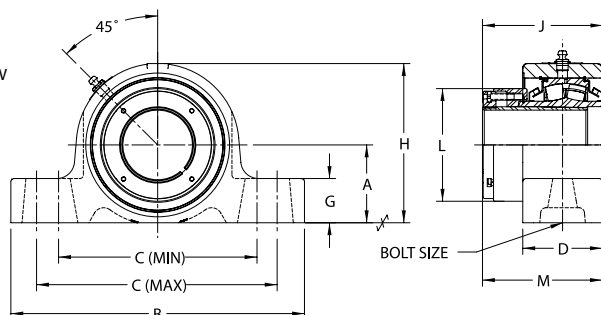


# Performance Mounted Spherical Roller Bearings **SEALMASTER®**



**Rolling Elements:** Spherical Roller  
**Housing:** Ductile Iron Two Bolt Pillow Block  
**Self Alignment:** +/- 2 Degrees  
**Lock:** Adapter  
**Seal:** Felt  
**Optional Seal:** Double Lip Contact  
**Temperature:** -20° to 220° F



## USRBE5000A Series Two-Bolt Base Pillow Blocks - Adapter Mount, Type E Mounting Dimensions

Bore Diameter	Part No.	Basic Dynamic Rating lb/N	Dimensions inch / mm											Unit Wt. lb/kg
			A	B	C		D	G	H	J	L	M *	Bolt Size	
	Min.				Max.									
1 15/16	USRBE5000A-115	23520	2 1/4	8 7/8	6	7 1/8	2 7/16	1 5/16	4 17/32	3 1/2	3 11/64	3 19/32	5/8	11.9
2	USRBE5000A-200	104617	57.2	225.4	152.4	181.0	61.9	33.3	115.1	88.9	80.6	91.3		5.41
2 3/16	USRBE5000A-203	28087	2 1/2	9 5/8	6 1/2	7 7/8	2 1/2	1 7/16	4 31/32	3 7/8	3 7/16	3 7/8	5/8	14.3
		124931	63.5	244.5	165.1	200.0	63.5	36.5	126.2	98.4	87.3	98.4		6.50
2 7/16	USRBE5000A-207	44691	2 3/4	10 3/8	6 7/8	8 5/8	2 13/16	1 9/16	5 5/8	4 5/16	3 63/64	4 19/64	5/8	20.3
2 1/2	USRBE5000A-208	198786	69.9	263.5	174.6	219.1	71.4	39.7	142.9	109.5	101.2	109.1		9.23
2 11/16	USRBE5000A-211	47447 211044											3/4	22.4 10.18
2 3/4	USRBE5000A-212													
2 15/16	USRBE5000A-215													
3	USRBE5000A-300													
3 3/16	USRBE5000A-303	72640	3 3/4	13 1/2	9 3/8	11 1/4	3 1/8	2 1/16	7 3/8	5 35/64	5 15/32	5 19/64	7/8	40.7
3 7/16	USRBE5000A-307	323103	95.3	342.9	238.1	285.8	79.4	52.4	187.3	140.9	138.9	134.5		18.50
3 1/2	USRBE5000A-308													
3 11/16	USRBE5000A-311	96050	4 1/8	14 1/4	10	11 3/4	3 9/16	2 1/4	8 1/2	5 15/16	5 13/16	5 23/32	1	56.2
3 15/16	USRBE5000A-315	427230	104.8	362.0	254.0	298.5	90.5	57.2	215.9	150.8	147.6	145.3		25.55
4	USRBE5000A-400													

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