

XM & XF Features

BALL

- 52100 Bearing Steel
- Heat Treated
- Hard Chrome Plated
- Precision Ground

RACE

- Reinforced Nylon 12 with PTFE

BODY

- Alloy Steel
- Heat Treated
- Protective Coated for Corrosion Resistance

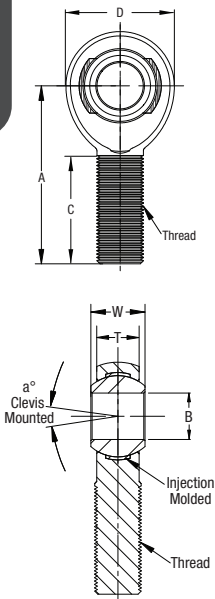
EXCLUSIVE FEATURES

- Metal-to-Metal Support for Heavy Shock Loads
- Increased Cross-Sectional Thickness for Greater Tensile Strength

PART NUMBER

DIMENSIONS IN INCHES

XM Male



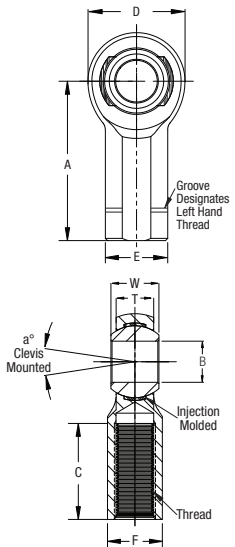
| Right Hand | Left Hand | B + .0015 - .0005 | W ± .005 | T ± .005 | A ± .015 | D ± .010 | Ball Dia. Ref. | C + .062 - .031 | Thread UNF-3A | Misalign. Angle a° | Ult. Radial Static Load Lbs. | Approx. Brg. Wgt. Lbs. |
|------------|-----------|-------------------------|-------------|-------------|-------------|-------------|----------------------|-----------------------|------------------|--------------------------|------------------------------------|------------------------------|
| XMR3 | XML3 | 0.1900 | 0.312 | 0.250 | 1.250 | 0.625 | 0.437 | 0.750 | 10-32 | 13 | 2,851 | 0.03 |
| XMR4 | XML4 | 0.2500 | 0.375 | 0.281 | 1.562 | 0.750 | 0.500 | 1.000 | 1/4-28 | 16 | 5,260 | 0.04 |
| XMR4-5 | XML4-5 | 0.2500 | 0.375 | 0.281 | 1.875 | 0.875 | 0.500 | 1.250 | 5/16-24 | 13 | 8,452 | 0.07 |
| XMR5 | XML5 | 0.3125 | 0.437 | 0.344 | 1.875 | 0.875 | 0.625 | 1.250 | 5/16-24 | 14 | 7,639 | 0.07 |
| XMR5-6 | XML5-6 | 0.3125 | 0.437 | 0.344 | 1.938 | 1.000 | 0.625 | 1.250 | 3/8-24 | 12 | 10,382 | 0.11 |
| XMR6 | XML6 | 0.3750 | 0.500 | 0.406 | 1.938 | 1.000 | 0.719 | 1.250 | 3/8-24 | 12 | 9,544 | 0.11 |
| XMR6-7 | XML6-7 | 0.3750 | 0.500 | 0.406 | 2.125 | 1.125 | 0.719 | 1.375 | 7/16-20 | 10 | 14,006 | 0.15 |
| XMR7 | XML7 | 0.4375 | 0.562 | 0.437 | 2.125 | 1.125 | 0.812 | 1.375 | 7/16-20 | 14 | 10,285 | 0.15 |
| XMR7-8 | XML7-8 | 0.4375 | 0.562 | 0.437 | 2.438 | 1.312 | 0.812 | 1.500 | 1/2-20 | 12 | 18,761 | 0.24 |
| XMR8 | XML8 | 0.5000 | 0.625 | 0.500 | 2.438 | 1.312 | 0.937 | 1.500 | 1/2-20 | 12 | 16,238 | 0.24 |
| XMR8-10 | XML8-10 | 0.5000 | 0.625 | 0.500 | 2.625 | 1.500 | 0.937 | 1.625 | 5/8-18 | 10 | 23,542 | 0.36 |
| XMR8-12 | XML8-12 | 0.5000 | 0.750 | 0.562 | 2.875 | 1.750 | 0.937 | 1.750 | 3/4-16 | 16 | 32,457 | 0.42 |
| XMR10 | XML10 | 0.6250 | 0.750 | 0.562 | 2.625 | 1.500 | 1.125 | 1.625 | 5/8-18 | 16 | 17,955 | 0.36 |
| XMR10-12 | XML10-12 | 0.6250 | 0.750 | 0.562 | 2.875 | 1.750 | 1.125 | 1.750 | 3/4-16 | 13 | 31,680 | 0.57 |
| XMR12 | XML12 | 0.7500 | 0.875 | 0.687 | 2.875 | 1.750 | 1.312 | 1.750 | 3/4-16 | 14 | 28,081 | 0.57 |
| XMR12-14 | XML12-14 | 0.7500 | 0.875 | 0.687 | 3.375 | 2.000 | 1.312 | 1.875 | 7/8-14 | 12 | 43,486 | 0.88 |
| XMR14 | XML14 | 0.8750 | 0.875 | 0.765 | 3.375 | 2.000 | 1.375 | 2.000 | 7/8-14 | 7 | 45,051 | 0.88 |
| XMR16 | XML16 | 1.0000 | 1.375 | 1.000 | 4.125 | 2.750 | 1.875 | 2.125 | 1 1/4-12 | 17 | 76,200 | 2.41 |
| XMR16-1 | XML16-1 | 1.0000 | 1.375 | 1.000 | 4.125 | 2.750 | 1.875 | 2.125 | 1-14* | 17 | 76,200 | 2.13 |
| XMR16-2 | XML16-2 | 1.0000 | 1.375 | 1.000 | 4.125 | 2.750 | 1.875 | 2.125 | 1-12 | 17 | 76,200 | 2.13 |

SELF-LUBRICATING

PART NUMBER

DIMENSIONS IN INCHES

XF Female



| Right Hand | Left Hand | B + .0015 - .0005 | W ± .005 | T ± .005 | A ± .015 | D ± .010 | E ± .010 | F ± .010 | Ball Dia. Ref. | C + .062 - .031 | Thread UNF-2B | Misalign. Angle a° | Ult. Radial Static Load Lbs. | Approx. Brg. Wgt. Lbs. |
|------------|-----------|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|-----------------------|------------------|--------------------------|------------------------------------|------------------------------|
| XFR3 | XFL3 | 0.1900 | 0.312 | 0.250 | 1.062 | 0.625 | 0.406 | 0.312 | 0.437 | 0.562 | 10-32 | 13 | 3,733 | 0.04 |
| XFR4 | XFL4 | 0.2500 | 0.375 | 0.281 | 1.312 | 0.750 | 0.469 | 0.375 | 0.500 | 0.750 | 1/4-28 | 16 | 6,190 | 0.06 |
| XFR5 | XFL5 | 0.3125 | 0.437 | 0.344 | 1.375 | 0.875 | 0.500 | 0.437 | 0.625 | 0.750 | 5/16-24 | 14 | 7,639 | 0.09 |
| XFR6 | XFL6 | 0.3750 | 0.500 | 0.406 | 1.625 | 1.000 | 0.687 | 0.562 | 0.719 | 0.937 | 3/8-24 | 12 | 9,544 | 0.14 |
| XFR7 | XFL7 | 0.4375 | 0.562 | 0.437 | 1.812 | 1.125 | 0.750 | 0.625 | 0.812 | 1.062 | 7/16-20 | 14 | 10,285 | 0.19 |
| XFR8 | XFL8 | 0.5000 | 0.625 | 0.500 | 2.125 | 1.312 | 0.875 | 0.750 | 0.937 | 1.187 | 1/2-20 | 12 | 15,336 | 0.31 |
| XFR10 | XFL10 | 0.6250 | 0.750 | 0.562 | 2.500 | 1.500 | 1.000 | 0.875 | 1.125 | 1.500 | 5/8-18 | 16 | 17,955 | 0.45 |
| XFR12 | XFL12 | 0.7500 | 0.875 | 0.687 | 2.875 | 1.750 | 1.125 | 1.000 | 1.312 | 1.750 | 3/4-16 | 14 | 28,081 | 0.69 |
| XFR16 | XFL16 | 1.0000 | 1.375 | 1.000 | 4.125 | 2.750 | 1.625 | 1.500 | 1.875 | 2.125 | 1 1/4-12 | 17 | 76,200 | 2.11 |
| XFR16-1 | XFL16-1 | 1.0000 | 1.375 | 1.000 | 4.125 | 2.750 | 1.625 | 1.500 | 1.875 | 2.125 | 1-14* | 17 | 76,200 | 2.58 |
| XFR16-2 | XFL16-2 | 1.0000 | 1.375 | 1.000 | 4.125 | 2.750 | 1.625 | 1.500 | 1.875 | 2.125 | 1-12 | 17 | 76,200 | 2.58 |

SELF-LUBRICATING

This design results in metal-to-metal support for heavy shock loads, and smooth operation for low loads. X Series rod ends are appropriate and provide the best performance for most applications. This series is moderately priced.

MXM & MXF Alloy Steel

Self-Lubricating Race - Right & Left Hand Threads - Male & Female

U L T I M A T E

Metric Rod Ends

MXM & MXF Features

BALL

- 52100 Bearing Steel
- Heat Treated
- Hard Chrome Plated
- Precision Ground

RACE

- Reinforced Nylon 12 with PTFE Liner

BODY

- Alloy Steel
- Heat Treated
- Protective Coated for Corrosion Resistance

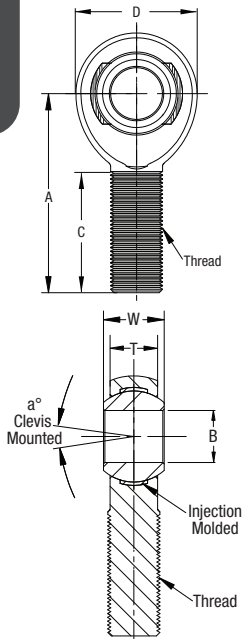
EXCLUSIVE FEATURES

- Metal-to-Metal Support for Heavy Shock Loads
- Increased Cross-Sectional Thickness for Greater Tensile Strength

PART NUMBER

DIMENSIONS IN MILLIMETERS

MXM Male



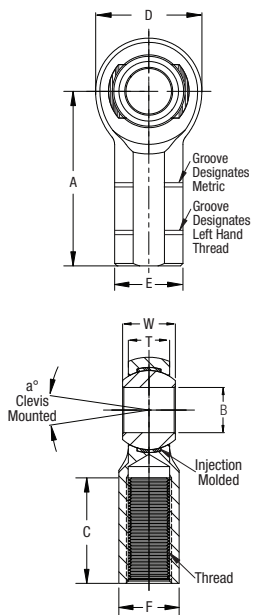
| Right Hand | Left Hand | B + .065 - .012 | W + .000 - .13 | T ± .12 | A ± .4 | D ± .38 | Ball Dia. Ref. | C + 1.5 - .75 | Thread 6g | Misalign. Angle a° | Ult. Radial Static Load (Newtons) | Approx. Brg. Wgt. (Grams) |
|------------|-----------|-----------------------|----------------------|------------|-----------|------------|----------------------|---------------------|--------------|--------------------------|---|---------------------------------|
| MXMR6 | MXML6 | 6 | 9 | 7.00 | 36 | 19.00 | 12.70 | 22 | M6X1.0 | 13 | 18,186 | 19 |
| MXMR8 | MXML8 | 8 | 12 | 8.75 | 42 | 22.25 | 15.88 | 25 | M8X1.25 | 18 | 33,114 | 33 |
| MXMR10 | MXML10 | 10 | 14 | 10.50 | 48 | 27.00 | 19.05 | 29 | M10X1.5 | 17 | 52,476 | 57 |
| MXMR12 | MXML12 | 12 | 16 | 12.00 | 54 | 30.00 | 22.23 | 33 | M12X1.75 | 17 | 68,147 | 82 |
| MXMR14 | MXML14 | 14 | 19 | 13.50 | 60 | 34.75 | 25.40 | 36 | M14X2.0 | 21 | 90,386 | 125 |
| MXMR16 | MXML16 | 16 | 21 | 14.25 | 66 | 38.00 | 28.58 | 40 | M16X2.0 | 23 | 97,714 | 168 |

SELF-LUBRICATING

PART NUMBER

DIMENSIONS IN MILLIMETERS

MXF Female



| Right Hand | Left Hand | B + .065 - .012 | W + .000 - .13 | T ± .12 | A ± .4 | D ± .38 | E ± .25 | F ± .25 | Ball Dia. Ref. | C + 1.5 - .75 | Thread 6H | Misalign. Angle a° | Ult. Radial Static Load (Newtons) | Approx. Brg. Wgt. (Grams) |
|------------|-----------|-----------------------|----------------------|------------|-----------|------------|------------|------------|----------------------|---------------------|--------------|--------------------------|---|---------------------------------|
| MXFR6 | MXFL6 | 6 | 9 | 7.00 | 30 | 19.00 | 13 | 11 | 12.70 | 14 | M6X1.0 | 13 | 34,399 | 29 |
| MXFR8 | MXFL8 | 8 | 12 | 8.75 | 36 | 22.25 | 16 | 14 | 15.88 | 17 | M8X1.25 | 18 | 41,710 | 51 |
| MXFR10 | MXFL10 | 10 | 14 | 10.50 | 43 | 27.00 | 19 | 17 | 19.05 | 21 | M10X1.5 | 17 | 63,442 | 86 |
| MXFR12 | MFL12 | 12 | 16 | 12.00 | 50 | 30.00 | 22 | 19 | 22.23 | 24 | M12X1.75 | 17 | 68,147 | 124 |
| MXFR14 | MXFL14 | 14 | 19 | 13.50 | 57 | 34.75 | 25 | 22 | 25.40 | 27 | M14X2.0 | 21 | 90,386 | 184 |
| MXFR16 | MXFL16 | 16 | 21 | 14.25 | 64 | 38.00 | 27 | 22 | 28.58 | 33 | M16X2.0 | 23 | 97,714 | 223 |

SELF-LUBRICATING

This design results in metal-to-metal support for heavy shock loads and smooth operation for low loads. MX Series rod ends are appropriate and provide the best performance for most applications. This series is moderately priced.