



HOW TO ORDER/NOMENCLATURE

E-Z KLEEN Polymer and Stainless Steel Housed Mounted Bearings

HOW TO ORDER

There are two ways to specify DODGE E-Z KLEEN ball bearings. Most of the product offerings have part numbers with listings shown throughout this catalog. Use of part numbers ensures accurate order processing.

When part numbers are not shown, the product may be specified by description or part name. This method is used when ordering units that include modifications or options.

NOMENCLATURE

P2B - SCHUEZ - 104S = PCR

Modification Or Feature:

- CR = Corrosion resistant insert
- MOD = Modified
- P = Polymer housing
- SH = Stainless Steel Housing

Shaft Size:

Inches:

- First digit = Number of inches
- Second & third digits = Number of sixteenths of an inch
- 104 = Indicates 1-4/16 or 1-1/4

- S = Next smaller ring size. E.g. 1-1/4 206 would be written as 104S
- L = Next larger ring size. E.g. 1/2 204 would be written as 008L

Metric:

- First two digits = number of millimeters
- M = Metric

Bearing Type:

- SC = Wide inner ring, normal duty, 65° setscrew locking
- DL = Wide inner ring, normal duty, concentric clamp collar
- GT = Wide inner ring, normal duty, thin wall adapter locking
- PS = Polymer Sleeve Insert

Suffixes to the above:

- EZ = E-Z KLEEN/ULTRA KLEEN (used with polymer or stainless steel housed units)
- BEZ = Low backing height pillow block, E-Z KLEEN/ULTRA KLEEN
- UEZ = higher back pillow block, E-Z KLEEN/ULTRA KLEEN (for interchangeability with competitive pillow blocks)

Housing:

- F2B = 2-bolt flange
- F4B = 4-bolt flange
- FB = Flanged bracket
- INS = Insert
- P2B = Pillow block, 2-bolt base
- TB = Tapped base pillow block
- WSTU = Wide slot take-up

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Bearing Reference Guide

ULTRA KLEEN

E-Z KLEEN

Extreme Duty

Setscrew Ball Bearing

GRIP TIGHT

D-LOK Ball Bearing



SELECTION

Selection of DODGE E-Z KLEEN Polymer and Stainless Steel Housed Ball Bearings

DODGE E-Z KLEEN mounted ball bearings are primarily designed for radial loading. However, they have the capacity to carry thrust loads and combined radial/thrust loads. The maximum recommended load which can be applied is limited by various components in the system, such as bearing, housing, shaft attachments, speed and life requirements as listed in this catalog and the instruction manual that accompanies each bearing. DODGE E-Z KLEEN ball bearings have been applied successfully when these limits have been exceeded under controlled operating conditions. Contact DODGE Engineering for applications which exceed these recommendations.

Select a bearing from the Selection Table that has a radial load rating at the operating speed equal to or greater than the calculated Equivalent Radial Load for a desired L₁₀ life. This simple method is all that is required for the majority of general applications and provides for occasional average shock loads.

L₁₀ Hours Life – The life which may be expected for at least 90% of a given group of bearings operating under identical conditions.

Heavy Service – For heavy shock loads, frequent shock loads or severe vibrations, add up to 50% (according to severity of conditions) to the Equivalent Radial Load to obtain a Modified Equivalent Radial Load. Consult Application Engineering for additional selection assistance.

A maximum thrust load value of C/10 is recommended as a guide for general applications and will give adequate L₁₀ life. If the thrust load exceeds this limit, it is advisable to use auxiliary thrust carrying devices, such as a shaft shoulder, snap ring, or a thrust collar. Where substantial radial load pulls the housing away from the mounting base, both the hold-down bolts and housing must be of adequate strength. Auxiliary load carrying devices, such as shear bars, are advisable for side or end-loading of pillow blocks and radial loads for flange units.

To determine the L₁₀ hours life for loads and RPMs not listed use the following equation:

$$L_{10} = \left(\frac{C}{P}\right)^3 \times \left(\frac{16667}{n}\right)$$

Where:

L₁₀ = Life, hours

C = Dynamic Capacity, lbs. or N

P = Equivalent Radial Load, lbs. or N

n = Revolutions per minute

When the load on a ball bearing is solely a radial load with no thrust (axial) load, the Equivalent Radial Load (P) is equal to the actual radial load. However, when a thrust (axial) load is applied, the radial and thrust loads applied must be converted into an Equivalent Radial Load. Use X (radial factor) and Y (thrust factor) from Table 1 to convert the actual applied thrust and radial loads to an Equivalent Radial Load which has the same effect on the life of a bearing as a radial load of this magnitude.

$$P = XF_R + YF_A$$

Where:

P = Equivalent Radial Load, lbs.

F_R = Radial load, lbs.

F_A = Thrust load, lbs.

e = Thrust load to radial load factor (Table 1)

X = Radial load factor (Table 1)

Y = Thrust Factor (Table 1)

C₀ = Basic static capacity (Selection Table)

To find X and Y, first calculate F_A/C₀ to determine e.

Calculate F_A/F_R and compare to e to determine the X and Y factors to use from Table 1.

Shaft Tolerances

| Normal Shaft Size Inches | Recommended Shaft Tolerances SC & D-LOK Products (Inches) | Recommended Shaft Tolerances GRIP TIGHT Ball Bearings (Inches) |
|--------------------------|---|--|
| Up to 1-1/2" | +0.000 - .0005 | +0.000 -0.002 |
| Over 1-1/2 to 2" | +0.000 - .0010 | +0.000 - .0003 |

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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SELECTION

Selection of DODGE E-Z KLEEN Polymer and Stainless Steel Housed Ball Bearings

Table 1

| F_A/C_0 | e | Radial/Thrust Factors | | | |
|-----------|------|---|---|--------------------------------|------|
| | | If F_A/F_R is equal to or less than e | | If F_A/F_R is greater than e | |
| | | $F_A/F_R \leq e$ | | $F_A/F_R > e$ | |
| | | X | Y | X | Y |
| 0.014 | 0.19 | 1 | 0 | 0.56 | 2.30 |
| 0.021 | 0.21 | 1 | 0 | 0.56 | 2.15 |
| 0.028 | 0.22 | 1 | 0 | 0.56 | 1.99 |
| 0.042 | 0.24 | 1 | 0 | 0.56 | 1.85 |
| 0.056 | 0.26 | 1 | 0 | 0.56 | 1.71 |
| 0.070 | 0.27 | 1 | 0 | 0.56 | 1.63 |
| 0.084 | 0.28 | 1 | 0 | 0.56 | 1.55 |
| 0.110 | 0.30 | 1 | 0 | 0.56 | 1.45 |
| 0.170 | 0.34 | 1 | 0 | 0.56 | 1.31 |
| 0.280 | 0.38 | 1 | 0 | 0.56 | 1.15 |
| 0.420 | 0.42 | 1 | 0 | 0.56 | 1.04 |
| 0.560 | 0.44 | 1 | 0 | 0.56 | 1.00 |

Lubrication – DODGE Ball Bearings are lubricated at the factory and are ready to run. The bearings are initially lubricated with an aluminum complex based, H1 Food Grade grease and should be relubricated with the same or some equivalent. For high speeds, high loads, extreme temperatures and other abnormal operating conditions, special greases may be required. Contact DODGE Application Engineering for recommendations on these types of applications.

Misalignment – DODGE Ball Bearings are designed to allow a maximum of 2° static misalignment. These bearings are not suitable for dynamic misalignment. To ensure good alignment, mounting surfaces must be checked for flatness and must lie in the same plane. When tightening base bolts, each bolt should be alternately tightened in incremental torque values until full torque is achieved to prevent the angular shifting of the pillow block that occurs when one bolt is tightened to its full torque. Shimming may be required to minimize misalignment.

Substitute all known values into the Equivalent Radial Load equation. The Equivalent Radial Load (P) thus determined can be used in the L10 life formula or compared to the allowable Equivalent Radial Load rating desired in the expanded rating chart to select a bearing (Selection Table).

If calculated value of P is less than F_R , use $P=F_R$.

NOTE: Bearing analysis program “BEST” is available on www.ptwizard.com

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SELECTION

Selection of DODGE E-Z KLEEN Polymer and Stainless Steel Housed Ball Bearings

Bearing Reference Guide

ULTRA KLEEN

E-Z KLEEN

Extreme Duty

Setscrew Ball Bearing

GRIP TIGHT

D-LOK Ball Bearing

| Recommended Torque | | | | | | | | | | | | | |
|--------------------|----------------------|------------------------------|------------|-------------------------------------|----------------|---------------|------------------------|----------------|-----------------------------|--|------------|---|------------|
| Setscrews | | | | | D-LOK | | | Mounting Bolts | | | | | |
| Setscrew Size | Key Hex Across Flats | ◆ Recommended Torque | | | Cap Screw Size | Recom. Torque | EZ-KLEEN Recom. Torque | Metal Housings | | EZ-KLEEN Housed Bearings | | | |
| | | Standard Ball Bearing Insert | | Corrosion Resistant Stainless Steel | | | | Bolt Size | Recom. Dry Torque (Grade 2) | 2-Bolt PB, 2 & 4 Bolt Fig. and Fig. Brackets | | Tapped Base PB | |
| | | Min | Max | | | | | | | Bolt Size | Torque ① | Bolt Size | Torque ② |
| (in.) | (in.) | (in.-lbs.) | (in.-lbs.) | (in.-lbs.) | (in.) | (in.Olbs.) | (in.-lbs.) | (in.) | (in.Olbs.) | (in.) | (in.-lbs.) | (in.) | (in.-lbs.) |
| #10 | 3/32 | 28 | 33 | 25 | #8-32 | 58 | 46 | 3/8-16 | 240 | 3/8-16 | 225 | 3/8-16 | 175 |
| 1/4 | 1/8 | 66 | 80 | 60 | #10-32 | 90 | 72 | 7/16-14 | 384 | 7/16-14 | 350 | 7/16-14 | 350 |
| 5/16 | 5/32 | 126 | 156 | 117 | 1/4-28 | 180 | 144 | 1/2-13 | 600 | 1/2-13 | 500 | 1/2-13 | 400 |
| 3/8 | 3/16 | 228 | 275 | 206 | 5/16-24 | 400 | 320 | 5/8-11 | 1200 | 9/16-12 | 650 | | |
| 7/16 | 7/32 | 342 | 428 | 321 | 3/8-24 | 750 | 600 | 3/4-10 | 1950 | 5/8-11 | 1000 | | |
| | | | | | | | | 7/8-9 | 2890 | | | | |
| (mm) | (mm) | (N-m) | (N-m) | (N-m) | (mm) | (N-m) | (N-m) | (mm) | (N-m) | (mm) | (N-m) | | |
| M5 | 2.5 | 3.2 | 3.7 | 2.8 | M4 | 585 | 4.68 | M10 | 29 | M8 | 15 | ① Torque for Austenitic (18-8) Stainless | |
| M6 | 3 | 6.2 | 7.7 | 5.8 | M5 | 10.75 | 8.6 | M12 | 50 | M10 | 25 | | |
| M8 | 4 | 14.2 | 17.8 | 13.4 | M6 | 20.5 | 16.4 | M16 | 124 | M12 | 50 | ② Max. torque values published. Do not exceed | |
| M10 | 5 | 26 | 31 | 23 | M8 | 45 | 36 | M20 | 238 | M14 | 75 | | |
| M12 | 6 | 46 | 57 | 43 | | | | M22 | 322 | M18 | 125 | | |

Lubrication

High Speed Operation - In the higher speed ranges, too much grease will cause over-heating. The amount of grease that the bearing will take for a particular high speed application can only be determined by experience. If excess grease in the bearing causes overheating, it will be necessary to remove grease fitting to permit excess grease to escape. The bearing has been greased at the factory and is ready to run. When establishing a relubrication schedule, note that a small amount of grease at frequent intervals is preferable to a large amount at infrequent intervals.

◆ **NOTE:** Dodge does not recommend the use of oils or locking agents on setscrew threads. However, if utilized, the the minimum installation torque values should be followed.

Lubrication Guide

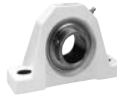
Use a No. 2 Lithium complex base grease or equivalent*

| Hours Run per Day | Suggested Lubrication Period in Weeks | | | | | | | |
|-------------------|---------------------------------------|----------------|----------------|-----------------|------------------|------------------|------------------|------------------|
| | 1 to 250 RPM | 251 to 500 RPM | 501 to 750 RPM | 751 to 1000 RPM | 1001 to 1500 RPM | 1501 to 2000 RPM | 2001 to 2500 RPM | 2501 to 3000 RPM |
| 8 | 12 | 12 | 10 | 7 | 5 | 4 | 3 | 2 |
| 16 | 12 | 7 | 5 | 4 | 2 | 2 | 1 | 1 |
| 24 | 10 | 5 | 3 | 2 | 1 | 1 | 1 | 1 |

* For EZ-KLEEN series bearings, use an aluminum complex base grease.

Lubrication recommendations are intended for standard products applied in general operating conditions. For modified products, high temperature applications, and other anomalous applications contact product engineering at 864-284-5700.

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EASY SELECTION

E-Z KLEEN SC and DL

| Ring Size | Shaft Size | | Dynamic Capacity C, lbs. | Static Capacity C ₀ , lbs. | L ₁₀ Life - Hours | Allowable Equivalent Radial Load Rating (lbs.) at Various RPM* | | | | | | | | | | | |
|-----------|--|--------------------------|--------------------------|---------------------------------------|------------------------------|--|------|------|-----|-----|------|------|------|------|------|------|------|
| | SC | SCM | | | | 50 | 150 | 250 | 500 | 750 | 1000 | 1250 | 1500 | 1600 | 1750 | 2000 | 2250 |
| 204 | 1/2 5/8 3/4 13/16 20mm | | 2899 | 1482 | 20000 | 741 | 513 | 433 | 344 | 300 | 273 | 253 | 238 | 233 | 226 | 217 | 208 |
| | | | | | 30000 | 647 | 449 | 378 | 300 | 262 | 238 | 221 | 208 | 204 | 198 | 189 | 182 |
| | | | | | 40000 | 588 | 408 | 344 | 273 | 238 | 217 | 201 | 189 | 185 | 180 | 172 | 165 |
| | | | | | 60000 | 513 | 356 | 300 | 238 | 208 | 189 | 176 | 165 | 162 | 157 | 150 | 144 |
| | | | | | 100000 | 433 | 300 | 253 | 201 | 176 | 160 | 148 | 139 | 136 | 132 | 127 | 122 |
| 205 | 7/8 15/16 1 25mm | | 3146 | 1769 | 20000 | 804 | 557 | 470 | 373 | 326 | 296 | 275 | 259 | 253 | 246 | 235 | 226 |
| | | | | | 30000 | 702 | 487 | 411 | 326 | 285 | 259 | 240 | 226 | 221 | 215 | 205 | 197 |
| | | | | | 40000 | 638 | 442 | 373 | 296 | 259 | 235 | 218 | 205 | 201 | 195 | 187 | 179 |
| | | | | | 60000 | 557 | 386 | 326 | 259 | 226 | 205 | 191 | 179 | 176 | 170 | 163 | 157 |
| | | | | | 100000 | 470 | 326 | 275 | 218 | 191 | 173 | 161 | 151 | 148 | 144 | 137 | 132 |
| 206 | 1-1/16 1-1/8 1-3/16 1-1/4 30mm | 1 25mm | 4368 | 2538 | 20000 | 1116 | 774 | 652 | 518 | 452 | 411 | 382 | 359 | 351 | 341 | 326 | 314 |
| | | | | | 30000 | 975 | 676 | 570 | 452 | 395 | 359 | 333 | 314 | 307 | 298 | 285 | 274 |
| | | | | | 40000 | 886 | 614 | 518 | 411 | 359 | 326 | 303 | 285 | 279 | 271 | 259 | 249 |
| | | | | | 60000 | 774 | 536 | 452 | 359 | 314 | 285 | 265 | 249 | 244 | 237 | 226 | 217 |
| | | | | | 100000 | 652 | 452 | 382 | 303 | 265 | 240 | 223 | 210 | 206 | 199 | 191 | 183 |
| 207 | 1-1/4 1-5/16 1-3/8 1-7/16 35mm | 1-3/16 1-1/4 30mm | 5759 | 3461 | 20000 | 1471 | 1020 | 860 | 683 | 596 | 542 | 503 | 473 | 463 | 450 | 430 | 414 |
| | | | | | 30000 | 1285 | 891 | 752 | 596 | 521 | 473 | 439 | 414 | 405 | 393 | 376 | 361 |
| | | | | | 40000 | 1168 | 810 | 683 | 542 | 473 | 430 | 399 | 376 | 368 | 357 | 341 | 328 |
| | | | | | 60000 | 1020 | 707 | 596 | 473 | 414 | 376 | 349 | 328 | 321 | 312 | 298 | 287 |
| | | | | | 100000 | 860 | 596 | 503 | 399 | 349 | 317 | 294 | 277 | 271 | 263 | 252 | 242 |
| 208 | 1-1/2 1-5/8 40mm | 1-7/16 1-1/2▲ 35mm | 7332 | 4475 | 20000 | 1873 | 1299 | 1095 | 869 | 759 | 690 | 641 | 603 | 590 | 573 | 548 | 527 |
| | | | | | 30000 | 1636 | 1134 | 957 | 759 | 663 | 603 | 560 | 527 | 515 | 500 | 478 | 460 |
| | | | | | 40000 | 1487 | 1031 | 869 | 690 | 603 | 548 | 508 | 478 | 468 | 454 | 435 | 418 |
| | | | | | 60000 | 1299 | 900 | 759 | 603 | 527 | 478 | 444 | 418 | 409 | 397 | 380 | 365 |
| | | | | | 100000 | 1095 | 759 | 641 | 508 | 444 | 403 | 375 | 352 | 345 | 335 | 320 | 308 |
| 209 | 1-5/8 1-11/16 1-3/4 45mm | 1-1/2 40mm | 7891 | 4906 | 20000 | 2016 | 1398 | 1179 | 936 | 817 | 743 | 689 | 649 | 635 | 616 | 589 | 567 |
| | | | | | 30000 | 1761 | 1221 | 1030 | 817 | 714 | 649 | 602 | 567 | 555 | 538 | 515 | 495 |
| | | | | | 40000 | 1600 | 1109 | 936 | 743 | 649 | 589 | 547 | 515 | 504 | 489 | 468 | 450 |
| | | | | | 60000 | 1398 | 969 | 817 | 649 | 567 | 515 | 478 | 450 | 440 | 427 | 409 | 393 |
| | | | | | 100000 | 1179 | 817 | 689 | 547 | 478 | 434 | 403 | 379 | 371 | 360 | 345 | 331 |
| 210 | 1-15/16 2 50mm | 1-11/16 1-3/4 45mm | 7891 | 5213 | 20000 | 2016 | 1398 | 1179 | 936 | 817 | 743 | 689 | 649 | 635 | 616 | 589 | 567 |
| | | | | | 30000 | 1761 | 1221 | 1030 | 817 | 714 | 649 | 602 | 567 | 555 | 538 | 515 | 495 |
| | | | | | 40000 | 1600 | 1109 | 936 | 743 | 649 | 589 | 547 | 515 | 504 | 489 | 468 | 450 |
| | | | | | 60000 | 1398 | 969 | 817 | 649 | 567 | 515 | 478 | 450 | 440 | 427 | 409 | 393 |
| | | | | | 100000 | 1179 | 817 | 689 | 547 | 478 | 434 | 403 | 379 | 371 | 360 | 345 | 331 |

* Slight interference fit required when operating on the right of the heavy line or in the shaded area.

▲ Piloted flange only

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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Bearing Reference Guide

ULTRA KLEEN

E-Z KLEEN

Extreme Duty

Setscrew Ball Bearing

GRIP TIGHT

D-LOK Ball Bearing



EASY SELECTION

E-Z KLEEN SC and DL (continued)

| Ring Size | Shaft Size | | Dynamic Capacity C, lbs. | Static Capacity C ₀ , lbs. | L ₁₀ Life - Hours | Allowable Equivalent Radial Load Rating (lbs.) at Various RPM* | | | | | | | | | | | |
|-----------|--|--------------------------|--------------------------|---------------------------------------|------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|
| | SC | SCM | | | | 2500 | 2750 | 3000 | 3250 | 3500 | 3600 | 4000 | 4500 | 5000 | 5250 | 5500 | 6000 |
| 204 | 1/2 5/8 3/4 13/16 20mm | | 2899 | 1482 | 20000 | 201 | 195 | 189 | 184 | 180 | 178 | 172 | 165 | 160 | 157 | 155 | 150 |
| | | | | | 30000 | 176 | 170 | 165 | 161 | 157 | 155 | 150 | 144 | 139 | 137 | 135 | 131 |
| | | | | | 40000 | 160 | 155 | 150 | 146 | 143 | 141 | 136 | 131 | 127 | 125 | 123 | 119 |
| | | | | | 60000 | 139 | 135 | 131 | 128 | 125 | 123 | 119 | 115 | 111 | 109 | 107 | 104 |
| | | | | | 100000 | 118 | 114 | 111 | 108 | 105 | 104 | 101 | 97 | 93 | 92 | 90 | 88 |
| 205 | 7/8 15/16 1 25mm | | 3146 | 1769 | 20000 | 218 | 211 | 205 | 200 | 195 | 193 | 187 | 179 | 173 | 170 | 168 | 163 |
| | | | | | 30000 | 191 | 185 | 179 | 175 | 170 | 169 | 163 | 157 | 151 | 149 | 147 | 142 |
| | | | | | 40000 | 173 | 168 | 163 | 159 | 155 | 153 | 148 | 142 | 137 | 135 | 133 | 129 |
| | | | | | 60000 | 151 | 147 | 142 | 139 | 135 | 134 | 129 | 124 | 120 | 118 | 116 | 113 |
| | | | | | 100000 | 128 | 124 | 120 | 117 | 114 | 113 | 109 | 105 | 101 | 100 | 98 | 95 |
| 206 | 1-1/16 1-1/8 1-3/16 1-1/4 30mm | 1 25mm | 4368 | 2538 | 20000 | 303 | 293 | 285 | 278 | 271 | 268 | 259 | 249 | 240 | 237 | | |
| | | | | | 30000 | 265 | 256 | 249 | 242 | 237 | 234 | 226 | 217 | 210 | 207 | | |
| | | | | | 40000 | 240 | 233 | 226 | 220 | 215 | 213 | 206 | 198 | 191 | 188 | | |
| | | | | | 60000 | 210 | 203 | 198 | 192 | 188 | 186 | 180 | 173 | 167 | 164 | | |
| | | | | | 100000 | 177 | 172 | 167 | 162 | 158 | 157 | 151 | 146 | 141 | 138 | | |
| 207 | 1-1/4 1-5/16 1-3/8 1-7/16 35mm | 1-3/16 1-1/4 30mm | 5759 | 3461 | 20000 | 399 | 387 | 376 | 366 | 357 | 354 | 341 | 328 | | | | |
| | | | | | 30000 | 349 | 338 | 328 | 320 | 312 | 309 | 298 | 287 | | | | |
| | | | | | 40000 | 317 | 307 | 298 | 290 | 283 | 281 | 271 | 261 | | | | |
| | | | | | 60000 | 277 | 268 | 261 | 254 | 247 | 245 | 237 | 228 | | | | |
| | | | | | 100000 | 234 | 226 | 220 | 214 | 209 | 207 | 200 | 192 | | | | |
| 208 | 1-1/2 1-5/8 40mm | 1-7/16 1-1/2▲ 35mm | 7332 | 4475 | 20000 | 508 | 492 | 478 | 466 | 454 | 450 | 435 | | | | | |
| | | | | | 30000 | 444 | 430 | 418 | 407 | 397 | 393 | 380 | | | | | |
| | | | | | 40000 | 403 | 391 | 380 | 370 | 361 | 357 | 345 | | | | | |
| | | | | | 60000 | 352 | 341 | 332 | 323 | 315 | 312 | 301 | | | | | |
| | | | | | 100000 | 297 | 288 | 280 | 272 | 266 | 263 | 254 | | | | | |
| 209 | 1-5/8 1-11/16 1-3/4 45mm | 1-1/2 40mm | 7891 | 4906 | 20000 | 547 | 530 | 515 | 501 | 489 | 485 | 468 | | | | | |
| | | | | | 30000 | 478 | 463 | 450 | 438 | 427 | 423 | 409 | | | | | |
| | | | | | 40000 | 434 | 421 | 409 | 398 | 388 | 385 | 371 | | | | | |
| | | | | | 60000 | 379 | 367 | 357 | 348 | 339 | 336 | 324 | | | | | |
| | | | | | 100000 | 320 | 310 | 301 | 293 | 286 | 283 | 274 | | | | | |
| 210 | 1-15/16 2 50mm | 1-11/16 1-3/4 45mm | 7891 | 5213 | 20000 | 547 | 530 | 515 | 501 | 489 | 485 | | | | | | |
| | | | | | 30000 | 478 | 463 | 450 | 438 | 427 | 423 | | | | | | |
| | | | | | 40000 | 434 | 421 | 409 | 398 | 388 | 385 | | | | | | |
| | | | | | 60000 | 379 | 367 | 357 | 348 | 339 | 336 | | | | | | |
| | | | | | 100000 | 320 | 310 | 301 | 293 | 286 | 283 | | | | | | |

* Slight interference fit required when operating on the right of the heavy line or in the shaded area.

▲ Piloted flange only

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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EASY SELECTION

E-Z KLEEN GT

| Ring Size | Shaft Size | | Dynamic Capacity C _r lbs. | Static Capacity C ₀ lbs. | Allowable Equivalent Radial Load Rating (lbs.) at Various RPM* | | | | | | | |
|-----------|-----------------------------------|--------------------------|--------------------------------------|-------------------------------------|--|------|------|------|-----|-----|------|------|
| | GT | GTM | | | L ₁₀ Life - Hours | 50 | 150 | 250 | 500 | 750 | 1000 | 1500 |
| 204 | 3/4 20mm | | 2899 | 1482 | 20000 | 741 | 513 | 433 | 344 | 300 | 273 | 238 |
| | | | | | 30000 | 647 | 449 | 378 | 300 | 262 | 238 | 208 |
| | | | | | 40000 | 588 | 408 | 344 | 273 | 238 | 217 | 189 |
| | | | | | 60000 | 513 | 356 | 300 | 238 | 208 | 189 | 165 |
| | | | | | 100000 | 433 | 300 | 253 | 201 | 176 | 160 | 139 |
| 205 | 7/8 15/16 1 25mm | 3/4 | 3146 | 1769 | 20000 | 804 | 557 | 470 | 373 | 326 | 296 | 259 |
| | | | | | 30000 | 702 | 487 | 411 | 326 | 285 | 259 | 226 |
| | | | | | 40000 | 638 | 442 | 373 | 296 | 259 | 235 | 205 |
| | | | | | 60000 | 557 | 386 | 326 | 259 | 226 | 205 | 179 |
| | | | | | 100000 | 470 | 326 | 275 | 218 | 191 | 173 | 151 |
| 206 | 1-1/8 1-3/16 1-1/4 30mm | 1 25mm | 4368 | 2538 | 20000 | 1116 | 774 | 652 | 518 | 452 | 411 | 359 |
| | | | | | 30000 | 975 | 676 | 570 | 452 | 395 | 359 | 314 |
| | | | | | 40000 | 886 | 614 | 518 | 411 | 359 | 326 | 285 |
| | | | | | 60000 | 774 | 536 | 452 | 359 | 314 | 285 | 249 |
| | | | | | 100000 | 652 | 452 | 382 | 303 | 265 | 240 | 210 |
| 207 | 1-1/4 1-3/8 1-7/16 35mm | 1-3/16 1-1/4 30mm | 5759 | 3461 | 20000 | 1471 | 1020 | 860 | 683 | 596 | 542 | 473 |
| | | | | | 30000 | 1285 | 891 | 752 | 596 | 521 | 473 | 414 |
| | | | | | 40000 | 1168 | 810 | 683 | 542 | 473 | 430 | 376 |
| | | | | | 60000 | 1020 | 707 | 596 | 473 | 414 | 376 | 328 |
| | | | | | 100000 | 860 | 596 | 503 | 399 | 349 | 317 | 277 |
| 208 | 1-1/2 40mm | 1-7/16 1-1/2▲ 35mm | 7332 | 4475 | 20000 | 1873 | 1299 | 1095 | 869 | 759 | 690 | 603 |
| | | | | | 30000 | 1636 | 1134 | 957 | 759 | 663 | 603 | 527 |
| | | | | | 40000 | 1487 | 1031 | 869 | 690 | 603 | 548 | 478 |
| | | | | | 60000 | 1299 | 900 | 759 | 603 | 527 | 478 | 418 |
| | | | | | 100000 | 1095 | 759 | 641 | 508 | 444 | 403 | 352 |
| 209 | 1-5/8 1-11/16 1-3/4 45mm | 1-1/2 40mm | 7891 | 4906 | 20000 | 2016 | 1398 | 1179 | 936 | 817 | 743 | 649 |
| | | | | | 30000 | 1761 | 1221 | 1030 | 817 | 714 | 649 | 567 |
| | | | | | 40000 | 1600 | 1109 | 936 | 743 | 649 | 589 | 515 |
| | | | | | 60000 | 1398 | 969 | 817 | 649 | 567 | 515 | 450 |
| | | | | | 100000 | 1179 | 817 | 689 | 547 | 478 | 434 | 379 |
| 210 | 1-15/16 2 50mm | 1-11/16 1-3/4 45mm | 7891 | 5213 | 20000 | 2016 | 1398 | 1179 | 936 | 817 | 743 | 649 |
| | | | | | 30000 | 1761 | 1221 | 1030 | 817 | 714 | 649 | 567 |
| | | | | | 40000 | 1600 | 1109 | 936 | 743 | 649 | 589 | 515 |
| | | | | | 60000 | 1398 | 969 | 817 | 649 | 567 | 515 | 450 |
| | | | | | 100000 | 1179 | 817 | 689 | 547 | 478 | 434 | 379 |

* Speed limit values reflect quad contact seal

▲ Piloted flange only

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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EASY SELECTION

E-Z KLEEN GT (continued)

| Ring Size | Shaft Size | | Dynamic Capacity C, lbs. | Static Capacity C ₀ , lbs. | Allowable Equivalent Radial Load Rating (lbs.) at Various RPM* | | | | | | | |
|-----------|-----------------------------------|--------------------------|--------------------------|---------------------------------------|--|------|------|------|------|------|------|------|
| | GT | GTM | | | L ₁₀ Life - Hours | 1750 | 2000 | 2200 | 2600 | 3000 | 3200 | 3600 |
| 204 | 3/4 20mm | | 2899 | 1482 | 20000 | 226 | 217 | 210 | 198 | 189 | 185 | 178 |
| | | | | | 30000 | 198 | 189 | 183 | 173 | 165 | 162 | 155 |
| | | | | | 40000 | 180 | 172 | 166 | 157 | 150 | 147 | 141 |
| | | | | | 60000 | 157 | 150 | 145 | 138 | 131 | 128 | 123 |
| | | | | | 100000 | 132 | 127 | 123 | 116 | 111 | 108 | 104 |
| 205 | 7/8 15/16 1 25mm | 3/4 | 3146 | 1769 | 20000 | 246 | 235 | 228 | 215 | 205 | 201 | 193 |
| | | | | | 30000 | 215 | 205 | 199 | 188 | 179 | 176 | 169 |
| | | | | | 40000 | 195 | 187 | 181 | 171 | 163 | 159 | 153 |
| | | | | | 60000 | 170 | 163 | 158 | 149 | 142 | 139 | 134 |
| | | | | | 100000 | 144 | 137 | 133 | 126 | 120 | 117 | 113 |
| 206 | 1-1/8 1-3/16 1-1/4 30mm | 1 25mm | 4368 | 2538 | 20000 | 341 | 326 | 316 | 299 | 285 | 279 | 268 |
| | | | | | 30000 | 298 | 285 | 276 | 261 | 249 | 244 | 234 |
| | | | | | 40000 | 271 | 259 | 251 | 237 | 226 | 221 | 213 |
| | | | | | 60000 | 237 | 226 | 219 | 207 | 198 | 193 | 186 |
| | | | | | 100000 | 199 | 191 | 185 | 175 | 167 | 163 | 157 |
| 207 | 1-1/4 1-3/8 1-7/16 35mm | 1-3/16 1-1/4 30mm | 5759 | 3461 | 20000 | 450 | 430 | 417 | 394 | 376 | 368 | 354 |
| | | | | | 30000 | 393 | 376 | 364 | 344 | 328 | 321 | 309 |
| | | | | | 40000 | 357 | 341 | 331 | 313 | 298 | 292 | 281 |
| | | | | | 60000 | 312 | 298 | 289 | 273 | 261 | 255 | 245 |
| | | | | | 100000 | 263 | 252 | 244 | 230 | 220 | 215 | 207 |
| 208 | 1-1/2 40mm | 1-7/16 1-1/2▲ 35mm | 7332 | 4475 | 20000 | 573 | 548 | 531 | 502 | 478 | 468 | 450 |
| | | | | | 30000 | 500 | 478 | 463 | 438 | 418 | 409 | 393 |
| | | | | | 40000 | 454 | 435 | 421 | 398 | 380 | 372 | 357 |
| | | | | | 60000 | 397 | 380 | 368 | 348 | 332 | 325 | 312 |
| | | | | | 100000 | 335 | 320 | 310 | 293 | 280 | 274 | 263 |
| 209 | 1-5/8 1-11/16 1-3/4 45mm | 1-1/2 40mm | 7891 | 4906 | 20000 | 616 | 589 | 571 | 540 | 515 | 504 | 485 |
| | | | | | 30000 | 538 | 515 | 499 | 472 | 450 | 440 | 423 |
| | | | | | 40000 | 489 | 468 | 453 | 429 | 409 | 400 | 385 |
| | | | | | 60000 | 427 | 409 | 396 | 374 | 357 | 349 | 336 |
| | | | | | 100000 | 360 | 345 | 334 | 316 | 301 | 295 | 283 |
| 210 | 1-15/16 2 50mm | 1-11/16 1-3/4 45mm | 7891 | 5213 | 20000 | 616 | 589 | 571 | 540 | 515 | 504 | 485 |
| | | | | | 30000 | 538 | 515 | 499 | 472 | 450 | 440 | 423 |
| | | | | | 40000 | 489 | 468 | 453 | 429 | 409 | 400 | 385 |
| | | | | | 60000 | 427 | 409 | 396 | 374 | 357 | 349 | 336 |
| | | | | | 100000 | 360 | 345 | 334 | 316 | 301 | 295 | 283 |

* Speed limit values reflect quad contact seal

▲ Piloted flange only

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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EASY SELECTION

E-Z KLEEN GT (continued)

| Ring Size | Shaft Size | | Dynamic Capacity C, lbs. | Static Capacity C ₀ , lbs. | Allowable Equivalent Radial Load Rating (lbs.) at Various RPM* | | | | | | | |
|-----------|-----------------------------------|--------------------------|--------------------------|---------------------------------------|--|------|------|------|------|------|------|------|
| | GT | GTM | | | L ₁₀ Life - Hours | 3840 | 4000 | 4240 | 4480 | 4800 | 5040 | 5300 |
| 204 | 3/4 20mm | | 2899 | 1482 | 20000 | 174 | 172 | 169 | 165 | 162 | 159 | 156 |
| | | | | | 30000 | 152 | 150 | 147 | 145 | 141 | 139 | 137 |
| | | | | | 40000 | 138 | 136 | 134 | 131 | 128 | 126 | 124 |
| | | | | | 60000 | 121 | 119 | 117 | 115 | 112 | 110 | 108 |
| | | | | | 100000 | 102 | 101 | 99 | 97 | 95 | 93 | 92 |
| 205 | 7/8 15/16 1 25mm | 3/4 | 3146 | 1769 | 20000 | 189 | 187 | 183 | 180 | 176 | 173 | 170 |
| | | | | | 30000 | 165 | 163 | 160 | 157 | 153 | 151 | 148 |
| | | | | | 40000 | 150 | 148 | 145 | 143 | 139 | 137 | 135 |
| | | | | | 60000 | 131 | 129 | 127 | 125 | 122 | 120 | 118 |
| | | | | | 100000 | 111 | 109 | 107 | 105 | 103 | 101 | 99 |
| 206 | 1-1/8 1-3/16 1-1/4 30mm | 1 25mm | 4368 | 2538 | 20000 | 262 | 259 | 254 | 249 | 244 | 240 | 236 |
| | | | | | 30000 | 229 | 226 | 222 | 218 | 213 | 209 | 206 |
| | | | | | 40000 | 208 | 206 | 202 | 198 | 193 | 190 | 187 |
| | | | | | 60000 | 182 | 180 | 176 | 173 | 169 | 166 | 163 |
| | | | | | 100000 | 154 | 151 | 149 | 146 | 143 | 140 | 138 |
| 207 | 1-1/4 1-3/8 1-7/16 35mm | 1-3/16 1-1/4 30mm | 5759 | 3461 | 20000 | 346 | 341 | 335 | 329 | 321 | 316 | |
| | | | | | 30000 | 302 | 298 | 293 | 287 | 281 | 276 | |
| | | | | | 40000 | 275 | 271 | 266 | 261 | 255 | 251 | |
| | | | | | 60000 | 240 | 237 | 232 | 228 | 223 | 219 | |
| | | | | | 100000 | 202 | 200 | 196 | 192 | 188 | 185 | |
| 208 | 1-1/2 40mm | 1-7/16 1-1/2▲ 35mm | 7332 | 4475 | 20000 | 441 | 435 | 426 | 419 | | | |
| | | | | | 30000 | 385 | 380 | 372 | 366 | | | |
| | | | | | 40000 | 350 | 345 | 338 | 332 | | | |
| | | | | | 60000 | 306 | 301 | 296 | 290 | | | |
| | | | | | 100000 | 258 | 254 | 249 | 245 | | | |
| 209 | 1-5/8 1-11/16 1-3/4 45mm | 1-1/2 40mm | 7891 | 4906 | 20000 | 474 | 468 | 459 | | | | |
| | | | | | 30000 | 414 | 409 | 401 | | | | |
| | | | | | 40000 | 376 | 371 | 364 | | | | |
| | | | | | 60000 | 329 | 324 | 318 | | | | |
| | | | | | 100000 | 277 | 274 | 268 | | | | |
| 210 | 1-15/16 2 50mm | 1-11/16 1-3/4 45mm | 7891 | 5213 | 20000 | 474 | | | | | | |
| | | | | | 30000 | 414 | | | | | | |
| | | | | | 40000 | 376 | | | | | | |
| | | | | | 60000 | 329 | | | | | | |
| | | | | | 100000 | 277 | | | | | | |

* Speed limit values reflect quad contact seal

▲ Piloted flange only

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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Bearing Reference Guide

ULTRA KLEEN

E-Z KLEEN

Extreme Duty

Setscrew Ball Bearing

GRIP TIGHT

D-LOK Ball Bearing



EASY SELECTION

E-Z KLEEN GT (continued)

| Ring Size | Shaft Size | | Dynamic Capacity C, lbs. | Static Capacity Co, lbs. | Allowable Equivalent Radial Load Rating (lbs.) at Various RPM* | | | | | | |
|-----------|-----------------------------------|--------------------------|--------------------------|--------------------------|--|------|------|------|------|------|------|
| | GT | GTM | | | L ₁₀ Life - Hours | 5600 | 6000 | 6500 | 7000 | 7200 | 8000 |
| 204 | 3/4 20mm | | 2899 | 1482 | 20000 | 154 | 150 | 146 | 143 | 141 | 136 |
| | | | | | 30000 | 134 | 131 | 128 | 125 | 123 | 119 |
| | | | | | 40000 | 122 | 119 | 116 | 113 | 112 | 108 |
| | | | | | 60000 | 107 | 104 | 101 | 99 | 98 | 95 |
| | | | | | 100000 | 90 | 88 | 85 | 83 | 83 | 80 |
| 205 | 7/8 15/16 1 25mm | 3/4 | 3146 | 1769 | 20000 | 167 | 163 | 159 | 155 | 153 | |
| | | | | | 30000 | 146 | 142 | 139 | 135 | 134 | |
| | | | | | 40000 | 132 | 129 | 126 | 123 | 122 | |
| | | | | | 60000 | 116 | 113 | 110 | 107 | 106 | |
| | | | | | 100000 | 97 | 95 | 93 | 91 | 90 | |
| 206 | 1-1/8 1-3/16 1-1/4 30mm | 1 25mm | 4368 | 2538 | 20000 | 231 | 226 | | | | |
| | | | | | 30000 | 202 | 198 | | | | |
| | | | | | 40000 | 184 | 180 | | | | |
| | | | | | 60000 | 160 | 157 | | | | |
| | | | | | 100000 | 135 | 132 | | | | |
| 207 | 1-1/4 1-3/8 1-7/16 35mm | 1-3/16 1-1/4 30mm | 5759 | 3461 | 20000 | | | | | | |
| | | | | | 30000 | | | | | | |
| | | | | | 40000 | | | | | | |
| | | | | | 60000 | | | | | | |
| | | | | | 100000 | | | | | | |
| 208 | 1-1/2 40mm | 1-7/16 1-1/2▲ 35mm | 7332 | 4475 | 20000 | | | | | | |
| | | | | | 30000 | | | | | | |
| | | | | | 40000 | | | | | | |
| | | | | | 60000 | | | | | | |
| | | | | | 100000 | | | | | | |
| 209 | 1-5/8 1-11/16 1-3/4 45mm | 1-1/2 40mm | 7891 | 4906 | 20000 | | | | | | |
| | | | | | 30000 | | | | | | |
| | | | | | 40000 | | | | | | |
| | | | | | 60000 | | | | | | |
| | | | | | 100000 | | | | | | |
| 210 | 1-15/16 2 50mm | 1-11/16 1-3/4 45mm | 7891 | 5213 | 20000 | | | | | | |
| | | | | | 30000 | | | | | | |
| | | | | | 40000 | | | | | | |
| | | | | | 60000 | | | | | | |
| | | | | | 100000 | | | | | | |

* Speed limit values reflect quad contact seal

▲ Piloted flange only

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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EASY SELECTION

Table 2 - Easy Selection For E-Z KLEEN Polymer-Housed Sleeve Bearing Mounted Units - Inch

RADIAL LOAD RATINGS (LBS) AT VARIOUS REVOLUTIONS PER MINUTE (RPM)

| Series | Shaft Size | Up To 10 | 25 | 50 | 75 | 100 | 150 | 200 | 250 |
|--------|-----------------|----------|------|-----|-----|-----|-----|-----|-----|
| 204 | 3/4 | 450 | 400 | 375 | 300 | 230 | 175 | 110 | 90 |
| 205 | 1 | 600 | 550 | 450 | 215 | 235 | 175 | 110 | 90 |
| 206 | 1-3/16 1-1/4 | 900 | 800 | 500 | 325 | 250 | 175 | 110 | 90 |
| 207 | 1-1/4 1-7/16 | 1000 | 900 | 600 | 400 | 300 | 175 | 120 | 95 |
| 208 | 1-1/2 | 1400 | 1200 | 700 | 430 | 320 | 180 | 125 | 95 |
| 210 | 1-15/16 | 1800 | 1600 | 750 | 450 | 350 | 185 | 130 | 100 |

RADIAL LOAD RATINGS (LBS) AT VARIOUS REVOLUTIONS PER MINUTE (RPM)

| Series | Shaft Size | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |
|--------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 204 | 3/4 | 60 | 50 | 45 | 40 | 35 | 25 | 20 | 15 |
| 205 | 1 | 60 | 50 | 45 | 40 | 35 | 25 | 20 | 15 |
| 206 | 1-3/16 1-1/4 | 65 | 60 | 50 | 40 | 35 | 30 | 25 | 20 |
| 207 | 1-1/4 1-7/16 | 70 | 65 | 55 | 45 | 40 | 35 | 30 | |
| 208 | 1-1/2 | 70 | 65 | 55 | 45 | 40 | 35 | | |
| 210 | 1-15/16 | 80 | 70 | 60 | 50 | 45 | | | |

Continuous operating temperature: -40 to 180° F

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

| | | | |
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EASY SELECTION

Table 3 - Easy Selection For E-Z KLEEN Polymer-Housed Sleeve Bearing Mounted Units - Metric

RADIAL LOAD RATINGS (NEWTONS) AT VARIOUS REVOLUTIONS PER MINUTE (RPM)

| Series | Shaft Size | Up To 10 | 25 | 50 | 75 | 100 | 150 | 200 | 250 |
|--------|------------|----------|------|------|------|------|------|-----|-----|
| 204 | 20 | 2000 | 1775 | 1665 | 1330 | 1020 | 775 | 485 | 400 |
| 205 | 25 | 2665 | 2445 | 2000 | 1400 | 1045 | 775 | 485 | 400 |
| 206 | 30 | 4000 | 3555 | 2220 | 1445 | 1110 | 775 | 485 | 400 |
| 207 | 35 | 4445 | 4000 | 2665 | 1775 | 1330 | 775 | 530 | 420 |
| 208 | 40 | 6225 | 5335 | 3110 | 1910 | 1420 | 8000 | 555 | 420 |
| 210 | 50 | 8005 | 7115 | 3335 | 2000 | 1555 | 820 | 575 | 440 |

RADIAL LOAD RATINGS (NEWTONS) AT VARIOUS REVOLUTIONS PER MINUTE (RPM)

| Series | Shaft Size | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |
|--------|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 204 | 20 | 265 | 220 | 200 | 175 | 155 | 110 | 85 | 65 |
| 205 | 25 | 265 | 220 | 200 | 175 | 155 | 110 | 85 | 65 |
| 206 | 30 | 285 | 265 | 220 | 175 | 155 | 130 | 110 | 85 |
| 207 | 35 | 310 | 285 | 240 | 200 | 175 | 155 | 130 | |
| 208 | 40 | 310 | 285 | 240 | 200 | 175 | 155 | | |
| 210 | 50 | 355 | 310 | 265 | 220 | 200 | | | |

Continuous operating temperature: -40 to 180° C

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

| | | | |
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EASY SELECTION

Chemical Resistance Chart*

| | Housing | | Ball Bearing Insert | |
|----------------------|---------|-----------|---------------------|-------------|
| | Polymer | Stainless | EZ-KLEEN | ULTRA-KLEEN |
| A | | | | |
| Acetic Acid | B | B | A | B |
| Acetone | B | A | A | B |
| Ammonium Chloride | | B | A | B |
| Ammonium Hydroxide | D | A | | A |
| Aniline | A | A | B | A |
| B | | | | |
| Beer | | A | A | |
| Beet Sugar Liquids | | A | | |
| Benzene | B | B | B | B |
| Bleaching Lye | A | | | |
| Brake Fluid | A | | | |
| Butane | A | A | A | |
| Butanol | B | A | A | |
| Butyl Acetate | A | B | A | |
| C | | | | |
| Calcium Chloride | A | B | A | C |
| Calcium Hydroxide | | B | A | |
| Calcium Hypochlorite | A | D | B | C |
| Carbon Disulphide | A | B | B | |
| Carbon Tetrachloride | A | B | A | A |
| Chloroform | D | A | A | A |
| Chromic Acid | A | B | A | B |
| Citric Acid | A | A | A | A |
| Cresol | D | A | | |
| D | | | | |
| Detergents | A | A | A | A |
| Diesel Fuel | A | A | B | |

Where: (A) = No Effect - Excellent
 (B) = Minor Effect - Good
 (C) = Moderate Effect - Fair
 (D) = Severe Effect - Not Recommended
 Blank = No Data Available

NOTE: All references assume exposure temperature of 72°F.

* This chemical resistance chart is intended as a guideline. For exposure to high concentrations, prolonged contact, or higher operating temperatures, etc. reliance upon actual application experience is best. Aggressive relubrication intervals may also benefit bearing life. Contact application engineering at 864-284-5700 for assistance.

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

| | | | |
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Bearing Reference Guide

ULTRA KLEEN

E-Z KLEEN

Extreme Duty

Setscrew Ball Bearing

GRIP TIGHT

D-LOK Ball Bearing



EASY SELECTION

Chemical Resistance Chart*

| | Housing | | Ball Bearing Insert | |
|---------------------------------|---------|-----------|---------------------|-------------|
| | Polymer | Stainless | EZ-KLEEN | ULTRA-KLEEN |
| E | | | | |
| Ethanol | A | A | | A |
| Ether (diethyl-) | A | A | B | A |
| Ethyl Acetate | B | B | B | |
| Ethylene Dichloride | D | B | B | |
| F | | | | |
| Ferrous Chloride | | D | B | |
| Formaldehyde | | B | B | |
| Formic Acid | B | B | A | B |
| Freon 11 | A | A | A | |
| G | | | | |
| Gasoline | A | A | A | A |
| Glycerol (Glycerin) | B | A | A | A |
| Glycol | B | | | |
| Grease | A | A | A | A |
| H | | | | |
| Heptane | A | A | A | |
| Hexane | A | A | A | |
| Hydrochloric Acid (20%) | A | D | B | D |
| Hydrochloric Acid (100%) | D | D | C | D |
| Hydrofluoric Acid (20%) | D | D | B | D |
| Hydrofluoric Acid (100%) | D | D | C | D |
| Hydrogen Peroxide (10%) | A | C | A | |
| Hydrogen Peroxide (30%) | B | C | A | |
| I, K, L | | | | |
| Iodine | | D | B | D |
| Isopropanol (Isopropyl Alcohol) | B | A | A | |
| Kerosene | A | A | A | A |
| Lithium Chloride | | A | | |

Where: (A) = No Effect - Excellent
 (B) = Minor Effect - Good
 (C) = Moderate Effect - Fair
 (D) = Severe Effect - Not Recommended
 Blank = No Data Available

NOTE: All references assume exposure temperature of 72°F.

* This chemical resistance chart is intended as a guideline. For exposure to high concentrations, prolonged contact, or higher operating temperatures, etc. reliance upon actual application experience is best. Aggressive relubrication intervals may also benefit bearing life. Contact application engineering at 864-284-5700 for assistance.

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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Bearing Reference Guide

ULTRA KLEEN

E-Z KLEEN

Extreme Duty

Setscrew Ball Bearing

GRIP TIGHT

D-LOK Ball Bearing



EASY SELECTION

Chemical Resistance Chart*

| | Housing | | Ball Bearing Insert | |
|------------------------|---------|-----------|---------------------|-------------|
| | Polymer | Stainless | EZ-KLEEN | ULTRA-KLEEN |
| M | | | | |
| Methanol | A | A | A | A |
| Methylene Chloride | D | B | B | |
| Methyl Ethyl Ketone | A | A | A | |
| Mineral Oil | A | A | A | A |
| Motor Oils | A | A | A | A |
| N | | | | |
| Nitric Acid (10%) | A | A | A | A |
| Nitric Acid (20%) | D | A | A | A |
| Nitric Acid (50%) | D | A | A | A |
| O | | | | |
| Oleic Acid | A | A | B | B |
| Olive Oil | A | A | A | A |
| P | | | | |
| Perchloroethylene | A | B | B | |
| Phenol | B | B | A | |
| Phosphoric Acid (<40%) | A | B | A | A |
| Phosphoric Acid (>40%) | A | C | A | B |
| Potassium Chloride | A | B | A | B |
| Potassium Dichromate | A | B | B | B |
| Potassium Hydroxide | D | B | A | B |
| Potassium Permanganate | A | A | B | B |
| S | | | | |
| Silicone | A | B | A | A |
| Soap Solution | A | A | A | A |
| Sodium Bicarbonate | A | A | A | A |
| Sodium Bisulfate | | D | B | B |
| Sodium Bisulfite | A | B | B | B |
| Sodium Carbonate | A | A | A | B |
| Sodium Chloride | A | B | A | B |
| Sodium Hydroxide (20%) | D | A | A | A |
| Sodium Hydroxide (50%) | D | B | A | |

Where: (A) = No Effect - Excellent

(B) = Minor Effect - Good

(C) = Moderate Effect - Fair

(D) = Severe Effect - Not Recommended

Blank = No Data Available

NOTE: All references assume exposure temperature of 72°F.

* This chemical resistance chart is intended as a guideline. For exposure to high concentrations, prolonged contact, or higher operating temperatures, etc. reliance upon actual application experience is best. Aggressive relubrication intervals may also benefit bearing life. Contact application engineering at 864-284-5700 for assistance.

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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EASY SELECTION

Chemical Resistance Chart*

| | Housing | | Ball Bearing Insert | |
|----------------------------|---------|-----------|---------------------|-------------|
| | Polymer | Stainless | EZ-KLEEN | ULTRA-KLEEN |
| S (Continued) | | | | |
| Sodium Hydroxide (80%) | D | C | B | |
| Sodium Hypochlorite (<20%) | A | C | B | C |
| Sodium Hypochlorite (100%) | B | D | B | D |
| Sulfuric Acid (<10%) | A | D | A | C |
| Sulfuric Acid (10 - 75%) | A | D | B | D |
| Sulfuric Acid (>75%) | D | D | C | D |
| T | | | | |
| Tetrahydrofuran | B | A | A | |
| Toulene | A | A | A | |
| Trichlorethylene | B | B | A | |
| Triethylamine | | A | A | |
| Turpentine | A | A | A | |
| V, W, X | | | | |
| Vegetable Oils | A | A | A | A |
| Water | A | A | A | A |
| Xylene | A | B | A | |

Where: (A) = No Effect - Excellent
 (B) = Minor Effect - Good
 (C) = Moderate Effect - Fair
 (D) = Severe Effect - Not Recommended
 Blank = No Data Available

NOTE: All references assume exposure temperature of 72°F.

* This chemical resistance chart is intended as a guideline. For exposure to high concentrations, prolonged contact, or higher operating temperatures, etc. reliance upon actual application experience is best. Aggressive relubrication intervals may also benefit bearing life. Contact application engineering at 864-284-5700 for assistance.

NOTE: Bearing analysis program "BEST" is available on www.ptwizard.com

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