Performance Mounted Spherical Roller Bearings **SEAL**





Rolling Elements: Spherical Roller

Housing: Cast Iron Four Bolt Pillow

Block

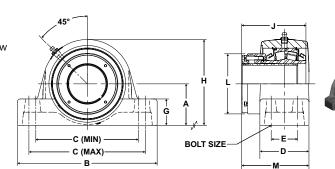
Self Alignment: +/- 2 Degrees

Lock: Adapter

Seal: Felt

Optional Seal: Double Lip Contact

Temperature: -20° to 220° F



USRBF5000A Series Four-Bolt Base Pillow Blocks - Adapter Mount

Bore		Basic	Dimensions inch / mm												
Diameter inch	Part No. Dynamic Rating Ib/N	Rating	A	В	Min.	Max.	D	Е	G	н	J	L	M *	Bolt Size	Unit Wt. lb/kg
2 7/16	USRBF5000A-207	44691	2 3/4	9 1/4	6 7/8	7 5/8	3 1/4	1 3/4	1 3/4	5 11/16	4 5/16	3 63/64	4 39/64	1.9	18.5
2 1/2	USRBF5000A-208	198786	69.9	235.0	174.6	193.7	82.6	44.5	44.5	144.5	109.5	101.2	117.1	1/2	8.42
2 11/16	USRBF5000A-211														
2 3/4	USRBF5000A-212	47447	3 1/4	10 7/16	7 7/8	8 3/8	3 3/4	1 7/8	2 1/4	6 7/16	4 31/64	4 25/64	4 29/32	5/8	26.4
2 15/16	USRBF5000A-215	211044	82.6	265.1	200.0	212.7	95.3	47.6	57.2	163.5	113.9	111.5	124.6	5/8	12.02
3	USRBF5000A-300														
3 3/16	USRBF5000A-303														
3 7/16	USRBF5000A-307	72640	3 3/4	13	9 1/4	10 3/4	3 7/8	2	2 1/4	7 1/2	5 35/64	5 15/32	5 11/16	3/4	41.0
3 1/2	USRBF5000A-308	323103	95.3	330.2	235.0	273.1	98.4	50.8	57.2	190.5	140.9	138.9	144.5		18.63
3 11/16	USRBF5000A-311														
3 15/16	USRBF5000A-315	96050	4 1/4	15 1/4	11	13	4 1/2	2 1/4	2 5/8	8 9/16	5 15/16	5 13/16	6 13/64	3/4	58.2
4	USRBF5000A-400	427230	108.0	387.4	279.4	330.2	114.3	57.2	66.7	217.5	150.8	147.6	157.6		26.47
4 7/16	USRB5000A-407	111537	4 3/4	16 1/16	13	14	4 5/8	2 1/2	2 3/4	9 3/8	6 27/64	6 11/32	6 31/64	0/4	68.2
4 1/2	USRB5000A-408	496117	120.7	408.0	330.2	355.6	117.5	63.5	69.9	238.1	163.1	161.1	164.7	3/4	31.01
4 15/16	USRB5000A-415	158816	5 1/2	18 1/2	15	16	5 1/8	2 3/4	3	10 7/8	7 1/8	7 13/64	7 3/32	7/8	107.8
5	USRB5000A-500	706414	139.7	469.9	381.0	406.4	130.2	69.9	76.2	276.2	181.0	183.0	180.2	110	48.99

*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.

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