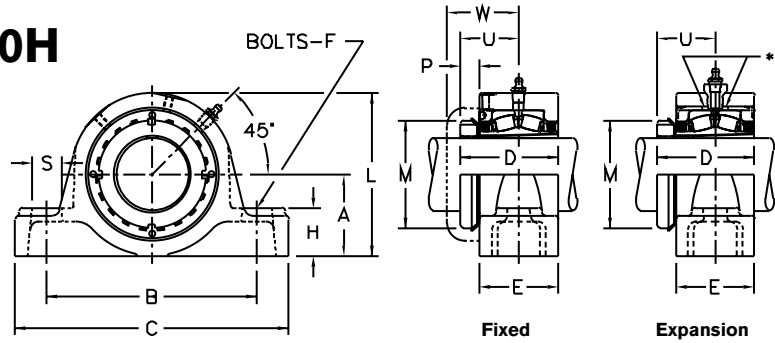
Spherical Roller Bearing Pillow Blocks

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 Δ		A †	B		C	D ●	E	F Bolts	H	L	M	P ●	U ●	W ◆	Unit wt. (lbs./kg.)
	Fixed	Expansion		min.	max.											
1 $\frac{7}{16}$	EP-B22623H	EPE-B22623H	1 $\frac{7}{8}$ 47.62	4 $\frac{3}{4}$ 120.6	6 152.4	7 $\frac{3}{8}$ 187.3	2.708 68.78	2 $\frac{1}{4}$ 57.2	1 $\frac{1}{2}$ 12	1 $\frac{1}{8}$ 28.6	3 $\frac{7}{8}$ 98.4	2 $\frac{1}{4}$ 57.2	9 $\frac{1}{16}$ 14.3	1 $\frac{43}{64}$ 42.5	2 $\frac{3}{16}$ 55.6	8 3.1
1 $\frac{15}{16}$	EP-B22631H	EPE-B22631H	2 $\frac{1}{4}$ 57.15	6 $\frac{1}{16}$ 154.0	7 $\frac{1}{4}$ 184.2	8 $\frac{7}{8}$ 225.4	3.075 78.10	2 $\frac{1}{2}$ 63.5	5 $\frac{1}{8}$ 16	1 $\frac{5}{16}$ 33.3	4 $\frac{9}{16}$ 115.9	2 $\frac{31}{32}$ 75.4	4 $\frac{3}{64}$ 17.1	1 $\frac{55}{64}$ 47.2	2 $\frac{9}{32}$ 57.9	12 5.5
2 $\frac{3}{16}$	EP-B22635H	EPE-B22635H	2 $\frac{1}{2}$ 63.50	6 $\frac{9}{16}$ 166.7	8 203.2	9 $\frac{5}{8}$ 244.5	3.159 80.24	2 $\frac{9}{16}$ 65.1	5 $\frac{1}{8}$ 16	1 $\frac{1}{2}$ 38.1	5 127.0	3 $\frac{5}{32}$ 80.2	2 $\frac{1}{32}$ 16.7	1 $\frac{9}{32}$ 30.7	2 $\frac{7}{16}$ 61.9	15 6.8
2 $\frac{7}{16}$	EP-B22639H	EPE-B22639H	2 $\frac{3}{4}$ 69.85	6 $\frac{15}{16}$ 176.2	8 $\frac{3}{4}$ 222.2	10 $\frac{1}{2}$ 266.7	3.362 85.39	2 $\frac{11}{16}$ 68.3	5 $\frac{1}{8}$ 16	1 $\frac{5}{8}$ 41.3	5 $\frac{1}{2}$ 139.7	3 $\frac{5}{8}$ 92.1	4 $\frac{3}{64}$ 17.1	2 $\frac{3}{64}$ 52.0	2 $\frac{9}{16}$ 65.1	17 7.7
2 $\frac{11}{16}$	EP-B22643H	EPE-B22643H	3 $\frac{1}{8}$ 79.38	7 $\frac{13}{16}$ 198.4	9 $\frac{3}{4}$ 247.6	11 $\frac{13}{16}$ 300.0	3.863 98.12	3 $\frac{3}{16}$ 81.0	3 $\frac{1}{4}$ 20	1 $\frac{7}{8}$ 47.6	6 $\frac{5}{16}$ 160.3	4 $\frac{5}{32}$ 105.6	3 $\frac{1}{4}$ 19.1	2 $\frac{19}{64}$ 58.3	2 $\frac{25}{32}$ 70.6	29
2 $\frac{15}{16}$	EP-B22647H	EPE-B22647H														27
3 $\frac{7}{16}$	EP-B22655H	EPE-B22655H	3 $\frac{3}{4}$ 95.25	9 $\frac{9}{16}$ 236.5	11 $\frac{15}{16}$ 287.3	13 $\frac{13}{16}$ 350.8	4.306 109.37	3 $\frac{1}{2}$ 88.9	7 $\frac{1}{8}$ 24	2 $\frac{1}{4}$ 57.2	7 $\frac{1}{2}$ 190.5	4 $\frac{15}{16}$ 125.4	7 $\frac{1}{8}$ 22.2	2 $\frac{9}{16}$ 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, $\pm 0.005"$ (± 0.13 mm).

Δ 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.

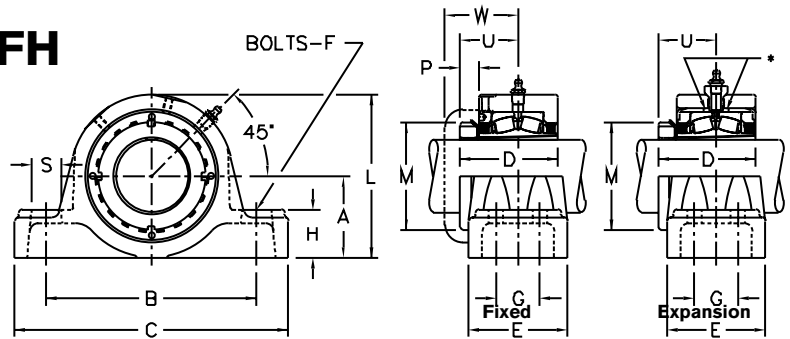
Spherical Roller Bearing Pillow Blocks

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		A †	B		C	D ●	E	F Bolts	G	H	L	M	P ●	U ●	W ◆	Unit wt. (lbs./kg.)
	Fixed	Expansion		min.	max.												
27/16	EP-B22639FH	EPE-B22639FH	23/4 69.85	615/16 176.2	83/4 222.2	101/2 266.7	3.362 85.39	35/8 92.1	5/8 16	17/8 47.6	15/8 41.3	51/2 139.7	35/8 92.1	43/64 17.1	23/64 52.0	29/16 65.1	20 9.1
211/16 215/16	EP-B22643FH EP-B22647FH	EPE-B22643FH EPE-B22647FH	31/8 79.38	713/16 198.4	97/8 250.8	1113/16 300.0	3.863 98.12	41/4 108.0	5/8 16	21/8 54.0	17/8 47.6	65/16 160.3	43/32 105.6	3/4 19.1	219/64 58.3	225/32 70.6	31 14.0 29 13.1
37/16	EP-B22655FH	EPE-B22655FH	33/4 95.25	99/16 236.5	111/16 290.5	1313/16 350.8	4.306 109.37	43/4 120.6	3/4 20	23/8 60.3	21/4 57.2	71/2 190.5	419/16 125.4	7/8 22.2	29/16 65.1	3 76.2	46 20.9
315/16	P-B22663FH	PE-B22663FH	41/4 107.95	117/8 301.6	13 330.2	151/4 387.4	4.944 125.58	41/2 114.3	3/4 20	21/4 57.2	25/8 66.7	81/2 215.9	57/16 138.1	15/16 23.8	215/16 74.6	37/16 87.3	67 30.4
47/16	P-B22671FH	PE-B22671FH	43/4 120.65	123/4 323.8	141/8 358.8	161/2 419.1	5.534 140.56	43/4 120.6	3/4 20	21/2 63.5	23/4 69.8	93/8 238.1	61/8 155.6	13/32 27.8	311/32 84.9	33/4 95.2	88 39.5
415/16	P-B22679FH	PE-B22679FH	51/2 139.70	149/16 363.5	161/8 409.6	181/2 469.9	6.056 153.82	53/8 136.5	7/8 24	23/4 69.8	3 76.2	107/8 276.2	63/4 171.4	13/16 30.2	321/32 92.9	4 101.6	128 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.

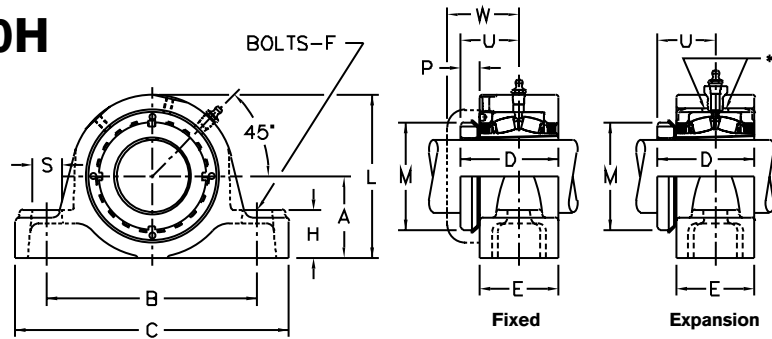
Additional information, page D-69.

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 Δ		A †	B	C	D ●	E	F Bolts	H	L		M	P ●	S	U ●	W ◆	Unit wt. (lbs./kg.)
	Fixed	Expansion								Fixed	Expansion						
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 ¹ / ₁₆ 14.3	1 ³ / 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	4 ³ / ₆₄ 17.1	1 ⁵ / 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	1 ⁵ / 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 ¹ / 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	4 ³ / ₆₄ 17.1	1 ⁵ / 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 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 ¹ / ₄ 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	30 29
2 ⁵ / ₁₆	PK-B22647H	PKE-B22647H															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, $\pm .005"$ (± 0.13 mm).

* Expansion unit allows axial movement of 3/16" (4.8 mm) in either direction from centered position shown.

Δ 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.

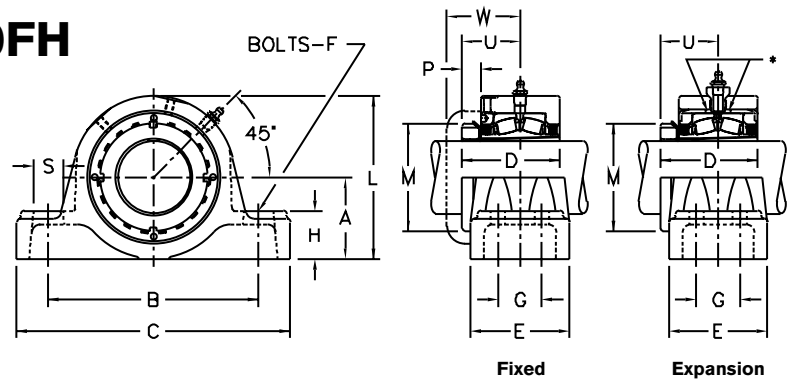
Additional information, page D-69.

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



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 ⁵ / 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	4 ³ / ₆₄ 17.1	1 ⁹ / 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	2 ¹ / ₃₂ 16.7	1 ⁹ / 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 ¹ / ₄ 44.4	1 ³ / ₄ 44.4	5 ¹ / ₂ 139.7	3 ⁵ / ₈ 92.1	4 ³ / ₆₄ 17.1	1 ⁹ / 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 82.55	8 ¹ / ₈ 206.4	10 ⁷ / ₁₆ 265.1	3.863 98.12	3 ³ / ₄ 95.2	5/8 16	1 ⁷ / ₈ 47.6	2 ¹ / ₄ 57.2	6 ⁷ / ₁₆ 163.5	4 ⁵ / ₃₂ 105.6	3/4 19.1	1 ⁹ / ₁₆ 23.8	2 ¹⁹ / ₆₄ 58.3	2 ²⁵ / ₃₂ 70.6	30 29
2 ⁵ / ₈	PK-B22647FH	PKE-B22647FH															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	1 ⁵ / 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 ¹¹ / 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 ⁵ / 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 ¹ / ₁₆ 30.2	1 ¹ / ₂ 38.1	3 ²¹ / 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.

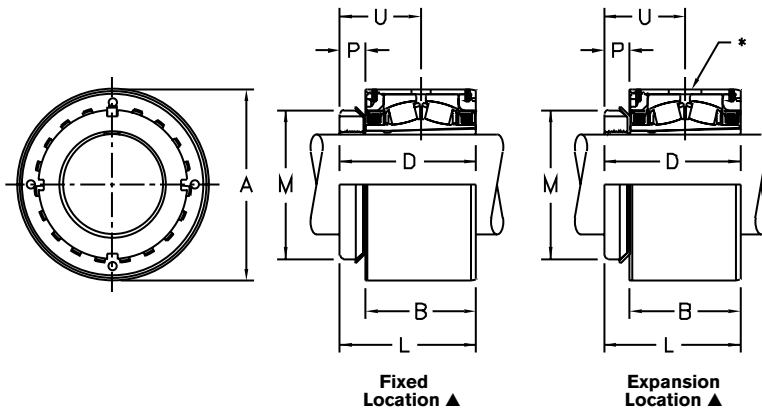
Additional information, page D-69.

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.)
17/16	CSE-B22623H	3.124 79.35	23/16 55.56	2.708 68.78	23/4 69.9	21/4 57.2	9/16 14.3	143/64 42.5	4 1.8
115/16	CSE-B22631H	3.833 97.36	229/64 60.72	3.075 78.10	31/16 77.8	231/32 75.4	43/64 17.1	155/64 47.2	5 2.3
23/16	CSE-B22635H	4.227 107.36	21/2 63.50	3.159 80.24	35/32 80.2	35/32 80.2	21/32 16.7	19/32 30.7	7 3.2
27/16	CSE-B22639H	4.621 117.37	25/8 66.68	3.362 85.39	319/64 83.7	35/8 92.1	43/64 17.1	23/64 52.0	8 3.6
211/16	CSE-B22643H	5.407 137.34	37/8 79.38	3.863 98.12	37/8 98.4	45/32 105.6	3/4 19.1	219/64 58.3	14
215/16	CSE-B22647H								13
									6.4 5.9
37/16	CSE-B22655H	6.194 157.33	37/16 87.31	4.306 109.37	45/16 109.5	415/16 125.4	7/8 22.2	29/16 65.1	18 8.2
315/16	CSE-B22663H	7.375 187.32	4 101.60	4.944 125.58	415/16 125.4	57/16 138.1	15/16 23.8	215/16 74.6	31 14.1
47/16	CSE-B22671H	7.769 197.33	49/16 115.89	5.534 140.56	521/32 143.7	61/8 155.6	13/32 27.8	311/32 84.9	51 23.1
415/16	CSE-B22679H	8.753 222.33	47/8 123.82	6.056 153.82	61/16 154.0	63/4 171.4	13/16 30.2	321/32 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.

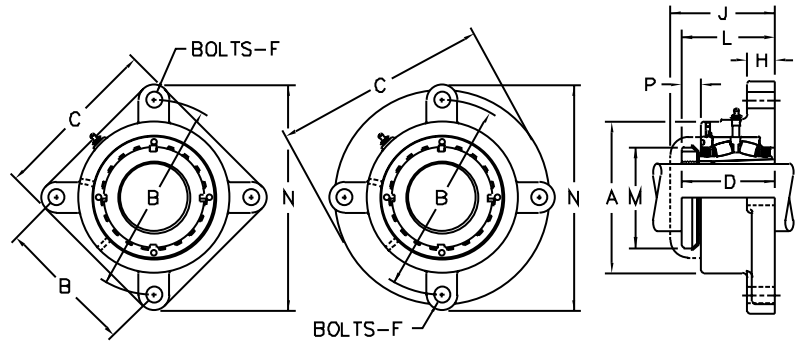
Additional information, page D-69.

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		A		B		C ▲	D ●	F Bolts	H	J ◆	L ●	M	N	P ●	Unit wt. (lbs./kg.)
		Fixed	Expansion†	Fixed	Exp	Circle	Square										
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 ¹ / ₁₆ 14.3	7 3.2
	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	1 ¹ / ₁₆ 17.5	3 ⁹ / ₁₆ 90.5	3 ¹³ / ₆₄ 81.4	2 ³¹ / ₃₂ 75.4	7 177.8	4 ³ / ₆₄ 17.1	10 4.5
4-BOLT ROUND	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	1 ¹ / ₁₆ 17.5	3 ²⁹ / ₃₂ 96.0	3 ⁹ / ₃₂ 83.3	3 ⁵ / ₃₂ 80.2	7 ³ / ₄ 196.8	2 ¹ / 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 ⁹ / 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	4 ³ / ₆₄ 17.1	17 7.9
	2 ¹¹ / ₁₆	F-B22643H	FE-B22643H	6 ¹ / ₄ 158.8	6 ¹ / ₄ 158.8	7 ⁷ / ₈ 200.02	5 ⁹ / ₁₆ 141.27	9 ¹ / ₈ 231.8	3.863 98.12	3/4 20	7/8 22.2	4 ⁷ / ₁₆ 112.7	4 101.6	4 ⁵ / ₃₂ 105.6	9 ¹ / ₂ 241.3	3/4 19.1	27 11.8
	2 ¹⁵ / ₁₆	F-B22647H	FE-B22647H	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
4-BOLT SQUARE	3 ⁷ / ₁₆	F-B22655H	FE-B22655H	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	1 ⁵ / 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.

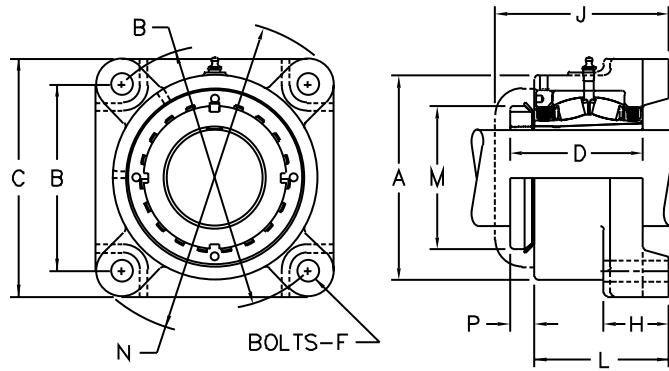
Additional information, page D-69.

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		C	D ●	F Bolts	H	J ◆	L ●	M	N	P ●	Unit wt. (lbs./kg.)
			Circle	Square										
1 ⁷ / ₁₆	EF-B22623H	3 ³ / ₄ 95.2	4 ⁶¹ / ₆₄ 125.81	3 ¹ / ₂ 88.9	4 ⁵ / ₈ 117.5	2.708 68.78	1/2 12	1 ¹ / ₄ 31.8	4 ¹ / ₃₂ 102.4	3 ⁵ / ₁₆ 92.1	2 ¹ / ₄ 57.2	6 ¹ / ₁₆ 154.0	9 ¹ / ₁₆ 14.3	8 3.6
1 ¹⁵ / ₁₆	EF-B22631H	4 ¹ / ₂ 114.3	6 ¹ / ₁₆ 157.18	4 ³ / ₈ 111.1	5 ¹ / ₂ 139.7	3.075 78.10	1/2 12	1 ¹ / ₁₆ 36.5	4 ⁹ / ₁₆ 109.5	3 ¹⁵ / ₁₆ 100.0	2 ³¹ / ₃₂ 75.4	7 ⁹ / ₁₆ 185.7	4 ³ / ₆₄ 17.1	11 5.0
2 ³ / ₁₆	EF-B22635H	5 127.0	6 ⁵⁷ / ₆₄ 175.03	4 ⁷ / ₈ 123.8	6 ¹ / ₄ 158.8	3.159 80.24	5/8 16	1 ¹ / ₂ 38.1	4 ⁵ / ₈ 117.5	4 ¹ / ₄ 108.0	3 ³ / ₃₂ 80.2	8 ⁹ / ₃₂ 210.3	2 ¹ / ₃₂ 16.7	15 6.8
2 ⁷ / ₁₆	EF-B22639H	5 ³ / ₈ 136.5	7 ¹⁹ / ₃₂ 192.89	5 ³ / ₈ 136.5	6 ³ / ₄ 171.4	3.362 85.39	5/8 16	1 ¹¹ / ₁₆ 42.9	4 ¹⁵ / ₁₆ 125.4	4 ⁹ / ₁₆ 115.9	3 ⁵ / ₈ 92.1	8 ³¹ / ₃₂ 227.8	4 ³ / ₆₄ 17.1	17 7.7
2 ¹¹ / ₁₆	EF-B22643H	6 ¹ / ₄ 158.8	8 ³¹ / ₆₄ 215.49	6 152.4	7 ⁵ / ₈ 193.7	3.863 98.12	3/4 20	1 ¹³ / ₁₆ 46.0	5 ¹ / ₃₂ 137.3	5 ¹ / ₁₆ 128.6	4 ⁵ / ₃₂ 105.6	10 ¹ / ₈ 257.2	3/4 19.1	25 11.5
2 ¹⁵ / ₁₆	EF-B22647H		8 203.2	7 177.8	8 ³ / ₄ 212.7	4.306 109.37	3/4 20	1 ¹⁵ / ₁₆ 49.2	5 ³ / ₄ 146.0	5 ¹³ / ₃₂ 137.3	4 ¹⁵ / ₁₆ 125.4	11 ²¹ / ₃₂ 296.1	7/8 22.2	41 18.6
3 ⁷ / ₁₆	EF-B22655H	7 ³ / ₈ 187.3	9 ⁵⁹ / ₆₄ 251.23	7 177.8	8 ³ / ₄ 222.2	4.306 109.37	3/4 20	1 ¹⁵ / ₁₆ 49.2	5 ³ / ₄ 146.0	5 ¹³ / ₃₂ 137.3	4 ¹⁵ / ₁₆ 125.4	11 ²¹ / ₃₂ 296.1	7/8 22.2	41 18.6
3 ¹⁵ / ₁₆	EF-B22663H	8 ³ / ₈ 212.7	10 ⁶¹ / ₆₄ 278.21	7 ³ / ₄ 196.8	9 ³ / ₄ 247.6	4.944 125.58	7/8 24	2 ³ / ₁₆ 55.6	6 ⁵ / ₈ 168.3	6 ⁷ / ₃₂ 158.0	5 ⁷ / ₁₆ 138.1	12 ³¹ / ₃₂ 329.4	1 ⁵ / 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, 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.

● 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.

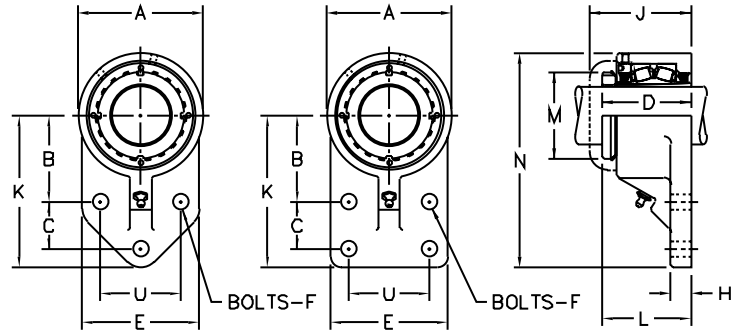
Additional information, page D-69.

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 ¹ / ₂ 12	5 ⁸ / ₁₆ 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 ¹ / ₂ 12	1 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 ⁹ / 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 16	3 ⁴ / ₈ 19.0	3 ³¹ / ₃₂ 100.8	6 ¹ / ₄ 158.8	3 ³ / ₃₂ 83.3	3 ⁵ / ₃₂ 80.2	8 ¹⁹ / ₁₆ 227.0	3 76.2	17.5 7.9
	2 ¹¹ / ₁₆	FB-B22643H	6 ¹ / ₄ 158.8	3 ³ / ₈ 98.4	2 ¹ / ₄ 57.2	3.362 85.39	5 ³ / ₄ 146.0	3 ⁴ / ₈ 20	7 ⁸ / ₁₆ 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
	2 ¹⁵ / ₁₆	FB-B22647H														28.0
																13.7 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-66, D-67.

Lubrication fitting tap size: for 1 1/2 and smaller shafts, 1/4"-28 UNF; for all other shafts, 1/8" 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.

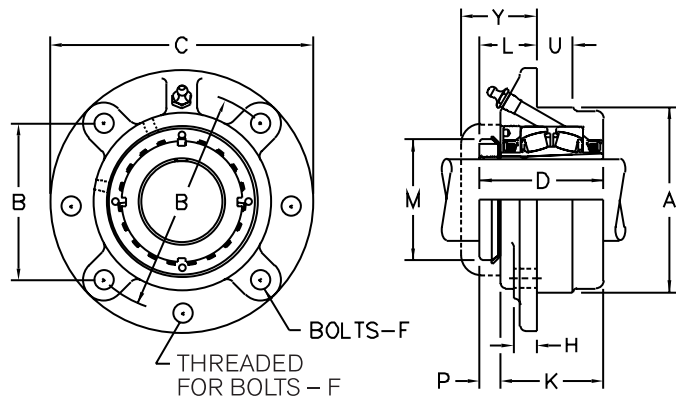
Additional information, page D-69.

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		C	D	F Bolts	H	J	K	L	M	P	U	Y ◆	Unit wt. (lbs./kg.)
			Circle	Square												
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 ⁵ / 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	4 ³ / 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	2 ¹ / 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 ³ / ₈ 92.1	4 ³ / ₆₄ 17.1	1 25.4	2 ⁵ / ₃₂ 54.8	16 7.2
2 ¹¹ / ₁₆	FC-B22643H	6.375 161.92	7 ¹ / ₂ 190.50	5 ¹⁹ / ₆₄	8 ³ / ₄	3.863	5/8	3/4	2 ¹ / ₃₂	3 ⁹ / ₃₂	1 ⁷ / ₈	4 ⁵ / ₃₂	3/4	1 ¹ / ₄	2 ⁵ / ₁₆	25 24
2 ¹⁵ / ₁₆	FC-B22647H			5 ¹⁹ / ₆₄	8 ³ / ₄	3.863	5/8	3/4	2 ¹ / ₃₂	3 ⁹ / ₃₂	1 ⁷ / ₈	4 ⁵ / ₃₂	3/4	1 ¹ / ₄	2 ⁵ / ₁₆	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	1 ⁵ / 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 ²¹ / ₃₂ 101.1	2 ⁹ / ₁₆ 65.1	5 ⁷ / ₁₆ 138.1	1 ⁵ / 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.

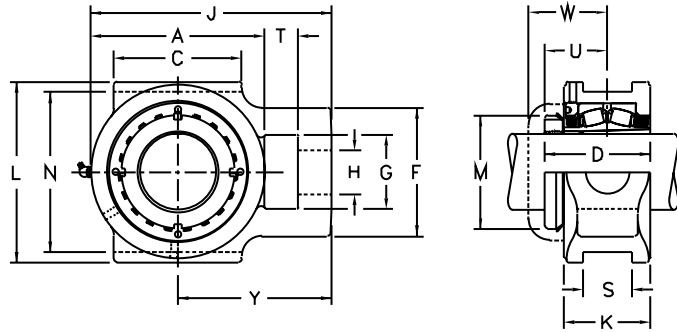
Additional information, page D-69.

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	2 ³ / ₄	2.708	2 ³ / ₈	1 ⁷ / ₁₆	7 ⁸ / ₁₆	4 ³ / ₄	2 ¹ / ₄	4 ¹ / ₈	2 ¹ / ₄	3.500	.531	5 ⁸ / ₁₆	1 ⁴³ / ₆₄	2 ³ / ₁₆	3	6.4
		88.9	69.8	68.78	60.3	36.5	22.2	120.6	57.2	104.8	57.2	88.90	13.49	15.9	42.5	55.6	76.2	2.9
1 ¹⁵ / ₁₆	T-B22631H	4 ³ / ₈	3 ³ / ₈	3.075	3 ³ / ₁₆	1 ¹⁵ / ₁₆	1 ¹ / ₈	5 ¹⁵ / ₁₆	2 ¹ / ₂	4 ³ / ₄	2 ³ / ₃₂	4.000	.687	3 ⁴ / ₁₆	1 ⁵⁵ / ₆₄	2 ⁹ / ₃₂	3 ³ / ₄	9.7
		111.1	85.7	78.10	81.0	49.2	28.6	150.8	63.5	120.6	75.4	101.60	17.46	19.0	47.2	57.9	95.2	4.4
2 ³ / ₁₆	T-B22635H	5 ¹ / ₁₆	3 ³ / ₄	3.159	3 ³ / ₄	2 ¹ / ₄	1 ¹ / ₄	7	2 ⁹ / ₁₆	5 ¹ / ₄	3 ³ / ₃₂	4.500	.813	1	1 ⁹ / ₃₂	2 ⁷ / ₁₆	4 ¹⁵ / ₃₂	14.1
		128.6	95.2	80.24	95.2	57.2	31.8	177.8	65.1	133.4	80.2	114.30	20.64	25.4	30.7	61.9	113.5	6.4
2 ⁷ / ₁₆	T-B22639H	5 ⁹ / ₁₆	4	3.362	4 ¹ / ₄	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 / ₆₄	2 ⁹ / ₁₆	5 ¹ / ₃₂	17.8
		141.3	101.6	85.39	104.8	63.5	34.9	198.4	68.3	149.2	92.1	130.18	26.99	31.8	52.0	65.1	127.8	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 ¹ / ₁₆	4 ⁵ / ₃₂	5.937	1.812	1 ¹ / ₄	2 ¹⁹ / ₆₄	2 ²⁵ / ₃₂	5 ²³ / ₃₂	13.5
		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
2 ¹⁵ / ₁₆	T-B22647H																	5.9
3 ⁷ / ₁₆	T-B22655H	7 ³ / ₈	5 ¹ / ₂	4.306	4 ⁷ / ₈	2 ⁷ / ₈	1 ⁷ / ₈	10	3 ⁷ / ₁₆	7 ¹³ / ₁₆	4 ¹⁵ / ₁₆	6.812	1.812	1 ⁹ / ₁₆	2 ⁹ / ₁₆	3	6 ⁵ / ₁₆	43.1
		187.3	139.7	109.37	123.8	73.0	47.6	254.0	87.3	198.4	125.4	173.02	46.02	39.7	65.1	76.2	160.3	19.6
3 ¹⁵ / ₁₆	T-B22663H	8 ⁷ / ₈	7	4.944	5 ¹ / ₄	3 ³ / ₈	1 ⁷ / ₈	11 ⁷ / ₈	4	9 ⁵ / ₈	5 ⁷ / ₁₆	8.625	2.062	1 ⁵ / ₈	2 ¹⁵ / ₁₆	3 ⁷ / ₁₆	7 ⁷ / ₁₆	76
		225.4	177.8	125.58	133.4	79.4	47.6	301.6	101.6	244.5	138.1	219.08	52.37	41.3	74.6	87.3	188.9	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.

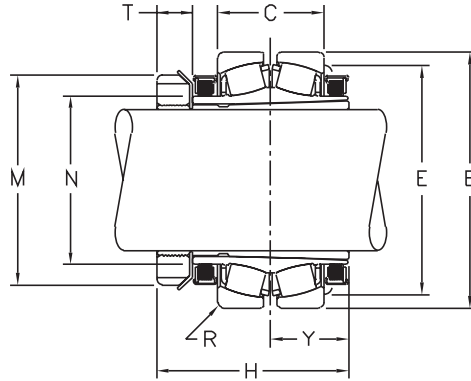
Additional information, page D-69.

Replacement Spherical Roller Bearings

Max Mount™

B22600HL

Self-aligning
Adapter Mounted



Dimensions (inches/mm)

Shaft Sizes inches	Bearing number *	B +.0010" -.0000" +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 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 ³ / ₃₂ 75.4	2.307 58.59	.078 1.98	9 ¹ / 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	1 ⁹ / 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 ¹ / ₈ 15.9	1 ⁵ / ₁₆ 33.34	5.9 2.8
2 ¹¹ / ₁₆	B22643HL	5.1172 129.977	2.125 53.98	4 ⁷ / ₃₂ 115.1	3.863 98.12	4 ⁵ / ₃₂ 105.6	3.370 85.60	.078 1.98	4 ³ / ₆₄ 17.1	1 ⁹ / ₁₆ 39.69	10.1
2 ¹⁵ / ₁₆	B22647HL										9.0
3 ¹ / ₁₆	B22655HL	5.9045 149.974	2.313 58.75	5 ¹ / ₃₂ 135.7	4.306 109.37	4 ¹⁵ / ₁₆ 125.4	3.975 100.97	.125 3.18	5 ¹ / ₆₄ 20.2	1 ²³ / ₃₂ 43.66	12.8 5.8
3 ⁵ / 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	5 ⁵ / 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	6 ¹ / 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.

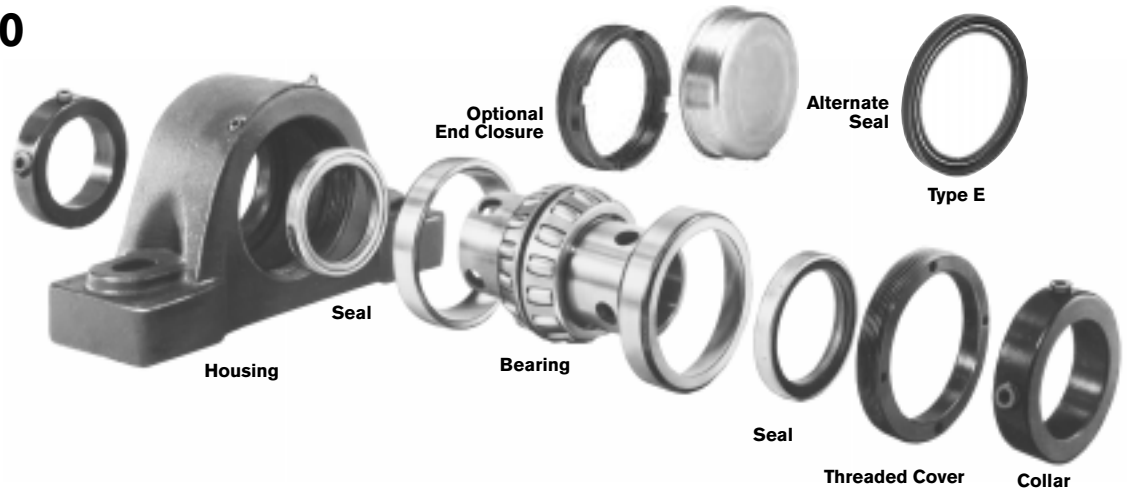
Additional information, page D-69.

‡ 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 <i>mm inches</i>	Basic Bearing Designation ▲	Repair kit ■	Components in repair kit			Threaded cover for open end	Threaded cover for closed end	End closure *	Housing number ▲
			Spherical roller bearing	Type H multi-disc labyrinth seals (2 reqd.)	Collar with setscrews				
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 B22419 1 1/4 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 B22423 1 1/2 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 B224B24 1 5/8 B22426 1 11/16 B22427 1 3/4 B22428 B224M40	B224B24HL B22426HL B22427HL B22428HL B224M40HL	B224B24 B22426 B22427 B22428 B224M40	B22428-3H	B22428-5S B22428-5S B22428-5S B22428-5S	B22428-7	B22428-7C	B22428-6	P-B22428-0
45	1 3/4 B224B28 1 15/16 B22431 2 B22432 B224M45	B224B28HL B22431HL B22432HL B224M45HL	B224B28 B22431 B22432 B224M45	B22432-3H	B22528-5S B22432-5S B22432-5S B22432-5S	B22432-7	B22432-7C	B22432-6	P-B22432-0
50	B224M50	B224M50HL	B224M50						
55	2 3/16 B22435 2 1/4 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 B224B36 2 7/16 B22439 2 1/2 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	2 11/16 B22443 2 3/4 B22444 2 15/16 B22447 3 B22448 B224M65	B22443HL B22444HL B22447HL B22448HL B224M65HL	B22443 B22444 B22447 B22448 B224M65	B22448-3H	B22443-5S B22444-5S B22448-5S B22448-5S B22443-5S	B22448-7	B22448-7C	B22448-6	P-B22448-0
70	B224M70	B224M70HL	B224M70						
75	B224M75	B224M75HL	B224M75						
80	3 3/16 B22451 3 7/16 B22455 3 1/2 B22456 B224M80	B22451HL B22455HL B22456HL B224M80HL	B22451 B22455 B22456 B224M80	B22456-3H	B22551-5S B22456-5S B22456-5S B22551-5S	B22456-7	B22456-7C	B22456-6	P-B22456-0
85	B224M85	B224M85HL	B224M85						
90	3 11/16 B22459 3 15/16 B22463 4 B22464 B224M90	B22459HL B22463HL B22464HL B224M90HL	B22459 B22463 B22464 B224M90	B22464-3H	B22464-5S	B22464-7	B22464-7C	B22464-6	P-B22464-0
100	B224M100	B224M100HL	B224M100						

▲ For variations in type and material, use prefix: T — takeup unit FB — flanged bracket unit P — pillow block, cast iron F — 4-bolt base pillow block
 EFR — padded flanged unit FC — flanged cartridge unit PK — pillow block, cast steel (on 1 15/16" and larger shafts only)
 EP — pillow block, cast iron C — cartridge unit, cast iron PL — pillow block, low backing * Closed end units are assembled with two seals.
 F — flanged unit DS — takeup unit

■ 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

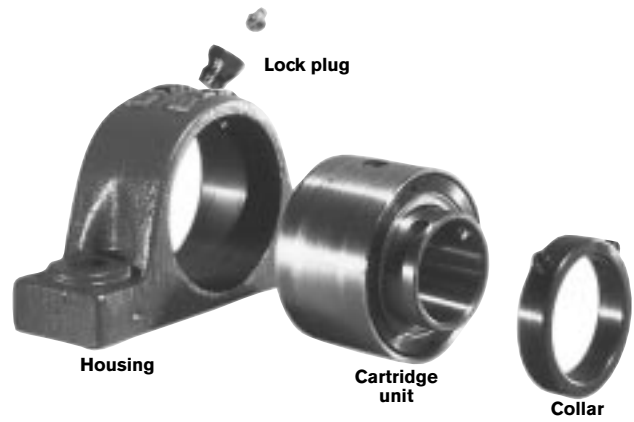
Expansion Type

Alternate seal



Type E

Lock plug



Housing

Cartridge unit

Collar

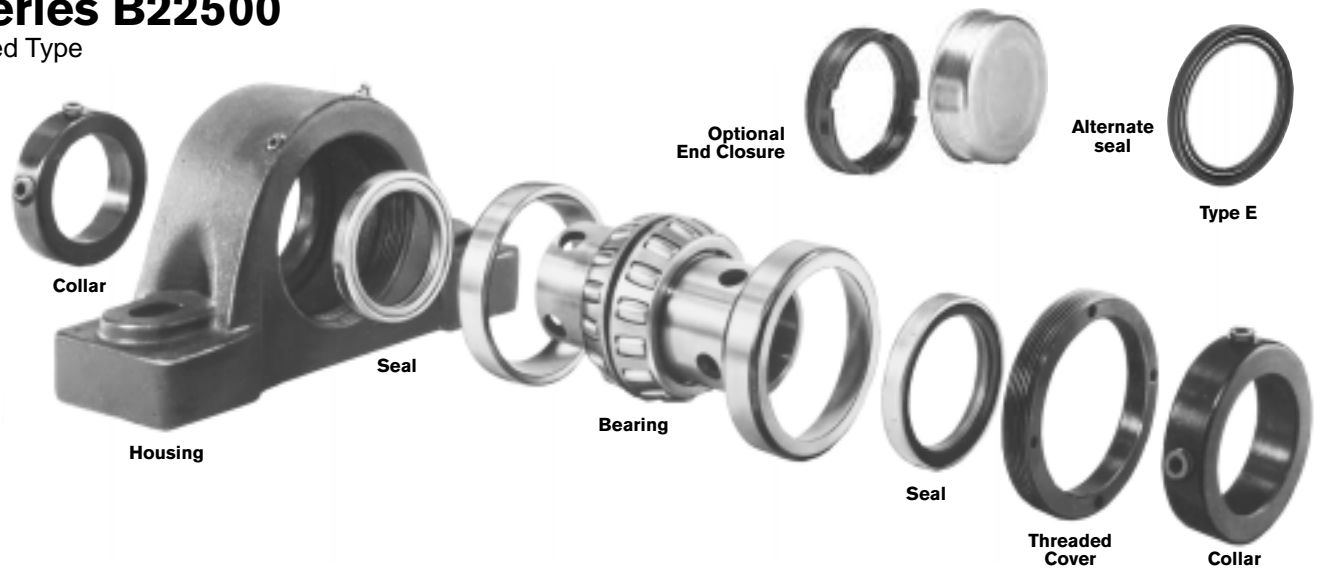
Shaft diameter		Pillow block number ▲	Basic Bearing Designation	Repair kit ■	Components in repair kit		Locking plug number		Housing number ▲
mm	inches				Type H multi-disc labyrinth seals (2 reqd.)	Collar with setscrews	For pillow block	For flanged unit	
25	1	PE-B22416H PE-B224M25H	B22416 B224M25	CSE-B22416H CSE-B224M25H	} B22417-3H	B22416-5S	B22440-8A	B22440-8A	PE-B22417-OE
	1 3/16	PE-B22419H PE-B22420H PE-B224M30H	B22419 B22420 B224M30	CSE-B22419H CSE-B22420H CSE-B224M30H						} B22420-3H	B22420-5S	B22440-8A	B22440-8A	PE-B22420-OE
30	1 1/4	PE-B22423H PE-B22424H PE-B224M35H	B22423 B22424 B224M35	CSE-B22423H CSE-B22424H CSE-B224M35H	} B22424-3H	B22424-5S	B22440-8A	B22440-8A	PE-B22424-OE
	1 7/16	PE-B22428H PE-B22429H PE-B224M40H	B22428 B22429 B224M40	CSE-B22428H CSE-B22429H CSE-B224M40H						} B22428-3H	B22428-5S	B22440-8A	B22440-8A	PE-B22428-OE
35	1 1/2	PE-B22432H PE-B22433H PE-B224M45H	B22432 B22433 B224M45	CSE-B22432H CSE-B22433H CSE-B224M45H	} B22432-3H	B22432-5S	B22440-8A	B22440-8A	PE-B22432-OE
	1 5/8	PE-B22436H PE-B22437H PE-B224M50H	B22436 B22437 B224M50	CSE-B22436H CSE-B22437H CSE-B224M50H						} B22436-3H	B22436-5S	B22440-8A	B22440-8A	PE-B22436-OE
40	1 3/4	PE-B22443H PE-B22444H PE-B224M60H	B22443 B22444 B224M60	CSE-B22443H CSE-B22444H CSE-B224M60H	} B22443-3H	B22443-5S	B22440-8A	B22440-8A	PE-B22443-OE
	1 7/8	PE-B22447H PE-B22448H PE-B224M65H	B22447 B22448 B224M65	CSE-B22447H CSE-B22448H CSE-B224M65H						} B22447-3H	B22447-5S	B22440-8A	B22440-8A	PE-B22447-OE
45	2	PE-B22451H PE-B22452H PE-B224M70H	B22451 B22452 B224M70	CSE-B22451H CSE-B22452H CSE-B224M70H	} B22451-3H	B22451-5S	B22440-8A	B22440-8A	PE-B22451-OE
	2 1/16	PE-B22455H PE-B22456H PE-B224M75H	B22455 B22456 B224M75	CSE-B22455H CSE-B22456H CSE-B224M75H						} B22455-3H	B22455-5S	B22440-8A	B22440-8A	PE-B22455-OE
50	2 1/8	PE-B22463H PE-B22464H PE-B224M80H	B22463 B22464 B224M80	CSE-B22463H CSE-B22464H CSE-B224M80H	} B22463-3H	B22463-5S	B22440-8A	B22440-8A	PE-B22463-OE
	2 1/4	PE-B22467H PE-B22468H PE-B224M85H	B22467 B22468 B224M85	CSE-B22467H CSE-B22468H CSE-B224M85H						} B22467-3H	B22467-5S	B22440-8A	B22440-8A	PE-B22467-OE
55	2 3/8	PE-B22473H PE-B22474H PE-B224M90H	B22473 B22474 B224M90	CSE-B22473H CSE-B22474H CSE-B224M90H	} B22473-3H	B22473-5S	B22440-8A	B22440-8A	PE-B22473-OE
	2 7/16	PE-B22477H PE-B22478H PE-B224M95H	B22477 B22478 B224M95	CSE-B22477H CSE-B22478H CSE-B224M95H						} B22477-3H	B22477-5S	B22440-8A	B22440-8A	PE-B22477-OE
60	2 1/2	PE-B22483H PE-B22484H PE-B224M100H	B22483 B22484 B224M100	CSE-B22483H CSE-B22484H CSE-B224M100H	} B22483-3H	B22483-5S	B22440-8A	B22440-8A	PE-B22483-OE
	2 5/8	PE-B22487H PE-B22488H PE-B224M105H	B22487 B22488 B224M105	CSE-B22487H CSE-B22488H CSE-B224M105H						} B22487-3H	B22487-5S	B22440-8A	B22440-8A	PE-B22487-OE
65	2 3/4	PE-B22493H PE-B22494H PE-B224M110H	B22493 B22494 B224M110	CSE-B22493H CSE-B22494H CSE-B224M110H	} B22493-3H	B22493-5S	B22440-8A	B22440-8A	PE-B22493-OE
	2 7/8	PE-B22497H PE-B22498H PE-B224M115H	B22497 B22498 B224M115	CSE-B22497H CSE-B22498H CSE-B224M115H						} B22497-3H	B22497-5S	B22440-8A	B22440-8A	PE-B22497-OE
70	3	PE-B22503H PE-B22504H PE-B225M120H	B22503 B22504 B225M120	CSE-B22503H CSE-B22504H CSE-B225M120H	} B22503-3H	B22503-5S	B22440-8A	B22440-8A	PE-B22503-OE
	3 1/16	PE-B22507H PE-B22508H PE-B225M125H	B22507 B22508 B225M125	CSE-B22507H CSE-B22508H CSE-B225M125H						} B22507-3H	B22507-5S	B22440-8A	B22440-8A	PE-B22507-OE
75	3 1/8	PE-B22513H PE-B22514H PE-B225M130H	B22513 B22514 B225M130	CSE-B22513H CSE-B22514H CSE-B225M130H	} B22513-3H	B22513-5S	B22440-8A	B22440-8A	PE-B22513-OE
	3 1/4	PE-B22517H PE-B22518H PE-B225M135H	B22517 B22518 B225M135	CSE-B22517H CSE-B22518H CSE-B225M135H						} B22517-3H	B22517-5S	B22440-8A	B22440-8A	PE-B22517-OE
80	3 1/2	PE-B22523H PE-B22524H PE-B225M140H	B22523 B22524 B225M140	CSE-B22523H CSE-B22524H CSE-B225M140H	} B22523-3H	B22523-5S	B22440-8A	B22440-8A	PE-B22523-OE
	3 5/8	PE-B22527H PE-B22528H PE-B225M145H	B22527 B22528 B225M145	CSE-B22527H CSE-B22528H CSE-B225M145H						} B22527-3H	B22527-5S	B22440-8A	B22440-8A	PE-B22527-OE
85	3 7/8	PE-B22533H PE-B22534H PE-B225M150H	B22533 B22534 B225M150	CSE-B22533H CSE-B22534H CSE-B225M150H	} B22533-3H	B22533-5S	B22440-8A	B22440-8A	PE-B22533-OE
	4	PE-B22537H PE-B22538H PE-B225M155H	B22537 B22538 B225M155	CSE-B22537H CSE-B22538H CSE-B225M155H						} B22537-3H	B22537-5S	B22440-8A	B22440-8A	PE-B22537-OE
90	4 1/16	PE-B22543H PE-B22544H PE-B225M160H	B22543 B22544 B225M160	CSE-B22543H CSE-B22544H CSE-B225M160H	} B22543-3H	B22543-5S	B22440-8A	B22440-8A	PE-B22543-OE
	4 1/8	PE-B22547H PE-B22548H PE-B225M165H	B22547 B22548 B225M165	CSE-B22547H CSE-B22548H CSE-B225M165H						} B22547-3H	B22547-5S	B22440-8A	B22440-8A	PE-B22547-OE
95	4 1/4	PE-B22553H PE-B22554H PE-B225M170H	B22553 B22554 B225M170	CSE-B22553H CSE-B22554H CSE-B225M170H	} B22553-3H	B22553-5S	B22440-8A	B22440-8A	PE-B22553-OE
	4 3/8	PE-B22557H PE-B22558H PE-B225M175H	B22557 B22558 B225M175	CSE-B22557H CSE-B22558H CSE-B225M175H						} B22557-3H	B22557-5S	B22440-8A	B22440-8A	PE-B22557-OE
100	4 7/8	PE-B22563H PE-B22564H PE-B225M180H	B22563 B22564 B225M180	CSE-B22563H CSE-B22564H CSE-B225M180H	} B22563-3H	B22563-5S	B22440-8A	B22440-8A	PE-B22563-OE
	5	PE-B22567H PE-B22568H PE-B225M185H	B22567 B22568 B225M185	CSE-B22567H CSE-B22568H CSE-B225M185H						} B22567-3H	B22567-5S	B22440-8A	B22440-8A	PE-B22567-OE

▲ 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 1/16" 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 inches	Basic Bearing Designation ▲	Repair kit ■	Components in repair kit							Housing number ▲
			Spherical roller bearing	Type H multi-disc labyrinth seals (2 reqd.) ■	Collar with setscrews (2 included)	Threaded cover for open end	Threaded cover for closed end	End closure		
17/16	B22523	B22523HL	B22523	B22424-3H	B22424-5S	B22424-7	B22424-7C	B22424-6	P-B22523-0	
11/16	B22527	B22527HL	B22527	B22428-3H	B22428-5S	B22428-7	B22428-7C	B22428-6	P-B22527-0	
15/16	B22531	B22531HL	B22531	B22432-3H	B22432-5S	B22432-7	B22432-7C	B22432-6	P-B22531-0	
2 23/16	B22532 B22535	B22532HL B22535HL	B22532 B22535	B22436-3H	B22435-5S	B22436-7	B22436-7C	B22436-6	P-B22535-0	
27/16	B22539	B22539HL	B22539							B22440-3H	B22440-5S	B22440-7	B22440-7C	B22440-6
21/16 25/16	B22543 B22547	B22543HL B22547HL	B22543 B22547	B22448-3H	B22443-5S B22448-5S	B22448-7	B22448-7C	B22448-6	P-B22547-0	
37/16	B22555	B22555HL	B22555							B22456-3H	B22456-5S	B22456-7	B22456-7C	B22456-6
35/16 4	B22563 B22564	B22563HL B22564HL	B22563 B22564	B22464-3H	B22464-5S	B22464-7	B22464-7C	B22464-6	P-B22564F-0	
43/16 47/16 41/2	B22567 B22571 B22572	B22567HL B22571HL B22572HL	B22567 B22571 B22572							B22572-3H	B22571-5S B22571-5S B22572-5S B22571-5S B22572-5S	B22572-7	B22572-7C	B22572-6	P-B22572F-0
110 115	B225M110 B225M115	B225M110HL B225M115HL	B225M110 B225M115	B22580-3H	B22580-5S	B22580-7	B22580-7C	B22580-6	P-B22580F-0	
415/16 5 125	B22579 B22580 B225M125	B22579HL B22580HL B225M125HL	B22579 B22580 B225M125							

- ▲ For variations in type and material, use prefix: P — pillow block, cast iron — block
 PK — pillow block, cast steel
 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.
- P-B22531 -0 For construction features, use suffix: F — 4-bolt base pillow block (on 1 15/16" and larger shafts only)

Spherical Roller Bearing Unit Replacement Parts

Series B22500

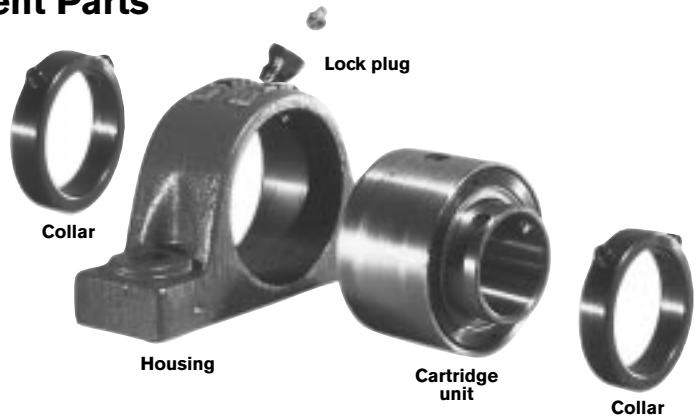
Expansion Type

Alternate seal



Type E

Lock plug



Collar

Housing

Cartridge unit

Collar

Shaft diameter		Pillow block number	Basic Bearing Designation	Repair kit ■	Components in repair kit			Housing number ▲
					Type H multi-disc labyrinth seals (2 reqd.) ■	Collar with setscrews (2 included)	Locking plug number	
mm	inches							
	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 ⁵ / ₁₆	PE-B22531H	B22531	CSE-B22531H	B22432-3H	B22432-5S	B22448-8A	PE-B22531-OE
	2 2 ³ / ₁₆	PE-B22532H PE-B22535H	B22532 B22535	CSE-B22532H CSE-B22535H	B22436-3H	B22435-5S	B22448-8A	PE-B22535-OE
	2 ⁷ / ₁₆	PE-B22539H	B22539	CSE-B22539H				
	2 ¹¹ / ₁₆ 2 ⁵ / ₁₆	PE-B22543H PE-B22547H	B22543 B22547	CSE-B22543H CSE-B22547H	B22448-3H	B22443-5S B22448-5S	B22572-8A	PE-B22547-OE
	3 ⁷ / ₁₆	PE-B22555FH	B22555	CSE-B22555H				
	3 ¹⁵ / ₁₆ 4	PE-B22563FH PE-B22564FH	B22563 B22564	CSE-B22563H CSE-B22564H	B22464-3H	B22464-5S	B22572-8A	PE-B22564F-OE
	4 ³ / ₁₆ 4 ⁷ / ₁₆ 4 ¹ / ₂	PE-B22567FH PE-B22571FH PE-B22572FH PE-B225M110FH PE-B225M115FH	B22567 B22571 B22572 B225M110 B225M115	CSE-B22567H CSE-B22571H CSE-B22572H CSE-B225M110H CSE-B225M115H				
110 115					B22572-3H	B22571-5S B22571-5S B22572-5S B22571-5S B22572-5S	B22572-8A	PE-B22572F-OE
	4 ¹⁵ / ₁₆ 5	PE-B22579FH PE-B22580FH PE-B225M125FH	B22579 B22580 B225M125	CSE-B22579H CSE-B22580H CSE-B225M125H	B22580-3H	B22580-5S	B22580-8A	PE-B22580F-OE
125								

Expansion units cannot be furnished with closed end caps.

4³/₁₆" , 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 1⁵/₁₆" and larger shafts only).

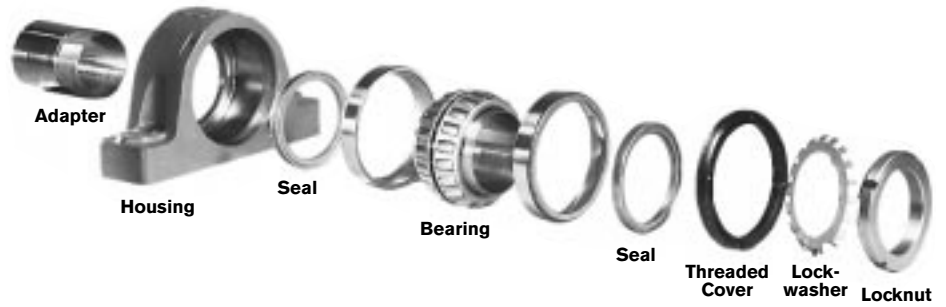
■ Floating labyrinth seals, suffix H, are furnished with CSE-B22500H repair kits. For spring-loaded lip type seals specify CSE-B22500E.

Spherical Roller Bearing Unit Replacement Parts

Max Mount™

Series B22600

Fixed Type



Shaft diameter inches	Basic Bearing Designation ▲	Repair kit ■	Components in repair kit			Threaded cover for open end	Threaded cover for closed end	End closure *	Housing number ▲
			Spherical roller bearing	Type H multi-disc labyrinth seals (2 reqd.)■	Adapter assembly†				
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 ¹⁵ / ₁₆	B22580-7	B22580-7C	B22580-6	P-B22580F-0

▲For variations in type and material, use prefix:

T — takeup unit FB— flanged bracket unit
 EF — padded flanged unit FC— flanged cartridge unit
 EP — pillow block, cast iron
 F — flanged 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 1¹⁵/₁₆" and larger shafts only)

* Closed end units are assembled with two seals.

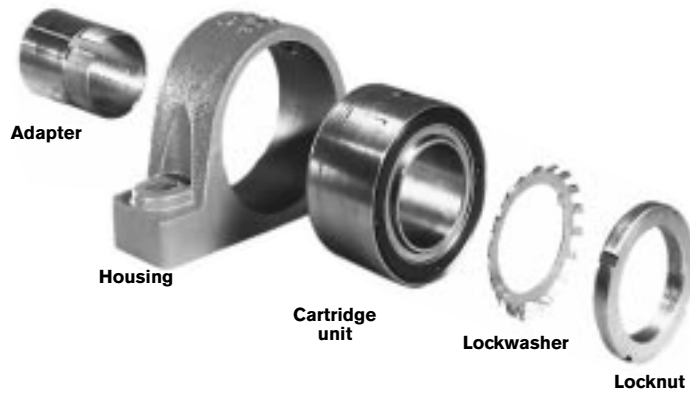
■ Floating labyrinth seals, suffix H, are furnished with B22600HL repair kits. For spring-loaded lip type seals specify B22600EL.

† — 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		Locking plug number		Housing number ▲
				Type H ■ multi-disc labyrinth seals (2 reqd.)	Adapter assembly †	For pillow block	For flanged unit	
17/16	PE-B22623H	B22623	CSE-B22623H	B22424-3H	SNW623-17/16	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	PE-B22643H	B22643	CSE-B22643H	B22448-3H	SNW647-2 11/16	B22448-8A	B22448-8A	PE-B22448-OE
2 15/16	PE-B22647H	B22647	CSE-B22647H		SNW647-2 15/16			
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: PE-B22631 -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-B22600H repair kits. For spring-loaded lip type seals specify CSE-B22600E.
- † — Adapter assembly consists of adapter, lockwasher and locknut.

Additional Information

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 $\frac{1}{8}$ " (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 $\frac{1}{32}$ " (0.8 mm) larger than the largest inch bolt shown. Cast slots in pillow blocks are normally $\frac{1}{16}$ " 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.

Recommended Shaft Tolerances

Shaft Diameter	Tolerance
1"–2"	Nominal to $-.0005$ "
2 $\frac{1}{16}$ "–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

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.

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 $+200^{\circ}\text{F}$ (-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.

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,

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

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 $\pm 2^{\circ}$. 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.

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

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. D-68

Additional Information

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 $\frac{1}{8}$ " (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 $\frac{1}{32}$ " (0.8 mm) larger than the largest inch bolt shown. Cast slots in pillow blocks are normally $\frac{1}{16}$ " 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 $+200^{\circ}\text{F}$ (-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 $\pm 2^{\circ}$. 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 $-.003$ "
$2\frac{1}{16}$ "-4"	Nominal to $-.004$ "
$3\frac{1}{16}$ "-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

Symbol	Description	P	E	-B22	4	39	F	H	C	17H	
C	Cartridge unit	}									
CSE	Cartridge unit; steel housing										
EF	Flanged unit; 4-bolt square										
EP	Pillow block; cast iron										
F	Flanged unit; 3- and 4-bolt										
FB	Flanged bracket unit										
FC	Flanged cartridge unit; 4-bolt round										
P	Pillow block										
PK	Pillow block; cast steel housing										
T	Takeup unit, slotted guides										
DS	Takeup, conveyor, hinged top, welded steel frame										
DSH	Takeup, conveyor, extra strength, welded steel frame										
R	Collar opposite cover (B22400 only)										
E	Expansion unit (not used with CSE symbol)										
B22	Spherical roller bearing; extended inner ring separable outer rings										
4	400 series designation (one locking collar)										
5	500 series designation (two locking collars)										
6	600 series designation (adapter mounted)										
B	Inner ring bore equal to a bore of preceding smaller bearing group										
39	Shaft diameter in 16ths of an inch										
M55	Metric series, bore in mm										
F	Four bolt base pillow block										
H	Floating labyrinth seal										
E	Spring-loaded lip seal (For closed end units use (2) i.e.: HHC)										
C	Closed end unit										
18	Takeup adjustment, inches										
17H	Grease designation										

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

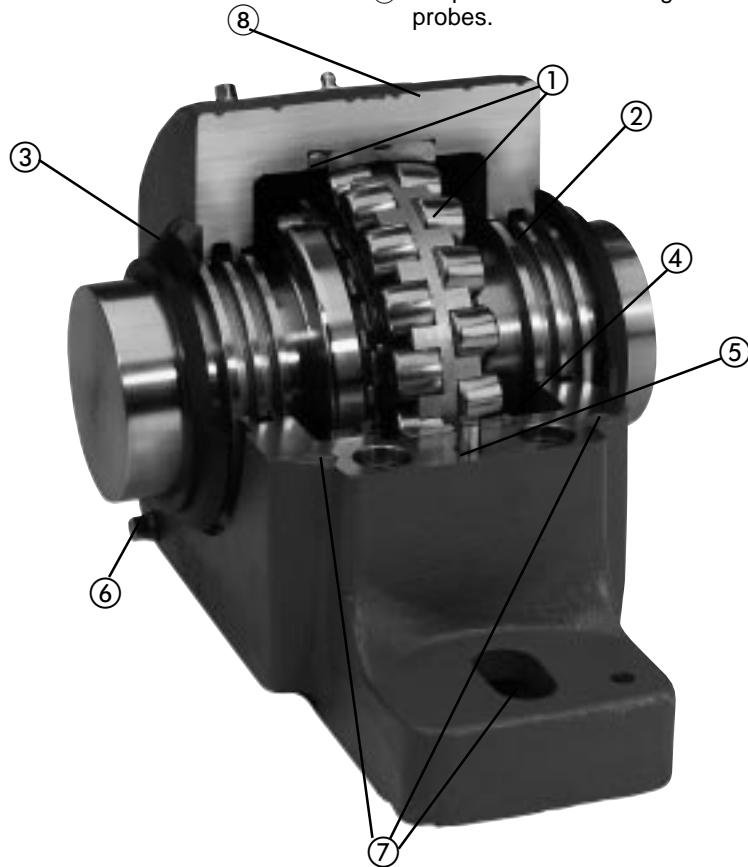
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Series 6600, 6800, 6900, SAF22600, 7600, 7800, 7900, SAF22300

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, hammer-mills 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

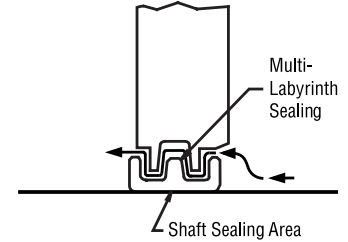
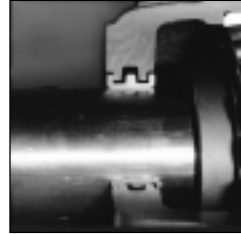
Select the proper seal from Link-Belt's seal menu.

	Triple Ring R Seal	PenTac [®] D5 Seal	Taconite D8 Seal	Wash Down T Seal
Dirt/Dust	✓	✓✓	✓✓✓	✓
Speed	✓✓✓	✓✓	✓	✓✓
Wash Down	✓	✓✓	✓✓	✓✓✓

✓ Good ✓✓ Better ✓✓✓ Best

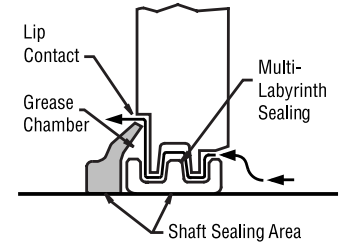
Metal Triple-Ring R Seal

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

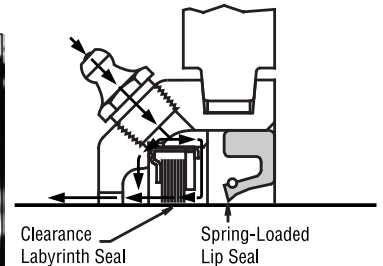
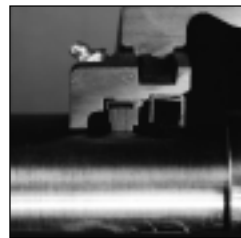
Rugged contact lip seal, molded on a Kevlar[®] body, rotates with the shaft. The PenTac seal acts as a flinger, keeping debris away from the seal area, and provides five seal points.



- 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

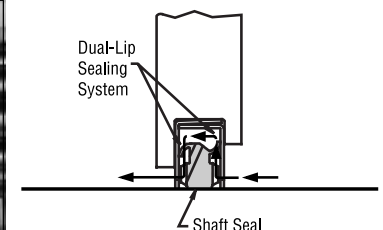
D8 Taconite Sealing System

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
17/16"	BP-LB6823	33/16"	BP-LB6851*
23/16"	BP-LB6835*	315/16"	BP-LB6863F
27/16"	BP-LB6839*	41/2"	BP-LB6872F
211/16"	BP-LB6843*	415/16"	BP-LB6879F
215/16"	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 $\frac{7}{16}$ " through 3 $\frac{1}{2}$ ",
40 mm through 90 mm.

P-LB6800FR 4-bolt base pillow block for shafts 2 $\frac{7}{16}$ " 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 $\frac{7}{16}$ " through
10 $\frac{1}{2}$ ", 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 $\frac{7}{16}$ " through 3 $\frac{1}{2}$ ".

P-LB6800FD8 4-bolt base pillow blocks for shafts 2 $\frac{7}{16}$ " through 8".

P-LB6600FD8 4-bolt base pillow blocks for shafts 8 $\frac{7}{16}$ " through 10 $\frac{1}{2}$ ".

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 $\frac{7}{16}$ " through 2 $\frac{15}{16}$ ".

P-LB6900FR 2-bolt base pillow blocks for shafts 2 $\frac{3}{16}$ " through 2 $\frac{15}{16}$ ".

SAF22600 4-bolt base pillow blocks for shafts 3 $\frac{3}{16}$ " through 5 $\frac{15}{16}$ ".

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.

Series PK-LB6800, PK-LB6600

Pillow Blocks

PK-LB6800FR 4-bolt base pillow block for shafts 2⁷/₁₆" 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 8⁷/₁₆" through 10¹/₂", 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 2⁷/₁₆" through 8". PK-LB6600FD8 4-bolt base pillow blocks for shafts 8⁷/₁₆" through 10¹/₂".

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.

Series PK-LB7800, PK-LB7600

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.

Selection

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:

$$P = F_r$$

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

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

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

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.

Selection

Series 6600, 6800, 6900, 7600, 7800, 7900, 22600, 22300

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)
- L₁₀ = rating life, hours
- n = speed, revolutions per minute
- P = equivalent radial load, pounds (or newtons)
- X = radial factor
- Y = thrust factor

basic formulas:

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

Table 1 • Relation of L₁₀ 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 L₁₀ 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, X₁, Y₁, X₂, and Y₂, 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, L₁₀, 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) % reliability,
 a₁ = Life adjustment factor for reliability
 a₂ = Life adjustment factor for material and processing
 a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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.

Selection

Series 6600, 6800, 7600, 7800

Table 2 • Load ratings and speed limits

Basic unit number				Bearing size number	C ₀ Static load rating pounds/ newtons	C Basic load rating pounds/ newtons	Approximate speed limit RPM			e	F _a / F _r ≤ e		F _a / F _r > e	
Adapter mounted		Direct shaft mounted					oil	grease	D5 PenTac™ 1mm Push-in ■		X ₁	Y ₁	X ₂	Y ₂
Shaft diameter inches/mm	number	Bearing seat mm	number											
1 ⁷ / ₁₆	LB6823	22209LB	23600 105000	20800 92500	6200	5300	5300	.26	1.00	2.6	.67	3.9
1 ¹ / ₂	LB6824	...	...									
40	LB68M40	...	...									
1 ¹¹ / ₁₆	LB6827	22210LB	25500 113000	22000 97900	5500	5000	5000	.26	1.00	2.8	.67	4.2
1 ³ / ₄	LB6828	...	...									
45	LB68M45	...	...									
1 ¹⁵ / ₁₆	LB6831	22211LB	32500 145000	27000 120000	5000	4500	4500	.23	1.00	2.9	.67	4.4
2	LB6832	...	...									
50	LB68M50	...	...									
2 ³ / ₁₆	LB6835	22213LB	46500 207000	38000 169000	4300	3800	3800	.24	1.00	2.8	.67	4.2
60	LB68M60	...	...									
2 ⁷ / ₁₆	LB6839	75	LB7875	22215LB	53000 236000	41500 185000	3700	3400	3400	.22	1.00	3.1	.67	4.6
65	LB68M65	...	...									
2 ¹¹ / ₁₆	LB6843	80	LB7880	22216LB	58500 260000	46500 207000	3500	3200	3200	.22	1.00	3.1	.67	4.7
70	LB68M70	...	...									
2 ¹⁵ / ₁₆	LB6847	85	LB7885	22217LB	73500 327000	58500 260000	3250	3000	3000	.22	1.00	3.0	.67	4.5
3	LB6848	...	...									
75	LB68M75	...	...									
3 ³ / ₁₆	LB6851	90	LB7890	22218LB	81500 363000	64000 285000	3000	2600	2600	.23	1.00	2.9	.67	4.3
80	LB68M80	...	...									
3 ⁷ / ₁₆	LB6855	100	LB78100	22220LB	104000 463000	80000 356000	2800	2200	2200	.24	1.00	2.8	.67	4.2
3 ¹ / ₂	LB6856	...	...									
90	LB68M90	...	...									
3 ¹¹ / ₁₆	LB6859	110	LB78110	22222LB	132000 587000	102000 454000	2500	2000	2000	.25	1.00	2.7	.67	4.0
3 ¹⁵ / ₁₆	LB6863													
4	LB6864													
100	LB68M100													
4 ³ / ₁₆	LB6867	120	LB78120	22224LB	163000 725000	120000 534000	2300	1900	1900	.25	1.00	2.7	.67	4.0
110	LB68M110	...	...									
4 ⁷ / ₁₆	LB6871	130	LB78130	22226LB	196000 872000	143000 636000	2100	1800	1800	.26	1.00	2.6	.67	3.9
4 ¹ / ₂	LB6872													
115	LB68M115													
4 ¹⁵ / ₁₆	LB6879	140	LB78140	22228LB	228000 1010000	166000 738000	1950	1700	1700	.25	1.00	2.7	.67	4.0
5	LB6880													
125	LB68M125													

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	F _a /F _r ≤ e		F _a /F _r > e	
Adapter mounted		Direct shaft mounted					oil	grease	D5 Pentac™ 1mm Push-In ■		X ₁	Y ₁	X ₂	Y ₂
Shaft diameter mm/inches	number	Bearing seat mm	number											
135	5 ³ / ₁₆ LB6883	150	LB78150	22230LB	270000	190000	1850	1600	1600	.25	1.00	2.7	.67	4.0
	1200000				845000									
140	5 ⁷ / ₁₆ LB6887	160	LB78160	22232LB	310000	216000	1700	1500	1500	.26	1.00	2.6	.67	3.9
	1380000				961000									
150	5 ¹⁵ / ₁₆ LB6895	170	LB78170	22234LB	345000	250000	1600	1300	1300	.26	1.00	2.6	.67	3.9
	1530000				1110000									
160	6 ¹ / ₁₆ LB68103	180	LB78180	22236LB	365000	255000	1500	1300	1300	.25	1.00	2.7	.67	4.0
	1620000				1130000									
170	6 ¹⁵ / ₁₆ LB68111	190	LB78190	22238LB	415000	270000	1400	1200	1200	.28	1.00	2.4	.67	3.6
	1850000				1200000									
180	7 ³ / ₁₆ LB68115	200	LB78200	22240LB	450000	300000	1300	1100	1100	.29	1.00	2.3	.67	3.5
	2000000				1330000									
200	7 ¹ / ₂ LB68120	220	LB78220	22244LB	550000	365000	1200	1000	1000	.29	1.00	2.3	.67	3.5
	2450000				1620000									
220	8 ⁷ / ₁₆ LB66135	240	LB76240	23048LB	490000	260000	1100	1000	100	.25	1.00	2.7	.67	4.1
	2180000				1160000									
260	9 ⁷ / ₁₆ LB66B151	280	LB76280	23056LB	670000	345000	950	850	850	.25	1.00	2.7	.67	4.1
	2980000				1530000									

● 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.

Load Ratings

Series 6600, 6800, 7600, 7800

Table 3 • Radial load ratings in pounds at various RPM for appropriate L₁₀ 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	12000				
			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.

Load Ratings

Series 6600, 6800, 7600, 7800

Table 3 • Radial load ratings in pounds at various RPM for appropriate L₁₀ life hours

Basic unit number		L ₁₀ Minimum life, hours	Radial load ratings, pounds														
Adapter mounted	Direct shaft mounted		Speed, RPM														
			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.

Load Ratings

Series 6900, 7900, SAF22600, SAF22300

Table 4 • Load ratings and speed limits

Basic unit number				Bearing size number	C ₀ Static load rating pounds/ newtons	C Basic load rating pounds/ newtons	Approximate speed limit RPM		e	F _a /F _r ≤ e		F _a /F _r > e	
Adapter mounted		Direct shaft mounted					oil	grease		X ₁	Y ₁	x ₂	Y ₂
Shaft diameter inches	number	Bearing seat mm	number										
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 ¹ / 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 ¹ / 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.

Load Ratings

Series 6900, SAF22600, 7900, SAF22300

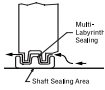
Table 5 • Radial load ratings in pounds at various RPM for appropriate L₁₀ life hours

Basic unit number		L ₁₀ Minimum life, hours	Radial load ratings, pounds														
Adapter mounted	Direct shaft mounted		Speed, RPM														
			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	9100
		8000	25200	20500	14700	12700	11200	10600	10300	9730	9100	8620	8350	7810	7390	7060	6760
		20000	19200	15600	11200	9610	8510	8060	7810	7390	6910	6540	6340	5930	5620	5360	5110
		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	12000	11400
		8000	32000	26000	18700	16000	14200	13400	13000	12300	11500	10900	10600	9890	9370	8970	8600
		20000	24300	19700	14200	12200	10800	10200	9890	9370	8760	8290	8040	7520	7120	6810	6520
		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	14100	13400	12800
		8000	35800	29100	20900	18000	15900	15100	14600	13800	12900	12200	11900	11100	10400	9800	9300
		20000	27200	22100	15900	13600	12100	11400	11100	10500	9820	9290	9000	8420	7920	7420	7020
		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	15300	14400	13600
		8000	39300	31900	23000	19700	17400	16500	16000	15200	14200	13400	13000	12200	11400	10700	10100
		20000	29900	24300	17400	15000	13300	12500	12200	11500	10800	10200	9870	9240	8700	8240	7840
		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	18500	17600	16800	16000
		8000	43900	35700	25700	22000	19500	18500	17900	16900	15800	15000	14500	13600	12900	12400	11900
		20000	33400	27100	19500	16700	14800	14000	13600	12900	12000	11400	11000	10200	9600	9100	8700
		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	23800	22800	21900	21100
		8000	56300	45700	32900	28200	25000	23600	22900	21700	20300	19200	18600	17600	16700	15900	15100
		20000	42700	34700	25000	21400	19000	18000	17400	16500	15400	14600	14100	13300	12600	12000	11400
		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	29500	28300	27200	26200
		8000	69400	56400	40500	34800	30800	29100	28200	26700	25000	23700	22900	21800	20900	20000	19100
		20000	52700	42800	30800	26400	23400	22100	21500	20300	19000	18000	17400	16500	15600	14800	14000
		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	34800	33800	32800	31800	30800
		8000	78600	63900	45900	39400	34900	33000	32000	30300	28300	26800	25800	24800	23800	22800	21800
		20000	59700	48500	34900	29900	26500	25100	24300	23000	21500	20400	19400	18400	17400	16400	15400
		40000	48500	39400	28300	24300	21500	20400	19700	18700	17500	16600					
22626	22326	3000	122000	99200	71300	61200	54200	51300	49700	47100	44000	42000	40800	39800	38800	37800	36800
		8000	91000	73900	53100	45600	40400	38200	37000	35100	32800	31000	29900	28900	27900	26900	25900
		20000	69100	56100	40400	34600	30700	29000	28100	26600	24900	23200	22100	21100	20100	19100	18100
		40000	56100	45600	32800	28100	24900	23600	22800	21600	20200						
22628	22328	3000	142000	116000	83100	71300	63100	59800	57900	54800	51300	49300	48200	47200	46200	45200	44200
		8000	106000	86100	61900	53100	47000	44500	43100	40900	38200	35500	33800	32800	31800	30800	29800
		20000	80500	65400	47000	40400	35700	33800	32800	31000	29000	27000	25900	24900	23900	22900	21900
		40000	65400	53100	38200	32800	29000	27500	26600	25200	23600						
22630	22330	3000	160000	130000	93700	80400	71200	67400	65300	61800	58300	55800	54700	53700	52700	51700	50700
		8000	119000	97000	69800	59900	53000	50200	48600	46100	43400	40700	39600	38600	37600	36600	35600
		20000	90800	73700	53000	45500	40300	38100	36900	35000	32900	30800	29700	28700	27700	26700	25700
		40000	73700	59900	43100	36900	32700	31000	30000	28400							
22632	22332	3000	173000	141000	101000	86900	76900	72800	70500	66800	63300	60800	59700	58700	57700	56700	55700
		8000	129000	105000	75400	64700	57300	54200	52600	49800	47100	44400	43300	42300	41300	40300	39300
		20000	98100	79700	57300	49200	43500	41200	39900	37800	35700	33600	32500	31500	30500	29500	28500
		40000	79700	64700	46500	39900	35400	33500	32400	30700							
22634	22334	3000	178000	145000	104000	89400	79200	75000	72700	68800	65300	62800	61700	60700	59700	58700	57700
		8000	133000	108000	77700	66600	59000	55900	54100	51200	48500	45800	44700	43700	42700	41700	40700
		20000	101000	82000	59000	50600	44800	42400	41100	38900	36800	34700	33600	32600	31600	30600	29600
		40000	82000	66600	47900	41100	36400	34500	33400	31600							

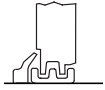
Operation in the high speed shaded areas may require oil lubrication.

Spherical Roller Bearing Pillow Blocks

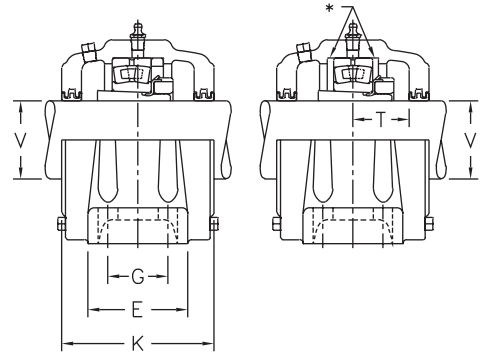
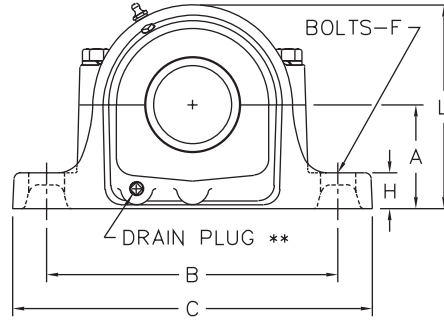
P-LB6800R, P-LB6800FR, P-LB6600FR



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



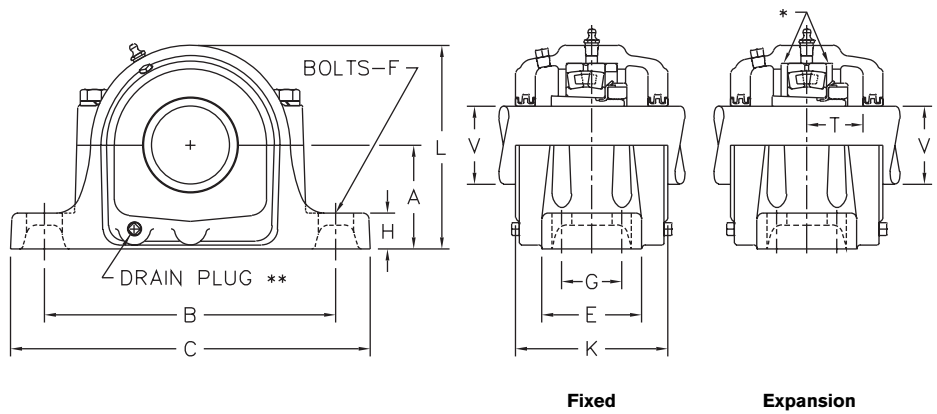
Fixed

Expansion

Dimensions (inches/mm)

Shaft diameter		Pillow block number	Bearing number	A	B		C	E	F Bolts	G	H	K	K □	L	T ■	P ●	Unit wt. (lbs./kgs.)
mm	inches				max.	min.											
40	1 ⁷ / ₁₆	P-LB6823R P-LB6824R P-LB68M40R	22209LBK	2 ¹ / ₄	7	6 ¹ / ₄	8 ¹ / ₄	2 ³ / ₈	1/2	....	1 ³ / ₁₆	3 ³ / ₈	4 ³ / ₈	4 ³ / ₈	1 ¹ / ₁₆	6 ¹ / ₄	11
	1 ¹ / ₂			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
45	1 ¹¹ / ₁₆	P-LB6827R P-LB6828R P-LB68M45R	22210LBK	2 ¹ / ₂	7	6 ¹ / ₂	8 ¹ / ₄	2 ³ / ₈	1/2	....	1 ³ / ₁₆	3 ³ / ₈	4 ³ / ₈	4 ³ / ₈	1 ¹ / ₈	6 ³ / ₈	12
	1 ³ / ₄			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
50	1 ¹⁵ / ₁₆	P-LB6831R P-LB6832R P-LB68M50R	22211LBK	2 ³ / ₄	7 ⁷ / ₈	7 ³ / ₈	9 ⁵ / ₈	2 ³ / ₄	5/8	....	1 ³ / ₁₆	3 ⁷ / ₈	4 ¹³ / ₁₆	5 ¹ / ₄	1 ³ / ₁₆	7 ¹ / ₄	14
	2			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
60	2 ³ / ₁₆	P-LB6835R P-LB68M60R	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
				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
65	2 ⁷ / ₁₆	P-LB6839R P-LB6839FR P-LB68M65R P-LB68M65FR	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 ⁴ / ₁₆	6 ³ / ₈	1 ¹⁵ / ₃₂	8 ³ / ₈	27
				82.55	244.5	219.1	285.8	79.4	16	....	28.6	120.6	143.3	161.9	37.3	212.7	12.2
70	2 ¹¹ / ₁₆	P-LB6843R P-LB6843FR P-LB68M70R P-LB68M70FR	22216LBK	3 ¹ / ₂	11	9 ⁵ / ₈	13	3 ¹ / ₂	3/4	....	1 ¹ / ₄	5 ¹ / ₄	6 ¹ / ₁₆	7	1 ¹ / ₂	9 ¹ / ₂	38
				88.90	279.4	244.5	330.2	88.9	20	....	31.8	133.4	156.8	177.8	38.1	241.3	17.2
75	2 ¹⁵ / ₁₆	P-LB6847R P-LB6847FR P-LB6848R P-LB6848FR P-LB68M75FR P-LB68M75FR	22217LBK	3 ³ / ₄	11	9 ⁷ / ₈	13	3 ¹ / ₂	3/4	....	1 ¹ / ₄	5	5 ⁵ / ₁₆	7 ⁵ / ₁₆	1 ¹⁹ / ₃₂	10	42
	3			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
80	3 ³ / ₁₆	P-LB6851R P-LB6851FR P-LB68M80R P-LB68M80FR	22218LBK	4	11 ³ / ₄	10 ¹ / ₄	13 ³ / ₄	3 ⁷ / ₈	3/4	....	1 ¹ / ₁₆	5 ⁷ / ₈	7 ¹ / ₁₆	7 ¹⁵ / ₁₆	1 ¹ / ₄	10 ¹ / ₂	47
				101.60	298.4	260.4	349.2	98.4	16	....	33.3	149.2	178.2	201.6	44.4	266.7	21.3
90	3 ⁷ / ₁₆	P-LB6855R P-LB6855FR P-LB6856R P-LB6856FR P-LB68M90R P-LB68M90FR	22220LBK	4 ¹ / ₂	13 ³ / ₈	11 ⁵ / ₈	15 ¹ / ₄	4 ³ / ₈	7/8	....	1 ¹ / ₂	6	6 ⁶ / ₁₆	8 ⁷ / ₈	1 ²⁹ / ₃₂	11 ³ / ₄	71
	3 ¹ / ₂			114.30	333.4	295.3	387.4	111.1	24	....	38.1	152.4	176.6	225.4	48.4	298.4	30.8
100	3 ¹¹ / ₁₆	P-LB6859FR P-LB6863FR P-LB6864FR P-LB68M100FR	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 ³ / ₁₆	9 ⁵ / ₈	2 ¹ / ₈	88	
	3 ¹⁵ / ₁₆			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																
110	4 ³ / ₁₆	P-LB6867FR P-LB68M110FR	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 ⁹ / ₃₂	13 ¹ / ₂	104
				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
115	4 ⁷ / ₁₆	P-LB6871FR P-LB6872FR P-LB68M115FR	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 ¹ / ₃₂	2 ¹⁵ / ₃₂	14 ¹ / ₂	149
	4 ¹ / ₂			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
125	4 ¹⁵ / ₁₆	P-LB6879FR P-LB6880FR P-LB68M125FR	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 ¹ / ₁₆	2 ⁵ / ₈	15 ¹ / ₂	167
	5			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

Continued on facing page.



Dimensions (inches/mm) - continued

Shaft diameter	Pillow block number	Bearing number	A	B		C	E	F	G	H	K	K □	L	T	P ●	Unit wt. (lbs./kgs.)		
				max.	min.													
135	P-LB6883FR P-LB68M135FR	22230LBK	6 ⁵ / ₁₆ 160.34	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 50.8	8 ¹ / ₈ 206.4	9 ¹⁷ / ₆₄ 235.4	12 ⁹ / ₁₆ 319.1	2 ³ / ₄ 69.8	16 406.4	187 84.8		
140	P-LB6887FR P-LB68M140FR	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	8 ¹ / ₂ 215.9	9 ³⁵ / ₆₄ 242.5	13 ³ / ₈ 339.7	2 ³¹ / ₃₂ 75.4	17 431.8	221 94.8		
150	P-LB6895FR P-LB6896FR P-LB68M150FR	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	9 ¹ / ₄ 235.0	10 ⁹ / ₁₆ 261.9	14 ¹ / ₄ 362.0	3 ¹ / ₈ 79.4	18 457.2	280 119.8		
160	P-LB68103FR P-LB68104FR P-LB68M160FR		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	9 ⁵ / ₈ 244.5	10 ¹¹ / ₁₆ 271.5	14 ¹⁵ / ₁₆ 379.4	3 ⁵ / ₃₂ 80.2	18 ³ / ₄ 476.2	304 137.9	
170	P-LB68111FR P-LB68112FR P-LB68M170FR	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	10 ¹ / ₄ 260.4	11 ³ / ₁₆ 284.2	15 ¹⁵ / ₁₆ 401.6	3 ⁵ / ₁₆ 84.1	20 ¹ / ₂ 520.7	370 167.8		
180	P-LB68115FR P-LB68M180FR		22240LBK	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	11 279.4	11 ⁷ / ₈ 301.6	16 ³ / ₄ 425.4	3 ¹⁸ / ₃₂ 89.7	22 ¹ / ₄ 565.2	450 204.1	
200	P-LB68120FR P-LB68127FR P-LB68128FR P-LB68M200FR	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	11 ³ / ₁₆ 284.2	12 ⁵ / ₁₆ 312.7	18 ⁹ / ₁₆ 471.5	3 ¹³ / ₁₆ 96.8	24 ¹ / ₂ 622.3	675 665 665 301.6		
220	P-LB66135FR P-LB66136FR P-LB66144FR P-LB66M220FR		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	11 279.4	12 ⁵ / ₁₆ 312.7	16 ³ / ₄ 425.4	3 ¹³ / ₁₆ 96.8	22 ¹ / ₄ 565.2	430 195.0	
260	P-LB66B151FR			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	11 ³ / ₄ 298.4	13 ³ / ₁₆ 331.8	19 ⁹ / ₁₆ 484.2	4 ¹ / ₄ 108.0	24 ¹ / ₂ 622.3	550 545 540 530 515 510 247.2
	P-LB66B152FR																	
	P-LB66159FR																	
	P-LB66160FR P-LB66167FR P-LB66168FR P-LB66M260FR																	

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

Lubrication fitting tap size: for 4¹/₂" (115 mm) and smaller shafts, 1/8" PT; for all other shafts 1/4" PT.

* Expansion type block provides 1/4" (6.4 mm) total axial movement for 1³/₄" (40 mm) and smaller shafts. All larger sizes provide 3/8" (9.5 mm). Fixed bearing is offset in relation to housing centerline.

** Drain plug tap size: for 3³/₁₆" (80 mm) and smaller shafts, 1/8" PT; for 3⁷/₁₆" (90 mm) through 6" (150 mm) shafts, 1/4" PT; for all other shafts, 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.

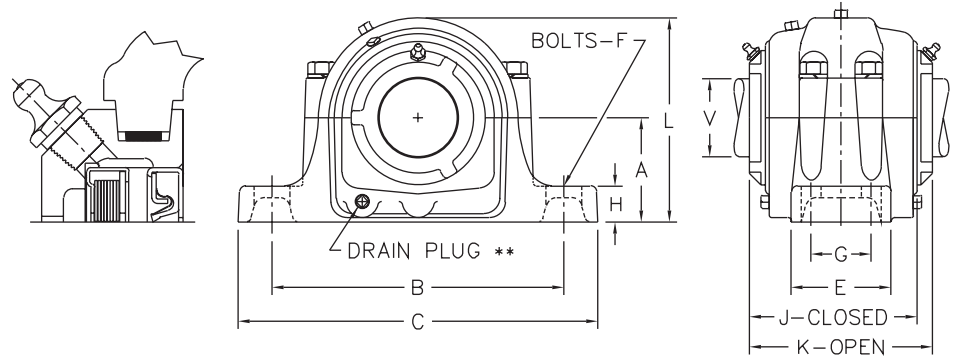
Additional information, page E-34.

□ Width for D5 Pentac™ 5 point sealing system.

Spherical Roller Bearing Pillow Blocks

P-LB6800D8, P-LB6800FD8, P-LB6600FD8

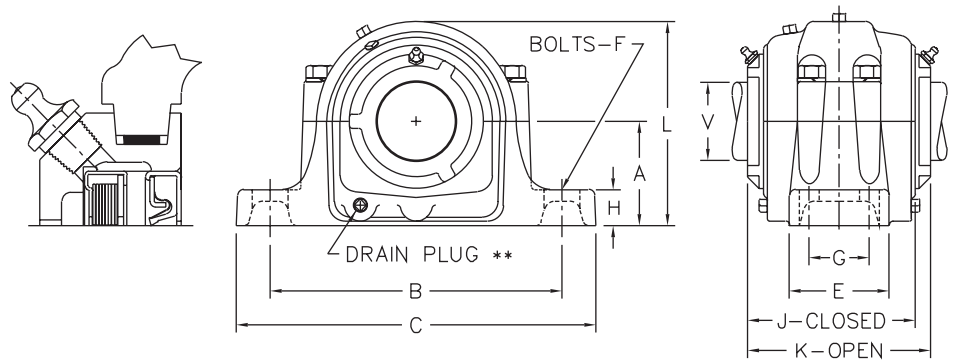
Two-piece Cast Iron Housing
 2 or 4-bolt Base
 Independently Flushable Seals
 Self-aligning
 Tapered Adapter Mounted
 Grease Lubrication



Dimensions (inches/mm)

V Shaft diameter ▲	Pillow block number	Bearing number	A	B		C	E	F Bolts	G	H	K	L	T ■	P ●	J	Unit wt. (lbs./kgs.)
				max.	min.											
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	... ... 20.6	1 ³ / 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 ¹ / 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 23.8	1 ⁵ / ₁₆ 23.8	4 ¹⁵ / ₁₆ 125.4	4 ³ / ₄ 120.6	1 ¹ / ₈ 28.6	6 ⁵ / ₈ 168.3	4 ¹ / ₃₂ 111.9
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 ³ / ₈ 244.5	2 ³ / ₄ 69.8	5/8 16 23.8	1 ⁵ / 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 25.4	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
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 ³ / ₈ 79.4	5/8 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 ¹ / 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 20 2 ... 20	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 20	... ... 2 ... 20	1 ¹ / ₄ 31.8	6 ³ / ₈ 161.9	7 ⁵ / ₁₆ 185.7	1 ¹⁹ / ₃₂ 40.5	10 254.0	5 ¹ / ₁₆ 144.5	47 21.3
3 ³ / ₁₆	P-LB6851D8 P-LB6851FD8		22218LBK	4 101.60	11 ³ / ₄ 298.4 295.3	10 ¹ / ₄ 260.4 263.5	13 ³ / ₄ 349.2	3 ⁷ / ₈ 98.4	3/4 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 ³ / ₈ 333.4	11 ⁵ / ₈ 295.3	15 ¹ / ₄ 387.4	4 ¹ / ₂ 111.1 114.3	7/8 24 20	... ... 2 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 ² / ₃₂ 169.1	79 35.8
3 ¹ / 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 / ₈ 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 ³ / 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 ³ / ₆₄ 215.5	165 74.8
4 ¹⁵ / ₁₆	P-LB6879FD8	22228LBK	6 152.40	17 ⁷ / 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

Continued on facing page.



Dimensions (inches/mm) - continued

V Shaft diameter ▲	Pillow block number	Bearing number	A	B		C	E	F Bolts	G	H	K	L	T ■	P ●	J	Unit wt. (lbs./kgs.)
				max.	min.											
57/16	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
67/16 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 ³ / 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: 1/4" and smaller shafts, 1/4-28; all other 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.

△ Cast steel housing is standard.

Expansion type block provides 1/4" (6.4 mm) total axial movement for 1/4" (40 mm) and smaller shafts. All larger shafts, 3/8" (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 3/16" (80 mm) and smaller shafts, 1/8" PT; for 3/16" (90 mm) through 6" (150 mm) 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

PK-LB6800FR, PK-LB6600FR

Two-piece Cast Steel Housing

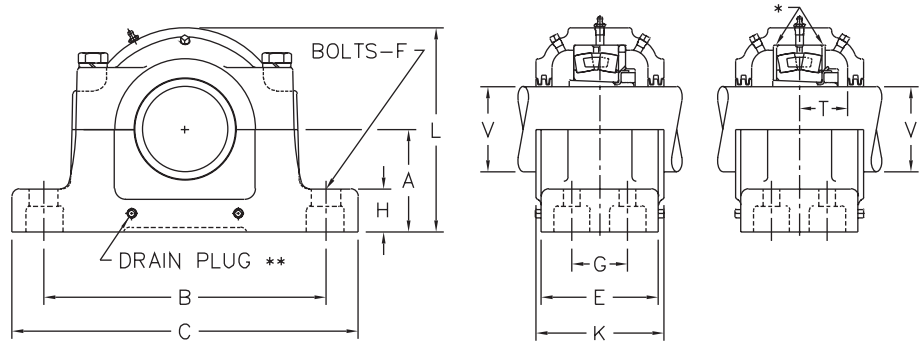
4-bolt Base

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 Bolts	G	H	K	L	T ■	P ●	Unit wt. (lbs./kgs.)	
				max.	min.											
mm	inches															
65	PK-LB6839FR <i>PK-LB68M65FR</i>	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	17/8 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	37 16.8	
70	PK-LB6843FR <i>PK-LB68M70FR</i>	22216LBK	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	51 23.1	
75	PK-LB6847FR PK-LB6848FR <i>PK-LB68M75FR</i>	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	5 1/4 133.4	7 3/8 187.3	1 19/32 40.5	11 1/2 292.1	51 23.1	
	PK-LB6855FR PK-LB6856FR <i>PK-LB68M90FR</i>		22220LBK	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	97 44.0
100	PK-LB6859FR PK-LB6863FR PK-LB6864FR <i>PK-LB68M100FR</i>	22222LBK	3 11/16 125.41	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	112 50.8	
	PK-LB6871FR PK-LB6872FR <i>PK-LB68M115FR</i>		22226LBK	4 7/16 152.40	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	7 3/4 196.8	11 1/2 292.1	2 15/32 62.7	18 1/4 463.6	200 196
	PK-LB6879FR PK-LB6880FR <i>PK-LB68M125FR</i>			22228LBK	4 15/16 152.40	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	7 1/2 190.5	11 15/16 303.2	2 5/8 66.7	19 1/4 489.0	207 93.9
140	PK-LB6887FR <i>PK-LB68M140FR</i>	22232LBK	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	270 122.5	
150	PK-LB6895FR PK-LB6896FR <i>PK-LB68M150FR</i>	22234LBK	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	368 166.9	
	PK-LB68103FR PK-LB68104FR <i>PK-LB68M160FR</i>		22236LBK	7 1/2 190.50	23 3/8 600.1	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	390 176.9
170	PK-LB68111FR PK-LB68112FR <i>PK-LB68M170FR</i>	22238LBK	6 15/16 200.02	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	470 213.2	
200	PK-LB68120FR PK-LB68127FR PK-LB68128FR <i>PK-LB68M200FR</i>	22244LBK	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 11/16 474.7	3 13/16 96.8	29 1/4 743.0	875 830 830 376.5	
	PK-LB66136FR PK-LB66144FR <i>PK-LB66M220FR</i>		23048LBK	8 1/2 209.55	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	562 528 240.4
260	PK-LB66B152FR PK-LB66159FR PK-LB66160FR PK-LB66168FR <i>PK-LB66M260FR</i>	23056LBK		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 11/16 474.7	4 1/4 108.0	29 1/4 743.0	800 790 780 770 358.3

Bold face items are normally available from stock; please consult for availability of non-stock items.
Lubrication fitting tap size: 1/4" PT.

* Expansion type block provides 1/4" (6.4 mm) total axial movement for 1 3/4" (40 mm) and smaller shafts. All larger shafts, 3/8" (9.5 mm). Fixed bearing is offset in relation to housing centerline.

** Drain plug tap size: for 6" (160 mm) and smaller shafts, 1/4" PT; for all other shafts, 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.

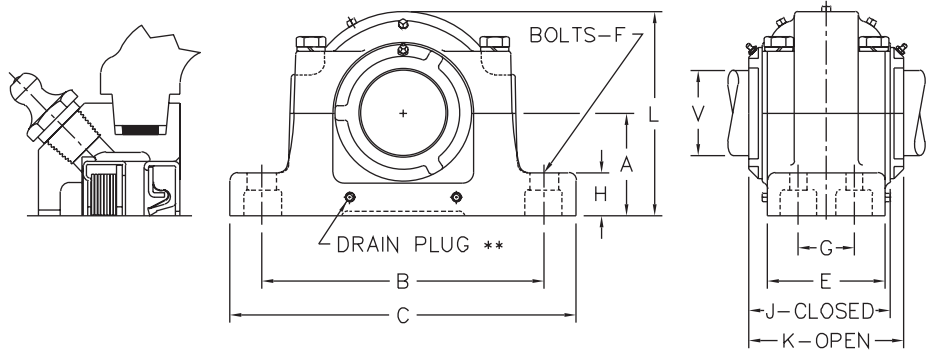
Load ratings, pages E-9 through E-12.

Additional information, page E-34.

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		C	E	F Bolts	G	H	K	L	T ■	P ●	J	Unit wt. (lbs./kgs.)
				max.	min.											
27/16	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 3/8 371.5	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 3/4 590.6	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.

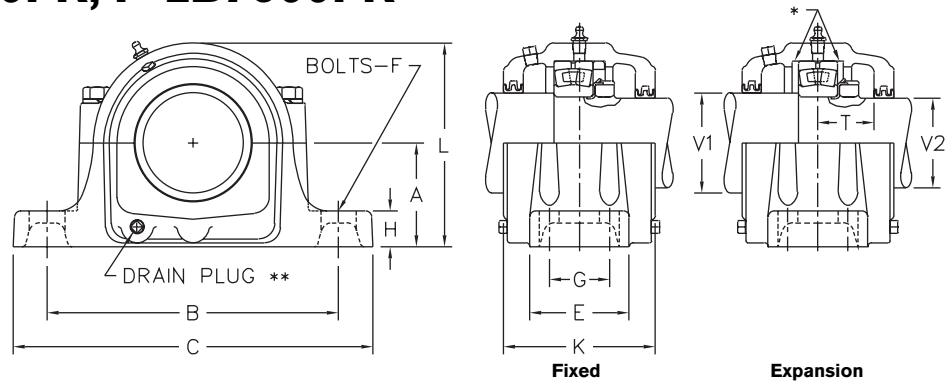
Load ratings, pages E-9 through E-12.

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



Dimensions (inches/mm)

Bearing bore diameter	Shaft diameter		Pillow block number	Bearing number	A	B		C	E	F Bolts	G	H	K □	L	T ■	P ●	Unit wt. (lbs./kgs.)
	V1	V2				max.	min.										
2.9528 75.000	3 ⁷ / ₁₆	2 ¹³ / ₁₆	P-LB7875R P-LB7875FR	22215LB	3 ¹ / ₄	9 ⁵ / ₈	8 ⁵ / ₈	11 ¹ / ₄	3 ¹ / ₈	5 ⁸ / ₁₆ 1 ¹ / ₂	1 ⁷ / ₈ 1 ¹ / ₈	1 ¹ / ₈	4 ³ / ₄	6 ³ / ₈	1 ¹⁵ / ₃₂	8 ³ / ₈	35
						82.55	244.5	219.1	285.8	79.4	16 12	47.6	28.6	120.6	161.9	37.3	212.7	15.9
3.1496 80.000	3 ⁵ / ₈	3	P-LB7880R P-LB7880FR	22216LB	3 ¹ / ₂	11	9 ⁵ / ₈	13	3 ¹ / ₂	3 ⁴ / ₈ 5 ⁸ / ₁₆	2 2	1 ¹ / ₄	5 ¹ / ₄	7	1 ¹ / ₂	9 ¹ / ₂	35
						88.90	279.4	244.5	330.2	88.9	20 16	50.8	31.8	133.4	177.8	38.1	241.3	15.9
3.3465 85.000	3 ¹⁵ / ₁₆	3 ³ / ₁₆	P-LB7885R P-LB7885FR	22217LB	3 ³ / ₄	11	9 ⁵ / ₈	13	3 ¹ / ₂	3 ⁴ / ₈ 5 ⁸ / ₁₆	2 2	1 ¹ / ₄	5	7 ¹⁵ / ₁₆	1 ¹⁹ / ₃₂	10	40
						95.25	279.4	250.8	330.2	88.9	20 16	50.8	31.8	127.0	185.7	40.5	254.0	18.1
3.5433 90.000	4 ¹ / ₈	3 ³ / ₈	P-LB7890R P-LB7890FR	22218LB	4	11 ⁵ / ₈	10 ³ / ₈	13 ³ / ₄	3 ⁷ / ₈	3 ⁴ / ₈ 5 ⁸ / ₁₆	2 2	1 ¹ / ₄	5 ⁷ / ₈	7 ¹⁵ / ₁₆	1 ¹ / ₄	10 ¹ / ₂	42
						101.60	295.3	263.5	349.2	98.4	20 16	54.0	33.3	149.2	201.6	44.4	266.7	19.1
3.9370 100.000	4 ¹ / ₂	3 ¹³ / ₁₆	P-LB78100R P-LB78100FR	22220LB	4 ¹ / ₂	13 ¹ / ₈	11 ⁵ / ₈	15 ¹ / ₄	4 ³ / ₈ 4 ¹ / ₂	7 ⁸ / ₁₆ 3 ⁴ / ₈	2 2	1 ¹ / ₂	6	8 ⁷ / ₈	1 ²⁹ / ₃₂	11 ³ / ₄	62
						114.30	333.4	295.1	387.4	111.1 114.3	24 20	60.3	38.1	152.4	225.4	48.4	298.4	28.1
4.3307 110.000	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 / ₈	2 ³ / ₄	1 ⁵ / ₈	6 ¹ / ₂	9 ⁵ / ₈	2 ¹ / ₈	12 ¹ / ₄	78
					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 120.000	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 / ₈	2 ³ / ₄	1 ³ / ₄	7 ⁷ / ₈	10 ¹ / ₁₆	2 ³ / ₃₂	13 ¹ / ₂	102
					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 130.000	5 ⁷ / ₈	4 ¹⁵ / ₁₆	P-LB78130FR	22226LB	6	16	14 ³ / ₈	18 ³ / ₈	5 ¹ / ₈	7 ⁸ / ₁₆	3 ¹ / ₄	1 ⁷ / ₈	7 ³ / ₄	11 ¹⁹ / ₃₂	2 ¹⁹ / ₃₂	14 ¹ / ₂	141
					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 140.000	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 ¹⁹ / ₃₂	2 ⁵ / ₈	15 ¹ / ₂	162
					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 150.000	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
					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 160.000	7	6 ¹ / ₁₆	P-LB78160FR	22232LB	6 ¹ / 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
					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 170.000	7 ¹ / 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 ³ / ₈	18	240
					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 180.000	7 ¹³ / ₁₆	6 ⁷ / ₈	P-LB78180FR	22236LB	7 ¹ / ₂	23 ³ / ₈	20 ⁷ / ₈	26 ³ / ₄	7 ¹ / ₈	1	4 ⁵ / ₈	2 ¹ / ₈	9 ⁵ / ₈	14 ¹⁵ / ₁₆	3 ³ / ₃₂	18 ³ / ₄	279
					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 190.000	8 ³ / ₈	7 ¹ / ₄	P-LB78190FR	22238LB	7 ⁷ / ₈	24 ³ / ₈	21 ³ / ₈	28	7 ¹ / ₂	1 ¹ / ₄	4 ¹ / ₂	2 ³ / ₈	10 ¹ / ₄	15 ¹⁹ / ₁₆	3 ⁵ / ₁₆	20 ¹ / ₂	345
					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 200.000	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
					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 220.000	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 ¹ / ₁₆	24 ¹ / ₂	620
					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 240.000	10 ¹ / ₂	9 ⁹ / 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 ¹ / ₁₆	22 ¹ / ₄	430
					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 280.000	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
					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

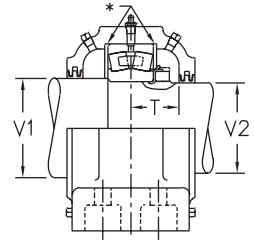
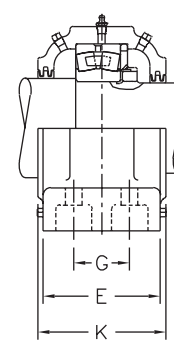
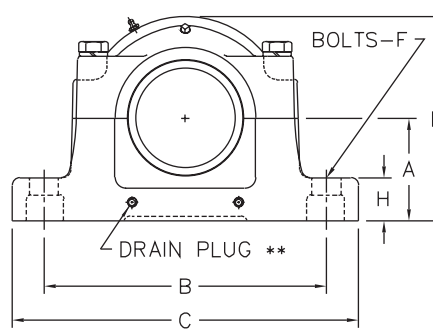
4-bolt Base

Fixed or Expansion

Self-aligning

Direct Shaft Mounted

Grease or Oil Lubrication



Fixed

Expansion

Dimensions (inches/mm)

Bearing bore diameter	Shaft diameter		Pillow block number	Bearing number	A	B		C	E	F Bolts	G	H	K	L	T	P	Unit wt. (lbs./kgs.)
	V1	V2				max.	min.										
2.9528 75.000	37/16	213/16	PK-LB7875FR	22215LB	31/4 82.55	95/8 244.5	85/8 219.1	111/4 285.8	43/8 111.1	1/2 12	17/8 47.6	11/2 38.1	43/4 120.6	63/8 161.9	115/32 37.3	101/4 260.4	35 15.9
3.1496 80.000	35/8	3	PK-LB7880FR	22216LB	31/2 88.90	11 279.4	95/8 244.5	13 330.2	47/8 123.8	5/8 16	2 50.8	15/8 41.3	51/4 133.4	7 177.8	11/2 38.1	11 279.4	48 21.8
3.3465 85.000	315/16	33/16	PK-LB7885FR	22217LB	33/4 95.25	11 279.4	97/8 250.8	13 330.2	47/8 123.8	5/8 16	2 50.8	15/8 41.3	51/4 133.4	73/8 187.3	119/32 40.5	111/2 292.1	50 22.7
3.9370 100.000	41/2	313/16	PK-LB78100FR	22220LB	41/2 114.30	131/8 333.4	115/8 295.3	151/4 387.4	6 152.4	3/4 20	23/8 60.3	17/8 47.6	61/2 165.1	813/16 165.1	129/32 48.4	133/4 349.2	85 38.6
4.3307 110.000	47/8	43/16	PK-LB78110FR	22222LB	415/16 125.41	141/2 368.3	125/8 320.7	161/2 419.1	61/2 165.1	3/4 20	23/4 69.8	2 50.8	7 177.8	93/4 247.6	21/8 54.0	151/4 387.4	105 47.6
5.1181 130.000	57/8	415/16	PK-LB78130FR	22226LB	6 16 152.40	145/8 406.4	183/8 371.5	71/4 466.7	7/8 184.2	3/4 24	21/4 82.6	73/4 57.2	111/2 196.8	215/32 292.1	181/4 62.7	187 463.6	84.8
5.5118 140.000	61/4	55/16	PK-LB78140FR	22228LB	6 175/8 152.40	16 435.0	201/8 406.4	67/8 511.2	1 174.6	33/8 24	21/2 85.7	71/2 63.5	1115/16 190.5	25/8 303.2	191/4 66.7	190 489.0	86.2
6.2992 160.000	7	61/16	PK-LB78160FR	22232LB	611/16 169.86	191/4 489.0	173/8 441.3	22 558.8	8 203.2	1 24	33/4 95.2	23/4 69.8	81/2 215.9	131/2 342.9	231/32 75.4	201/2 520.7	250 113.4
6.6929 170.000	77/16	67/16	PK-LB78170FR	22234LB	71/16 179.39	215/8 549.3	193/8 492.1	243/4 628.6	83/4 222.2	1 24	41/4 108.0	3 76.2	91/4 235.0	141/4 362.0	31/8 79.4	221/4 565.2	344 156.0
7.0866 180.000	713/16	67/8	PK-LB78180FR	22236LB	71/2 190.50	235/8 600.1	207/8 530.2	263/4 679.4	91/8 231.8	1 24	45/8 117.5	31/4 82.6	95/8 244.5	1415/16 379.4	35/32 80.2	231/4 590.6	365 165.6
7.4803 190.000	83/8	71/4	PK-LB78190FR	22238LB	77/8 200.02	243/8 619.1	215/8 549.3	28 711.2	93/4 247.6	11/4 30	41/2 114.3	31/4 82.6	101/4 260.4	1519/16 401.6	35/16 84.1	25 635.0	450 204.1
8.6614 220.000	99/16	85/16	PK-LB78220FR	22244LB	91/2 241.30	275/8 701.7	255/8 657.2	32 812.8	12 304.8	13/4 48	71/4 184.2	4 101.6	125/8 320.7	1811/16 474.7	313/16 96.8	291/4 743.0	770 349.3
9.4488 240.000	101/2	93/16	PK-LB76240FR	23048LB	81/4 209.55	25 635.0	221/2 571.5	291/2 749.3	103/8 263.5	11/4 30	5 127.0	31/2 88.9	11 279.4	161/2 419.1	313/16 96.8	261/2 673.1	530 240.4
11.0236 280.000	12	103/4	PK-LB76280FR	23056LB	91/2 241.30	275/8 701.7	255/8 657.2	32 812.8	12 304.8	13/4 48	71/4 184.2	4 101.6	125/8 320.7	1811/16 474.7	41/4 108.0	291/4 743.0	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.

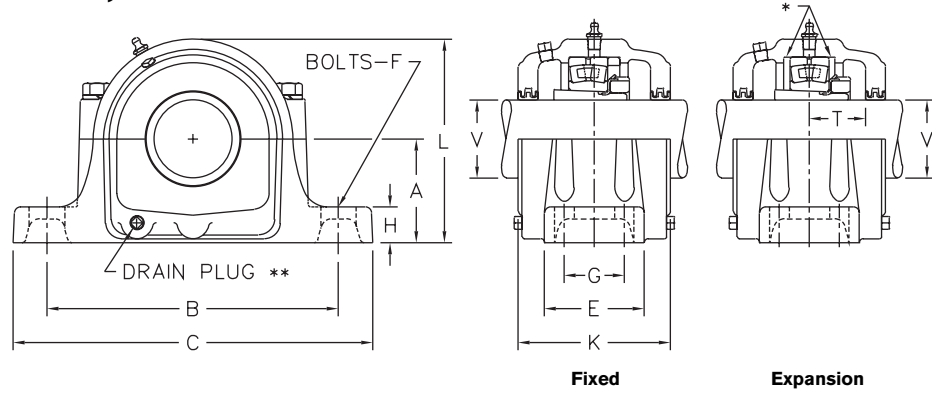
Additional information, page E-34.

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



Dimensions (inches/mm)

V Shaft diameter inches	Pillow block number	Bearing number	A	B		C	E	F Bolts	G	H	K	L	T ■	P ●	Unit wt. (lbs./kgs.)
				max.	min.										
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 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 ⁷ / ₈ 196.8	10 ⁵ / ₈ 269.9	2 ³ / ₄ 69.8	5 ⁸ / ₁₆ 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 16	....	1 ³ / ₁₆ 30.2	4 ³ / ₄ 120.6	6 ⁵ / ₁₆ 160.3	1 ¹ / 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 / 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 / ₈ 20 16	.... 2 ¹ / ₈ 54.0	1 ¹ / ₁₆ 33.3	5 ⁷ / ₈ 149.2	7 ¹ / ₁₆ 201.6	1 ¹ / 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 / ₈ 20 16 2 ¹ / ₄ 54.0	1 ¹ / ₁₆ 33.3	6 ¹ / ₈ 155.6	8 ⁵ / ₈ 212.7	2 50.8	11 ¹ / ₄ 285.8
2 ⁵ / ₁₆	P-LB6947R P-LB6947FR	22317LBK	4 ¹ / ₂ 114.30	13 ³ / ₈ 333.4	11 ⁵ / ₈ 295.3	15 ¹ / ₄ 387.4	4 ³ / ₈ 111.1	7 ⁸ / ₁₆ 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 / ₈ 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 ³ / ₄ 336.6	16 ¹ / ₂ 419.1	4 ³ / ₄ 120.6	3 ⁴ / ₈ 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 ³ / ₈ 371.5	18 ³ / ₈ 466.7	5 ¹ / ₈ 130.2	7 ⁸ / ₁₆ 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 ³ / 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 ¹ / 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 2¹¹/₁₆" 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 2¹¹/₁₆" (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.

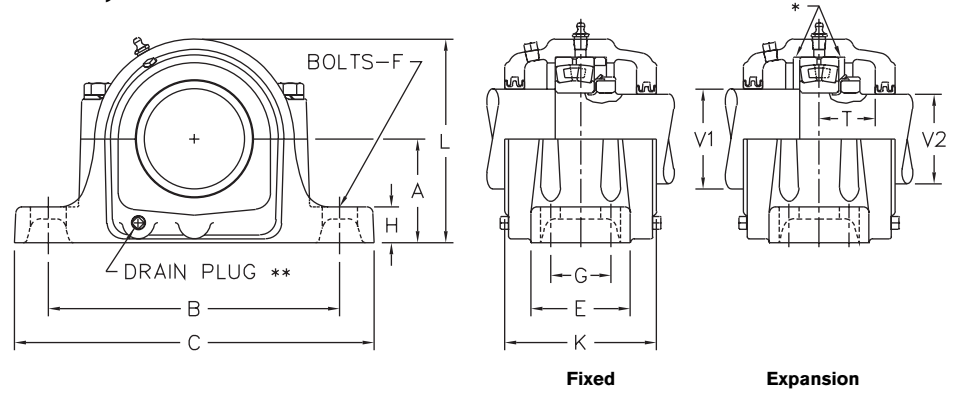
Load ratings, pages E-13, E-14.

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



Dimensions (inches/mm)

Bearing bore diameter	Shaft diameter		Pillow block number ▲	Bearing number	A	B		C	E	F Bolts	G	H	K	L	T ■	P	Unit wt. (lbs./kgs.)
	V1	V2				max.	min.										
1.7717 45.000	2 1/8	1 1/16	P-LB7945R	22309LB	2 3/4 69.85	8 203.2	7 1/4 184.2	9 9/16 244.5	2 3/4 69.8	5/8 16	....	1 25.4	4 1/8 104.8	5 3/8 136.5	1 1/16 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 88.9	3/4 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 20 16	.... 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 3/8 269.9	14 1/4 362.0	3 7/8 98.4	3/4 20 16	.... 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 1/8 295.3	15 1/4 387.4	4 3/8 111.1	7/8 24 20	.... 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 1/16	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 1/16	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 3/8 600.1	20 3/4 530.2	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 1/16 398.5	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 5/8" (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

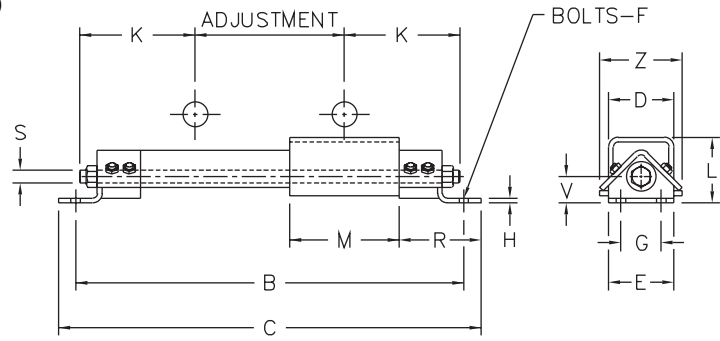
LHD Type (Bearing Unit Not Included)

Welded Steel Frame

Protected Screw

P-LB6800 Bearing Unit Pillow Block

P-LB7800 Pillow Block



Shaft Sizes		Takeup frame number	Adjustment	B	C	D	E	F Bolts	G	H	K	L	M	R	S rod dia.	V	Z
inches	mm																
17/16 thru 23/16	...	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												
		LHD20-36	36	53	55												
		LHD20-48	48	65	67	101.6	127.0	16	63.5	6.4	215.9	133.4	279.4	101.6	50.8	158.8	
27/16 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	29/16	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												
		LHD25-36	36	56 3/4	59 1/4												
		LHD25-48	48	68 3/4	71 1/4	127.0	139.7	16	76.2	9.5	263.5	158.8	336.6	127.0	65.1	181.0	
3 1/16	90	LHD30-12	12	35 1/2	38 1/4	6	6 1/2	3/4	3	1/2	11 1/4	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												
		LHD30-36	36	59 1/2	62 1/4												
		LHD30-48	48	71 1/2	74 1/4	152.4	165.1	20	76.2	12.7	298.4	177.8	362.0	152.4	63.5	228.6	
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												
		LHD35-36	36	61 1/4	64												
		LHD35-48	48	73 1/4	76	152.4	165.1	20	76.2	12.7	320.7	177.8	406.4	152.4	63.5	228.6	
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												
		LHD40-36	36	65 1/4	68												
		LHD40-48	48	77 1/4	80	177.8	165.1	20	76.2	12.7	371.5	177.8	508.0	152.4	63.5	228.6	
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 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												
		LHD50-36	36	71	73 1/2												
		LHD50-48	48	83	85 1/2	215.9	177.8	24	101.6	12.7	444.5	196.8	596.9	171.4	85.7	285.8	

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.

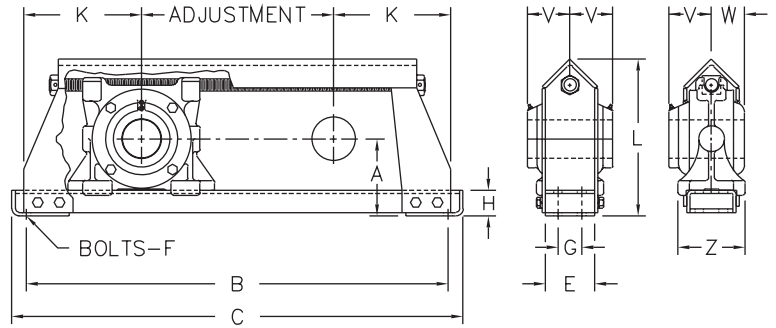
For load ratings, see rating table for pillow block to be used.

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.)
27/16	12	DS-LB6839-12	22215LBK	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			42 1/2	44 1/2	111										
	30			48 1/2	50 1/2	119										
	304.8			774.7	825.5	42.6										
	457.2			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	DS-LB6847-12	22217LBK	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			44	46 1/4	145										
	30			50	52 1/4	155										
	304.8			812.8	870.0	54.4										
	457.2			965.2	1022.4	59.0										
	609.6			1117.6	1174.8	65.8										
762.0	1270.0	1327.2	70.3													
37/16	12	DS-LB6855-12	22220LBK	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			48	50 1/2	230										
	30			54	56 1/2	242										
	304.8			914.4	977.9	93.4										
	457.2			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	DS-LB6863-12	22222LBK	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			48	50 1/2	285										
	30			54	56 1/2	300										
	304.8			914.4	977.9	115.7										
	457.2			1066.8	1130.3	122.5										
	609.6			1219.2	1282.7	129.3										
762.0	1371.6	1435.1	136.1													
47/16	18	DS-LB6871-18	22226LBK	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			53	56 1/2	432										
	30			59	62 1/2	450										
	457.2			1193.8	1282.7	187.8										
	609.6			1346.2	1435.1	196.0										
	762.0			1498.6	1587.5	204.1										
	4 15/16			18	DS-LB6879-18	22228LBK										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		55	58 1/2	494												
30		61	64 1/2	515												
457.2		1244.6	1333.5	215.5												
609.6		1397.0	1485.9	224.1												
762.0		1549.4	1638.3	233.6												
5 15/16		18	DS-LB6895-18	22234LBK			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	67 7/8			72 1/4	746										
	42	79 7/8			84 1/4	784										
	457.2	1419.2			1530.4	321.1										
	609.6	1571.6			1682.8	329.3										
	762.0	1724.0			1835.2	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

Symbol	Description	P	E - LB	79	65	F	B	C	-T2/ 3
BP	Pillow block; two-piece; black Rilsan nylon II coated	}	}	}	}	}	}	}	}
P	Pillow block; two-piece								
PK	Pillow block; two-piece cast steel housing (66, 68, 76 and 78 series)								
E	Expansion Mounting								
LB	Spherical roller bearing								
66	Adapter mounted with 23000LBK bearing			}	}	}	}	}	}
68	Adapter mounted with 22200LBK bearing								
69	Adapter mounted with 22300LBK bearing								
76	Direct shaft mounted with 23000LB bearing								
78	Direct shaft mounted with 22200LB bearing								
79	Direct shaft mounted with 22300LB bearing								
M	Metric bore adapter mount								
39	Shaft diameter in 16ths of an inch — adapter mounted			}	}	}	}	}	}
65	Inner ring bore in millimeters — direct shaft mounted								
60	Shaft diameter in millimeters — adapter mounted								
F	Four bolt base pillow block								
None	"T" Water seals	}	}	}	}	}	}	}	}
D5	Pentac™ 5-point seals								
D8	Independently flushable seal								
B	Felt contact seal								
R	Multi-labyrinth seal								
C	Closed end unit								
T2	Locknut and washer included (76, 78, 79 series)								
2	Internal clearance less than C0	}	}	}	}	}	}	}	}
0	Basic C0 internal clearance								
None	Internal clearance greater than C0 (standard)								
4	Internal clearance greater than C3								

Takeups

Symbol	Description	DS	E	LB	68	39	C	12
DS	Takeup, welded steel frame, hinged top							
E	Expansion unit							
LB	Spherical roller bearing							
68	Adapter mounted with 22200LBK bearing							
39	Shaft diameter in 16ths of an inch — adapter mounted							
None	D8 independently flushable seal (standard)							
C	Closed end unit							
12	Takeup adjustment, inches							

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

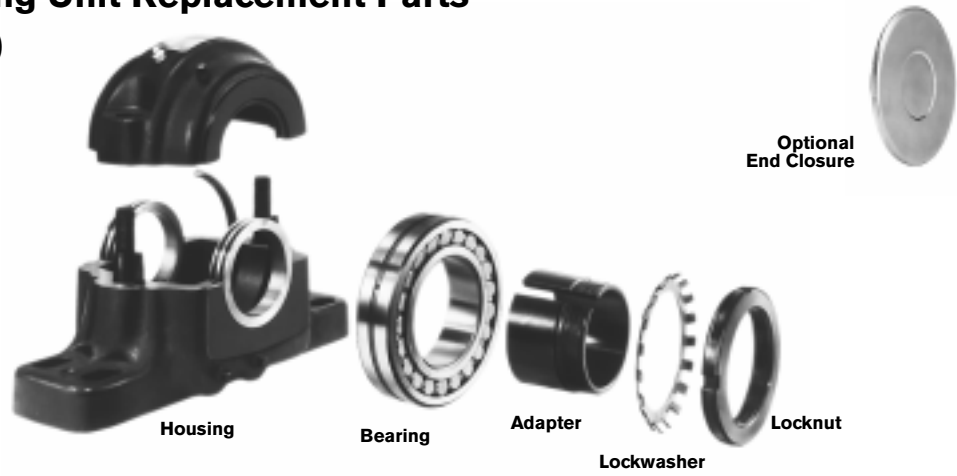
Pillow blocks

Symbol	Description	F	SAF	226	17	-215 /
F	Four bolt base					
SAF	Pillow block; two-piece; inch series; labyrinth seal					
None S	Gray Iron Cast Steel	} Housing Material				
None E	Fixed Unit — Furnish with spacer ring Expansion Unit	}				
223	Direct shaft mounted with 22300LB spherical roller bearing			}		
226	Adapter mounted with 22300LBK spherical roller bearing					
17	One-fifth bearing bore diameter in mm					
C	Closed end unit					
T	Lockwasher and locknut <i>NOT INCLUDED</i> (22300 Series)					
None	Direct shaft mounted shaft size			}		
215	Adapter mounted shaft size in inch and 1/16, i.e., 215 is 2 ¹⁵ / ₁₆ inch shaft size					
2	Internal clearance less than C0					} Radial Clearance
0	Basic internal clearance					
None	Internal clearance greater than C0 (standard)					
4	Internal clearance greater than C3					

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
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
P-LB6831R	1 ¹⁵ / ₁₆	22211LBK/W33/C3	LB6931-3RA	H311031	6924-4	LB6932-6R	P-LB6831R-02
P-LB6832R	2						LB6932-3R
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
P-LB6843R*	2 ¹ / ₁₆	22216LBK/W33/C3	LB6843-3RA	H316043	6844-4	LB6844-6R	P-LB6843R-02*
P-LB6847R*	2 ¹⁵ / ₁₆						22217LBK/W33/C3
P-LB6848R*	3	22218LBK/W33/C3	LB6851-3R	H320055	6852-4	LB6852-6R	P-LB6848R-02*
P-LB6851R*	3 ³ / ₁₆						22220LBK/W33/C3
P-LB6855R*	3 ⁷ / ₁₆	22222LBK/W33/C3	LB6855-3RA	H322064	6864-4	LB6864-6R	P-LB6855R-02*
P-LB6856R*	3 ¹ / ₂						22224LBK/W33/C3
P-LB6859FR	3 ¹ / ₁₆	22224LBK/W33/C3	LB6867-3R	H3126072	6868-4	LB6868-6R	P-LB6859FR-02
P-LB6863FR	3 ¹⁵ / ₁₆						22226LBK/W33/C3
P-LB6864FR	4	22226LBK/W33/C3	LB6871-3RA	H3128079	6872-4	LB6872-6R	P-LB6864FR-02
P-LB6867FR	4 ³ / ₁₆						22228LBK/W33/C3
P-LB6871FR	4 ⁷ / ₁₆	22228LBK/W33/C3	LB6872-3R	H3130083	6880-4	LB6880-6R	P-LB6871FR-02
P-LB6872FR	4 ¹ / ₂						22228LBK/W33/C3
P-LB6879FR	4 ¹⁵ / ₁₆	22230LBK/W33/C3	LB6883-3R	H3134095	6884-4	LB6884-6R	P-LB6879FR-02
P-LB6880FR	5						22232LBK/W33/C3
P-LB6883FR	5 ³ / ₁₆	22234LBK/W33/C3	LB6895-3R	H3136103	6896-4	LB6896-6R	P-LB6883FR-02
P-LB6887FR	5 ⁷ / ₁₆						22234LBK/W33/C3
P-LB6895FR	5 ¹⁵ / ₁₆	22234LBK/W33/C3	LB6896-3R	H3136104	6896-4	LB6896-6R	P-LB6895FR-02
P-LB6896FR	6						22236LBK/W33/C3
P-LB68103FR	6 ⁷ / ₁₆	22236LBK/W33/C3	LB68103-3R	H3138111	68104-4	LB68104-6R	P-LB68103FR-02
P-LB68104FR	6 ¹ / ₂						22238LBK/W33/C3
P-LB68111FR	6 ¹⁵ / ₁₆	22238LBK/W33/C3	LB68111-3R	H3140115	68112-4	LB68112-6R	P-LB68111FR-02
P-LB68112FR	7						22240LBK/W33/C3
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
P-LB68127FR	7 ¹⁵ / ₁₆	22244LBK/W33/C3	LB68120-3R	SNW44-7 ¹⁵ / ₁₆	68128-4	LB68128-6R	P-LB68127FR-02
P-LB68128FR	8						23048LBK/W33/C3
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						23048LBK/W33/C3
P-LB66144FR	9	23056LBK/W33/C3	LB66144-3R	SNP3048-9	66168-4	LB66160-6R	P-LB66144FR-02
P-LB66B151FR	9 ⁷ / ₁₆						23056LBK/W33/C3
P-LB66B152FR	9 ¹ / ₂	23056LBK/W33/C3	LB66B152-3R	SNP3056-9 ¹ / ₂	66168-4	LB66168-6R	P-LB66B152FR-02
P-LB66159FR	9 ¹⁵ / ₁₆						23056LBK/W33/C3
P-LB66160FR	10	23056LBK/W33/C3	LB66160-3R	SNP3056-10	66168-4	LB66168-6R	P-LB66160FR-02
P-LB66167FR	10 ⁷ / ₁₆						23056LBK/W33/C3
P-LB66168FR	10 ¹ / ₂	23056LBK/W33/C3	LB66168-3R	SNP3056-10 ¹ / ₂	66168-4	LB66168-6R	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.

■ 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.

For construction features, use suffix:

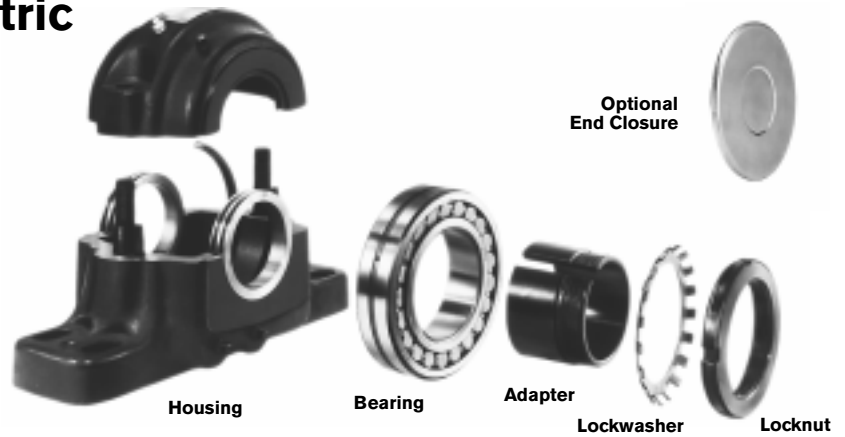
F—4-bolt base pillow block

M4—Cast steel housing material.

C—End closure included

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.

‡ 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.

P-LB68M40R-02

For construction features, use suffix:

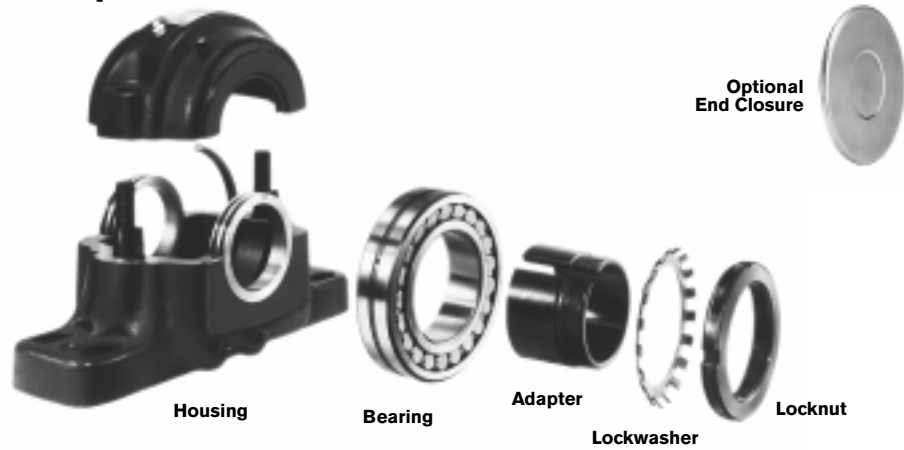
F — 4-bolt base pillow block

M4 — Cast steel housing material.

C — End closure included

Spherical Roller Bearing Unit Replacement Parts

Series P-LB6900, SAF22600



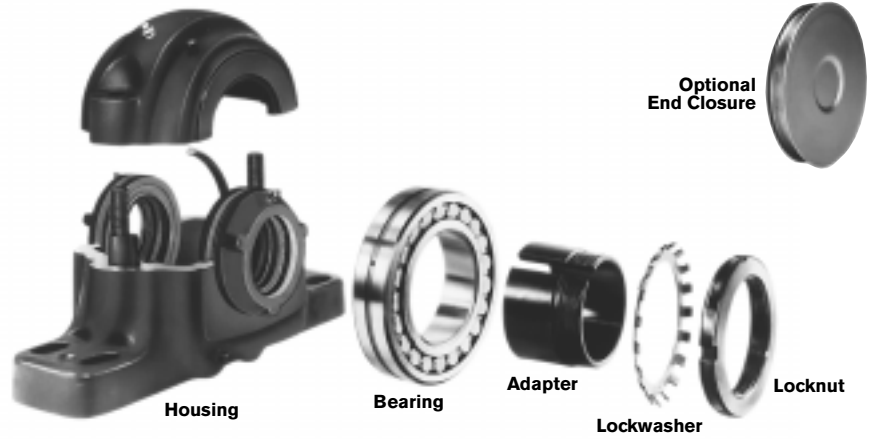
Pillow block number	Shaft diameter inches	Spherical roller bearing number	Labyrinth seal number	Adapter assembly number	C-spacer number	End closure ‡	Housing number ▲ (Bearing and adapter assembly not included)
P-LB6923R	1 ⁷ / ₁₆ }	22309LBK/W33/C3	{ LB6923-3R	SNW109-1 ⁷ / ₁₆ }	6924-4	LB6924-6R	P-LB6923R-02
P-LB6924R	1 ¹ / ₂ }						LB6924-3R	SNW109-1^{1}/_{2} }	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 }						LB6931-3RA	SNW111-1^{15}/_{16} }	P-LB6931R-02
P-LB6932R	2 }	22311LBK/W33/C3	{ LB6932-3R	SNW111-2 }	6932-4	LB6932-6R	P-LB6932R-02
P-LB6935R*	2 ³ / ₁₆ }						L6935-3R	SNW113-2^{3}/_{16} }	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 ¹ / ₂ }						LB6840-3R	SNW115-2^{1}/_{2} }	P-LB6940R-02*
P-LB6943R*	2 ¹ / ₁₆ }	22316LBK/W33/C3	{ LB6843-3RA	SNW116-2 ¹ / ₁₆ }	6944-4	LB6844-6R	P-LB6943R-02*
P-LB6947R*	2 ¹⁵ / ₁₆ }						L6947-3R	SNW117-2^{15}/_{16} }	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 }						LB6855-3RA	SNW120-3^{7}/_{16} }	SAF620-307-02
SAF22620-308	3 ¹ / ₂ }	22320LBK/W33/C3	{ LB6856-3R	SNW120-3 ¹ / ₂ }	6868-4	LB6856-6R	SAF620-308-02
SAF22622-315	3 ¹⁵ / ₁₆ }						LB6863-3RA	SNW122-3^{15}/_{16} }	SAF622-315-02
SAF22622-400	4 }	22322LBK/W33/C3	{ LB6864-3R	SNW122-4 }	6964-4	LB6864-6R	SAF622-400-02
SAF22624-403	4 ³ / ₁₆ }						LB6867-3R	SNW124-4^{3}/_{16} }	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 }						LB6879-3R	SNW128-4^{15}/_{16} }	SAF628-415-02
SAF22628-500	5 }	22328LBK/W33/C3	{ LB6880-3R	SNW128-5 }	L6980-4	LB6880-6R	SAF628-500-02
SAF22630-503	5 ³ / ₁₆ }						LB6883-3R	SNW130-5^{3}/_{16} }	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 }						LB6895-3R	SNW134-5^{15}/_{16} }	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		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 ¹ / ₁₆		LB6843D8	SNW16-2 ¹ / 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		LB6855D8	SNW20-3 ⁷ / ₁₆			P-LB6855D8-02*
P-LB6856D8*	3 ¹ / ₂	22220LBK/W33/C3	LB6856D8	SNW20-3 ¹ / ₂	6856-4	LB6856D8-6	P-LB6856D8-02*
P-LB6859FD8	3 ¹ / ₁₆		LB6859D8	SNW22-3 ¹ / ₁₆			P-LB6859FD8-02
P-LB6863FD8	3 ¹⁵ / ₁₆	22222LBK/W33/C3	LB6863D8	SNW22-3 ¹⁵ / ₁₆	6864-4	LB6868D8-6	P-LB6863FD8-02
P-LB6867FD8	4 ³ / ₁₆		LB6867D8	SNW24-4 ³ / ₁₆			6868-4	LB6868D8-6	P-LB6867FD8-02
P-LB6871FD8	4 ⁷ / ₁₆	22224LBK/W33/C3	LB6871D8	SNW26-4 ⁷ / ₁₆	6872-4	LB6880D8-6	P-LB6871FD8-02
P-LB6879FD8	4 ¹⁵ / ₁₆		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		LB6895D8	SNW34-5 ¹⁵ / ₁₆			P-LB6895FD8-02
P-LB6896FD8	6	22234LBK/W33/C3	LB6896D8	SNW34-6	6896-4	LB68104D8-6	P-LB6896FD8-02
P-LB68103FD8	6 ⁷ / ₁₆		LB68103D8	SNW36-6 ⁷ / ₁₆			68104-4	LB68104D8-6	P-LB68103FD8-02
P-LB68111FD8	6 ¹⁵ / ₁₆	22236LBK/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	23048LBK/W33/C3	L68128D8	SNW44-8	66144-4	LB66144D8-6	P-LB68128FD8-02
P-LB66135FD8	8 ⁷ / ₁₆		LB66135D8	SNP3048-8 ⁷ / ₁₆			P-LB66135FD8-02
P-LB66136FD8	8 ¹ / ₂	23056LBK/W33/C3	LB66136D8	SNP3048-8 ¹ / ₂	66168-4	LB66168D8-6	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;

‡ 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.

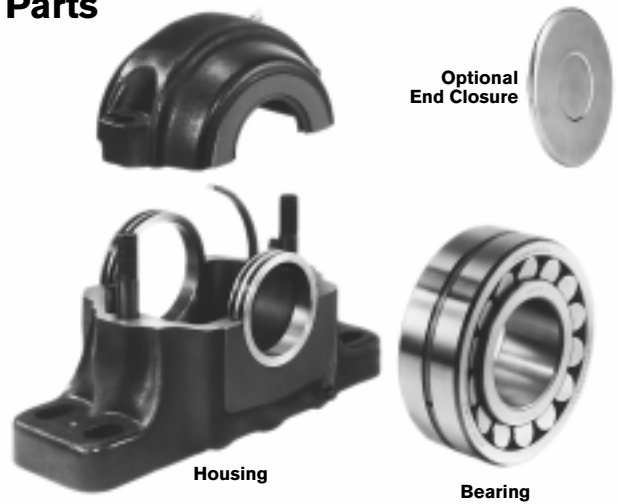
P-LB6839_D8-02

For construction features, use suffix:

- F — 4-bolt base pillow block
- M4 — Cast steel housing material.
- C-spacer not required.

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;

‡ 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.

For construction features, use suffix:

F — 4-bolt base pillow block

M4 — Cast steel housing material.

C-spacer not required.

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.

Additional Information

Series 6600, 6800, 7600, 7800, 22600, 22300

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 1/8".

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

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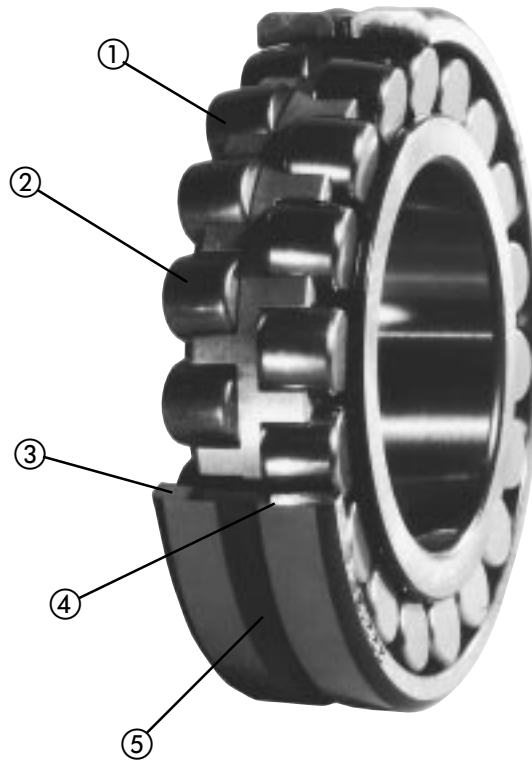
Series 22200, 22300, 23000, 23100, 23200

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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

Series 22200, 22300, 23000

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 1⁷/₁₆" 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 1³/₁₆" through 7¹⁵/₁₆".

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 4³/₁₆" 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:

$$P = F_r$$

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

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

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

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.

Selection

Series 22200, 22300, 23000

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)
- L₁₀ = 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 L₁₀ 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 L₁₀ 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, X₁, Y₁, X₂, and Y₂, 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, L₁₀, may be modified for some applications in accordance with the formula

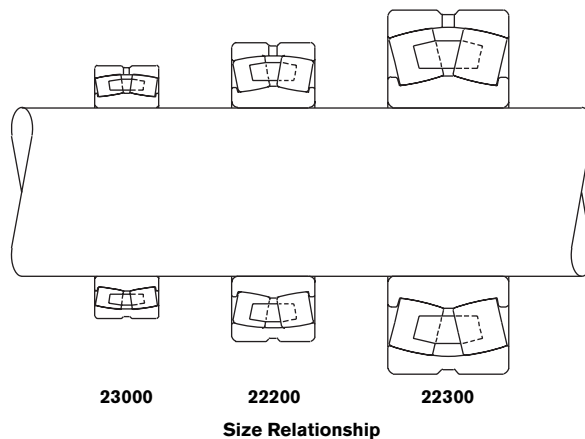
$$L_n = a_1 a_2 a_3 L_{10}$$

where L_n = Adjusted life for (100-n) % reliability,
a₁ = Life adjustment factor for reliability
a₂ = Life adjustment factor for material and processing
a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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



Load ratings and speed limits

Bearing number		C ₀ Static load rating		C Basic load rating		Speed Limit, rpm		e	F _a /F _r ≤ e		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.

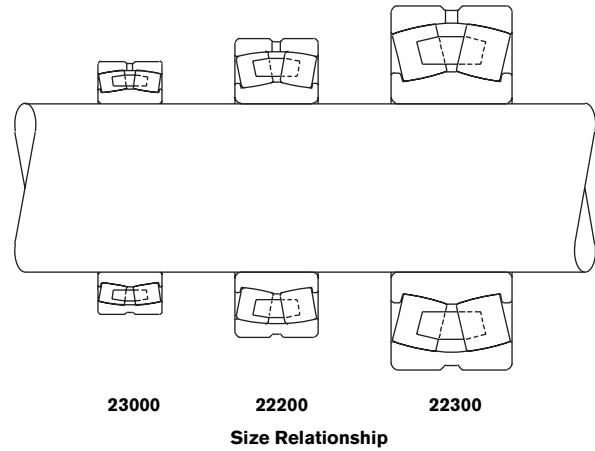
Speed limits are based on the following:

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



Load ratings and speed limits

Bearing number		C ₀ Static load rating		C Basic load rating		Speed Limit, rpm		e	F _r / F _r ≤ e		F _r / 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.

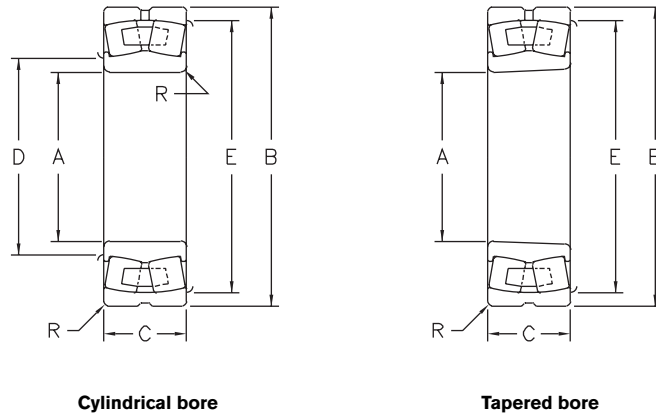
Speed limits are based on the following:

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



Dimensions

Bearing number		A		B		C		D		E		R		Unit weight
Cylindrical bore	Tapered bore +	Bore diameter		Outside diameter		Width		Shaft shoulder diameter min.		Housing shoulder diameter max.		Housing & shaft fillet radius#		
		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.

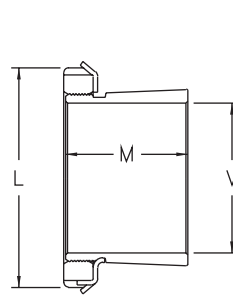
Additional information, page F-17.

Shaft and housing bearing seat diameters, pages F-11 through F-14.

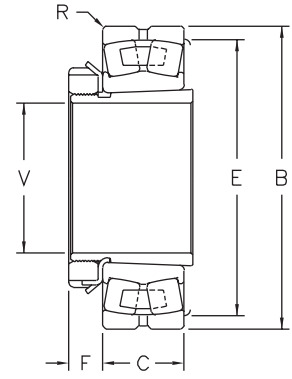
Spherical Roller Bearings

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	Adapter assembly number	V Shaft diameter	L		F		M		Adapter weight
			in.	mm	in.	mm	in.	mm		in.
22209LBK	H309023, H309024	1 ⁷ / ₁₆ , 1½	65.0	2.56	11.3	.44	39.0	1.54	.7
22210LBK	H310027, H310028	1 ¹¹ / ₁₆ , 1¾	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 ⁹ / ₁₆	3 ⁵ / ₁₆	125.4	4.94	21.0	.83	70.2	2.77	3.5
22220LBK	H320055, H320056	3 ⁷ / ₁₆ , 3½	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							
22226LBK	{ H3126071, H3126072	4 ⁷ / ₁₆ , 4½							
22228LBK	{ H3128079, H3128080	4 ¹¹ / ₁₆ , 5							
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 ¹¹ / 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	7½, 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.

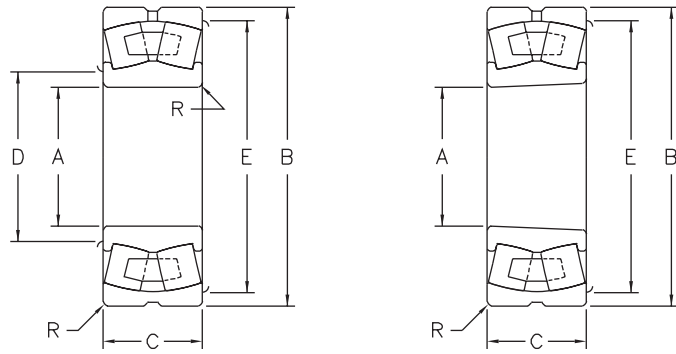
Additional information, page F-17.

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		Unit weight lbs.
Cylindrical bore	Tapered bore +	Bore diameter		Outside diameter		Width		Shaft shoulder diameter min.		Housing shoulder diameter max.		Housing & shaft fillet radius#		
		mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
22308LB	22308LBK	40.000	1.5748	90.000	3.5433	33.000	1.2992	49	1.9	81	3.2	1.50	.059	2.8
22309LB	22309LBK	45.000	1.7717	100.000	3.9370	36.000	1.4173	55	2.2	91	3.6	1.50	.059	3.1
22310LB	22310LBK	50.000	1.9685	110.000	4.3307	40.000	1.5748	60	2.4	100	3.9	2.00	.079	4.0
22311LB	22311LBK	55.000	2.1654	120.000	4.7244	43.000	1.6929	66	2.6	110	4.3	2.00	.079	5.2
22312LB	22312LBK	60.000	2.3622	130.000	5.1181	46.000	1.8110	73	2.9	118	4.6	2.00	.079	6.6
22313LB	22313LBK	65.000	2.5591	140.000	5.5118	48.000	1.8898	78	3.1	128	5.0	2.00	.079	7.9
22314LB	22314LBK	70.000	2.7559	150.000	5.9055	51.000	2.0079	83	3.3	138	5.4	2.00	.079	9.8
22315LB	22315LBK	75.000	2.9528	160.000	6.2992	55.000	2.1654	88	3.5	148	5.8	2.00	.079	11.9
22316LB	22316LBK	80.000	3.1496	170.000	6.6929	58.000	2.2835	93	3.7	157	6.2	2.00	.079	14.1
22317LB	22317LBK	85.000	3.3465	180.000	7.0866	60.000	2.3622	100	3.9	166	6.5	2.50	.098	16.3
22318LB	22318LBK	90.000	3.5433	190.000	7.4803	64.000	2.5197	104	4.1	176	6.9	2.50	.098	19.5
22319LB	22319LBK	95.000	3.7402	200.000	7.8740	67.000	2.6378	109	4.3	186	7.3	2.50	.098	22.6
22320LB	22320LBK	100.000	3.9370	215.000	8.4646	73.000	2.8740	115	4.5	201	7.9	2.50	.098	28.9
22322LB	22322LBK	110.000	4.3307	240.000	9.4488	80.000	3.1496	124	4.9	226	8.9	2.50	.098	40.0
22324LB	22324LBK	120.000	4.7244	260.000	10.2362	86.000	3.3858	135	5.3	246	9.7	2.50	.098	49.0
22326LB	22326LBK	130.000	5.1181	280.000	11.0236	93.000	3.6614	149	5.9	262	10.3	3.00	.118	62.5
22328LB	22328LBK	140.000	5.5118	300.000	11.8110	102.000	4.0157	159	6.3	283	11.1	3.00	.118	78.2
22330LB	22330LBK	150.000	5.9055	320.000	12.5984	108.000	4.2520	169	6.6	303	11.9	3.00	.118	92.0
22332LB	22332LBK	160.000	6.2992	340.000	13.3858	114.000	4.4882	180	7.1	322	12.7	3.00	.118	110.0
22334LB	22334LBK	170.000	6.6929	360.000	14.1732	120.000	4.7244	188	7.4	342	13.5	3.00	.118	129.0
22336LB	22336LBK	180.000	7.0866	380.000	14.9606	126.000	4.9606	199	7.8	363	14.3	3.00	.118	153.0
22338LB	22338LBK	190.000	7.4803	400.000	15.7480	132.000	5.1968	213	8.4	379	14.9	4.00	.157	176.0
22340LB	22340LBK	200.000	7.8740	420.000	16.5354	138.000	5.4331	223	8.8	399	15.7	4.00	.157	200.0
22344LB	22344LBK	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.

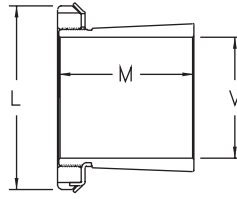
Additional information, page F-17.

Shaft and housing bearing seat diameters, pages F-11 through F-14.

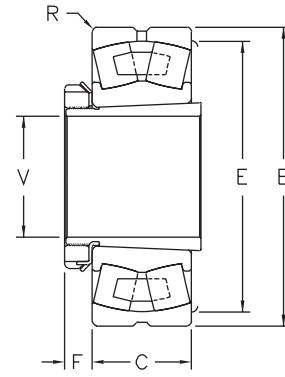
Spherical Roller Bearings

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	Adapter assembly number ★	V Shaft diameter		L		F max.		M		Adapter weight lbs.
		in.	mm	in.	mm	in.	mm	in.	mm	
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	
22310LBK	SNW109	1 ¹ / ₂	64.3	2.53	13.1	.52	54.4	2.14	1.4	
22311LBK	H2310027	1 ¹¹ / ₁₆	70.0	2.76	12.3	.48	55.0	2.16	1.8	
	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 ¹ / 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., SNW108-1³/₁₆.

◆ SNP3048 adapter assemblies also available with 8¹/₂" and 9" bores; SNP3056 adapter assemblies available with 9⁷/₁₆", 9¹/₂" and 10⁷/₁₆" bores.

Selection guide, pages F-3, F-4.

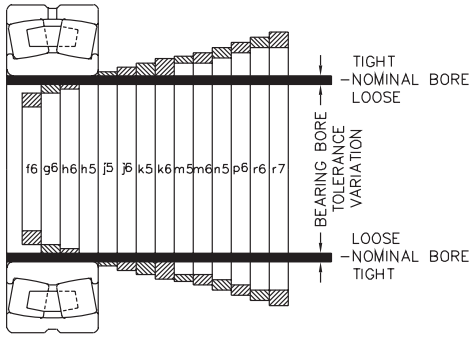
Load ratings, page F-6.

■ 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 \square	Bearing/Shaft diameter fits▲										
				f6		g6		h6		h5		j5		
				Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	Fit	Shaft Dia.	
Basic size	inches	mm												
08	1.5748	40.000	+0.000 -0.0005	.0005L	-.0010	.0001T	-.0004	.0005T	+0.0000	.0005T	+0.0000	.0007T	+0.0002	
09	1.7717	45.000	+0.000 -0.0005	.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	+0.0000	.0006T	+0.0000	.0008T	+0.0002	
13	2.5591	65.000	+0.000 -0.0006	.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		.0006L	-.0014	.0003T	-.0005	.0008T	+0.0000	.0008T	+0.0000	.0010T	+0.0002	
18	3.5433	90.000		.0023L	-.0023	.0014L	-.0014	.0009L	-.0009	.0006L	-.0006	.0004L	-.0004	
19	3.7402	95.000	+0.000 -0.0008	16L	-36	8T	-12	20T	+0	20T	+0	26T	+6	
20	3.9370	100.000	+0 -20	58L	-58	34L	-34	22L	-22	15L	-15	9L	-9	
22	4.3307	110.000												
24	4.7244	120.000												
26	5.1181	130.000		.0006L	-.0016	.0004T	-.0006	.0010T	+0.0000	.....	.....	.0013T	+0.0003
28	5.5118	140.000	+0.000 -0.0010	.0026L	-.0026	.0016L	-.0016	.0010L	-.0010	.....	.....	.0005L	-.0004
30	5.9055	150.000		18L	-43	11T	-14	25T	+0	.....	.....	32T	+7
32	6.2992	160.000	+0 -25	68L	-68	39L	-39	25L	-25	.....	.....	11L	-11
34	6.6929	170.000												
36	7.0866	180.000												
38	7.4803	190.000		.0008L	-.0020	.0006T	-.0006	.0012T	+0.0000	.....	.....	.....	.....
40	7.8740	200.000	+0.000 -0.0012	.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	+0.0000	.....	.....	.....	.....
56	11.0236	280.000	+0.000 -0.0014	.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	.....	.....	.....	.....

1 μm = .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	

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	+0.004	.0010T	+0.005	.0012T	+0.007	.0013T	+0.008	.0015T	+0.010	.0018T	+0.013	.....	.....	.....	.....
.0002L	−0.002	.0001T	+0.001	.0001T	+0.001	.0004T	+0.004	.0004T	+0.004	.0007T	+0.007	.....	.....	.....	.....
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	+0.004	.0012T	+0.006	.0014T	+0.008	.0016T	+0.010	.0018T	+0.012	.0021T	+0.015	.0027T	+0.021	.....	.....
.0003L	−0.003	.0001T	+0.001	.0001T	+0.001	.0005T	+0.005	.0005T	+0.005	.0008T	+0.008	.0014T	+0.014	.....	.....
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	+0.005	.0015T	+0.007	.0018T	+0.010	.0019T	+0.011	.0022T	+0.014	.0027T	+0.019	.0033T	+0.025	.0037T	+0.029
.0004L	−0.004	.0001T	+0.001	.0001T	+0.001	.0005T	+0.005	.0005T	+0.005	.0010T	+0.010	.0016T	+0.016	.0020T	+0.020
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	+0.006	.0018T	+0.008	.0021T	+0.011	.0023T	+0.013	.0026T	+0.016	.0032T	+0.020	.0038T	+0.028	.0045T	+0.035
.0004L	−0.004	.0001T	+0.001	.0001T	+0.001	.0006T	+0.006	.0006T	+0.006	.0012T	+0.011	.0018T	+0.018	.0025T	+0.025
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	+0.007	.0022T	+0.010	.0026T	+0.014	.0026T	+0.014	.0030T	+0.018	.0038T	+0.026	.0044T	+0.032	.0054T	+0.042
.0005L	−0.005	.0002T	+0.002	.0002T	+0.002	.0006T	+0.006	.0006T	+0.006	.0014T	+0.014	.0020T	+0.020	.0030T	+0.030
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	+0.007	.0025T	+0.011	.0028T	+0.014	.0031T	+0.017	.0034T	+0.020	.0040T	+0.026	.0048T	+0.034	.0061T	+0.047
.0006L	−0.006	.0002T	+0.002	.0002T	+0.002	.0008T	+0.008	.0008T	+0.008	.0014T	+0.014	.0022T	+0.022	.0035T	+0.035
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
Shaft diameter tolerance	=	−.0010	−.0016	= −0.025
Resultant shaft diameter	=	1.5738	1.5732	= 39.975
				39.959

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◆	
Housing split or housing not split radially	Direction of load indeterminate	Heavy shock loads	Electrical fraction motors	K6◆	Outer ring, as a rule, not axially displaceable
		Heavy and normal loads where outer ring does not have to be axially displaceable	Electrical motors, pumps, crankshaft main bearings		
	Housing stationary in relation to direction of load	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
Shock loads, a temporary complete unloading		Journal boxes for rail vehicles	H6◆	Outer ring easily displaceable axially	
		All loads			Housing not split radially	Bearing applications in general, journal boxes for rail vehicles
	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	22T	-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							
Basic size	Bore mm	C2		C0(basic)		C3		C4	
		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

1 μm = .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							
Basic size	Bore mm	C2		C0(basic)		C3		C4	
		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

1 μm = .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 Information

Series 22200, 22300, 23000

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	22	16	LB	K / W33 / C0 / C40 / W4	
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

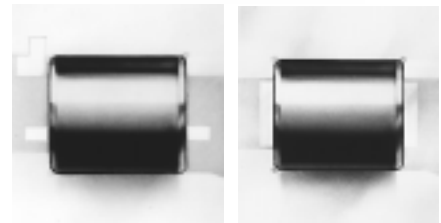
surfaces minimizes wiping action and promotes hydrodynamic lubrication.



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.

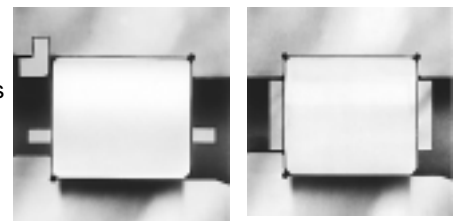


Rings

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	} Formed steel retainer
MA ---- UV, MA ---- UAV	
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

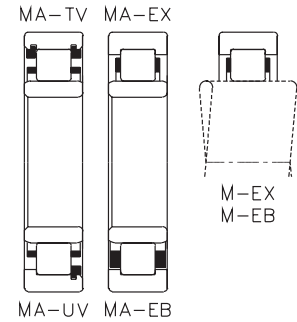
M ---- TV, M ---- TAV	} Formed steel retainer
M ---- UV, M ---- UAV	
M ---- EX, M ---- EAX	} Segmented steel retainer
M ---- EB, M ---- EAB	} Polymeric retainer

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

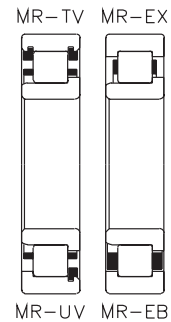
MR ---- TV, MR ---- TAV	} Formed steel retainer
MR ---- UV, MR ---- UAV	
MR ---- EX, MR ---- EAX	} Segmented steel retainer
MR ---- EB, MR ---- EAB	} Polymeric retainer

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

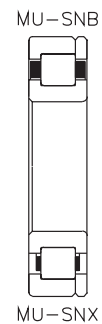
MU --- SNX, MU --- SNAX	} Segmented steel retainer
MU --- SNB, MU --- SNAB	} Polymeric retainer

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	} Formed steel retainer
MU --- UV, MU --- UAV	

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

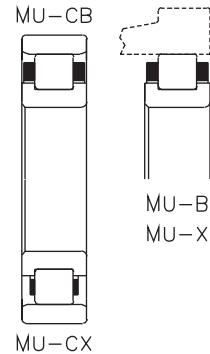
For applications and where an inner ring and roller sub-assembly is required; a non-locating or expansion type bearing.

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.

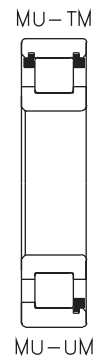


Non-separable, Full Complement Bearing

MU --- TM } Full roller complement
 MU --- UM }

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.

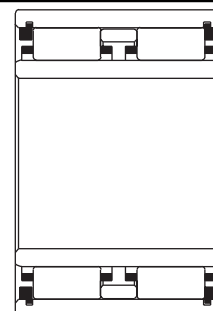


Separable Cylindrical Inner Ring Type Double Wide Series

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.

$$P = F_r$$

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

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.

$$\text{DN value} = \text{Bearing bore (mm)} \times \text{speed (RPM)}$$

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

Selection 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)
- L₁₀ = rating life, hours
- n = speed, revolutions per minute
- P = equivalent radial load, pounds (or newtons)

basic formulas:

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

Table 1 • Relation of L₁₀ 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 L₁₀ 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 500L₁₀ 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, L₁₀, 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) % reliability,

a₁ = Life adjustment factor for reliability

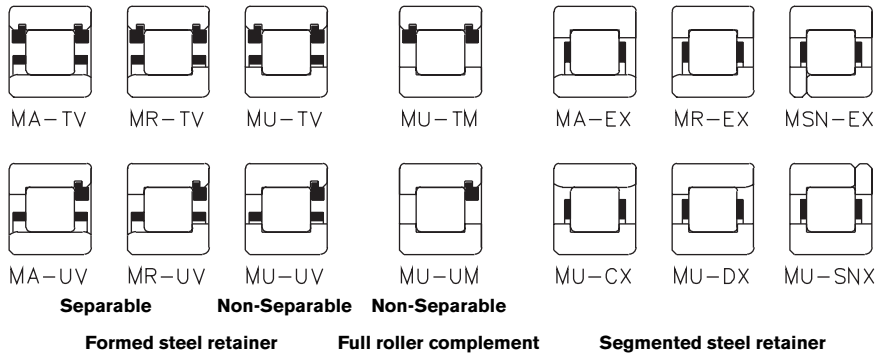
a₂ = Life adjustment factor for material and processing

a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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.

Ratings

Series M 25mm, 30mm, 35mm, 40mm Bores



pounds/newtons

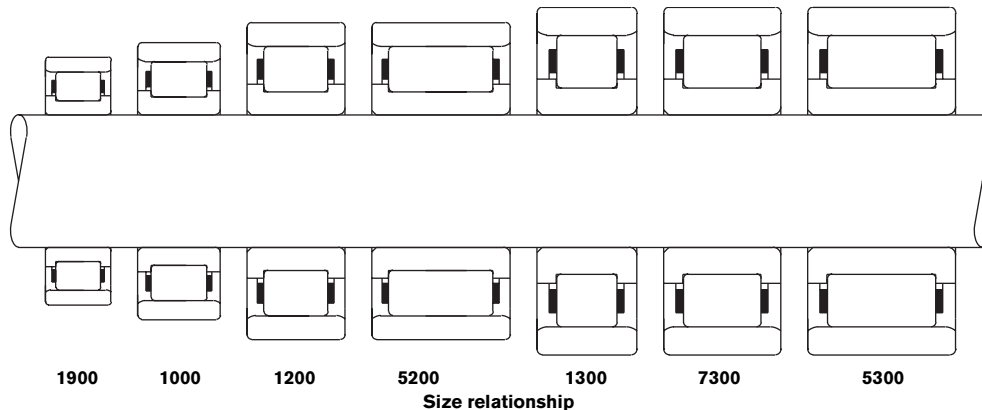
Basic bearing number	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable			C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C ₀ Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C ₀ Basic static load rating
	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						
1205	4330	1120	52205280	13705220	6170	16006430	70201820	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	18807830	8460	21909640	96202490	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	20006690	8840	22908030	99202570	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	25509180	11300	293011000	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	19007170	8150	21108270	93402420	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	25209270	10300	268010000	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	21608030	9290	24109270	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



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	43800
	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

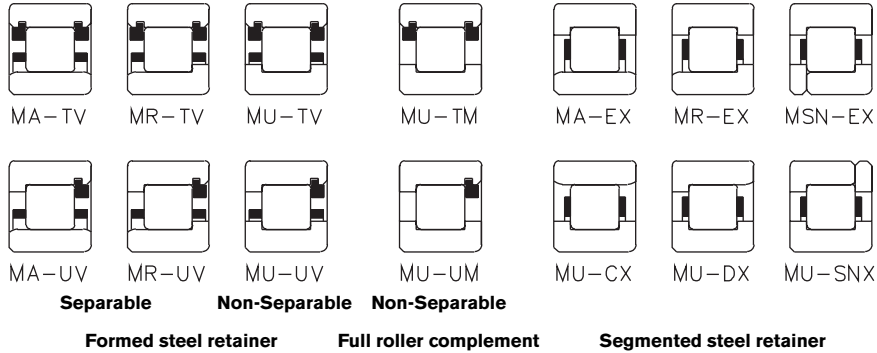
Selection guide, pages G-5, G-6.

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



pounds/newtons

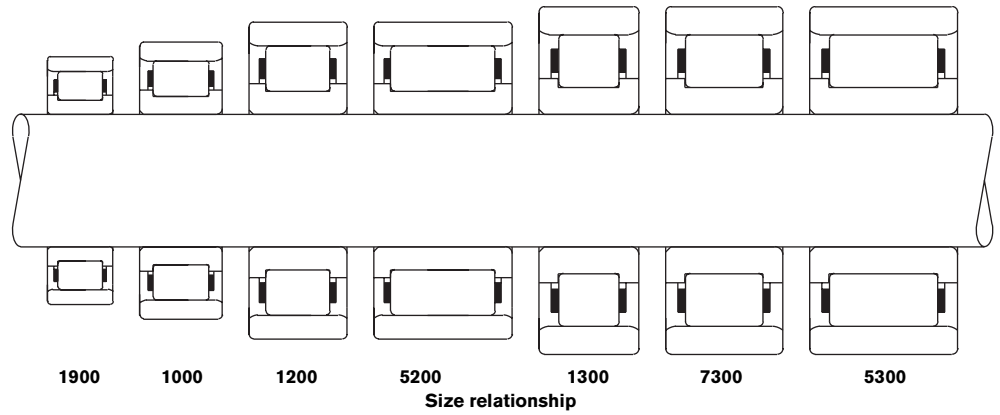
Basic bearing number	Formed steel retainer						Segmented steel retainer			Full roller complement		
	Separable			Non-Separable			C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C ₀ Basic static load rating	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	C ₀ Basic static load rating
	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						
1912	.....	.....	.....	.....	.....	.....	7200	1870	10300	.....	.....	.....
1012	.....	.....	.....	.....	.....	.....	32 000	8 300	45 600	.....	.....	.....
1212	14500	3760	19600	17700	4590	19600	19400	5020	22100	21700	5630	25800
5212	64 600	16 700	87 400	78 900	20 400	87 400	86 100	22 300	98 300	96 700	25 000	115 000
1312	24700	6390	38900	30100	7800	38900	32900	8520	43700	36900	9570	51000
7312	110 000	28 400	173 000	134 000	34 700	173 000	146 000	37 900	194 000	164 000	42 600	227 000
5312	24900	6450	32800	30400	7880	32800	32100	8330	35300	37200	9630	42900
1913	111 000	28 700	146 000	135 000	35 000	146 000	143 000	37 000	157 000	165 000	42 800	191 000
1013	32600	8450	46400	39800	10300	46400	42100	10900	50000	48700	12600	60700
1213	145 000	37 600	206 000	177 000	45 900	206 000	187 000	48 500	222 000	217 000	56 100	270 000
5213	43900	11400	68000	53600	13900	68000	56600	14700	73200	65500	17000	88900
1313	195 000	50 500	302 000	238 000	61 700	302 000	252 000	65 200	326 000	291 000	75 500	395 000
7313	.....	.....	.....	.....	.....	.....	7600	1970	11200	.....	.....	.....
5313	.....	.....	.....	.....	.....	.....	33 800	8 750	50 000	.....	.....	.....
1914	.....	.....	.....	.....	.....	.....	12000	3100	16300	.....	.....	.....
1014	.....	.....	.....	.....	.....	.....	53 200	13 800	72 400	.....	.....	.....
1214	16800	4360	24400	20500	5320	24400	21400	5540	25800	24700	6390	31200
5214	74 800	19 400	109 000	91 400	23 700	109 000	95 100	24 600	115 000	110 000	28 400	139 000
1314	26800	6930	44400	32700	8460	44400	34000	8810	46800	39300	10200	56700
7314	119 000	30 800	197 000	145 000	37 600	197 000	151 000	39 200	208 000	175 000	45 200	252 000
5314	30800	7970	41900	37600	9730	41900	37600	9730	41900	43400	11300	50900
1914	137 000	35 400	186 000	167 000	43 300	186 000	167 000	43 300	186 000	193 000	50 100	226 000
1014	39200	10100	57200	47800	12400	57200	47800	12400	57200	55300	14300	69400
1214	174 000	45 100	254 000	213 000	55 100	254 000	213 000	55 100	254 000	246 000	63 700	309 000
5214	54900	14200	88200	67000	17300	88200	67000	17300	88200	77500	20100	107000
1314	244 000	63 200	392 000	298 000	77 200	392 000	298 000	77 200	392 000	345 000	89 300	476 000
7314	.....	.....	.....	.....	.....	.....	10900	2810	15800	.....	.....	.....
5314	.....	.....	.....	.....	.....	.....	48 300	12 500	70 400	.....	.....	.....
1914	.....	.....	.....	.....	.....	.....	14600	3770	18600	.....	.....	.....
1014	.....	.....	.....	.....	.....	.....	64 800	16 800	82 800	.....	.....	.....
1214	18100	4700	26300	22100	5730	26300	24100	6230	29400	27900	7190	35600
5214	80 600	20 900	117 000	98 500	25 500	117 000	107 000	27 700	131 000	124 000	32 000	158 000
1314	29900	7750	50100	36600	9470	50100	39700	10300	56000	45900	11900	67800
7314	133 000	34 500	223 000	163 000	42 100	223 000	177 000	45 800	249 000	204 000	52 800	302 000
5314	35300	9130	48800	43000	11100	48800	43000	11100	48800	49800	12900	59200
1914	157 000	40 600	217 000	191 000	49 600	217 000	191 000	49 600	217 000	221 000	57 400	263 000
1014	43800	11300	64400	53500	13800	64400	53500	13800	64400	61800	16000	78200
1214	195 000	50 400	287 000	238 000	61 600	287 000	238 000	61 600	287 000	275 000	71 300	348 000
5214	57600	14900	91700	70400	18200	91700	70400	18200	91700	81400	21100	111000
1314	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



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	.....	.....	.....
1015	.....	.....	.....	.....	.....	.....	50 000	13 000	75 200	.....	.....	.....
1215	18800	4880	28000	23000	5960	28000	15300	3970	20300	.....	.....	.....
5215	83 800	21 700	125 000	102 000	26 500	125 000	68 200	17 700	90 300	.....	.....	.....
1315	145 000	37 500	252 000	177 000	45 800	252 000	24900	6450	31100	28600	7390	37400
7315	36600	9470	49700	44600	11600	49700	111 000	28 700	139 000	127 000	32 900	166 000
5315	163 000	42 100	221 000	199 000	51 400	221 000	43000	11100	62900	49300	12800	75500
1916	48500	12600	71500	59300	15400	71500	191 000	49 500	280 000	219 000	56 800	336 000
1016	216 000	55 900	318 000	264 000	68 300	318 000	44600	11600	49700	51600	13400	60300
1216	70900	18400	116000	86600	22400	116000	199 000	51 400	221 000	230 000	59 500	268 000
5216	315 000	81 700	518 000	385 000	99 800	518 000	59300	15400	71500	68600	17800	86900
1316	.....	.....	.....	.....	.....	.....	264 000	68 300	318 000	305 000	79 000	386 000
7316	.....	.....	.....	.....	.....	.....	86600	22400	116000	100000	25900	141000
5316	.....	.....	.....	.....	.....	.....	385 000	99 800	518 000	446 000	115 000	629 000
1917	.....	.....	.....	.....	.....	.....	11600	3010	18000	.....	.....	.....
1017	.....	.....	.....	.....	.....	.....	51 700	13 400	80 000	.....	.....	.....
1217	.....	.....	.....	.....	.....	.....	19200	4970	25800	.....	.....	.....
5217	.....	.....	.....	.....	.....	.....	85 300	22 100	115 000	.....	.....	.....
1317	20600	5330	30100	25100	6500	30100	27200	7040	33400	30200	7820	38400
7317	91 500	23 700	134 000	112 000	28 900	134 000	121 000	31 300	149 000	134 000	34 800	171 000
5317	36800	9540	63700	45000	11600	63700	48700	12600	70700	54000	14000	81300
1918	164 000	42 400	283 000	200 000	51 800	283 000	216 000	56 100	315 000	240 000	62 300	362 000
1018	41500	10800	57300	50700	13100	57300	50700	13100	57300	58700	15200	69600
1218	185 000	47 900	255 000	226 000	58 400	255 000	226 000	58 400	255 000	261 000	67 600	309 000
5218	55100	14300	82400	67300	17400	82400	67300	17400	82400	77900	20200	100000
1318	245 000	63 500	367 000	299 000	77 500	367 000	299 000	77 500	367 000	346 000	89 700	445 000
7318	73300	19000	119000	89400	23200	119000	89400	23200	119000	103000	26800	144000
5318	326 000	84 400	528 000	398 000	103 000	528 000	398 000	103 000	528 000	460 000	119 000	642 000
1919	.....	.....	.....	.....	.....	.....	13700	3550	20900	.....	.....	.....
1019	.....	.....	.....	.....	.....	.....	60 900	15 800	93 100	.....	.....	.....
1219	.....	.....	.....	.....	.....	.....	19700	5100	27000	.....	.....	.....
5219	.....	.....	.....	.....	.....	.....	87 500	22 700	120 000	.....	.....	.....
1319	24800	6410	36700	30200	7830	36700	31500	8160	38700	36300	9410	46900
7319	110 000	28 500	163 000	134 000	34 800	163 000	140 000	36 300	172 000	162 000	41 900	208 000
5319	45300	11700	79700	55300	14300	79700	57600	14900	84100	66400	17200	102000
1920	201 000	52 200	354 000	246 000	63 700	354 000	356 000	66 300	374 000	296 000	76 500	453 000
1020	44600	11500	61200	54400	14100	61200	54400	14100	61200	63000	16300	74300
1220	198 000	51 300	272 000	242 000	62 700	272 000	242 000	62 700	272 000	280 000	72 500	330 000
5220	61700	16000	92900	75400	19500	92900	75400	19500	92900	87200	22600	113000
1320	275 000	71 100	413 000	335 000	86 800	413 000	335 000	86 900	413 000	388 000	100 000	502 000
7320	86300	22400	143000	105000	27300	143000	105000	27300	143000	122000	31600	174000
5320	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.

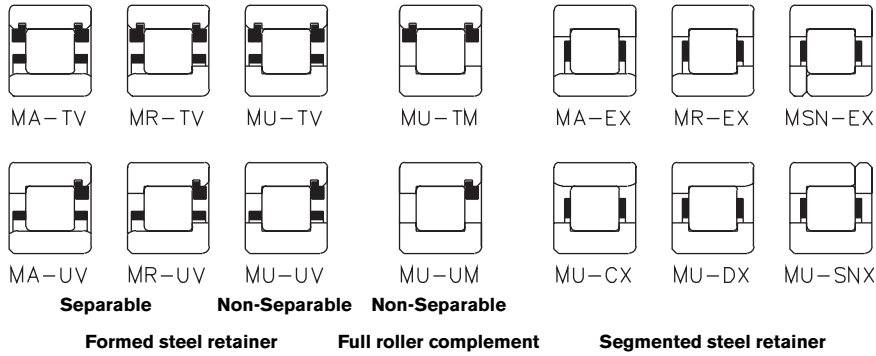
Additional information, page G-31.

For shaft and housing bearing seat diameters, pages G-25 through G-30.

Ratings

Series M

90mm, 95mm,
100mm Bores

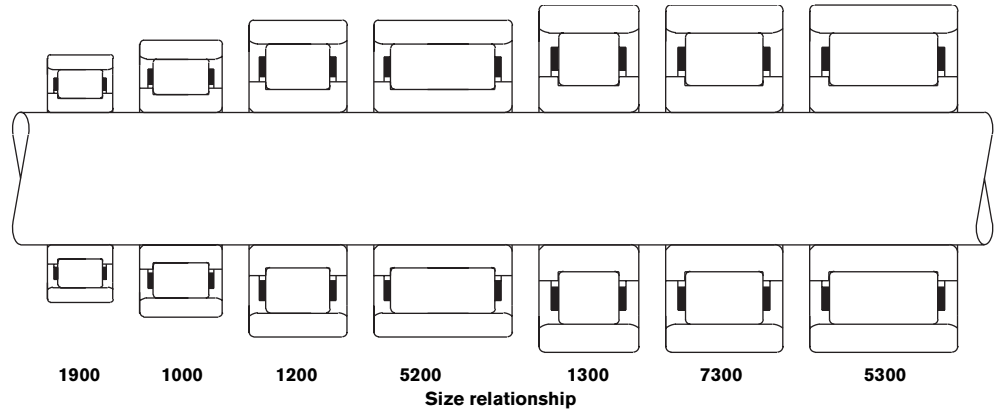


pounds/newtons

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						
1918	.....	.....	.....	.....	.....	.....	14200	3670	22200	.....	.....	.....
1018	.....	.....	.....	.....	.....	.....	63 000	16 300	98 900	.....	.....	.....
1218	28700	7440	42600	35100	9090	42600	24900	6440	33500	.....	.....	.....
5218	51000	13200	89100	62300	16100	89100	111 000	28 600	149 000	.....	.....	.....
1318	227 000	58 700	396 000	277 000	71 700	396 000	38100	9880	47600	42600	11000	55100
7318	52600	13600	74200	64200	16600	74200	170 000	43 900	212 000	189 000	49 000	245 000
5318	234 000	60 600	330 000	285 000	73 900	330 000	67700	17500	99600	75500	19600	115000
1919	69000	17900	105000	84300	21800	105000	301 000	78 000	443 000	336 000	87 000	513 000
1019	307 000	79 500	469 000	375 000	97 100	469 000	64200	16600	74200	74200	19200	90100
1219	88400	22900	145000	108000	27900	145000	285 000	73 900	330 000	330 000	85 500	401 000
5219	393 000	102 000	644 000	480 000	124 000	644 000	84300	21800	105000	97500	25300	128000
1319	.....	.....	.....	.....	.....	.....	375 000	97 100	469 000	434 000	112 000	569 000
7319	.....	.....	.....	.....	.....	.....	108000	27900	145000	125000	32300	176000
5319	480 000	124 000	644 000	480 000	124 000	644 000	480 000	124 000	644 000	556 000	144 000	783 000
1920	.....	.....	.....	.....	.....	.....	14600	3790	23600	.....	.....	.....
1020	.....	.....	.....	.....	.....	.....	65 100	16 900	105 000	.....	.....	.....
1220	33400	8650	50000	40800	10600	50000	25500	6600	35100	.....	.....	.....
5220	149 000	38 500	222 000	181 000	47 000	222 000	113 000	29 400	156 000	.....	.....	.....
1320	58500	15200	103000	71400	18500	103000	42600	11000	53000	49500	12800	64700
7320	260 000	67 400	457 000	318 000	82 300	457 000	189 000	49 000	236 000	220 000	57 000	288 000
5320	55300	14300	80500	67600	17500	80500	74600	19300	109000	86700	22400	133000
1921	246 000	63 700	358 000	300 000	77 800	358 000	332 000	85 900	484 000	386 000	99 800	592 000
1021	75800	19600	121000	92600	24000	121000	67600	17500	80500	77400	20100	96600
1221	337 000	87 400	537 000	412 000	107 000	537 000	300 000	77 800	358 000	344 000	89 200	430 000
5221	93000	24100	157000	114000	29400	157000	92600	24000	121000	106000	27500	145000
1321	414 000	107 000	698 000	505 000	131 000	698 000	412 000	107 000	537 000	472 000	122 000	644 000
7321	.....	.....	.....	.....	.....	.....	114000	29400	157000	130000	33700	188000
5321	.....	.....	.....	.....	.....	.....	505 000	131 000	698 000	579 000	150 000	838 000
1922	.....	.....	.....	.....	.....	.....	17300	4470	25600	.....	.....	.....
1022	.....	.....	.....	.....	.....	.....	76 800	19 900	114 000	.....	.....	.....
1222	36500	9470	54800	44600	11600	54800	26100	6760	36700	.....	.....	.....
5222	163 000	42 100	244 000	198 000	51 400	244 000	116 000	30 100	163 000	.....	.....	.....
1322	65900	17100	117000	80500	20800	117000	46600	12100	58000	54100	14000	70900
7322	293 000	76 000	520 000	358 000	92 700	520 000	207 000	53 700	258 000	241 000	62 400	315 000
5322	60600	15700	88300	74000	19200	88300	84000	21800	124000	97700	25300	151000
1923	270 000	69 800	393 000	329 000	85 300	393 000	374 000	96 800	551 000	434 000	113 000	674 000
1023	82500	21400	131000	101000	26100	131000	74000	19200	88300	84800	22000	106000
1223	367 000	95 000	584 000	448 000	116 000	584 000	329 000	85 300	393 000	377 000	97 700	472 000
5223	111000	28700	192000	135000	35100	192000	448 000	116 000	584 000	513 000	133 000	700 000
1323	493 000	128 000	855 000	602 000	156 000	855 000	101000	26100	131000	115000	29900	157000
7323	.....	.....	.....	.....	.....	.....	448 000	116 000	584 000	513 000	133 000	700 000
5323	.....	.....	.....	.....	.....	.....	135000	35100	192000	155000	40200	231000
	.....	.....	.....	.....	.....	.....	602 000	156 000	855 000	691 000	179 000	1030 000

Ratings

Series M 105mm, 110mm, 120mm Bores



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	.....	.....	.....
1021	.....	.....	.....	.....	.....	.....	79 800	20 700	121 000	.....	.....	.....
1221	38600	9990	57800	47100	12200	57800	49200	12700	61200	57200	14800	74800
5221	172 000	44 400	257 000	210 000	54 300	257 000	219 000	56 600	272 000	254 000	65 800	333 000
1321	73400	19000	132000	89600	23200	132000	93600	24200	140000	109000	28200	171000
7321	327 000	84 600	588 000	399 000	103 000	588 000	416 000	108 000	622 000	484 000	125 000	760 000
5321	71700	18600	108000	87500	22700	108000	87500	22700	108000	100000	26000	129000
1922	319 000	82 500	479 000	389 000	101 000	479 000	389 000	101 000	479 000	446 000	116 000	575 000
1022	90500	23400	145000	110000	28600	145000	110000	28600	145000	127000	32800	174000
1222	403 000	104 000	647 000	491 000	127 000	647 000	491 000	127 000	647 000	563 000	146 000	776 000
5222	118000	30500	204000	144000	37200	204000	144000	37200	204000	165000	42700	244000
1322	523 000	136 000	906 000	639 000	165 000	906 000	639 000	165 000	906 000	734 000	190 000	1090 000
7322	18200	4720	28200	.....	.....	.....	18200	4720	28200	.....	.....	.....
5322	81 000	21 000	125 000	.....	.....	.....	81 000	21 000	125 000	.....	.....	.....
1924	35300	9150	50600	.....	.....	.....	35300	9150	50600	.....	.....	.....
1024	157 000	40 700	225 000	.....	.....	.....	157 000	40 700	225 000	.....	.....	.....
1224	43600	11300	67300	53200	13800	67300	55400	14400	71100	61900	16000	82300
5224	194 000	50 200	299 000	237 000	61 300	299 000	247 000	63 900	316 000	275 000	71 300	366 000
1324	79900	20700	147000	97600	25300	147000	102000	26300	155000	113000	29400	179000
7324	356 000	92 100	653 000	434 000	112 000	653 000	452 000	117 000	689 000	505 000	131 000	798 000
5324	72800	18900	107000	88900	23000	107000	88900	23000	107000	102000	26400	129000
1924	324 000	83 800	477 000	395 000	102 000	477 000	395 000	102 000	477 000	453 000	117 000	572 000
1024	99800	25800	161000	122000	31500	161000	122000	31500	161000	140000	36200	193000
1224	444 000	115 000	715 000	542 000	140 000	715 000	542 000	140 000	715 000	621 000	161 000	858 000
5224	138000	35700	244000	169000	43600	244000	169000	43600	244000	193000	50000	293000
1324	614 000	159 000	1090 000	750 000	194 000	1090 000	750 000	194 000	1090 000	859 000	223 000	1300 000
7324	23800	6160	37300	.....	.....	.....	23800	6160	37300	.....	.....	.....
5324	106 000	27 400	166 000	.....	.....	.....	106 000	27 400	166 000	.....	.....	.....
1924	37000	9590	55100	.....	.....	.....	37000	9590	55100	.....	.....	.....
1024	165 000	42 700	245 000	.....	.....	.....	165 000	42 700	245 000	.....	.....	.....
1224	49400	12800	77900	60300	15600	77900	62800	16300	82300	72500	18800	99600
5224	220 000	56 900	347 000	268 000	69 500	347 000	279 000	72 400	366 000	323 000	83 500	443 000
1324	97200	25200	186000	119000	30700	186000	124000	32000	196000	143000	36900	238000
7324	432 000	112 000	827 000	528 000	137 000	827 000	550 000	142 000	873 000	634 000	164 000	1060 000
5324	84600	21900	126000	103000	26700	126000	103000	26700	126000	118000	30700	151000
1924	376 000	97 400	562 000	459 000	119 000	562 000	459 000	119 000	562 000	527 000	136 000	674 000
1024	118000	30500	193000	144000	37300	193000	144000	37300	193000	165000	42700	232000
1224	524 000	136 000	861 000	640 000	166 000	861 000	640 000	166 000	861 000	734 000	190 000	1030 000
5224	170000	44100	310000	208000	53900	310000	208000	53900	310000	238000	61700	373000
1324	757 000	196 000	1380 000	925 000	240 000	1380 000	925 000	240 000	1380 000	1060 000	275 000	1660 000

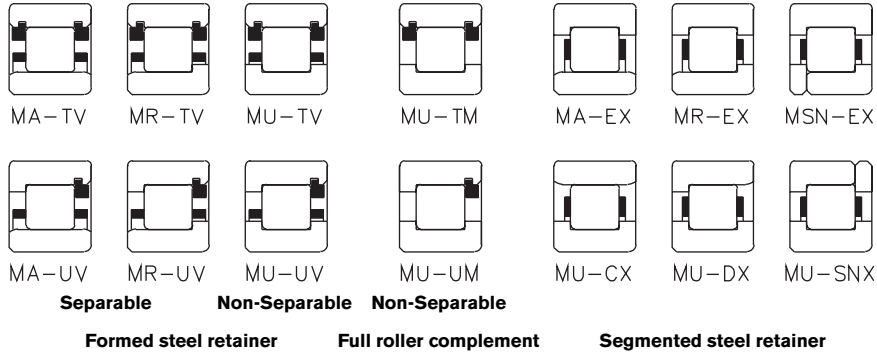
Selection guide, pages G-5, G-6.

Additional information, page G-31.

For shaft and housing bearing seat diameters, pages G-25 through G-30.

Ratings

Series M 130mm, 140mm, 150mm Bores



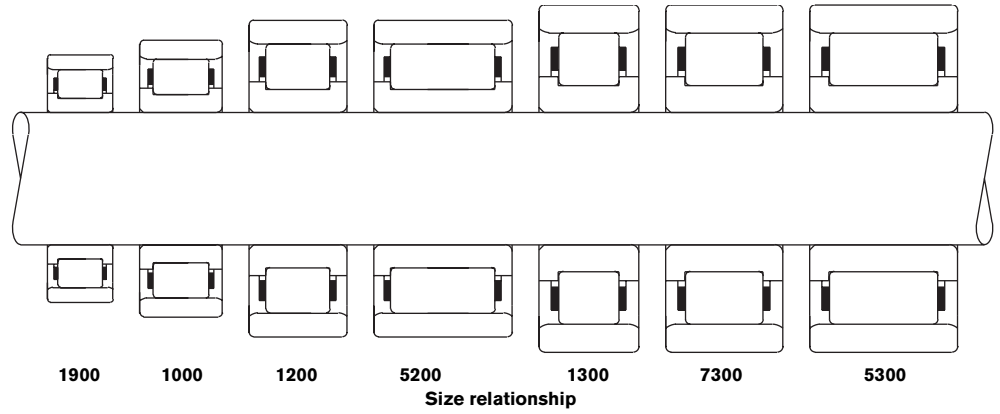
pounds/newtons

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						
1926	.....	.....	.....	.....	.....	.....	30100	7800	47600	.....	.....	.....
1026	.....	.....	.....	.....	.....	.....	134 000	34 700	212 000	.....	.....	.....
1226	55300	14300	85200	67500	17500	85200	47500	12300	69100	.....	.....	.....
5226	104000	26900	192000	127000	32800	192000	211 000	54 700	307 000	.....	.....	.....
1326	100000	25900	151000	122000	31700	151000	67500	17500	85200	78500	20300	104000
7326	138000	35700	228000	168000	43600	228000	300 000	77 800	379 000	349 000	90 400	463 000
5326	190000	49300	346000	232000	60200	346000	217 000	56 400	352 000	147000	38200	234000
1928	.....	.....	.....	.....	.....	.....	67500	17500	85200	146 000	170 000	1040 000
1028	.....	.....	.....	.....	.....	.....	127000	32800	192000	655 000	170 000	1040 000
1228	61700	16000	95000	75300	19500	95000	146 000	379 000	349 000	140000	36300	182000
5228	129000	33400	244000	157000	40700	244000	151000	122000	151000	140000	36300	182000
1328	111000	28800	170000	136000	35200	170000	141 000	674 000	674 000	624 000	162 000	808 000
7328	158000	40800	266000	192000	49800	266000	168000	43600	228000	193000	50000	274000
5328	209000	54200	383000	256000	66200	383000	168000	43600	228000	858 000	222 000	1220 000
1930	.....	.....	.....	.....	.....	.....	749 000	194 000	1020 000	267000	69000	415000
1030	.....	.....	.....	.....	.....	.....	232000	60200	346000	267000	69000	415000
1230	71000	18400	111000	86700	22500	111000	1030 000	268 000	1540 000	1190 000	307 000	1850 000
5230	150000	38900	289000	183000	47500	289000	268 000	60200	346000	267000	69000	415000
	668 000	173 000	1290 000	815 000	211 000	1290 000	268 000	60200	346000	267000	69000	415000

See facing page for footnotes.

Ratings

Series M 160mm, 170mm, 180mm, 190mm, 200mm Bores



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	.....	.....	.....
1032	.....	.....	.....	.....	.....	.....	192 000	49 800	325 000	.....	.....	.....
1232	78300	20300	120000	95600	24800	120000	65000	16800	99800	.....	.....	.....
5232	348 000	90 200	534 000	425 000	110 000	534 000	289 000	74 800	444 000	.....	.....	.....
	174000	45100	336000	213000	55100	336000	444 000	115 000	565 000	498 000	129 000	660 000
	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	.....	.....	.....
1034	.....	.....	.....	.....	.....	.....	195 000	50 400	336 000	.....	.....	.....
1234	95700	24800	149000	117000	30300	149000	81400	21100	130000	.....	.....	.....
5234	426 000	110 000	664 000	520 000	135 000	664 000	362 000	93 800	577 000	.....	.....	.....
	202000	52400	391000	247000	64000	391000	122000	31600	158000	137000	35500	184000
	900 000	233 000	1740 000	1100 000	285 000	1740 000	543 000	141 000	703 000	609 000	158 000	820 000
1936	.....	.....	.....	.....	.....	.....	258000	66800	414000	290000	75000	483000
1036	.....	.....	.....	.....	.....	.....	1150 000	297 000	1840 000	1290 000	334 000	2150 000
1236	99600	25800	159000	122000	31500	159000	56000	14500	93700	.....	.....	.....
5236	443 000	115 000	708 000	541 000	140 000	708 000	249 000	64 500	417 000	.....	.....	.....
	195000	50600	379000	239000	61800	379000	97900	25400	154000	.....	.....	.....
	870 000	225 000	1690 000	1060 000	275 000	1690 000	436 000	113 000	685 000	136000	35300	186000
1938	.....	.....	.....	.....	.....	.....	122000	31500	159000	.....	.....	.....
1038	.....	.....	.....	.....	.....	.....	541 000	140 000	708 000	607 000	157 000	826 000
1238	143200	37000	239400	175400	45600	239400	239000	61800	379000	268000	69400	442000
5238	637 000	164 900	1065000	780 000	203 000	1065000	1060 000	275 000	1690 000	1190 000	309 000	1970 000
	242000	62800	489000	296000	76600	489000	56800	14700	97000	.....	.....	.....
	1080 000	279 000	2170 000	1320 000	341 000	2170 000	253 000	65 500	431 000	.....	.....	.....
1940	.....	.....	.....	.....	.....	.....	100000	26000	161000	.....	.....	.....
1040	.....	.....	.....	.....	.....	.....	446 000	115 000	716 000	.....	.....	.....
1240	123000	31900	201000	150000	38900	201000	190600	49300	267700	205000	53000	299000
5240	637 000	164 900	1065000	780 000	203 000	1065000	848 000	219 500	1191000	912 000	236 000	1330000
	270000	69900	551000	329000	85300	551000	296000	76600	489000	332000	86000	570000
	1200 000	311 000	2450 000	1460 000	379 000	2450 000	1320 000	341 000	2170 000	1480 000	383 000	254 000
	.....	.....	.....	.....	.....	.....	73700	19100	125000	.....	.....	.....
	.....	.....	.....	.....	.....	.....	328 000	84 900	556 000	.....	.....	.....
	.....	.....	.....	.....	.....	.....	121000	31300	193000	.....	.....	.....
	.....	.....	.....	.....	.....	.....	538 000	139 000	859 000	.....	.....	.....
	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
	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.

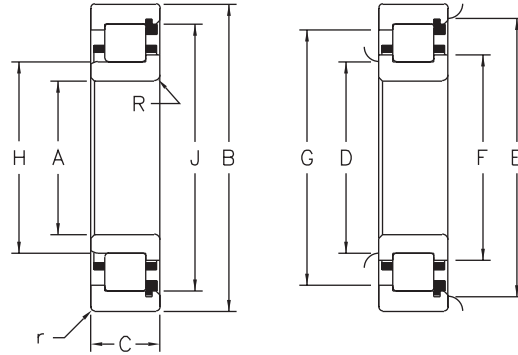
For shaft and housing bearing seat diameters, pages G-25 through G-30.

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.		E Max. housing shoulder dia.		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.
				Plain inner ring	Ribbed inner ring	Plain outer ring	Ribbed outer ring								
1205		2.0472 52.000	.5906 15.000	1.20 30.5	1.26 32.0	1.85 47.0	1.76 44.7	1.351 34.32	1.691 42.95	1.2664 32.166	1.7659 44.854	.040 1.02	.040 1.02	1.2677 32.200	1.7646 44.820
5205		2.0472 52.000	.8125 20.638												
1305	.9843 25.000	2.4409 62.000	.6693 17.000												
7305		2.4409 62.000	.8268 21.000	1.24 31.5	1.33 33.8	2.20 55.9	2.10 53.3	1.476 37.49	1.974 50.14	1.3375 33.972	2.1034 53.426	.040 1.02	.040 1.02	1.3388 34.006	2.1021 53.393
5305		2.4409 62.000	1.0000 25.400												
1206		2.4409 62.000	.6299 16.000	1.42 36.1	1.49 37.8	2.22 56.4	2.12 53.8	1.609 40.87	2.027 51.48	1.4985 38.062	2.1289 54.074	.040 1.02	.040 1.02	1.4999 38.098	2.1275 54.038
5206		2.4409 62.000	.9375 23.812												
1306	1.181 30.000	2.8346 72.000	.7480 19.000												
7306		2.8346 72.000	.9055 23.000	1.49 37.8	1.60 40.6	2.52 64.0	2.37 60.2	1.742 44.25	2.239 56.87	1.6016 40.681	2.3783 60.409	.060 1.52	.040 1.02	1.6029 40.713	2.3770 60.377
5306		2.8346 72.000	1.1875 30.162												
1207		2.8346 72.000	.6693 17.000	1.64 41.6	1.73 43.9	2.57 65.3	2.45 62.2	1.862 47.29	2.343 59.51	1.7311 43.970	2.4595 62.471	.040 1.02	.040 1.02	1.7327 44.011	2.4579 62.430
5207		2.8346 72.000	1.0625 26.988												
1307	1.3780 35.000	3.1496 80.000	.8268 21.000												
7307		3.1496 80.000	1.0236 26.000	1.72 43.7	1.84 46.7	2.81 71.4	2.67 67.8	1.995 50.67	2.538 64.46	1.8442 46.843	2.6749 67.942	.060 1.52	.060 1.52	1.8457 46.880	2.6734 67.905
5307		3.1496 80.000	1.3750 34.925												
1208		3.1496 80.000	.7087 18.000	1.86 47.2	1.96 49.8	2.87 72.9	2.74 69.6	2.104 53.44	2.615 66.42	1.9657 49.929	2.7409 69.619	.060 1.52	.040 1.02	1.9673 49.969	2.7393 69.579
5208		3.1496 80.000	1.1875 30.162												
1308	1.5748 40.000	3.5433 90.000	.9055 23.000												
7308		3.5433 90.000	1.1811 30.000	1.93 49.0	2.05 52.1	3.20 81.3	3.05 77.5	2.244 57.00	2.887 73.33	2.0590 52.299	3.0576 77.663	.060 1.52	.060 1.52	2.0606 52.339	3.0560 77.623
5308		3.5433 90.000	1.4375 36.512												

See facing page for footnotes.

Cylindrical Roller Bearings

Series M

45mm, 50mm, 55mm, Bores

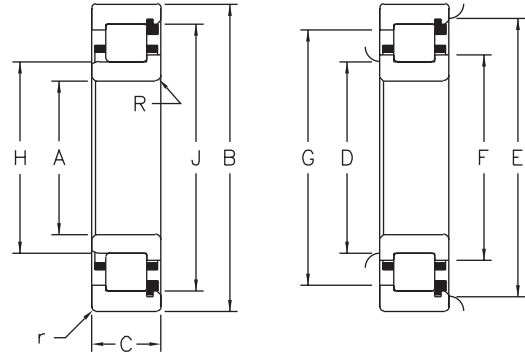
Fully Crowned Rollers

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.		E Max. housing shoulder dia.		F Inner ring O.D.	G Outer ring 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.
				Plain inner ring	Ribbed inner ring	Plain outer ring	Ribbed outer ring								
1209		3.3465 85.000	.7480 19.000	2.08 52.8	2.18 55.4	3.08 78.2	2.95 74.9	2.324 59.03	2.827 71.80	2.1858 55.519	2.9523 74.988	.060 1.52	.040 1.02	2.1877 55.568	2.9504 74.939
5209		3.3465 85.000	1.1875 30.162												
1309	1.7717 45.000	3.9370 100.000	.9843 25.000	2.20 55.9	2.33 59.2	3.56 90.4	3.38 85.8	2.532 64.31	3.208 81.48	2.3371 59.362	3.3899 86.103	.080 2.03	.060 1.52	2.3389 59.408	3.3881 86.058
7309		3.9370 100.000	1.2205 31.000												
5309		3.9370 100.000	1.5625 39.688												
1010		3.1496 80.000	.6299 16.000	2.21 56.1	2.27 57.6	2.93 74.4	2.84 72.1	2.379 60.43	2.741 69.62	2.2788 57.882	2.8406 72.151	.060 1.52	.040 1.02	2.2808 57.933	2.8386 72.100
1210		3.5433 90.000	.7874 20.000	2.27 57.6	2.38 60.4	3.26 82.8	3.13 79.5	2.518 63.96	3.018 76.66	2.3803 60.460	3.1317 79.545	.060 1.52	.040 1.02	2.3823 60.511	3.1297 79.494
5210		3.5433 90.000	1.1875 30.162												
1310	1.9685 50.000	4.3307 110.000	1.0630 27.000	2.40 61.0	2.56 65.0	3.90 99.1	3.72 94.5	2.781 70.64	3.518 89.36	2.5648 65.146	3.7201 94.490	.080 2.03	.080 2.03	2.5667 65.194	3.7182 94.442
7310		4.3307 110.000	1.2992 33.000												
5310		4.3307 110.000	1.7500 44.450												
1911		3.1496 80.000	.5118 13.000	2.36 59.9	2.43 61.7	2.96 75.2	2.88 73.2	2.530 64.26	2.789 70.84	2.4300 61.722	2.8889 73.378	.040 1.02	.040 1.02	2.4323 61.780	2.8866 73.320
1011		3.5433 90.000	.7087 18.000	2.44 62.0	2.53 64.3	3.29 83.6	3.17 80.5	2.665 67.69	3.045 77.34	2.5392 64.496	3.1705 80.531	.060 1.52	.040 1.02	2.5415 64.555	3.1682 80.472
1211		3.9370 100.000	.8268 21.000	2.52 64.0	2.63 66.8	3.60 91.4	3.46 87.9	2.785 70.74	3.328 84.53	2.6339 66.901	3.4653 88.019	.080 2.03	.060 1.52	2.6361 66.957	3.4631 87.963
5211	2.1654 55.000	3.9370 100.000	1.3125 33.338												
1311		4.7244 120.000	1.1417 29.000	2.62 66.5	2.81 71.4	4.28 108.7	4.07 103.4	3.045 77.34	3.860 98.04	2.8123 71.432	4.0790 103.607	.080 2.03	.080 2.03	2.8144 71.486	4.0769 103.553
7311		4.7244 120.000	1.4173 36.000												
5311		4.7244 120.000	1.9375 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.

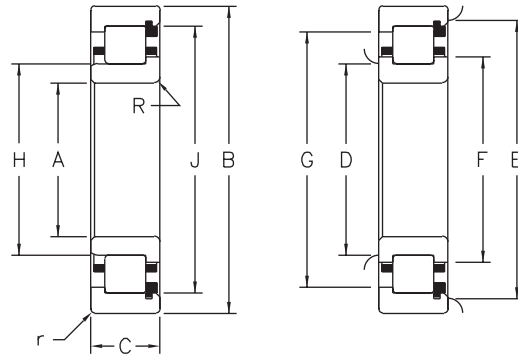
For shaft and housing bearing seat diameters, pages G-25 through G-30.

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.		E Max. housing shoulder dia.		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.		
				Plain inner ring	Ribbed inner ring	Plain inner ring	Ribbed inner ring									▲	▲
1912		3.3465 85.000	.5118 13.000	2.56 65.0	2.63 66.8	3.16 80.3	3.08 78.2	2.730 69.34	2.989 75.92	2.6300 66.802	3.0890 78.461	.040 1.02	.040 1.02	2.6324 66.863	3.0866 78.400		
1012		3.7402 95.000	.7087 18.000	2.64 67.0	2.73 69.3	3.49 88.6	3.36 85.3	2.862 72.69	3.242 82.35	2.7362 69.499	3.3675 85.534	.060 1.52	.040 1.02	2.7385 69.558	3.3652 85.476		
1212		4.3307 110.000	.8661 22.000	2.73 69.3	2.84 72.1	3.99 101.3	3.84 97.5	3.029 76.94	3.681 93.50	2.8496 72.380	3.8489 97.762	.080 2.03	.060 1.52	2.8519 72.438	3.8466 97.704		
5212	2.3622 60.000	4.3307 110.000	1.4375 36.512														
1312		5.1181 130.000	1.2205 31.000	2.87 72.9	3.05 77.5	4.64 117.8	4.42 112.3	3.308 84.02	4.187 106.35	3.0532 77.551	4.4286 112.486	.100 2.54	.080 2.03	3.0554 77.607	4.4264 112.431		
7312		5.1181 130.000	1.4961 38.000														
5312		5.1181 130.000	2.1250 53.975														
1913		3.5433 90.000	.5118 13.000	2.76 70.1	2.82 71.6	3.36 85.3	3.28 83.3	2.925 74.30	3.184 80.87	2.8250 71.755	3.2841 83.416	.040 1.02	.040 1.02	2.8275 71.818	3.2816 83.353		
1013		3.9370 100.000	.7087 18.000	2.84 72.1	2.93 74.4	3.69 93.7	3.56 90.4	3.060 77.72	3.439 87.35	2.9332 74.503	3.5646 90.541	.060 1.52	.040 1.02	2.9356 74.565	3.5622 90.479		
1213		4.7244 120.000	.9055 23.000	3.03 77.0	3.16 80.3	4.33 110.0	4.16 105.7	3.360 85.34	3.986 101.24	3.1662 80.421	4.1655 105.804	.100 2.54	.060 1.52	3.1685 80.480	4.1632 105.745		
5213	2.5591 65.000	4.7244 120.000	1.5000 38.100														
1313		5.5118 140.000	1.2992 33.000	3.10 78.7	3.29 83.6	5.00 127.0	4.77 121.2	3.571 90.70	4.515 114.68	3.2943 83.675	4.7782 121.366	.100 2.54	.080 2.03	3.2966 83.734	4.7759 121.308		
7313		5.5118 140.000	1.5748 40.000														
5313		5.5118 140.000	2.3125 58.738														
1914		3.9370 100.000	.6299 16.000	2.99 75.9	3.07 78.0	3.72 94.5	3.63 92.2	3.182 80.82	3.520 89.41	3.0700 77.978	3.6326 92.268	.040 1.02	.040 1.02	3.0728 78.050	3.6298 92.196		
1014		4.3307 110.000	.7874 20.000	3.05 77.5	3.15 80.0	4.07 103.4	3.93 99.8	3.312 84.12	3.779 95.99	3.1570 80.188	3.9333 99.906	.080 2.03	.040 1.02	3.1597 80.256	3.9306 99.838		
1214		4.9213 125.000	.9449 24.000	3.22 81.8	3.33 84.6	4.55 115.6	4.39 111.5	3.528 89.61	4.213 107.01	3.3375 84.772	4.3912 111.536	.100 2.54	.060 1.52	3.3402 84.840	4.3885 111.468		
5214	2.7559 70.000	4.9213 125.000	1.5625 39.688														
1314		5.9055 150.000	1.3780 35.000	3.32 84.3	3.51 89.2	5.34 135.6	5.09 129.3	3.808 96.72	4.811 122.20	3.5115 89.192	5.0935 129.375	.125 3.18	.080 2.03	3.5141 89.258	5.0909 129.309		
7314		5.9055 150.000	1.6929 43.000														
5314		5.9055 150.000	2.5000 63.600														

See facing page for footnotes.

Cylindrical Roller Bearings

Series M

75mm, 80mm, 85mm Bores

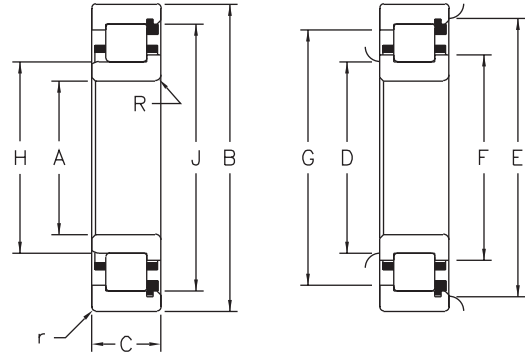
Fully Crowned Rollers

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.		E Max. housing shoulder dia.		F Inner ring O.D.	G Outer ring 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.
				Plain inner ring	Ribbed inner ring	Plain inner ring	Ribbed inner ring								
				▲	▲	▲	▲								
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	3.37	3.50	4.73	4.55	3.695	4.380	3.5045	4.5583	.100	.060	3.5073	4.5555
		130.000	25.000												
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	41.275												
1315		6.2992	1.4567	3.56	3.77	5.74	5.47	4.096	5.172	3.7764	5.4778	.125	.080	3.7790	5.4752
		160.000	37.000												
7315		6.2992	1.8110	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	3.59	3.75	5.09	4.90	3.968	4.700	3.7514	4.9078	.100	.080	3.7542	4.9050
		140.000	26.000												
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	44.450												
1316		6.6929	1.5354	3.78	4.00	6.08	5.80	4.342	5.480	4.0014	5.8041	.125	.080	4.0041	5.8014
		170.000	39.000												
7316		6.6929	1.9291	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	3.86	4.01	5.48	5.28	4.254	5.056	4.0160	5.2841	.125	.080	4.0193	5.2808
		150.000	28.000												
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	49.212												
1317		7.0868	1.6142	4.05	4.27	6.47	6.19	4.655	5.852	4.2725	6.1977	.156	.100	4.2757	6.1945
		180.000	41.000												
7317		7.0866	2.0079	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.

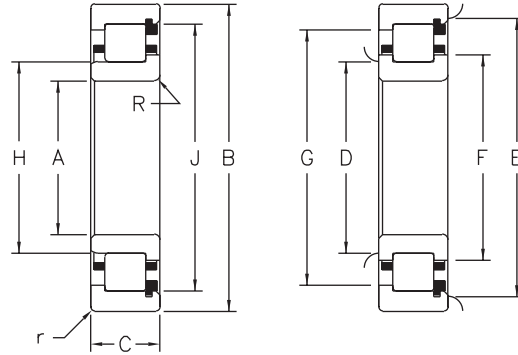
For shaft and housing bearing seat diameters, pages G-25 through G-30.

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.		E Max. housing shoulder dia.		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.		
				Plain inner ring	Ribbed inner ring	Plain outer ring	Ribbed outer ring									▲	▲
1918		4.9213 125.000	.7087 18.000	3.82 97.0	3.92 99.6	4.67 118.6	4.55 115.6	4.046 102.77	4.446 112.92	3.9200 99.568	4.5526 115.636	.060 1.52	.040 1.02	3.9236 99.660	4.5490 115.544		
1018		5.5118 140.000	.9449 24.000	3.92 99.6	4.03 102.4	5.18 131.6	5.03 127.8	4.229 107.42	4.831 122.71	4.0300 102.362	5.0305 127.775	.100 2.54	.060 1.52	4.0335 102.451	5.0270 127.686		
1218	3.5433 90.000	6.2992 160.000	1.811 30.000	4.06 103.1	4.22 107.2	5.81 147.6	5.59 142.0	4.495 114.17	5.350 135.89	4.2212 107.218	5.5980 142.189	.125 3.18	.080 2.03	4.2246 107.305	5.5946 142.102		
5218		6.2992 160.000	2.0625 52.388														
1318	7.4803 190.000	7.4803 190.000	1.6929 43.000	4.26 108.2	4.48 113.8	6.80 172.7	6.51 165.4	4.895 124.33	6.148 156.16	4.4894 114.031	6.5121 165.047	.156 3.96	.100 2.54	4.4927 114.115	6.5088 165.323		
7318		7.4803 190.000	2.1260 54.000														
5318		7.4803 190.000	2.8750 73.025														
1919		5.1181 130.000	.7087 18.000	4.02 102.1	4.11 104.4	4.87 123.7	4.74 120.4	4.241 107.72	4.622 117.40	4.1150 104.521	4.7476 120.589	.060 1.52	.040 1.02	4.1186 104.613	4.7440 120.497		
1019		5.7087 145.000	.9449 24.000	4.11 104.4	4.22 107.2	5.38 136.6	5.22 132.6	4.425 112.40	5.027 127.68	4.2260 107.340	5.2266 132.756	.100 2.54	.060 1.52	4.2296 107.432	5.2230 132.664		
1219	3.7402 95.000	6.6929 170.000	1.2598 32.000	4.29 109.0	4.46 113.3	6.18 157.0	5.95 151.1	4.765 121.03	5.688 144.48	4.4692 113.518	5.9544 151.242	.125 3.18	.080 2.03	4.4726 113.604	5.9510 151.156		
5219		6.6929 170.000	2.1875 55.562														
1319	7.8740 200.000	7.8740 200.000	1.7717 45.000	4.53 115.1	4.80 121.9	7.16 181.9	6.83 173.5	5.215 132.46	6.468 164.29	4.8092 122.154	6.8319 173.530	.156 3.96	.100 2.54	4.8125 122.238	6.8286 173.446		
7319		7.8740 200.000	2.2047 56.000														
5319		7.8740 200.000	3.0625 77.788														
1920		5.5118 140.000	.7874 20.000	4.22 107.2	4.33 110.0	5.25 133.4	5.10 129.5	4.485 113.92	4.953 125.81	4.3305 109.995	5.1078 129.738	.060 1.52	.040 1.02	4.3342 110.088	5.1041 129.645		
1020		5.9055 150.000	.9449 24.000	4.31 109.5	4.42 112.3	5.58 141.7	5.42 137.7	4.627 117.52	5.220 132.59	4.4230 112.344	5.4236 137.759	.100 2.54	.060 1.52	4.4266 112.435	5.4200 137.668		
1220	3.9370 100.000	7.0866 180.000	1.3386 34.000	4.57 116.1	4.76 120.9	6.58 167.1	6.34 161.0	5.057 128.45	6.070 154.18	4.7640 121.006	6.3471 161.216	.156 3.96	.080 2.03	4.7675 121.094	6.3436 161.128		
5220		7.0866 180.000	2.3750 60.325														
1320	8.4646 215.000	8.4646 215.000	1.8504 47.000	4.82 122.4	5.12 130.0	7.66 194.6	7.27 184.6	5.530 140.46	6.892 175.06	5.1246 130.165	7.2798 184.907	.187 4.75	1.00 2.54	5.1280 130.251	7.2764 184.821		
7320		8.4646 215.000	2.3622 60.000														
5320		8.4646 215.000	3.2500 82.550														

See facing page for footnotes.

Cylindrical Roller Bearings

Series M

105mm, 110mm, 120mm Bores

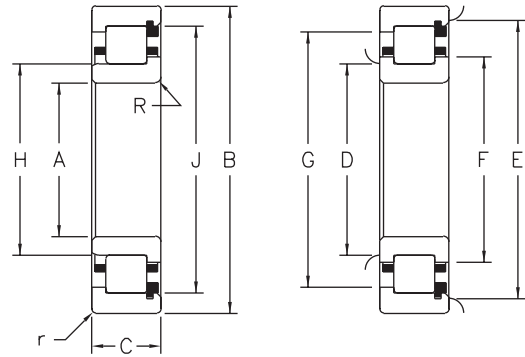
Fully Crowned Rollers

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.		E Max. housing shoulder dia.		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.
				Plain inner ring	Ribbed inner ring	Plain outer ring	Ribbed outer ring								
1921		5.7087 145.000	.7874 20.000	4.41 112.0	4.52 114.8	5.44 138.2	5.30 134.6	4.682 118.92	5.150 130.81	4.5274 114.996	5.3047 134.739	.060 1.52	.040 1.02	4.5311 115.089	5.3010 134.646
1021		6.2992 160.000	1.0236 26.000	4.56 115.8	4.69 119.1	5.91 150.1	5.74 145.8	4.901 124.48	5.536 140.61	4.6910 119.151	5.7457 145.941	.100 2.54	.080 2.03	4.6947 119.245	5.7420 145.847
1221		7.4803 190.000	1.4173 36.000	4.78 121.4	4.98 126.5	6.90 175.3	6.63 168.4	5.310 134.87	6.339 161.01	4.9811 126.520	6.6363 168.562	.156 3.96	.080 2.03	4.9847 126.611	6.6327 168.470
5221	4.1339 105.000	7.4803 190.000	2.5625 65.088												
1321		8.8583 225.000	1.9291 49.000	5.04 128.0	5.36 136.1	8.01 203.4	7.61 193.3	5.794 147.17	7.211 183.16	5.3616 136.185	7.6164 193.456	.187 4.75	.100 2.54	5.3650 136.270	7.6130 193.370
7321		8.8583 225.000	2.4803 63.000												
5321		8.8583 225.000	3.4375 87.312												
1922		5.9055 150.000	.7874 20.000	4.61 117.1	4.72 119.9	5.64 143.2	5.50 139.7	4.879 123.93	5.347 135.81	4.7242 119.995	5.5016 139.741	.060 1.52	.040 1.02	4.7280 120.091	5.4978 139.645
1022		6.6929 170.000	1.1024 28.000	4.80 121.9	4.93 125.2	6.27 159.2	6.09 154.7	5.161 131.09	5.866 149.00	4.9350 125.349	6.0923 154.744	.100 2.54	.080 2.03	4.9387 125.442	6.0886 154.651
1222		7.8740 200.000	1.4961 38.000	5.01 127.2	5.23 132.8	7.24 183.9	6.93 176.0	5.575 141.60	6.631 168.43	5.2343 132.951	6.9367 176.192	.156 3.96	.080 2.03	5.2379 133.042	6.9331 176.101
5222	4.3307 110.000	7.8740 200.000	2.7500 69.850												
1322		9.4488 240.000	1.9685 50.000	5.35 135.9	5.71 145.0	8.55 217.2	8.12 206.2	6.200 157.48	7.692 195.38	5.7187 145.255	8.1235 206.337	.187 4.75	.100 2.54	5.7221 145.341	8.1201 206.251
7322		9.4488 240.000	2.5591 65.000												
5322		9.4488 240.000	3.6250 92.075												
1924		6.4961 165.000	.8661 22.000	5.11 129.8	5.17 131.3	6.21 157.7	6.06 153.9	5.353 135.97	5.885 149.50	5.1771 131.498	6.0624 153.985	.080 2.03	.040 1.02	5.1810 131.597	6.0585 153.886
1024		7.0866 180.000	1.1024 28.000	5.20 132.1	5.32 135.1	6.66 169.2	6.48 164.6	5.560 141.22	6.256 158.90	5.3290 135.357	6.4864 164.754	.125 3.18	.080 2.03	5.3328 135.452	6.4826 164.659
1224		8.4646 215.000	1.5748 40.000	5.48 139.2	5.71 145.0	7.83 198.9	7.51 190.8	6.075 154.30	7.194 182.73	5.7141 145.138	7.5178 190.952	.187 4.75	.080 2.03	5.7178 145.232	7.5141 190.858
5224	4.7244 120.000	8.4646 215.000	3.0000 76.200												
1324		10.2362 260.000	2.1654 55.000	5.82 147.8	6.18 157.0	9.26 135.2	8.78 223.0	6.700 170.18	8.315 211.20	6.1820 157.023	8.7816 223.053	.250 6.35	.100 2.54	6.1856 157.115	8.7780 222.961
7324		10.2362 260.000	2.7953 71.000												
5324		10.2362 260.000	4.1250 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.

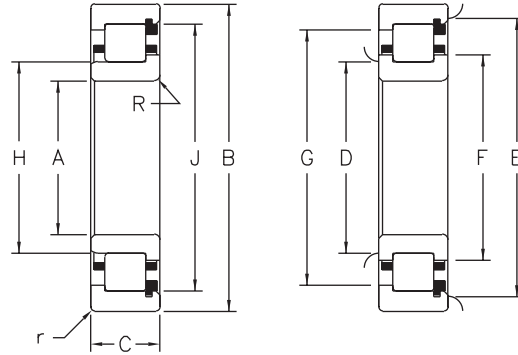
For shaft and housing bearing seat diameters, pages G-25 through G-30.

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.		E Max. housing shoulder dia.		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.		
				Plain inner ring	Ribbed inner ring	Plain outer ring	Ribbed outer ring									▲	▲
1926		7.0866 180.000	.9449 24.000	5.48 139.2	5.60 142.2	6.76 171.7	6.60 167.6	5.804 147.42	6.417 162.99	5.6050 142.367	6.6065 167.085	.080 2.03	.060 1.52	5.6095 142.481	6.6020 167.691		
1026		7.8740 200.000	1.2992 33.000	5.63 143.0	5.81 147.6	7.41 188.2	7.18 182.4	6.085 154.56	6.913 175.59	5.8100 147.574	7.1878 182.570	.125 3.18	.080 2.03	5.8144 147.686	7.1834 182.458		
1226	5.1181 130.000	9.0551 230.000	1.5748 40.000	5.87 149.1	6.10 154.9	8.42 213.9	8.12 206.2	6.485 164.72	7.761 197.13	6.1013 154.973	8.1250 206.375	.187 4.75	.100 2.54	6.1056 155.083	8.1207 206.265		
5226		9.0551 230.000	3.1250 79.375														
1326		11.0236 280.000	2.2835 58.000														
7326		11.0236 280.000	2.9528 75.000	6.31 160.3	6.71 170.4	10.02 254.5	9.55 242.6	7.280 184.91	9.046 229.77	6.7140 170.536	9.5573 242.755	.250 6.35	.125 3.18	6.7181 170.640	9.5532 242.651		
5326		11.0236 280.000	4.3750 111.125														
1928		7.4803 190.000	.9449 24.000	5.87 149.1	6.00 152.4	7.15 181.6	7.00 177.8	6.200 157.48	6.803 172.80	6.0010 152.425	7.0027 177.868	.080 2.03	.060 1.52	6.0057 152.544	6.9980 177.749		
1028		8.2677 210.000	1.2992 33.000	6.05 153.7	6.20 157.5	7.80 198.1	7.58 192.5	6.478 164.54	7.307 185.60	6.2030 157.556	7.5810 192.557	.156 3.96	.080 2.03	6.2076 157.673	7.5764 192.440		
1228	5.5118 140.000	9.8425 250.000	1.6535 42.000	6.36 161.5	6.63 168.4	9.15 232.4	8.83 224.3	7.050 179.07	8.440 214.38	6.6323 168.460	8.8353 224.417	.187 4.75	.100 2.54	6.6367 168.573	8.8309 224.304		
5228		9.8425 250.000	3.2500 82.550														
1328		11.8110 300.000	2.4409 62.000														
7328		11.8110 300.000	3.2677 83.000	6.77 172.0	7.15 181.6	10.68 271.3	10.16 258.1	7.755 196.98	9.620 244.35	7.1529 181.684	10.1607 258.082	.312 7.92	.125 3.18	7.1571 181.790	10.1565 257.975		
5328		11.8110 300.000	4.5000 114.300														
1930		8.2677 210.000	1.1024 28.000	6.36 161.5	6.51 165.4	7.84 199.1	7.66 194.6	6.741 171.22	7.438 188.92	6.5100 165.354	7.6689 194.790	.125 3.18	.080 2.03	6.5153 165.488	7.6636 194.656		
1030		8.8583 225.000	1.3780 35.000	6.47 164.3	6.64 168.6	8.36 212.3	8.12 206.2	6.937 176.20	7.832 198.93	6.6410 168.681	8.1281 206.454	.156 3.96	.080 2.03	6.6463 168.816	8.1228 206.319		
1230	150.000	10.6299 270.000	1.7717 45.000	6.86 174.2	7.14 181.4	9.88 251.0	9.52 241.8	7.600 193.04	9.095 231.01	7.1474 181.544	9.5218 241.854	.250 6.35	.100 2.54	7.1524 181.672	9.5168 241.726		
5230		10.6299 270.000	3.5000 88.900														

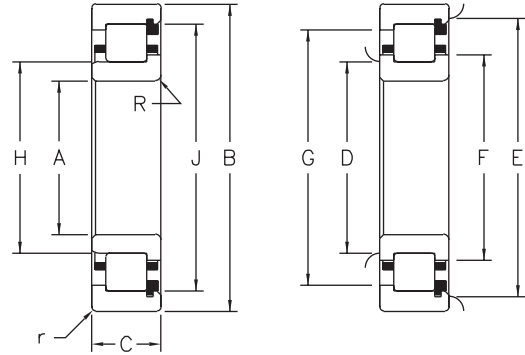
See facing page for footnotes

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.		E Max. housing shoulder dia.		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.
				Plain inner ring	Ribbed inner ring	Plain outer ring	Ribbed outer ring								
1932		8.6614 220.000	1.1024 28.000	6.76 171.7	6.90 175.3	8.24 209.3	8.06 204.7	7.136 181.25	7.833 198.96	6.9050 175.387	8.0641 204.828	.125 3.18	.080 2.03	6.9105 175.526	8.0586 204.689
1032	6.2992	9.4488 240.000	1.4961 38.000	6.91 175.5	7.08 179.8	8.92 226.6	8.66 220.0	7.400 187.96	8.353 212.17	7.0840 179.934	8.6690 220.193	.156 3.96	.080 2.03	7.0894 180.071	8.6636 220.056
1232	160.000	11.4173 290.000	1.8898 48.000	7.31 185.7	7.62 193.5	10.61 269.5	10.22 259.6	8.105 205.87	9.757 247.83	7.6234 193.634	10.2246 259.705	.250 6.35	.100 2.54	7.6286 193.767	10.2194 259.572
5232		11.4173 290.000	3.8750 98.425												
1934		9.0551 230.000	1.1024 28.000	7.15 181.6	7.30 185.4	8.63 219.2	8.45 214.6	7.531 191.29	8.228 208.99	7.3000 185.420	8.4593 214.866	.125 3.18	.080 2.03	7.3057 185.564	8.4536 214.722
1034	6.6929	10.2362 260.000	1.6535 42.000	7.41 188.2	7.61 193.3	9.61 244.1	9.31 236.5	7.965 202.31	8.969 227.81	7.6150 193.421	9.3193 236.710	.187 4.75	.080 2.03	7.6205 193.560	9.3138 236.571
1234	170.000	12.2047 310.000	2.0472 52.000	7.76 197.1	8.08 205.2	11.32 287.5	10.93 277.6	8.625 219.08	10.423 264.74	8.0899 205.483	10.9344 277.734	.250 6.35	.125 3.18	8.0952 205.618	10.9291 277.599
5234		12.2047 310.000	4.1250 104.775												
1936		9.8425 250.000	1.2992 33.000	7.60 193.0	7.78 197.6	9.38 238.2	9.15 232.4	8.055 204.60	8.885 225.68	7.7800 197.612	9.1592 232.644	.156 3.96	.080 2.03	7.7858 197.760	9.1534 232.496
1036	7.0866	11.0236 280.000	1.8110 46.000	7.86 199.6	8.09 205.5	10.35 262.9	10.02 254.5	8.478 215.34	9.638 244.80	8.0940 205.588	10.0217 254.551	.187 4.75	.080 2.03	8.0997 205.733	10.0160 254.406
1236	180.000	12.5984 320.000	2.0472 52.000	8.17 207.5	8.51 216.2	11.74 298.2	11.36 288.5	9.050 229.87	10.849 275.56	8.5153 216.289	11.3600 288.544	.250 6.35	.125 3.18	8.5208 216.428	11.3545 288.405
5236		12.5984 320.000	4.2500 107.950												
1938		10.2362 260.000	1.2992 33.000	7.99 202.9	7.17 182.1	9.78 248.4	9.55 242.6	8.453 214.71	9.283 235.79	8.1779 207.719	9.5578 242.768	.156 3.96	.080 2.03	8.1844 207.884	9.5513 242.603
1038	7.4803	11.4173 290.000	1.8110 46.000	8.25 209.6	8.48 215.4	10.74 272.8	10.41 264.4	8.895 225.93	10.009 254.23	8.4880 215.595	10.4164 264.576	.187 4.75	.080 2.03	8.4944 215.758	10.4100 264.413
1238	190.000	13.3858 340.000	2.1654 55.000	8.66 220.1	9.02 229.1	12.63 320.37	12.19 309.63	9.610 244.11	11.436 290.48	9.0266 229.276	12.1938 309.723	.312 7.42	.125 3.18	9.0326 229.428	12.1878 309.570
5238		13.3858 340.000	4.5000 114.300												
1940		11.0236 280.000	1.4961 38.000	8.48 215.4	8.66 220.0	10.49 266.4	10.24 260.1	8.976 227.99	9.930 252.22	8.6600 219.964	10.2463 260.256	.187 4.75	.080 2.03	8.6667 220.134	10.2396 260.086
1040	7.8740	12.2047 310.000	2.0079 51.000	8.70 221.0	8.96 227.6	11.47 291.3	11.12 282.4	9.394 238.61	10.692 271.58	8.9640 227.686	11.1223 282.506	.187 4.75	.080 2.03	8.9705 227.850	11.1158 282.342
1240	200.000	14.1732 360.000	2.2835 58.000	9.15 232.4	9.53 242.1	13.17 334.5	12.70 322.6	10.135 257.43	12.134 308.20	9.5353 242.197	12.7028 322.651	.312 7.92	.125 3.18	9.5416 242.357	12.6965 322.491
5240		14.1732 360.000	4.7500 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

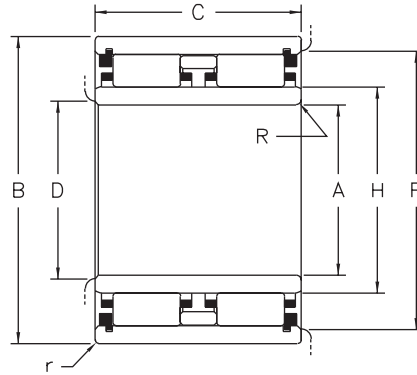
25 thru 60mm Bore

Double Row

Fully Crowned Rollers

Contoured Roller Pockets

Rollers Individually Separated



Dimensions (inches/mm)

Basic bearing number	A	B	C	D	E	H	J	R	r	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
	Bore diameter	Outside diameter	Width	Min. shaft shoulder dia.	Min. housing shoulder dia.	Inner ring raceway O.D.	Outer ring raceway I.D.	Inner	Outer				
6205	.9843 25.000	2.0472 52.000	1.6250 41.275	1.20 30.5	1.85 47.0	1.2664 32.166	1.7659 44.854	.040 1.02	.040 1.02	1.2677 32.200	10200 45400	2640 11700	15700 69900
6206	1.1811 30.000	2.4409 62.000	1.8750 47.625	1.42 36.1	2.22 56.4	1.4985 38.062	2.1289 54.074	.040 1.02	.040 1.02	1.4999 38.098	15500 69000	4010 17800	24300 108000
6207	1.3780 35.000	2.8346 72.000	2.1250 53.975	1.64 41.6	2.57 65.3	1.7311 43.970	2.4595 62.471	.040 1.02	.040 1.02	1.7327 44.011	19400 86300	5020 22300	30600 136000
6208	1.5748 40.000	3.1496 80.000	2.3750 60.325	1.86 47.2	2.87 72.9	1.9657 49.929	2.7409 69.619	.060 1.52	.040 1.02	1.9673 49.969	24600 109000	6370 28300	41300 184000
6209	1.7717 45.000	3.3465 85.000	2.3750 60.325	2.08 52.8	3.08 78.2	2.1858 55.519	2.9523 74.988	.060 1.52	.040 1.02	2.1877 55.568	26700 119000	6910 30700	47500 211000
6210	1.9865 50.000	3.5433 90.000	2.3750 60.325	2.27 57.6	3.26 82.8	2.3803 60.460	3.1317 79.545	.060 1.52	.040 1.02	2.3823 60.511	27100 121000	7020 31200	50300 224000
6211	2.1654 55.000	3.9370 100.000	2.6250 66.675	2.52 64.0	3.60 87.9	2.6339 66.901	3.4653 88.019	.080 2.03	.060 1.52	2.6361 66.957	32900 146000	8520 37900	61900 275000
6212	2.3622 60.000	4.3307 110.000	2.8750 73.025	2.73 69.3	3.99 101.3	2.8496 72.380	3.8489 97.762	.080 2.03	.060 1.52	2.8519 72.438	42300 188000	10900 48500	77700 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

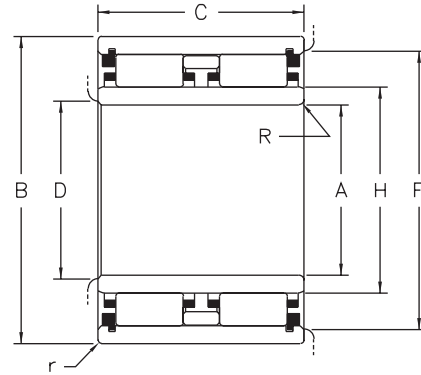
65 thru 95mm Bore

Double Row

Fully Crowned Rollers

Contoured Roller Pockets

Rollers Individually Separated



Dimensions (inches/mm)

Basic bearing number	A	B	C	D	E	H	J	R	r	Outer Ring & Roller Assembly Under Roller Dia.	C Basic load rating	Bearing Capacity 500 RPM 3000 Hrs. L-10	Co Basic static load rating
	Bore diameter	Outside diameter	Width	Min. shaft shoulder dia.	Min. housing shoulder dia.	Inner ring raceway O.D.	Outer ring raceway I.D.	Inner ▲	Outer ▲				
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.

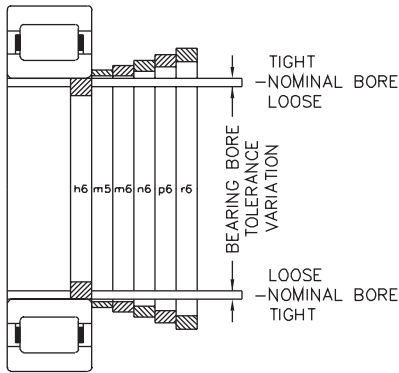
Selection guide, pages G-5, G-6.

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/ μm)

Bearing series 1000, 1200, 1300, 1900, 5200, 5300, 7300	Nominal bearing bore and shaft diameter		Bearing bore tolerance Δ		Bearing/Shaft diameter fits G			
					h6		m5	
					Tolerance		Tolerance	
Basic size	mm	inches	μm	inches	Fit	Shaft dia.	Fit	Shaft dia.
04	20.000	.7874	+0 -10	+.0000 -.0004	.0004T	-.0000	.0011T	+.0007
05	25.000	.9843			.0005L	-.0005	.0003T	+.0003
06	30.000	1.1811			10T	+0	27T	+17
					13L	-13	8T	+8
07	35.000	1.3780	+0 -12	+.0000 -.0005	.0005T	+.0000	.0013T	+.0008
08	40.000	1.5748			.0006L	-.0006	.0004T	+.0004
09	45.000	1.7717			12T	+0	33T	+20
10	50.000	1.9685			16L	-16	9T	+9
11	55.000	2.1654	+0 -15	+.0000 -.0006	.0006T	+.0000	.0016T	+.0010
12	60.000	2.3622			.0007L	+.0007	.0005T	+.0005
13	65.000	2.5591			15T	+0	39T	+24
14	70.000	2.7559			19L	-19	11T	+11
15	75.000	2.9528						
16	80.000	3.1496						
17	85.000	3.3465	+0 -20	+.0000 -.0008	.0008T	-.0000	.0019T	+.0011
18	90.000	3.5433			.0009L	-.0009	.0005T	+.0005
19	95.000	3.7402			20T	+0	48T	+28
20	100.000	3.9370			22L	-22	13T	+13
21	105.000	4.1339						
22	110.000	4.3307						
24	120.000	4.7244	+0 -25	+.0000 -.0010	.0010T	-.0000	.0023T	+.0013
26	130.000	5.1181			.0010L	-.0010	.0006T	+.0006
28	140.000	5.5118			25T	+0	58T	+33
30	150.000	5.9055			25L	-25	15T	+13
32	160.000	6.2992						
34	170.000	6.6929						
36	180.000	7.0866						
			+0 -30	+.0000 -.0012	.0012T	+.0000	.0026T	+.0014
38	190.000	7.4803			.0012L	-.0012	.0006T	+.0006
40	200.000	7.8740			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 9T	+25 +9	46T 17T	+33 +17	.....	.....	.....	.....	.....
11	.0018T	+0012	.0021T	+0015	.0027T	+0021	.....	.....	.....
thru	.0005T	+0005	.0008T	+0008	.0014T	+0014	.....	.....	.....
16	45T 11T	+30 +11	54T 20T	+39 +20	66T 32T	+51 +32	.....	.....	.....
17	.0022T	+0014	.0027T	+0019	.0033T	+0025	.0037T	+0029	.....
thru	.0005T	+0005	.0010T	+0010	.0016T	+0016	.0020T	+0020	.....
24	55T 13T	+35 +13	65T 23T	+45 +23	79T 37T	+59 +37	96T 54T	+76 +54	.....
26	.0026T	+0016	.0032T	+0022	.0038T	+0028	.0045T	+0035	.....
thru	.0006T	+0006	.0012T	+0012	.0018T	+0018	.0025T	+0025	.....
36	65T 15T	+40 +15	77T 27T	+52 +27	93T 43T	+68 +43	118T 68T	+93 +68	.....
38	.0030T	+0018	.0038T	+0026	.0044T	+0032	.0054T	+0042	.....
40	.0006T	+0006	.0014T	+0014	.0020T	+0020	.0030T	+0030	.....
	76T 17T	+46 +17	90T 31T	+60 +31	109T 50T	+79 +50	136T 77T	+106 +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
 $1 \mu\text{m} = .001 \text{ mm}$

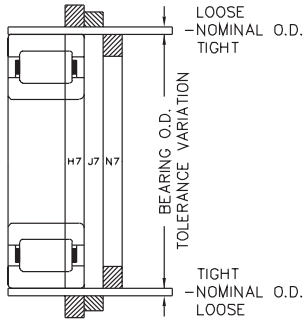
■ For solid steel shafts.

● 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



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.

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).

Class of fit and housing bores (inches/ μm)

Bearing series						Bearing/Housing diameter fits▲							
1900	1000	1200 5200	1300 5300 7300	Nominal bearing O.D. and housing bore		Bearing O.D. tolerance△	H7		J7		N7		
Basic size							Tolerance		Tolerance		Tolerance		
							Fit	Housing bore	Fit	Housing bore	Fit	Housing bore	
						<i>mm</i>	<i>inches</i>						
...	...	205	304	52	2.0472	+0.000 -0.005 +0 -13	.0000	-0.0000	.0004T	-0.0004	.0002L	-0.0003	
...	...	206	305	62	2.4409		.0017L	+0.0012	.0013L	≠.0008	.0015T	-0.0015	
...	...	207	306	72	2.8346		0	-0	12T	-12	4L	-9	
911	010	208	307	80	3.1496		43L	+30	31L	-18	39T	-39	
912	...	209	...	85	3.3465	+0.000 -0.006 +0 -15	.0000	-0.0000	.0005T	-0.0005	.0002L	-0.0004	
913	011	210	308	90	3.5433		.0020L	+0.0014	.0015L	+0.0009	.0018T	-0.0018	
...	012	...	...	95	3.7402		0	-0	13T	-13	5L	-10
914	013	211	309	100	3.9370		50L	+35	37L	+22	45T	-45	
915	105	4.1339		+0.000 -0.008 +0 -20	.0000	-0.0000	.0006T	-0.0006	.0002L	-0.0006
916	014	212	310	110	4.3307			.0024L	+0.0016	.0018L	+0.0010	.0022T	-0.0022
...	015	115	4.5276			0	-0	14T	-14	6L	-12
917	...	213	311	120	4.7244	61L		+41	44L	+26	52T	-52	
918	016	214	...	125	4.9213	+0.000 -0.010 +0 -25	.0000	-0.0000	.0006T	-0.0006	.0004L	-0.0006	
919	017	215	312	130	5.1181		.0026L	+0.0016	.0020L	+0.0010	.0022T	-0.0022	
920	018	216	313	140	5.5118		0	-0	14T	-14	6L	-12	
921	019	...	...	145	5.7087		65L	+40	51L	+26	57T	-52
922	020	217	314	150	5.9055	+0.000 -0.012 +0 -30	.0000	-0.0000	.0007T	-0.0007	.0004L	-0.0008	
...	021	218	315	160	6.2992		.0030L	+0.0018	.0023L	+0.0011	.0026T	-0.0026	
924	...	...	...	165	6.4961		0	-0	16T	-16	16L	-14
...	022	219	316	170	6.6929		76L	+46	60L	+30	60T	-60	
...	024	220	317	180	7.0866		+0.000 -0.014 +0 -35	.0000	-0.0000	.0007T	-0.0007	.0006L	-0.0008
928	...	221	318	190	7.4803			.0034L	+0.0020	.0027L	+0.0013	.0028T	-0.0028
...	026	222	319	200	7.8740			0	-0	16T	-16	21L	-14
930	028	...	...	210	8.2677	87		+52	71L	+36	66T	-66
...	...	224	320	215	8.4646	+0.000 -0.016 +0 -40	.0000	-0.0000	.0007T	-0.0007	.0008L	-0.0008	
932	...	...	321	220	8.6614		.0038L	+0.0022	.0030L	+0.0014	.0030T	-0.0030
...	030	...	...	225	8.8583		0	-0	8T	-18	24L	-16
934	...	226	322	230	9.0551		97L	+57	79L	+39	73T	-73	
...	032	240	9.4488		+0.000 -0.016 +0 -40	.0000	-0.0000	.0007T	-0.0007	.0008L	-0.0008
936	...	228	...	250	9.8425			.0038L	+0.0022	.0030L	+0.0014	.0030T	-0.0030
938	034	...	324	260	10.2362			0	-0	8T	-18	24L	-16
...	...	230	...	270	10.6299	97L		+57	79L	+39	73T	-73	
...	036	...	326	280	11.0236	+0.000 -0.016 +0 -40	.0000	-0.0000	.0007T	-0.0007	.0008L	-0.0008	
940	...	232	...	290	11.4173		.0038L	+0.0022	.0030L	+0.0014	.0030T	-0.0030	
...	...	...	328	300	11.8110		0	-0	8T	-18	24L	-16
...	040	234	...	310	12.2047		97L	+57	79L	+39	73T	-73	
...	...	236	330	320	12.5984	+0.000 -0.016 +0 -40	.0000	-0.0000	.0007T	-0.0007	.0008L	-0.0008	
...	...	238	...	340	13.3858		.0038L	+0.0022	.0030L	+0.0014	.0030T	-0.0030	
...	...	...	...	360	14.1732		0	-0	8T	-18	24L	-16
...	...	240	...	360	14.1732		97L	+57	79L	+39	73T	-73	

1 μm = .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/ μ m)

1900	Bearing series		Nominal bearing O.D. and housing bore Style A outer ring		Bearing O.D. tolerance Δ	Bearing/Housing diameter fits \blacktriangle							
	1000	1200	1300	mm		inches	Tolerance						
	5200	5300	7300				Fit	Housing bore					
...	...	205	304	52.024	2.0482	+0.0000	{	.0000	0	-0.0005	-13		
...	...	206	305	62.029	2.4421			.0014T	35T	-0.0014	-35		
...	...	207	306	72.032	2.8359			.0001T	2T	-0.0006	-15		
...	...	207	306	72.032	2.8359			.0016T	40T	-0.0016	-40		
911	010	208	307	80.035	3.1510	-0.0005	{	.0002T	5T	-0.0007	-18		
...	...	207	306	72.032	2.8359			.0017T	43T	-0.0017	-43		
...	...	208	307	80.035	3.1510			.0003T	7T	-0.0008	-20		
...	...	208	307	80.035	3.1510			.0018T	45T	-0.0018	-45		
912	...	209	...	85.039	3.3480	+0.0000	{	.0004T	10T	-0.0010	-25		
913	011	210	308	90.040	3.5449			.0020T	50T	-0.0020	-50		
...	012	...	...	95.044	3.7419			.0005T	13T	-0.0011	-28
...	012	...	...	95.044	3.7419			.0021T	53T	-0.0021	-53
914	013	211	309	100.046	3.9388	-0.0006	{	.0006T	15T	-0.0012	-30		
...	...	211	309	100.046	3.9388			.0022T	56T	-0.0022	-56		
915	...	...	...	105.049	4.1358			.0007T	18T	-0.0013	-33
...	...	...	...	105.049	4.1358			.0023T	58T	-0.0023	-58
916	014	212	310	110.056	4.3329	+0	{	.0008T	20T	-0.0014	-35		
...	015	...	...	115.057	4.5298			.0024T	61T	-0.0024	-61
917	...	213	311	120.056	4.7266			.0009T	23T	-0.0017	-38		
...	...	213	311	120.056	4.7266			.0027T	69T	-0.0027	-69		
918	016	214	...	125.059	4.9236	-0.0008	{	.0009T	23T	-0.0017	-43		
919	017	215	312	130.058	5.1204			.0029T	74T	-0.0029	-74		
920	018	216	313	140.058	5.5141			+0	{	.0010T	25T	-0.0018	-45
921	019	145.067	5.7113					.0032T	81T	-0.0032	-81
922	020	217	314	150.066	5.9081	-20	{	.0010T	25T	-0.0020	-50		
...	021	218	315	160.071	6.3020			.0034T	86T	-0.0034	-86		
924	165.072	6.4989			+0	{	.0010T	25T	-0.0020	-50
...	022	219	316	170.071	6.6957					.0034T	86T	-0.0034	-86
926	024	220	317	180.071	7.0894	-25	{	.0011T	28T	-0.0023	-58		
...	...	220	317	180.071	7.0894			.0037T	94T	-0.0037	-94		
928	...	221	318	190.076	7.4833			.0012T	30T	-0.0024	-60		
...	026	222	319	200.078	7.8771			.0038T	97T	-0.0038	-97		
930	028	...	...	210.081	8.2709	+0.0000	{	.0013T	33T	-0.0025	-63
...	...	224	320	215.087	8.4680			.0039T	99T	-0.0039	-99		
...	...	224	320	215.087	8.4680			.0013T	33T	-0.0025	-63		
932	...	...	...	220.088	8.6649			.0041T	104T	-0.0041	-104
...	030	...	321	225.090	8.8618	-30	{	.0014T	36T	-0.0026	-66		
...	...	224	320	215.087	8.4680			.0042T	107T	-0.0042	-107		
934	...	226	...	230.091	9.0587			.0015T	38T	-0.0027	-68		
...	032	...	322	240.096	9.4526			.0043T	109T	-0.0043	-109		
936	...	228	...	250.096	9.8463	+0	{	.0015T	38T	-0.0027	-68		
...	...	228	...	250.096	9.8463			.0045T	114T	-0.0045	-114		
938	034	...	324	260.101	10.2402			-0.0014	{	.0015T	38T	-0.0029	-73
...	...	230	...	270.101	10.6339					.0047T	119T	-0.0047	-119
940	036	...	326	280.101	11.0276	+0	{	.0016T	41T	-0.0030	-76		
...	038	232	...	290.109	11.4216			.0050T	127T	-0.0050	-127		
...	328	300.111	11.8154			-35	{	.0017T	43T	-0.0031	-78
...	040	234	...	310.111	12.2091					.0051T	130T	-0.0051	-130
...	...	236	330	320.121	12.6032	+0.0000	{	.0017T	43T	-0.0033	-83		
...	...	238	...	340.121	13.3906			.0055T	140T	-0.0055	-140		
...	...	240	...	360.124	14.1781			-0.0016	{	.0018T	46T	-0.0043	-86
...	...	240	...	360.124	14.1781					.0056T	142T	-0.0056	-142

\blacktriangle 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)

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

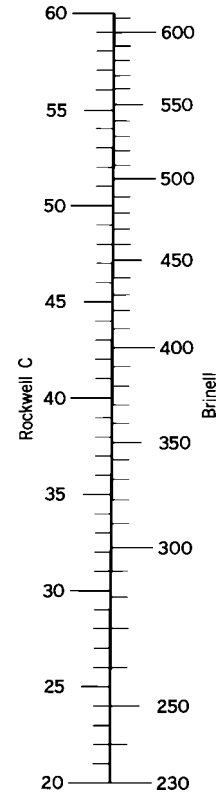
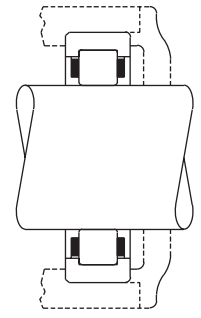
Cylindrical roller bearings with the inner ring omitted may be installed so that the rollers operate directly on the surface of the shaft.

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)				(max-min)			
	inches				inches			
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.

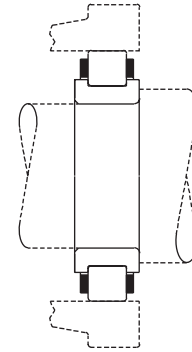
▲ Shaft diameter limits also apply to Style A outer ring bearings.

■ Hultgren 10 mm ball penetrator; 3000 kg load.

□ Brale penetrator; 150 kg load.

Operation Without Outer Ring

For Cylindrical Roller Bearings



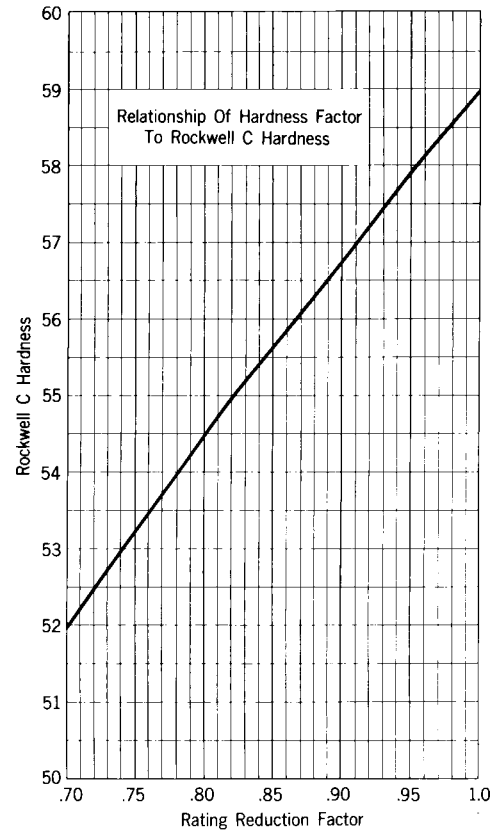
Inner ring and roller assembly

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	1900	1000	1200-5200	1300-5300-7300	1900	1000	1200-5200	1300-5300-7300
Basic size	(max-min)								(max-min)							
	inches								inches							
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	4.7751
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.

Additional Information

Series M1000, 1200, 1300, 1900, 5200, 5300, 7300

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 or 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.

Nomenclature

Series M1000, 1200, 1300, 1900, 5200, 5300, 7300

Cylindrical Roller Bearing

Symbol	Description	M	A	1	2	05	GEA	X/W101/C0
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 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.

Cylindrical Roller Bearings

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

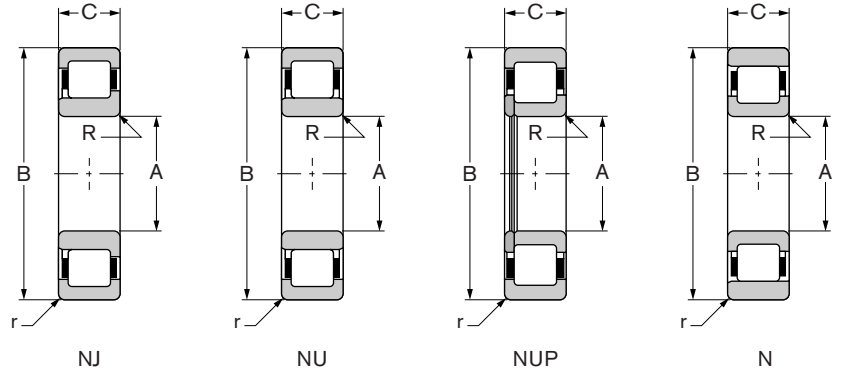
All bearings are made to ISO Normal (RBEC-1) tolerances or higher if specified.



Cylindrical Roller Bearings

Series N-EC

200E



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)

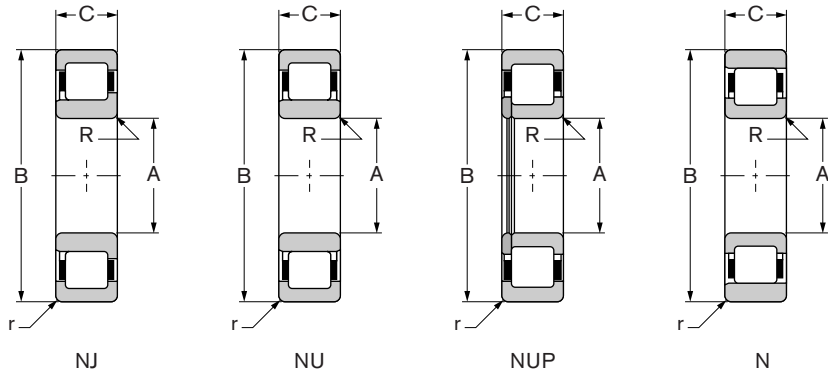
Static and dynamic capacities are calculated in accordance with ISO76 and ISO281.

▲Largest fillet radius that will clear bearing corners.

Cylindrical Roller Bearings

Series N-EC

300E



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	2	08	E	M	C3
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

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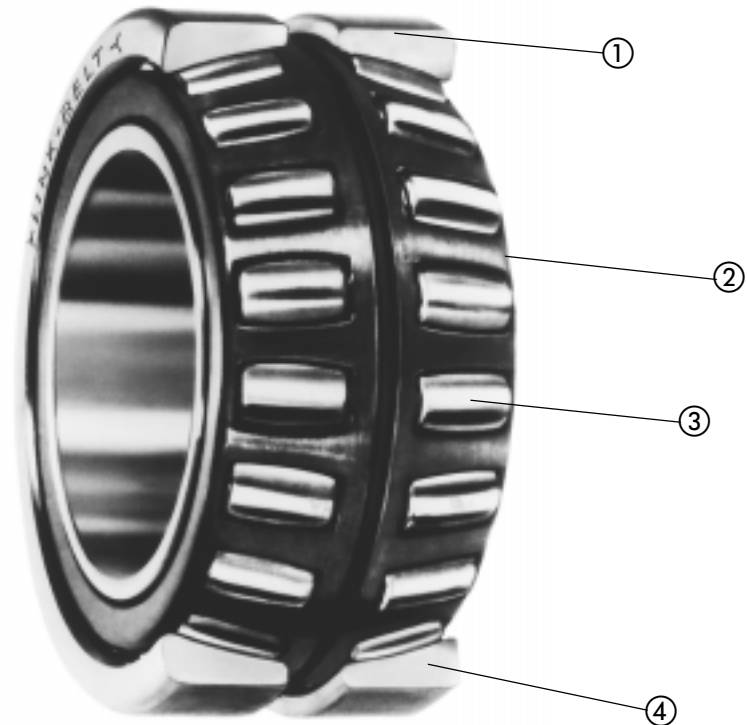
Series A20000

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A20000, A20000M	
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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 capaci-

ties.

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.



Selection

Series A2000S

A2000S 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.

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

Consult the bearing rating table to see if the selected bearings meet or exceed the required C in each case.

Selection Series 2000S

basic formulas:

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

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)
- L₁₀ = 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 L₁₀ 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 (pair of bearings)

To calculate the Rating Life L₁₀ 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 = X F_r + Y F_a

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

$$P = X_1 F_r + Y_1 F_a \quad \text{where} \quad \begin{cases} X_1 = 1.0 \\ Y_1 = 0 \end{cases}$$

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

$$P = X_2 F_r + Y_2 F_a$$

For values of e, X₂, and Y₂ 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, L₁₀, 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) % reliability,
a₁ = Life adjustment factor for reliability
a₂ = Life adjustment factor for material and processing
a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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 A2000S



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
	<i>kilograms</i>	pounds								
			<i>newtons</i>	pounds	<i>newtons</i>	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.

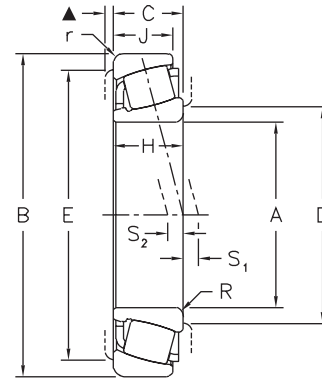
● For oil lubrication only. For grease lubrication, use 75% of these values.

Additional information, page H-15.

Spherical Roller Bearings

A2000S

Single Row
Adjustable
Self-aligning
Deep Coined Retainer
Double Contoured Roller Pocket



Dimensions (inches/mm)

Bearing number	A	B	C	D	E	H	J	R*	r*	S ₁	S ₂
	Bore diameter †	Outside diameter ●										Assembly width	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	3.0000 76.200	5.9045 149.974	1.109 28.17	4.00 101.6	5.34 135.6	1.236	.925	.140	.125	.0475	....
A23334S	3.3457 84.981					1.109 28.17	.925 23.50	.125 3.18	3.18	....
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 $\frac{3}{16}$ " (**4.8 mm**); minimum $\frac{1}{16}$ " (**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.

Selection

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 Manufactur-

ers 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:

$$P = F_r$$

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

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

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

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.

Selection

Series A2000, A2000M

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)
- L₁₀ = 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 L₁₀ 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 L₁₀ of any selected 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, X₁, Y₁, X₂, and Y₂, consult the appropriate bearing rating table, pages H-9 and H-10.

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

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

Step 3 Approximate the bearing life from Table 1.

Life Adjustment

The Rating Life, L₁₀, 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) % reliability,
a₁ = Life adjustment factor for reliability
a₂ = Life adjustment factor for material and processing
a₃ = 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, a₂ will be normally set equal to one. The factor a₃ covers such things as lubrication, misalignment, and temperature. Some conditions that could yield a₃ 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	F _{r1} /F _r ≤ e		F _{r1} /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	80	500	18100	60	900	13700	6200	.48	1.00	1.40	.67	2.08
A22118	0.6	1.3												
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												
A22177M	0.9	2.0	127	700	28700	89	800	20200	4800	.45	1.00	1.51	.67	2.25
A22196	1.0	2.1												
A22196M	1.0	2.3												
A23196	1.4	3.1												
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												
A23200M	1.5	3.3												
A23225	1.3	2.8												
A23225M	1.3	2.9	197	500	44400	117	400	26400	4000	.40	1.00	1.68	.67	2.50
A24236	1.8	3.9												
A24236M	2.0	4.3												
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

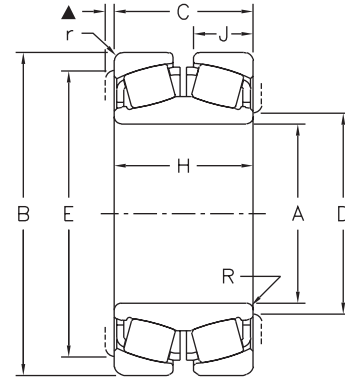
Bearing number	Weight		C ₀ Static load rating			C Basic load rating			Approximate speed limit RPM ●	e	F _r /F _r ≤ e		F _r /F _r > e	
	kilograms	pounds	newtons	pounds	newtons	pounds	newtons	pounds			X ₁	Y ₁	X ₂	Y ₂
A22262	1.9	4.2	272	700	61300	159	700	35900	3500	.37	1.00	1.81	.67	2.70
A23262	2.9	6.5	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	403	400	90700	226	800	51000	2650	.38	1.00	1.77	.67	2.64
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	516	000	116000	274	000	61600	2600	.43	1.00	1.57	.67	2.33
A22351M	5.1	11.3												
A22362	4.7	10.4	609	400	137000	351	800	79100	2200	.36	1.00	1.88	.67	2.79
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	790	200	178000	419	400	94300	2100	.38	1.00	1.80	.67	2.68
A22400M	8.8	19.3												
A22413	8.4	18.6	944	700	212000	520	400	117000	1800	.37	1.00	1.83	.67	2.72
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	B	C	D	E	H	J	R*	r*
	Bore diameter †	Outside diameter ●	Assembly width ‡	Shoulder diameter		Ring width		Fillet radius	
A22100	1.0000 25.400	2.3750 60.235	1.188 30.18	1.31 33.3	2.00 50.8	1.188 30.18	.491 12.47	.046 1.17	.046 1.17
A22112	1.1250 28.575								
A22118	1.1875 30.162								
A22125	1.2500 31.750	2.6250 66.675	1.312 33.32	1.50 38.1	2.31 58.7	1.312 33.32	.541 13.74	.046 1.17	.062 1.57
A22137	1.3775 34.988	2.8345 71.996	1.310 33.27	1.68 42.7	2.50 63.5	1.310 33.27	.546 13.87	.046 1.17	.062 1.57
A22150	1.5000 38.100								
A22177	1.7712 44.988								
A22196	1.9680 49.987	3.5433 90.000	1.526 38.76	2.25 57.2	3.18 80.8	1.526 38.76	.651 16.54	.062 1.57	.078 1.98
A23196	1.9680 49.987	3.9370 100.000	1.656 42.06	2.25 57.2	3.50 88.9	1.656 42.06	.624 15.85	.093 2.36	.062 1.57
A24196	1.9680 49.987	4.3299 109.979	2.062 52.37	2.18 55.4	3.83 97.3	2.062 52.37	.836 21.23	.062 1.57	.080 2.03
A23200	2.0000 50.800	3.9370 100.000	1.656 42.06	2.50 63.5	3.50 88.9	1.656 42.06	.693 17.60	.093 2.36	.062 1.57
A23225	2.2500 57.150								
A24236	2.3616 59.985								
	4.3307 110.000	1.750 44.45	2.68 68.1	3.87 98.3	1.750 44.45	.763 19.38	.062 1.57	.078 1.98	

See facing page for footnotes.

Dimensions (inches/*mm*)

Bearing number	A	B	C	D	E	H	J	R★	r★
	Bore diameter †	Outside diameter ●	Assembly width ‡	Shoulder diameter		Inner	Outer	Inner	Outer
									Fillet radius
A22262	2.6250 66.675	4.4677 113.480	1.716 43.59	3.00 76.2	4.07 103.4	1.716 43.59	.690 17.53	.140 3.56	.062 1.57
A23262	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
A23275	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
A22275	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
A22295	2.9522 74.986								
A23334	3.3457 84.981								
A22343	3.4375 87.312	6.0000 152.400	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
A22351	3.5100 89.154								
A22362	3.6250 92.075								
A24374	3.7402 95.001								
A22354	3.5425 89.980	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
A22400	4.0000 101.600								
A22413	4.1331 104.981								
A23472	4.7236 119.979								
	8.4634 214.970	3.437 87.30	5.37 136.4	7.50 190.5	3.437 87.30	1.511 38.38	.125 3.18	.125 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.

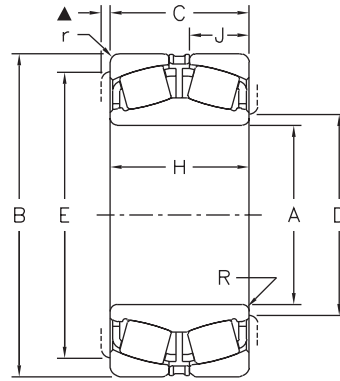
Load Ratings, pages H-9, H-10.

Additional information, page H-15.

Spherical Roller Bearings

A2000M

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 60.235	1.188 30.18	1.31 33.3	2.00 50.8	1.188 30.18	.491 12.47	.046 1.17	.046 1.17
A22112M	1.1250 28.575								
A22118M	1.1875 30.162								
A22125M	1.2500 31.750	2.6250 66.675	1.312 33.32	1.50 38.1	2.31 58.7	1.312 33.32	.541 13.74	.046 1.17	.062 1.57
A22137M	1.3775 34.988								
A22150M	1.5000 38.100								
A22177M	1.7712 44.988	3.3464 85.000	1.578 40.08	2.00 50.8	2.87 72.9	1.578 40.08	.651 16.54	.080 2.03	.062 1.57
A22196M	1.9680 49.987								
A23196M	1.9680 49.987								
A24196M	1.9680 49.987	4.3299 109.979	2.062 52.37	2.18 55.4	3.83 97.3	2.062 52.37	.836 21.23	.062 1.57	.080 2.03
A23200M	2.0000 50.800								
A23225M	2.2500 57.150								
A24236M	2.3616 59.985	3.9370 100.000	1.656 42.06	2.50 63.5	3.50 88.9	1.656 42.06	.693 17.60	.093 2.36	.062 1.57
A23236M	2.3616 59.985								
A24236M	2.3616 59.985								

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								
A23334M	3.3457 84.981								
A22343M	3.4375 87.312	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
A22351M	3.5100 89.154								
A22362M	3.6250 92.075								
A22354M	3.5425 89.980	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
A22400M	4.0000 101.600								
A22413M	4.1331 104.981								

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

▲ Housing recess: Recommended $\frac{3}{16}$ " (**4.8 mm**); minimum $\frac{1}{16}$ " (**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.

Additional Information

Series A2000S, A20000, A20000M

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. - .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, mount-

ing, 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 A2000S, A20000, A20000M

Spherical Roller Bearings

Symbol	Description	A	22	196	M	C0	C40
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						

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
Pictorial Index	I-3
Selection	I-5
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Replacement Bearings	I-17
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Series 3200

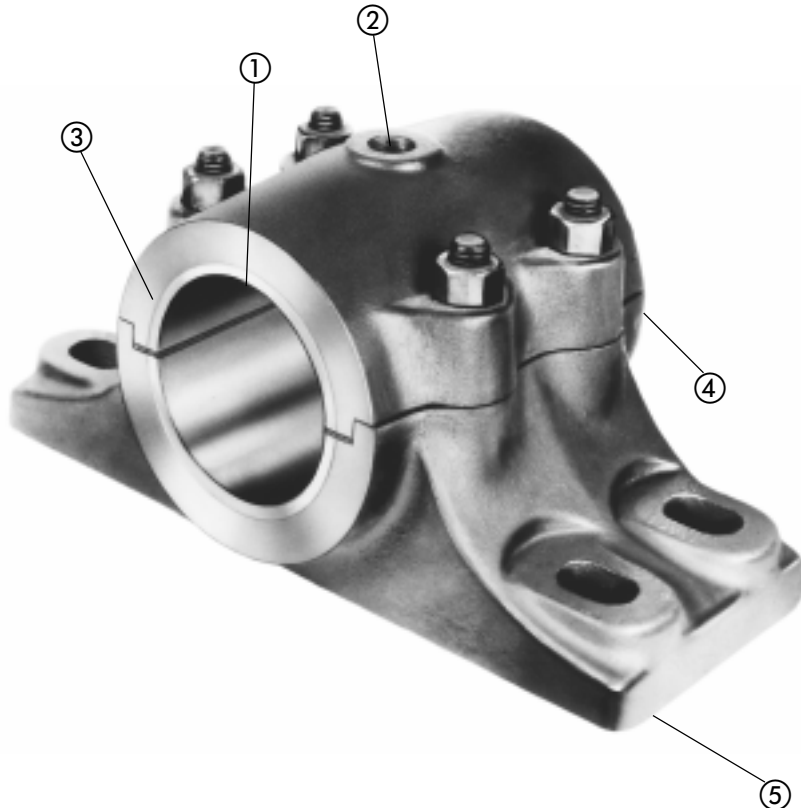
Flex-block® Sleeve Bearing Units

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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 stokers, 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.

Rigid Sleeve Bearing Units

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 $\frac{1}{2}$ " through $3\frac{15}{16}$ ". Series 1100 has a plain cast iron bore and 2 or 4-bolt base for shaft sizes $\frac{1}{2}$ " through $3\frac{15}{16}$ ".

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 $\frac{7}{8}$ " through $3\frac{15}{16}$ ". Series 2-1300 babbitt bearing pillow blocks have 4-bolt base for shaft sizes $3\frac{7}{16}$ " through $4\frac{7}{16}$ ".

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 $1\frac{15}{16}$ " through 10". Series 2-1400Z bronze bearing pillow blocks have 4-bolt base for shaft sizes $1\frac{15}{16}$ " through 8", also available with cast steel housings for shaft sizes $1\frac{15}{16}$ " 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 $1\frac{15}{16}$ " through 9". Series 2-1500Z bronze bearing pillow blocks have 4-bolt base for shaft sizes $1\frac{15}{16}$ " 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 $\frac{3}{4}$ " through $3\frac{15}{16}$ ".

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 $1\frac{15}{16}$ " through $3\frac{15}{16}$ ". 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.



Selection

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

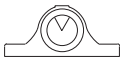




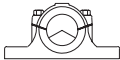



Refer to the radial load rating tables on pages I-7 and I-8 to determine the shaft diameter necessary to obtain the required radial rating at the given speed.

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					
Bearing	Housing			Pillow block	4-bolt	Flanged Unit Square			
Cast iron one-piece		300° 5.2 rad	1/2-2 ¹⁵ / ₁₆	1000					
			3/4-3 ¹⁵ / ₁₆	F2200					
			3 ⁷ / ₁₆ -3 ¹⁵ / ₁₆	1000F					
Babbitt		120° 2.1 rad	7/8-3 ¹⁵ / ₁₆	2-1200					
			3 ⁷ / ₁₆ -4 ¹⁵ / ₁₆	2-1300					
			Cast iron two-piece		300° 5.2 rad	1 ¹⁵ / ₁₆ -12	2-1400		
	1 ¹⁵ / ₁₆ -9	2-1500							
Cast iron one-piece		300° 5.2 rad	1/2-2 ¹⁵ / ₁₆	1000Z					
			3/4-3 ¹⁵ / ₁₆	F2200Z					
			3 ⁷ / ₁₆ -3 ¹⁵ / ₁₆	1000FZ					
Bronze		120° 2.1 rad	7/8-3 ¹⁵ / ₁₆	2-1200Z					
			Cast iron two-piece		300° 5.2 rad	3 ⁷ / ₁₆ -8	2-1400Z		
							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.

Selection, Additional Information

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:

<i>Shaft Diameters</i>	<i>Recommended Tolerance</i>
through 2"	Nominal to $-.003$ "
2 $\frac{1}{16}$ " through 4"	Nominal to $-.004$ "
4 $\frac{1}{16}$ " through 6"	Nominal to $-.005$ "
6 $\frac{1}{16}$ " 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 engi-

neering 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.

Load Ratings

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							
1/2	100	445	100	445	100	445	95	423	95	423	95	423	95	423
5/8	150	667	150	667	145	645	145	645	140	623	140	623	135	600
3/4	180	801	175	778	175	778	170	756	170	756	165	734	160	712
7/8	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
1 1/8	415	1 846	410	1 824	400	1 779	390	1 735	380	1 690	370	1 646	355	1 579
1 3/16, 1 1/4	440	1 957	430	1 913	420	1 868	410	1 824	395	1 757	385	1 713	375	1 668
1 5/16, 1 3/8	585	2 602	570	2 535	555	2 469	535	2 380	520	2 313	505	2 246	485	2 157
1 7/16, 1 1/2	640	2 847	625	2 780	605	2 691	585	2 602	565	2 513	545	2 424	525	2 335
1 11/16, 1 3/4	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, 2 1/4	1460	6 490	1400	6 230	1330	5 920	1260	5 600	1190	5 290	1120	4 980	1050	4 670
2 7/16, 2 1/2	1800	8 010	1730	7 690	1630	7 250	1530	6 810	1430	6 360	1340	5 960	1240	5 520
2 11/16, 2 3/4	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, 3 1/2	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, 4 1/2	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, 5 1/2	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, 6 1/2	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, 7 1/2	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							
1/2	95	423	90	400	90	400	85	378	85	378	85	378	80	356	80	356
5/8	135	600	135	600	130	587	125	556	120	534	115	512	110	489	110	489
3/4	160	712	155	689	155	689	145	645	140	623	130	578	125	556	120	534
7/8	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				
1 1/8	345	1535	335	1490	325	1446	315	1401	295	1312	245	1090				
1 3/16, 1 1/4	360	1601	350	1557	340	1512	325	1446	305	1357	190	845				
1 5/16, 1 3/8	470	2091	455	2024	435	1935	420	1868	345	1535						
1 7/16, 1 1/2	500	2224	480	2135	460	2046	440	1957	205	912						
1 11/16, 1 3/4	655	2914	625	2780	590	2624	340	1512								
1 15/16, 2	815	3625	730	3247	335	1490										
2 3/16, 2 1/4	975	4337	410	1824												
2 7/16, 2 1/2	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.

Load Ratings

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					
1/2	200	890	200	890	200	890	195	867	195	867	195	867
5/8	250	1 112	250	1 112	245	1 090	245	1 090	240	1 090	240	1 068
3/4	300	1 334	300	1 334	295	1 312	295	1 312	290	1 290	285	1 268
7/8	435	1 935	430	1 913	425	1 890	420	1 868	415	1 846	410	1 824
15/16	465	2 068	460	2 046	455	2 024	450	2 002	445	1 979	435	1 935
1	495	2 202	490	2 180	485	2 157	480	2 135	470	2 091	465	2 068
1 1/8	700	3 114	690	3 069	680	3 025	670	2 980	660	2 936	650	2 891
1 3/16, 1 1/4	735	3 269	730	3 247	715	3 180	705	3 136	695	3 092	680	3 025
1 5/16, 1 3/8	980	4 359	965	4 293	950	4 226	930	4 137	915	4 070	895	3 981
1 7/16, 1 1/2	1070	4 760	1050	4 670	1030	4 580	1010	4 490	995	4 426	975	4 337
1 11/16, 1 3/4	1470	6 540	1440	6 410	1410	6 270	1370	6 090	1340	5 960	1310	5 830
1 15/16, 2	1920	8 540	1880	8 360	1830	8 140	1790	7 960	1740	7 740	1690	7 520
2 3/16, 2 1/4	2440	10 850	2390	10 630	2320	10 320	2240	9 960	2170	9 650	2100	9 340
2 7/16, 2 1/2	3020	13 430	2940	13 080	2850	12 680	2750	12 230	2650	11 790	2560	11 390
2 11/16, 2 3/4	3660	16 280	3560	15 840	3430	15 260	3300	14 680	3170	14 100	3040	13 520
2 15/16, 3	4370	19 440	4230	18 820	4060	18 060	3890	17 300	3720	16 550	3550	15 790
3 1/16, 3 1/2	5960	26 510	5740	25 530	5470	24 330	5200	23 130	4930	21 930	3610	16 060
3 15/16, 4	7790	34 650	7460	33 180	7060	31 400	6650	29 580	5910	26 290		
4 7/16, 4 1/2	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, 5 1/2	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, 6 1/2	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, 7 1/2	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)

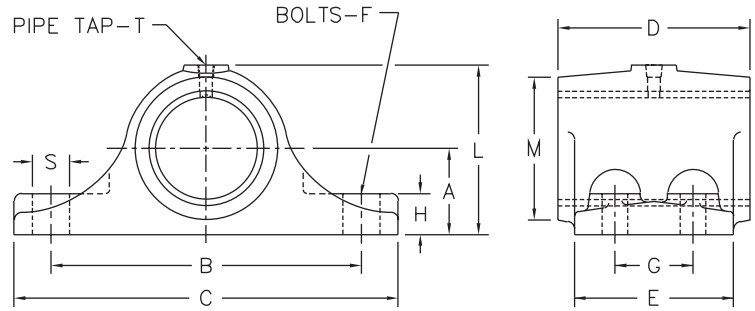
Shaft diameter, inches	Shaft speed, RPM											
	350	400	450	500	600	700	800	900	1000			
1/2	195	867	190	845	190	845	185	823	185	823	180	800
5/8	235	1045	235	1045	235	1045	225	1001	220	979	220	979
3/4	280	1246	280	1246	275	1223	270	1201	265	1179	260	1157
7/8	400	1779	395	1757	390	1735	385	1713	375	1668	365	1624
15/16	425	1890	420	1868	415	1846	410	1824	395	1757	385	1713
1	450	2002	445	1979	440	1957	430	1913	420	1868	405	1802
1 1/8	630	2802	620	2758	605	2691	595	2647	575	2558	525	2335
1 3/16, 1 1/4	660	2936	645	2869	635	2825	625	2780	600	2669	485	2157
1 5/16, 1 3/8	865	3848	845	3759	830	3692	815	3625	735	3269	465	2068
1 7/16, 1 1/2	935	4159	915	4070	895	3981	875	3892	635	2825	315	1401
1 11/16, 1 3/4	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, 2 1/4	1960	8720	1390	6180	830	3692						
2 7/16, 2 1/2	1860	8270	1090	4850								
2 11/16, 2 3/4	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		A	B	C	D	E	F Bolts	G	H	L	M	S	T	Unit wt. (lbs.)
		Series 1000 babbitt	Series 1000Z bronze													
2-BOLT	1/2	1008	1008Z	3/4 19.05	2 3/8 60.3	3 1/4 82.6	1 3/8 34.9	1 25.4	5/16 8	...	3/8 9.5	1 1/2 38.1	1 3/16 30.2	1/2 12.7	1/8 .8	
	3/8	1010	1010Z	7/8 22.22	3 76.2	4 1/4 108.0	2 50.8	1 3/8 34.9	3/8 10	...	1/2 12.7	1 3/4 44.4	1 1/2 38.1	5/8 15.9	1/8 1.6	1.5
		1012	1012Z													
	7/8	1014	1014Z	1 25.40	3 1/4 82.6	4 1/2 114.3	2 50.8	1 3/8 34.9	3/8 10	...	1/2 12.7	1 31/32 50.0	1 3/4 44.4	5/8 15.9	1/8 1.6	1.9
		1015	1015Z													
		1016	1016Z													
	1 1/8	1018	1018Z	1 1/4 31.75	4 101.6	5 1/4 133.4	2 1/2 63.5	1 5/8 41.3	3/8 10	...	5/8 15.9	2 3/8 60.3	2 50.8	5/8 15.9	1/8 2.6	2.5
		1019	1019Z													
		1020	1020Z													
	1 3/8	1022	1022Z	1 3/8 34.92	5 127.0	6 3/4 171.4	3 76.2	2 50.8	1/2 12	...	3/4 19.0	2 11/16 68.3	2 3/8 60.3	1 3/16 20.6	1/4 4.5	4.3
		1023	1023Z													
		1024	1024Z													
	1 11/16	1027	1027Z	1 5/8 41.28	5 1/2 139.7	7 1/4 184.2	3 1/2 88.9	2 1/4 57.2	1/2 12	...	3/4 19.0	3 3/16 81.0	2 3/4 69.8	7/8 22.2	1/4 6.0	5.7
		1028	1028Z													
	1 15/16	1031	1031Z	1 3/4 44.45	6 152.4	8 203.2	4 101.6	2 3/4 69.8	5/8 16	...	7/8 22.2	3 1/2 88.9	3 3/8 79.4	1 25.4	1/4 8.5	8.3
1032		1032Z														
2	1035	1035Z	2 50.80	6 1/2 165.1	8 1/2 215.9	4 1/2 114.3	3 76.2	5/8 16	...	1 25.4	3 7/8 98.4	3 3/8 85.7	1 25.4	3/8 11.0		
2 7/16	1039	1039Z	2 1/4 57.15	7 177.8	9 1/4 235.0	5 127.0	3 1/4 82.6	3/4 20	...	1 1/8 28.6	4 3/8 111.1	3 3/4 95.2	1 1/8 28.6	3/8 15.0		
2 15/16	1047	1047Z	2 1/2 63.50	8 1/2 215.9	11 1/4 285.8	6 152.4	4 101.6	7/8 24	...	1 1/4 31.8	5 127.0	4 1/2 114.3	1 3/8 34.9	3/8 26.0	25.0	
4-BOLT	3 7/16	1055F	1055FZ	3 76.20	10 254.0	12 1/2 317.5	7 177.8	5 127.0	3/4 20	2 3/4 69.8	1 3/8 34.9	6 152.4	5 1/4 133.4	1 1/4 31.8	1/2 39	
	3 15/16	1063F	1063FZ	3 1/4 82.55	11 279.4	13 3/4 349.2	8 203.2	5 1/2 139.7	3/4 20	3 76.2	1 1/2 38.1	6 9/16 166.7	5 7/8 149.2	1 3/8 34.9	1/2 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.

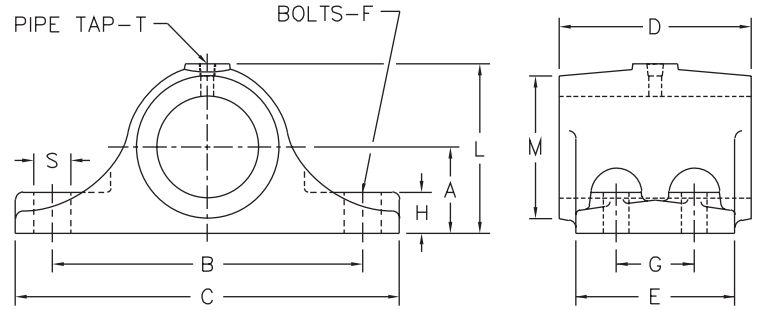
Selection guide, pages I-5, I-6.

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	3/4	1112	3/4 19.05	23/8 60.3	31/4 82.6	13/8 34.9	1 25.4	5/16 8	...	3/8 9.5	11/2 38.1	13/16 30.2	1/2 12.7	1/8	.6
		1114	7/8 22.22	3 76.2	41/4 108.0	2 50.8	13/8 34.9	3/8 10	...	1/2 12.7	13/4 44.4	11/2 38.1	5/8 15.9	1/8	1.4
		1115 1116	19/16 22.22	1 25.40	41/4 108.0	2 50.8	13/8 34.9	3/8 10	...	1/2 12.7	13/4 44.4	11/2 38.1	5/8 15.9	1/8	1.3
	13/16	1118	1 25.40	33/4 82.6	41/2 114.3	2 50.8	13/8 34.9	3/8 10	...	1/2 12.7	131/32 50.0	13/4 44.4	5/8 15.9	1/8	1.6
		1119	13/16 25.40	4 101.6	51/4 133.4	21/2 63.5	15/8 41.3	3/8 10	...	3/8 15.9	23/8 60.3	2 50.8	5/8 15.9	1/8	1.5
		1120	11/4 25.40	5 127.0	63/4 171.4	3 76.2	2 50.8	1/2 12	...	3/4 19.0	211/16 68.3	23/8 60.3	13/16 20.6	1/4	1.4
	17/16	1123	11/4 31.75	6 152.4	8 203.2	4 101.6	23/4 69.8	5/8 16	...	7/8 22.2	31/2 88.9	31/8 79.4	1 25.4	3/8	2.1
		1124	11/2 31.75	61/2 165.1	81/2 215.9	41/2 114.3	3 76.2	3/8 16	...	1 25.4	37/8 98.4	33/8 85.7	1 25.4	3/8	2.0
		1127	111/16 34.92	7 177.8	91/4 235.0	5 127.0	31/4 82.6	3/4 20	...	1 28.6	43/8 111.1	33/4 95.2	11/8 28.6	3/8	3.5
	115/16	1128	13/4 34.92	81/2 215.9	111/4 285.8	6 152.4	4 101.6	7/8 24	...	11/4 31.8	5 127.0	41/2 114.3	13/8 34.9	1/2	3.4
		1131	115/16 41.28	9 228.6	11 279.4	7 177.8	5 127.0	7/8 24	...	11/4 31.8	5 127.0	41/2 114.3	13/8 34.9	1/4	5.0
		1132	2 41.28	10 254.0	121/2 317.5	7 177.8	5 127.0	3/4 20	23/4 69.8	13/8 34.9	6 152.4	51/4 133.4	11/4 31.8	1/2	4.9
	23/16	1135	23/16 44.45	10 254.0	121/2 317.5	7 177.8	5 127.0	3/4 20	23/4 69.8	13/8 34.9	6 152.4	51/4 133.4	11/4 31.8	1/2	6.8
		1139	27/16 50.80	11 279.4	13 330.2	8 203.2	6 152.4	7/8 24	...	11/4 31.8	6 152.4	51/4 133.4	11/4 31.8	1/2	9.0
		1143	211/16 57.15	12 304.8	14 355.6	9 228.6	7 177.8	7/8 24	...	11/4 31.8	6 152.4	51/4 133.4	11/4 31.8	1/2	12.0
1147		215/16 57.15	13 330.2	15 381.0	10 254.0	8 203.2	7/8 24	...	11/4 31.8	6 152.4	51/4 133.4	11/4 31.8	1/2	11.0	
1155		37/16 63.50	14 355.6	17 431.8	11 279.4	9 228.6	7/8 24	...	11/4 31.8	6 152.4	51/4 133.4	11/4 31.8	1/2	19	
4-BOLT	315/16	1163F	3 76.20	10 254.0	121/2 317.5	7 177.8	5 127.0	3/4 20	23/4 69.8	13/8 34.9	6 152.4	51/4 133.4	11/4 31.8	1/2	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 babbit ratings, page I-7.

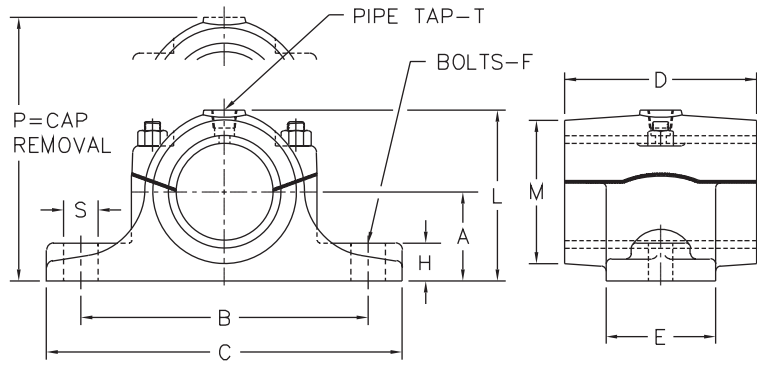
Selection guide, pages I-5, I-6.

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 Δ number		A	B	C	D	E	F Bolts	H	L	M	P	S	T	Unit wt. (lbs.)
	Series 2-1200 babbitt	Series 2-1200Z bronze													
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													1.8
1	2-1216	2-1216Z													1.7
1 1/16	2-1217	2-1217Z	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	2.6
1 1/8	2-1218	2-1218Z													2.5
1 3/16	2-1219	2-1219Z													2.4
1 1/4	2-1220	2-1220Z													2.3
1 5/16	2-1221	2-1221Z	1 3/8	4 7/8	6 1/4	3	2	1/2	3/4	2 11/16	2 5/16	3 7/8	1 1/16	1/4	4.1
1 3/8	2-1222	2-1222Z													4.0
1 7/16	2-1223	2-1223Z													4.0
1 1/2	2-1224	2-1224Z													3.8
1 9/16	2-1225	2-1225Z	1 1/2	5 1/4	6 3/4	3 1/2	2 1/4	1/2	1 3/16	3	2 11/16	4 3/8	3/4	1/4	6.8
1 3/8	2-1226	2-1226Z													6.4
1 11/16	2-1227	2-1227Z													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													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													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													13.0
2 11/16	2-1243	2-1243Z	2 1/4	7 3/4	10	5 1/2	3 3/4	3/4	1 3/16	4 1/2	4	6 3/8	1 1/8	3/8	19.0
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													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
3 15/16	2-1263	2-1263Z	3 3/8	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

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.

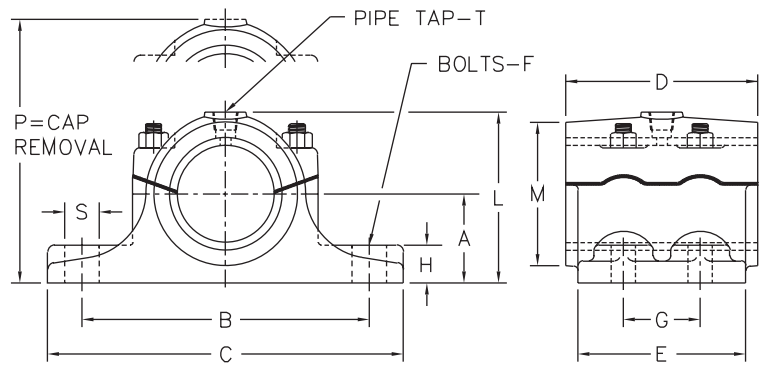
Load ratings, pages I-7, I-8.

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	3 ³ / ₄ 82.55	10 ¹ / ₂ 266.7	13 330.2	7 177.8	5 127.0	3 ³ / ₄ 20	2 ³ / ₄ 69.8	1 ³ / ₈ 34.9	6 ¹ / ₄ 158.8	5 ¹ / ₄ 133.4	8 ¹ / ₈ 206.4	1 ¹ / ₄ 31.8	1/2	43
	3 ¹⁵ / ₁₆	2-1363	3 ¹ / ₂ 88.90	12 304.8	14 ³ / ₄ 374.6	8 203.2	5 ¹ / ₂ 139.7	3 ³ / ₄ 20	3 76.2	1 ¹ / ₂ 38.1	6 ¹³ / ₁₆ 157.2	5 ⁷ / ₈ 149.2	9 ³ / ₈ 238.1	1 ³ / ₈ 34.9	1/2	61
	4 ⁷ / ₁₆	2-1371	4 ¹ / ₈ 104.77	13 ¹ / ₂ 342.9	16 ¹ / ₂ 419.1	9 228.6	6 ¹ / ₄ 158.8	7 ⁷ / ₈ 24	3 ¹ / ₂ 88.9	1 ³ / ₄ 44.4	7 ⁷ / ₈ 200.0	6 ⁵ / ₈ 168.3	10 ³ / ₈ 263.5	1 ¹ / ₂ 38.1	1/2	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.

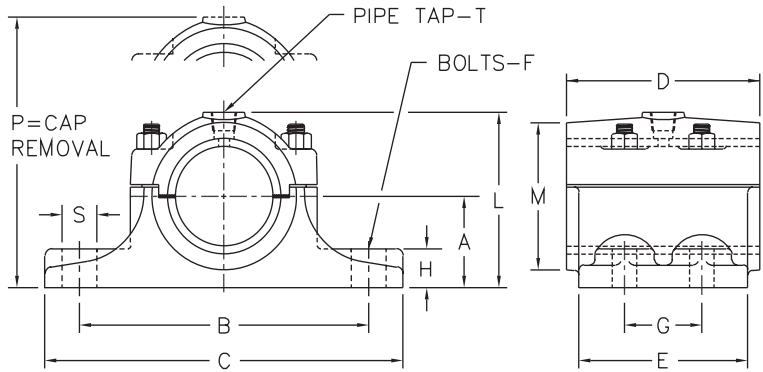
Load ratings, pages I-7, I-8.

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 Δ			A	B	C	D	E	F	G	H	L	M	P	S	T	Unit wt. (lbs.)	
		Cast Iron		Cast steel														Cast iron	Cast steel
		Series 2-1400 babbitt	Series 2-1400Z bronze	Series 2K1400Z bronze															
2-BOLT	1 ¹⁵ / ₁₆	2-1431	2-1431Z	2K1431Z	1 ³ / ₄ 44.45	6 ¹ / ₂ 165.1	8 ¹ / ₄ 209.6	4 101.6	3 ¹ / ₂ 88.9	1/2 12	1 ¹ / ₄ 44.4	7/8 22.2	3 ³ / ₁₆ 87.3	3 76.2	4 ¹ / ₂ 114.3	3/4 19.0	1/4	10.0	11.0
	2 ³ / ₁₆	2-1435	2-1435Z	2K1435Z	1 ⁷ / ₈ 47.62	6 ³ / ₄ 171.4	8 ¹ / ₂ 215.9	4 ¹ / ₂ 114.3	3 ¹ / ₂ 88.9	1/2 12	1 ¹ / ₄ 44.4	1 25.4	3 ³ / ₄ 95.2	3 ³ / ₈ 85.7	4 ¹⁹ / ₁₆ 125.4	3/4 19.0	3/8	14.0	15.0
	2 ⁷ / ₁₆	2-1439	2-1439Z	2K1439Z	2 ¹ / ₈ 53.98	8 203.2	10 ¹ / ₄ 260.4	5 127.0	4 101.6	5/8 16	2 50.8	1 ¹ / ₈ 28.6	4 ³ / ₁₆ 106.4	3 ³ / ₄ 95.2	5 ⁵ / ₈ 136.5	1 25.4	3/8	19.0	21.0
	2 ¹ / ₁₆	2-1443	2-1443Z	2K1443Z	2 ¹ / ₄ 57.15	8 ¹ / ₄ 209.6	10 ¹ / ₂ 266.7	5 ¹ / ₂ 139.7	4 ¹ / ₄ 108.0	5/8 16	2 ¹ / ₄ 57.2	1 ¹ / ₄ 31.8	4 ¹ / ₂ 114.3	4 101.6	6 152.4	1 25.4	3/8	25.0	28.3
	2 ¹⁵ / ₁₆	2-1447	2-1447Z	2K1447Z	2 ¹ / ₂ 63.50	8 ³ / ₄ 222.2	11 279.4	6 152.4	4 ¹ / ₂ 114.3	5/8 16	2 ¹ / ₂ 63.5	1 ³ / ₈ 34.9	4 ⁷ / ₈ 123.8	4 ¹ / ₄ 108.0	6 ⁷ / ₈ 174.6	1 25.4	3/8	30	34
	3 ¹ / ₁₆	2-1455	2-1455Z	2K1455Z	3 ¹ / ₄ 82.55	10 ¹ / ₂ 266.7	13 330.2	7 177.8	5 127.0	3/4 20	2 ³ / ₄ 69.8	1 ³ / ₈ 34.9	6 ¹ / ₄ 158.8	5 ¹ / ₄ 133.4	8 ³ / ₃₂ 210.3	1 ¹ / ₄ 31.8	1/2	43	49
	3 ¹⁵ / ₁₆	2-1463	2-1463Z	2K1463Z	3 ¹ / ₂ 88.90	12 304.8	14 ³ / ₄ 374.6	8 203.2	5 ¹ / ₂ 139.7	3/4 20	3 76.2	1 ¹ / ₂ 38.1	6 ¹ / ₁₆ 173.0	5 ⁷ / ₈ 149.2	9 ¹ / ₁₆ 249.2	1 ³ / ₈ 34.9	1/2	61	69
	4 ¹ / ₁₆	2-1471	2-1471Z	2K1471Z	4 ¹ / ₈ 104.78	13 ¹ / ₂ 342.9	16 ¹ / ₂ 419.1	9 228.6	6 ¹ / ₄ 158.8	7/8 24	3 ¹ / ₂ 88.9	1 ³ / ₄ 44.4	7 ⁷ / ₈ 200.0	6 ⁵ / ₈ 168.3	10 ¹ / ₄ 260.4	1 ¹ / ₂ 38.1	1/2	92	104
	4 ¹⁵ / ₁₆	2-1479	2-1479Z	2K1479Z	4 ¹ / ₂ 114.30	15 381.0	18 457.2	10 254.0	7 177.8	7/8 24	4 101.6	1 ⁷ / ₈ 47.6	8 ⁹ / ₁₆ 217.5	7 ¹ / ₄ 184.2	11 ¹ / ₁₆ 284.2	1 ⁵ / ₈ 41.3	1/2	119	134
	5 ⁷ / ₁₆	2-1487	2-1487Z	2K1487Z	5 127.00	15 ³ / ₄ 400.0	19 ¹ / ₄ 489.0	11 479.4	7 ³ / ₄ 196.8	1 24	4 ¹ / ₂ 114.3	2 50.8	9 ³ / ₈ 238.1	7 ⁷ / ₈ 200.0	12 ¹ / ₄ 311.2	1 ³ / ₄ 44.4	1/2	166	187
5 ¹⁵ / ₁₆	2-1495	2-1495Z	2K1495Z	5 ¹ / ₂ 139.70	16 ¹ / ₂ 419.1	20 ¹ / ₂ 520.7	12 304.8	8 ¹ / ₂ 215.9	1 ¹ / ₈ 30	5 127.0	2 ¹ / ₈ 54.0	10 ¹ / ₄ 260.4	8 ¹ / ₂ 215.9	13 ³ / ₈ 352.4	1 ⁷ / ₈ 47.6	1/2	198	213	
4-BOLT	6 ⁷ / ₁₆ *	2-14103	2-14103Z	2K14103Z	6 152.40	18 457.2	22 558.8	13 330.2	9 ¹ / ₂ 241.3	1 ¹ / ₈ 30	5 ¹ / ₂ 139.7	2 ¹ / ₄ 57.2	11 279.4	9 ³ / ₈ 231.8	15 ¹ / ₈ 384.2	1 ⁷ / ₈ 47.6	1/2	260	294
	6 ¹ / ₂ *	2-14104	2-14104Z	2K14104Z															
	7	2-14112	2-14112Z	2K14112Z	6 ¹ / ₂ 165.10	19 482.6	23 584.2	14 355.6	10 254.0	1 ¹ / ₄ 30	6 152.4	2 ³ / ₈ 60.3	11 ³ / ₄ 298.4	9 ³ / ₄ 247.6	15 ⁷ / ₈ 403.2	2 50.8	1/2	311	350
	7 ¹ / ₂ *	2-14120	2-14120Z	2K14120Z	7 177.80	21 ¹ / ₂ 546.1	26 660.4	16 406.4	11 279.4	1 ³ / ₈ 171.4	6 ³ / ₄ 63.5	2 ¹ / ₂ 63.5	13 ³ / ₁₆ 338.1	11 ³ / ₈ 288.9	17 ¹ / ₈ 454.0	2 ¹ / ₄ 57.2	1/2	459	525
	8*	2-14128	2-14128Z	2K14128Z															
	9*	.....	.....	2K14144Z	8 203.20	23 584.2	29 736.6	16 406.4	10 ¹ / ₂ 266.7	1 ¹ / ₂ 36	6 152.4	2 ³ / ₄ 69.8	14 ⁷ / ₈ 377.8	12 ¹ / ₂ 317.5	20 ³ / ₈ 517.5	2 ³ / ₄ 69.8	1/2	482	530
	10*	.....	.....	2K14160Z	9 228.60	25 635.0	31 787.4	16 406.4	10 ¹ / ₂ 266.7	1 ³ / ₄ 48	6 152.4	3 76.2	16 ⁷ / ₈ 428.6	14 355.6	22 ⁷ / ₈ 581.0	3 76.2	1/2	592	650
	12*	.....	.....	2K14192Z	11 279.40	29 736.6	36 914.4	18 457.2	12 ¹ / ₂ 317.5	2 48	7 ¹ / ₂ 190.5	3 ¹ / ₂ 88.9	20 508.0	16 406.4	27 685.8	3 ¹ / ₂ 88.9	1/2	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.

Δ LHD sliding base takeup can be drilled for 2-1400 pillow blocks, for shaft sizes thru 3¹⁵/₁₆ see page D-22, for shaft sizes 4⁷/₁₆ thru 5¹⁵/₁₆ 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

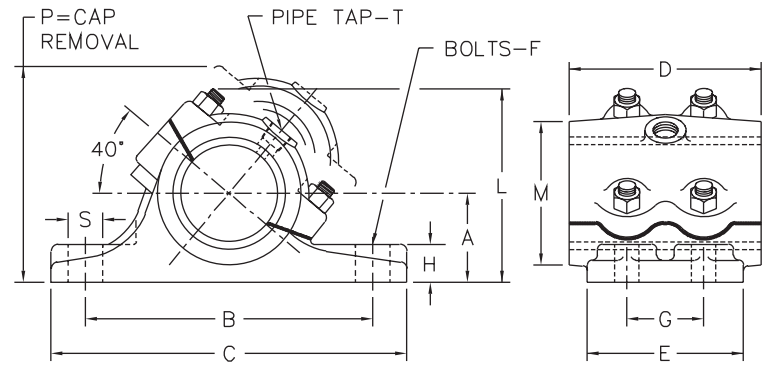
Cast Iron

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		A	B	C	D	E	F	G	H	L	M	P	S	T	Unit wt. (lbs.)
		Series 2-1500 babbitt	Series 2-1500Z bronze														
2-BOLT	1 ¹ / ₁₆	2-1531	2-1531Z	2 ¹ / ₄ 57.15	6 ¹ / ₂ 165.1	8 ¹ / ₄ 209.6	4 101.6	3 ¹ / ₂ 88.9	1/2 12	1 ³ / ₄ 44.4	7/8 22.2	4 ¹ / ₂ 114.3	3 76.2	5 ¹ / ₄ 133.4	3/4 19.0	1/4	10.0
	2 ³ / ₁₆	2-1535	2-1535Z	2 ¹ / ₂ 63.50	6 ³ / ₄ 171.4	8 ¹ / ₂ 215.9	4 ¹ / ₂ 114.3	3 ¹ / ₂ 88.9	1/2 12	1 ³ / ₄ 44.4	1 25.4	4 ⁷ / ₈ 123.8	3 ³ / ₈ 85.7	5 ³ / ₄ 146.0	3/4 19.0	3/8	14.0
	2 ⁷ / ₁₆	2-1539	2-1539Z	2 ³ / ₄ 69.85	8 203.2	10 ¹ / ₄ 260.4	5 127.0	4 101.6	5/8 16	2 50.8	1 ¹ / ₈ 28.6	5 ⁵ / ₁₆ 134.9	3 ³ / ₄ 95.2	6 ¹ / ₈ 155.6	1 25.4	3/8	17.0
	2 ¹ / ₁₆	2-1543	2-1543Z	3 76.20	8 ¹ / ₄ 209.6	10 ¹ / ₂ 266.7	5 ¹ / ₂ 139.7	4 ¹ / ₄ 108.0	3/4 16	2 ¹ / ₄ 57.2	1 ¹ / ₄ 31.8	6 152.4	4 101.6	7 177.8	1 25.4	3/8	27.0
	2 ¹ / ₁₆	2-1547	2-1547Z	3 ¹ / ₄ 82.55	8 ³ / ₄ 222.2	11 279.4	6 152.4	4 ¹ / ₂ 114.3	5/8 16	2 ¹ / ₂ 63.5	1 ³ / ₈ 34.9	6 ³ / ₈ 161.9	4 ¹ / ₄ 108.0	7 ¹ / ₂ 190.5	1 25.4	3/8	29.0
4-BOLT	3 ¹ / ₁₆	2-1555	2-1555Z	3 ¹ / ₂ 88.90	10 ¹ / ₂ 266.7	13 330.2	7 177.8	5 127.0	3/4 20	2 ³ / ₄ 69.8	1 ¹ / ₂ 38.1	7 ¹ / ₈ 181.0	5 ¹ / ₄ 133.4	9 228.6	1 ¹ / ₄ 31.8	1/2	43
	3 ¹ / ₁₆	2-1563	2-1563Z	3 ⁵ / ₈ 95.25	12 304.8	14 ³ / ₄ 374.6	8 203.2	5 ¹ / ₂ 139.7	3/4 20	1 ¹ / ₂ 76.2	1 ¹ / ₈ 41.3	8 ¹ / ₄ 209.6	5 ⁷ / ₈ 149.2	10 ¹ / ₄ 260.4	1 ³ / ₈ 34.9	1/2	60
	4 ¹ / ₁₆	2-1571	2-1571Z	4 ¹ / ₈ 104.78	13 ¹ / ₂ 342.9	16 ¹ / ₂ 419.1	9 228.6	6 ¹ / ₄ 158.8	7/8 24	3 ¹ / ₂ 88.9	1 ³ / ₄ 44.4	8 ⁷ / ₈ 225.4	6 ⁵ / ₈ 168.3	11 279.4	1 ¹ / ₂ 38.1	1/2	87
	4 ¹ / ₁₆	2-1579	2-1579Z	4 ¹ / ₂ 114.30	15 381.0	18 457.2	10 254.0	7 177.8	7/8 24	4 101.6	1 ⁷ / ₈ 47.6	9 ³ / ₄ 247.6	7 ¹ / ₄ 184.2	12 304.8	1 ⁵ / ₈ 41.3	1/2	119
	5 ¹ / ₁₆	2-1587	2-1587Z	5 127.00	15 ³ / ₄ 400.0	19 ³ / ₄ 501.6	11 479.4	8 203.2	1 24	4 ¹ / ₂ 114.3	2 50.8	10 ¹³ / ₁₆ 274.6	7 ⁷ / ₈ 200.0	13 ¹ / ₂ 342.9	1 ⁷ / ₈ 47.6	1/2	163
	5 ¹ / ₁₆ *	2-1595	2-1595Z	5 ¹ / ₂ 139.70	16 ¹ / ₂ 419.1	20 ¹ / ₂ 520.7	12 304.8	8 ¹ / ₂ 215.9	1 ¹ / ₈ 30	5 127.0	2 ¹ / ₈ 54.0	11 ²⁹ / ₃₂ 302.4	8 ¹ / ₂ 215.9	14 ⁵ / ₈ 371.5	1 ⁷ / ₈ 47.6	1/2	192
	6 ¹ / ₂ *	2-15104	2-15104Z	6 152.40	18 457.2	22 558.8	13 330.2	9 ¹ / ₂ 241.3	1 ¹ / ₈ 30	5 ¹ / ₂ 139.7	2 ¹ / ₄ 57.2	11 ³ / ₄ 298.4	9 ¹ / ₈ 231.8	14 ³ / ₄ 374.6	1 ⁷ / ₈ 47.6	1/2	255
	7*	2-15112	2-15112Z	6 ¹ / ₂ 165.10	19 482.6	23 584.2	14 355.6	10 254.0	1 ¹ / ₄ 30	6 152.4	2 ³ / ₈ 60.3	13 ¹¹ / ₁₆ 347.7	9 ³ / ₄ 247.6	16 ⁵ / ₈ 422.3	2 50.8	1/2	295
	8*	2-15128	2-15128Z	8 203.20	23 584.2	29 736.6	16 406.4	10 ¹ / ₂ 266.7	1 ¹ / ₂ 36	6 152.4	2 ³ / ₄ 69.8	16 ¹ / ₈ 409.6	12 ¹ / ₂ 317.5	22 558.8	2 ³ / ₄ 69.8	1/2	575
	9*	.....	.....	203.20	584.2	736.6	406.4	266.7	36	152.4	69.8	409.6	317.5	558.8	69.8		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.

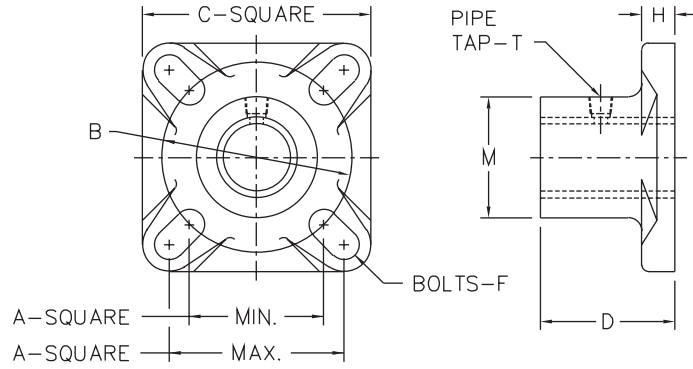
Load ratings, pages I-7, I-8.

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 inches	Flange unit number		A		B	C	D	F Bolts	H	M	T ■	Unit wt. (lbs.)
	Series F2200 babbitt	Series F2200Z bronze	Max.	Min.								
3/4	F2212	F2212Z	2 1/2 63.5	2 1/8 54.0	3 76.2	3 3/8 85.7	1 1/2 38.1	3/8 10	7/16 11.1	1 1/2 38.1	1/8	1.7
7/8	F2214	F2214Z	2 3/4 69.8	2 1/8 54.0	3 76.2	3 3/4 95.2	2 50.8	3/8 10	1/2 12.7	1 7/8 47.6	1/8	2.5
1 1/16	F2215	F2215Z										
1	F2216	F2216Z										
1 1/16	F2219	F2219Z	3 1/4 82.6	2 1/2 63.5	3 9/16 90.5	4 1/4 108.0	2 1/2 63.5	1/2 12	5/8 15.9	2 1/4 57.2	1/8	3.7
1 1/4	F2220	F2220Z										
1 7/16	F2223	F2223Z	4 101.6	2 29/32 73.8	4 1/8 104.8	5 1/8 130.2	3 76.2	1/2 12	3/4 19.0	2 1/2 63.5	1/4	5.0
1 1/2	F2224	F2224Z										
1 11/16	F2227	F2227Z	4 1/8 104.8	3 9/32 83.3	4 9/8 117.5	5 3/8 136.5	3 1/2 88.9	1/2 12	3/4 19.0	2 7/8 73.0	1/4	10.4
1 3/4	F2228	F2228Z										
1 15/16	F2231	F2231Z	5 1/8 130.2	3 23/32 94.4	5 1/4 133.4	6 3/8 161.9	4 101.6	5/8 16	7/8 22.2	3 1/4 82.6	1/4	10.6
2	F2232	F2232Z										
2 3/16	F2235	F2235Z	5 1/8 130.2	4 1/16 103.2	5 3/4 146.0	6 3/8 161.9	4 1/2 114.3	5/8 16	7/8 22.2	3 5/8 92.1	1/4	14.8
2 7/16	F2239	F2239Z	5 5/8 142.9	4 13/32 111.9	6 1/4 158.8	6 7/8 174.6	5 127.0	5/8 16	1 25.4	4 101.6	3/8	16.5
2 15/16	F2247	F2247Z	6 152.4	5 7/32 132.6	7 3/8 187.3	7 3/4 196.8	6 152.4	3/4 20	1 1/8 28.6	4 3/4 120.6	3/8	27.0
3	F2248	F2248Z										
3 7/16	F2255	F2255Z	6 3/4 171.4	5 29/32 150.0	8 3/8 212.7	8 9/16 217.5	7 177.8	3/4 20	1 1/4 31.8	5 1/2 139.7	1/2	40.5
3 15/16	F2263	F2263Z	7 3/8 193.7	6 23/32 170.6	9 1/2 241.3	9 3/4 247.6	8 203.2	7/8 24	1 1/2 38.1	6 3/8 161.9	1/2	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.

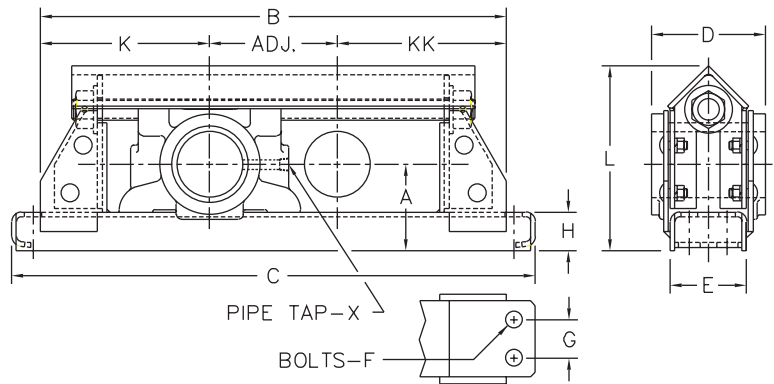
Load ratings, pages I-7, I-8.

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.		Adjustment ▲		Takeup number	A	B	C	D	E	F Bolts	G	H	K	KK	L	X ■	Radial factor □	Unit wt. (lbs.)		
	inches	mm	in.	mm																	
REMOVABLE	1 ¹⁵ / ₁₆	{	304.8	12	DSB2831-12	3 ¹ / ₄	26 ¹ / ₂	673.1	29 ¹ / ₂	749.3	4	3	5/8	...	1 ¹ / ₄	7 ³ / ₄	7 ³ / ₄	7 ¹ / ₄	1/4	1.0	39
			457.2	18	DSB2831-18	82.6	32 ¹ / ₂	825.5	35 ¹ / ₂	901.7												101.6	76.2	16	...	44.4	196.8	196.8	184.2
	2 ³ / ₁₆	{	304.8	12	DSB2835-12	3 ³ / ₈	27 ¹ / ₂	698.5	29 ¹ / ₂	749.3	4	3	5/8	...	1 ¹ / ₄	7 ³ / ₄	7 ³ / ₄	7 ¹ / ₄	3/8	1.0	42
			457.2	18	DSB2835-18	85.7	33 ¹ / ₂	850.9	35 ¹ / ₂	901.7												114.3	76.2	16	...	44.4	196.8	196.8	184.2
	2 ⁷ / ₁₆	{	304.8	12	DSB2839-12	3 ¹ / ₂	28 ¹ / ₂	723.9	30 ¹ / ₂	774.7	5	3	3/4	...	1 ¹ / ₄	8 ¹ / ₄	8 ¹ / ₄	7 ¹ / ₂	3/8	1.0	49
			457.2	18	DSB2839-18	88.9	34 ¹ / ₂	876.3	36 ¹ / ₂	927.1												127.0	76.2	20	...	44.4	209.6	209.6	190.5
	2 ¹⁵ / ₁₆	{	304.8	12	DSB2847-12	4 ¹ / ₈	30 ¹ / ₂	774.7	32 ¹ / ₂	825.5	6	4	5/8	2	2	9 ¹ / ₄	9 ¹ / ₄	8 ³ / ₄	3/8	1.0	72
			457.2	18	DSB2847-18	104.8	36 ¹ / ₂	927.1	38 ¹ / ₂	977.9												152.4	101.6	16	50.8	50.8	235.0	235.0	222.2
	3 ⁷ / ₁₆	{	304.8	12	DSB2855-12	4 ¹ / ₂	32	812.8	34 ¹ / ₄	870.0	7	4	3/4	2	2	10	10	9 ¹¹ / ₁₆	1/2	1.0	94
			457.2	18	DSB2855-18	114.3	38	965.2	40 ¹ / ₄	1022.4												177.8	101.6	20	50.8	50.8	254.0	254.0	246.1
3 ¹⁵ / ₁₆	{	304.8	12	DSB2863-12	5	36	914.4	38 ¹ / ₂	977.9	8	5	3/4	2 ¹ / ₂	2 ¹ / ₄	12	12	10 ¹⁵ / ₁₆	1/2	1.0	138	
		457.2	18	DSB2863-18	127.0	42	1066.8	44 ¹ / ₂	1130.3												203.2	127.0	20	63.5	57.2	304.8	304.8	277.8
3 ¹⁵ / ₁₆	{	609.6	24	DSB2863-24		48	1219.2	50 ¹ / ₂	1282.7											150	
		609.6	24	DSB2863-24																	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
1/2	1008Z	285Y222-101
5/8	1010Z	285Y222-104
3/4	1012Z	285Y222-105
3/4	F2212Z	285Y222-96
7/8	1014Z, F2214Z	285Y222-1
15/16	1015Z, F2215Z	285Y222-2
1	1016Z, F2216Z	285Y222-3
1 1/8	1018Z	285Y222-4
1 3/16	1019Z, F2219Z	285Y222-5
1 1/4	1020Z, F2220Z	285Y222-6
1 7/16	1023Z, F2223Z	285Y222-9
1 1/2	1024Z, F2224Z	285Y222-10
1 11/16	1027Z, F2227Z	285Y222-11
1 3/4	1028Z, F2228Z	285Y222-12
1 5/8	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 5/8	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
7/8	2-1214Z	285BY2-4	131Y954-1	2
15/16	2-1215Z	285BY2-5	131Y954-21	2
1	2-1216Z	285BY2-6	131Y954-21	2
1 1/8	2-1218Z	285BY2-7	131Y954-2	2
1 3/16	2-1219Z	285BY2-8	131Y954-22	2
1 1/4	2-1220Z	285BY2-9	131Y954-22	2
1 3/8	2-1222Z	285BY2-10	131Y954-23	4
1 7/16	2-1223Z	285BY2-11	131Y954-23	4
1 1/2	2-1224Z	285BY2-12	131Y954-23	4
1 9/16	2-1225Z	285BY2-13	131Y954-24	4
1 5/8	2-1226Z	285BY2-14	131Y954-24	4
1 11/16	2-1227Z	285BY2-15	131Y954-24	4
1 3/4	2-1228Z	285BY2-16	131Y954-24	4
1 5/8	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
2 1/4	2-1236Z	285BY2-20	131Y954-26	4
2 7/16	2-1239Z	285BY2-22	131Y954-27	4
2 1/2	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 5/8	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 ¹ / ₁₆	2-1455Z, 2K1455Z	285BY3-17	131Y366-11	6
3 ⁵ / ₁₆	2-1463Z, 2K1463Z	285BY3-19	131Y366-13	6
4 ¹ / ₁₆	2-1471Z	285BY3-21	131Y366-15	8
4 ⁵ / ₁₆	2K1471Z	285BY3-22	131Y366-15	8
4 ⁹ / ₁₆	2-1479Z	285BY3-25	131Y366-17	8
4 ¹³ / ₁₆	2K1479Z	285BY3-26	131Y366-17	8
5 ¹ / ₁₆	2-1487Z, 2K1487Z	285BY3-29	131Y366-18	12
5 ⁵ / ₁₆	2-1495Z, 2K1495Z	285BY3-31	131Y366-21	12
6 ¹ / 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 ¹ / ₁₆	2-1555Z	285BY2-33	131Y954-9	6
3 ⁵ / ₁₆	2-1563Z	285BY2-37	131Y954-10	6
4 ¹ / ₁₆	2-1571Z	285BY2-40	131Y954-11	8
4 ⁵ / ₁₆	2-1579Z	285BY2-42	131Y954-12	8
5 ¹ / ₁₆	2-1587Z	285BY2-44	131Y954-34	12
5 ⁵ / 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

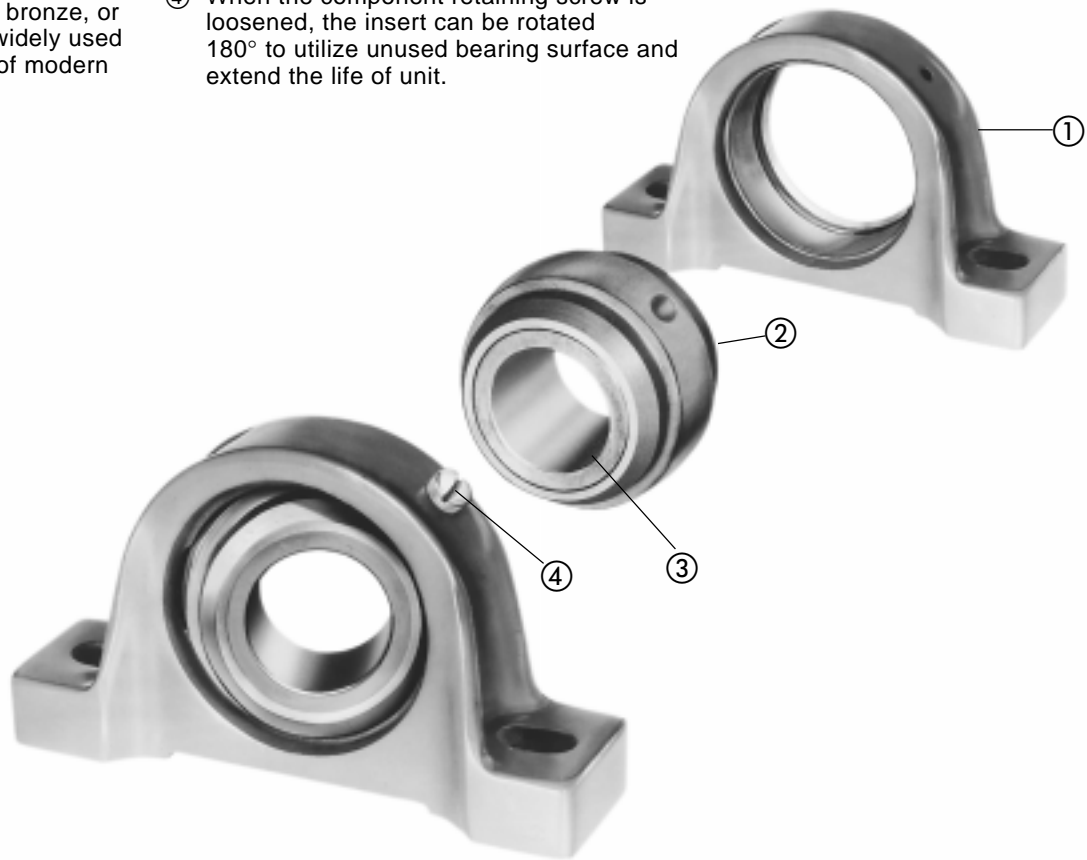
Replacement bronze bearings are pre-split with lube groove.
 Provision should be made to lock each bearing segment to the base and cap.
 Replacement bronze bearings and shims must be ordered as individual items.

Series 3200

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 $\frac{5}{8}$ " through $3\frac{15}{16}$ ".

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 $\frac{5}{8}$ " through $1\frac{3}{4}$ ".

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 $\frac{5}{8}$ " through $3\frac{7}{16}$ ".

Load ratings on pages I-23 and I-24.

Dimensions on pages I-27.

Additional information on page I-22.



Selection

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 ($0.2\mu m$ to $1.3\mu m$). 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 ($0.3\mu m$). Shafting should also be within the diameter tolerances listed on page I-22.
3. Ambient temperatures should not be lower than $32^{\circ}F$ ($0^{\circ}C$) for T1 bearing material. The upper operating temperature limits are as follows:
T1— $200^{\circ}F$ ($93^{\circ}C$)
T3— $700^{\circ}F$ ($371^{\circ}C$)
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	$\frac{5}{8}$ "— $3\frac{15}{16}$ "
			FX	$\frac{5}{8}$ "— $1\frac{3}{4}$ "
			F	$\frac{5}{8}$ "— $3\frac{7}{16}$ "
T3	Machined carbon-graphite	self-lubricating	P	$\frac{5}{8}$ "— $3\frac{15}{16}$ "
			FX	$\frac{5}{8}$ "— $1\frac{3}{4}$ "
			F	$\frac{5}{8}$ "— $3\frac{7}{16}$ "
Bearing insert suffix	Minimum temperature limit	Maximum temperature limit	Comments	
T1	$32^{\circ}F$ ($0^{\circ}C$)	$200^{\circ}F$ ($93^{\circ}C$)		
T3	...	$700^{\circ}F$ ($371^{\circ}C$)	material somewhat brittle—handle with care—no significant shock loads	

Selection, Additional Information

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 $\frac{1}{32}$ " (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 $\frac{1}{8}$ " (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
$\frac{5}{8}$ " through 2"	Nominal to $-.003$ "
2 $\frac{1}{16}$ " through 4"	Nominal to $-.004$ "

Caution: Do not use stainless steel shaft, if bearing insert T1 is used.

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.

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												Short bearing factor		
			10 to 25		50		75		100		150		200			300	
5/8 1 1/16	3210	T1 T3	586	2 607	586	2 607	586	2 607	586	2 607	476	2 117	357	1 588	238	1 059	
	3211		296	1 317	296	1 317	296	1 317	296	1 317	240	1 068	180	801	120	534	...
3/4	3212	T1 T3	940	4 181	940	4 181	940	4 181	940	4 181	638	2 838	479	2 131	318	1 415	
			470	2 091	470	2 091	470	2 091	470	2 091	318	1 415	240	1 068	159	707	1.25
7/8 15/16 1	3214	T1 T3	985	4 381	985	4 381	985	4 381	860	3 825	572	2 544	430	1 913	286	1 272	
	3215 3216		493	2 193	493	2 193	493	2 193	430	1 913	287	1 277	215	956	144	641	...
1 1/8 1 3/16	3218	T1 T3	1545	6 870	1545	6 870	1400	6 230	1050	4 670	701	3 118	527	2 344	350	1 557	
	3219		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 1 5/16 1 3/8 1 7/16	3220	T1 T3	2110	9 390	2110	9 390	1720	7 650	1295	5 760	862	3 834	650	2 891	433	1 926	
	3221 3222 3223		1055	4 690	1055	4 690	860	3 825	646	2 874	430	1 913	323	1 437	215	956	1.42
1 1/2	3224	T1 T3	3190	14 900	3190	14 190	2160	9 610	1630	7 250	1090	4 850	815	3 625	545	2 424	
			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 1 11/16 1 3/4	3226	T1 T3	3450	15 350	3240	14 410	2160	9 610	1620	7 210	1090	4 850	815	3 625	545	2 424	
	3227 3228		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 T3	4360	19 390	3440	15 300	2340	10 410	1720	7 650	1150	5 120	860	3 825	575	2 558	
			2180	9 700	1720	7 650	1170	5 200	860	3 825	575	2 558	430	1 913	288	1 281	1.39
2 2 1/8 2 3/16	3232	T1 T3	4750	21 130	3620	16 100	2420	10 760	1810	8 050	1210	5 380	910	4 048	608	2 705	
	3234 3235		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 2 7/16	3236	T1 T3	6050	26 910	4110	18 280	2750	12 200	2050	9 120	1370	6 090	1030	4 580	687	3 056	
	3239		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 2 11/16	3240	T1 T3	7500	33 360	4590	20 420	3050	13 570	2290	10 190	1530	6 810	1145	5 090	765	3 403	
	3243		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 2 15/16	3244	T1 T3	9120	40 570	5070	22 550	3380	15 030	2530	11 250	1685	7 500	1265	5 630	844	3 754	
	3247		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 T3	11500	51 150	5720	25 440	3820	16 990	2880	12 810	1925	8 560	1440	6 410	965	4 293	
			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 T3	15000	66 720	7500	33 360	5000	22 240	3730	16 590	2500	11 120	1870	8 320	1248	5 550	
			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														Short bearing factor
			400		500		750		1000		1500		2000		2500		
5/8 1 1/16	3210 3211	{ T1 T3	180	801	144	641	96	427	71	316	48	214	36	160	29	129	....
			90	400	72	320	48	214	36	160	24	107	24	80	15	67	
3/4	3212	{ T1 T3	238	1 059	191	850	128	569	96	427	64	285	48	214	38	169	1.25
			120	534	92	409	63	280	48	214	32	142	24	107	19	84	
7/8 1 5/16 1	3214 3215 3216	{ T1 T3	215	956	175	778	114	507	86	383	57	254	43	191	34	151	....
			108	480	86	383	57	254	43	191	29	129	22	98	..	...
1 1/8 1 3/16	3218 3219	{ T1 T3	263	1 170	211	939	140	623	105	467	70	311	53	236	42	187	1.22
			131	583	105	467	70	311	53	236	35	156	..	...	..	...
1 1/4 1 5/16 1 3/8 1 7/16	3220 3221 3222 3223	{ T1 T3	322	1 432	258	1 148	172	765	130	578	86	383	65	289	52	231	1.42
			162	721	130	578	86	383	65	289	43	191	..	...	..	...
1 1/2	3224	{ T1 T3	408	1 815	325	1 446	216	961	163	725	109	485	82	365	65	289	1.54
			203	903	162	721	109	485	81	360	...	...	..	...	..	...
1 5/8 1 11/16 1 3/4	3226 3227 3228	{ T1 T3	408	1 815	325	1 446	216	961	162	721	109	485	82	365	..	...	1.42
			203	903	162	721	109	485	81	360	...	...	..	...	..	...
1 15/16	3231	{ T1 T3	431	1 917	344	1 530	234	1 041	172	765	115	512	...	...	...	...	1.39
			215	956	172	765	115	512	...	...	...	...	...	...	...	...
2 2 1/8 2 3/16	3232 3234 3235	{ T1 T3	455	2 024	363	1 615	242	1 076	181	805	125	556	...	...	...	...	1.47
			227	1 010	182	810	121	538	...	...	...	...	...	...	...	...
2 1/4 2 7/16	3236 3239	{ T1 T3	515	2 291	413	1 837	275	1 223	205	912	137	609	...	...	...	...	1.45
			257	1 143	205	912	137	609	...	...	...	...	...	...	...	...
2 1/2 2 11/16	3240 3243	{ T1 T3	574	2 553	460	2 046	305	1 357	229	1 019	...	...	...	...	...	1.51	
			287	1 277	229	1 019	153	681	...	...	...	...	...	...	...		...
2 3/4 2 15/16	3244 3247	{ T1 T3	635	2 825	507	2 255	338	1 503	253	1 125	...	...	...	...	...	1.61	
			317	1 410	253	1 125	...	...	...	...	...	...	...	...	...		...
3 7/16	3255	{ T1 T3	725	3 225	580	2 580	382	1 699	290	1 390	...	...	...	...	...	1.31	
			363	1 615	290	1 290	...	...	...	...	...	...	...	...	...		...
3 15/16	3263	{ T1 T3	936	4 164	750	3 336	500	2 224	...	...	...	...	...	...	...	....
			468	2 082	...	...	...	...	...	...	...	...	...	...	...		...

■ Load ratings are based on industry standards established by the Mechanical Power Transmission Association.

Flex-block® Sleeve Bearing Pillow Block

3200P

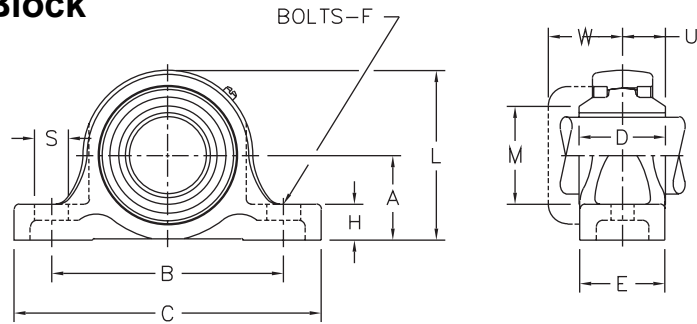
Cast Iron Housing

2-bolt Base

Alignable

T1 Sintered Bronze Bearing

T3 Carbon Graphite Bearing



Dimensions (inches/mm)

Shaft diameter inches	Pillow block number Δ		A	B	C	D	E	F Bolts	H	L	M	S	U	W ‡	Unit wt. (lbs.)
	Basic pillow bearing number	Bearing sleeve suffix													
5/8 1 1/16	3210P	T1 T3	1 1/16	3 1/2	4 5/8	1 5/16	1 1/2	3/8	1/2	2 11/32	1 1/8	3/4	1 5/32	1 13/64	1.3
	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	3 7/8	5 1/8	1 1/4	1 1/2	3/8	1/2	2 19/32	1 3/16	1 1/16	5/8	1 19/64	1.8
7/8 1 5/16	3214P	T1 T3	1 1/16	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	2.1
	3215P 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	2.0 1.9
1 1/8 1 3/16	3218P	T1 T3	1 11/16	4 5/8	6 5/16	1 3/8	1 3/4	1/2	1 1/16	3 5/16	1 7/8	1 5/16	1 1/16	1 29/64	2.8
	3219P	T1 T3	42.86	117.5	160.3	34.9	44.4	12	17.5	84.1	47.6	23.8	17.5	36.9	2.7
1 1/4 1 15/16 1 3/8 1 7/16	3220P	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	2 7/32	1 35/64	4.5
	3221P	T1 T3													4.4
	3222P	T1 T3													4.3
	3223P	T1 T3													4.1
1 1/2	3224P	T1 T3	2	5 3/8	7 1/16	2 1/8	1 7/8	1/2	1 3/16	4	2 1/8	1 5/16	1 1/16	1 41/64	5.3
1 5/8 1 11/16 1 3/4	3226P	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	6.4
	3227P	T1 T3													6.3
	3228P	T1 T3													6.1
1 15/16	3231P	T1 T3	2 1/4	6 3/16	7 7/8	2 1/4	2 1/8	5/8	7/8	4 1/2	2 9/16	1 5/16	1 1/8	1 25/32	7.2
2 2 1/8 2 3/16	3232P	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	9.2
	3234P	T1 T3													9.0
	3235P	T1 T3													8.8
2 1/4 2 7/16	3236P	T1 T3	2 11/16	7 1/2	9 1/2	2 11/16	2 1/2	5/8	1 1/8	5 1/16	3 1/4	1 1/16	1 11/32	2 7/64	13.4
	3239P	T1 T3													13.2
2 1/2 2 11/16	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
	3243P	T1 T3													16.5
2 3/4 2 15/16	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
	3247P	T1 T3													21.9
3 7/16	3255P	T1 T3	3 3/4	10	13	3 3/4	3 1/2	7/8	1 5/8	7 7/8	4 7/16	1 5/8	1 7/8	2 1/2	32.5
3 5/16	3263P	T1 T3	4 7/16	11 7/8	15 1/4	4 15/16	4 3/8	7/8	1 13/16	8 15/16	4 7/8	1 7/8	2 15/32	3 1/64	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.

Δ Order by number, as: 3212PT1.

‡ Width dimension for closed end unit.

Selection guide, pages I-21, I-22.

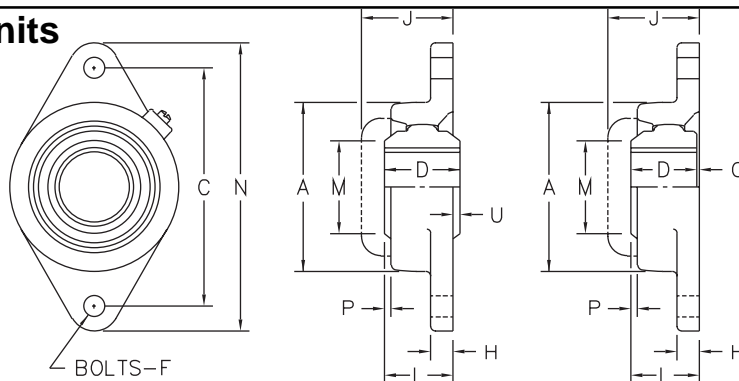
Load ratings, pages I-23, I-24.

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 Δ			A	C	D		F Bolts	G	H	J ‡	L	M	N	P	U	Unit wt. (lbs.)	
	Basic flange number	Bearing sleeve suffix				Reg.	Short											
5/8 1 1/16	3210FX	T1	T3	2 1/8	3	1 5/16	...	3/8	1 7/64	1/2	1 25/32	1 1/64	1 1/8	3 3/8	7/64	...	1.0	
	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	
7/8 1 5/16	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	
	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 1 3/16	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	
	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 1 5/16 1 3/8 1 7/16	3220FX	T1	T3	3 5/8	5 1/8	1 11/16	1 1/2	1/2	5/32	5/8	2 35/64	1 21/32	2 1/8	6 1/8	1/4	1/32	3.7	
	3221FX	T1	T3															3.6
	3222FX	T1	T3															3.5
	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	4.9					
1 5/8 1 11/16 1 3/4	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	
	3227FX	T1	T3															6.0
	3228FX	T1	T3															5.9
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	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.

Δ 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.

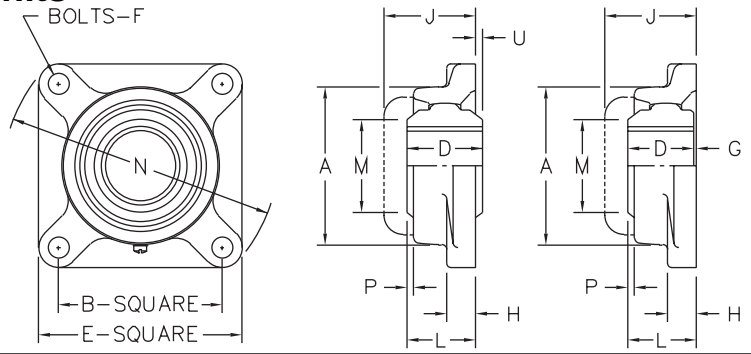
Load ratings, pages I-23, I-24.

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 Δ		A	B	D		E	F Bolts	G	H	J \ddagger	L	M	N	P	U	Unit wt. (lbs.)
	Basic flange number	Bearing sleeve suffix			Reg.	Short											
$\frac{5}{8}$	3210F	T1 T3	$\frac{2}{8}$	$\frac{2}{8}$	$\frac{15}{16}$	...	3	$\frac{3}{8}$	$\frac{17}{64}$	$\frac{1}{2}$	$\frac{125}{32}$	$\frac{17}{64}$	$\frac{1}{8}$	$\frac{37}{8}$	$\frac{7}{64}$	...	1.2
$\frac{1}{16}$	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
$\frac{3}{4}$	3212F	T1 T3	$\frac{27}{16}$	$\frac{2}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{9}{16}$	$\frac{21}{64}$	$\frac{123}{64}$	$\frac{13}{16}$	$\frac{413}{32}$	$\frac{5}{32}$	...	1.5
$\frac{7}{8}$	3214F	T1 T3	$\frac{21}{16}$	$\frac{23}{4}$	$\frac{1}{8}$	...	$\frac{3}{4}$	$\frac{7}{16}$	$\frac{3}{16}$	$\frac{19}{32}$	2	$\frac{15}{16}$	$\frac{19}{16}$	$\frac{429}{32}$	$\frac{1}{16}$	...	2.1
$\frac{15}{16}$	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	68.3	69.8	28.6	...	95.2	10	4.8	15.1	50.8	33.3	39.7	124.6	1.6	...	1.9
$\frac{1}{8}$	3218F	T1 T3	$\frac{39}{16}$	$\frac{3}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{4}{4}$	$\frac{7}{16}$	$\frac{7}{32}$	$\frac{19}{32}$	$\frac{215}{64}$	$\frac{115}{32}$	$\frac{17}{8}$	$\frac{519}{32}$	$\frac{5}{32}$	...	3.2
$\frac{13}{16}$	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
$\frac{1}{4}$	3220F	T1 T3	$\frac{35}{8}$	$\frac{35}{8}$	$\frac{11}{16}$	$\frac{1}{2}$	$\frac{45}{8}$	$\frac{1}{2}$	$\frac{5}{32}$	$\frac{5}{8}$	$\frac{223}{64}$	$\frac{121}{32}$	$\frac{21}{8}$	$\frac{61}{8}$	$\frac{1}{4}$	$\frac{1}{32}$	4.5
$\frac{15}{16}$	3221F	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	4.4
$\frac{13}{16}$	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
$\frac{17}{16}$	3223F	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	4.1
$\frac{1}{2}$	3224F	T1 T3	4	4	$\frac{21}{8}$	$\frac{13}{4}$	$\frac{51}{8}$	$\frac{1}{2}$	$\frac{5}{32}$	$\frac{5}{8}$	$\frac{235}{64}$	$\frac{131}{32}$	$\frac{21}{8}$	$\frac{625}{32}$	$\frac{25}{64}$	$\frac{5}{32}$	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	5.6
$\frac{15}{8}$	3226F	T1 T3	$\frac{41}{4}$	$\frac{41}{8}$	$\frac{21}{8}$	$\frac{113}{16}$	$\frac{53}{8}$	$\frac{1}{2}$	$\frac{5}{32}$	$\frac{5}{8}$	$\frac{29}{16}$	$\frac{131}{32}$	$\frac{27}{16}$	$\frac{73}{32}$	$\frac{3}{8}$	$\frac{5}{32}$	7.1
$\frac{11}{16}$	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
$\frac{13}{4}$	3228F	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	6.7
$\frac{115}{16}$	3231F	T1 T3	$\frac{41}{2}$	$\frac{43}{8}$	$\frac{21}{4}$	$\frac{115}{16}$	$\frac{53}{8}$	$\frac{1}{2}$	$\frac{7}{32}$	$\frac{3}{4}$	$\frac{213}{16}$	$\frac{25}{32}$	$\frac{29}{16}$	$\frac{77}{16}$	$\frac{27}{64}$	$\frac{3}{32}$	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	7.8
2	3232F	T1 T3	$\frac{415}{16}$	$\frac{51}{8}$	$\frac{23}{8}$	2	$\frac{63}{8}$	$\frac{5}{8}$	$\frac{11}{32}$	$\frac{29}{32}$	$\frac{311}{64}$	$\frac{211}{32}$	$\frac{27}{8}$	$\frac{81}{2}$	$\frac{13}{32}$	$\frac{1}{32}$	10.0
$\frac{21}{8}$	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
$\frac{23}{16}$	3235F	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	9.5
$\frac{21}{4}$	3236F	T1 T3	$\frac{53}{8}$	$\frac{53}{8}$	$\frac{211}{16}$	$\frac{21}{4}$	$\frac{67}{8}$	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{15}{16}$	$\frac{325}{64}$	$\frac{25}{8}$	$\frac{31}{4}$	$\frac{97}{32}$	$\frac{27}{64}$	$\frac{1}{16}$	12.8
$\frac{27}{16}$	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
$\frac{21}{2}$	3240F	T1 T3	$\frac{57}{8}$	$\frac{57}{8}$	3	$\frac{21}{2}$	$\frac{73}{8}$	$\frac{5}{8}$	$\frac{3}{32}$	$\frac{3}{4}$	$\frac{35}{32}$	$\frac{219}{32}$	$\frac{39}{16}$	$\frac{913}{16}$	$\frac{7}{16}$	$\frac{13}{32}$	16.6
$\frac{211}{16}$	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
$\frac{23}{4}$	3244F	T1 T3	$\frac{63}{8}$	6	$\frac{31}{16}$	$\frac{211}{16}$	$\frac{73}{4}$	$\frac{3}{4}$	$\frac{1}{8}$	$\frac{3}{4}$	$\frac{33}{8}$	$\frac{213}{16}$	$\frac{33}{4}$	$\frac{101}{4}$	$\frac{17}{32}$	$\frac{1}{2}$	20.4
$\frac{215}{16}$	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
$\frac{37}{16}$	3255F	T1 T3	$\frac{71}{2}$	$\frac{63}{4}$	$\frac{33}{4}$	$\frac{35}{16}$	$\frac{89}{16}$	$\frac{3}{4}$	$\frac{3}{32}$	1	$\frac{41}{32}$	$\frac{313}{32}$	$\frac{47}{16}$	$\frac{113}{8}$	$\frac{1}{2}$	$\frac{11}{32}$	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	29.5

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.

Δ Order by number, as: 3216FT3. For short sleeves add suffix S; i.e., 3220FT1S.

\ddagger 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.

Nomenclature

Rigid Sleeve Bearing and Flex-Block® Units

Rigid Sleeve Bearing Units

Symbol	Description	2K	15	95	F	Z -
None	One-piece housing, cast iron	}	}	}	}	}
2—	Two-piece housing, cast iron					
2K	Two-piece housing, cast steel					
10	Pillow block, one-piece, 2-bolt base	}	}	}	}	}
11	Pillow block, plain iron (no sleeve)					
12	Pillow block, angle type split joint, 2-bolt base					
13	Pillow block, angle type split joint, 4-bolt base					
14	Pillow block, horizontal gibbed joint, 4-bolt base					
15	Pillow block, angle type split joint, 40° off horizontal					
F22	Flanged unit, square, 4-bolt	}	}	}	}	}
DS28	Takeup, conveyor, heavy rigid frame					
DSB28	Takeup, conveyor, heavy hinged frame					
95	Shaft diameter in 16ths of an inch					
F	4-bolt base (units 1000, 1100 only)					
None	Babbitt bearing (except units 1100)	}	}	}	}	}
Z	Bronze bearing					
XX	Takeup adjustment, inches					

Flex-block Sleeve Bearing Units

Symbol	Description	32	16	F	T1	S	C
32	Standard duty series	}	}	}	}	}	}
16	Shaft diameter in 16ths of an inch						
F	Flanged unit, 4-bolt	}	}	}	}	}	}
FX	Flanged unit, 2-bolt						
P	Pillow block						
T1	Porous sintered bronze, oil impregnated, 200°F max.	}	}	}	}	}	}
T3	Self-lubricating carbon graphite, 700°F max.						
T4	Plain bore (cast iron), 1000°F max.						
None	Standard length	}	}	}	}	}	}
S	Short sleeve, (F, FX units)						
C	Closed end unit						

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.

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