

Ball Bearings, Ball Bearing Units and Takeups

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Series 200

Ball Bearing Units and Takeups

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Series 200

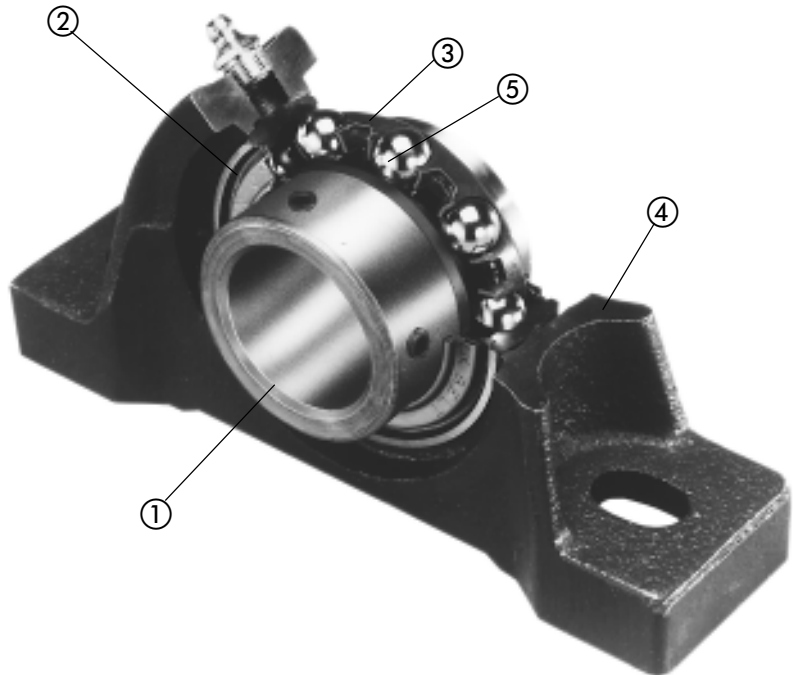
Collar Mounted Ball Bearings, Spring Locking Ball Bearings, Round, Square and Hex Bore Ball Bearings

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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 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 E3 SEAL



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.*

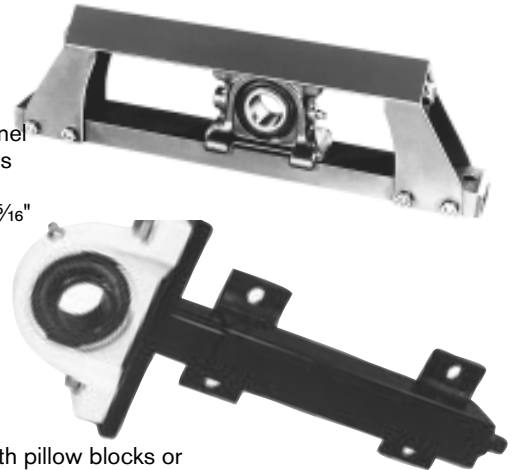
Conveyor takeup with welded steel channel frame for moderate service. Bearing bores are parallel to the base of the frame. Shaft sizes $1\frac{5}{16}$ " through $1\frac{15}{16}$ " (25-50 mm).

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

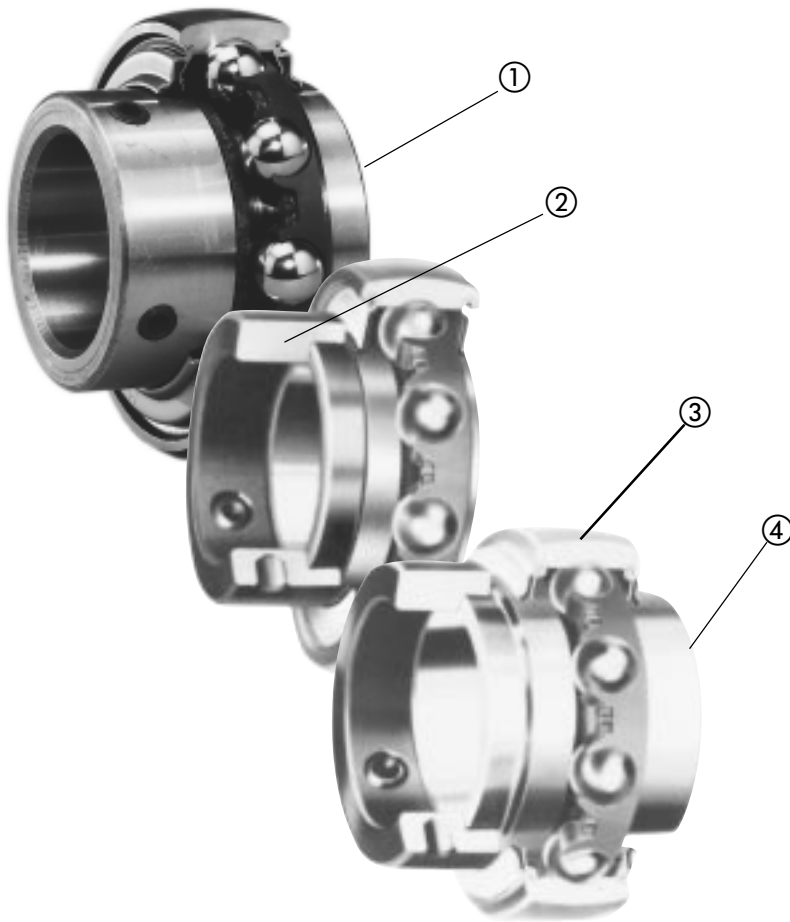
Spring Locking Ball Bearing

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).

Load Ratings

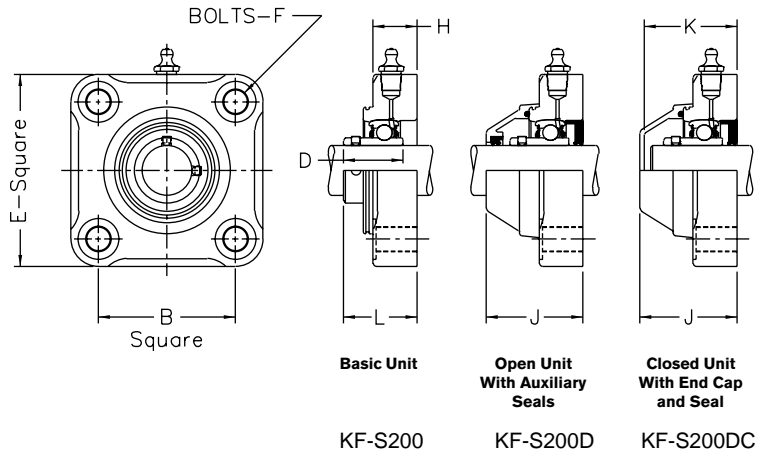
Ball Bearings and Ball Bearing Units

Table 4 • Radial load ratings in pounds at various RPM for appropriate L₁₀ life hours

Bearing Size Number S200 U200 W200 Y200	Hex Square Round	L ₁₀ Minimum life, hours	Radial load ratings, pounds																			
			Speed, RPM																			
			50	100	200	300	400	500	600	700	800	900	1000	1200	1500	1800	2000	2500	3000	3500	4000	5000
2B08 210 211 2M17	...	3000	...	...	...	...	444	413	387	367	353	338	327	309	287	269	262	243	229	218	209	194
		8000	...	...	404	353	320	298	382	267	256	245	236	223	209	196	191	176	166	158	152	141
		20000	...	373	298	260	238	222	209	198	189	182	176	166	154	146	141	131	123	118	113	105
		40000	374	298	238	209	189	176	166	158	152	146	141	133	124	116	113	105	94	89	86	79
		100000	271	215	171	149	136	126	119	113	108	104	100	94	87	82	79	74	69	66	63	58
212 2M20	204	3000	...	...	...	...	538	500	469	445	427	409	396	374	348	325	317	295	277	264	253	235
		8000	...	...	489	427	387	361	341	323	310	297	286	270	253	237	230	213	201	191	183	170
		20000	...	451	361	314	288	268	253	239	228	220	213	201	186	176	170	158	149	142	136	126
		40000	454	361	288	253	228	213	201	191	183	176	170	160	149	140	136	127	119	114	109	96
		100000	331	263	209	182	166	154	145	137	131	126	122	115	107	100	97	90	85	80	77	71
214 215 216 2M25	205	3000	...	...	...	...	591	549	515	489	469	450	435	411	382	357	348	323	304	298	277	258
		8000	...	...	537	469	425	396	374	355	340	326	314	297	277	260	253	234	220	210	201	186
		20000	...	496	396	345	316	294	277	263	250	242	234	220	205	193	187	173	163	155	149	138
		40000	498	396	316	277	250	234	220	209	201	193	186	176	163	154	149	139	131	124	119	111
		100000	364	289	229	200	182	169	159	151	144	139	134	126	117	110	106	99	93	88	84	78
218 219 2E20 2M30	206	3000	...	...	...	...	820	762	715	678	651	624	603	569	529	495	482	448	421	400	384	357
		8000	...	...	745	651	590	549	519	492	471	451	434	411	384	360	350	323	304	290	277	257
		20000	...	688	549	378	438	407	384	363	346	335	323	304	282	267	258	239	225	214	205	191
		40000	691	549	438	384	346	323	304	289	277	266	257	243	225	212	206	191	180	171	164	152
		100000	505	401	318	278	252	234	221	209	200	193	186	175	162	153	148	137	129	123	117	109
220 222 223 2M35	207	3000	...	...	...	...	1080	1000	944	895	859	823	796	751	698	653	635	591	555	526	506	470
		8000	...	...	984	859	778	725	684	649	622	595	573	541	506	474	461	426	401	381	365	338
		20000	...	908	725	631	577	537	506	479	456	441	426	401	372	351	339	314	296	282	270	250
		40000	912	759	577	506	456	426	401	380	365	351	338	319	296	279	271	251	236	224	216	200
		100000	668	530	421	367	334	310	292	277	265	255	246	231	215	202	195	181	171	162	155	144
224 2M40	208	3000	...	...	...	...	1220	1130	1060	1000	968	927	897	847	786	736	716	665	625	595	569	529
		8000	...	...	1100	968	877	816	771	731	701	670	645	610	569	534	519	479	451	429	411	381
		20000	...	1020	816	711	650	605	569	539	514	496	479	451	419	395	382	354	333	317	304	282
		40000	1020	816	650	569	514	480	452	428	411	395	380	359	334	313	304	282	266	252	242	225
		100000	752	597	474	414	376	349	328	312	298	287	277	261	242	228	220	204	192	182	174	162
226 227 228 2M45	209	3000	...	...	...	...	1370	1270	1190	1130	1080	1040	1000	952	884	827	804	748	702	668	640	596
		8000	...	...	1240	1080	986	918	867	821	787	753	725	685	640	600	583	539	507	482	462	428
		20000	...	1150	918	799	731	680	640	606	578	558	539	507	471	444	429	397	374	356	341	316
		40000	1150	918	731	640	578	539	507	481	461	443	427	404	375	352	342	317	298	283	272	252
		100000	847	672	534	466	423	393	370	351	336	323	312	294	273	256	248	230	216	205	197	182
231 2E32 2M50	210	3000	...	...	...	...	1470	1360	1280	1210	1160	1110	1080	1020	949	888	864	803	754	718	687	647
		8000	...	...	1330	1160	1050	985	931	882	845	809	778	736	687	644	626	578	544	518	496	456
		20000	...	1230	985	858	785	730	687	651	620	599	578	544	505	476	461	426	401	382	366	326
		40000	1240	985	785	687	620	579	545	517	495	476	459	433	402	378	367	340	320	304	292	252
		100000	909	722	573	500	455	422	397	377	361	347	335	315	293	275	266	247	232	221	211	171
232 235 2M55	211	3000	...	...	...	...	1820	1690	1580	1500	1440	1380	1340	1260	1170	1090	1060	993	932	887	849	799
		8000	...	...	1650	1440	1300	1210	1150	1090	1040	1000	963	910	849	797	774	715	672	640	613	563
		20000	...	1520	1210	1060	970	902	849	804	767	740	715	672	624	589	569	527	496	472	452	402
		40000	1530	1210	970	849	767	715	673	638	612	588	567	535	497	466	453	420	395	375	360	310
		100000	1126	894	710	620	563	523	492	467	447	430	415	391	363	341	329	306	288	273	261	211
E3 SEALS																						
USEALS																						
236 238 239 2M60	...	3000	...	...	...	...	2200	2040	1910	1810	1740	1670	1610	1520	1410	1320	1290	1190	1120	1070	1000	
		8000	...	...	2000	1740	1580	1470	1390	1310	1260	1200	1160	1090	1020	962	934	862	811	772	722	672
		20000	...	1840	1470	1280	1170	1080	1020	971	925	893	862	811	753	710	686	635	598	569	547	497
		40000	1850	1470	1170	1020	925	863	812	770	738	709	684	645	599	563	546	506	476	452	437	387
		100000	1360	1079	857	748	680	631	594	564	540	519	501	471	438	412	398	369	347	330	313	263
N & E SEALS																						
HSEALS																						
240 243 2M65	...	3000	...	...	...	...	2400	2230	2090	1980	1900	1820	1760	1660	1540	1440	1400	1300	1220	1160	1090	
		8000	...	...	2180	1900	1720	1600	1510	1430	1370	1310	1260	1190	1110	1040	1010	940	885	842	792	742
		20000	...	2010	1600	1390	1270	1180	1110	1050	1000	974	940	885	821	774	749	693	652	620	590	540
		40000	2020	1600	1270	1110	1000	941	886	840	805	773	746	704	653	613	595	552	519	493	463	413
		100000	1485	1178	935	817	742	689	649	616	589	567	547	515	478	450	434	403	379	360	343	293
244 247 2E48 2M75	...	3000	...	...	...	...	2880	2600	2440	2310	2220	2120	2050	1940	1800	1680	1640	1520	1430	1360	1290	1220
		8000	...	...	2540	2220	2010	1870	1760	1670	1600	1530	1470	1390	1300	1220	1180	1090	1030	970	910	850
		20000	...	2340	1870	1620	1490	1380	1300	1230	1170	1130	1090	1030	957	903	873	808	760	710	660	610
		40000	2360	1870	1490	1300	1170	1090	1030	979	939	902	869	820	761	715	694	643	605	575	545	495
		100000	1732	1375	1091	953	866	804	756	719	687	661	638	600	557	524	506	470	442	412	382	332
255 2E56 2M85	...	3000	...	...	...	...	3500	3250	3050	2890	2770	2650	2570	2420	2250	2100	2050	1900	1800	1720	1640	1560
		8000	...	...	3180	2770	2510	2340	2200	2090	2000	1910	1840	1740	1620	1520	1480	1360	1260	1180	1100	1020
		20000	...	2930	2340	2030	1860	1730	1620	1540	1470	1410	1360	1280	1190	1120	1090	1000	920	840	760	680
		40000	2940	2340	1860	1620	1470	1370	1290	1220	1170	1120	1080	1020	950	892	866	803	730	650	570	49

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

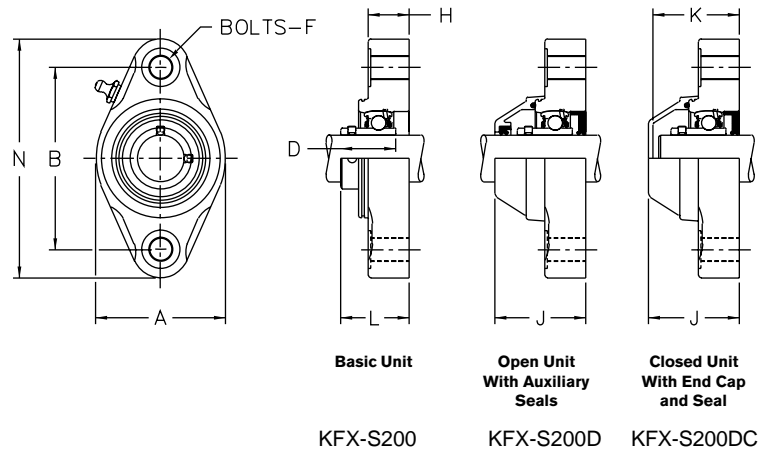


Dimensions (inches/mm)

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	83	34.13	110	10	26	55	53	44.2	
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										92	39.67	120	10	26	59	57	47.7
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
		KF-S2M40	KLF-S2M40	102	42.87	131	10	30	65.5	62.5	52.4	SG2M40ELK82/99A

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

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



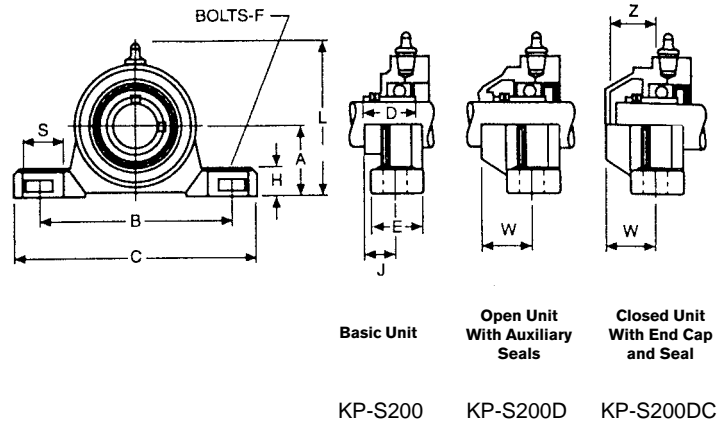
Dimensions (inches/mm)

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											71	99	30.17	10	22.5	49.5	47.5	37.3	130
		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		148
KFX-S2E20	KLFX-S2E20												
KFX-S2M30	KLFX-S2M30	85	117	34.13	10	26	55	53	44.2	148			
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											93	130	39.67	10	26	59	57	47.7	162
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	17/32	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
30	1 3/16 1 1/4	<i>KP-S2M30</i>	<i>KLP-S2M30</i>	42.9	121.0	163.0	34.13	36	12	20	24.2	98	24.0	35	33	SG2M30ELK82/99A
		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														
35	1 1/4 1 3/8 1 7/16	KP-S223	KLP-S223	47.6	126.0	167.0	39.67	38.6	12	20	28.2	108	24.0	39.5	37.5	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 11/64	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.

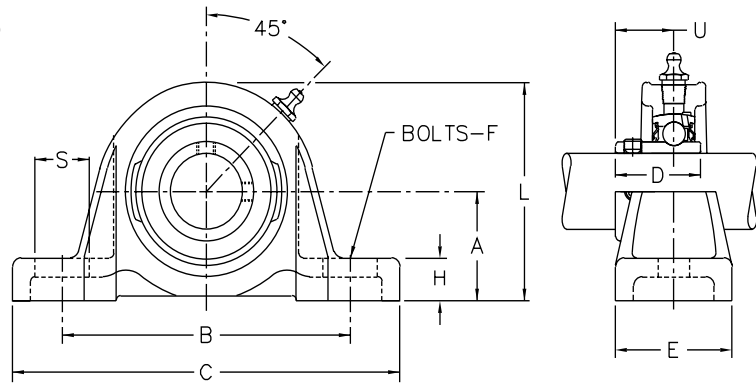
Load ratings for bearings and housings

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	1 7/16	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 1/16	WP3-S215E												1.6	SG215ELK82/99A
	1	WP3-S216E												1.6	SG216ELK82/99A
		WP3-S2M25E	36.51	101.6	136.5	30.17	41.3	10	14.3	73.0	17.5	20.6	.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	42.86	117.5	160.3	34.13	44.4	12	17.5	84.1	23.8	24.2	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	47.62	125.4	161.9	39.67	47.6	12	20.6	93.7	20.6	28.2	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
			53.98	142.9	184.2	44.85	50.8	12	20.6	109.5	22.2	31.4	2.22		
1 15/16	WP3-S231E	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).

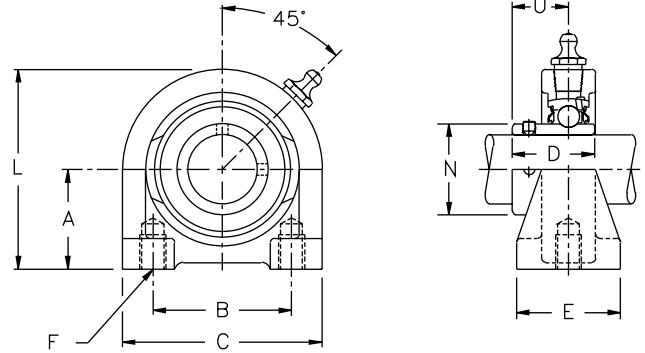
Selection guide, pages B-9, B-10.

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
	1 5/16	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	6 1/64	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).

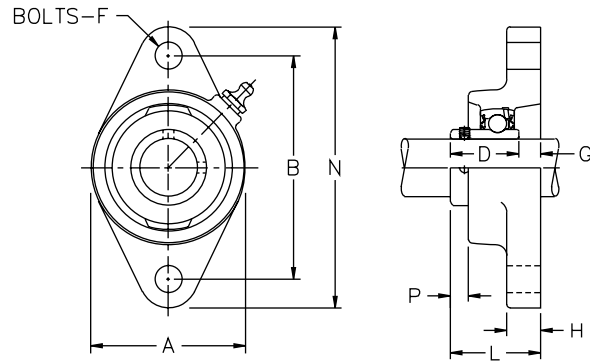
Selection guide, pages B-9, B-10.

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	19/32	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.

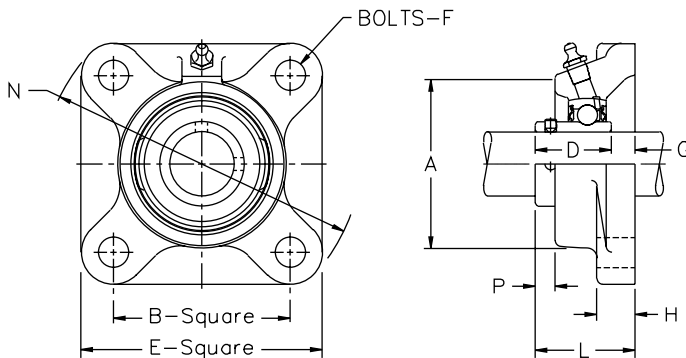
Selection guide, pages B-9, B-10.

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 3/16	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
	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												
1 15/16	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.

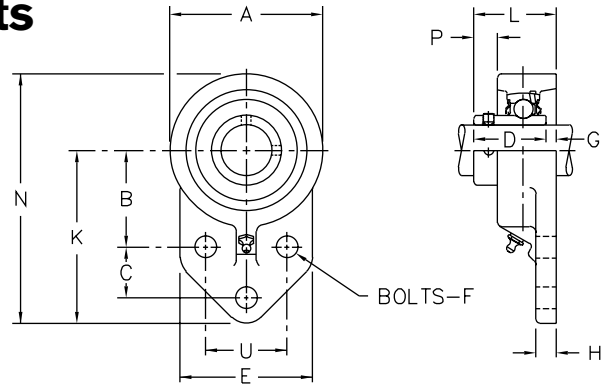
Selection guide, pages B-9, B-10.

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.

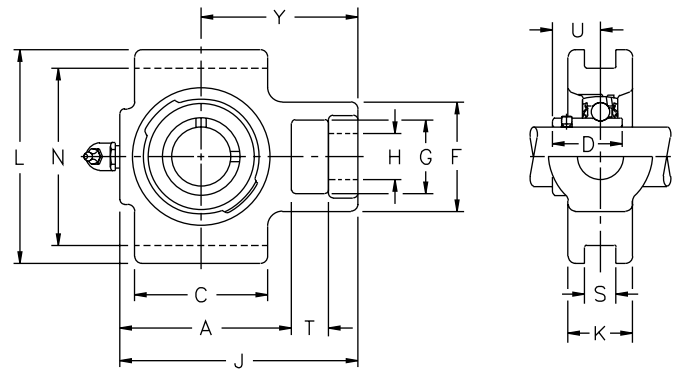
Selection guide, pages B-9, B-10.

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	1.2	SG215ELK82/99A		
																				SG216ELK82/99A
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 ¹⁵ / 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
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 ¹³ / 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
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 ⁴³ / 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.

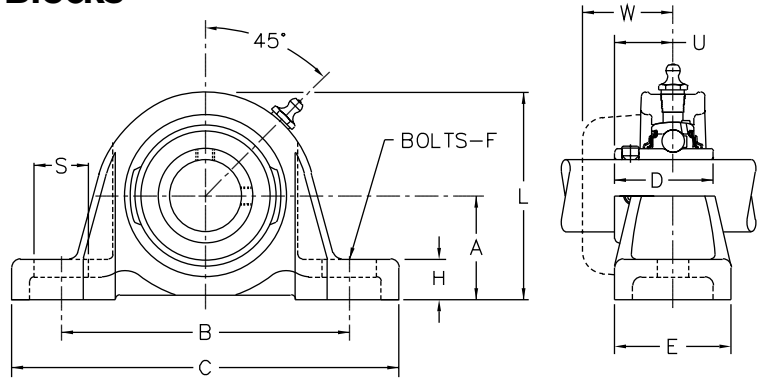
Load ratings, pages B-11, B-12.

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 41/64	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 3/4	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 3/32	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.

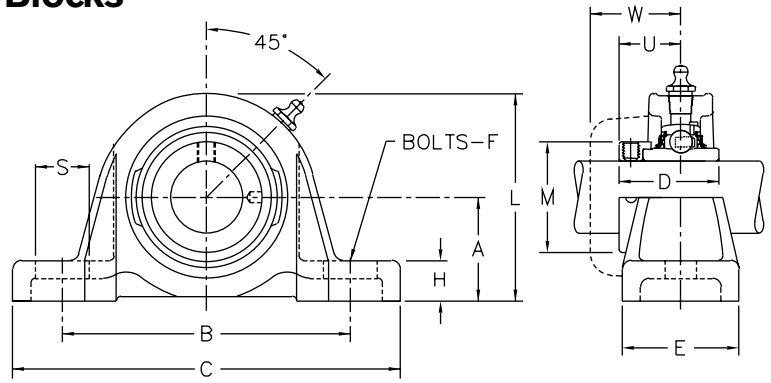
Load ratings, pages B-11, B-12.

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.

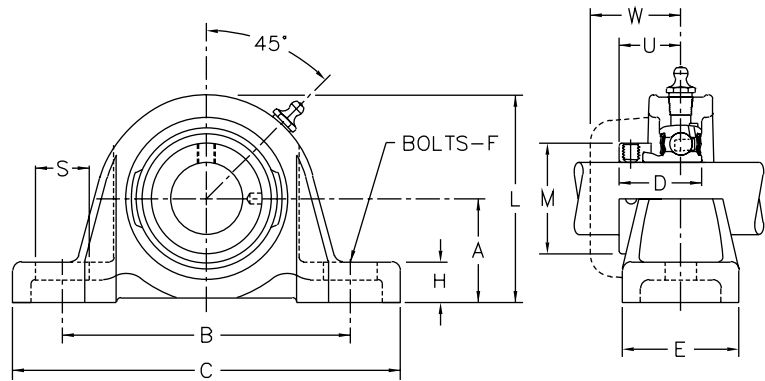
Load ratings, pages B-11, B-12.

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.

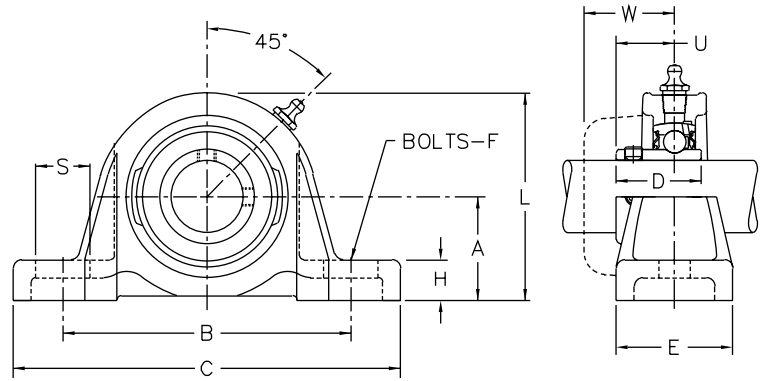
Load ratings, pages B-11, B-12.

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	15/16 33.34	37/8 98.4	51/8 130.2	11/8 28.58	1 1/2 38.1	9/8 10	1/2 12.7	219/32 65.9	11/16 17.5	3/4 19.0	1 19/64 32.9	1.5 .68	SG212EL
7/8 15/16 1	P3-S214E P3-S215E P3-S216E	17/16 36.51	4 101.6	53/8 136.5	13/16 30.17	1 5/8 41.3	3/8 10	9/16 14.3	27/8 73.0	11/16 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	11/16 17.5	3 5/16 84.1	1 5/16 23.8	61/64 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.

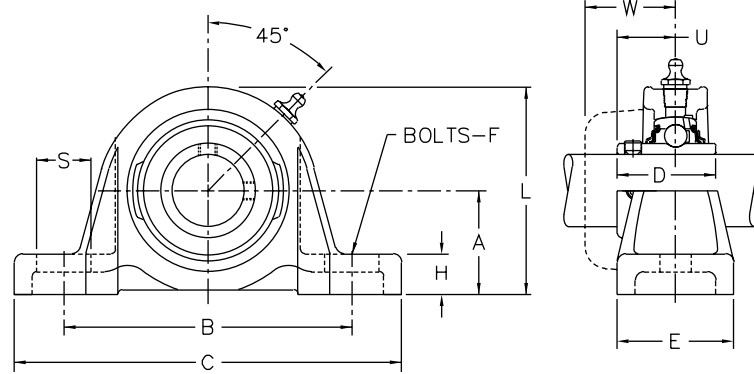
Load ratings, pages B-11, B-12.

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	PL3-U2B08N PL3-U210N PL3-U211N PL3-U2M17N	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
	5/8													.9	UG210NL
	11/16													.9	UG211NL
														0.4	UG2M17NL
20	3/4	PL3-U212N PL3-U2M20N	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
														0.8	UG2M20NL
25	7/8	PL3-U214N△ PL3-U215N△ PL3-U216N△ PL3-U2M25N	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
	19/16													1.8	UG215NL
	1													1.7	UG216NL
														0.9	UG2M25NL
30	1 1/8	PL3-U218N PL3-U219N PL3-U2E20N PL3-U2M30N	1 5/16	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
	1 3/16													2.5	UG219NL
	1 1/4													2.5	UG2E20NL
														1.1	UG2M30NL
35	1 1/4	PL3-U220N△ PL3-U222N△ PL3-U223N△ PL3-U2M35N	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
	1 3/8													3.5	UG222NL
	1 7/16													3.5	UG223NL
														1.6	UG2M35NL
40	1 1/2	PL3-U224N△ PL3-U2M40N	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
														2.0	UG2M40NL
45	1 5/8	PL3-U226N△ PL3-U227N△ PL3-U228N△ PL3-U2M45N	2 1/16	5 5/8	7 1/4	2 1/32	2	1/2	3/4	4 1/4	7/8	1 15/64	1 21/32	5.2	UG226NL
	1 11/16													5.2	UG227NL
	1 3/4													5.1	UG228NL
														2.2	UG2M45NL
50	1 15/16	PL3-U231N△ PL3-U2E32N△ PL3-U2M50N	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
	2													5.8	UG2E32NL
														2.5	UG2M50NL
55	2	PL3-U232N△ PL3-U235N△ PLE-U2M55N	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
	2 3/16													7.3	UG235NL
														3.2	UG2M55NL
60	2 1/4	PL3-U236N PL3-U238N PL3-U239N PL3-U2M60N	2 11/16	7 1/2	9 1/2	2 1/2	2 1/2	5/8	1 1/8	5 3/8	1 1/16	1 9/16	2 7/64	11.0	UG236NL
	2 3/8													11.0	UG238NL
	2 7/16													10.9	UG239NL
														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.

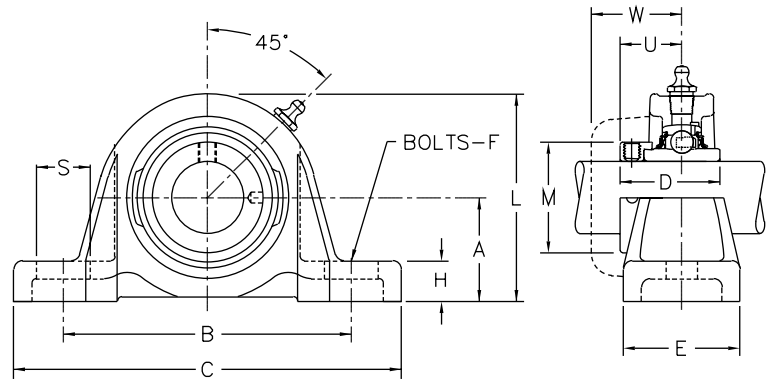
Load ratings, pages B-11, B-12.

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 1 3/16 1 1/4	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 1 3/8 1 7/16	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 3/8	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	4.8	YG224NL
		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 2	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 2 3/8 2 7/16	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.

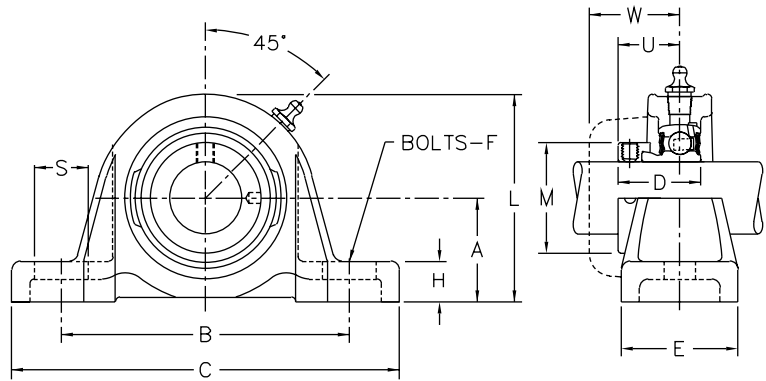
Load ratings, pages B-11, B-12.

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.

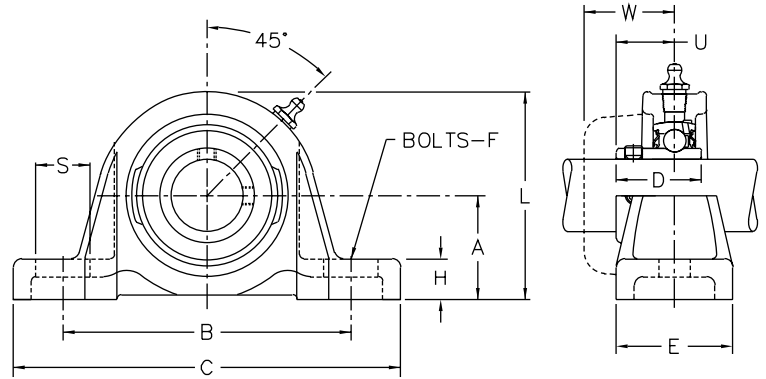
Load ratings, pages B-11, B-12.

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	SG214EL
	PL3-S215E												1.8	SG215EL
	PL3-S216E												1.8	SG216EL
													.82	
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	SG218EL
	PL3-S219E												2.6	SG219EL
	PL3-S2E20E												2.5	SG2E20EL
													1.14	
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	SG220EL
	PL3-S222E												3.3	SG222EL
	PL3-S223E												3.3	SG223EL
													1.50	
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 5/16 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	SG226EL
	PL3-S227E												5.0	SG227EL
	PL3-S228E												5.0	SG228EL
													2.27	
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 5/16 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.

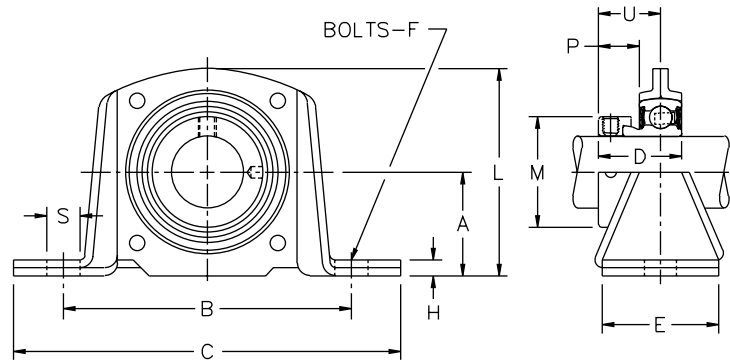
Load ratings, pages B-11, B-12.

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 30.2	3 1/2 88.9	4 5/8 117.5	1 1/8 28.58	1 15/32 37.31	1 1/16 27.0	3/8 10	7/32 5.6	2 11/32 59.5	1 1/8 28.6	33/64 13.1	7/8 22.2	59/64 23.4	600 2 670	.7 0.3	.9 0.4
	PS-W210E	PS-Y210N																
	-----	PS-Y211N																
3/4	PS-W212E	PS-Y212N	1 5/16 33.3	3 7/8 98.4	5 1/8 130.2	1 7/32 30.96	1 23/32 43.66	1 1/8 28.6	3/8 10	7/32 5.6	2 5/8 66.7	1 5/16 33.3	9/16 14.3	59/64 23.4	700 3 110	.9 0.4	1.1 0.5	
7/8 15/16 1	PS-W214E	PS-Y214N	1 7/16 36.5	4 1/16 103.2	5 3/8 136.5	1 7/32 30.96	1 3/4 44.45	1 7/32 31.0	3/8 10	7/32 5.6	2 55/64 72.6	1 1/2 38.1	1/2 12.7	59/64 23.4	1 1/16 27.0	800 3 560	1.1 0.5	1.3 0.6
	PS-W215E	PS-Y215N																
	PS-W216E	PS-Y216N																
1 1/8 1 3/16 1 1/4	PS-W218E	PS-Y218N	1 11/16 42.9	4 49/64 121.0	6 5/16 160.3	1 13/32 35.72	1 29/32 48.42	1 1/16 36.5	1/2 12	5/16 7.9	3 5/16 84.1	1 3/4 44.4	49/64 19.4	1 3/64 26.6	1 3/16 30.2	985 4 380	1.7 0.8	2.0 0.9
	PS-W219E	PS-Y219N																
	PS-W2E20E	PS-Y2E20N																
1 1/4 1 3/8 1 7/16	PS-W220E	PS-Y220N	1 7/8 47.6	5 5/64 129.0	6 15/16 176.2	1 7/32 38.89	2 1/64 51.20	1 5/8 41.3	1/2 12	5/16 7.9	3 3/4 95.2	2 3/16 55.6	49/64 19.4	1 5/32 29.4	1 5/32 32.5	1300 5 780	2.4 1.1	2.7 1.2
	PS-W222E	PS-Y222N																
	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.

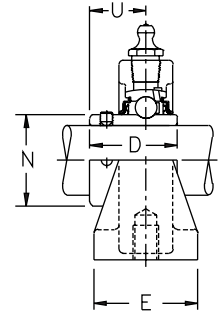
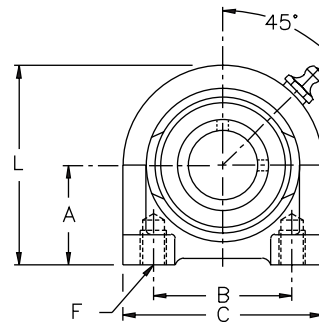
Additional information, page B-76.

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).

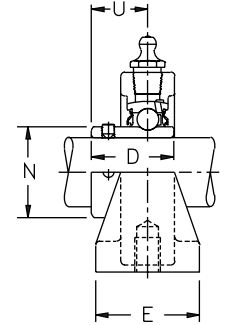
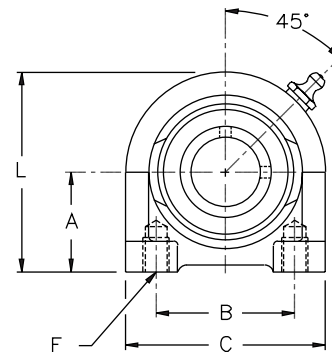
△ Available with E3 triple lip seals.

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 3/16 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.

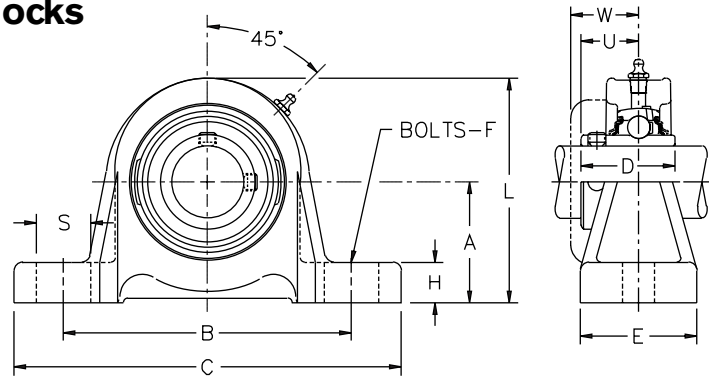
Load ratings, pages B-11, B-12.

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.

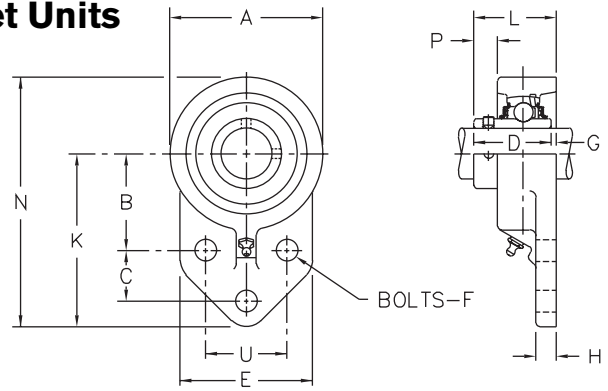
Load ratings, pages B-11, B-12.

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.

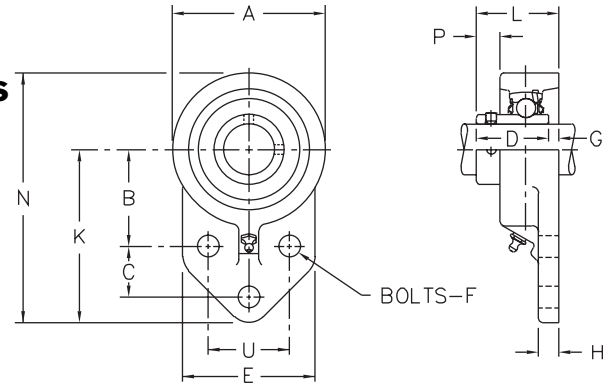
Additional information, page B-75.

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			
	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	FB3-S220E	3¾	2⅝	1¼	1⅝	3¼	½	⅜	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.

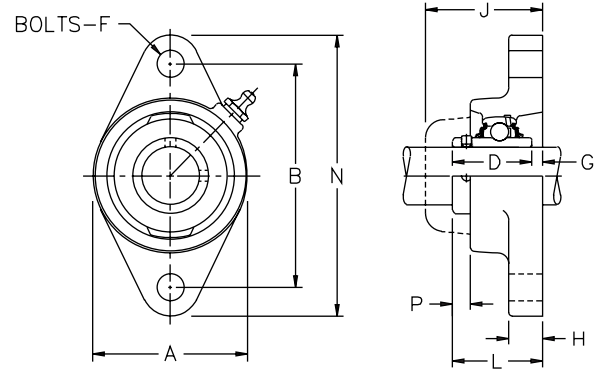
Load ratings, pages B-11, B-12.

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
	15/16	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 3/16	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											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.

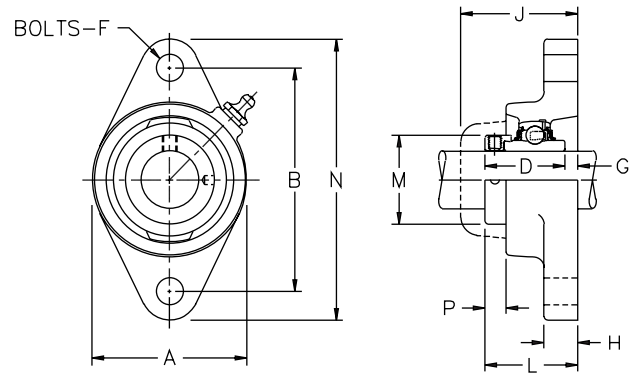
Load ratings, pages B-11, B-12.

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.

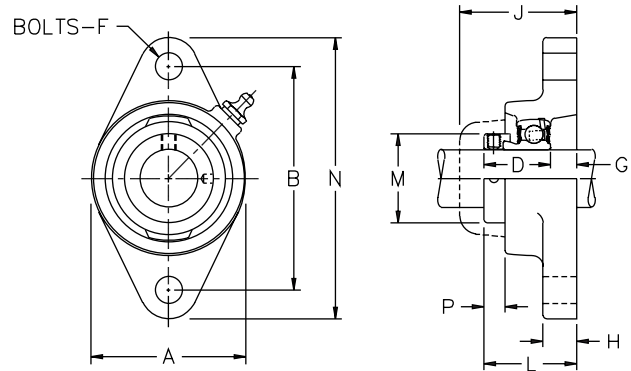
Load ratings, pages B-11, B-12.

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.

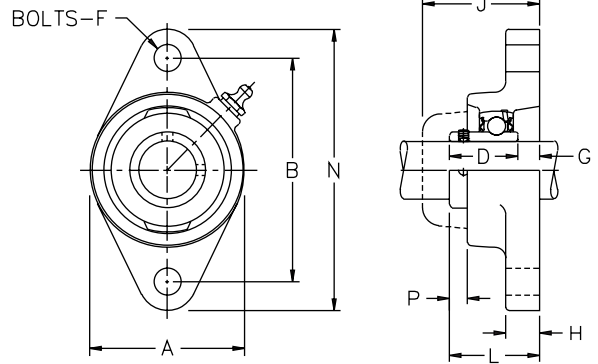
Load ratings, pages B-11, B-12.

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.

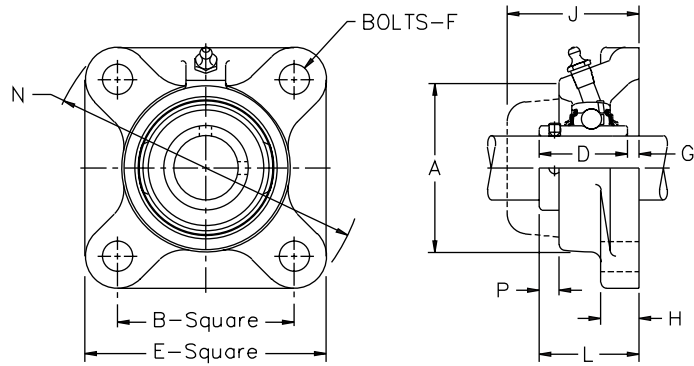
Load ratings, pages B-11, B-12.

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 31/32	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

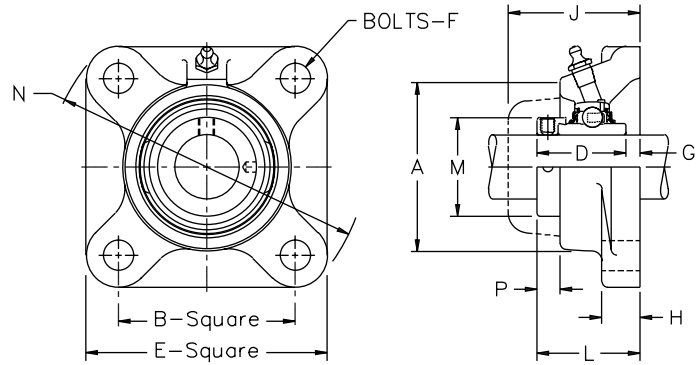
Bold face items are normally available from stock; please consult for availability of non-stock items.
 Shaft sizes over 2 7/16" have collars.
 Lubrication fitting tap size: for 1 1/16" (17 mm) and smaller shafts, 1/4"-28 UNF; for all other shafts, 1/8" PT.
 ■ N lip seals standard. H labyrinth seals 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.
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 5/16 33.3	4 13/32 111.9	37/64 14.7	1.6 0.7	YG212NL
7/8 15/16 1	F3-Y214N △ F3-Y215N △ F3-Y216N △	2 11/16 68.3	2 3/4 69.85	1 3/4 44.45	3 3/4 95.2	7/16 10	1/16 1.6	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 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.

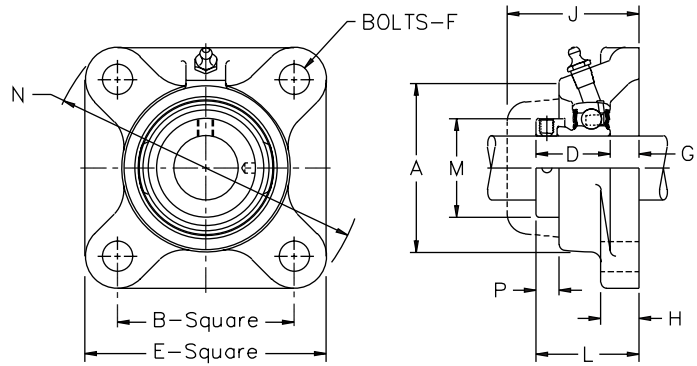
Load ratings, pages B-11, B-12.

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 F3-W210E	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
		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	
7/8 1 5/16 1	F3-W214E F3-W215E F3-W216E	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
		68.3	69.85	30.96	95.2	10	11.5	15.1	50.8	42.5	38.1	124.6	10.7	0.8	WG215EL
1 1/8 1 3/16 1 1/4	F3-W218E F3-W219E F3-W2E20E	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
		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
1 1/4 1 3/8 1 7/16	F3-W220E F3-W222E F3-W223E	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
		92.1	92.08	38.89	117.5	12	11.1	15.9	59.9	50.0	55.6	155.6	14.3	1.7	WG222EL
1 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	
1 5/8 1 11/16 1 3/4	F3-W226E F3-W227E F3-W228E	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
		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
1 15/16 2	F3-W231E F3-W2E32E	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
		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.

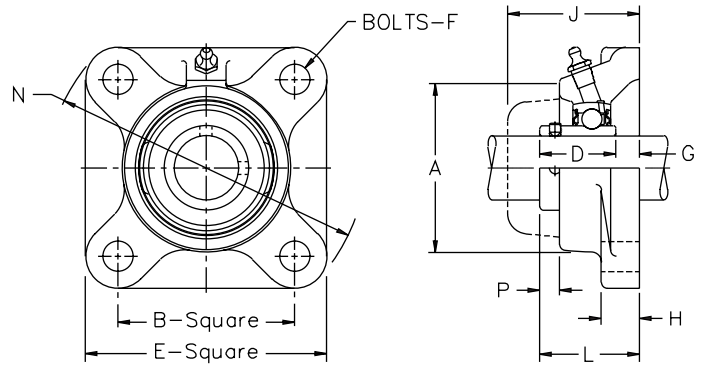
Load ratings, pages B-11, B-12.

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.

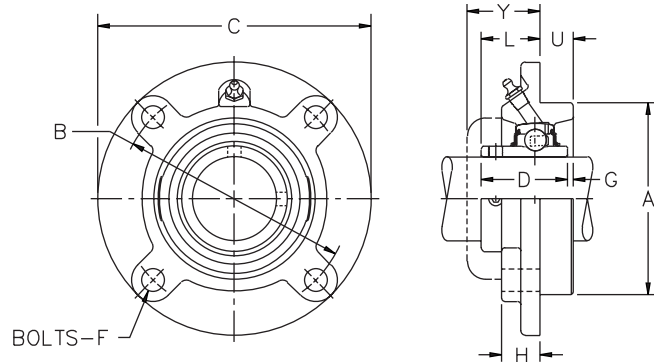
Load ratings, pages B-11, B-12.

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	5 5/64	...	1/2	1 3/8	3.0	UG214NL
	1 5/16	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 3/64	...	27/64	1 1/4	4.6	UG218NL
	1 3/8	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 15/16	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 1/64	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 1/8	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.

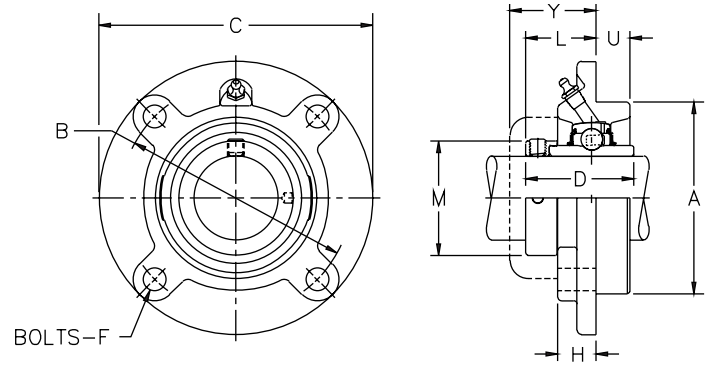
Load ratings, pages B-11, B-12.

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.

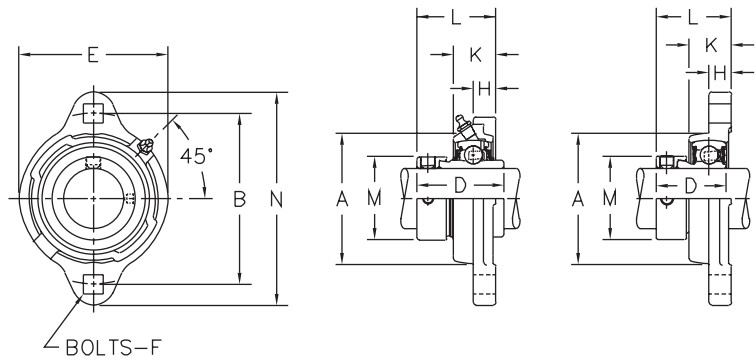
Additional information, page B-75.

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	2 1/16	2 13/16	1 7/32	1 23/32	2 15/32	2 3/8	5/16	27/64	25/32	1 11/32	1 15/32	1 5/16	3 9/16	.7	.8
	FX-WG212E	FX-YG212N	52.4	71.4	30.96	43.66	62.7	60.3	...	10.7	19.8	34.1	37.3	33.3	90.5	0.3	0.4
7/8	FX-W214E	FX-Y214N△	2 9/32	3	1 7/32	1 3/4	2 23/32	2 5/8	5/16	27/64	25/32	1 11/32	1 31/64	1 1/2	3 3/4	.8	1.0
	FX-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	0.4	0.5
	FX-WG215E	FX-YG215N△															
1	FX-W216E	FX-Y216N△	57.9	76.2	30.96	44.45	69.0	66.7	...	10.7	19.8	34.1	37.7	38.1	95.2	0.4	0.5
	FX-WG216E	FX-YG216N△															
1 1/8	FX-W218E	FX-Y218N	2 23/32	3 9/16	1 13/32	1 29/32	3 3/32	3 3/32	3/8	15/32	57/64	1 17/32	1 21/32	1 3/4	4 7/16	1.2	1.4
	FX-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	0.5	0.6
	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	0.5	0.6
	FX-WG2E20E	FX-YG2E20N															
1 1/4	FX-W220E	FX-Y220N△	3 1/8	3 15/16	1 17/32	2 1/64	3 1/2	3 1/2	3/8	1/2	15/16	1 21/32	1 25/32	2 3/16	4 13/16	1.8	2.0
	FX-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	0.8	0.9
	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	0.8	0.9
	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

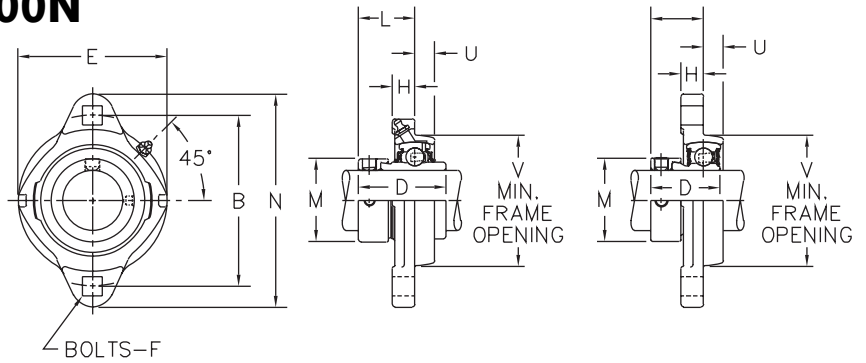
2-bolt (Carriage) Inboard Mounting

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	63.5	28.58	37.31	55.6	...	9.5	22.2	23.4	28.6	81.0	8.3	47.6	.5	.6
	-----	FXR-Y211N														
1 1/16	-----	FXR-YG211N														
3/4	FXR-W212E	FXR-Y212N	2 3/16 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 7/32 30.96	1 3/4 44.45	2 23/32 69.0	5/16 ...	27/64 10.7	59/64 23.4	1 1/16 27.0	1 1/2 38.1	3 3/4 95.2	2 3/64 9.1	2 3/8 60.3	.8 0.4	1.0 0.5
	FXR-WG214E	FXR-YG214N△														
	FXR-W215E	FXR-Y215N△														
15/16	FXR-WG215E	FXR-YG215N△	76.2	30.96	44.45	69.0	...	10.7	23.4	27.0	38.1	95.2	9.1	60.3	.8	1.0
	FXR-W216E	FXR-Y216N△														
1	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	90.5	35.72	48.42	78.6	...	11.9	26.6	30.2	44.4	112.7	10.7	71.4	1.2	1.4
	FXR-WG219E	FXR-YG219N														
1 1/4	FXR-W2E20E	FXR-Y2E20N	90.5	35.72	48.42	78.6	...	11.9	26.6	30.2	44.4	112.7	10.7	71.4	1.2	1.4
	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△	100.0	38.89	51.20	88.9	...	12.7	29.4	32.5	55.6	122.2	11.1	81.8	1.8	2.0
	FXR-WG222E	FXR-YG222N△														
1 7/16	FXR-W223E	FXR-Y223N△	100.0	38.89	51.20	88.9	...	12.7	29.4	32.5	55.6	122.2	11.1	81.8	1.8	2.0
	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.

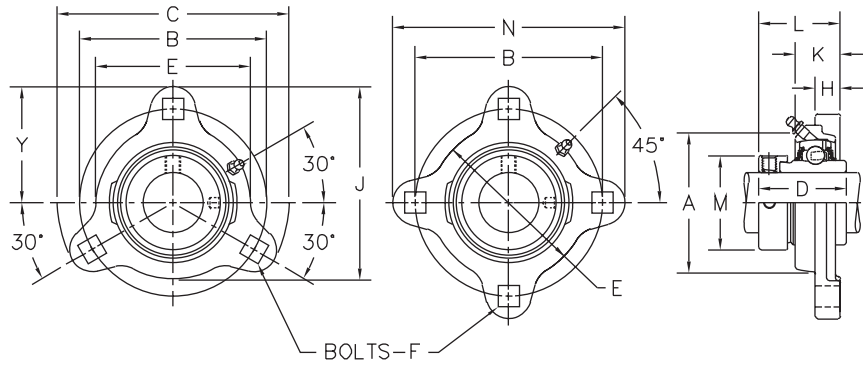
Additional information, page B-76.

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		B	C	D		E	F		L			Unit wt. (lbs./kg.)																					
		Non-relubricatable	Non-relubricatable	Non-relubricatable	Relubricatable			W200	Y200		WG200	YG200	Carriage bolt size	H	K	W200	Y200	M	N	Y	W200	Y200															
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 15/32	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 15/32	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 15/32	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
1	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 1/8	F-W222E	F-Y222N	3 1/8	3 7/32	3 15/16	4 13/16	1 17/32	2 1/64	3 1/2	3/8	1/2	15/16	1 21/32	1 25/32	2 3/16	...	2 13/32	1.8	2.0																		
	F-WG222E	F-YG222N																		79.4	81.8	100.0	122.2	38.89	51.20	88.9	...	12.7	23.8	42.1	45.2	55.6	...	61.1	0.8	0.9	
1 1/4	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 1/2	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 5/8	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 11/16	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 15/16	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.

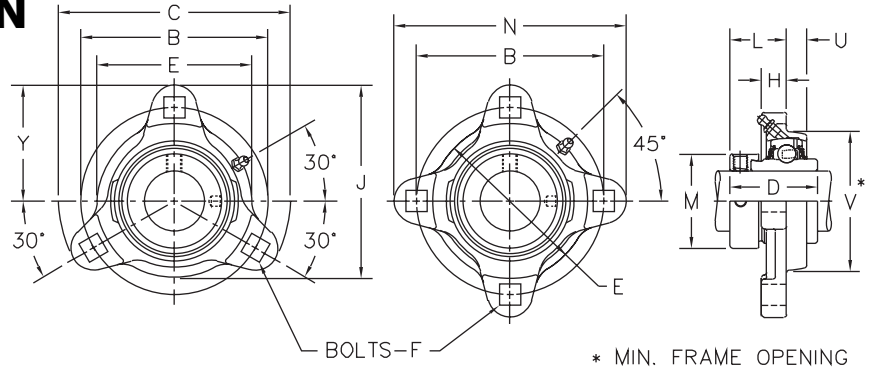
Additional information, page B-76.

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 YG200	W200 YG200					W200 YG200	W200 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																
	5/8	FR-W210E	FR-Y210N	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-WG210E	FR-YG210N																
	1 1/16	-----	FR-Y211N	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
		-----	FR-YG211N																
	3/4	FR-W212E	FR-Y212N	2 13/16	3 3/16	17/32	2 23/32	2 3/8	5/16	27/64	59/64	1 3/4	1 1/2	2 3/4	2 5/32	1 25/32	.7	.8	
		FR-WG212E	FR-YG212N	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	
	3-BOLT	7/8	FR-W214E	FR-Y214N△	3	3 3/4	17/32	1 3/4	2 5/8	5/16	27/64	59/64	1 1/16	1 1/2	2 3/4	2 3/8	1 7/8	.8	1.0
			FR-WG214E	FR-YG214N△															
		1 5/16	FR-W215E	FR-Y215N△	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-WG215E	FR-YG215N△															
1		FR-W216E	FR-Y216N△	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
		FR-WG216E	FR-YG216N△																
1 1/8	FR-W218E	FR-Y218N	3 3/16	4 7/16	1 13/32	1 25/32	3 3/32	3/8	1 5/32	1 3/4	1 3/16	1 3/4	2 7/64	2 13/16	2 7/32	1.2	1.4		
	FR-WG218E	FR-YG218N																	
1 3/16	FR-W219E	FR-Y219N	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-WG219E	FR-YG219N																	
1 1/4	FR-W2E20E	FR-Y2E20N	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
	FR-WG2E20E	FR-YG2E20N																	
3-BOLT	1 1/4	FR-W220E	FR-Y220N△	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-WG220E	FR-YG220N△																
	1 3/8	FR-W222E	FR-Y222N△	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-WG222E	FR-YG222N△																
	1 7/16	FR-W223E	FR-Y223N△	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
		FR-WG223E	FR-YG223N△																
4-BOLT	1 1/2	FR-W224E	FR-Y224N△	4 11/16	5 13/16	1 23/32	2 7/32	3 7/8	1/2	5/8	1 1/32	1 3/8	2 3/8	1/2	3 9/16	...	2.8	3.0	
		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	...	1.3	1.4	
	1 5/8	FR-W226E	FR-Y226N△	4 3/4	5 7/8	1 23/32	2 7/32	2 7/32	1/2	5/8	1 1/32	1 3/8	2 1/2	1/2	3 25/32	...	2.9	3.1	
		FR-WG226E	FR-YG226N△																
	1 11/16	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	...	1.3	1.4	
		FR-WG227E	FR-YG227N△																
1 3/4	FR-W228E	FR-Y228N△	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
	FR-WG228E	FR-YG228N△																	
4-BOLT	1 15/16	FR-W231E	FR-Y231N△	5	6 1/8	1 23/32	2 15/32	4 15/32	1/2	5/8	1 1/32	1 1/2	2 3/4	1/2	3 31/32	...	3.1	3.6	
		FR-WG231E	FR-YG231N△																
	2	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	...	1.4	1.6	
		FR-WG2E32E	FR-YG2E32N△																

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.

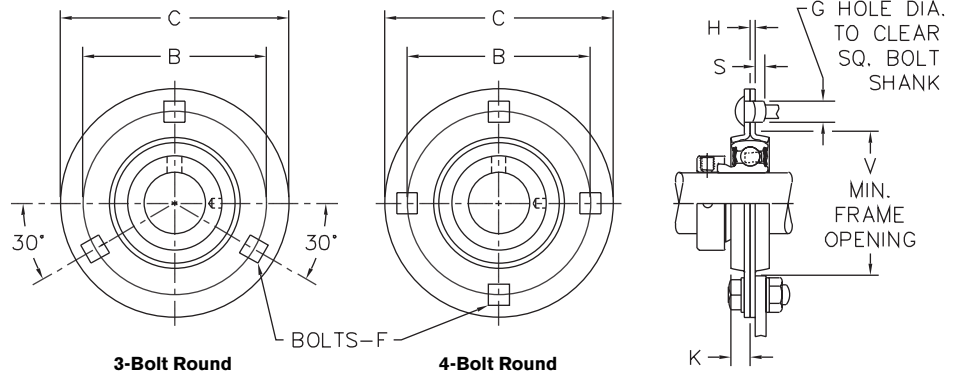
Load ratings, pages B-11, B-12.

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																211	2M17	63.5	81.0	...	7.14	10.3	1.90	7.1	49.2	2 670														
		1 1/16	2M17																																										
	47MSC1 20	3/4	212	... ..	... ..	5/8	204	2 13/16	3 9/16	5/16	1 1/32	1/2	.083	5/16	.021	.115	2 3/16	700																									
			2M20																71.4	90.5	...	8.73	12.7	2.11	7.9	55.6	3 110																
	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																									
			215																216	2M25	76.2	95.2	...	8.73	12.7	.211	8.7	60.3	3 560														
			1																													2M25	2.64	4 890			
	62MSC1 30	1 1/8	218	... ..	... ..	1	206	3 9/16	4 7/16	3/8	1 3/32	1 9/32	.104	1 1/32	.011	.104	2 13/16	1100																									
			219																2E20	2M30	90.5	112.7	...	10.32	15.1	2.64	8.7	71.4	4 890														
1 1/4			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																									
		222	2M35																2.64													
		1 3/8																															223	.134
		1 7/16																																											
80MSC1 40	1 1/2	224	7/8	7/8	1 1/4	208	4 11/16	5 13/16	1/2	1 7/32	9/64	.134	1 3/32	.013	.107	3 3/16	1700																												
		2M40																1 1/16	1	119.1	147.6	...	13.49	19.4	3.40	10.3	90.5	7 560															
		1 1/2																													2M40														
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	9/64	.134	7/16	.013	.107	3 13/16	1700																												
		227																45	120.6	149.2	...	13.49	19.4	3.40	11.1	96.8	7 560																
		1 3/4																												2M45															
90MSC1 50	1 15/16	231	1 3/8	1 1/8	1 3/8	210	5	6 1/8	1/2	1 7/32	9/64	.149	7/16	.000	.077	4	1900																												
		2																2E32	2M50	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	9/64	.149	1 5/32	.000	.077	4 7/16	1900																												
		235																2M55	138.1	166.7	...	13.49	19.4	3.78	11.9	112.7	8 450																
		2 3/16																												2M55															

Please consult for availability.

■ Assembly requires two housing halves.

Additional information, page B-76.

Triangular Flanged Housings, 2-piece Formed Steel

MSTR

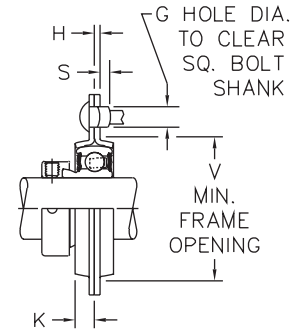
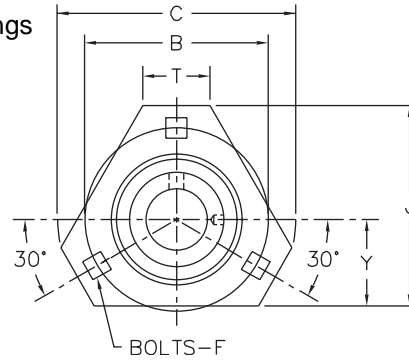
3-bolt (Carriage) Mounting

For Collar Mounted, Round, Square, or Hex Bore Bearings

Alignable

Non-relubricatable

Bearing Not Included



Dimensions (inches/mm)

Housing half number	For collar mounted bearings				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 1/16	215 216																				2M25	76.2	95.2
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	2E20																				2M30

Please consult for availability.

■ Assembly requires two housing halves.

Additional information, page B-76.

Flanged Housings, 2-piece Formed Steel

MST

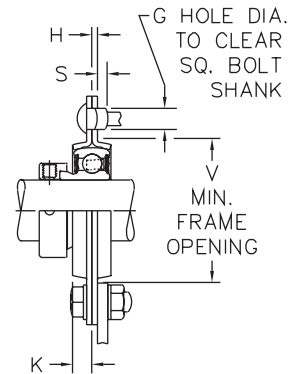
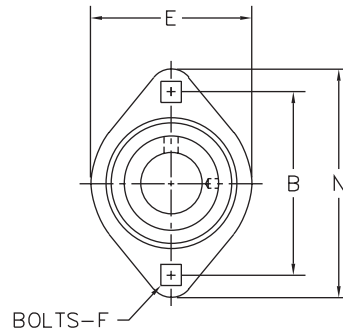
2-bolt (Carriage) Mounting

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.

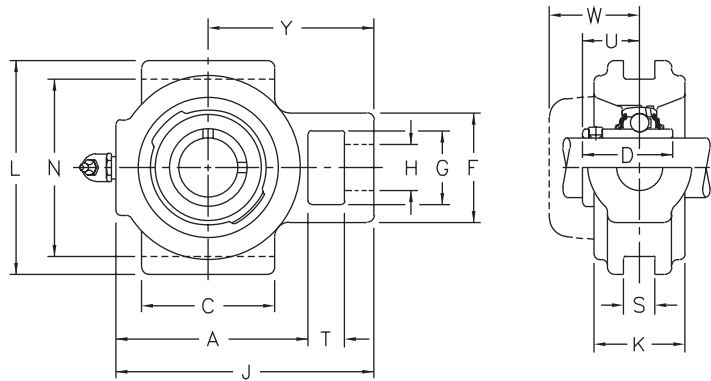
■ Assembly requires two housing halves.

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)

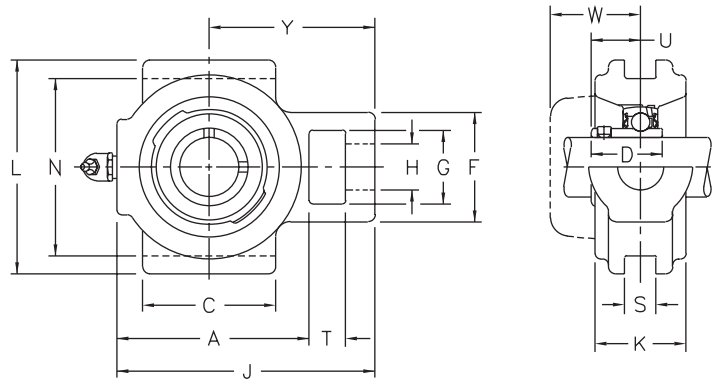
Shaft diameter	Takeup unit number	A	C	D	F	G	H	J	K	L	N	S	T	U	W	Y	Unit wt. (lbs./kg.)	Bearing no.
17	T3-U2B08N	23/16	17/8	13/32	11 1/16	1 1/16	9/16	3	13/16	2 1/4	1.875	.281	1/2	4 1/64	1 13/64	1 15/16	1.0	UG2B08NL UG210NL UG211NL UG2M17NL
	T3-U210N																	
	T3-U211N																	
	T3-U2M17N	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 9/16	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)

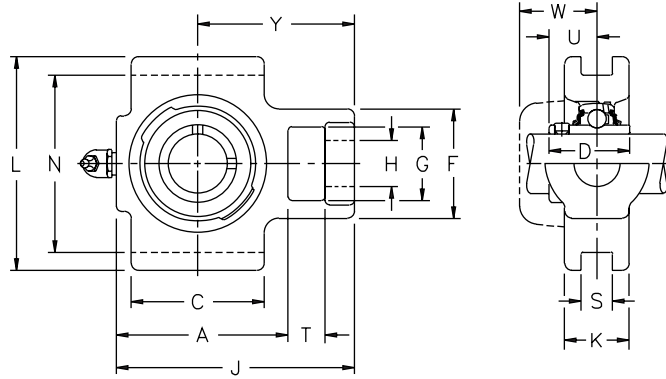
Shaft diameter	Takeup unit number	A	C	D	F	G	H	J	K	L	N +.000" -.015" (+0.00 -0.38)	S +.005" -.015" (+0.13 -0.38)	T	U	W ◆	Y	Unit wt. (lbs./kg.)	Bearing no.
in.	Lip seals																	
3/4	T3-S212E	2 1/2	1 7/8	1 1/8	1 11/16	1 1/16	9/16	3 3/16	1 9/16	2 5/8	2.125	.281	1/2	3/4	1 5/16	2 3/32	1.5	SG212EL
		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		S		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)								
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	1 1/16 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 1 5/16 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 ¹¹ / 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 ¹¹ / ₁₆ 93.7	2 3/4 69.8	1 ⁴ / 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 1/4 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 ⁷ / 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 ⁷ / 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.

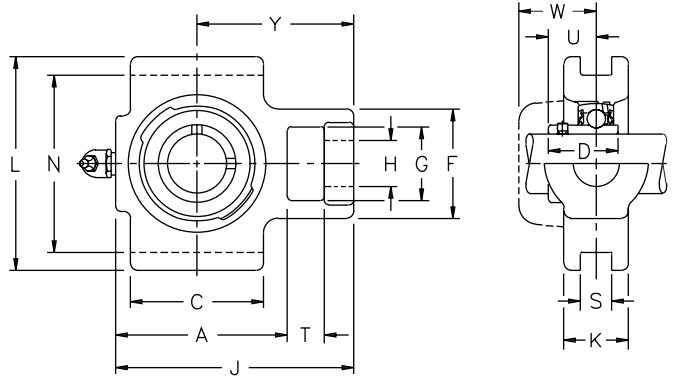
Load ratings, pages B-11, B-12.

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.
<i>inches</i>	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 11/16 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 13/16 122.2	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	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.

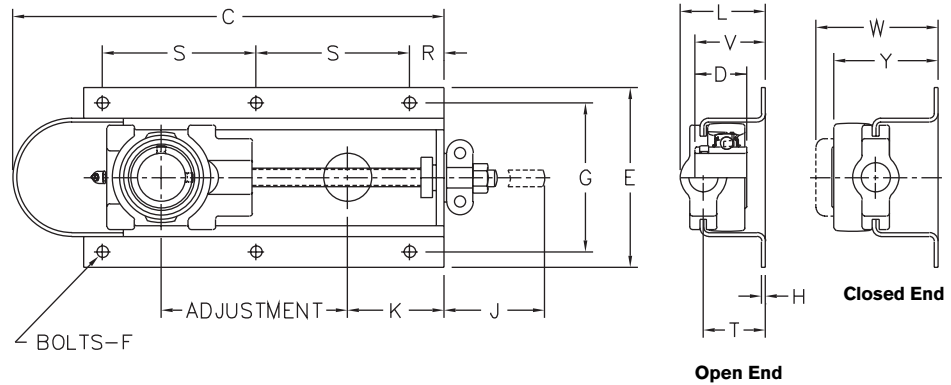
Load ratings, pages B-11, B-12.

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



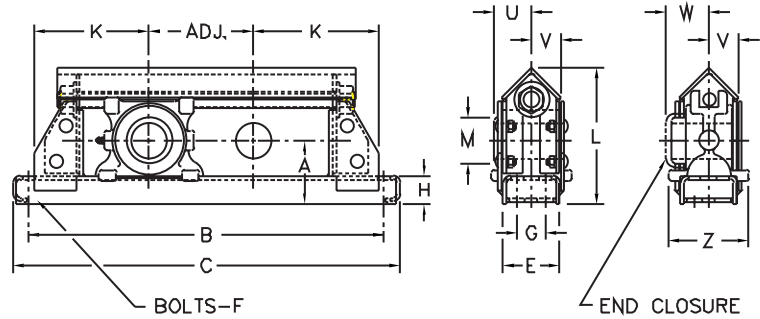
Dimensions (inches/mm)

Shaft diameter mm in.	Adjust- ment	Takeup unit number Lip seals	C	D	E	F	G	H	J	K	L	M	R	S	T	V	W	Y	Unit wt. (lbs./kg.)	Unit no.																		
																					Bolts																	
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																		
		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
		TAS3-U2M25N-6																																				
30	6	TAS3-U218N-6	15	1 9/16	6 1/4	3/8	5 1/4	3/16	8 9/16	3 11/16	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																		
		TAS3-U219N-6																			15	15	21	381.0	533.4	39.69	158.8	10	133.4	4.8	208.0	93.7	73.0	53.2	41.3	123.8	136.5	54.0
	TAS3-U219N-12	21	21	381.0	533.4	39.69	158.8	10	133.4	4.8	208.0	93.7	73.0	53.2	41.3	123.8	136.5	54.0	59.5	109.1																		
	TAS3-U2M30N-6																				21	21	381.0	533.4	39.69	158.8	10	133.4	4.8	208.0	93.7	73.0	53.2	41.3	123.8	136.5	54.0	59.5
	TAS3-U2M30N-12	21	21	381.0	533.4	39.69	158.8	10	133.4	4.8	208.0	93.7	73.0	53.2	41.3	123.8	136.5	54.0	59.5	109.1																		
	TAS3-U220N-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 3/64	13.5	15.2
TAS3-U220N-12	21	21	381.0	533.4	44.85	158.8	10	133.4	4.8	211.1	95.2	73.0	61.9	41.3	123.8	136.5	54.0	63.1	112.7	90.1																		
TAS3-U223N-6																					21	21	381.0	533.4	44.85	158.8	10	133.4	4.8	211.1	95.2	73.0	61.9	41.3	123.8	136.5	54.0	63.1
TAS3-U2M35N-6	21	21	381.0	533.4	44.85	158.8	10	133.4	4.8	211.1	95.2	73.0	61.9	41.3	123.8	136.5	54.0	63.1	112.7	90.1																		
TAS3-U2M35N-12																					21	21	381.0	533.4	44.85	158.8	10	133.4	4.8	211.1	95.2	73.0	61.9	41.3	123.8	136.5	54.0	63.1
TAS3-U224N-9	19 3/4	1 29/32	7 7/8	3/8	6 5/8	1/4	11 1/4	4 1/2	3 3/8	2 11/16	1 5/8	5 6	2 3/4	3 1/16	5 5/32	4 3/8	24.0	31.0	10.9	14.1																		
TAS3-U224N-18																					28 3/4	501.6	730.2	48.42	200.0	10	168.3	6.4	114.3	92.1	68.3	41.3	5 6	127.0	152.4	69.8	77.8	134.1
TAS3-U2M40N-9	28 3/4	501.6	730.2	48.42	200.0	10	168.3	6.4	114.3	92.1	68.3	41.3	5 6	127.0	152.4	69.8	77.8	134.1	111.1	24.0																		
TAS3-U2M40N-18																					28 3/4	501.6	730.2	48.42	200.0	10	168.3	6.4	114.3	92.1	68.3	41.3	5 6	127.0	152.4	69.8	77.8	134.1
TAS3-U227N-9	19 3/4	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 6	2 3/4	3 1/16	5 7/16	4 1/2	25.5	32.0	25.0	31.5																		
TAS3-U227N-18																					28 3/4	501.6	730.2	41.59	200.0	10	168.3	6.4	117.5	92.1	73.0	41.3	127.0	152.4	69.8	77.8	138.1	114.3
TAS3-U228N-9	19 3/4	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 6	2 3/4	3 1/16	5 7/16	4 1/2	25.5	32.0	25.0	31.5																		
TAS3-U228N-18																					28 3/4	501.6	730.2	41.59	200.0	10	168.3	6.4	117.5	92.1	73.0	41.3	127.0	152.4	69.8	77.8	138.1	114.3
TAS3-U2M45N-9	28 3/4	501.6	730.2	41.59	200.0	10	168.3	6.4	117.5	92.1	73.0	41.3	127.0	152.4	69.8	77.8	138.1	114.3	25.5	32.0																		
TAS3-U2M45N-18																					28 3/4	501.6	730.2	41.59	200.0	10	168.3	6.4	117.5	92.1	73.0	41.3	127.0	152.4	69.8	77.8	138.1	114.3
TAS3-U231N-9	19 3/4	2 3/32	7 7/8	3/8	6 5/8	1/4	11 1/4	4 5/8	3 3/8	3 3/8	1 5/8	5 6	2 3/4	3 1/16	5 19/32	4 17/32	23.0	29.8	10.4	13.5																		
TAS3-U231N-18																					28 3/4	501.6	730.2	53.18	200.0	10	168.3	6.4	117.5	92.1	79.4	41.3	127.0	152.4	69.8	77.8	142.1	115.1
TAS3-U2M50N-9	28 3/4	501.6	730.2	53.18	200.0	10	168.3	6.4	117.5	92.1	79.4	41.3	127.0	152.4	69.8	77.8	142.1	115.1	23.0	29.8																		
TAS3-U2M50N-18																					28 3/4	501.6	730.2	53.18	200.0	10	168.3	6.4	117.5	92.1	79.4	41.3	127.0	152.4	69.8	77.8	142.1	115.1
TAS3-U232N-9	21 1/8	2 1/4	8 1/4	1/2	7 1/8	1/4	11 3/16	5 1/2	4 1/4	3 1/2	2 1/2	5 6	3 1/4	3 1/16	6 5/16	5 1/16	32.3	41.2	29.9	39.0																		
TAS3-U232N-18																					30 3/8	512.8	777.9	57.15	209.6	12	181.0	6.4	139.7	108.0	88.9	63.5	127.0	152.4	82.6	93.7	160.3	128.6
TAS3-U235N-9	21 1/8	2 1/4	8 1/4	1/2	7 1/8	1/4	11 3/16	5 1/2	4 1/4	3 1/2	2 1/2	5 6	3 1/4	3 1/16	6 5/16	5 1/16	32.3	41.2	29.9	39.0																		
TAS3-U235N-18																					30 3/8	512.8	777.9	57.15	209.6	12	181.0	6.4	139.7	108.0	88.9	63.5	127.0	152.4	82.6	93.7	160.3	128.6
TAS3-U2M55N-9	21 1/8	2 1/4																																				

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 1/16	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 1/16	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	38.6														
609.6	TDS3-U2M60N-24	1028.7	1079.5	42.2														
762.0	TDS3-U2M60N-30	1181.1	1231.9	45.8														
2 15/16	12	TDS-U247N-12	5 1/8	30 1/2	32 1/2	4	5/8	2	2	9 1/4	10 5/8	4 5/8	1 13/16	1 5/32	2 13/64	5 1/8	76.0	TD3-U247N
	18	TDS-U247N-18		36 1/2	38 1/2												85.0	
	24	TDS-U247N-24		42 1/2	44 1/2												93.0	
	30	TDS-U247N-30		48 1/2	50 1/2												101.0	
	304.8	TDS-U2M75N-12		774.7	825.5												34.5	
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 1/16	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.

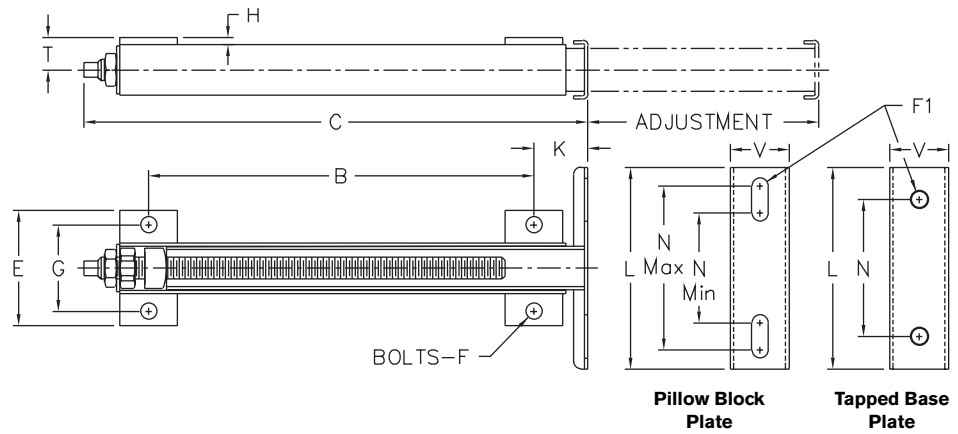
Load ratings, pages B-11, B-12.

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

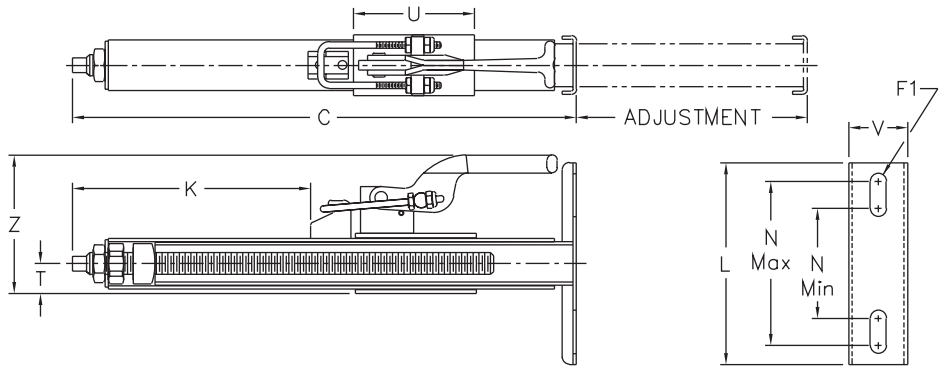
Shaft dia.	T-Frame		F1 Bolts	L	N	V
	Steel	Stainless				
3/4 Thru 1	TPT100-3	TSPT100-3	3/8	3	2	1 ¹ / ₂
	TPT100-6	TSPT100-6				
	TPT100-9	TSPT100-9				
1 ¹ / ₈ Thru 1 ¹ / ₄	TPT2501-3	TSPT2501-3	7/16	4	3	1 ¹ / ₂
	TPT2501-6	TSPT2501-6				
	TPT2501-9	TSPT2501-9				
	TPT2501-12	TSPT2501-12				
1 ¹ / ₄ Thru 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.*	Adjust- ment	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	7	3 13/16	5 1 1/16	1	4	2 1/32	4 7/8	1/2	3/4-10	7.0
	TQP250-9	9	14 1/2	1/2	3 1/16					6					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.

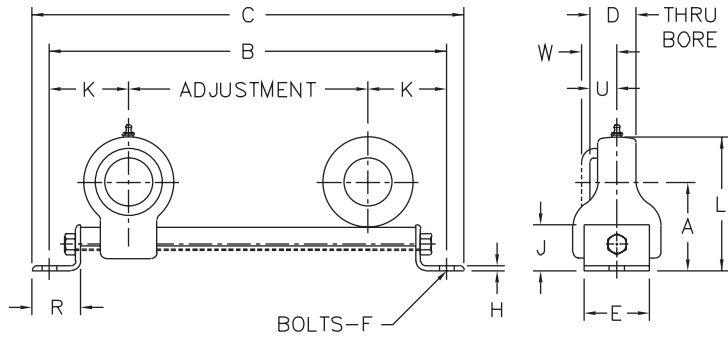
Load ratings, pages B-11, B-12.

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	152.4	NT3-U216N-6														4.5
			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
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	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
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
		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	8.2
		228.6	NT3-U2M50N-9														8.6
		304.8	NT3-U2M50N-12														9.5
	457.2	NT3-U2M50N-18															

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.

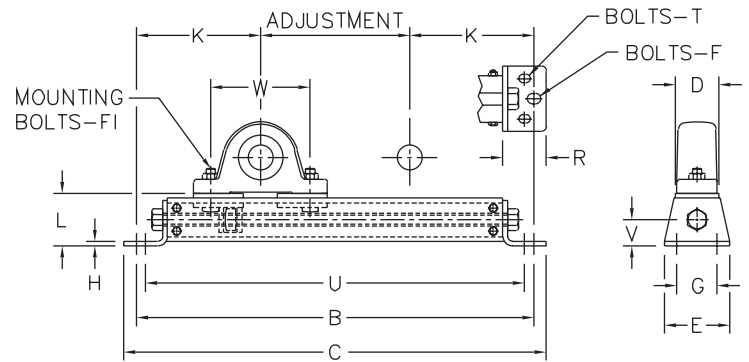
Load ratings, pages B-11, B-12.

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)																	Min.	Max.
	in.	mm							Bolts						Bolts				
P3-U216N P3-U2M25N	3/8 bolts	10	LC1-6 LC1-9 LC1-12	6	16	17	1 3/4 44.5	2 5/8 66.7	3/8 10	1 5/8 41.3	3/16 4.8	5 127.0	2 1/8 54.0	1 3/4 44.5	5/16 8	15 1/4	1 1/16 27.0	3 76.2	5 15/16 127.0
9				19	20	18 1/4													
12				22	23	21 1/4													
PL3-U216N PL3-U2M25N	1 shaft	25	LC1-12	152.4	406.4	431.8	387.4	436.6	539.8										
228.6				482.6	508.0	436.6													
304.8				558.8	584.2	539.8													
P3-U231N P3-U2M50N	1/2 bolts	12	LC2-6 LC2-9	6	19 1/8	20 1/4	2 3/8 60.3	3 1/8 79.4	1/2 12	2 1/8 54.0	1/4 6.4	6 9/16 166.7	2 11/16 68.3	2 3/16 55.6	3/8 10	18 1/8	1 1/32 34.1	3 3/4 95.2	7 1/4 184.2
9				22 1/8	23 1/4	21 1/8													
12				25 1/8	26 1/4	24 1/8													
PL3-U231N PL3-U2M50N	1 15/16 shaft	50	LC2-12 LC2-18	152.4	485.8	514.4	460.4	536.6	612.8	765.2									
228.6				562.0	590.6	536.6													
304.8				667.8	667.8	612.8													
PH3-U219N PH3-U2M30N	1 15/16 shaft	50	LC2-18 LC2-24	152.4	485.8	514.4	460.4	536.6	612.8	765.2									
228.6				562.0	590.6	536.6													
304.8				667.8	667.8	612.8													
P3-U239N P3-U2M60N	5/8 bolts	16	LC3-9 LC3-12	9	25 5/16	26 9/16	3 76.2	4 101.6	5/8 16	2 3/4 69.8	5/16 7.9	8 5/32 207.2	3 3/16 84.1	2 3/4 69.8	1/2 12	24 1/16	1 5/8 41.3	4 1/4 108.0	9 228.6
12				28 5/16	29 9/16	27 1/16													
18				34 5/16	35 9/16	33 1/16													
PL3-U235N PL3-U2M55N	2 3/16 shaft	60	LC3-18 LC3-24	228.6	642.9	674.7	611.2	687.4	839.8	992.2									
304.8				719.1	750.9	687.4													
457.2				871.5	903.3	839.8													
PH3-U235N PH3-U2M55N	2 3/16 shaft	60	LC3-24	228.6	642.9	674.7	611.2	687.4	839.8	992.2									
304.8				719.1	750.9	687.4													
457.2				871.5	903.3	839.8													
PH3-U2M55N	2 3/16 shaft	60	LC3-24	609.6	1023.9	1055.7	992.2												
609.6				1023.9	1055.7	992.2													

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

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

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

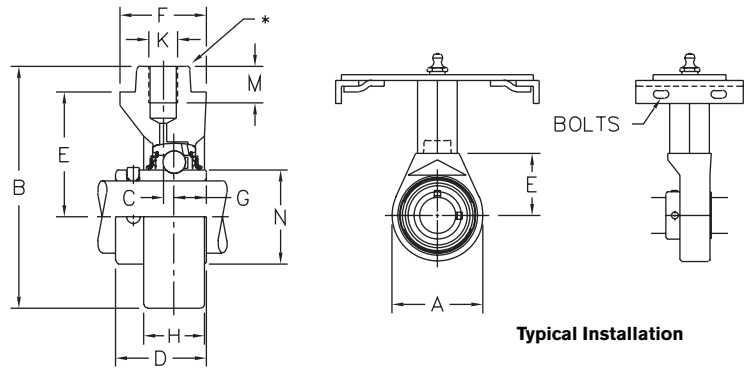
Load ratings, pages B-11, B-12.

Additional information, page B-75.

Standard Duty Screw Conveyor Hanger Bearing Units

HM3-U200

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



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.

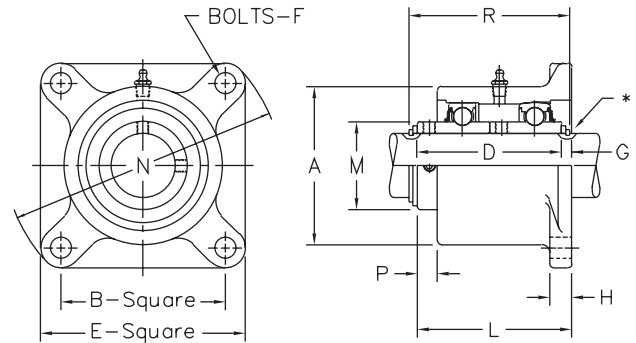
Load ratings, pages B-11, B-12.

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

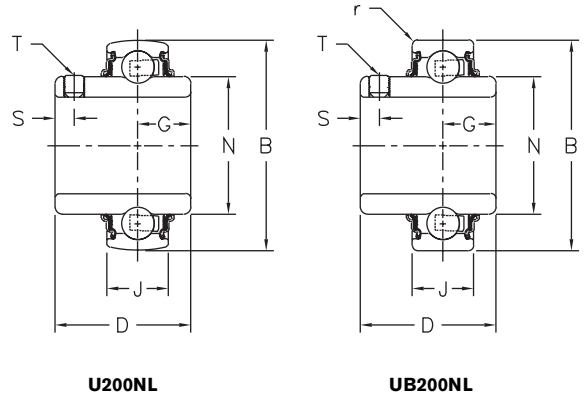
Spherical or Cylindrical O.D.

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 15/16	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 1/16" 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

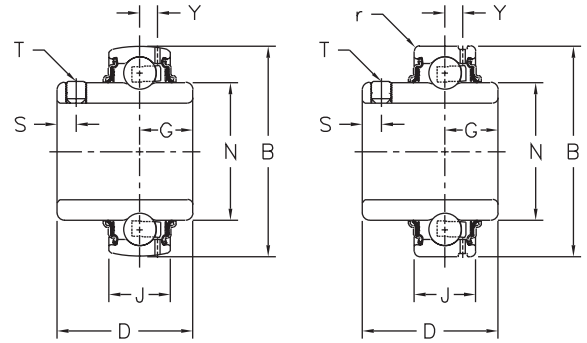
Spherical or Cylindrical O.D.

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 Δ	UBG214NLΔ	+0.0007 -0.0000	2.0472	1 23/64	.5625	.5906	.5906	...	1.313	.039	.22	1/4-28	.140
	15/16	UG215NL Δ	UBG215NLΔ												
	1	UG216NL Δ	UBG216NLΔ												
		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 Δ	UBG220NLΔ	+0.0008 -0.0000	2.8346	1 49/64	.6563	.7480	.7480	...	1.847	.039	.25	5/16-24	.239
	1 3/8	UG222NL Δ	UBG222NLΔ												
	1 7/16	UG223NL Δ	UBG223NLΔ												
		UG2M35NL	UBG2M35NL												
40	1 1/2	UG224NL Δ	UBG224NLΔ	+0.0008 -0.0000	3.1496	1 29/32	.7344	.8268	.8661	...	2.083	.039	.32	5/16-24	.253
		UG2M40NL Δ	UBG2M40NLΔ	+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 Δ	UBG226NLΔ	+0.0008 -0.0000	3.3465	2 1/32	.7969	.8661	.8661	...	2.281	.039	.32	5/16-24	.254
	1 11/16	UG227NL Δ	UBG227NLΔ												
	1 3/4	UG228NL Δ	UBG228NLΔ												
		UG2M45NL	UBG2M45NL												
50	1 15/16	UG231NL Δ	UBG231NLΔ	+0.0008 -0.0000	3.5433	2 3/32	.8281	.9055	.8661	...	2.475	.039	.38	3/8-24	.268
	2	UG2E32NL Δ	UBG2E32NLΔ												
		UG2M50NL	UBG2M50NL												
55	2 1/16	UG232NL Δ	UBG232NLΔ	+0.0009 -0.0000	3.9370	2 1/4	.8438	.9843	.9843	...	2.749	.059	.38	3/8-24	.295
	2 3/16	UG235NL Δ	UBG235NLΔ												
		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												
65	2 1/2	UG240NL	UBG240NL	+0.0009 -0.0000	4.7244	2 11/16	1.0000	...	1.0630	4 3/16	3.331343
	2 11/16	UG243NL	UBG243NL												
		UG2M65NL	UBG2M65NL												
75	2 3/4	UG244NL	UBG244NL	+0.0009 -0.0000	5.1181	2 7/8	1.0625	...	1.1417	4 5/8	3.624367
	2 15/16	UG247NL	UBG247NL												
	3	UG2E48NL	UBG2E48NL												
		UG2M75NL	UBG2M75NL												
85	3 1/16	UG255NL	UBG255NL	+0.0011 -0.0000	5.9055	3 9/16	1.4375	...	1.3386	5 3/16	4.158415
	3 1/2	UG2E56NL	UBG2E56NL												
		UG2M85NL	UBG2M85NL												
100	3 15/16	UG263NL	UBG263NL	+0.0011 -0.0000	7.0866	4 1/4	1.6719	...	1.5748	5 15/16	4.913504
	4	UG2E64NL	UBG2E64NL												
		UG2M100NL	UBG2M100NL												

See footnotes on facing page.

Collar Mounted Ball Bearings

Y200NL, YB200NL

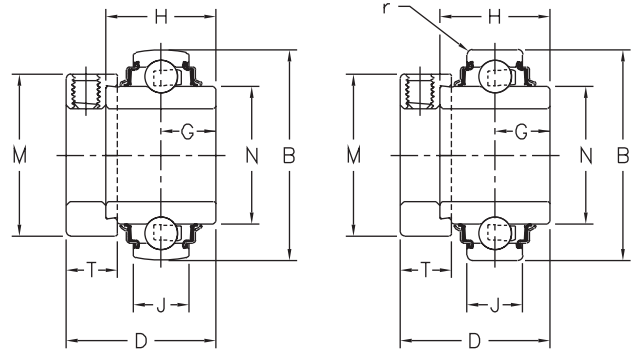
Spherical or Cylindrical O.D.

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).

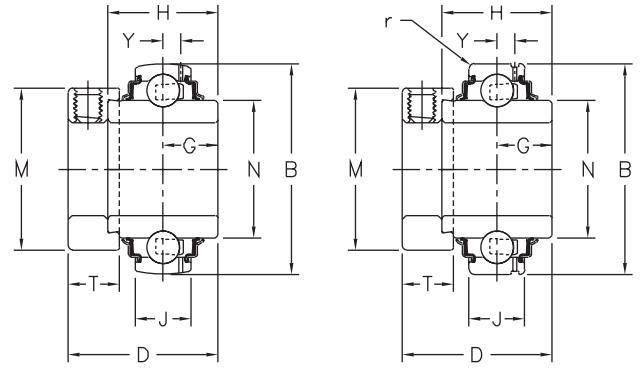
Selection guide, pages B-9, B-10.

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
1 1/16	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	YG220NL	YBG220NL	W220-5S		+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.

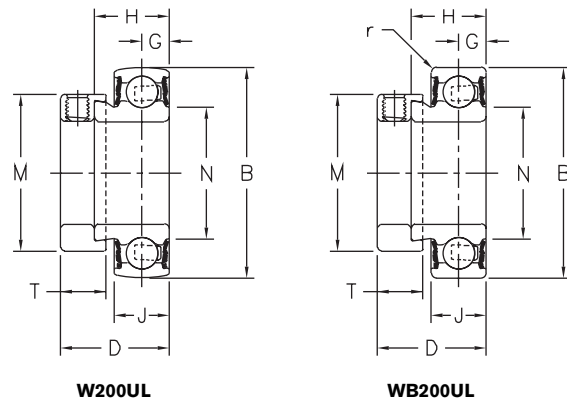
Load ratings, pages B-11, B-12.

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).

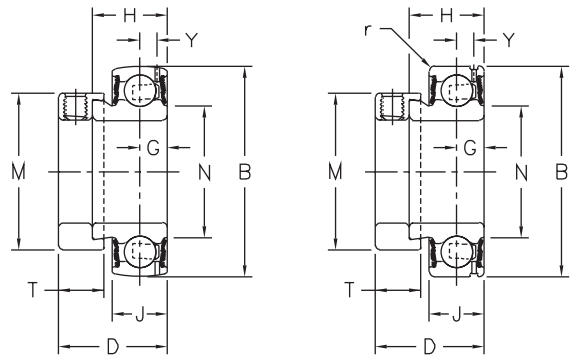
Selection guide, pages B-9, B-10.

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	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
5/8		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 5/16 33.3	1.013 25.73	.039 1.00	17/32 13.5	.137 3.48
7/8	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
1 1/16		WBG215EL	W215-5S											
1		WBG216EL	W216-5S											
1 1/8	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
1 1/16		WBG219EL	W219-5S											
1 1/4		WBG220EL	W220-5S											
1 1/4	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
1 3/8		WBG222EL	W222-5S											
1 7/16		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	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
1 11/16		WBG227EL	W227-5S											
1 3/4		WBG228EL	W228-5S											
1 15/16	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
2		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" - .0005" (+0.000 mm -0.013 mm); all others +.0000" - .0006" (+0.000 mm -0.015 mm).

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

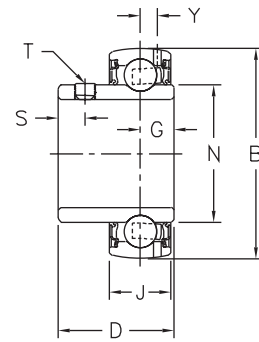
Load ratings, pages B-11, B-12.

Additional information, page B-77.

Spring Locking Ball Bearings

SG200EL

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



SG200EL

Dimensions (inches/mm)

Shaft diameter in.	Bearing number with set screws	Bore tolerance	B □	D	G	J	N	S	T Tap Size	Y
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 15/16 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 5/16	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.

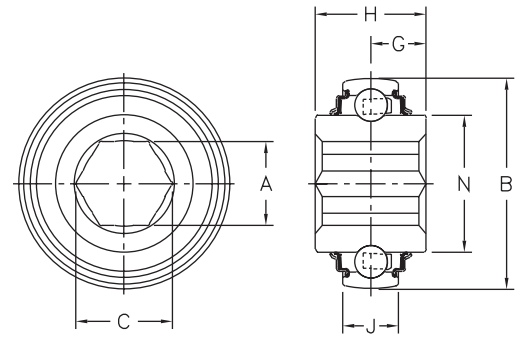
Selection guide, pages B-9, B-10.

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)

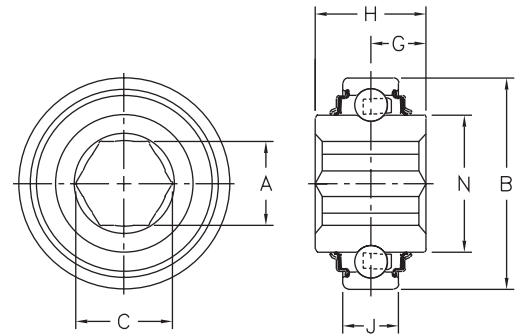
Hex shaft size, inches	Bearing number	Industry number	A		B		C	G	H	J	N						
			Across flats	Tolerance	Outside diameter	Tolerance											
1/16	11K204N	(204KRRB2)	.695	+0.00 +0.005 +0.00 +0.13	1.8504	+0.000 -0.005 +0.000 -0.013 +0.000 -0.006 +0.000 -0.015	.797	.412	.8250	.5906	1.121						
7/8	14K205N	(205KRRB2)	17.65		47.000		20.24	10.48	20.955	15.000	15.000	40.31					
			.876		2.0472								1.010	.500	1.0000	.5906	1.313
			22.25		52.000								25.65	12.70	25.400	15.000	33.35
1	16K206N	(206KRRB6)	1.001		2.4409		1.153	.472	.9449	.7087	1.587						
			25.43		62.000		29.29	12.00	24.000	18.000	40.31						
1 1/8	18K207N	(207KRRB9)	1.126		2.8346		1.299	.742	1.4844	.7480	1.847						
			28.60		72.000		32.99	18.85	37.704	19.000	46.91						
1 1/4	20K5-208E3△	(W208PPB16)	1.251		3.1496		1.450	.718	1.4375	.7087	2.083						
			31.78		80.000		36.83	18.26	36.512	18.000	52.91						
1 1/2	24K209N	(209KRRB2)	1.501	3.3465	1.732	.591	1.1811	.8661	2.281								
			38.13	85.000	43.99	15.00	30.000	22.000	57.94								
1 5/8	26K3-210E3△	(W210PPB7)	1.626	3.5433	1.876	.594	1.1875	1.1875	2.475								
			41.30	90.000	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	+0.00 +0.005 +0.00 +0.13	1.8504	+0.000 -0.005 +0.000 -0.013 +0.000 -0.006 +0.000 -0.015	.728	.412	.8250	.5512	1.121					
1 1/16	11KB204N	(204KRR2)	15.90		47.000		20.24	10.48	20.955	14.000	28.47					
			.695		1.8504							.797	.412	.8250	.5512	1.121
			17.65		47.000							25.65	12.70	25.400	15.000	33.35
7/8	14KB205N	(205KRR2)	.876		2.0472		1.010	.500	1.0000	.5906	1.313					
			22.25		52.000		25.65	12.70	25.400	15.000	33.35					
1	16KB206N	(206KRR6)	1.001		2.4409		1.153	.472	.9449	.6299	1.587					
			25.43		62.000		29.29	12.00	24.000	16.000	40.31					
1 1/8	18KB207N	(207KRR9)	1.126		2.8346		1.299	.742	1.4844	.6693	1.847					
			28.60		72.000		32.99	18.85	37.704	17.000	46.91					
1 1/2	24KB209N	(209KRR2)	1.501	3.3465	1.732	.591	1.1811	.7480	2.281							
			31.78	85.000	43.99	15.00	30.000	19.000	57.94							
1 5/8	26KB3-210E3△	(W210PP7)	1.626	3.5433	1.876	.594	1.1875	1.1875	2.475							
			41.30	90.000	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.

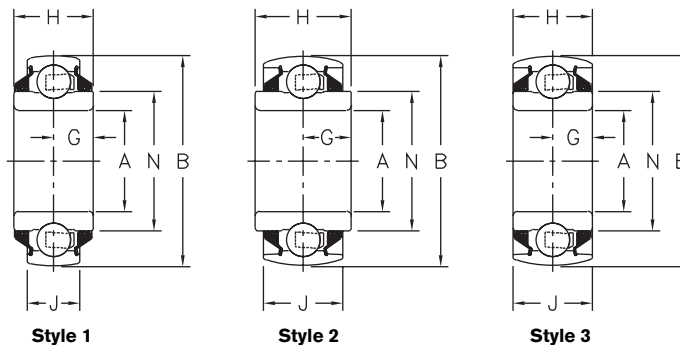
Selection guide, pages B-9, B-10.

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)

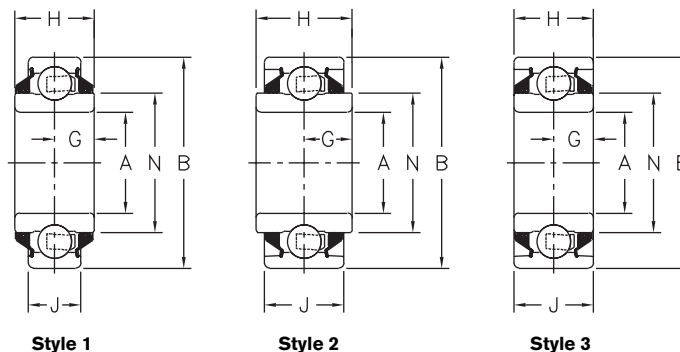
Shaft diameter <i>mm inches</i>	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N
				Bearing bore	Tolerance + .0000" +0.000 mm	Outside diameter	Tolerance + .0000" +0.000 mm				
7/8	14R4-208E3	(W208PPB14)	2	.890	-.010	3.438	‡	.719	1.4375	1.1875	2.083
				22.61	- 0.25	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, ±.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.

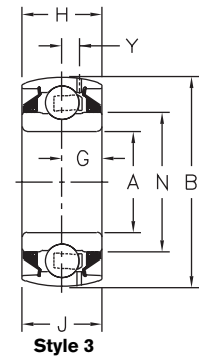
Selection guide, pages B-9, B-10.

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

Additional information, page B-77.

Round Bore Ball Bearings

Alignable Spherical O.D.
Triple Lip Seals
Relubricatable



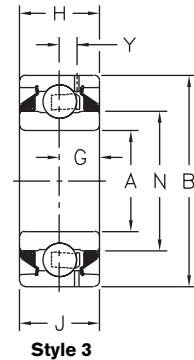
Dimensions (inches/mm)

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.

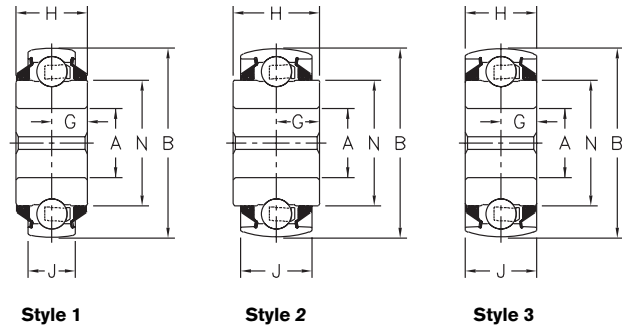
Selection guide, pages B-9, B-10.

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)

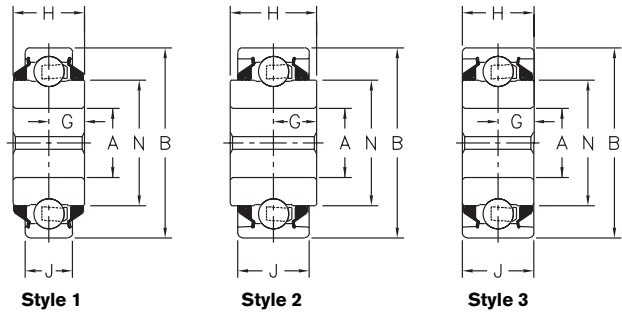
Square Shaft size, inches	Bearing number	Industry number	Style	A		B		G	H Inner ring width	J Outer ring width	N
				Bearing bore	Tolerance	Outside diameter	Tolerance +.0000" +0.000 mm				
7/8	14S4-208E3	(W208PPB11)	2	.905	±.005 ±0.13	3.438	‡	.719	1.4375	1.1875	2.083
				22.99		87.32		18.26	36.512	30.162	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.

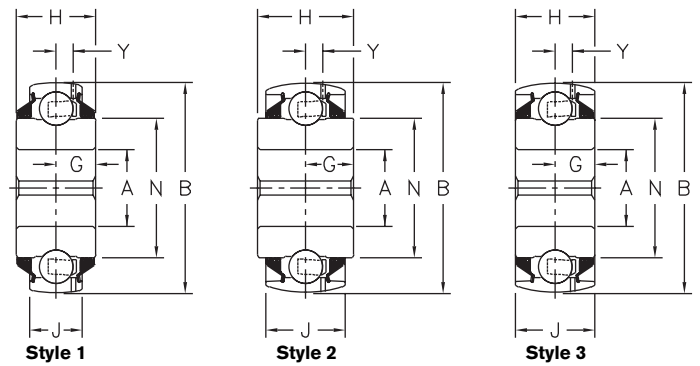
Selection guide, pages B-9, B-10.

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

Additional information, page B-77.

Square Bore Ball Bearings

Alignable Spherical O.D.
Triple Lip Seals
Relubricatable



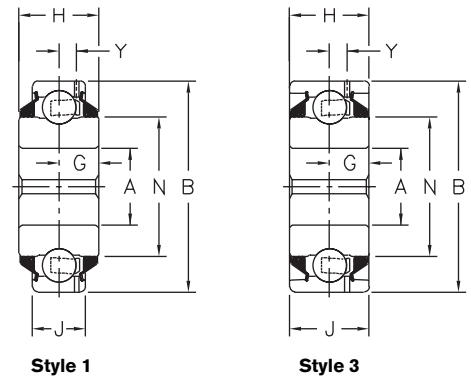
Dimensions (inches/mm)

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	±.005	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	±.013	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	±.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	24SG3-211E3	(GW211PPB3)	3	1.530	±.013	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	±.013	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 31	Bore is basic metric size Shaft size in sixteenths of an inch	}	}	}	}	}	}	}	}	}
R	Bearing bore is round									
S	Bearing bore is square									
K	Bearing bore is hex									
None B	O.D. of outer ring is spherical O.D. of outer ring is cylindrical									
None G	Non-relubricatable Relubricatable (two holes in outer ring @ 180°)									
None 2	Metric width outer ring; basic inch width inner ring				}	}	}	}	}	}
3	Basic inch width outer ring; intermediate inch width inner ring									
4	Basic inch width outer ring; basic inch width inner ring									
5	Basic inch width outer ring; unground spherical O.D. with flat ground cylindrical center; intermediate inch width inner ring									
6	Metric width outer ring; intermediate inch width inner ring									
7	Basic inch width outer ring; wide inch width inner ring									
8	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 J	Non-metallic retainer Formed steel retainer, two-piece									
N	Single lip seals									
E3	Triple lip seals									

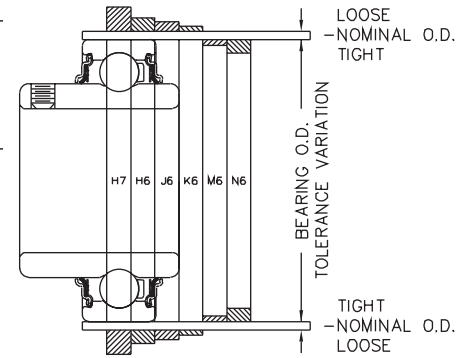
The nomenclature shown is provided to identify the basic and optional features of bearing and mounted unit assemblies. The most commonly specified variations are listed; however, availability of all variations cannot be assumed. Link-Belt Bearing Division should be consulted regarding optional features,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