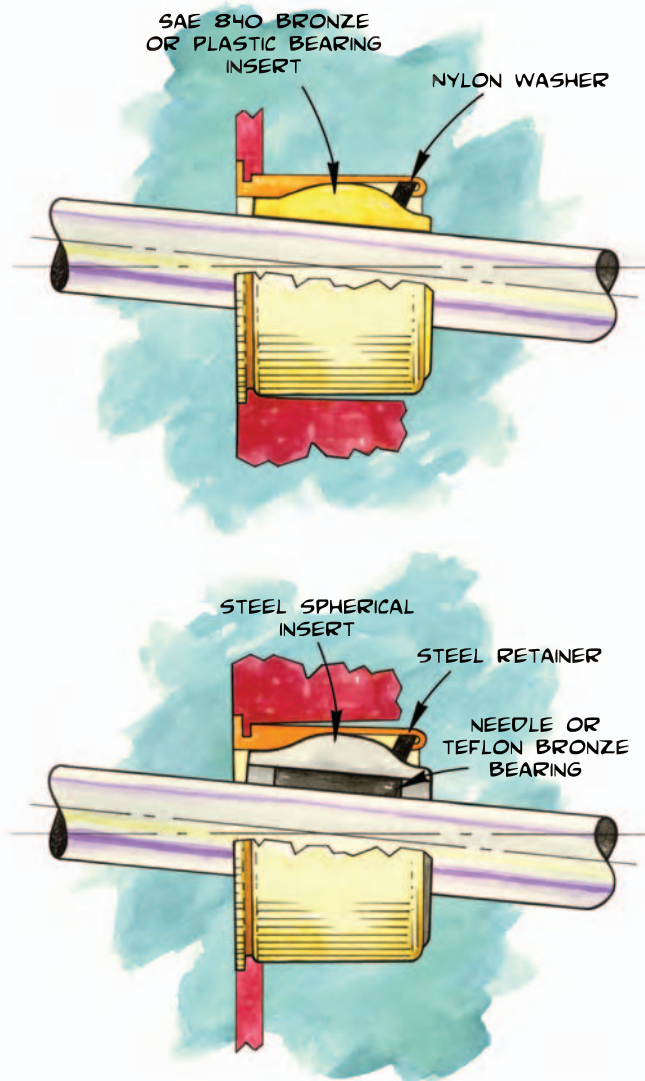


The Spyraflo Solution



Cost effective, reliable bearing application solutions based on over 40 years of experience. Spyraflo offers a range of products that will solve your bearing performance, alignment and assembly challenges.

ReadyMount Self-Clinch and Self-Align features allow our bearings to be mounted in a variety of material types and thicknesses, from 1 mm (.04 in.) upward, at the same time accommodating misaligned mounting holes due to manufacturing or assembly factors. This unique combination ensures positive installation together with smooth shaft motion with minimum start-up torque. Bearing installation is simple and secure; performance is enhanced and long lived.

Along with problem solving special designs, Spyraflo offer a range of high temperature bearings. Able to operate, or accommodate, temperatures up to 540° the bearings are the ideal solution for components subjected to powder coat paint process. Additionally the bearings can be used in commercial ovens or transport devices subject to high temperatures.

Spyraflo Aluminum Self-Aligning Pillow Block and Housing Flange, as well as Steel Flange-Mount bearings allow designers to use these easily installed assemblies for a wide variety of machine and system applications. The common assemblies allow the use of Needle Roller, Teflon-Bronze, Oilite-Bronze or Delrin bearing mediums.

READY MOUNT

Needle Roller

Self Clinch — Self-Align
Non-Align

Press Fit — Self-Align

Teflon Bronze

Self Clinch — Self-Align
Non-Align

Bronze

Self Clinch — Self-Align

Press Fit — Self-Align

Delrin

Self Clinch — Self-Align

Press Fit — Self-Align

MOUNTED

Pillow Block

Self-Align

Housing Flange

Self-Align

Flange-Mount

Self-Align

Non-Align

HIGH TEMP. BEARINGS

Ready Mount


Flange-Mount



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Peachtree City, Georgia 30269
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Fax: 770-487-9299
E-mail: sales@spyraflo.com
www.spyraflo.com

Quick Reference Guide


TECHNICAL INFORMATION

	Bearing Medium Size Range Operating Temperature Shaft Requirement	INA Needle Roller .125" - .750" / 4mm - 18mm -22°F to 248°F / -30°C to 120°C 16 RMS (Max), RC 58 (Min)
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PAGE 2-3

	Bearing Medium Size Range Operating Temperature Shaft Requirement	INA Permaglide .125" - .750" / 4mm - 18mm -330°F to 380°F / -201°C to 195°C 16 RMS (Max), soft or hard
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PAGE 4-7

	Bearing Medium Size Range Operating Temperature Shaft Requirement	SAE 840 Oilite Bronze .125" - .750" / 4mm - 18mm -20°F to 200°F / -29°C to 93°C 16 RMS (Max), soft or hard
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PAGE 8-9

	Bearing Medium Size Range Operating Temperature Shaft Requirement	Delrin or Delrin AF .125" - .750" / 4mm - 18mm -40°F to 300°F / -40°C to 149°C 16 RMS (Max), soft or hard
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PAGE 10-11

	Description Bearing Medium Size Range Bearing Data	Aluminum Pillow Block Needle Roller, Teflon Bronze, Oilite Bronze .250" - 1.250" / 6mm - 30mm Refer to individual bearing information
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PAGE 12-13

	Description Bearing Medium Size Range Bearing Data	Aluminum Housing Flange Needle Roller, Teflon Bronze, Oilite Bronze .250" - 1.250" / 6mm - 30mm Refer to individual bearing information
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PAGE 14

	Description Bearing Medium Size Range Bearing Data	Steel Flange Needle Roller, Teflon Bronze, Oilite Bronze, Delrin .250" - .750" / 6mm - 18mm Refer to individual bearing information
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PAGE 15

	Description Bearing Medium Size Range Operating Temperature	Self-Clinch & Self-Align / Steel Flange Graphite Bronze, Teflon-Bronze .250" - .500" / 6mm - 12mm -540°F / 282°C
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PAGE 16-17

APPLICATIONS & SPECIAL SOLUTIONS

PAGE 18

PAGE 19-20

ReadyMount Selection

SELF-CLINCH

The combination of the serrated flange and tapered outer profile encourage the panel material to “cold flow” into the undercut as the bearing is pressed into the fabrication or sub-assembly; clinching the bearing securely in place. The final installation is permanent and able to withstand shock and vibration. The bearings may be clinched into any thickness of panel with a minimum of 0.04” (1 mm).

INSTALLATION

The self-clinching process is suitable for metals with hardness no greater than RB 65: metals such as steel, aluminum, bronze, brass, copper, etc. The powdered metal derivatives of these materials are also suitable for self-clinch installation. The retainer is surfaced hardened and absorbs the installation forces without impacting the I.D. of the bearing. Stainless steel retainers are available and suitable for installation into metals with a maximum hardness of RB 75.

Refer to the installation data for the selected bearing. Ensure the panel hole location meets the “center line to edge” minimum requirements; this figure applies to slots as well as edges. Do not chamfer the panel hole; leave the hole corners sharp. Place the bearing into the panel hole and support the underside of the panel using an anvil to the specified dimensions. Using a punch to the specified dimensions, apply a smooth continuous load, pressing the bearing into the panel material until the serrated face is flush. Do not use hammer blows!

PRESS-FIT

Easily installed into non-metallic materials. Allows self-aligning bearings to be used in injection-molded housings or plastic chassis side plates. Press-Fit bearings require a minimum amount of real estate for installation and may be extracted when used in an environment where serviceability is a concern.

INSTALLATION

The steel retainer is surfaced hardened and absorbs the installation forces without impacting the I.D. of the bearing.

Refer to the installation data for the selected bearing. Punch or machine the mounting hole to the tolerance specified, using a punch to the specified dimension press the bearing until the flange is flush against the panel material.

SELF-ALIGN

± 5° Static Misalignment

NON-ALIGN

Non-alignable self-clinch retainers
Available in Needle Roller, Teflon Bronze and Roller Clutch.

MAXIMUM LOAD & SPEED

The figures shown in the plain bearing data are maximums, for guidance only, and cannot be combined. The performance of a plain bearing is stated as a PV value, which is the product of pressure and velocity. Using the PV value shown in the bearing data, the formula is:

psi-fpm

$$PV = \frac{\pi fn}{12D}$$

f = total load in lbf
D = bearing length in inches
n = rpm

N/mm²-m/s

$$PV = \frac{\pi fn}{60,000D}$$

f = total load in Newtons
D = bearing length in mm
n = rpm

The load and speed data shown for Needle Roller bearings meet the tolerances specified in ISO, ANSI / ABMA and DIN standards.

OPERATING ENVIRONMENT

The temperature and nature of the operating environment for the bearing is a significant selection factor. The operating temperature range is in the specifications for each bearing. Dust, Paper Dust, Corrosion, Humidity, and Vibration are key factors in bearing selection; please contact Spyraflo Engineering.

BEARING PERFORMANCE

The performance and life of plain and needle bearings is influenced by the diameter, surface finish and hardness of the mating shaft. Attention must be given to the shaft data in the bearing specifications. When selecting a bearing size and type, consideration of the operating parameters and environment must be taken into account and an appropriate factor of safety applied.

Plain bearing performance / efficiency improves with time during the early operational period. All plain bearings are subject to “Bedding In”. When first installed the load is being carried on a small contact area between shaft and bearing. Very quickly the shaft “Beds” itself into the bearing, increasing the contact area and consequently bearing efficiency. This early wear is disproportionate to the overall life calculation and should not be interpolated as an indication of bearing life.

BEARING RETAINER

The standard outer steel retainer is manufactured from carbon steel and treated with a hardening process to introduce a durable surface finish and facilitate the self-clinching process. The process provides excellent corrosion resistance. It has low resistance to electrical current thereby insuring very effective dissipation of static electricity. The bearings are also available in 303 stainless steel.

PILLOW BLOCK AND HOUSING FLANGE

Self-Align Needle Roller, Teflon Bronze and Oilite Bronze bearings mounted in Aluminum housings offer a simple solution to often-expensive mounting problems. The housings are manufactured in sintered aluminum, ensuring a high degree of consistent dimensional accuracy. The bearing is securely clinched into place in the assembly.

FEATURES:

- Self-Align
- Multiple bearing choices
- Lightweight
- Corrosion resistant
- Clean lines
- Easy installation



NEEDLE ROLLER

Drawn-Cup Needle Roller Bearings combine a narrow cross-section with the high performance of a rolling element bearing. The hardened shaft acts as the inner bearing raceway with the needles generally being retained in a cage. The bearings are supplied pre-lubricated with a lithium-complex grease for optimum performance in normal operating conditions. High temperature grease, sealed and full compliment options are available.

FEATURES:

- High Speed, Medium Load
- Rotational Motion only
- No oscillation
- No linear motion
- Hardened shaft required
- Electrically Conductive



DELTRIN AND DELTRIN AF

Manufactured from an Acetal Polymer resin having the characteristic of no "Stick Slip," where the coefficient of friction is equal or less than its coefficient of dynamic friction. The Acetal material is self-lubricating and can be used in applications where the presence of oil would be a problem. It is available with a Teflon additive (AF), giving it a considerably lower coefficient of friction. AF performance has approximately twice the speed of the comparable Delrin product.

FEATURES:

- Medium Speed, Light Load
- Rotational, Oscillatory, Linear Motion
- No lubricant transfer
- Light Weight
- Economic solution
- FDA Approved Materials



FLANGE-MOUNT

Self-Align Needle Roller, Teflon Bronze, Oilite Bronze and Delrin bearings mounted in a steel flange are complimentary to the ReadyMount bearing range. Special flange designs are engineered to customer specifications, often incorporating additional products.

FEATURES:

- Self-align and non-align
- Multiple bearing choices
- Low profile steel flange
- Electrically conductive
- Easy installation
- Special flange designs



TEFLON BRONZE

Teflon Impregnated Bronze Bearings are among the highest performing plain bearings available. The porous bronze inner structure acts as a reservoir for the very low friction Teflon lubricant. The lubricant film transfers to the mating surface. As the film is depleted, the relative motion draws further lubricant from the bronze layer. When load or speed are significant, localized heat is generated and additional lubricant is forced to the surface. The bronze inner structure is bonded to a steel backing, giving a high load carrying capability and dimensional rigidity.

FEATURES:

- Medium Speed, Heavy Load
- Rotation, Oscillatory or Linear Motion
- Resilient to dirt & dust
- High and Low temperature tolerant
- Resilient to shock
- Electrically conductive



OILITE BRONZE

SAE 840 specification, containing 25% oil within the porous structure of the spherical bronze insert. Oil is distributed to the surface hydrodynamically; ensuring a permanent film of oil is maintained between the bearing and mating surface.

GRAPHITE for high temperature applications, or where the bearing is subject to a powder-coat paint process, graphite is used in place of oil. Shaft rotation, transfers the graphite lubricant from the bearing, insuring lifetime lubricant remains in place.

FEATURES:

- Medium Speed, Medium Load
- Rotational and Oscillatory Motion
- No Linear Motion
- Electrically Conductive

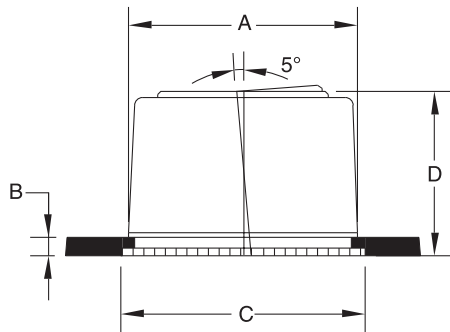


Needle Roller

- Patent No. 5,911,515
6,238,096-B1
- Drawn-cup caged bearings
- Self-Clinch: Permanent, secure mount
- Self-Align: $\pm 5^\circ$ static alignment
- Non-Align: Permanent, secure mount
- Lubrication: Lithium-complex grease
- Shaft Requirement: RC 58 to 64 / 16 RMS (Rz2)
- Temperature Range: -22°F to 248°F / -30°C to 120°C
- Full complement and sealed bearing options
- Apply appropriate factor of safety to the nominal loads and speeds specified

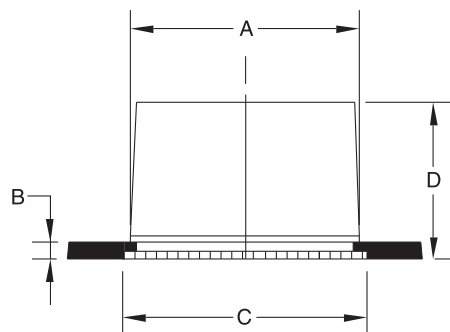


SELF-CLINCH/SELF-ALIGN



Part No.	Nominal I.D.	Shaft Dia. Min. Max.	Max. Radial Dyn. Load	Max. Speed r.p.m.	Panel Hole		Min. Panel Thickness
					+0.003" -0.000	+0.07mm -0.000	
					A	B	
FSN-125	1/8"	.1247 - .1250	240 lbf	31500	0.500	0.04	
FSN-187	3/16"	.1872 - .1875	630 lbf	21000	0.625	0.06	
FSN-250	1/4"	.2495 - .2500	570 lbf	44000	0.625	0.06	
FSN-312	5/16"	.3120 - .3125	650 lbf	35500	0.812	0.06	
FSN-375	3/8"	.3745 - .3750	650 lbf	29500	0.812	0.06	
FSN-500	1/2"	.4995 - .5000	1,040 lbf	22000	1.063	0.075	
FSN-625	5/8"	.6245 - .6250	1,830 lbf	17600	1.250	0.09	
FSN-4M	4mm	3.992 - 4.000	1,780 N	41000	15.90	1.5	
FSN-6M	6mm	5.992 - 6.000	2,030 N	35000	15.90	1.5	
FSN-8M	8mm	7.991 - 8.000	2,750 N	28000	20.60	1.5	
FSN-10M	10mm	9.991 - 10.000	4,400 N	23000	20.60	1.5	
FSN-12M	12mm	11.989 - 12.000	4,950 N	20000	27.00	2.0	
FSN-15M	15mm	14.989 - 15.000	7,900 N	16000	31.80	2.3	

SELF-CLINCH/NON-ALIGN



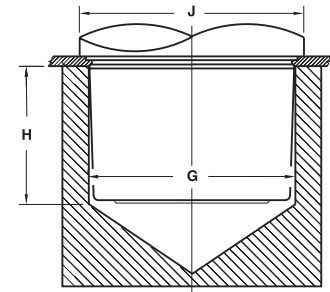
Part No.	Nominal I.D.	Shaft Dia. Min. Max.	Max. Radial Dyn. Load	Max. Speed r.p.m.	Panel Hole		Min. Panel Thickness
					+0.003" -0.000	+0.07mm -0.000	
					A	B	
FSNN-125	1/8"	.1247 - .1250	240 lbf	31500	0.375	0.04	
FSNN-187	3/16"	.1872 - .1875	630 lbf	21000	0.500	0.04	
FSNN-250	1/4"	.2495 - .2500	570 lbf	44000	0.625	0.06	
FSNN-312	5/16"	.3120 - .3125	650 lbf	35500	0.625	0.06	
FSNN-375	3/8"	.3745 - .3750	650 lbf	29500	0.812	0.06	
FSNN-500	1/2"	.4995 - .5000	1,040 lbf	22000	0.875	0.06	
FSNN-625	5/8"	.6245 - .6250	1,830 lbf	17600	1.063	0.075	
FSNN-750	3/4"	.7495 - .7500	2,210 lbf	14700	1.250	0.09	
FSNN-4M	4mm	3.992 - 4.000	1,780 N	41000	12.70	1.0	
FSNN-6M	6mm	5.992 - 6.000	2,030 N	35000	15.90	1.5	
FSNN-8M	8mm	7.991 - 8.000	2,750 N	28000	15.90	1.5	
FSNN-10M	10mm	9.991 - 10.000	4,400 N	23000	20.60	1.5	
FSNN-12M	12mm	11.989 - 12.000	4,950 N	20000	20.60	1.5	
FSNN-15M	15mm	14.989 - 15.000	7,900 N	16000	27.00	2.0	
FSNN-18M	18mm	17.989 - 18.000	8,100 N	13000	31.80	2.3	

Installation

SELF-CLINCH:

- Panel material no harder than RB 65
- Panel hole no closer to edge than stated minimum
- Panel hole punched or machined to size (A)
- Do not chamfer panel hole – leave corners sharp
- Use a correctly sized anvil dia. (G), depth (H)
- Ensure the punch completely covers all serrations (J)
- Use continuous, steady press action (X)
- No hammer blows
- Top face of installed bearing must be flush with panel material
- The minimum panel thickness referenced is for mounting purposes only. For load carrying, the panel thickness should be recalculated.

Self-Clinch



Min. Dist. to Edge	Flange Dia.	Height	Install Force	Push Out Force	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Weight
					+ .005" - .000	+ .1mm - .000			
	C	D	X		G	H	J		
0.38	0.55	0.40	5.0 tons	1100 lbf	0.515	0.60	0.75	0.2 oz.	
0.45	0.67	0.46	5.5 tons	1300 lbf	0.640	0.66	0.87	0.4 oz.	
0.45	0.67	0.46	5.5 tons	1300 lbf	0.640	0.66	0.87	0.9 oz.	
0.50	0.87	0.64	5.5 tons	1600 lbf	0.827	0.84	1.07	0.8 oz.	
0.50	0.87	0.64	5.5 tons	1600 lbf	0.827	0.84	1.07	0.7 oz.	
0.75	1.10	0.77	6.0 tons	1800 lbf	1.078	0.97	1.30	1.4 oz.	
0.75	1.30	0.89	6.0 tons	2000 lbf	1.265	1.09	1.50	2.3 oz.	
11.5	17.0	11.6	49 kN	6000 N	16.35	16.6	22.0	11 g.	
11.5	17.0	11.6	49 kN	6000 N	16.35	16.6	22.0	10 g.	
12.7	22.0	16.3	49 kN	7000 N	21.05	21.3	27.0	23 g.	
12.7	22.0	16.3	49 kN	7000 N	21.05	21.3	27.0	20 g.	
19.0	28.0	19.5	54 kN	8000 N	27.45	24.5	33.0	40 g.	
19.0	33.0	22.5	54 kN	9000 N	32.25	27.5	38.0	71 g.	

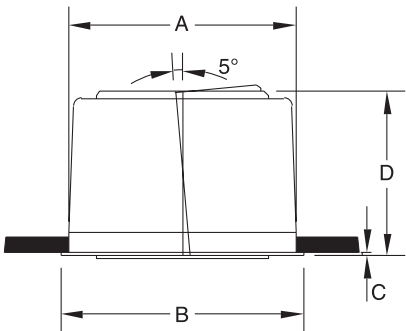
Min. Dist. to Edge	Flange Dia.	Height	Install Force	Push Out Force	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Weight
					+ .005" - .000	+ .1mm - .000			
	C	D	X		G	H	J		
0.25	0.42	0.31	2.0 tons	900 lbf	0.390	0.51	0.62	0.1 oz.	
0.38	0.55	0.50	5.0 tons	1100 lbf	0.515	0.70	0.75	0.3 oz.	
0.45	0.67	0.44	5.5 tons	1300 lbf	0.640	0.64	0.87	0.4 oz.	
0.45	0.67	0.44	5.5 tons	1300 lbf	0.640	0.64	0.87	0.3 oz.	
0.50	0.87	0.44	5.5 tons	1600 lbf	0.827	0.64	1.07	0.6 oz.	
0.63	0.92	0.50	6.0 tons	1600 lbf	0.890	0.70	1.12	0.7 oz.	
0.75	1.10	0.62	6.0 tons	1800 lbf	1.078	0.94	1.30	1.3 oz.	
0.75	1.30	0.63	6.0 tons	2000 lbf	1.265	0.83	1.50	1.5 oz.	
9.5	14.0	10.8	45 kN	5000 N	13.15	15.8	19.0	7 g.	
11.5	17.0	10.8	49 kN	6000 N	16.35	15.8	22.0	12 g.	
11.5	17.0	11.1	49 kN	6000 N	16.35	16.1	22.0	9 g.	
12.7	22.0	12.7	49 kN	7000 N	21.05	17.7	27.0	20 g.	
12.7	22.0	12.7	49 kN	7000 N	21.05	17.7	27.0	16 g.	
19.0	28.0	18.7	54 kN	8000 N	27.45	23.7	33.0	32 g.	
19.0	33.0	16.0	54 kN	9000 N	32.25	21.0	38.0	34 g.	

Needle Roller

- Patent No. 5,911,515
6,238,096-B1
- Drawn-cup caged bearings and clutches
- Self-Clinch: Permanent, secure mount
- Press-fit: Non-metallic and replacement applications
- Self-Align: $\pm 5^\circ$ static alignment
- Non-Align: Permanent, secure mount
- Lubrication: Lithium-complex grease
- Shaft Requirements: RC 58 to 64 / 16 RMS (Rz2)
- Temperature Range: -22°F to 248°F / -30°C to 120°C
- Full complement and sealed bearing options
- 8mm and .375" clutches include an integral bearing
- 6mm and .250" clutches include an auxiliary bearing
- Apply appropriate factor of safety to the nominal loads and speeds specified

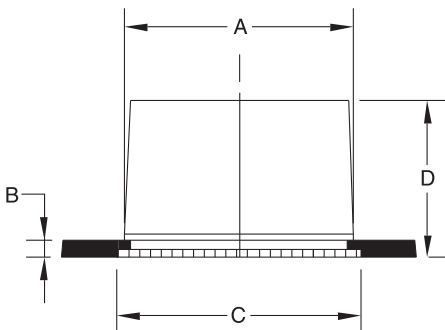


PRESS-FIT/SELF-ALIGN



Part No.	Nominal I.D.	Shaft Dia. Min. Max.	Max. Radial Dyn. Load	Max. Speed r.p.m.	Mounting Hole	
					+ .003" - .000	+ .07mm - .000
					A	B
PSN-125	1/8"	.1247 - .1250	240 lbf	31500	0.500	0.56
PSN-187	3/16"	.1872 - .1875	630 lbf	21000	0.625	0.69
PSN-250	1/4"	.2495 - .2500	570 lbf	44000	0.625	0.69
PSN-312	5/16"	.3120 - .3125	650 lbf	35500	0.812	0.88
PSN-375	3/8"	.3745 - .3750	650 lbf	29500	0.812	0.88
PSN-500	1/2"	.4995 - .5000	1,040 lbf	22000	1.063	1.13
PSN-625	5/8"	.6245 - .6250	1,830 lbf	17600	1.250	1.31
PSN-4M	4mm	3.992 - 4.000	1,780 N	41000	15.90	17.4
PSN-6M	6mm	5.992 - 6.000	2,030 N	35000	15.90	17.4
PSN-8M	8mm	7.991 - 8.000	2,750 N	28000	20.60	22.2
PSN-10M	10mm	9.991 - 10.000	4,400 N	23000	20.60	22.2
PSN-12M	12mm	11.989 - 12.000	4,950 N	20000	27.00	28.5
PSN-15M	15mm	14.989 - 15.000	7,900 N	16000	31.80	33.3

CLUTCH SELF-CLINCH/NON-ALIGN



Part No.	Nominal I.D.	Shaft Dia. Min. Max.	Max. Radial Dyn. Load	Max. Speed r.p.m.	Torque	Panel Hole	
						+ .003" - .000	+ .07mm - .000
						A	
FSC-250-CW	1/4"	.2495 - .2500	570 lbf	12000	18.6 in-lb	0.625	
FSC-375-CW	3/8"	.3745 - .3750	1,350 lbf	12000	50.4 in-lb	0.875	
FSC-6M-CW	6mm	5.992 - 6.000	2,030 N	13000	1.7 N-m	15.90	
FSC-8M-CW	8mm	7.991 - 8.000	4,050 N	12000	3.1 N-m	22.20	
FSC-250-CCW	1/4"	.2495 - .2500	570 lbf	12000	18.6 in-lb	0.625	
FSC-375-CCW	3/8"	.3745 - .3750	1,350 lbf	12000	50.4 in-lb	0.875	
FSC-6M-CCW	6mm	5.992 - 6.000	2,030 N	13000	1.7 N-m	15.90	
FSC-8M-CCW	8mm	7.991 - 8.000	4,050 N	12000	3.1 N-m	22.20	

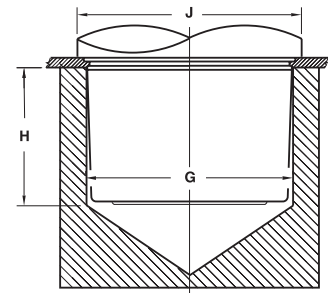
Rotation when viewed from serrated end of bearing, CW = clockwise, CCW = counterclockwise

Installation

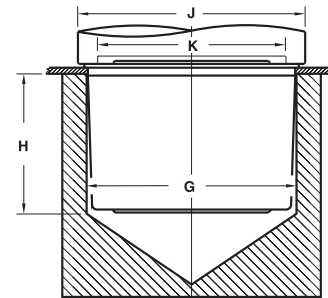
SELF-CLINCH:

- Panel material no harder than RB 65
- Panel hole no closer to edge than stated minimum
- Panel hole punched or machined to size (A)
- Do not chamfer panel hole – leave corners sharp
- Use a correctly sized anvil dia. (G), depth (H)
- Ensure the punch completely covers all serrations (J)
- Use continuous, steady press action (X)
- No hammer blows
- Top face of installed bearing must be flush with panel material
- The minimum panel thickness referenced is for mounting purposes only.
For load carrying, the panel thickness should be recalculated.

Self-Clinch



Press-Fit



PRESS-FIT:

- Mounting hole punched, molded or machined to size (A)
- Use punch min dia (J), relieved to dia (K) x .075" / 2 mm deep
- Press bearing into place

Flange Ht.	Height	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Relief Min. Dia.		Weight
		+ .005" - .000	+ .1mm - .000			+ .005" - .000	+ .1mm - .000	
C	D	G	H	J	K			
0.03	0.37	0.515	0.57	0.76	0.380	0.2 oz.		
0.03	0.43	0.640	0.63	0.89	0.504	0.4 oz.		
0.03	0.43	0.640	0.63	0.89	0.504	0.8 oz.		
0.03	0.60	0.827	0.80	1.08	0.646	0.7 oz.		
0.03	0.60	0.827	0.80	1.08	0.646	0.6 oz.		
0.03	0.77	1.078	0.97	1.33	0.813	1.5 oz.		
0.03	0.85	1.265	1.05	1.51	1.021	2.4 oz.		
0.75	10.8	16.35	15.8	22.4	12.80	11 g.		
0.75	10.8	16.35	15.8	22.4	12.80	10 g.		
0.75	15.2	21.05	20.2	27.2	16.41	22 g.		
0.75	15.2	21.05	20.2	27.2	16.41	20 g.		
0.75	19.6	27.45	24.6	33.5	20.65	44 g.		
0.75	21.6	32.25	26.6	38.3	25.93	66 g.		

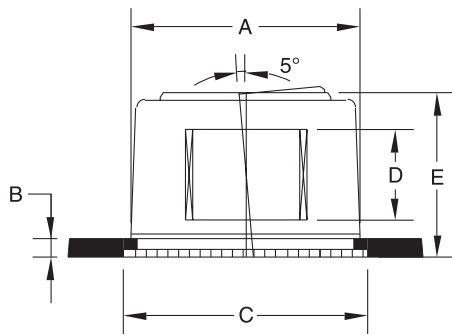
Min. Panel Thickness	Min. Dist. ϕ to Edge	Flange Dia.	Height	Install Force	Push Out Force	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Weight
						+ .005" - .000	+ .1mm - .000			
B	C	D	X	G	H	J				
0.06	0.45	0.67	0.94	5.5 tons	1300 lbf	0.640	1.14	0.87	0.8 oz.	
0.06	0.63	0.92	1.00	6.0 tons	1600 lbf	0.890	1.20	1.12	1.7 oz.	
1.5	11.5	17.0	23.8	49 kN	6000 N	16.35	28.8	22.0	24 g.	
1.5	16.0	23.0	25.4	50 kN	7000 N	22.65	30.4	28.0	60 g.	
0.06	0.45	0.67	0.94	5.5 tons	1300 lbf	0.640	1.14	0.87	0.8 oz.	
0.06	0.63	0.92	1.00	6.0 tons	1600 lbf	0.890	1.20	1.12	1.7 oz.	
1.5	11.5	17.0	23.8	49 kN	6000 N	16.35	28.8	22.0	24 g.	
1.5	16.0	23.0	25.4	50 kN	7000 N	22.65	30.4	28.0	60 g.	

Teflon Bronze

- Patent No. 5,911,515
6,238,096-B1
- Teflon Impregnated bronze bearings
- PV 50,000 (continuous), 100,000 (intermittent)
- Rotational, oscillatory & linear motion
- Self-Clinch: Permanent, secure mount
- Self-Align: $\pm 5^\circ$ static alignment
- Non-Align: Permanent, secure mount
- Shaft Requirement: Soft or Hard / 16 RMS (Rz2)
- Temperature Range: -330°F to 380°F / -201°C to 195°C
- High temperature option available, refer to page 18
- Apply appropriate factor of safety to the nominal loads and speeds specified

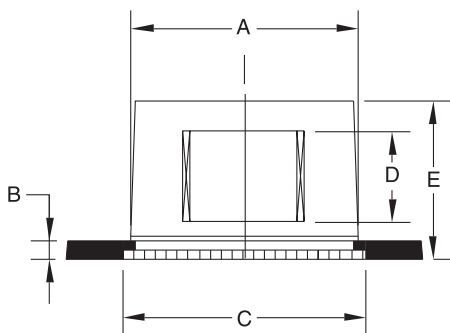


SELF-CLINCH/SELF-ALIGN



Part No.	Nominal I.D.	Shaft Dia. Min. Max.	Max. Radial Dyn. Load	Max. Speed r.p.m.	Panel Hole		Min. Panel Thickness
					+ .003" - .000	+ .07mm - .000	
					A	B	
FSP-187	3/16"	.1858 - .1865	630 lbf	8040	0.500	0.04	
FSP-250	1/4"	.2481 - .2490	1700 lbf	6020	0.625	0.06	
FSP-312	5/16"	.3106 - .3115	2120 lbf	4820	0.625	0.06	
FSP-375	3/8"	.3731 - .3740	3400 lbf	4010	0.812	0.06	
FSP-500	1/2"	.4980 - .4990	4530 lbf	3010	1.063	0.09	
FSP-625	5/8"	.6230 - .6240	5670 lbf	2410	1.250	0.075	
FSP-750	3/4"	.7479 - .7491	6800 lbf	2010	1.250	0.09	
FSP-4M	4mm	3.992 - 4.000	3000 N	9540	12.70	1.0	
FSP-6M	6mm	5.978 - 5.990	4500 N	6360	15.90	1.5	
FSP-8M	8mm	7.972 - 7.987	8000 N	4770	15.90	1.5	
FSP-10M	10mm	9.972 - 9.987	12500 N	3820	20.60	1.5	
FSP-12M	12mm	11.966 - 11.984	15000 N	3180	20.60	1.5	
FSP-16M	16mm	15.966 - 15.984	20000 N	2390	27.00	2.0	
FSP-18M	18mm	17.966 - 17.984	33750 N	2120	31.80	2.3	

SELF-CLINCH/NON-ALIGN

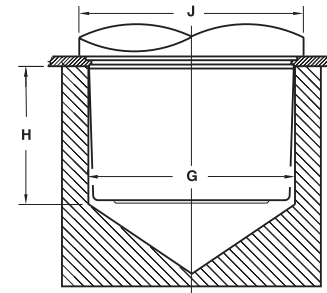


Part No.	Nominal I.D.	Shaft Dia. Min. Max.	Max. Radial Dyn. Load	Max. Speed r.p.m.	Panel Hole		Min. Panel Thickness
					+ .003" - .000	+ .07mm - .000	
					A	B	
FSPN-187	3/16"	.1858 - .1865	630 lbf	8040	0.375	0.04	
FSPN-250	1/4"	.2481 - .2490	1700 lbf	6020	0.500	0.04	
FSPN-312	5/16"	.3106 - .3115	2120 lbf	4820	0.500	0.04	
FSPN-375	3/8"	.3731 - .3740	3400 lbf	4010	0.625	0.06	
FSPN-500	1/2"	.4980 - .4990	4530 lbf	3010	0.812	0.06	
FSPN-625	5/8"	.6230 - .6240	5670 lbf	2410	0.875	0.06	
FSPN-750	3/4"	.7479 - .7491	6800 lbf	2010	1.063	0.075	
FSPN-4M	4mm	3.992 - 4.000	3000 N	9540	9.50	1.0	
FSPN-6M	6mm	5.978 - 5.990	4500 N	6360	12.70	1.0	
FSPN-8M	8mm	7.972 - 7.987	8000 N	4770	15.90	1.5	
FSPN-10M	10mm	9.972 - 9.987	12500 N	3820	15.90	1.5	
FSPN-12M	12mm	11.966 - 11.984	15000 N	3180	20.60	1.5	
FSPN-16M	16mm	15.966 - 15.984	20000 N	2390	22.20	1.5	
FSPN-18M	18mm	17.966 - 17.984	33750 N	2120	27.00	2.0	

SELF-CLINCH:

- Panel material no harder than RB 65
- Panel hole no closer to edge than stated minimum
- Panel hole punched or machined to size (A)
- Do not chamfer panel hole – leave corners sharp
- Use a correctly sized anvil dia. (G), depth (H)
- Ensure the punch completely covers all serrations (J)
- Use continuous, steady press action (X)
- No hammer blows
- Top face of installed bearing must be flush with panel material
- The minimum panel thickness referenced is for mounting purposes only.
For load carrying, the panel thickness should be recalculated.

Self-Clinch



Min. Dist. ζ to Edge	Flange Dia. C	Bearing Length D	Height E	Install Force X	Push Out Force	Anvil Dia. +.005" - .000 G	Anvil Dia. +.1mm - .000	Anvil Min. Depth H	Punch Min. Dia. J	Weight
0.38	0.55	0.19	0.40	5.0 tons	1100 lbf	0.515		0.60	0.75	0.3 oz.
0.45	0.67	0.37	0.46	5.5 tons	1300 lbf	0.640		0.66	0.87	0.4 oz.
0.45	0.67	0.37	0.46	5.5 tons	1300 lbf	0.640		0.66	0.87	0.3 oz.
0.50	0.87	0.50	0.64	5.5 tons	1600 lbf	0.827		0.84	1.07	0.8 oz.
0.75	1.10	0.50	0.77	6.0 tons	1800 lbf	1.078		0.97	1.30	1.7 oz.
0.75	1.30	0.50	0.89	6.0 tons	2000 lbf	1.265		1.09	1.50	2.6 oz.
0.80	1.30	0.50	0.87	6.0 tons	2000 lbf	1.265		1.07	1.50	2.1 oz.
9.5	14.0	6.0	10.2	45 kN	5000 N	13.15		15.2	19.0	9 g.
11.5	17.0	6.0	11.5	49 kN	6000 N	16.35		16.5	22.0	11 g.
11.5	17.0	8.0	11.5	49 kN	6000 N	16.35		16.5	22.0	10 g.
12.7	22.0	10.0	16.3	49 kN	7000 N	21.05		21.3	27.0	21 g.
12.7	22.0	10.0	15.9	49 kN	7000 N	21.05		20.9	27.0	19 g.
19.0	28.0	10.0	19.5	54 kN	8000 N	27.45		24.5	33.0	73 g.
19.0	33.0	15.0	22.5	54 kN	9000 N	32.25		27.5	38.0	61 g.

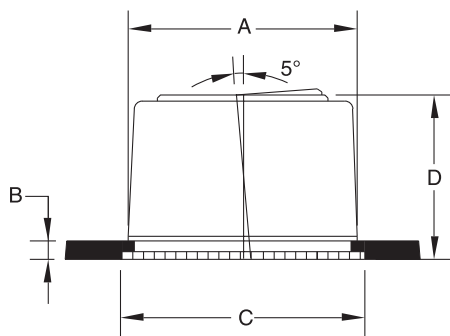
Min. Dist. ζ to Edge	Flange Dia. C	Bearing Length D	Height E	Install Force X	Push Out Force	Anvil Dia. +.005" - .000 G	Anvil Dia. +.1mm - .000	Anvil Min. Depth H	Punch Min. Dia. J	Weight
0.25	0.42	0.19	0.29	2.0 tons	900 lbf	0.390		0.49	0.62	0.4 oz.
0.37	0.55	0.25	0.36	5.0 tons	1100 lbf	0.515		0.56	0.75	0.3 oz.
0.37	0.55	0.37	0.50	5.0 tons	1100 lbf	0.515		0.70	0.75	0.2 oz.
0.45	0.67	0.37	0.48	5.5 tons	1300 lbf	0.640		0.68	0.87	0.4 oz.
0.50	0.87	0.37	0.49	5.5 tons	1600 lbf	0.827		0.69	1.07	0.7 oz.
0.63	0.92	0.50	0.62	6.0 tons	1600 lbf	0.890		0.82	1.12	0.7 oz.
0.75	1.10	0.50	0.62	6.0 tons	1800 lbf	1.078		0.82	1.30	1.3 oz.
6.4	10.5	4.0	6.7	18 kN	4000 N	9.95		11.7	15.5	11 g.
9.5	14.0	6.0	8.7	45 kN	5000 N	13.15		13.7	19.0	9 g.
11.5	17.0	8.0	10.7	49 kN	6000 N	16.35		15.7	22.0	10 g.
11.5	17.0	10.0	12.9	49 kN	6000 N	16.35		17.9	22.0	11 g.
12.7	22.0	10.0	12.9	49 kN	7000 N	21.05		17.9	27.0	21 g.
16.0	23.0	10.0	14.9	54 kN	7000 N	22.65		19.9	28.0	20 g.
19.0	28.0	15.0	17.9	54 kN	8000 N	27.45		22.9	33.0	41 g.

Bronze

- SAE 840 specification - 25% oil by volume
- PV 25,000 (continuous), 50,000 (intermittent)
- Self-Clinch: Permanent, secure mount
- Press-fit: Non-metallic applications
- Self-Align: $\pm 5^\circ$ static alignment
- Preferred Orientation: Horizontal
- Shaft Requirements: RB 100 min. / 16 RMS (Rz2)
- Temperature Range: -20°F to 200°F / -29°C to 93°C
- High temperature option available, refer to page 18
- 303 Stainless Steel retainer option
- Apply appropriate factor of safety to the nominal loads and speeds specified

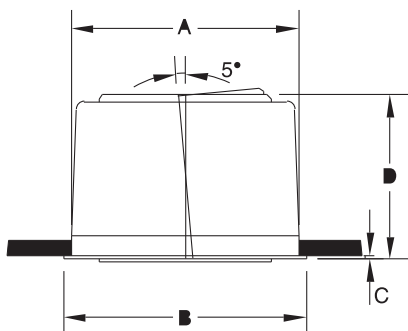


SELF-CLINCH/SELF-ALIGN



Part No. Steel	Part No. Stainless Steel	Nominal I.D.	I.D. Actual		Max. Radial Dyn. Load	Max. Speed r.p.m.	Panel Hole	
			min.	max.			+0.003" - 000	+0.07mm - 000
FSB-125	FSSB-125	1/8"	.1255	-.1260	70 lbf	30550	0.344	
FSB-187	FSSB-187	3/16"	.1883	-.1888	140 lbf	20310	0.500	
FSB-250	FSSB-250	1/4"	.2508	-.2513	190 lbf	15270	0.500	
FSB-312	FSSB-312	5/16"	.3133	-.3140	270 lbf	12240	0.625	
FSB-375	FSSB-375	3/8"	.3758	-.3765	320 lbf	10180	0.625	
FSB-500	FSSB-500	1/2"	.5010	-.5017	600 lbf	7640	0.812	
FSB-625	FSSB-625	5/8"	.6260	-.6270	890 lbf	6110	1.063	
FSB-750	FSSB-750	3/4"	.7510	-.7520	1280 lbf	5090	1.250	
FSB-4M	FSSB-4M	4mm	4.010	- 4.030	530 N	24170	12.70	
FSB-6M	FSSB-6M	6mm	6.020	- 6.040	790 N	16110	12.70	
FSB-8M	FSSB-8M	8mm	8.020	- 8.040	1,190 N	12120	15.90	
FSB-10M	FSSB-10M	10mm	10.020	- 10.040	1,490 N	9700	15.90	
FSB-12M	FSSB-12M	12mm	12.030	- 12.050	2530 N	8060	20.60	
FSB-15M	FSSB-15M	15mm	15.030	- 15.050	3750 N	6460	27.00	
FSB-18M	FSSB-18M	18mm	18.030	- 18.050	5370 N	5380	31.80	

PRESS-FIT/SELF-ALIGN



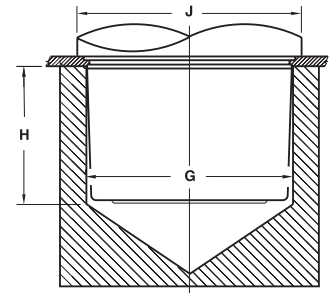
Part No.	Nominal I.D.	I.D. Actual		Max. Radial Dyn. Load	Max. Speed r.p.m.	Mounting Hole	
		min.	max.			+0.003" - 000	+0.07mm - 000
PSB-125	1/8"	.1255	-.1260	70 lbf	30550	0.344	
PSB-187	3/16"	.1883	-.1888	140 lbf	20310	0.500	
PSB-250	1/4"	.2508	-.2513	190 lbf	15270	0.500	
PSB-312	5/16"	.3133	-.3140	270 lbf	12240	0.625	
PSB-375	3/8"	.3758	-.3765	320 lbf	10180	0.625	
PSB-500	1/2"	.5010	-.5017	600 lbf	7640	0.812	
PSB-625	5/8"	.6260	-.6270	890 lbf	6110	1.063	
PSB-4M	4mm	4.010	- 4.030	530 N	24170	12.70	
PSB-6M	6mm	6.020	- 6.040	790 N	16110	12.70	
PSB-8M	8mm	8.020	- 8.040	1190 N	12120	15.90	
PSB-10M	10mm	10.020	- 10.040	1490 N	9700	15.90	
PSB-12M	12mm	12.030	- 12.050	2430 N	8060	20.60	
PSB-15M	15mm	15.030	- 15.050	3750 N	6460	27.00	

Installation

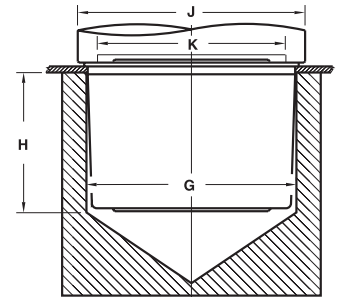
SELF-CLINCH:

- Panel material no harder than RB 65 / RB 75 (stainless steel retainer)
- Panel hole no closer to edge than stated minimum
- Panel hole punched or machined to size (A)
- Do not chamfer panel hole – leave corners sharp
- Use a correctly sized anvil dia. (G), depth (H)
- Ensure the punch completely covers all serrations (J)
- Use continuous, steady press action (X)
- No hammer blows
- Top face of installed bearing must be flush with panel material
- The minimum panel thickness referenced is for mounting purposes only. For load carrying, the panel thickness should be recalculated.

Self-Clinch



Press-Fit



PRESS-FIT:

- Mounting hole punched, molded or machined to size (A)
- Use punch min dia (J), relieved to dia (K) x .075"/2mm deep
- Press bearing into place

Min. Panel Thickness	Min. Dist. ζ to Edge	Flange Dia.	Bearing Length	Install Force	Push Out Force	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Weight
						+ .005" - .000	+ .1mm - .000			
B		C	D	X		G		H	J	
0.04	0.24	0.39	0.29	2.0 tons	700 lbf	0.359		0.49	0.59	0.1 oz.
0.04	0.38	0.55	0.40	5.0 tons	1100 lbf	0.515		0.60	0.75	0.2 oz.
0.04	0.38	0.55	0.40	5.0 tons	1100 lbf	0.515		0.60	0.75	0.2 oz.
0.06	0.45	0.67	0.46	5.5 tons	1300 lbf	0.640		0.66	0.87	0.3 oz.
0.06	0.45	0.67	0.46	5.5 tons	1300 lbf	0.640		0.66	0.87	0.3 oz.
0.06	0.50	0.87	0.64	5.5 tons	1600 lbf	0.827		0.84	1.07	0.6 oz.
0.075	0.75	1.10	0.77	6.0 tons	1800 lbf	1.078		0.97	1.30	1.4 oz.
0.09	0.75	1.30	0.89	6.0 tons	2000 lbf	1.265		1.09	1.50	2.1 oz.
1.0	9.5	14.0	10.2	45 kN	5000 N	13.15		15.2	19.0	6 g.
1.0	9.5	14.0	10.2	45 kN	5000 N	13.15		15.2	19.0	5 g.
1.5	11.5	17.0	11.5	49 kN	6000 N	16.35		16.5	22.0	9 g.
1.5	11.5	17.0	11.5	49 kN	6000 N	16.35		16.5	22.0	7 g.
1.5	12.7	22.0	16.3	49 kN	7000 N	21.05		21.3	27.0	19 g.
2.0	19.0	28.0	19.4	54 kN	8000 N	27.45		24.4	33.0	41 g.
2.3	19.0	33.0	22.5	54 kN	9000 N	32.25		27.5	38.0	65 g.

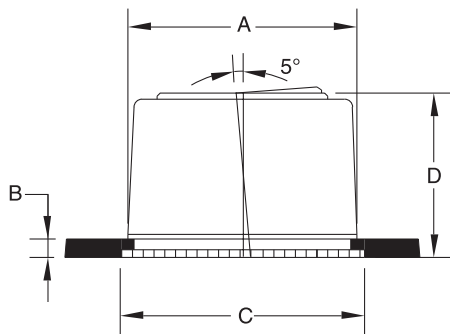
Flange Dia.	Flange Height	Bearing Length	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Relief Dia.		Weight
			+ .005" - .000	+ .1mm - .000			+ .005" - .000	+ .1 mm - .000	
B	C	D	G		H	J	K		
0.41	0.03	0.27	0.359		0.47	0.61	0.250		0.1 oz.
0.56	0.03	0.38	0.515		0.58	0.76	0.390		0.2 oz.
0.56	0.03	0.38	0.515		0.58	0.76	0.390		0.2 oz.
0.69	0.03	0.43	0.640		0.63	0.89	0.520		0.3 oz.
0.69	0.03	0.43	0.640		0.63	0.89	0.520		0.3 oz.
0.88	0.03	0.60	0.827		0.80	1.08	0.640		0.3 oz.
1.13	0.03	0.77	1.078		0.97	1.33	1.000		0.6 oz.
14.2	0.75	9.6	13.15		14.6	19.2	9.90		6 g.
14.2	0.75	9.6	13.15		14.6	19.2	9.90		5 g.
17.4	0.75	10.8	16.35		15.8	22.4	13.10		9 g.
17.4	0.75	10.8	16.35		15.8	22.4	13.10		8 g.
22.2	0.75	15.2	21.05		20.2	27.2	16.10		19 g.
28.5	0.75	19.6	27.45		24.6	33.5	23.30		41 g.

Delrin

- Delrin bearings
- Rotational, Oscillatory and linear motion
- Delrin PV 3,000 (continuous) 6,000 intermittent
- Delrin AF PV 9,000 (continuous) 18,000 (intermittent)
- Self-clinch: Permanent, secure mount
- Press-fit: Non-metallic applications
- Self-align: $\pm 5^\circ$ static alignment
- Shaft Requirements: Soft / 16 RMS (Rz2)
- Temperature Range: -40°F to 300°F / -40°C to 149°C
- Delrin AF option
- 303 Stainless Steel retainer options
- Apply appropriate factor of safety to the nominal loads and speeds specified
- Bearings 0.250" / 8mm diameter and smaller are a 2 part design

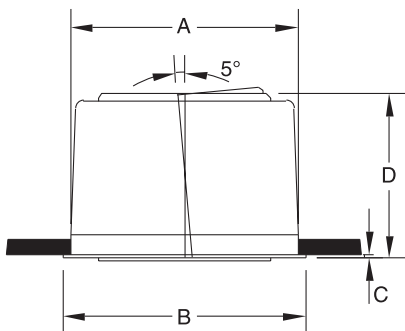


SELF-CLINCH/Self-ALIGN



Part No. Steel	Part No. Stainless Steel	Nominal I.D.	I.D. Actual		Max. Radial Dyn. Load	Max. Speed r.p.m.	Panel Hole	
			min.	max.			+ .003" - .000	+ .07mm - .000
FSD-093	FSSD-093	3/32"	.0940	.0970	20 lbf	3980	A	
FSD-125	FSSD-125	1/8"	.1260	.1280	30 lbf	3010	A	
FSD-187	FSSD-187	3/16"	.1885	.1905	50 lbf	2010	A	
FSD-250	FSSD-250	1/4"	.2510	.2530	70 lbf	1520	A	
FSD-312	FSSD-312	5/16"	.3135	.3155	120 lbf	1220	A	
FSD-375	FSSD-375	3/8"	.3760	.3780	190 lbf	1010	A	
FSD-500	FSSD-500	1/2"	.5010	.5040	320 lbf	760	A	
FSD-625	FSSD-625	5/8"	.6260	.6280	450 lbf	610	A	
FSD-750	FSSD-750	3/4"	.7510	.7530	640 lbf	510	A	
FSD-2M	FSSD-2M	2mm	2.060	2.100	60 N	4850	A	
FSD-4M	FSSD-4M	4mm	4.020	4.070	150 N	2430	A	
FSD-6M	FSSD-6M	6mm	6.020	6.070	270 N	1620	A	
FSD-8M	FSSD-8M	8mm	8.030	8.080	530 N	1210	A	
FSD-10M	FSSD-10M	10mm	10.030	10.080	860 N	970	A	
FSD-12M	FSSD-12M	12mm	12.030	12.080	1330 N	810	A	
FSD-15M	FSSD-15M	15mm	15.030	15.080	1870 N	650	A	
FSD-18M	FSSD-18M	18mm	18.030	18.080	2680 N	540	A	

PRESS-FIT/Self-ALIGN

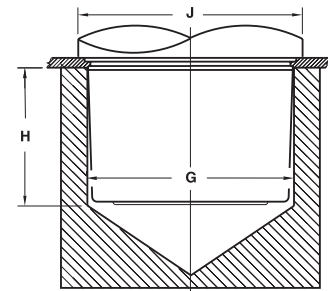


Part No.	Nominal I.D.	I.D. Actual		Max. Radial Dyn. Load	Max. Speed r.p.m.	Mounting Hole	
		min.	max.			+ .003" - .000	+ .07mm - .000
PSD-125	1/8"	.1260	.1280	30 lbf	3010	A	
PSD-187	3/16"	.1885	.1905	50 lbf	2010	A	
PSD-250	1/4"	.2510	.2530	70 lbf	1520	A	
PSD-312	5/16"	.3135	.3155	120 lbf	1220	A	
PSD-375	3/8"	.3760	.3780	190 lbf	1010	A	
PSD-500	1/2"	.5010	.5040	320 lbf	760	A	
PSD-625	5/8"	.6260	.6280	450 lbf	610	A	
PSD-4M	4mm	4.020	4.070	150 N	2430	A	
PSD-6M	6mm	6.020	6.070	270 N	1620	A	
PSD-8M	8mm	8.030	8.080	530 N	1210	A	
PSD-10M	10mm	10.030	10.080	860 N	970	A	
PSD-12M	12mm	12.030	12.080	1330 N	810	A	
PSD-15M	15mm	15.030	15.080	1870 N	650	A	

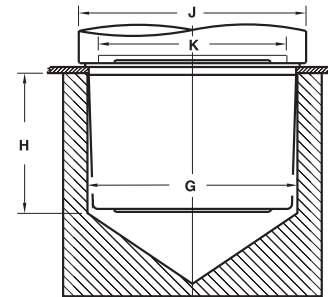
SELF-CLINCH:

- Panel material no harder than RB 65 / RB 75 (stainless steel retainer)
- Panel hole no closer to edge than stated minimum
- Panel hole punched or machined to size (A)
- Do not chamfer panel hole - leave corners sharp
- Use a correctly sized anvil dia. (G), depth (H)
- Ensure the punch completely covers all serrations (J)
- Use continuous, steady press action (X)
- No hammer blows
- Top face of installed bearing must be flush with panel material
- The minimum panel thickness referenced is for mounting purposes only. For load carrying, the panel thickness should be recalculated.

Self-Clinch



Press-Fit



PRESS-FIT:

- Mounting hole punched, molded or machined to size (A)
- Use punch min dia (J), relieved to dia (K) x .075"/2mm deep
- Press bearing into place

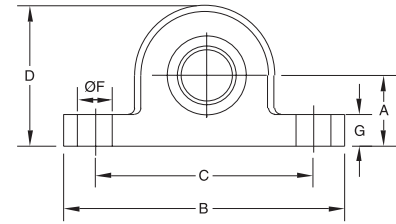
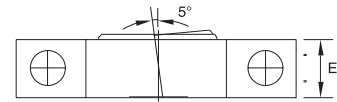
Min. Panel Thickness	Min. Dist. \perp to Edge	Flange Dia.	Bearing Length	Install Force	Push Out Force	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Weight
						+.005" - 000	+1mm - 000			
B		C	D	X		G		H	J	
0.04	0.19	0.28	0.19	1.0 tons	400 lbf	0.249		0.39	0.48	0.01 oz.
0.04	0.22	0.34	0.23	1.5 tons	500 lbf	0.312		0.43	0.54	0.02 oz.
0.04	0.25	0.42	0.28	2.0 tons	900 lbf	0.390		0.48	0.62	0.03 oz.
0.04	0.25	0.42	0.28	2.0 tons	900 lbf	0.390		0.48	0.62	0.03 oz.
0.06	0.41	0.60	0.39	5.0 tons	1100 lbf	0.562		0.59	0.80	0.10 oz.
0.06	0.45	0.67	0.45	5.5 tons	1300 lbf	0.640		0.71	0.87	0.16 oz.
0.06	0.50	0.87	0.65	5.5 tons	1600 lbf	0.827		0.87	1.07	0.31 oz.
0.075	0.75	1.11	0.77	6.0 tons	1800 lbf	1.078		0.97	1.31	0.81 oz.
0.09	0.75	1.30	0.89	6.0 tons	2000 lbf	1.265		1.09	1.50	1.13 oz.
1.0	4.7	7.2	4.9	9.0 kN	1800 N	6.35		9.9	12.2	0.4 g.
1.0	5.5	8.7	6.0	14.0 kN	2000 N	7.95		11.0	13.7	0.6 g.
1.0	6.4	10.6	6.9	18.0 kN	4000 N	9.95		11.9	15.6	0.9 g.
1.5	10.3	15.3	10.0	45.0 kN	5000 N	14.35		15.0	20.3	2.8 g.
1.5	11.5	17.0	11.4	49.0 kN	6000 N	16.35		18.0	22.0	4.3 g.
1.5	12.7	22.0	16.5	49.0 kN	7000 N	21.05		22.0	27.0	9.1 g.
2.0	19.0	28.0	19.4	54.0 kN	8000 N	27.45		24.4	33.0	6.6 g.
2.3	19.0	33.0	22.4	54.0 kN	9000 N	32.25		27.4	38.0	32.2 g.

Flange Dia.	Flange Height	Bearing Length	Anvil Dia.		Anvil Min. Depth	Punch Min. Dia.	Relief Dia.		Weight
			+.005" - 000	+1mm - 000			+.005" - 000	+1 mm - 000	
B	C	D	G		H	J	K		
0.41	0.03	0.27	0.359		0.47	0.61	0.250		0.02 oz.
0.56	0.03	0.38	0.515		0.58	0.76	0.390		0.11 oz.
0.56	0.03	0.38	0.515		0.58	0.76	0.390		0.10 oz.
0.69	0.03	0.43	0.640		0.63	0.89	0.520		0.16 oz.
0.69	0.03	0.43	0.640		0.63	0.89	0.520		0.14 oz.
0.88	0.03	0.60	0.827		0.80	1.08	0.640		0.29 oz.
1.12	0.03	0.77	1.078		0.97	1.32	1.000		0.80 oz.
14.2	0.75	9.6	13.15		14.6	19.2	9.90		3.2 g.
14.2	0.75	9.6	13.15		14.6	19.2	9.90		3.0 g.
17.4	0.75	10.8	16.35		15.8	22.4	13.10		4.5 g.
17.4	0.75	10.8	16.35		15.8	22.4	13.10		3.9 g.
22.2	0.75	14.9	21.05		20.2	27.2	16.10		9.1 g.
28.5	0.75	19.6	27.45		24.6	33.5	23.30		23.1 g.

Pillow Block



- $\pm 5^\circ$ Static Alignment
- Sintered Aluminum
- Corrosion Resistant
- Clean lines
- Light Weight
- Easy Installation
- Apply appropriate factor of safety to the nominal loads and speeds specified



NEEDLE ROLLER

Part No.	I.D. Nominal	Shaft Dia. Min. Max.	A	B	C	D	E	F	G	Max. Speed r.p.m.	Max. Radial Dyn. Load
PB-250-N	1/4"	.2495 - .2500	9/16	2.1/4	1.3/4	1.1/8	7/16	9/32	1/4	26400	340 lbf
PB-312-N	5/16"	.3120 - .3125	9/16	2.1/4	1.3/4	1.1/8	5/8	9/32	1/4	21300	390 lbf
PB-375-N	3/8"	.3745 - .3750	9/16	2.1/4	1.3/4	1.1/8	5/8	9/32	1/4	17700	390 lbf
PB-500-N	1/2"	.4995 - .5000	3/4	3.1/4	2.1/2	1.9/16	25/32	11/32	5/16	13200	620 lbf
PB-625-N	5/8"	.6245 - .6500	3/4	3.1/4	2.1/2	1.9/16	7/8	11/32	5/16	10560	1100 lbf
PB-750-N	3/4"	.7495 - .7500	1.1/4	5.0	4.0	2.9/16	29/32	9/16	9/16	7800	1330 lbf
PB-6M-N	6mm	5.992 - 6.000	14.5	57.0	44.5	28.5	11.0	7.0	6.5	21000	1220 N
PB-8M-N	8mm	7.991 - 8.000	14.5	57.0	44.5	28.5	16.0	7.0	6.5	16800	1650 N
PB-10M-N	10mm	9.991 - 10.000	14.5	57.0	44.5	28.5	16.0	7.0	6.5	13800	2640 N
PB-12M-N	12mm	11.989 - 12.000	19.0	82.5	63.5	39.5	20.0	8.7	8.0	12000	2970 N
PB-15M-N	15mm	14.989 - 15.000	19.0	82.5	63.5	39.5	23.0	8.7	8.0	9600	4740 N
PB-18M-N	18mm	17.989 - 18.000	32.0	127.0	101.5	65.0	23.0	14.3	14.5	7800	4860 N

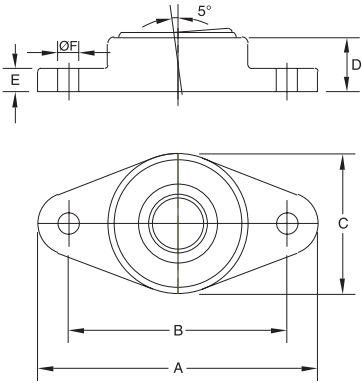
TEFLON BRONZE

Part No.	I.D. Nominal	Shaft Dia. Min. Max.	A	B	C	D	E	F	G	Max. Speed r.p.m.	Max. Radial Dyn. Load
PB-250-P	1/4"	.2481 - .2490	9/16	2.1/4	1.3/4	1.1/8	7/16	9/32	1/4	3610	1020 lbf
PB-312-P	5/16"	.3106 - .3115	9/16	2.1/4	1.3/4	1.1/8	7/16	9/32	1/4	2890	1270 lbf
PB-375-P	3/8"	.3731 - .3740	9/16	2.1/4	1.3/4	1.1/8	5/8	9/32	1/4	2410	2040 lbf
PB-500-P	1/2"	.4980 - .4990	3/4	3.1/4	2.1/2	1.9/16	25/32	11/32	5/16	1810	2720 lbf
PB-625-P	5/8"	.6230 - .6240	3/4	3.1/4	2.1/2	1.9/16	7/8	11/32	5/16	1440	3400 lbf
PB-750-P	3/4"	.7479 - .7491	3/4	3.1/4	2.1/2	1.9/16	7/8	11/32	5/16	1200	4080 lbf
PB-1000-P	1"	.9979 - .9991	1.1/4	5	4	2.9/16	29/32	9/16	9/16	900	5440 lbf
PB-6M-P	6mm	5.978 - 5.990	14.5	57.0	44.5	28.5	11.0	7.0	6.5	3820	2700 N
PB-8M-P	8mm	7.972 - 7.987	14.5	57.0	44.5	28.5	11.0	7.0	6.5	2860	4800 N
PB-10M-P	10mm	9.972 - 9.987	14.5	57.0	44.5	28.5	16.0	7.0	6.5	2290	7500 N
PB-12M-P	12mm	11.966 - 11.984	14.5	57.0	44.5	28.5	16.0	7.0	6.5	1910	9000 N
PB-16M-P	16mm	15.966 - 15.984	19.0	82.5	63.5	39.5	20.0	8.7	8.0	1430	12000 N
PB-18M-P	18mm	17.966 - 17.984	19.0	82.5	63.5	39.5	23.0	8.7	8.0	1270	20250 N
PB-25M-P	25mm	24.959 - 24.980	32.0	127.0	101.5	65.0	23.0	14.3	14.5	920	28130 N

BRONZE SAE 840

Part No.	I.D. Nominal	I.D. Actual Min. Max.	A	B	C	D	E	F	G	Max. Speed r.p.m.	Max. Radial Dyn. Load
PB-250-B	1/4"	.2508 - .2513	9/16	2.1/4	1.3/4	1.1/8	3/8	9/32	1/4	9160	110 lbf
PB-312-B	5/16"	.3133 - .3140	9/16	2.1/4	1.3/4	1.1/8	7/16	9/32	1/4	7340	160 lbf
PB-375-B	3/8"	.3758 - .3765	9/16	2.1/4	1.3/4	1.1/8	7/16	9/32	1/4	6110	190 lbf
PB-500-B	1/2"	.5010 - .5017	9/16	2.1/4	1.3/4	1.1/8	5/8	9/32	1/4	4580	360 lbf
PB-625-B	5/8"	.626 - .627	3/4	3.1/4	2.1/2	1.9/16	25/32	11/32	5/16	3670	530 lbf
PB-750-B	3/4"	.751 - .752	3/4	3.1/4	2.1/2	1.9/16	7/8	11/32	5/16	3060	770 lbf
PB-875-B	7/8"	.876 - .878	1	4	3.1/8	1.15/16	29/32	11/32	13/32	2620	750 lbf
PB-1000-B	1"	1.001 - 1.003	1.1/4	5	4	2.9/16	29/32	9/16	9/16	2290	850 lbf
PB-1250-B	1.1/4"	1.251 - 1.253	1.1/4	5	4	2.9/16	15/16	9/16	9/16	1830	1320 lbf
PB-6M-B	6mm	6.02 - 6.04	14.5	57.0	44.5	28.5	9.5	7.0	6.5	9670	480 N
PB-8M-B	8mm	8.02 - 8.04	14.5	57.0	44.5	28.5	11.0	7.0	6.5	7270	720 N
PB-10M-B	10mm	10.02 - 10.04	14.5	57.0	44.5	28.5	11.0	7.0	6.5	5820	890 N
PB-12M-B	12mm	12.03 - 12.05	14.5	57.0	44.5	28.5	16.0	7.0	6.5	4830	1520 N
PB-15M-B	15mm	15.03 - 15.05	19.0	82.5	63.5	39.5	20.0	8.7	8.0	3880	2250 N
PB-18M-B	18mm	18.03 - 18.05	19.0	82.5	63.5	39.5	23.0	8.7	8.0	3230	3220 N
PB-25M-B	25mm	25.03 - 25.07	32.0	127.0	101.5	65.0	23.0	14.3	14.5	2330	3730 N
PB-30M-B	30mm	30.03 - 30.07	32.0	127.0	101.5	65.0	24.0	14.3	14.5	1940	5550 N

Housing Flange



- $\pm 5^\circ$ Static Alignment
- Sintered Aluminum
- Corrosion Resistant
- Clean lines
- Light Weight
- Easy Installation
- Apply appropriate factor of safety to the nominal loads and speeds specified



NEEDLE ROLLER

Part No.	I.D. Nominal	Shaft Dia. Min. Max.	A	B	C	D	E	F	Max. Speed r.p.m.	Max. Radial Dyn. Load
HF-250-N	1/4"	.2495 - .2500	2.1/4	1.3/4	1.1/8	7/16	3/16	9/32	26400	340 lbf
HF-312-N	5/16"	.3120 - .3125	2.1/4	1.3/4	1.1/8	5/8	3/16	9/32	21300	390 lbf
HF-375-N	3/8"	.3745 - .3750	2.1/4	1.3/4	1.1/8	5/8	3/16	9/32	17700	390 lbf
HF-500-N	1/2"	.4995 - .5000	3.1/4	2.1/2	1.5/8	25/32	1/4	13/32	13200	620 lbf
HF-625-N	5/8"	.6245 - .6500	3.1/4	2.1/2	1.5/8	7/8	1/4	13/32	10560	1100 lbf
HF-750-N	3/4"	.7495 - .7500	5.0	4.0	2.5/8	29/32	3/8	9/16	7800	1330 lbf
HF-6M-N	6 mm	5.992 - 6.000	57.0	44.5	28.5	11.0	5.0	7.0	21000	1220 N
HF-8M-N	8 mm	7.991 - 8.000	57.0	44.5	28.5	15.9	5.0	7.0	16800	1650 N
HF-10M-N	10 mm	9.991 - 10.000	57.0	44.5	28.5	15.9	5.0	7.0	13800	2640 N
HF-12M-N	12 mm	11.989 - 12.000	82.5	63.5	41.5	20.0	6.5	10.5	12000	2970 N
HF-15M-N	15 mm	14.989 - 15.000	82.5	63.5	41.5	22.0	6.5	10.5	9600	4740 N
HF-18M-N	18 mm	17.989 - 18.000	127.0	101.5	66.5	23.0	9.5	14.5	7800	4860 N

TEFLON BRONZE

Part No.	I.D. Nominal	Shaft Dia. Min. Max.	A	B	C	D	E	F	Max. Speed r.p.m.	Max. Radial Dyn. Load
HF-250-P	1/4"	.2481 - .2490	2.1/4	1.3/4	1.1/8	7/16	3/16	9/32	3610	1020 lbf
HF-312-P	5/16"	.3106 - .3115	2.1/4	1.3/4	1.1/8	7/16	3/16	9/32	2890	1270 lbf
HF-375-P	3/8"	.3731 - .3740	2.1/4	1.3/4	1.1/8	5/8	3/16	9/32	2410	2040 lbf
HF-500-P	1/2"	.4980 - .4990	3.1/4	2.1/2	1.5/8	25/32	1/4	13/32	1810	2720 lbf
HF-625-P	5/8"	.6230 - .6240	3.1/4	2.1/2	1.5/8	7/8	1/4	13/32	1440	3400 lbf
HF-750-P	3/4"	.7479 - .7491	3.1/4	2.1/2	1.5/8	7/8	1/4	13/32	1200	4080 lbf
HF-1000-P	1"	.9979 - .9991	5.0	4.0	2.5/8	29/32	3/8	9/16	900	5440 lbf
HF-6M-P	6mm	5.978 - 5.990	57.0	44.5	28.5	11.0	5.0	7.0	3820	2700 N
HF-8M-P	8mm	7.972 - 7.987	57.0	44.5	28.5	11.0	5.0	7.0	2860	4800 N
HF-10M-P	10mm	9.972 - 9.987	57.0	44.5	28.5	15.9	5.0	7.0	2290	7500 N
HF-12M-P	12mm	11.966 - 11.984	57.0	44.5	28.5	15.9	5.0	7.0	1910	9000 N
HF-16M-P	16mm	15.966 - 15.984	82.5	63.5	41.5	20.0	6.5	10.5	1430	12000 N
HF-18M-P	18mm	17.966 - 17.984	82.5	63.5	41.5	22.0	6.5	10.5	1270	20250 N
HF-25M-P	25mm	24.959 - 24.980	127.0	101.5	66.5	23.0	9.5	14.5	920	28130 N

BRONZE SAE 840

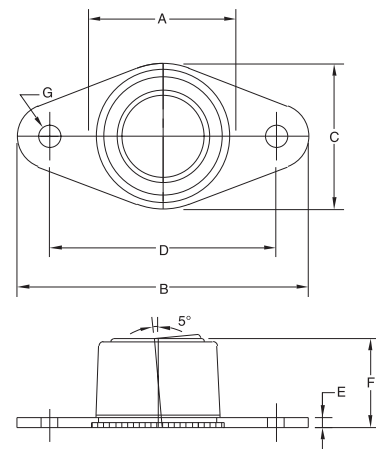
Part No.	I.D. Nominal	I.D. Actual Min. Max.	A	B	C	D	E	F	Max. Speed r.p.m.	Max. Radial Dyn. Load
HF-250-B	1/4"	.2508 - .2513	1.5/8	1.1/4	3/4	3/8	3/16	11/64	9160	110 lbf
HF-312-B	5/16"	.3133 - .3140	2.1/4	1.3/4	1.1/8	7/16	3/16	9/32	7340	160 lbf
HF-375-B	3/8"	.3758 - .3765	2.1/4	1.3/4	1.1/8	7/16	3/16	9/32	6110	190 lbf
HF-500-B	1/2"	.5010 - .5017	2.1/4	1.3/4	1.1/8	5/8	3/16	9/32	4580	360 lbf
HF-625-B	5/8"	.626 - .627	3.1/4	2.1/2	1.5/8	25/32	1/4	13/32	3670	530 lbf
HF-750-B	3/4"	.751 - .752	3.1/4	2.1/2	1.5/8	7/8	1/4	13/32	3060	770 lbf
HF-875-B	7/8"	.876 - .878	4.0	3.1/8	1.7/8	29/32	5/16	13/32	2620	750 lbf
HF-1000-B	1"	1.001 - 1.003	5.0	4.0	2.5/8	29/32	3/8	9/16	2290	860 lbf
HF-1250-B	1.1/4"	1.251 - 1.253	5.0	4.0	2.5/8	15/16	3/8	9/16	1830	1320 lbf
HF-6M-B	6mm	6.02 - 6.04	41.5	32.0	19.0	9.5	5.0	4.5	9670	480 N
HF-8M-B	8mm	8.02 - 8.04	57.0	44.5	28.5	11.0	5.0	7.0	7270	720 N
HF-10M-B	10mm	10.02 - 10.04	57.0	44.5	28.5	11.0	5.0	7.0	5820	890 N
HF-12M-B	12mm	12.03 - 12.05	57.0	44.5	28.5	15.9	5.0	7.0	4830	1520 N
HF-15M-B	15mm	15.03 - 15.05	82.5	63.5	41.5	20.0	6.5	10.5	3880	2250 N
HF-18M-B	18mm	18.03 - 18.05	82.5	63.5	41.5	22.0	6.5	10.5	3230	3220 N
HF-25M-B	25mm	25.03 - 25.07	127.0	101.5	66.5	23.0	9.5	14.5	2330	3730 N
HF-30M-B	30mm	30.03 - 30.07	127.0	101.5	66.5	24.0	9.5	14.5	1940	5550 N

Flange - Mount

Self-Align



- $\pm 5^\circ$ Static Alignment
- Low Profile Steel Flange
- High temperature option available, refer to page 18
- Special Flange Design Option
- Apply appropriate factor of safety to the nominal loads and speeds specified



NEEDLE ROLLER - Self-Align

Part No.	Nominal I.D.	Shaft Dia.		Max. Radial Dyn. Load	Max. Speed r.p.m.	A	B	C	D	E	F	G
		Min.	Max.									
BFM-250-N	1/4"	.2495	.2500	570 lbf	44000	21/32	2.10	1.19	1.53	0.06	0.46	7/32
BFM-312-N	5/16"	.3120	.3125	650 lbf	35500	27/32	1.78	1.25	1.22	0.09	0.64	7/32
BFM-375-N	3/8"	.3745	.3750	650 lbf	29500	27/32	1.78	1.25	1.22	0.09	0.64	7/32
BFM-500-N	1/2"	.4995	.5000	1,040 lbf	22000	1.3/32	2.34	1.56	1.78	0.09	0.77	7/32
BFM-625-N	5/8"	.6245	.6250	1,830 lbf	17600	1.9/32	2.34	1.85	1.78	0.09	0.89	7/32
BFM-6M-N	6mm	5.992	6.000	2,030 N	35000	17.0	53.0	30.0	39.0	1.5	11.6	5.5
BFM-8M-N	8mm	7.991	8.000	2,750 N	28000	22.0	45.0	31.8	30.9	2.3	16.3	5.5
BFM-10M-N	10mm	9.991	10.000	4,400 N	23000	22.0	45.0	31.8	30.9	2.3	16.3	5.5
BFM-12M-N	12mm	11.989	12.000	4,950 N	20000	28.0	60.0	39.6	45.2	2.3	19.5	5.5
BFM-15M-N	15mm	14.989	15.000	7,900 N	16000	33.0	60.0	47.0	45.2	2.3	22.5	5.5

NEEDLE ROLLER - Non-Align

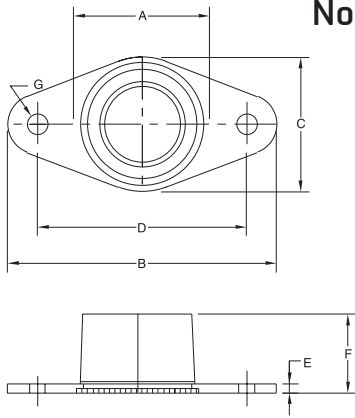
Part No.	Nominal I.D.	Shaft Dia.		Max. Radial Dyn. Load	Max. Speed r.p.m.	A	B	C	D	E	F	G
		Min.	Max.									
BFM-250-NN	1/4"	.2495	.2500	570 lbf	44000	21/32	2.10	1.19	1.53	0.06	0.44	7/32
BFM-312-NN	5/16"	.3120	.3125	650 lbf	35500	21/32	2.10	1.19	1.53	0.06	0.44	7/32
BFM-375-NN	3/8"	.3745	.3750	650 lbf	29500	27/32	1.78	1.25	1.22	0.09	0.44	7/32
BFM-500-NN	1/2"	.4995	.5000	1,040 lbf	22000	29/32	2.10	1.26	1.53	0.09	0.50	7/32
BFM-625-NN	5/8"	.6245	.6250	1,830 lbf	17600	1.3/32	2.34	1.56	1.78	0.09	0.74	7/32
BFM-750-NN	3/4"	.7495	.7500	2,210 lbf	14700	1.9/32	2.34	1.56	1.78	0.09	0.63	7/32
BFM-6M-NN	6mm	5.992	6.000	2,030 N	35000	16.7	53.0	30.0	38.8	1.5	10.8	5.5
BFM-8M-NN	8mm	7.991	8.000	2,750 N	28000	16.7	53.0	30.0	38.8	1.5	11.1	5.5
BFM-10M-NN	10mm	9.991	10.000	4,400 N	23000	22.0	45.0	31.8	31.0	2.3	12.7	5.5
BFM-12M-NN	12mm	11.989	12.000	4,950 N	20000	22.0	45.0	31.8	31.0	2.3	12.7	5.5
BFM-15M-NN	15mm	14.989	15.000	7,900 N	16000	28.0	59.4	39.6	45.2	2.3	18.7	5.5
BFM-18M-NN	18mm	17.989	18.000	8,100 N	13000	32.5	59.4	39.6	45.2	2.3	16.0	5.5

BRONZE - Self-Align

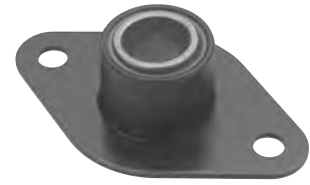
Part No.	Nominal I.D.	I.D. Actual		Max. Radial Dyn. Load	Max. Speed r.p.m.	A	B	C	D	E	F	G
		min.	max.									
BFM-250-B	1/4"	.2508	.2513	190 lbf	15270	17/32	1.80	0.88	1.22	0.05	0.40	7/32
BFM-312-B	5/16"	.3133	.3140	270 lbf	12240	21/32	2.10	1.19	1.53	0.06	0.46	7/32
BFM-375-B	3/8"	.3758	.3765	320 lbf	10180	21/32	2.10	1.19	1.53	0.06	0.46	7/32
BFM-500-B	1/2"	.5010	.5017	600 lbf	7640	27/32	2.35	1.44	1.78	0.06	0.64	7/32
BFM-625-B	5/8"	.6260	.6270	890 lbf	6110	1.3/32	2.35	1.56	1.78	0.09	0.77	7/32
BFM-750-B	3/4"	.7510	.7520	1280 lbf	5090	1.9/32	2.35	1.85	1.78	0.09	0.89	7/32
BFM-6M-B	6mm	6.020	6.040	790 N	16110	13.5	45.0	22.3	31.0	1.2	10.2	5.5
BFM-8M-B	8mm	8.020	8.040	1190 N	12120	17.0	53.0	30.2	39.0	1.5	11.5	5.5
BFM-10M-B	10mm	10.020	10.040	1490 N	9700	17.0	53.0	30.2	39.0	1.5	11.5	5.5
BFM-12M-B	12mm	12.030	12.050	2530 N	8060	21.5	60.0	36.5	45.2	1.5	16.3	5.5
BFM-15M-B	15mm	15.030	15.050	3750 N	6460	28.0	60.0	39.7	45.2	2.3	19.4	5.5
BFM-18M-B	18mm	18.030	18.050	5370 N	5380	32.5	60.0	47.0	45.2	2.3	22.5	5.5

Flange - Mount

Non-Align



- Low Profile Steel Flange
- Special Flange Design Option
- Apply appropriate factor of safety to the nominal loads and speeds specified



TEFLON BRONZE- Self-Align

Part No.	Nominal I.D.	Shaft Dia.		Max. Radial Dyn. Load	Max. Speed r.p.m.	A	B	C	D	E	F	G
		Min.	Max.									
BFM-250-P	1/4"	.2481	-.2490	1700 lbf	6020	21/32	2.10	1.19	1.53	0.06	0.46	7/32
BFM-312-P	5/16"	.3106	-.3115	2120 lbf	4820	21/32	2.10	1.19	1.53	0.06	0.46	7/32
BFM-375-P	3/8"	.3731	-.3740	3400 lbf	4010	27/32	2.35	1.43	1.78	0.06	0.64	7/32
BFM-500-P	1/2"	.4980	-.4990	4530 lbf	3010	1.3/32	2.35	1.56	1.78	0.09	0.77	7/32
BFM-625-P	5/8"	.6230	-.6240	5670 lbf	2410	1.9/32	2.35	1.85	1.78	0.09	0.89	7/32
BFM-750-P	3/4"	.7479	-.7490	6800 lbf	2010	1.9/32	2.35	1.85	1.78	0.09	0.87	7/32
BFM-6M-P	6mm	5.978	-5.990	4500 N	6360	16.5	53.0	30.2	39.0	1.5	11.5	5.5
BFM-8M-P	8mm	7.972	-7.987	8000 N	4770	16.5	53.0	30.2	39.0	1.5	11.5	5.5
BFM-10M-P	10mm	9.972	-9.987	12500 N	3820	22.0	60.0	36.5	45.2	1.5	16.3	5.5
BFM-12M-P	12mm	11.966	-11.984	15000 N	3180	22.0	60.0	36.5	45.2	1.5	15.9	5.5
BFM-16M-P	15mm	15.966	-15.984	20000 N	2390	28.0	60.0	39.7	45.2	2.3	19.5	5.5
BFM-18M-P	18mm	17.966	-17.984	33750 N	2120	33.0	60.0	47.0	45.2	2.3	22.5	5.5

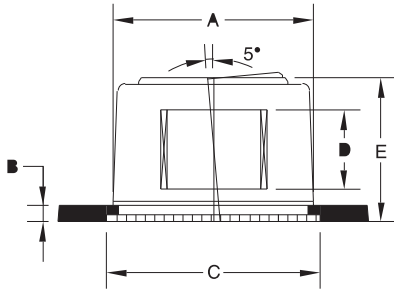
TEFLON BRONZE - Non-Align

Part No.	Nominal I.D.	Shaft Dia.		Max. Radial Dyn. Load	Max. Speed r.p.m.	A	B	C	D	E	F	G
		Min.	Max.									
BFM-250-PN	1/4"	.2481	-.2490	1700 lbf	6020	17/32	1.80	0.88	1.21	0.05	0.36	7/32
BFM-312-PN	5/16"	.3106	-.3115	2120 lbf	4820	17/32	1.80	0.88	1.21	0.05	0.50	7/32
BFM-375-PN	3/8"	.3731	-.3740	3400 lbf	4010	21/32	2.09	1.19	1.53	0.06	0.48	7/32
BFM-500-PN	1/2"	.4980	-.4990	4530 lbf	3010	27/32	2.09	1.26	1.53	0.09	0.49	7/32
BFM-625-PN	5/8"	.6230	-.6240	5670 lbf	2410	29/32	2.09	1.26	1.53	0.09	0.62	7/32
BFM-750-PN	3/4"	.7479	-.7491	6800 lbf	2010	1.3/32	2.35	1.56	1.78	0.09	0.62	7/32
BFM-6M-PN	6mm	5.978	-5.990	4500 N	6360	13.0	45.0	22.2	31.0	1.2	8.7	5.5
BFM-8M-PN	8mm	7.972	-7.987	8000 N	4770	16.5	53.0	30.2	39.0	1.5	10.7	5.5
BFM-10M-PN	10mm	9.972	-9.987	12500 N	3820	16.5	53.0	30.2	39.0	1.5	12.9	5.5
BFM-12M-PN	12mm	11.966	-11.984	15170 N	3180	22.0	60.0	36.5	45.0	1.5	12.9	5.5
BFM-16M-PN	15mm	15.966	-15.984	20000 N	2390	23.0	53.0	32.0	39.0	2.3	14.9	5.5
BFM-18M-PN	18mm	17.966	-17.984	33750 N	2120	28.0	60.0	39.7	45.0	2.3	17.9	5.5

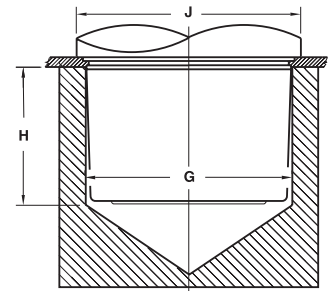
DELAIN - Self-Align

Part No.	Nominal I.D.	I.D. Actual		Max. Radial Dyn. Load	Max. Speed r.p.m.	A	B	C	D	E	F	G
		min.	max.									
BFM-250-A	1/4"	.2510	-.2530	70 lbf	1520	13/32	1.80	0.87	1.21	0.05	0.28	7/32
BFM-312-A	5/16"	.3135	-.3155	120 lbf	1220	19/32	2.10	1.19	1.53	0.06	0.39	7/32
BFM-375-A	3/8"	.3760	-.3780	190 lbf	1010	21/32	2.10	1.19	1.53	0.06	0.45	7/32
BFM-500-A	1/2"	.5010	-.5040	320 lbf	760	27/32	2.35	1.43	1.78	0.06	0.65	7/32
BFM-625-A	5/8"	.6260	-.6280	450 lbf	610	1.3/32	2.35	1.56	1.78	0.09	0.77	7/32
BFM-750-A	3/4"	.7510	-.7530	640 lbf	510	1.9/32	2.34	1.85	1.78	0.09	0.89	7/32
BFM-6M-A	6mm	6.020	-6.070	270 N	1620	11.0	45.0	22.0	31.0	1.2	6.9	5.5
BFM-8M-A	8mm	8.030	-8.080	530 N	1210	17.0	53.0	30.0	39.0	1.6	10.0	5.5
BFM-10M-A	10mm	10.030	-10.080	860 N	970	17.0	53.0	30.0	39.0	1.6	11.4	5.5
BFM-12M-A	12mm	12.030	-12.080	1330 N	810	22.0	60.0	36.5	45.0	1.6	16.5	5.5
BFM-15M-A	15mm	15.030	-15.080	1870 N	650	28.0	60.0	39.7	45.0	2.3	19.4	5.5
BFM-18M-A	18mm	18.030	-18.080	2680 N	540	33.0	60.0	47.0	45.2	2.3	22.4	5.5

High Temperature



Self-Clinch



GRAPHITE BRONZE

Part Number	I.D. Min.	Actual Max.	Radial Dyn. Load	Max. Speed	Panel Hole			Bearing Length	Install Force	Push Out Force	Anvil Dia.		Punch Min. Dia.
					Min.	Max.	Min. Thickness				Flange Dia.	Flange Dia.	
				rpm	A	B	C	E			G	H	J
FSB-250HT	.2508	.2513	185 lbf	6015	0.500	0.04	0.55	0.40	5.0 tons	1100 lbf	0.515	0.60	0.75
FSB-312HT	.3133	.3140	265 lbf	4820	0.625	0.06	0.67	0.46	5.5 tons	1300 lbf	0.640	0.66	0.87
FSB-375HT	.3758	.3765	318 lbf	4010	0.625	0.06	0.67	0.46	5.5 tons	1300 lbf	0.640	0.66	0.87
FSB-500HT	.5010	.5017	600 lbf	3008	0.812	0.06	0.87	0.64	5.5 tons	1600 lbf	0.827	0.84	1.07
FSB-6MHT	6.020	6.040	790 N	6361	12.70	1.0	14.0	10.2	45 kN	5000 N	13.15	15.2	19.0
FSB-8MHT	8.020	8.040	1191 N	4771	15.90	1.5	17.0	11.5	49 kN	6000 N	16.35	16.5	22.0
FSB-10MHT	10.020	10.040	1489 N	3817	15.90	1.5	17.0	11.5	49 kN	6000 N	16.35	16.5	22.0
FSB-12MHT	12.030	12.050	2531 N	3181	20.60	1.5	22.0	16.3	49 kN	7000 N	21.05	21.3	27.0

- PV - 25,000
- Self-Clinching
- ±5° Self-Alignment
- Temperature Range - 20° to 500°F (-29° to 260°C)

TEFLON BRONZE

Part Number	Shaft Dia. Min.	Max. Dyn. Load	Max. Speed	rpm	Panel Hole			Bearing Length	Bearing Height	Install Force	Push Out Force	Anvil Dia.		Punch Min. Dia.
					Min.	Max.	Min. Thickness					Flange Dia.	Flange Dia.	
				rpm	A	B	C	D	E			G	H	J
FSP250HT	.2481	.2490	3399 lbf	6015	0.625	0.06	0.67	0.37	0.46	5.5 tons	1300 lbf	0.64	0.66	0.87
FSP312HT	.3106	.3115	4242 lbf	4820	0.625	0.06	0.67	0.37	0.46	5.5 tons	1300 lbf	0.64	0.66	0.87
FSP375HT	.3731	.3740	6798 lbf	4010	0.812	0.06	0.87	0.50	0.64	5.5 tons	1600 lbf	0.827	0.84	1.07
FSP500HT	.4980	.4990	9064 lbf	3008	1.063	0.09	1.10	0.50	0.77	6.0 tons	1800 lbf	1.078	0.97	1.30
FSP6MHT	5.978	5.990	9000 N	6361	15.90	1.5	17.0	6.0	11.5	49 kN	6000 N	16.35	16.5	22.0
FSP8MHT	7.972	7.987	16000 N	4771	15.90	1.5	17.0	8.0	11.5	49 kN	6000 N	16.35	16.5	22.0
FSP10MHT	9.972	9.987	25000 N	3817	20.60	1.5	22.0	10.0	16.3	49 kN	7000 N	21.05	21.3	27.0
FSP12MHT	11.966	11.984	30000 N	3181	20.60	1.5	22.0	10.0	15.9	49 kN	7000 N	21.05	20.9	27.0

- PV - 50,000
- Self-Clinching
- ±5° Self-Alignment
- Temperature Range - 330° to 540°F (-200° to 282°C)

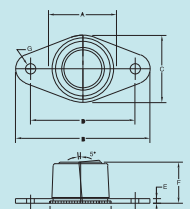
FLANGE-MOUNT

Part Number	ID		Max Radial Dyn. Load	Max Speed	rpm	A	B	C	D	E	F	G
	Min.	Max.										
Graphite Bronze												
BFM250BHT	.2508	.2513	185 lbf	6015	17/32	1.80	0.88	1.22	0.05	0.40	7/32	
BFM312BHT	.3133	.3140	265 lbf	4820	21/32	2.10	1.19	1.53	0.06	0.46	7/32	
BFM375BHT	.3758	.3765	318 lbf	4010	21/32	2.10	1.19	1.53	0.06	0.46	7/32	
BFM500BHT	.5010	.5017	600 lbf	3008	27/32	2.35	1.44	1.78	0.06	0.64	7/32	
BFM6MBHT	6.020	6.040	790 N	6361	13.5	45.0	22.3	31.0	1.2	10.2	5.5	
BFM8MBHT	8.020	8.040	1191 N	4771	17.0	53.0	30.2	39.0	1.5	11.5	5.5	
BFM10MBHT	10.020	10.040	1489 N	3817	17.0	53.0	30.2	39.0	1.5	11.5	5.5	
BFM12MBHT	12.030	12.050	2531 N	3181	21.5	60.0	36.5	45.2	1.5	16.3	5.5	

- 2 Bolt-Hole Steel Flange
- Graphite-Lubricated Bronze
- Teflon-Bronze



Teflon Bronze												
Part Number	ID Min.	ID Max.	Max Radial Dyn. Load	Max Speed	rpm	A	B	C	D	E	F	G
BFM250PHT	.2481	.2490	3399 lbf	6015	21/32	2.10	1.19	1.53	0.06	0.46	7/32	
BFM312PHT	.3106	.3115	4242 lbf	4820	21/32	2.10	1.19	1.53	0.06	0.46	7/32	
BFM375PHT	.3731	.3740	6798 lbf	4010	27/32	2.35	1.43	1.78	0.06	0.64	7/32	
BFM500PHT	.4980	.4990	9064 lbf	3008	13/32	2.35	1.56	1.78	0.09	0.77	7/32	
BFM6MPHT	5.978	5.990	9000 N	6361	16.5	53.0	30.2	39.0	1.5	11.5	5.5	
BFM8MPHT	7.972	7.987	16000 N	4771	16.5	53.0	30.2	39.0	1.5	11.5	5.5	
BFM10MPHT	9.972	9.987	25000 N	3817	22.0	60.0	36.5	45.2	1.5	16.3	5.5	
BFM12MPHT	11.966	11.984	30000 N	3181	22.0	60.0	36.5	45.2	1.5	15.9	5.5	



Special Solutions

The Self-Aligning, Self-Clinching features, combined with various bearing mediums, allow Spyraflo to offer unique solutions across a wide variety of special applications. Contact Spyraflo engineering for your next bearing solution.



0.625" Iron / Oil, Self-Aligning insert, mounted in a low profile, reverse orientation, Self-Clinching assembly. Combining short bearing length, minimal footprint and reverse direction axial load.



8mm threaded steel insert mounted in a Self-aligning flange assembly. Ensures the threaded axes is always operating in the most free and effective manner.



Self-Aligning, Teflon-Bronze, 0.750" bearing, mounted in a yellow zinc plated steel, 3-hole flange. Giving high performance in a ductile housing as an economic alternative to cast iron, ball bearing.

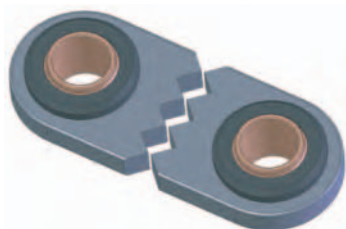


0.375" ball bearing mounted in a Non-Aligning, Self-Clinching housing. Facilitates the ball bearing being securely mounted in a sheet steel panel.



Two 0.375" Teflon-Bronze bearings mounted in a single Self-Clinching retainer. Positions the bearings either side of a sheet steel panel facilitating a cantilever application.

Customized flanges are a Spyraflo specialty, often combining multiple features, this example incorporates a 0.500" Self-Aligning, SAE 840 Bronze bearing with a secondary bronze bush.



A steel linkage incorporating two 0.500" SAE 840 Bronze bearings, mounted 5" apart centrally across the width of the link.



Very low profile, Non-Aligning, Self-Clinching, Delrin shaft support.

Applications



Flange-Mounted, Self-Aligning, Needle Roller bearings are used in the challenging environment of powered bus doors.



SAE 840 Bronze, Self-Clinching, Self-Aligning bearings are used to facilitate the linkage system between handles and pedals on aerobic elliptical stepper machines.



Press-Fit, Self-Aligning, SAE 840 Bronze bearings are mounted into plastic sub-assemblies in both the mailing meter and its accompanying feeder unit. The Self-Aligning feature allows design engineers to reduce material / process costs while at the same time improving machine performance.



Self-Aligning, Yellow Zinc Plated Steel, Pillow Blocks house 0.625" SAE 840 Bronze bearings being used on commercial lawn mowers. The bearings are subject to high loads and an aggressive operating environment while, at the same time, facilitating easy, smooth cut height adjustment.

Document handling machines, where sheets of paper are folded, collated, inserted, counted, scored or perforated at high speed utilize Spyraflo Self-Aligning, Self-Clinching bearings in many operational areas.





Spyraflo ReadyMount and Mounted bearing solutions are in wide use throughout the world. Technical and product support is supplied either directly from Spyraflo Sales and Engineering or our team of highly trained representatives and distributors. The company's experience and quality standards ensure the most discerning customers are totally satisfied. Spyraflo's ISO 9000 registration covers the design, development, manufacture, sales and distribution of self-clinching and self-aligning bearings.

SPYRAFLO[®]



Bearing Solutions