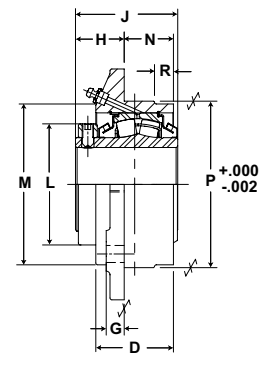
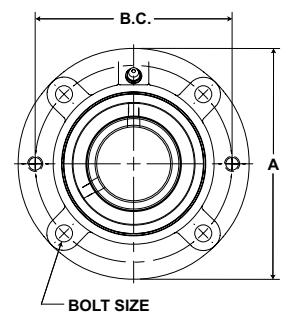


SEALMASTER® Performance Mounted Spherical Roller Bearings

Mtd. Spherical Bearings



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



USFC5000 Series Piloted Flange Cartridge Units - Collar Mount

| Bore Diameter inch | Part No. | Basic Dynamic Rating lb/N | Dimensions inch / mm | | | | | | | | | | | Unit Wt. lb/kg | |
|-----------------------|--------------|------------------------------|----------------------|-------|--------|-------|---------|---------|---------|--------|---------|-------|-------|-------------------|-----------|
| | | | A | B.C. | D | G | H* | J | K | M | N* | P | R | | Bolt Size |
| 1 7/16 | USFC5000-107 | 20368 | 5 1/4 | 4 3/8 | 2 1/16 | 15/32 | 1 7/16 | 2 3/4 | 2 49/64 | 3 1/2 | 1 9/32 | 3 5/8 | - | 3/8 | 6.4 |
| 1 1/2 | USFC5000-108 | 91249 | 133.4 | 111.1 | 52.4 | 11.9 | 36.5 | 69.9 | 70.2 | 88.9 | 32.5 | 92.1 | - | 3/8 | 2.93 |
| 1 11/16 | USFC5000-111 | 22689 | 6 1/8 | 5 1/8 | 2 1/4 | 15/32 | 1 27/64 | 2 7/8 | 2 3/4 | 4 | 1 7/16 | 4 1/4 | 9/16 | 7/16 | 7.4 |
| 1 3/4 | USFC5000-112 | 101647 | 155.6 | 130.2 | 57.2 | 11.9 | 36.1 | 73.0 | 69.9 | 101.6 | 36.5 | 108.0 | 14.3 | 7/16 | 3.37 |
| 1 15/16 | USFC5000-115 | 23520 | 6 3/8 | 5 3/8 | 2 1/4 | 17/32 | 1 25/64 | 2 7/8 | 3 | 4 3/8 | 1 15/32 | 4 1/2 | 5/8 | 7/16 | 8.1 |
| 2 | USFC5000-200 | 105370 | 161.9 | 136.5 | 57.2 | 13.5 | 35.3 | 73.0 | 76.2 | 111.1 | 37.3 | 114.3 | 15.9 | 7/16 | 3.70 |
| 2 3/16 | USFC5000-203 | 28087 | 7 1/8 | 6 | 2 3/8 | 17/32 | 1 19/32 | 3 1/8 | 3 1/4 | 4 3/4 | 1 15/32 | 5 | 15/32 | 1/2 | 10.2 |
| | | 125830 | 181.0 | 152.4 | 60.3 | 13.5 | 40.5 | 79.4 | 82.6 | 120.7 | 37.3 | 127.0 | 11.9 | 1/2 | 4.66 |
| 2 7/16 | USFC5000-207 | 44691 | 7 5/8 | 6 1/2 | 2 9/16 | 19/32 | 1 19/32 | 3 3/8 | 4 | 5 5/16 | 1 5/8 | 5 1/2 | 5/8 | 1/2 | 14.4 |
| 2 1/2 | USFC5000-208 | 200216 | 193.7 | 165.1 | 65.1 | 15.1 | 40.5 | 85.7 | 101.6 | 134.9 | 41.3 | 139.7 | 15.9 | 1/2 | 6.53 |
| 2 11/16 | USFC5000-211 | | | | | | | | | | | | | | |
| 2 3/4 | USFC5000-212 | 47447 | 8 3/4 | 7 1/2 | 2 7/8 | 23/32 | 2 | 3 7/8 | 4 17/32 | 6 | 1 27/32 | 6 3/8 | 19/32 | 5/8 | 21.8 |
| 2 15/16 | USFC5000-215 | 212563 | 222.3 | 190.5 | 73.0 | 18.3 | 50.8 | 98.4 | 115.1 | 152.4 | 46.8 | 161.9 | 15.1 | 5/8 | 9.92 |
| 3 | USFC5000-300 | | | | | | | | | | | | | | |
| 3 3/16 | USFC5000-303 | 72640 | 10 1/4 | 8 5/8 | 3 1/8 | 53/64 | 2 13/32 | 4 15/32 | 5 5/16 | 7 3/16 | 1 27/32 | 7 3/8 | 5/8 | 3/4 | 33.6 |
| 3 7/16 | USFC5000-307 | 325427 | 260.4 | 219.1 | 79.4 | 21.0 | 61.1 | 113.5 | 134.9 | 182.6 | 46.8 | 187.3 | 15.9 | 3/4 | 15.25 |
| 3 1/2 | USFC5000-308 | | | | | | | | | | | | | | |
| 3 11/16 | USFC5000-311 | 96050 | 10 7/8 | 9 3/8 | 3 1/2 | 31/32 | 2 21/32 | 4 15/16 | 6 | 7 3/4 | 2 1/16 | 8 1/8 | 9/16 | 3/4 | 42.3 |
| 3 15/16 | USFC5000-315 | 430304 | 276.2 | 238.1 | 88.9 | 24.6 | 67.5 | 125.4 | 152.4 | 196.9 | 52.4 | 206.4 | 14.3 | 3/4 | 19.25 |
| 4 | USFC5000-400 | | | | | | | | | | | | | | |

*For expansion bearings, the sum of dimension "H" and "N" 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 |
| 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 |

Mtd. Tapered Bearings

