Performance Mounted Spherical Roller Bearings **SEAL**





Rolling Elements: Spherical Roller

Housing: Cast Iron Four Bolt Flange

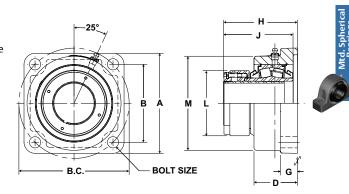
Self Alignment: +/- 2 Degrees

Lock: Adapter

Seal: Felt

Optional Seal: Double Lip Contact

Temperature: -20° to 220° F



USFB5000A Series Four-Bolt Flange Units - Adapter Mount

Bore		Basic	Dimensions inch / mm										
Diameter inch	Part No.	Dynamic Rating Ib/N	Α	В	B.C.	D	G	H *	J	L	M	Bolt Size	Unit Wt. Ib/kg
1 7/16	USFB5000A-107	20368	4 5/8	3 17/32	5	2 1/16	3/4	3 7/16	3 11/32	2 47/64	3 7/8	4 /0	6.7
1 1/2	USFB5000A-108	90597	117.5	89.7	127.0	52.4	19.1	87.3	84.9	69.5	98.4	1/2	3.06
1 11/16	USFB5000A-111	22689	5	3 57/64	5 1/2	2 1/4	3/4	3 35/64	3 29/64	2 31/32	4 1/2		8.9
1 3/4	USFB5000A-112	100921	127.0	98.8	139.7	57.2	19.1	90.1	87.7	75.4	114.3	1/2	4.04
1 15/16	USFB5000A-115	23520	5 3/16	4 1/16	5 3/4	2 1/4	3/4	3 37/64	3 1/2	3 11/64	4 3/4	4.0	9.5
2	USFB5000A-200	104617	131.8	103.2	146.1	57.2	19.1	90.9	88.9	80.6	120.7	1/2	4.33
0.046	0.040	28087	5 7/8	4 1/2	6 3/8	2 7/16	13/16	3 31/32	3 7/8	3 7/16	5 1/8	5/0	11.9
2 3/16	USFB5000A-203	124931	149.2	114.3	161.9	61.9	20.6	100.8	98.4	87.3	130.2	5/8	5.42
2 7/16	USFB5000A-207	44691	6 1/8	4 49/64	6 3/4	2 21/32	1 1/32	4 13/32	4 5/16	3 63/64	5 3/4	E/0	16.2
2 1/2	USFB5000A-208	198786	155.6	121.0	171.5	67.5	26.2	111.9	109.5	101.2	146.1	46.1	7.37
2 11/16	USFB5000A-211												
2 3/4	USFB5000A-212	47447	7 3/16	5 9/16	7 7/8	2 7/8	15/16	4 19/32	4 31/64	4 25/64	6 5/8	2/4	23.2
2 15/16	USFB5000A-215	211044	182.6	141.3	200.0	73.0	23.8	116.7	113.9	111.5	168.3	3/4	10.54
3	USFB5000A-300												
3 3/16	USFB5000A-303												
3 7/16	USFB5000A-307	72640 323103	8 3/8 212.7	6 23/32	9 1/2 241.3	3 9/32 83.3	1 1/8 28.6	5 43/64 144.1	5 35/64 140.9	5 15/32 138.9	7 5/8 193.7	3/4	38.0 17.28
3 1/2	USFB5000A-308	020100	212.1	170.7	271.0	03.3	20.0	174.1	170.5	150.5	190.7		17.20
3 11/16	USFB5000A-311												
3 15/16	USFB5000A-315	96050 427230	9 1/2 241.3	7 19/32 192.9	10 3/4 273.1	3 11/16 93.7	1 1/4 31.8	6 5/64 154.4	5 15/16 150.8	5 13/16 147.6	8 7/8 225.4	7/8	46.9 21.32
4	USFB5000A-400	421230	241.3	192.9	213.1	33.1	31.0	154.4	130.0	147.0	223.4		21.02

^{*}For expansion bearings, this dimension can increase by the corresponding value in table VIII on page I-69. One expansion unit is to be used in conjunction with one non-expansion unit for applications using an adapter lock unit Failure to utilize one expansion and one non-expansion unit is likely to result in reduced bearing performance.

Bearing Selection Page H-3

Installation Instructions continued

Alternate Lubrication Procedure:

Stop rotating equipment. Add one half the recommended amount shown in Table V. Start the bearing and run for a few minutes. Stop the bearing and add the second half of the recommended amount. A temperature rise after lubrication, sometimes 30°F (17°C), is normal. Bearing should operate at temperatures less than 200°F (94°C) and should not exceed 250° (121°C) for intermittent operation. For lubrication guidelines, see Table VI.

Note: Table VI are general recommendations. Experience and testing may be required for specific applications.

Note: Grease charges in Table V are based on the use of lithium complex thickened grease with a NLGI grade 2 consistency.

Expansion Bearing Applications:

Before installation, make certain proper expansion is accounted for. Expansion units should be placed in a location where relative movement between the bearing insert and the housing can be tolerated. For most applications using expansion type units, the fixed unit (non-expansion unit) is placed at the drive end of the shaft. Use Table VIII to review the total available bearing expansion. If the application requires additional expansion, consult Application Engineering.

NOTICE: One expansion unit is to be used in conjunction with one non-expansion unit for applications using adapter lock units. Failure to utilize one expansion and one non-expansion unit is likely to result in reduced bearing performance.

Table V

Grease Charge for Relubrication				
Bore Size	Grease Charge (Mass - Ounces)			
1 1/8 - 1 1/2	0.20			
1 11/16 - 1 3/4	0.20			
1 15/16 - 2	0.25			
2 3/16	0.40			
2 7/16 - 2 1/2	0.60			
2 11/16 - 3	0.75			
3 3/16 - 3 1/2	1.25			
3 11/16 - 4	2.00			
4 7/16 - 4 1/2	2.75			
4 15/16 - 5	4.00			

Table VI

Relubrication Recommendations							
Environment	Temperature (°F)	Speed (% Catalog Max)	Frequency				
Dirty	Dirty -20 to 250		Daily to 1 Week				
		0 - 25%	4 to 10 Months				
	-20 to 125	26 - 50%					
		51 - 75%	1 Week to 1 Month				
		76 - 100%	Daily to 1 Week				
Clean	125 to 175	0 - 25%	2 to 6 Weeks				
		26 - 50%	1 Week to 1 Month				
		51 - 75%	Daily to 1 Wook				
		76 - 100%	Daily to 1 Week				
	175 to 250	0 - 100%	Daily to 1 Week				

Table VII

Maximum Operational Speed					
Bore Size	Felt Seal (RPM)	Contact Seal (RPM)			
1 1/8 - 1 1/2	4000	3000			
1 11/16 - 1 3/4	4000	2750			
1 15/16 - 2	4000	2500			
2 3/16	3750	2200			
2 7/16 - 2 1/2	3250	1750			
2 11/16 - 3	3000	1600			
3 3/16 - 3 1/2	2500	1350			
3 11/16 - 4	2250	1200			
4 7/16 - 4 1/2	2000	1100			
4 15/16 - 5	1750	900			

Table VIII

Total Available Housing Expansion (inch)						
Bore Size	Setscrew	Adapter Lock				
1 1/8 - 1 1/2	3/16	5/32				
1 11/16 - 3 1/2	1/4	7/32				
3 11/16 - 4	5/16	1/4				
4 7/16 - 5	3/8	9/32				