

Mounted Bearings

Replacement Bearings for Setscrew Locking Series

F



Mounted Bearings offer a simple, convenient method of providing load support. Selection for most applications may be readily accomplished from a single selection chart, based on shaft size, radial and thrust load requirements. Installation normally requires only bolting to a suitable mounting surface and securing bearing to shaft with setscrews or eccentric locking collar provided.

The Boston Gear Mounted Bearing line is one of the most comprehensive available to industry. Ranging from light duty, plain bearing blocks to precision units. They all feature Boston Gear's tradition of design excellence and precision manufacture.

Light Duty Series

PPB — Split cast iron housing with bore and mounting base machined.

SRP — PPB Series with a Bost-Bronz (oil impregnated) sleeve bearing.

PS — Stamped steel housing with pillow block, 2 bolt and 3 bolt flange configuration. Extended inner race, (2) setscrews locking to shaft. Prelubricated spherical O.D. bearing.

XL — Ductile iron housing with pillow block, 2 bolt and 3 bolt flange configuration. Extended inner race, (2) setscrews locking to shaft. Prelubricated spherical O.D. bearing.

Standard Duty Series

All Series — Solid one-piece cast iron housing of American manufacture with removable zerk-type threaded grease fitting. Precision machined base and spherical bore. Available in pillow block, 2 bolt and 4 bolt flanges.

H & L Series — Eccentric shaft lock of international manufacture.

S Series — Extended inner race with double setscrews for positive shaft locking.

Medium Duty Series

MB Series — Solid one-piece heavy duty cast iron housing with removable zerk-type threaded grease fitting. Available in pillow block 4 bolt flange and piloted flange with precision machined base, pilot diameter and spherical bore. Spherical O.D. bearing of international manufacture with extended inner race and double setscrews for positive shaft locking and smoothness of operation.

Mounted Bearings

Replacement Bearings and Locking Collars for Eccentric Locking Collar Series



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ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	INTERNATIONAL BEARINGS					
	Replacement Bearings		Locking Collars		Bearing and Carrier (A Series Only)	
	Catalog Number	Item Code	Catalog Number	Item Code	Catalog Number	Item Code
1/2	NX3008M	67374	NX3008LC	67373	3A-1/2 B&C	07030
5/8	NX3010M	67377	—	—	3A-5/8 B&C	07032
3/4	NX4012M	67380	NX4012LC	67379	4A-3/4 B&C	07014
7/8	NX5014M	67383	—	—	5A-7/8 B&C	07034
15/16	NX5015M	67386	NX5015LC	67385	5A-15/16 B&C	07036
1	NX5016M	67389	NX5016LC	67388	5A-1 B&C	07022
1-1/8	NX6018M	67392	—	—	6A-1-1/8 B&C	07038
1-3/16	NX6019M	67395	NX6019LC	67394	6A-1-3/16 B&C	07040
1-1/4S	NX6020M	67398	NX6020LC	67397	6A-1-1/4 B&C	07042
1-1/4	NX7104M	67401	—	—	—	—
1-5/16	NX7105M	67404	NX7105LC	67403	—	—
1-3/8	NX7106M	67407	NX7106LC	67406	—	—
1-7/16	NX7107M	67410	NX7107LC	67409	—	—
1-1/2	NX8108M	67413	NX8108LC	67412	—	—
1-5/8	NX9110M	67416	NX9110LC	67415	—	—
1-11/16	NX9111M	67419	NX9111LC	67418	—	—
1-3/4	NX9112M	67422	NX9112LC	67421	—	—
1-15/16	NX10115M	67425	NX10115LC	67424	—	—
2	NX11200M	67428	NX11200LC	67427	—	—
2-3/16	NX11203M	67431	NX11203LC	67430	—	—
2-1/4	NX11204M	67434	—	—	—	—
2-7/16	NX11207M	67437	NX11207LC	67436	—	—

(FOR USE WITH THE L, H, F, T AND A SERIES BEARINGS)

Mounted Bearings

Replacement Bearings for Setscrew Locking Series

F



PS & XL SERIES

Bore	Catalog Number	Item Code
1/2	NBG15-1/2	68880
5/8	NBG15-5/8	68881
3/4	NBG15-3/4	68882
7/8	NBG15-7/8	68883
15/16	NBG15-15/16	68884
1	NBG15-1	68885
1-1/16	NBG15-1-1/16	68886
1-1/8	NBG15-1-1/8	68887
1-3/16	NBG15-1-3/16	68888
1-1/4S	NBG15-1-1/4S	68889
1-3/8	NBG15-1-3/8	68891
1-7/16	NBG15-1-7/16	68892

(FOR USE WITH THE PS, PS2, PS3, XL, XL2 AND XL3 SERIES BEARINGS)

S SERIES

Bore	Catalog Number	Item Code
1/2	NBG25-1/2	68893
5/8	NBG25-5/8	68894
3/4	NBG25-3/4	68895
7/8	NBG25-7/8	68896
15/16	NBG25-15/16	68897
1	NBG25-1	68898
1-1/16	NBG25-1-1/16	68899
1-1/8	NBG25-1-1/8	68900
1-3/16	NBG25-1-3/16	68901
1-1/4S	NBG25-1-1/4S	68902
1-5/16	NBG25-1-5/16	68903
1-3/8	NBG25-1-3/8	68904
1-7/16	NBG25-1-7/16	68905
1-1/2	NBG25-1-1/2	68906
1-5/8	NBG25-1-5/8	68907
1-11/16	NBG25-1-11/16	68908
1-3/4	NBG25-1-3/4	68909
1-15/16	NBG25-1-15/16	68910
2	NBG25-2	68911
2-3/16	NBG25-2-3/16	68912
2-1/4	NBG25-2-1/4	68913
2-7/16	NBG25-2-7/16	68914

(FOR USE WITH THE SF, SH, SL AND ST SERIES BEARINGS)

MB SERIES

Bore	Catalog Number	Item Code
1-7/16	NBG35-1-7/16	68915
1-1/2	NBG35-1-1/2	68916
1-11/16	NBG35-1-11/16	68917
1-3/4	NBG35-1-3/4	68918
1-15/16	NBG35-1-15/16	68919
2	NBG35-2	68920
2-3/16	NBG35-2-3/16	68921
2-1/4	NBG35-2-1/4	68922
2-7/16	NBG35-2-7/16	68923
2-1/2	NBG35-2-1/2	68924
2-11/16	NBG35-2-11/16	68925
2-15/16	NBG25-2-15/16	68926
3	NBG35-3	68927
3-3/16	NBG35-3-3/16	68928
3-1/4	NBG35-3-1/4	68929
3-7/16	NBG35-3-7/16	68930
3-1/2	NBG35-3-1/2	68931

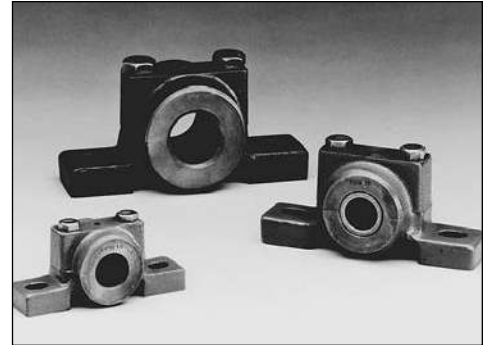
(FOR USE WITH THE MB, MBF AND MBP SERIES BEARINGS)

Mounted Bearings

PPB Series SRP Series – With Bost-Bronz Bushings

Pillow Blocks – Light Duty Split Cast Iron

The bottom surface and the split surfaces are ground. Both end surfaces of the bore are finished perpendicular to the base. Bolt holes in the base are slotted except Cat. No. PPB4 which has drilled holes. PPB Series blocks have an oil hole drilled in center of cap.†



ORDER BY CATALOG NUMBER OR ITEM CODE

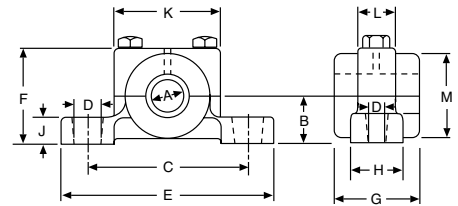
Bore	PPB SERIES		SRP SERIES			
	Catalog Number	Item Code	Pillow Blocks		Replacement Bearing	
			Catalog Number	Item Code	Catalog Number	Item Code
1/4	PPB4	34304	SRP4	34434	B46-2	34542
3/8	PPB6	34306	SRP6	34436	B68-3	34634
1/2	PPB8	34308	SRP8	34438	B812-4	34752
5/8	PPB10	34310	SRP10	34440	B1014-6	34852
3/4	PPB12	34312	SRP12	34442	B1216-6	34934
7/8	PPB14	34314	—	—	—	—
15/16	PPB15	34316	SRP15	34444	B1520-8	35042
1	PPB16	34318	SRP16	34446	B1620-8	35068
1-3/16	PPB19	34320	SRP19	34448	B1924-8	35172
1-1/4	PPB20	34322	SRP20	34450	B2024-8	35186
1-7/16	PPB23	34324	—	—	—	—
1-1/2	PPB24	34326	—	—	—	—

STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
PPB Series		
Bore	All	+0.000 to -0.001
SRP Series		
Bore	.252-1.003	+0.000 to -0.001
	1.1905-1.2530	+0.000 to -0.002

*Two required.

†The 1/4" size is made of brass and has no oil holes.

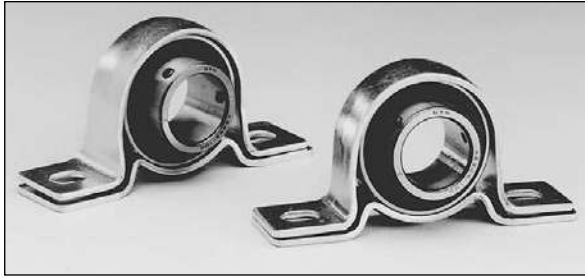


ALL DIMENSIONS IN INCHES

A (Bore)	B	C	D	E	F	G	H	J	K	L	M
PPB SERIES											
.2500	1/4	1-1/8	1/8	1-1/2	1/2	1/2	3/8	1/4	3/4	3/8	7/16
.3760	9/16	2-1/8	5/16x3/16	2-3/4	1-1/8	1	5/8	5/16	1-7/16	7/16	1
.5010	13/16	2-7/8	1/2x5/16	3-3/4	1-5/8	1-1/2	1	1/2	2	11/16	1-1/2
.6260	1-1/8	3-3/4	5/8x3/8	5	2-1/4	2	1-1/4	5/8	2-1/2	7/8	2
.7510	1-3/8	4-1/2	3/4x1/2	6	2-3/4	2-1/2	1-1/2	3/4	3	1	2-1/2
.8760											
.9385											
1.0010											
1.1885											
1.2510											
1.4385											
1.5010											
SRP SERIES											
.2510	9/16	2-1/8	5/16x3/16	2-3/4	1-1/8	1	5/8	5/16	1-7/16	7/16	1
.3770	13/16	2-7/8	1/2x5/16	3-3/4	1-5/8	1-1/2	1	1/2	2	11/16	1-1/2
.5020	1-1/8	3-3/4	5/8x3/8	5	2-1/8	2	1-1/4	5/8	2-1/2	7/8	2
.6270	1-3/8	4-1/2	3/4x1/2	6	2-3/4	2-1/2	1-1/2	3/4	3	1	2-1/2
.7530											
.9405											
1.0030											
1.1905											
1.2530											

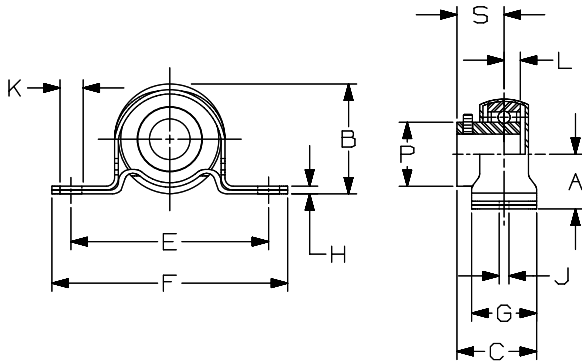
Mounted Ball Bearings

PS Series Pressed Steel Housing Pillow Blocks – Light Duty Setscrew Locking



Features —

- Quality pressed steel outer housing.
- Deep groove ball bearings for high radial and thrust loads.
- Spherical outer race for full self-alignment.
- Synthetic lip type seals.
- Positive locking by setscrews through extended inner race.
- Lubricated for life.
- Housing halves snap together for ease of assembly.



ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Catalog Number	Item Code
1/2	PS-1/2	64500
5/8	PS-5/8	64501
3/4	PS-3/4	64502
7/8	PS-7/8	64503
15/16	PS-15/16	64504
1	PS-1	64505
1-1/16	PS-1-1/16	64506
1-1/8	PS-1-1/2	64507
1-3/16	PS-1-3/16	64508
1-1/4S	PS-1-1/4S	64509

STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.001 to -0.000

ALL DIMENSIONS IN INCHES

Bore	A	B	C	E	F	G	H	J	K	L	P	R* Setscrew UNF	S	Bolt Size	Approx. Weight (Lbs.)
1/2	7/8	1-3/4	1.125	2-11/16	3-5/8	1	.133	.34	.54	15/64	31/32	10-32	5/8	5/16	.52
5/8															.48
3/4	1	2-1/16	1.203	3	4-1/8	1	.178	.40	.54	9/32	1-11/64	10-32	45/64	5/16	.58
7/8															.67
15/16	1-1/8	2-7/32	1.328	3-3/8	4-1/2	1-1/8	.208	.40	.54	19/64	1-11/32	10-32	49/64	3/8	.64
1															.61
1-1/16															1.10
1-1/8	1-5/16	2-5/8	1.390	3-3/4	4-7/8	1-1/8	.238	.53	.75	5/16	1-39/64	1/4-28	53/64	3/8	1.05
1-3/16															1.00
1-1/4S															.95

*2 at 120°

Eccentric Locking Collar bearings are available to special order.

For Load Ratings, See Engineering Section, Page 242.

Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

XL Series Cast Ductile Housing Pillow Blocks – Light Duty Setscrew Locking

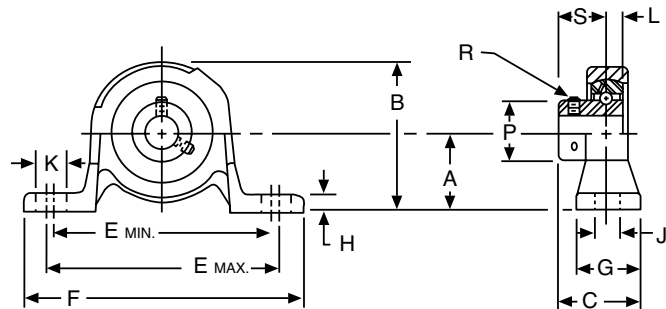
Features —

- One-piece housing (ductile casting).
- Deep groove ball bearings for high radial and thrust loads.
- Machined housing bore and spherical outer race for full self-alignment.
- Synthetic lip type seal.
- Positive locking by setscrews through extended inner race.



ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Catalog Number	Item Code
1/2	XL-1/2	64534
5/8	XL-5/8	64535
3/4	XL-3/4	64536
7/8	XL-7/8	64537
15/16	XL-15/16	64538
1	XL-1	64539
1-1/16	XL-1-1/16	64540
1-1/8	XL-1-1/8	64541
1-3/16	XL-1-3/16	64542
1-1/4S	XL-1-1/4S	64543
1-3/8	XL-1-3/8	64545
1-7/16	XL-1-7/16	64546



STANDARD TOLERANCES

DIMENSIONS	TOLERANCE	
Bore	All	±.001 - .000

ALL DIMENSIONS IN INCHES

Bore	A	B	C	E Min.	E Max.	F	G	H	J	K	L	P	R* Setscrew UNF	S	Bolt Size	Approx. Weight (Lbs.)
1/2 5/8	1-3/16	2-5/32	1-1/8	3-3/16	3-11/16	4-1/2	1	9/32	7/16	11/16	15/64	31/32	10-32	5/8	3/8	.6
3/4	1-5/16	2-7/16	1-15/64	3-5/8	3-7/8	4-3/4	1-1/16	5/16	7/16	9/16	9/32	1-11/64	10-32	45/64	3/8	.8
7/8 15/16 1	1-7/16	2-21/32	1-11/32	3-7/8	4-1/8	5	1-1/8	11/32	7/16	9/16	19/64	1-11/32	10-32	49/64	3/8	1.0
1-1/16 1-1/8 1-3/16 1-1/4S	1-11/16	3-5/32	1-31/64	4-1/2	4-3/4	6	1-5/16	3/8	9/16	11/16	5/16	1-39/64	1/4-28	53/64	1/2	1.4
1-3/8 1-7/16	1-7/8	3-9/16	1-11/16	4-3/4	5	6-3/8	1-3/8	13/32	9/16	11/16	11/32	1-27/32	1/4-28	1	1/2	1.9

*2 at 120°

These units also available with Eccentric Locking Collars on Special Order.

For Load Ratings, see Engineering Section, Page 237.

Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

L/H Series

Pillow Blocks – Standard Duty; Eccentric Locking Collar



L Series Low Backing
H Series High Backing

Features —

- Rigid one piece housing.
- Chrome alloy steel balls.
- Spherical outer race.
- Synthetic lip type seals.
- Eccentric locking collar.
- 1/4-28 threaded grease fitting.

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Low Backing		High Backing	
	L Series		H Series	
	Catalog Number	Item Code	Catalog Number	Item Code
1/2	3L-1/2	06906	3H-1/2	06902
5/8	3L-5/8	06908	3H-5/8	06904
3/4	4L-3/4	06912	4H-3/4	06910
7/8	5L-7/8	06920	5H-7/8	06914
15/16	5L-15/16	06922	5H-15/16	06916
1	5L-1	06924	5H-1	06918
1-1/8	6L-1-1/8	06928	6H-1-1/8	06932
1-3/16	6L-1-3/16	06930	6H-1-3/16	06936
1-1/4S	6L-1-1/4S	06934	6H-1-1/4S	06926
1-1/4	7L-1-1/4*	06858	7H-1-1/4*	06850
1-5/16	7L-1-5/16*	06860	7H-1-5/16*	06852
1-3/8	7L-1-3/8*	06862	7H-1-3/8*	06854
1-1/2	8L-1-1/2*	06868	8H-1-1/2*	06866
1-5/8	9L-1-5/8*	06876	9H-1-5/8*	06870
1-11/16	9L-1-11/16*	06878	9H-1-11/16*	06872
1-15/16	10L-1-15/16*	06884	10H-1-15/16*	06882
2-1/4	12L-2-1/4*	06898	12H-2-1/4*	06894
2-7/16	12L-2-7/16*	06900	12H-2-7/16*	06896

*Bearings equipped with steel flinger.
 Replacement Bearings are shown on Page 213.

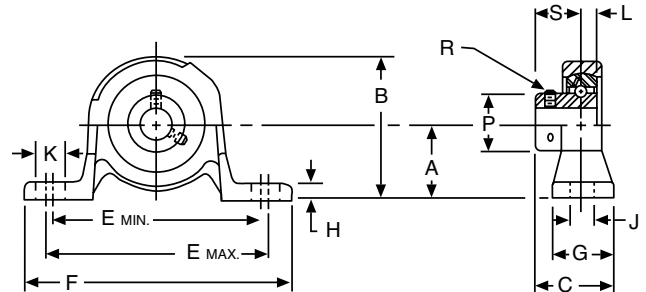
Mounted Ball Bearings

L/H Series

Pillow Blocks – Standard Duty; Eccentric Locking Collar

SHAFT HEIGHT DIMENSIONS IN INCHES

Bore	Low Backing			High Backing		
	A	B	H	A	B	H
1/2 5/8	1-1/16	2-5/32	1/2	1-3/16	2-9/32	5/8
3/4	1-1/4	2-15/32	9/16	1-5/16	2-17/32	5/8
7/8 15/16 1	1-5/16	2-21/32	5/8	1-7/16	2-25/32	3/4
1-1/8 1-3/16 1-1/4S	1-9/16	3-1/8	3/4	1-11/16	3-1/4	7/8
1-1/4 1-5/16 1-3/8 1-7/16	1-13/16	3-11/16	1	1-7/8	3-3/4	1-1/16
1-1/2	1-15/16	4	1-1/8	2	4-1/16	1-3/16
1-5/8 1-11/16 1-3/4	2-1/16	4-1/4	1-1/4	2-1/8	4-5/16	1-5/16
1-15/16	2-3/16	4-1/2	1-3/8	2-1/4	4-9/16	1-7/16
2 2-3/16	2-7/16	4-15/16	1-1/2	2-1/2	5	1-9/16
2-1/4 2-7/16	2-11/16	5-7/16	1-5/8	2-3/4	5-1/2	1-11/16



STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.0012 to -0.0000

ALL DIMENSIONS IN INCHES

Bore	C	E		F	G	J	K	L	P	R Setscrew UNF	S	Bolt Size	Approx. Wt. (Lbs.)	
		Min.	Max.										L	H
1/2 5/8	1-5/8	3-5/16	4	5-1/16	1-1/2	7/16	25/32	1/4	1-9/64	1/4-28	7/8	3/8	1.1	1.2
3/4	1-45/64	3-7/16	4-1/8	5-1/4	1-9/16	7/16	25/32	19/64	1-19/64	1/4-28	59/64	3/8	1.6	1.6
7/8 15/16 1	1-47/64	3-7/16	4-1/4	5-1/2	1-5/8	7/16	11/16	19/64	1-1/2	1/4-28	59/64	3/8	1.9	1.9
1-1/8 1-3/16 1-1/4S	1-59/64	4-5/16	4-15/16	6-1/4	1-3/4	9/16	7/8	23/64	1-3/4	5/16-24	1-3/64	1/2	2.6	2.7
1-1/4 1-5/16 1-3/8 1-7/16	2-13/64	4-3/4	5-3/8	6-11/16	1-7/8	9/16	7/8	47/64	2-3/16	3/8-24	1-17/64	1/2	4.1	4.3
1-1/2	2-3/8	5-1/4	5-13/16	7-1/4	2	9/16	27/32	27/32	2-23/64	3/8-24	1-3/8	1/2	5.5	5.6
1-5/8 1-11/16 1-3/4	2-7/16	5-9/16	6-1/8	7-3/4	2-1/8	9/16	27/32	27/32	2-1/2	3/8-24	1-3/8	1/2	6.5	6.6
1-15/16	2-5/8	6-1/16	6-5/8	8-1/4	2-1/4	11/16	31/32	31/32	2-3/4	3/8-24	1-1/2	5/8	8.0	8.1
2 2-3/16	2-29/32	6-7/16	7-3/8	8-7/8	2-3/8	11/16	1-5/32	1-3/32	3	7/16-20	1-23/32	5/8	9.5	10.0
2-1/4 2-7/16	3-3/32	6-15/16	7-7/8	9-5/8	2-1/2	11/16	1-5/32	1-7/32	3-5/16	7/16-20	1-27/32	5/8	11.8	11.9

For Load Ratings, see Engineering Section, Page 243.

Mounted Ball Bearings

SL/SH Series

Pillow Blocks – Standard Duty; Extended Inner Race – Setscrew Locking



SL Series Low Backing SH Series High Backing

Features —

- One-piece, high grade cast iron housing.
- Deep groove ball bearings for high radial and thrust loads.
- Precision machined housing bore and spherical outer race for self-alignment.
- Synthetic lip type seals with steel flinger.
- Positive locking by setscrews through extended inner race.
- 1/4-28 threaded grease fitting and channel through outer race allow relubrication.

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Low Backing		High Backing	
	Catalog Number	Item Code	Catalog Number	Item Code
1/2	SL-1/2*	64680	SH-1/2*	64679
5/8	SL-5/8*	64682	SH-5/8*	64681
3/4	SL-3/4	64684	SH-3/4	64683
7/8	SL-7/8	64686	SH-7/8	64685
15/16	SL-15/16	64688	SH-15/16	65687
1	SL-1	64690	SH-1	64689
1-1/8	SL-1-1/8	64692	SH-1-1/8	64691
1-3/16	SL-1-3/16	64694	SH-1-3/16	64693
1-1/4S	SL-1-1/4S	64696	SH-1-1/4S	64695
1-1/4	SL-1-1/4	64698	SH-1-1/4	64697
1-5/16	SL-1-5/16	64700	SH-1-5/16	64699
1-3/8	SL-1-3/8	64702	SH-1-3/8	64701
1-7/16	SL-1-7/16	64704	SH-1-7/16	64703
1-1/2	SL-1-1/2	64706	SH-1-1/2	64705
1-5/8	SL-1-5/8	64708	SH-1-5/8	64707
1-11/16	SL-1-11/16	64710	SH-1-11/16	64709
1-3/4	SL-1-3/4	64712	SH-1-3/4	64711
1-15/16	SL-1-15/16	64714	SH-1-15/16	64713
2	SL-2	64716	SH-2	64715
2-3/16	SL-2-3/16	64718	SH-2-3/16	64717
2-1/4	SL-2-1/4	64720	SH-2-1/4	64719
2-7/16	SL-2-7/16	64722	SH-2-7/16	64721

*Bearings not equipped with steel flinger.
Replacement Bearings are shown on Page 214.

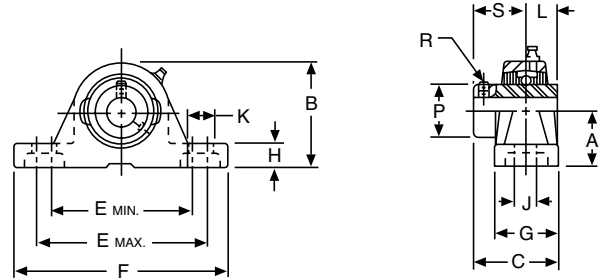
Mounted Ball Bearings

SL/SH Series

Pillow Blocks – Standard Duty; Extended Inner Race
– Setscrew Locking

SHAFT HEIGHT DIMENSIONS IN INCHES

Bore	Low Backing			High Backing		
	A	B	H	A	B	H
1/2 5/8	1-1/16	2-5/32	1/2	1-3/16	2-9/32	5/8
3/4	1-1/4	2-15/32	9/16	1-5/16	2-17/32	5/8
7/8 15/16 1	1-5/16	2-21/32	5/8	1-7/16	2-25/32	3/4
1-1/8 1-3/16 1-1/4S	1-9/16	3-1/8	3/4	1-11/16	3-1/4	7/8
1-1/4 1-5/16 1-3/8 1-7/16	1-13/16	3-11/16	1	1-7/8	3-3/4	1-1/16
1-1/2	1-15/16	4	1-1/8	2	4-1/16	1-3/16
1-5/8 1-11/16 1-3/4	2-1/16	4-1/4	1-1/4	2-1/8	4-5/16	1-5/16
1-15/16	2-3/16	4-1/2	1-3/8	2-1/4	4-9/16	1-7/16
2 2-3/16	2-7/16	4-15/16	1-1/2	2-1/2	5	1-9/16
2-1/4 2-7/16	2-11/16	5-7/16	1-5/8	2-3/4	5-1/2	1-11/16



STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.0012 to -0.0000

ALL DIMENSIONS IN INCHES

Bore	C	E		F	G	J	K	L	P	R* Setscrew (UNF)	S	Bolt Size	Approx. Wt. (Lbs.)	
		Min.	Max.										L	H
1/2 5/8	1-3/8	3-5/16	4	5-1/16	1-1/2	7/16	25/32	9/32	31/32	10-32	5/8	3/8	1.25	1.38
3/4	1-1/2	3-7/16	4-1/8	5-1/4	1-9/16	7/16	25/32	1/2	1-11/64	10-32	23/32	3/8	1.75	1.75
7/8 15/16 1	1-37/64	3-3/4	4-1/4	5-1/2	1-5/8	7/16	11/16	9/16	1-21/64	10-32	25/32	3/8	2.00	2.00
1-1/8 1-3/16 1-1/4S	1-3/4	4-5/16	4-15/16	6-1/4	1-3/4	9/16	7/8	5/8	1-39/64	1/4-28	7/8	3/8	2.75	2.88
1-1/4 1-5/16 1-3/8 1-7/16	1-15/16	4-3/4	5-3/8	6-11/16	1-7/8	9/16	7/8	11/16	1-27/32	1/4-28	1	1/2	4.25	4.50
1-1/2	2-3/16	5-1/4	5-13/16	7-1/4	2	9/16	27/32	3/4	2-3/32	5/16-24	1-3/16	1/2	5.63	5.75
1-5/8 1-11/16 1-3/4	2-33/64	5-9/16	6-1/8	7-3/4	2-1/8	9/16	27/32	3/4	2-17/64	5/16-24	1-3/16	1/2	6.63	6.75
1-15/16	2-13/32	6-1/16	6-5/8	8-1/4	2-1/4	11/16	31/32	3/4	2-29/64	5/16-24	1-5/16	5/8	8.25	8.25
2 2-3/16	2-1/2	6-7/16	7-3/8	8-7/8	2-3/8	11/16	1-5/32	7/8	2-23/32	5/16-24	1-5/16	5/8	10.00	10.25
2-1/4 2-7/16	2-13/16	6-15/16	7-7/8	9-5/8	2-1/2	11/16	1-5/32	1	3-1/32	3/8-24	1-9/16	5/8	12.25	12.38

*2 at 120°

For Load Ratings, see Engineering Section, Page 243.

Mounted Ball Bearings

MB Series

Pillow Blocks – Medium Duty; Extended Inner Race – Setscrew Locking

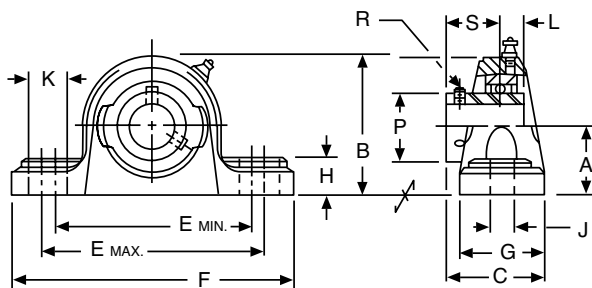


Features —

- One-piece high grade cast iron housing.
- Deep groove ball bearings for high radial and thrust loads.
- Precision machined housing bore and spherical race for full self-alignment.
- Synthetic lip type seal with steel flinger.
- Positive locking by setscrews through extended inner race.
- 1/4-28 threaded grease fitting and channel through outer race allow relubrication.

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Catalog Number	Item Code
1-7/16	MB-1-7/16	64573
1-1/2	MB-1-1/2	64574
1-11/16	MB-1-11/16	64575
1-3/4	MB-1-3/4	64576
1-15/16	MB-1-15/16	64577
2	MB-2	64578
2-3/16	MB-2-3/16	64579
2-1/4	MB-2-1/4	64580
2-7/16	MB-2-7/16	64581
2-1/2	MB-2-1/2	64582
2-11/16	MB-2-11/16	64583
2-15/16	MB-2-15/16	64584
3	MB-3	64585
3-3/16	MB-3-3/16	64586
3-1/4	MB-3-1/4	64587
3-7/16	MB-3-7/16	64588
3-1/2	MB-3-1/2	64589



STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.001 to -0.000

ALL DIMENSIONS IN INCHES

Bore	A	B	C	E Min.	E Max.	F	G	H	J	K	L	P	R* Setscrew (UNF)	S	Bolt Size	Approx. Weight (Lbs.)
1-7/16	2-1/8	4-3/16	2-17/64	5-1/16	6-5/16	6-1/2	2-1/4	3/4	9/16	1-3/16	3/4	1-27/32	5/16-24	1-9/64	1/2	6.8
1-1/2	2-5/16	4-9/16	2-1/2	5-9/16	6-11/16	8-1/4	2-5/8	13/16	11/16	1-1/4	3/4	2-3/32	5/16-24	1-3/16	5/8	9.0
1-11/16 1-3/4	2-5/16	4-5/8	2-19/32	5-1/2	6-3/4	8-1/4	2-5/8	13/16	11/16	1-5/16	3/4	2-17/64	5/16-24	1-9/32	5/8	9.5
1-15/16 2	2-1/2	5-1/16	2-3/4	6	7-1/2	8-7/8	2-7/8	7/8	11/16	1-7/16	7/8	2-23/32	5/16-24	1-5/16	5/8	11.7
2-3/16 2-1/4	2-3/4	5-5/8	3-1/8	6-5/8	7-7/8	9-5/8	3-1/8	1-1/16	13/16	1-7/16	1	3-1/32	3/8-24	1-9/16	3/4	16.2
2-7/16 2-1/2	3	6-3/16	3-3/8	7-3/16	8-13/16	10-3/8	3-1/4	1-1/16	13/16	1-5/8	1-3/16	3-27/64	3/8-24	1-3/4	3/4	21.5
2-11/16	3-1/2	6-15/16	3-3/8	7-15/16	10-1/16	11-7/8	3-1/2	1-1/8	15/16	2	1-5/16	3-43/64	3/8-24	1-3/4	7/8	29.2
2-15/16 3	3-1/2	7-1/8	3-11/16	7-15/16	10-1/16	11-7/8	3-1/2	1-1/4	15/16	2	1-5/16	3-7/8	1/2-20	1-15/16	7/8	31.5
3-3/16 3-1/4	4	8	4-1/32	9-3/4	12-1/2	15	4	1-1/4	15/16	2-5/16	1-11/32	4-3/16	1/2-20	2-1/32	7/8	41.1
3-7/16 3-1/2	4	8-1/4	4-13/32	9-11/16	12-9/16	15	4-3/8	1-5/16	15/16	2-3/8	1-9/16	4-25/64	1/2-20	2-7/32	7/8	47.8

*2 at 120°

For Load Ratings, See Engineering Section, Page 243.

Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

PS2/PS3 Series Pressed Steel Housing Flanged Units – Light Duty; Setscrew Locking

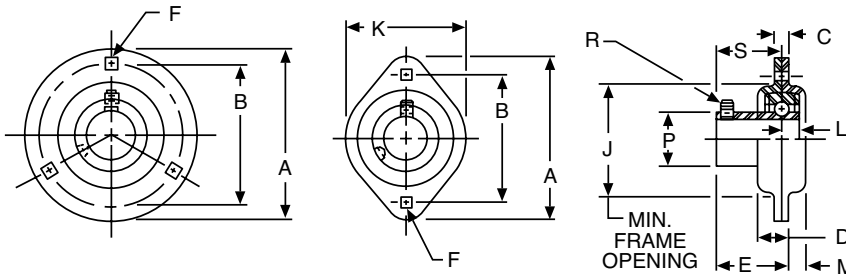
ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	3-BOLT		2-BOLT	
	Catalog Number	Item Code	Catalog Number	Item Code
1/2	PS3-1/2	64520	PS2-1/2	64510
5/8	PS3-5/8	64521	PS2-5/8	64511
3/4	PS3-3/4	64522	PS2-3/4	64512
7/8	PS3-7/8	64523	PS2-7/8	64513
15/16	PS3-15/16	64524	PS2-15/16	64514
1	PS3-1	64525	PS2-1	64515
1-1/16	PS3-1-1/16	64526	PS2-1-1/16	64516
1-1/8	PS3-1-1/8	64527	PS2-1-1/8	64517
1-3/16	PS3-1-3/16	64528	PS2-1-3/16	64518
1-1/4S	PS3-1-1/4S	64529	PS2-1-1/4S	64519
1-1/4	PS3-1-1/4	64530	-----	-----
1-3/8	PS3-1-3/8	64532	-----	-----
1-7/16	PS3-1-7/16	64533	-----	-----



STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.001 to -0.000



ALL DIMENSIONS IN INCHES

Bore	A	B	C	D	E	F Sq.	J	K	L	M	P	R* Setscrew UNF	S	Bolt Size	Approx. Weight (Lbs.)	
															PS3	PS2
1/2	3-3/16	2-1/2	.150	23/64	45/64	9/32	1-15/16	2-5/16	15/64	13/64	31/32	10-32	5/8	1/4	.63	.51
5/8	3-3/16	2-1/2	.150	23/64	45/64	9/32	1-15/16	2-5/16	15/64	13/64	31/32	10-32	5/8	1/4	.59	.47
3/4	3-9/16	2-13/16	.166	25/64	25/32	11/32	2-3/16	2-5/8	9/32	7/32	1-11/64	10-32	45/64	5/16	.74	.60
7/8	3-3/4	3	.166	27/64	27/32	11/32	2-3/8	2-51/64	19/64	1/4	1-11/32	10-32	49/64	5/16	.87	.70
15/16	3-3/4	3	.166	27/64	27/32	11/32	2-3/8	2-51/64	19/64	1/4	1-11/32	10-32	49/64	5/16	.84	.67
1	3-3/4	3	.166	27/64	27/32	11/32	2-3/8	2-51/64	19/64	1/4	1-11/32	10-32	49/64	5/16	.81	.64
1-1/16	4-7/16	3-9/16	.208	29/64	15/16	13/32	2-13/16	3-5/16	5/16	1/4	1-39/64	1/4-28	53/64	3/8	1.42	1.08
1-1/8	4-7/16	3-9/16	.208	29/64	15/16	13/32	2-13/16	3-5/16	5/16	1/4	1-39/64	1/4-28	53/64	3/8	1.37	1.03
1-3/16	4-7/16	3-9/16	.208	29/64	15/16	13/32	2-13/16	3-5/16	5/16	1/4	1-39/64	1/4-28	53/64	3/8	1.32	.98
1-1/4S	4-7/16	3-9/16	.208	29/64	15/16	13/32	2-13/16	3-5/16	5/16	1/4	1-39/64	1/4-28	53/64	3/8	1.27	.93
1-1/4	4-13/16	3-15/16	.208	31/64	1-7/64	13/32	3-3/16	—	11/32	9/32	1-27/32	1/4-28	1	3/8	1.93	—
1-3/8	4-13/16	3-15/16	.208	31/64	1-7/64	13/32	3-3/16	—	11/32	9/32	1-27/32	1/4-28	1	3/8	1.84	—
1-7/16	4-13/16	3-15/16	.208	31/64	1-7/64	13/32	3-3/16	—	11/32	9/32	1-27/32	1/4-28	1	3/8	1.74	—

*2 at 120°

Eccentric Locking Collar bearings are available to special order.

On 1-1/4" through 1-7/16" Hole Diameters, Eccentric Collar bearings will have extended inner races on both sides and will project beyond "M" dimension.

For Load Ratings, see Engineering Section, Page 242.

Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

XL2/XL3 Series Cast Ductile Housing Flanged Units – Light Duty; Setscrew Locking

F

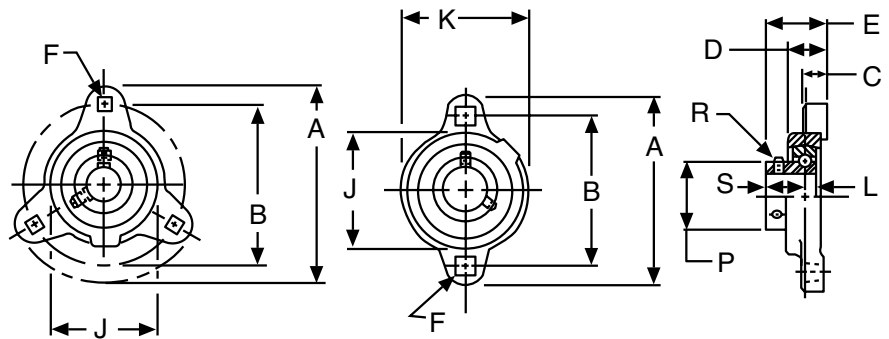


ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	3-BOLT		2-BOLT	
	Catalog Number	Item Code	Catalog Number	Item Code
1/2	XL3-1/2	64560	XL2-1/2	64547
5/8	XL3-5/8	64561	XL2-5/8	64548
3/4	XL3-3/4	64562	XL2-3/4	64549
7/8	XL3-7/8	64563	XL2-7/8	64550
15/16	XL3-15/16	64564	XL2-15/16	64551
1	XL3-1	64565	XL2-1	64552
1-1/16	XL3-1-1/16	64566	XL2-1-1/16	64553
1-1/8	XL3-1-1/8	64567	XL2-1-1/8	64554
1-3/16	XL3-1-3/16	64568	XL2-1-3/16	64555
1-1/4S	XL3-1-1/4S	64569	XL2-1-1/4S	64556
1-3/8	XL3-1-3/8	64571	XL2-1-3/8	64558
1-7/16	XL3-1-7/16	64572	XL2-1-7/16	64559

STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+ .001 to - .000



ALL DIMENSIONS IN INCHES

Bore	A	B	C	D	E	F Sq.	J	K	L	P	R* Setscrew UNF	S	Bolt Size	Approx. Weight (Lbs.)	
														XL3	XL2
1/2 5/8	3-3/16	2-1/2	27/64	11/16	1	9/32	1-13/16	1-15/16	15/64	31/32	10-32	5/8	1/4	.6	.5
3/4	3-9/16	2-13/16	7/16	3/4	1-1/8	11/32	2-1/16	2-1/4	9/32	1-11/64	10-32	45/64	3/16	.7	.7
7/8 15/16 1	3-3/4	3	7/16	3/4	1-1/8	11/32	2-5/16	2-1/2	19/64	1-11/32	10-32	49/64	5/16	.8	.8
1-1/16 1-1/8 1-3/16 1-1/4S	4-7/16	3-9/16	15/32	27/32	1-19/64	13/32	2-13/16	2-15/16	5/16	1-39/64	1/4-28	53/64	3/8	1.2	1.2
1-3/8 1-7/16	4-13/16	3-15/16	1/2	29/32	1-1/2	13/32	3-3/16	3-3/8	11/32	1-27/32	1/4-28	1	3/8	1.6	1.5

*2 at 120°

These units also available with Eccentric Locking Collars on Special Order.

For Load Ratings, See Engineering Section, Page 243.

Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

F/T Series

Flanged Units – Standard Duty; Eccentric Locking Collar

F Series 4-Bolt T Series 2-Bolt

Features —

- Rigid one-piece high housing.
- Chrome alloy steel balls. Spherical outer race.
- Synthetic lip type seals.
- Eccentric locking collar.
- 1/4-28 threaded grease fitting.



F

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	4-BOLT FLANGES F SERIES		2-BOLT FLANGES T SERIES	
	Catalog Number	Item Code	Catalog Number	Item Code
1/2	3F-1/2	06938	3T-1/2	06982
5/8	3F-5/8	06940	3T-5/8	06984
3/4	4F-3/4	06942	4T-3/4	06986
7/8	5F-7/8	06944	5T-7/8	06988
15/16	5F-15/16	06946	5T-15/16	06990
1	5F-1	06948	5T-1	06992
1-1/8	6F-1-1/8	06950	6T-1-1/8	06994
1-3/16	6F-1-3/16	06952	6T-1-3/16	06996
1-1/4S	6F-1-1/4S	06954	6T-1-1/4S	06998
1-1/4	7F-1-1/4*	06956	7T-1-1/4*	07000
1-5/16	7F-1-5/16*	06958	7T-1-5/16*	07002
1-3/8	7F-1-3/8*	06960	7T-1-3/8*	07004
1-7/16	7F-1-7/16*	06962	7T-1-7/16*	07006
1-1/2	8F-1-1/2*	06964	—	—
1-5/8	9F-1-5/8*	06966	—	—
1-11/16	9F-1-11/16*	06968	—	—
1-3/4	9F-1-3/4*	06970	—	—
1-15/16	10F-1-15/16*	06972	10T-1-15/16*	50695
2	11F-2*	06974	—	—
2-3/16	11F-2-3/16*	06976	—	—
2-1/4	12F-2-1/4*	06978	—	—
2-7/16	12F-2-7/16*	06980	—	—

*Bearings equipped with steel flinger.

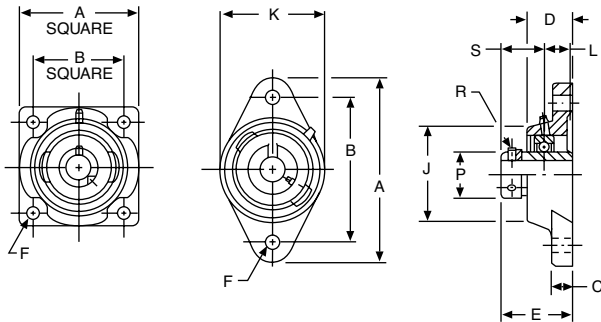
Replacement Bearings are shown on Page 213.

Mounted Ball Bearings

F/T Series

Flanged Units – Standard Duty; Eccentric Locking Collar

F



STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.0012 to -0.0000

ENVELOPE AND BOLT SPACING DIMENSIONS IN INCHES

Bore	4-BOLT		2-BOLT		
	A	B	A	B	K
1/2	2-7/8	2-1/8	3-3/4	3	2-9/32
5/8	3-3/8	2-1/2	4-13/32	3-17/32	2-37/64
3/4	3-3/8	2-1/2	4-13/32	3-17/32	2-37/64
7/8	3-3/4	2-3/4	4-57/64	3-57/64	2-53/64
15/16	3-3/4	2-3/4	4-57/64	3-57/64	2-53/64
1	3-3/4	2-3/4	4-57/64	3-57/64	2-53/64
1-1/8	4-1/4	3-1/4	5-19/32	4-19/32	3-19/64
1-3/16	4-1/4	3-1/4	5-19/32	4-19/32	3-19/64
1-1/4S	4-1/4	3-1/4	5-19/32	4-19/32	3-19/64
1-1/4	4-5/8	3-5/8	6-1/8	5-1/8	3-11/64
1-5/16	4-5/8	3-5/8	6-1/8	5-1/8	3-11/64
1-3/8	4-5/8	3-5/8	6-1/8	5-1/8	3-11/64
1-7/16	4-5/8	3-5/8	6-1/8	5-1/8	3-11/64
1-1/2	5-1/8	4	—	—	—
1-5/8	5-3/8	4-1/8	—	—	—
1-11/16	5-3/8	4-1/8	—	—	—
1-3/4	5-3/8	4-1/8	—	—	—
1-15/16	5-5/8	4-3/8	7-7/16	6-3/16	4-9/16
2	6-3/8	5-1/8	—	—	—
2-3/16	6-3/8	5-1/8	—	—	—
2-1/4	6-7/8	5-5/8	—	—	—
2-7/16	6-7/8	5-5/8	—	—	—

ALL DIMENSIONS IN INCHES

Bore	C	D	E	F Bolt	J	L	P	R* Setscrew UNF	S	Approx. Weight (Lbs.)	
							F T			F	T
1/2	7/16	1-1/16	1-37/64	3/8	2	1/4	1-9/64	1/4-28	7/8	.9	.9
5/8	1/2	1-7/32	1-13/16	3/8	2-1/4	19/64	1-19/64	1/4-28	59/64	1.7	1.2
3/4	1/2	1-7/32	1-13/16	3/8	2-1/4	19/64	1-19/64	1/4-28	59/64	1.7	1.2
7/8	9/16	1-1/4	1-27/32	7/16	2-1/2	19/64	1-1/2	1/4-28	59/64	2.0	1.6
15/16	9/16	1-1/4	1-27/32	7/16	2-1/2	19/64	1-1/2	1/4-28	59/64	2.0	1.6
1	9/16	1-1/4	1-27/32	7/16	2-1/2	19/64	1-1/2	1/4-28	59/64	2.0	1.6
1-1/8	9/16	1-11/32	2	7/16	2-15/16	23/64	1-3/4	5/16-24	1-3/64	2.7	2.1
1-3/16	9/16	1-11/32	2	7/16	2-15/16	23/64	1-3/4	5/16-24	1-3/64	2.7	2.1
1-1/4S	9/16	1-11/32	2	7/16	2-15/16	23/64	1-3/4	5/16-24	1-3/64	2.7	2.1
1-1/4	5/8	1-3/8	2-1/8	1/2	3-1/4	47/64	2-3/16	3/8-24	1-17/64	3.7	2.8
1-5/16	5/8	1-3/8	2-1/8	1/2	3-1/4	47/64	2-3/16	3/8-24	1-17/64	3.7	2.8
1-3/8	5/8	1-3/8	2-1/8	1/2	3-1/4	47/64	2-3/16	3/8-24	1-17/64	3.7	2.8
1-7/16	5/8	1-3/8	2-1/8	1/2	3-1/4	47/64	2-3/16	3/8-24	1-17/64	3.7	2.8
1-1/2	11/16	1-37/64	2-11/32	1/2	3-3/4	27/32	2-23/64	3/8-24	1-3/8	5.0	—
1-5/8	11/16	1-37/64	2-11/32	1/2	3-3/4	27/32	2-23/64	3/8-24	1-3/8	5.0	—
1-11/16	11/16	1-39/64	2-11/32	9/16	3-7/8	27/32	2-1/2	3/8-24	1-3/8	5.4	—
1-3/4	11/16	1-39/64	2-11/32	9/16	3-7/8	27/32	2-1/2	3/8-24	1-3/8	5.4	—
1-15/16	11/16	1-51/64	2-19/32	9/16	4-1/8	31/32	2-3/4	3/8-24	1-1/2	6.0	4.8
2	3/4	1-31/32	2-15/16	5/8	4-1/2	1-3/32	3	7/16-20	1-23/32	8.4	—
2-3/16	3/4	1-31/32	2-15/16	5/8	4-1/2	1-3/32	3	7/16-20	1-23/32	8.4	—
2-1/4	3/4	2-1/8	3-3/16	5/8	4-7/8	1-7/32	3-5/16	7/16-20	1-27/32	10.0	—
2-7/16	3/4	2-1/8	3-3/16	5/8	4-7/8	1-7/32	3-5/16	7/16-20	1-27/32	10.0	—

*2 at 120°.

For Load Ratings, See Engineering Section, Page 243.

SF Series 4-Bolt
ST Series 2-Bolt

Features —

- One-piece high grade cast iron housing.
- Deep groove ball bearings for high radial and thrust loads.
- Precision machined housing bore and spherical outer race for self-alignment.
- Synthetic lip type seal with steel flinger.
- Positive locking by setscrews through extended inner race.
- 1/4-28 threaded grease fitting and channel through outer race allow relubrication.



ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	4-BOLT		2-BOLT	
	Catalog Number	Item Code	Catalog Number	Item Code
1/2	SF-1/2	64736	ST-1/2	64723
5/8	SF-5/8	64737	ST-5/8	64724
3/4	SF-3/4	64738	ST-3/4	64725
7/8	SF-7/8	64739	ST-7/8	64726
15/16	SF-15/16	64740	ST-15/16	64727
1	SF-1	64741	ST-1	64728
1-1/8	SF-1-1/8	64742	ST-1-1/8	64729
1-3/16	SF-1-3/16	64743	ST-1-3/16	64730
1-1/4S	SF-1-1/4S	64744	ST-1-1/4S	64731
1-1/4	SF-1-1/4	64745	ST-1-1/4	64732
1-3/8	SF-1-3/8	64747	ST-1-3/8	64734
1-7/16	SF-1-7/16	64748	ST-1-7/16	64735
1-1/2	SF-1-1/2	64749	—	—
1-5/8	SF-1-5/8	64750	—	—
1-11/16	SF-1-11/16	64751	—	—
1-3/4	SF-1-3/4	64752	—	—
1-15/16	SF-1-15/16	64753	ST-1-15/16	50696
2	SF-2	64754	—	—
2-3/16	SF-2-3/16	64755	—	—
2-1/4	SF-2-1/4	64756	—	—
2-7/16	SF-2-7/16	64757	—	—

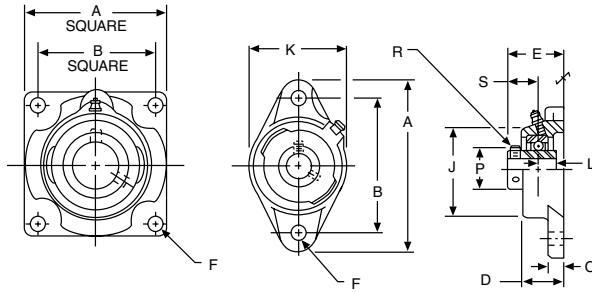
Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

SF/ST Series

Flanged Units – Standard Duty; Extended Inner Race – Setscrew Locking

F



ENVELOPE AND BOLT SPACING DIMENSIONS IN INCHES

Bore	4-BOLT		2-BOLT		
	A	B	A	B	K
1/2 5/8	2-7/8	2-1/8	3-3/4	3	2-9/32
3/4	3-3/8	2-1/2	4-13/32	3-17/32	2-37/64
7/8 15/16 1	3-3/4	2-3/4	4-57/64	3-57/64	2-53/64
1-1/8 1-3/16 1-1/4S	4-1/4	3-1/4	5-19/32	4-19/32	3-19/64
1-1/4 1-5/16 1-3/8 1-7/16	4-5/8	3-5/8	6-1/8	5-1/8	3-11/64
1-1/2	5-1/8	4	—	—	—
1-5/8 1-11/16 1-3/4	5-3/8	4-1/8	—	—	—
1-15/16	5-5/8	4-3/8	7-7/16	6-3/16	4-9/16
2 2-3/16	6-3/8	5-1/8	—	—	—
2-1/4 2-7/16	6-7/8	5-5/8	—	—	—

STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.0012 to -0.0000

ALL DIMENSIONS IN INCHES

Bore	C	D	E	F Bolt	J	L	P	R* Setscrew UNF	S	Approx. Weight (Lbs.)	
										SF	ST
1/2 5/8	7/16	1-1/16	1-17/64	3/8	2	9/32	31/32	10-32	5/8	.9	.9
3/4	1/2	1-7/32	1-31/64	3/8	2-1/4	1/2	1-11/64	10-32	23/32	1.7	1.2
7/8 15/16 1	9/16	1-1/4	1-9/16	7/16	2-1/2	9/16	1-11/32	10-32	25/32	2.0	1.6
1-1/8 1-3/16 1-1/4S	9/16	1-11/32	1-11/16	7/16	2-15/16	5/8	1-39/64	1/4-28	7/8	2.7	2.1
1-1/4 1-5/16 1-3/8 1-7/16	5/8	1-3/8	1-27/32	1/2	3-5/16	11/16	1-27/32	1/4-28	1	3.7	2.8
1-1/2	11/16	1-37/64	2-1/64	1/2	3-3/4	3/4	2-3/32	5/16-24	1-3/16	5.0	—
1-5/8 1-11/16 1-3/4	11/16	1-39/64	2-1/64	9/16	3-7/8	3/4	2-17/64	5/16-24	1-3/16	5.4	—
1-15/16	11/16	1-51/64	2-3/8	9/16	4-1/8	3/4	2-29/64	5/16-24	1-9/32	6.0	4.8
2 2-3/16	3/4	1-31/32	2-17/32	5/8	4-1/2	7/8	2-23/32	5/16-24	1-5/16	8.4	—
2-1/4 2-7/16	3/4	2-1/8	2-29/32	5/8	4-7/8	1	3-1/32	3/8-24	1-9/16	10.0	—

*2 AT 120°

For Load Ratings, See Engineering Section, Page 243.

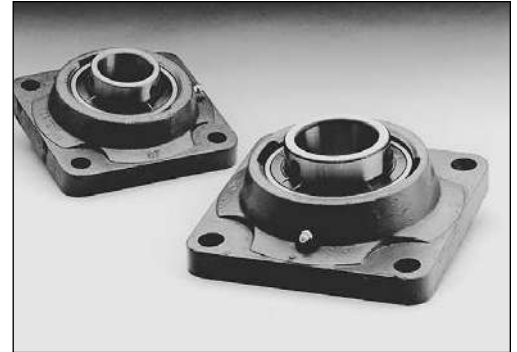
Mounted Ball Bearings

MBF Series

Flanged Units – Medium Duty; Extended Inner Race – Setscrew Locking

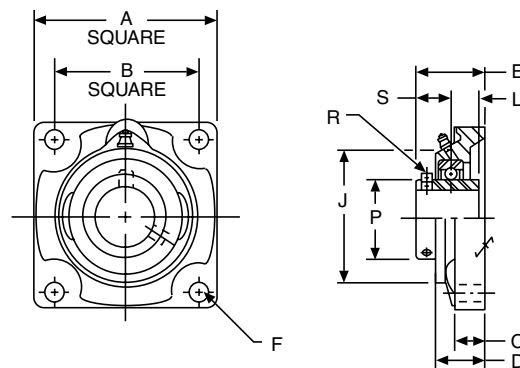
Features —

- One-piece high grade cast iron housing.
- Deep groove ball bearings for high radial and thrust loads.
- Precision machined housing bore and spherical outer race for full self-alignment.
- Synthetic lip type seal with steel flinger.
- Positive locking by setscrews through extended inner race.
- 1/4-28 threaded grease fitting and channel through outer race allow relubrication.



ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Catalog Number	Item Code
1-7/16	MBF-1-7/16	64590
1-1/2	MBF-1-1/2	64591
1-11/16	MBF-1-11/16	64592
1-3/4	MBF-1-3/4	64593
1-15/16	MBF-1-15/16	64594
2	MBF-2	64595
2-3/16	MBF-2-3/16	64596
2-1/4	MBF-2-1/4	64597
2-7/16	MBF-2-7/16	64598
2-1/2	MBF-2-1/2	64599
2-11/16	MBF-2-11/16	64600
2-15/16	MBF-2-15/16	64601
3	MBF-3	64602
3-3/16	MBF-3-3/16	64603
3-1/4	MBF-3-1/4	64604
3-7/16	MBF-3-7/16	64605
3-1/2	MBF-3-1/2	64606



STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	1-7/16-1-3/4	+0.010 to -0.000
	1-15/16-3-1/2	+0.012 to -0.000

ALL DIMENSIONS IN INCHES

Bore	A	B	C	D	E	F Bolt	J	L	P	R* Setscrew UNF	S	Approx. Weight (Lbs.)
1-7/16	5-1/8	4	11/16	1-37/64	2-5/32	1/2	3-3/4	3/4	1-27/32	5/16-24	1-9/64	5.5
1-1/2	5-3/8	4-1/8	11/16	1-39/64	2-5/32	9/16	3-7/8	3/4	2-3/32	5/16-24	1-3/16	6.0
1-11/16 1-3/4	5-5/8	4-3/8	11/16	1-51/64	2-3/8	9/16	4-1/8	3/4	2-17/64	5/16-24	1-9/32	6.8
1-15/16 2	6-3/8	5-1/8	3/4	1-31/32	2-17/32	5/8	4-1/2	7/8	2-23/32	5/16-24	1-5/16	10.5
2-3/16 2-1/4	6-7/8	5-5/8	3/4	2-1/8	2-29/32	5/8	4-7/8	1	3-1/32	3/8-24	1-9/16	12.1
2-7/16 2-1/2	7-1/8	5-7/8	3/4	2-5/32	3-1/16	5/8	5-3/4	1-3/16	3-27/64	3/8-24	1-3/4	16.4
2-11/16	7-5/8	6	3/4	2-5/16	3-3/16	3/4	5-3/4	1-5/16	3-43/64	3/8-24	1-3/4	20.6
2-15/16 3	7-5/8	6	13/16	2-7/16	3-1/2	3/4	6-1/4	1-5/16	3-7/8	1/2-20	1-15/16	21.4
3-3/16 3-1/4	8-3/8	6-3/4	15/16	2-13/32	3-17/32	3/4	6-7/8	1-11/32	4-3/16	1/2-20	2-1/32	26.7
3-7/16 3-1/2	8-3/8	6-3/4	15/16	2-11/16	3-31/32	3/4	7	1-9/16	4-25/64	1/2-20	2-7/32	20.0

*2 AT 120°

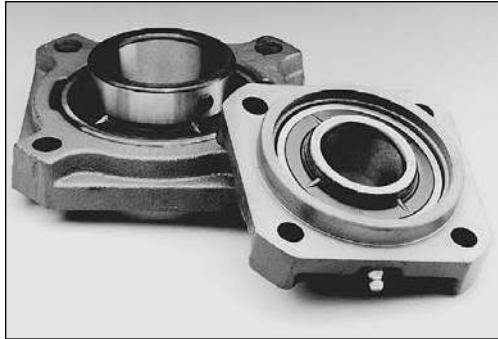
For Load Ratings, See Engineering Section, Page 243.
Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

MBP Series

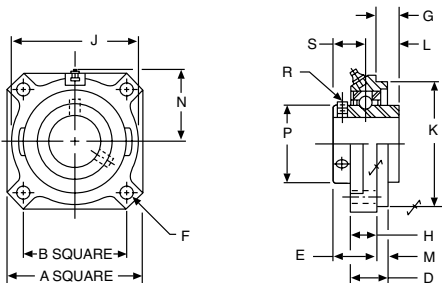
Piloted Flanged Units – Medium Duty; Extended Inner Race – Setscrew Locking

F



Features —

- One-piece high grade cast iron housing.
- Deep groove ball bearings for high radial and thrust loads.
- Precision machined housing bore and spherical outer race for full self-alignment.
- Synthetic lip type seal with steel flinger.
- Positive locking by setscrews through extended inner race.
- 1/4-28 threaded grease fitting and channel through outer race allow relubrication.



ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Catalog Number	Item Code
1-7/16	MBP-1-7/16	64607
1-1/2	MBP-1-1/2	64608
1-11/16	MBP-1-11/16	64609
1-3/4	MBP-1-3/4	64610
1-15/16	MBP-1-15/16	64611
2	MBP-2	64612
2-3/16	MBP-2-3/16	64613
2-1/4	MBP-2-1/4	64614
2-7/16	MBP-2-7/16	64615
2-1/2	MBP-2-1/2	64616
2-11/16	MBP-2-11/16	64617
2-15/16	MBP-2-15/16	64618
3	MBP-3	64619
3-7/16	MBP-3-7/16	64620
3-1/2	MBP-3-1/2	64621

STANDARD TOLERANCES

DIMENSIONS	TOLERANCE
Bore	1-7/16-1-3/4 1-15/16-3-1/2
K	All

ALL DIMENSIONS IN INCHES

Bore	A	B	D	E	F Bolt	G	H	J	K	L	M	N	P	R* Setscrew UNF	S	Approx. Weight (Lbs.)
1-7/16	4-1/4	3-3/32	1-5/16	1-17/32	7/16	13/32	7/8	4	3-5/8	3/4	7/16	2-1/4	1-27/32	5/16-24	1-9/64	5.5
1-1/2	4-1/4	3-3/32	1-11/32	1-9/16	7/16	3/8	29/32	4	3-5/8	3/4	7/16	2-9/32	2-3/32	5/16-24	1-3/16	6.0
1-11/16 1-3/4	4-15/16	3-5/8	1-3/8	1-11/16	1/2	11/32	15/16	4-1/2	4-1/4	3/4	7/16	2-9/16	2-17/64	5/16-24	1-9/32	6.8
1-15/16 2	5-3/16	3-13/16	1-3/8	1-21/32	1/2	17/32	15/16	4-3/4	4-1/2	7/8	7/16	2-3/4	2-23/32	5/16-24	1-5/16	10.5
2-3/16 2-1/4	5-13/16	4-1/4	1-15/32	1-7/8	1/2	11/16	31/32	5-3/8	5	1	1/2	3-1/16	3-1/32	3/8-24	1-9/16	12.1
2-7/16 2-1/2	6-1/4	4-19/32	1-5/8	2-1/8	1/2	13/16	1-1/8	5-3/4	5-1/2	1-3/16	1/2	3-9/32	3-27/64	3/8-24	1-3/4	16.4
2-11/16	7-1/8	5-5/16	1-21/32	2-5/32	5/8	29/32	1-5/32	6-9/16	6-3/8	1-5/16	1/2	3-11/32	3-43/64	3/8-24	1-3/4	20.6
2-15/16 3	7-1/8	5-5/16	1-7/8	2-3/8	5/8	7/8	1-1/4	6-9/16	6-3/8	1-5/6	5/8	3-23/32	3-7/8	1/2-20	1-15/16	21.4
3-7/16 3-1/2	8-3/8	6-3/32	1-31/32	2-21/32	3/4	1-1/8	1-11/32	7-3/4	7-3/8	1-9/16	5/8	4-5/16	4-25/64	1/2-20	2-7/32	30.0

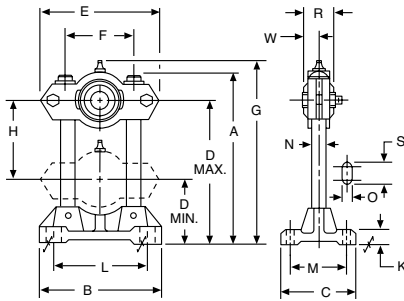
*2 AT 120°

For Load Ratings, See Engineering Section, Page 243.
Replacement Bearings are shown on Page 214.

Mounted Ball Bearings

A Series

Adjustable Shaft Supports – Standard Duty; Eccentric Locking Collar



Features —

- Rigid one piece housing.
- Chrome alloy steel balls.
- Spherical outer race.
- Synthetic lip type seals.
- Eccentric locking collar.
- 1/4-28 threaded grease fitting.



ORDER BY CATALOG NUMBER OR ITEM CODE

Bore	Catalog Number	Item Code
1/2	3A-1/2	07008
5/8	3A-5/8	07010
3/4	4A-3/4	07012
7/8	5A-7/8	07016
15/16	5A-15/16	07018
1	5A-1	07020
1-1/8	6A-1-1/8	07024
1-3/16	6A-1-3/16	07026
1-1/4S	6A-1-1/4S	07028

STANDARD TOLERANCES

DIMENSIONS		TOLERANCE
Bore	All	+0.001 to -0.000

ALL DIMENSIONS IN INCHES

Bore	A	B	C	D		E	F	G Max.	H	
				Min.	Max.				Min.	Max.
1/2 5/8	7-1/8	5-1/8	3-1/8	2-13/32	6-1/16	4-7/8	2-3/4	7-7/16	2-1/2	3-21/32
3/4	7-1/8	5-1/8	3-1/8	2-17/32	6-1/16	4-7/8	2-3/4	7-9/16	2-13/16	3-17.32'
7/8 15/16 1	8-1/4	6-1/4	3-3/4	2-25/32	7-1/16	5-11/16	3-1/8	8-11/16	3	4-9/32
1-1/8 1-3/16 1-1/4S	11-1/4	8-1/8	4-1/2	3-1/2	9-15/16	7-11/16	4-3/8	11-25/32	3-7/16	6-7/16

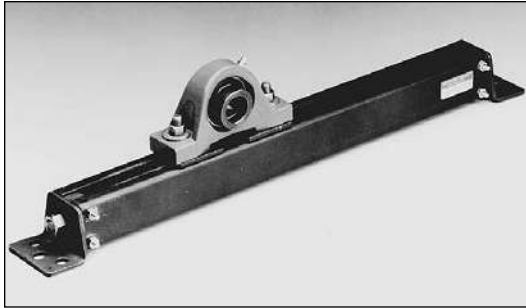
Bore	K	L	M	N	O	R	S	W	Bolt Size
1/2 5/8	5/8	3-15/16	2-1/4	5/8	3/8	1-9/16	11/16	15/16	5/16
3/4	5/8	3-15/16	2-1/4	5/8	3/8	1-23/32	11/16	1-3/64	5/16
7/8 15/16 1	3/4	4-13/16	2-3/4	3/4	1/2	1-3/4	15/16	1-1/16	7/16
1-1/8 1-3/16 1-1/4S	1	6-3/8	3-1/4	1-1/4	5/8	2-5/16	1-1/8	1-3/16	9/16

NOTE: For applications where direction of radial bearing load is away from base, it is recommended that a hole be drilled near the end of each post and a suitable size pin inserted, as a safety precaution.

Replacement Bearings are shown on Page 213.

Mounted Bearings

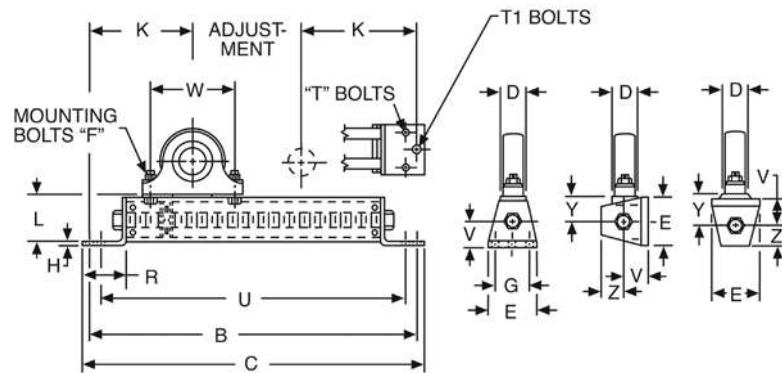
TU Series Take-Up Frames



Boston Gear Take-up Frames are designed for use with Boston's Standard Duty Pillow Blocks. Pillow Block units are not included.

Features —

- Bolted steel frame
- 3 or 4 bolt frame mounting
- Bolt hole centers adjustable



ALL DIMENSIONS IN INCHES

Pillow Block Bore	Adjustment	B	C	D	E	F Bolts	G	H	K	L	R
1/2-1	6	16	17	1-3/4	2-5/8	3/8	1-5/8	3/16	5	2-1/8	1-3/4
	9	19	20								
	12	22	23								
1-1/8-1-3/4	6	19-1/8	20-1/4	2-3/8	3-1/8	1/2	2-1/8	1/4	6-9/16	2-11/16	2-3/16
	9	22-1/8	23-1/4								
	12	25-1/8	26-1/4								
	18	31-1/8	32-1/4								
1-15/16-2-7/16	9	25-5/16	26-9/16	3	4	5/8	2-3/4	5/16	8-5/32	3-5/16	2-3/4
	12	28-5/16	29-9/16								
	18	34-5/16	35-9/16								
	24	40-5/16	41-9/16								

ORDER BY CATALOG NUMBER OR ITEM CODE

Pillow Block Bore	Adjustment	Bolts		U	V	W		Y	Z	Catalog Number	Item Code
		T	T1			Min.	Max.				
1/2-1	6	5/16	3/8	15-1/4	1-1/16	3	5	1-1/16	15/16	TU816-6	29827
	9			18-1/4						TU816-9	29828
	12			21-1/4						TU816-12	29829
1-1/8-1-3/4	6	3/8	1/2	18-1/8	1-11/32	3-3/4	7-1/4	1-11/32	1-3/32	TU1828-6	29830
	9			21-1/8						TU1828-9	29831
	12			24-1/8						TU1828-12	19832
	18			30-1/8						TU1828-18	29833
	24										
1-15/16-2-7/16	9	1/2	5/8	24-1/16	1-5/8	4-1/4	9	1-11/16	1-13/16	TU3139-9	29834
	12			27-1/16						TU3139-12	29835
	18			33-1/16						TU3139-18	29836
	24			39-1/16						TU3139-24	29837

Stainless Mounted Bearings

Pillow Blocks – Setscrew Locking 2 Bolt Pillow Block – Setscrew Locking; Extended Inner Race

Features —

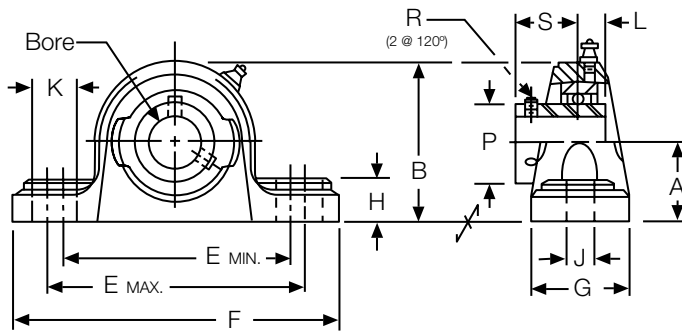
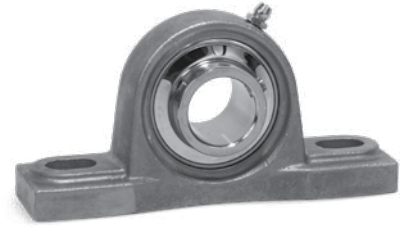
Synthetic lip seal with stainless steel flinger provides superior protection for high pressure washdown conditions.

Pre-filled with NSF H1 food grade grease.

Cast stainless steel housing.

Laser marked.

M6 grease fitting.



Stainless Steel Material	
AISI 304	AISI 440
Housing, cage, shield, setscrew, seal	Balls, inner/outer ring

ALL DIMENSIONS IN INCHES

Catalog Number	Bore Size	Dimensions (in)														Load Rating* (lbf)	
		A	B	E _{max}	E _{min}	F	G	H	J	K	L	P	R (UNF)	S	Bolt Size	CR	Co
SSUP4-3/4	3/4	1-5/16	2-9/16	4-1/8	3-3/8	5	1-1/2	9/16	1/2	3/4	0.500	1.142	1/4-28	0.721	3/8	2,901	1,507
SSUP5-1	1	1-7/16	2-25/32	4-1/2	3-3/4	5-1/2	1-1/2	19/32	1/2	3/4	0.563	1.339	1/4-28	0.780	3/8	3,175	1,782
SSUP6-1-3/16	1-3/16	1-11/16	3-1/4	5-1/32	4-15/32	6-1/2	1-7/8	21/32	43/64	25/32	0.626	1.591	1/4-28	0.874	1/2	4,431	2,558
SSUP7-1-1/4	1-1/4	1-7/8	3-21/32	5-9/32	4-23/32	6-9/16	1-7/8	45/64	43/64	25/32	0.689	1.866	5/16-24	1.000	1/2	5,847	3,472
SSUP7-1-7/16	1-7/16	1-7/8	3-21/32	5-9/32	4-23/32	6-9/16	1-7/8	45/64	43/64	25/32	0.689	1.866	5/16-24	1.000	1/2	5,847	3,472
SSUP8-1-1/2	1-1/2	1-15/16	3-15/16	5-11/16	5-1/8	7-1/4	2-1/8	45/64	43/64	25/32	0.748	2.075	5/16-24	1.189	1/2	6,632	4,069
SSUP10-1-15/16	1-15/16	2-1/4	4-29/64	6-17/32	5-31/32	8-1/8	2-3/8	53/64	25/32	29/32	0.748	2.465	3/8-24	1.284	5/8	7,868	5,216

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore Size	Mounted Bearing		Bearing Insert	
	Catalog Number	Item Code	Catalog Number	Item Code
3/4	SSUP4-3/4	G01140	SSUC204-12	G01171
1	SSUP5-1	G01141	SSUC205-16	G01172
1-3/16	SSUP6-1-3/16	G01142	SSUC206-19	G01173
1-1/4	SSUP7-1-1/4	G01143	SSUC207-20	G01174
1-7/16	SSUP7-1-7/16	G01144	SSUC207-23	G01175
1-1/2	SSUP8-1-1/2	G05900	SSUC208-24	G05922
1-15/16	SSUP10-1-15/16	G05901	SSUC210-31	G05923

NOTES: Bore tolerance: +.001"/-.000".

Recommended shaft tolerance: Nominal +.000"/-.001".

Max recommended speed is 5000 RPM.

*CR=dynamic load rating, Co=static load rating.

Stainless Mounted Bearings

Pillow Blocks – Eccentric Locking Collar

2 Bolt Pillow Block – Eccentric Locking Collar; For Superior Shaft Holding Power

F



Features —

Synthetic lip seal with stainless steel flinger provides superior protection for high pressure washdown conditions.

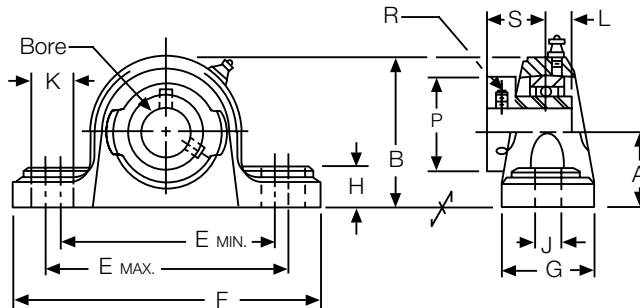
Pre-filled with NSF H1 food grade grease.

Cast stainless steel housing.

Laser marked.

M6 grease fitting.

Stainless Steel Material	
AISI 304	AISI 440
Housing, cage, shield, setscrew, seal, collar	Balls, inner/outer ring



ALL DIMENSIONS IN INCHES

Catalog Number	Bore Size	Dimensions (in)														Load Rating* (lbf)	
		A	B	E _{max}	E _{min}	F	G	H	J	K	L	P	R (UNF)	S	Bolt Size	CR	CO
SSHP4-3/4	3/4	1-5/16	2-9/16	4-1/8	3-3/8	5	1-1/2	9/16	1/2	3/4	0.673	1.311	1/4-28	1.047	3/8	2,901	1,507
SSHP5-1	1	1-7/16	2-25/32	4-1/2	3-3/4	5-1/2	1-1/2	19/32	1/2	3/4	0.689	1.500	1/4-28	1.059	3/8	3,175	1,782
SSHP6-1-3/16	1-3/16	1-11/16	3-1/4	5-1/32	4-15/32	6-1/2	1-7/8	21/32	43/64	25/32	0.720	1.713	1/4-28	1.186	1/2	4,431	2,558
SSHP7-1-1/4	1-1/4	1-7/8	3-21/32	5-9/32	4-23/32	6-9/16	1-7/8	45/64	43/64	25/32	0.740	2.087	5/16-24	1.272	1/2	5,847	3,472
SSHP7-1-7/16	1-7/16	1-7/8	3-21/32	5-9/32	4-23/32	6-9/16	1-7/8	45/64	43/64	25/32	0.740	2.087	5/16-24	1.272	1/2	5,847	3,472
SSHP8-1-1/2	1-1/2	1-15/16	3-15/16	5-11/16	5-1/8	7-1/4	2-1/8	45/64	43/64	25/32	0.748	2.283	5/16-24	1.378	1/2	6,632	4,069
SSHP10-1-15/16	1-15/16	2-1/4	4-29/64	6-17/32	5-31/32	8-1/8	2-3/8	53/64	25/32	29/32	0.969	2.697	3/8-24	1.500	5/8	7,868	5,216

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore Size	Mounted Bearing		Bearing Insert	
	Catalog Number	Item Code	Catalog Number	Item Code
3/4	SSHP4-3/4	G01145	SSHC204-12	G01176
1	SSHP5-1	G01146	SSHC205-16	G01177
1-3/16	SSHP6-1-3/16	G01147	SSHC206-19	G01178
1-1/4	SSHP7-1-1/4	G01148	SSHC207-20	G01179
1-7/16	SSHP7-1-7/16	G01149	SSHC207-23	G01180
1-1/2	SSHP8-1-1/2	G05902	SSHC208-24	G05924
1-15/16	SSHP10-1-15/16	G05903	SSHC210-31	G05925

NOTES: Bore tolerance: +.001"/-.000".

Recommended shaft tolerance: Nominal +.000"/-.001".

Max recommended speed is 5000 RPM.

*CR=dynamic load rating, CO=static load rating.

Stainless Mounted Bearings

Flanged Units – Setscrew Locking 2 Bolt Flange – Setscrew Locking; Extended Inner Race

Features —

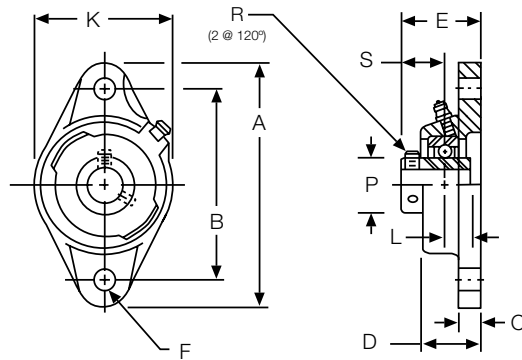
Synthetic lip seal with stainless steel finger provides superior protection for high pressure washdown conditions.

Pre-filled with NSF H1 food grade grease.

Cast stainless steel housing.

Laser marked.

M6 grease fitting.



Stainless Steel Material	
AISI 304	AISI 440
Flange, cage, shield, setscrew, seal	Balls, inner/outer ring

ALL DIMENSIONS IN INCHES

Catalog Number	Bore Size	Dimensions (in)											Load Rating* (lbf)	
		A	B	C	D	E	Bolt Size F**	K	L	P	R (UNF)	S	CR	CO
SSUFL4-3/4	3/4	4-7/16	3-35/64	7/16	1.000	1-5/16	3/8	2-3/8	0.500	1.142	1/4-28	0.721	2,901	1,507
SSUFL5-1	1	5-1/8	3-57/64	1/2	1.063	1-13/32	1/2	2-11/16	0.563	1.339	1/4-28	0.780	3,175	1,782
SSUFL6-1-3/16	1-3/16	5-13/16	4-39/64	1/2	1.219	1-19/32	1/2	3-5/32	0.626	1.591	1/4-28	0.874	4,431	2,558
SSUFL7-1-1/4	1-1/4	6-11/32	5-1/8	35/64	1.344	1-3/4	1/2	3-35/64	0.689	1.866	5/16-24	1.000	5,847	3,472
SSUFL7-1-7/16	1-7/16	6-11/32	5-1/8	35/64	1.344	1-3/4	1/2	3-35/64	0.689	1.866	5/16-24	1.000	5,847	3,472
SSUFL8-1-1/2	1-1/2	6-7/8	5-43/64	35/64	1.422	2-1/64	1/2	3-15/16	0.748	2.075	5/16-24	1.189	6,632	4,069
SSUFL10-1-15/16	1-15/16	7-3/4	6-3/16	19/32	1.578	2-5/32	5/8	4-17/32	0.748	2.465	3/8-24	1.284	7,868	5,216

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore Size	Mounted Bearing		Bearing Insert	
	Catalog Number	Item Code	Catalog Number	Item Code
3/4	SSUFL4-3/4	G01150	SSUC204-12	G01171
1	SSUFL5-1	G01151	SSUC205-16	G01172
1-3/16	SSUFL6-1-3/16	G01152	SSUC206-19	G01173
1-1/4	SSUFL7-1-1/4	G01153	SSUC207-20	G01174
1-7/16	SSUFL7-1-7/16	G01154	SSUC207-23	G01175
1-1/2	SSUFL8-1-1/2	G05904	SSUC208-24	G05922
1-15/16	SSUFL10-1-15/16	G05905	SSUC210-31	G05923

NOTES: Bore tolerance: +.001"/-.000".

Recommended shaft tolerance: Nominal +.000"/-.001".

Max recommended speed is 5000 RPM.

*CR=dynamic load rating, CO=static load rating.

** Smaller bolt sizes are acceptable with the use of flat washers

Stainless Mounted Bearings

Flanged Units – Setscrew Locking

4 Bolt Flange – Setscrew Locking; Extended Inner Race

F



Features —

Synthetic lip seal with stainless steel flinger provides superior protection for high pressure washdown conditions.

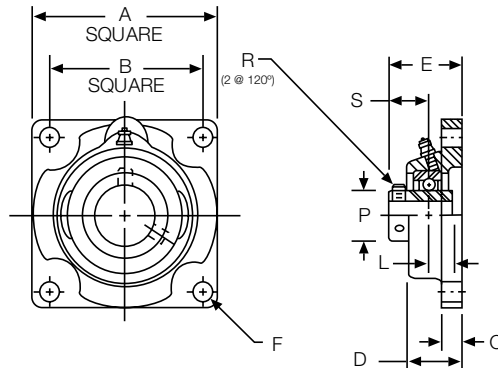
Pre-filled with NSF H1 food grade grease.

Cast stainless steel housing.

Laser marked.

M6 grease fitting.

Stainless Steel Material	
AISI 304	AISI 440
Flange, cage, shield, setscrew, seal	Balls, inner/outer ring



ALL DIMENSIONS IN INCHES

Catalog Number	Bore Size	Dimensions (in)										Load Rating* (lbf)	
		A	B	C	D	E	Bolt Size F**	L	P	R (UNF)	S	CR	Co
SSUF4-3/4	3/4	3-3/8	2-33/64	15/32	1.000	1-5/16	3/8	0.500	1.142	1/4-28	0.721	2,901	1,507
SSUF5-1	1	3-3/4	2-3/4	35/64	1.063	1-13/32	3/8	0.563	1.339	1/4-28	0.780	3,175	1,782
SSUF6-1-3/16	1-3/16	4-1/4	3-17/64	35/64	1.219	1-19/32	3/8	0.626	1.591	1/4-28	0.874	4,431	2,558
SSUF7-1-1/4	1-1/4	4-39/64	3-5/8	5/8	1.344	1-3/4	7/16	0.689	1.866	5/16-24	1.000	5,847	3,472
SSUF7-1-7/16	1-7/16	4-39/64	3-5/8	5/8	1.344	1-3/4	7/16	0.689	1.866	5/16-24	1.000	5,847	3,472
SSUF8-1-1/2	1-1/2	5-1/8	4-1/64	5/8	1.422	2-1/64	1/2	0.748	2.075	5/16-24	1.189	6,632	4,069
SSUF10-1-15/16	1-15/16	5-13/32	4-3/8	23/32	1.578	2-5/32	1/2	0.748	2.465	3/8-24	1.284	7,868	5,216

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore Size	Mounted Bearing		Bearing Insert	
	Catalog Number	Item Code	Catalog Number	Item Code
3/4	SSUF4-3/4	G01155	SSUC204-12	G01171
1	SSUF5-1	G01156	SSUC205-16	G01172
1-3/16	SSUF6-1-3/16	G01157	SSUC206-19	G01173
1-1/4	SSUF7-1-1/4	G01158	SSUC207-20	G01174
1-7/16	SSUF7-1-7/16	G01159	SSUC207-23	G01175
1-1/2	SSUF8-1-1/2	G05906	SSUC208-24	G05922
1-15/16	SSUF10-1-15/16	G05907	SSUC210-31	G05923

NOTES: Bore tolerance: +.001"/-.000".

Recommended shaft tolerance: Nominal +.000"/-.001".

Max recommended speed is 5000 RPM.

*CR=dynamic load rating, Co=static load rating.

** Smaller bolt sizes are acceptable with the use of flat washers

Stainless Mounted Bearings

Flanged Units – Setscrew Locking 3 Bolt Flange – Setscrew Locking; Extended Inner Race

Features —

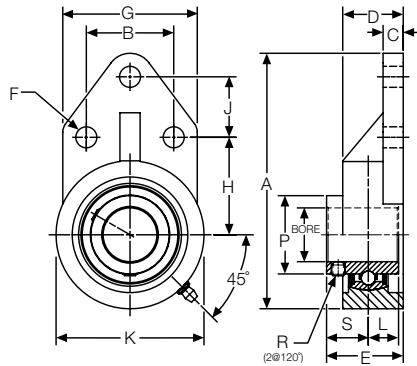
Synthetic lip seal with stainless steel finger provides superior protection for high pressure washdown conditions.

Pre-filled with NSF H1 food grade grease.

Cast stainless steel housing.

Laser marked.

M6 grease fitting.



Stainless Steel Material	
AISI 304	AISI 440
Flange, cage, shield, setscrew, seal	Balls, inner/outer ring

ALL DIMENSIONS IN INCHES

Catalog Number	Bore Size	Dimensions (in)														Load Rating* (lbf)	
		A	B	C	D	E	Bolt Size F**	G	H	J	K	L	P	R (UNF)	S	CR	Co
SSUFB4-3/4	3/4	4-1/4	1-1/2	5/16	1	1.35	5/16	2-3/8	1-11/16	7/8	2-1/2	0.500	1.142	1/4-28	0.850	2,901	1,507
SSUFB5-1	1	4-3/4	1-5/8	3/8	1-5/64	1.43	5/16	2-1/2	1-13/16	1-1/8	2-3/4	0.563	1.339	1/4-28	0.867	3,175	1,782
SSUFB6-1-3/16	1-3/16	5-3/8	1-7/8	3/8	1-7/64	1-19/32	5/16	2-3/4	2-1/16	1-1/4	3-1/4	0.626	1.591	1/4-28	0.968	4,431	2,558
SSUFB7-1-1/4	1-1/4	6-1/8	2	1/2	1-1/4	1-3/4	7/16	3-1/4	2-3/8	1-1/4	3-3/4	0.689	1.866	5/16-24	1.061	5,847	3,472
SSUFB7-1-7/16	1-7/16	6-1/8	2	1/2	1-1/4	1-3/4	7/16	3-1/4	2-3/8	1-1/4	3-3/4	0.689	1.866	5/16-24	1.061	5,847	3,472
SSUFB8-1-1/2	1-1/2	6-15/32	1-31/32	5/8	1-13/32	2-1/64	3/8	3-1/16	2-3/8	1-5/8	3-15/16	0.748	2.075	5/16-24	1.267	6,632	4,069
SSUFB10-1-15/16	1-15/16	7-1/2	2-3/4	1/2	1-1/2	2-5/32	7/16	4	2-15/16	1-5/8	4-5/8	0.748	2.465	3/8-24	1.408	7,868	5,216

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore Size	Mounted Bearing		Bearing Insert	
	Catalog Number	Item Code	Catalog Number	Item Code
3/4	SSUFB4-3/4	G05908	SSUC204-12	G01171
1	SSUFB5-1	G05909	SSUC205-16	G01172
1-3/16	SSUFB6-1-3/16	G05910	SSUC206-19	G01173
1-1/4	SSUFB7-1-1/4	G05911	SSUC207-20	G01174
1-7/16	SSUFB7-1-7/16	G05912	SSUC207-23	G01175
1-1/2	SSUFB8-1-1/2	G05913	SSUC208-24	G05922
1-15/16	SSUFB10-1-15/16	G05914	SSUC210-31	G05923

NOTES: Bore tolerance: +.001"/-.000".

Recommended shaft tolerance: Nominal +.000"/-.001".

Max recommended speed is 5000 RPM.

*CR=dynamic load rating, Co=static load rating.

** Smaller bolt sizes are acceptable with the use of flat washers

Stainless Mounted Bearings

Take Up Units – Setscrew Locking

Wide Slot Take Up Unit – Setscrew Locking; Extended Inner Race

F



Features —

Synthetic lip seal with stainless steel finger provides superior protection for high pressure washdown conditions.

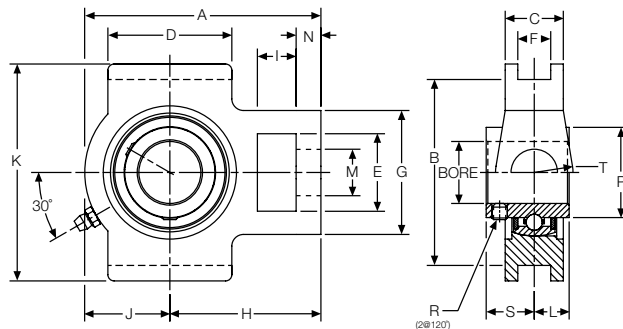
Pre-filled with NSF H1 food grade grease.

Cast stainless steel housing.

Laser marked.

M6 grease fitting.

Stainless Steel Material	
AISI 304	AISI 440
Flange, cage, shield, setscrew, seal	Balls, inner/outer ring



ALL DIMENSIONS IN INCHES

Catalog Number	Bore Size	Dimensions (in)																Load Rating* (lb)		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	R (UNF)	S	CR	CO
SSUT4-3/4	3/4	3-11/16	2-63/64	13/16	2-1/64	1.250	0.469	2-1/64	2-13/32	0.625	1-9/32	3-1/2	0.500	0.750	0.391	1.142	1/4-28	0.721	2,901	1,507
SSUT5-1	1	3-13/16	2-63/64	15/16	2-1/64	1.250	0.469	2-1/64	2-7/16	0.625	1-3/8	3-1/2	0.563	0.750	0.391	1.339	1/4-28	0.780	3,175	1,782
SSUT6-1-3/16	1-3/16	4-29/64	3-1/2	1-3/32	2-1/4	1.453	0.469	2-7/32	2-3/4	0.625	1-45/64	4-1/64	0.626	0.859	0.391	1.591	1/4-28	0.874	4,431	2,558
SSUT7-1-1/4	1-1/4	5-5/64	3-1/2	1-3/16	2-33/64	1.453	0.469	2-33/64	3-5/64	0.625	2	4-1/64	0.689	0.859	0.516	1.866	5/16-24	1.000	5,847	3,472
SSUT7-1-7/16	1-7/16	5-5/64	3-1/2	1-3/16	2-33/64	1.453	0.469	2-33/64	3-5/64	0.625	2	4-1/64	0.689	0.859	0.516	1.866	5/16-24	1.000	5,847	3,472
SSUT8-1-1/2	1-1/2	5-43/64	4-1/64	1-5/16	3-17/64	1.938	0.625	3-17/64	3-1/2	0.750	2-11/64	4-31/64	0.748	1.141	0.625	2.075	5/16-24	1.189	6,632	4,069
SSUT10-1-15/16	1-15/16	5-55/64	4-1/64	1-15/32	3-17/64	1.938	0.625	3-17/64	3-35/64	0.750	2-5/16	4-39/64	0.748	1.141	0.625	2.465	3/8-24	1.284	7,868	5,216

ORDER BY CATALOG NUMBER OR ITEM CODE

Bore Size	Mounted Bearing		Bearing Insert	
	Catalog Number	Item Code	Catalog Number	Item Code
3/4	SSUT4-3/4	G05915	SSUC204-12	G01171
1	SSUT5-1	G05916	SSUC205-16	G01172
1-3/16	SSUT6-1-3/16	G05917	SSUC206-19	G01173
1-1/4	SSUT7-1-1/4	G05918	SSUC207-20	G01174
1-7/16	SSUT7-1-7/16	G05919	SSUC207-23	G01175
1-1/2	SSUT8-1-1/2	G05920	SSUC208-24	G05922
1-15/16	SSUT10-1-15/16	G05921	SSUC210-31	G05923

NOTES: Bore tolerance: +.001"/-.000".

Recommended shaft tolerance: Nominal +.000"/-.001".

Max recommended speed is 5000 RPM.

*CR=dynamic load rating, CO=static load rating.

Analysis of Radial Bearing Loads for Unmounted and Mounted Rolling Elements

Radial Load

Radial bearing loads are determined by analysis of all the forces applied to a shaft. In many instances this becomes a complex analysis and should be performed with expertise. However, many applications involve simple loading and may be calculated with basic information.

Many shafts are supported by two bearings, with a load “L” applied either between two bearings, as in Figure 1; or with load overhung, as in Figure 2. In either case, the reaction on the bearing is dependent upon:

- The point of load application
- The magnitude of the load.
- The distance between the bearing centers.

With the above information known, the reactions, due to the loads, on the bearings, may be calculated.

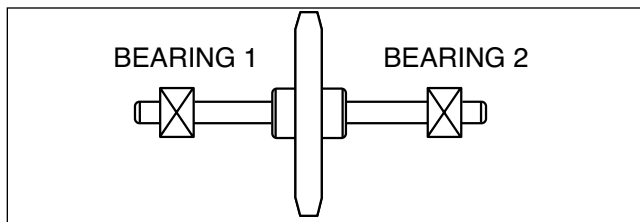


FIGURE 1.

When the applied load is located between the two bearings, it is commonly referred to as “Straddle” loading.

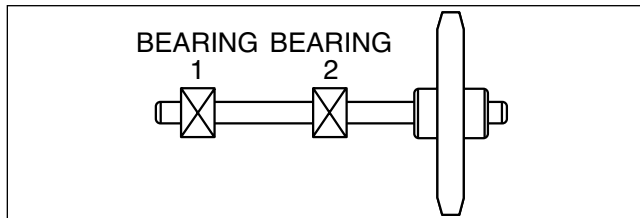


FIGURE 2.

When the applied load is located outside the two bearings, it is commonly referred to as “Overhung” loading.

The loading of a shaft usually is the result of forces generated by gearing, sprockets or pulleys, the weight of these parts and friction.

Normally the weight of the parts and friction are ignored. However, if the weight of these parts is large, they should be considered.

In this text we are mainly considering radial loading of the shaft. Each load should be calculated individually as the sum of these will be used to calculate the load imposed on the bearings.

Load Connection Factor

Loads applied by various types of drives may be calculated with use of the following load connection factors and formula:

$$L = \frac{2TK}{D}$$

L = Load (Lbs.)

$$T = \text{Torque (Lb-Ins.)} \quad T = \frac{(63025)(\text{H.P.})}{\text{RPM}}$$

K = Load Connection Factor

D = P.D. of Sprocket, Pinion, or Pulley (In.)

Load Connection Factors (K)

Sprocket or Timing Belt	1.00
Pinion and Gear Drive	1.25
Pulley and V-Belt Drive	1.50
Pulley and Flat-Belt Drive.....	2.50

Example “A”

Load smooth and steady 8 hours per day.

- #40 Chain Drive
- 30 Tooth Sprocket
- 4.783 Sprocket P.D.
- 2 HP
- 500 RPM
- 5/8 Shaft Dia.

With the above information the load can be calculated as follows:

$$L = \frac{2TK}{D}$$

$$T = \frac{63025 \times 2}{\text{RPM}} = 252 \text{ In. Lbs.}$$

K = 1.0 From Load Connection Factor Table

D = 4.783

$$L = \frac{2 \times 252 \times 1.0}{4.783}$$

L = 105 lbs. Radial Load

Engineering Information

Analysis of Radial Bearing Loads for Unmounted and Mounted Rolling Elements (Cont'd)

F

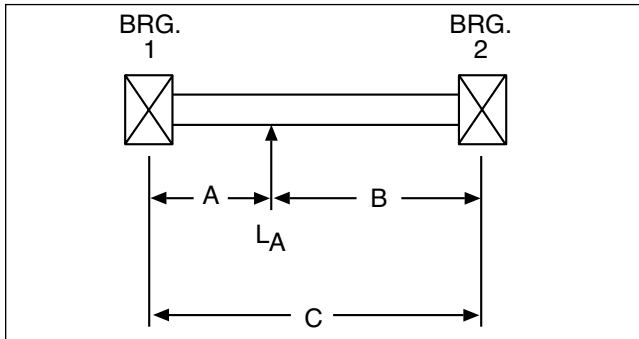
Magnitude of Load Acting on Bearings

Once the applied load or loads that act on the shaft is determined, we may now apply it to the bearings.

There are many types of loadings that can be imposed on a bearing:

Straddle Loaded Bearings

Radial Applied Load Acting On Shaft



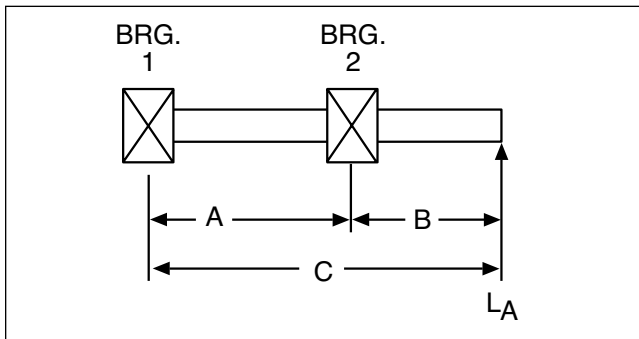
$$\text{Load Bearing I} = L_I = \frac{L_A \times B}{C}$$

$$\text{Load Bearing II} = L_{II} = \frac{L_A \times A}{C}$$

Check $L_I + L_{II} = L_A$

Overhung Loaded Bearings

Radial Applied Load Acting On Shaft



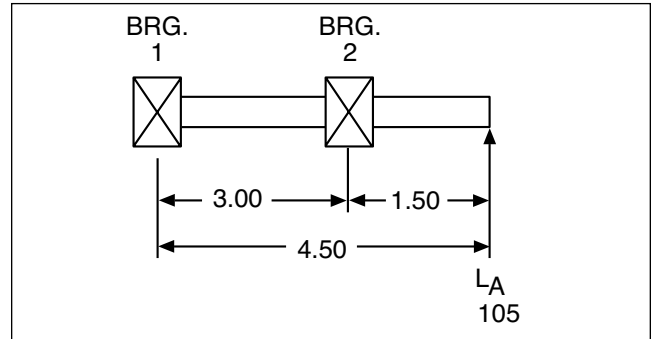
$$\text{Load Bearing I} = L_I = \frac{L_A \times B}{A}$$

$$\text{Load Bearing II} = L_{II} = \frac{L_A \times C}{A}$$

Check $L_{II} - L_I = L_A$

Example "B"

Load given in Example "A" = 105 lbs. is in overhung condition, as shown.



LOAD BEARING I

$$L_I = \frac{L_A \times B}{A}$$

$$L_I = \frac{105 \times 1.50}{3.00}$$

$$L_I = 52.5 \text{ lbs.}$$

LOAD BEARING II

$$L_{II} = \frac{L_A \times C}{A}$$

$$L_{II} = \frac{105 \times 4.5}{3.0}$$

$$L_{II} = 157.5 \text{ lbs.}$$

CHECK

$$L_{II} - L_I = L_A$$

$$157.5 - 52.5 = 105$$

$$105 = 105$$

Ball and Mounted Ball Bearing Selection

Bearing selection for the majority of applications can be made directly from the Load Rating Tables. Mounted bearings are listed individually on each page. The mounted bearings tables are located on Pages 108-109.

The following procedure may be followed:

1. Determine the actual radial load to be supported by the bearing. For applications involving heavy shock loads or severe vibration, actual load should be multiplied by a service factor from 1.1 to 1.5 depending on the severity of these conditions.

2. Select a bearing from the table that has a radial load rating equal to or greater than the actual radial load determined in Step 1, for the life desired at the required operating speed.

Ball bearing rating tables are based on an “Average” bearing life of 2500 hours. Average or medium life (L_{50}) is the life that may be expected from 50% or more of a given group of bearings operating under an identical steady load condition. The minimum life (L_{10}) is the life expectancy of at least 90% of a group of bearings and is approximately 1/5 average.

Service Factor	Operating Conditions
.8	Uniform — not more than 15 minutes in 2 hours.
1.0	Moderate Shock — not more than 15 minutes in 2 hours. Uniform — not more than 10 hours per day
1.25	Moderate Shock — not more than 10 hours per day. Uniform — more than 10 hours per day.
1.50	Heavy Shock — not more than 15 minutes in 2 hours. Moderate Shock — more than 10 hours per day.
1.75	Heavy Shock — not more than 10 hours per day.
2.0	Heavy Shock — more than 10 hours per day.

Example “C”

Using loading from Example “B,” select a mounted bearing suitable to give an average life (L_{50}) of 15,000 hours.

Known—

Load Bearing I = 52.5

Load Bearing II = 157.5

Shaft Diameter 5/8 (From Example “A”)

Service Factor 1 (From Example “A”)

500 RPM (From Example “A”)

From the Rating Table, Page 243, as shown, a standard duty bearing (either eccentric collar or extended set screw inner race) may be selected.

Engineering Information

Mounted Ball Bearing Radial Load Capacities Light Duty

PS Series Pillow Blocks

F

Shaft Sizes	Average Life (L ₅₀) Hours	Speed (R.P.M.)							
		Radial Load (Pounds)							
		50	100	500	1000	1500	1800	2000	2500
1/2 5/8	2,500	300	300	300	300	300	300	300	300
	5,000	300	300	300	300	300	300	300	300
	7,500	300	300	300	245	215	200	195	180
	15,000	300	300	280	220	195	180	175	165
	75,000	300	300	245	195	170	160	155	140
3/4	2,500	350	350	350	350	350	350	350	350
	5,000	350	350	350	350	350	350	350	350
	7,500	350	350	350	330	285	270	260	240
	15,000	350	350	350	300	260	245	235	220
	75,000	350	350	350	260	225	215	205	190
7/8 15/16 1	2,500	400	400	400	400	400	400	400	400
	5,000	400	400	400	400	400	400	400	400
	7,500	400	400	400	360	315	295	285	265
	15,000	400	400	400	325	285	270	260	240
	75,000	400	400	360	285	250	235	225	210
1-1/16 1-1/8 1-3/16 1-1/4	2,500	600	600	600	600	600	600	600	600
	5,000	600	600	600	600	600	600	600	600
	7,500	600	600	600	500	435	410	395	370
	15,000	600	600	570	455	395	375	360	335
	75,000	600	600	500	395	345	325	315	295

PS2 and PS3 Series Flanged Units

Shaft Sizes	Average Life (L ₅₀) Hours	Speed (R.P.M.)							
		Radial Load (Pounds)							
		50	100	500	1000	1500	1800	2000	2500
1/2 5/8	2,500	600	600	600	530	460	435	420	390
	5,000	600	600	530	420	365	385	330	310
	7,500	600	530	310	245	215	200	195	180
	15,000	600	480	280	220	195	180	175	165
	75,000	530	420	245	195	170	160	155	140
3/4	2,500	700	700	700	700	620	585	560	520
	5,000	700	700	700	560	490	460	445	415
	7,500	700	700	415	330	285	270	260	240
	15,000	700	645	375	300	260	245	235	220
	75,000	700	560	330	260	225	215	205	190
7/8 15/16 1	2,500	800	800	800	775	680	640	615	570
	5,000	800	800	775	615	540	505	490	455
	7,500	800	775	455	360	315	295	285	265
	15,000	800	705	410	325	285	270	260	240
	75,000	775	615	360	285	250	235	225	210
1-1/16 1-1/8 1-3/16 1-1/4S	2,500	1100	1100	1100	1080	940	885	855	795
	5,000	1100	1100	1080	855	750	700	680	630
	7,500	1100	1080	630	500	435	410	395	370
	15,000	1100	980	570	455	395	375	360	335
	75,000	1080	855	500	395	345	325	315	295
1-1/4 1-5/16 1-3/8 1-7/16	2,500	1400	1400	1400	1400	1245	1175	1130	1050
	5,000	1400	1400	1400	1130	990	930	895	835
	7,500	1400	1400	835	660	580	545	525	485
	15,000	1400	1295	755	600	525	495	475	440
	75,000	1400	1130	660	525	460	430	415	385

Application Data – Unmounted Bearings

Lubrication

Either oil or grease can be used for lubricating bearings. Boston bearings are supplied slushed (open bearings) with a rust inhibiting oil, or prepacked with grease (sealed or shielded bearings) at the factory. However, special purpose lubricants can be used when required. It is recommended that bearing selection include consideration of the lubricant specifications and whether the lubricant will be applied in service or prepacked at the factory. Good lubrication adds measurably to the life of a bearing.

Precautions

1. Keep bearings clean and protected with covering until ready to install.
2. Make preliminary examination of shaft and housing for correct window size. Also check for chips, filings and burrs.
3. Press inner race on shaft or outer race in housing preferably by use of arbor press. Never transmit mounting press forces through balls from one race to the other.
4. Avoid hammer blows.

Recommended Shaft Fits — 1600-3000-7500-7600 Series

Bearing Bore		Shaft Rotating				Shaft Stationary			
		Shaft Diameter		Theoretical Fit		Shaft Diameter		Theoretical Fit	
Max.	Min.	Max.	Min.	Tight	Loose	Max.	Min.	Tight	Loose
.2500	.2495	.2500	.2495	.0005	.0005	.2495	.2490	.0000	.0010
.3125	.3120	.3125	.3120	.0005	.0005	.3120	.3115	.0000	.0010
.3750	.3745	.3750	.3745	.0005	.0005	.3745	.3740	.0000	.0010
.4375	.4370	.4375	.4370	.0005	.0005	.4370	.4365	.0000	.0010
.5000	.4995	.5000	.4995	.0005	.0005	.4995	.4990	.0000	.0010
.6250	.6245	.6250	.6245	.0005	.0005	.6245	.6240	.0000	.0010
.7500	.7495	.7500	.7495	.0005	.0005	.7495	.7490	.0000	.0010
.8750	.8745	.8752	.8747	.0007	.0003	.8745	.8740	.0000	.0010
1.0000	.9995	1.0002	.9997	.0007	.0003	.9995	.9990	.0000	.0010
1.1250	1.1245	1.1252	1.1247	.0007	.0003	1.1245	1.1240	.0000	.0010
1.2500	1.2405	1.2502	1.2497	.0007	.0003	1.2495	1.2490	.0000	.0010

Recommended Housing Fits — 1600-3000-7500-7600 Series

Bearing Outside Diameter		Housing Rotating				Housing Stationary			
		Housing Inside Diameter		Theoretical Fit		Housing Inside Diameter		Theoretical Fit	
Max.	Min.	Max.	Min.	Tight	Loose	Max.	Min.	Tight	Loose
.6875	.6870	.6877	.6870	.0005	.0007	.6880	.6875	.0000	.0010
.8750	.8745	.8752	.8745	.0005	.0007	.8755	.8750	.0000	.0010
.9063	.9058	.9065	.9058	.0005	.0007	.9068	.9063	.0000	.0010
1.1250	1.1245	1.1252	1.1242	.0008	.0007	1.1255	1.1250	.0000	.0010
1.3750	1.3745	1.3752	1.3742	.0008	.0007	1.3755	1.3750	.0000	.0010
1.6250	1.6245	1.6252	1.6242	.0008	.0007	1.6258	1.6250	.0000	.0013
1.7500	1.7495	1.7502	1.7492	.0008	.0007	1.7508	1.7500	.0000	.0013
2.0000	1.9994	2.0002	1.9990	.0010	.0008	2.0010	2.0000	.0000	.0016
2.5000	2.4994	2.5002	2.4990	.0010	.0008	2.5010	2.5000	.0000	.0016
2.5625	2.5619	2.5627	2.5615	.0010	.0008	2.5635	2.5625	.0000	.0016

Note: 3000 Series Dim Are Nom. +.0005
7600 Series Dim Are Nom. +.0008

Application Data – Mounted Bearings

Lubrication

Boston Gear ball and tapered roller bearing Pillow Blocks and Flanged Cartridges are factory lubricated prior to shipping. Those designed with the relubrication feature periodically require grease during operation. The interval between relubrication and the amount necessary to insure a long operational life are determined by the specific application.

Loading, speed, and environmental conditions must be considered when determining the proper interval between relubrication.

Hours Operated Per Day	Weeks							
	1-250 RPM	251-500 RPM	501-750 RPM	751-1000 RPM	1001-1500 RPM	1501-2000 RPM	2001-2500 RPM	2501-3000 RPM
8	12	12	10	7	5	4	3	2
16	12	7	5	4	2	2	1	1
24	10	5	3	2	1	1	1	1

The table above may be used as a guide for establishing lubrication intervals for applications where contamination is not present.

For unusual operating conditions not covered by the table, consult the factory for our recommendations. Normal bearing operation temperatures range from “cool-to-the-touch” to “too-hot-to-touch” for more than a few seconds, depending on the load, speed, and ambient temperature.

The type of grease used in Boston bearing units allows satisfactory operation at temperatures to 225°F and speeds to 6500 RPM.

Bearings are prelubricated with a No. 2 consistency lithium base grease, and it is recommended that the Lith EP-2 or an equivalent grease be used when relubrication is required. When relubricating bearings, it is preferable that the shaft be rotating. This rotation of the shaft will aid in preventing excessive filling and insure proper distribution of the grease.

Grease should be added slowly to the bearing. When a slight bead appears from under the seal, the bearing will usually contain the proper amount of lubricant.

Precautions

The shaft must be clean, straight and free from nicks and burns and should fit the bearing as snugly as possible. Recommended shaft tolerance – Low Speed (or Light Load) +.0 to -.002; Normal Speed (or Load) +.0 to -.001; High Speed (or Heavy Load) a light press fit is desirable.

The use of flats at setscrew locations will permit ease of shaft removal.

Mounting

Setscrew Locking Type

Housing should be fastened to the mounting structure. Back out setscrews to clear shaft. After lubricating the shaft, slide it through the bearings and tighten setscrews to recommended torque, see Table below.

Eccentric Locking Collar Type

When sliding the shaft through the bore bearing inner ring, be sure that the counterbore of eccentric collar “A” is toward eccentric boss “B” on inner ring.

Turn eccentric collar “A” in the direction in which the shaft will rotate. Hand tight is often sufficient but a spanner wrench or drift pin may be inserted in spanner wrench hole “C” and used to set the collar (Note: DO NOT USE A DIRECT HAMMER BLOW to set the collar as such a blow may fracture the inner ring.) Not recommended for severe reversing applications.

Tighten set screw in eccentric collar firmly against shaft to recommended torque, see Table below.

Set Screw Diameter	Hex Width Across Flats	Tightening Torque (In.-Lbs.)
1/4	1/8	70
5/16	5/32	140
3/8	5/16	220
7/16	7/32	350
1/2	1/4	515
5/8	5/16	1200



NOTE: PS, PS2 and PS3 series: It is particularly important on these units that shaft be in place before the housing is secured to the mounting structure. The self-aligning steel stampings clamp the outer race when bolts are tightened making further shaft alignment impossible.