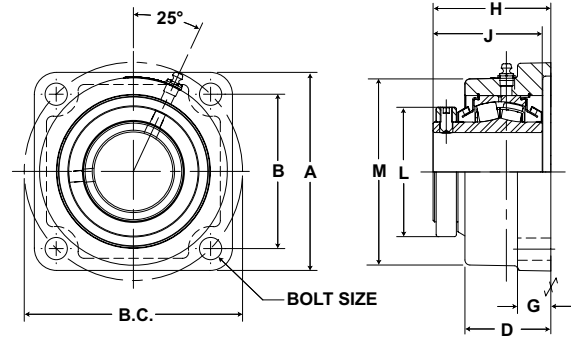


# SEALMASTER® Performance Mounted Spherical Roller Bearings

Mtd. Spherical Bearings



- Rolling Elements:** Spherical Roller
- Housing:** Cast Iron Four Bolt Flange
- Self Alignment:** +/- 2 Degrees
- Lock:** Setscrew
- Seal:** Felt
- Optional Seal:** Double Lip Contact
- Temperature:** -20° to 220° F



## USFB5000 Series Four-Bolt Flange Units - Collar Mount

Bore Diameter inch	Part No.	Basic Dynamic Rating lb/N	Dimensions inch / mm										Unit Wt. lb/kg											
			A	B	B.C.	D	G	H *	J	L	M	Bolt Size												
1 7/16	USFB5000-107	20368	4 5/8	3 17/32	5	2 1/16	3/4	2 53/64	2 3/4	2 49/64	3 7/8	1/2	6.4											
1 1/2	USFB5000-108	90597	117.5	89.7	127.0	52.4	19.1	71.8	69.9	70.2	98.4		2.93											
1 11/16	USFB5000-111	22689	5	3 57/64	5 1/2	2 1/4	3/4	2 61/64	2 7/8	2 3/4	4 1/2	1/2	8.4											
1 3/4	USFB5000-112	100921	127.0	98.8	139.7	57.2	19.1	75.0	73.0	69.9	114.3		3.82											
1 15/16	USFB5000-115	23520	5 3/16	4 1/16	5 3/4	2 1/4	3/4	2 61/64	2 7/8	3	4 3/4	1/2	8.9											
2	USFB5000-200	104617	131.8	103.2	146.1	57.2	19.1	75.0	73.0	76.2	120.7		4.04											
2 3/16	USFB5000-203	28087	5 7/8	4 1/2	6 3/8	2 7/16	13/16	3 7/32	3 1/8	3 1/4	5 1/8	5/8	11.3											
		124931	149.2	114.3	161.9	61.9	20.6	81.8	79.4	82.6	130.2		5.13											
2 7/16	USFB5000-207	44691	6 1/8	4 49/64	6 3/4	2 21/32	1 1/32	3 31/64	3 3/8	4	5 3/4	5/8	15.3											
2 1/2	USFB5000-208	198786	155.6	121.0	171.5	67.5	26.2	88.5	85.7	101.6	146.1		6.95											
2 11/16	USFB5000-211	47447	7 3/16	5 9/16	7 7/8	2 7/8	15/16	3 63/64	3 7/8	4 17/32	6 5/8	3/4	23.1											
2 3/4	USFB5000-212													211044	182.6	141.3	200.0	73.0	23.8	101.2	98.4	115.1	168.3	10.50
2 15/16	USFB5000-215																							
3	USFB5000-300																							
3 3/16	USFB5000-303	72640	8 3/8	6 23/32	9 1/2	3 9/32	1 1/8	4 19/32	4 15/32	5 5/16	7 5/8	3/4	36.0											
3 7/16	USFB5000-307	323103	212.7	170.7	241.3	83.3	28.6	116.7	113.5	134.9	193.7		16.38											
3 1/2	USFB5000-308																							
3 11/16	USFB5000-311	96050	9 1/2	7 19/32	10 3/4	3 11/16	1 1/4	5 5/64	4 15/16	6	8 7/8	7/8	46.1											
3 15/16	USFB5000-315	427230	241.3	192.9	273.1	93.7	31.8	129.0	125.4	152.4	225.4		20.98											
4	USFB5000-400																							

\*For expansion bearings, this dimension can increase by the corresponding value in table VIII on page I-69.

Metric dimensions for reference only.

Not all parts are available from stock. Please contact customer service for availability (800) 626-2120.

For more information on bearing capabilities outside of our standard offering, please contact Application Engineering (800) 626-2093.

### 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	-20 to 250	0 - 100%	Daily to 1 Week
		0 - 25%	4 to 10 Months
Clean	-20 to 125	26 - 50%	1 to 4 Months
		51 - 75%	1 Week to 1 Month
		76 - 100%	Daily to 1 Week
		0 - 25%	2 to 6 Weeks
	125 to 175	26 - 50%	1 Week to 1 Month
		51 - 75%	Daily to 1 Week
76 - 100%			
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

Mtd. Tapered Bearings

