# DBM/DBF

4-Piece, Bronze Race, Oil Impregnated, Metric



**Rod Ends** Industrial/ Commercial Suitable for many high precision/mechanical motion transfer applications, the Cablecraft DBM/DBF Series offers a four-piece, bronze race design in metric thread sizing. Its oil impregnated bronze raceway delivers precise and extremely low friction performance, leading to longer wear life, higher temperature performance and lower maintenance costs. Ball materials are produced from bearing quality steel that is thru hardened and finish ground, adding to its precision fit and increased wear performance. Body materials are produced from economical low carbon steel and are zinc plated for extended corrosion resistance. Its clear chromate treatment is suited for high visibility exposed surfaces requiring aesthetically pleasing bright metal finishes. It can be used in a wide operating temperature range. Studded and right or left-handed thread versions are available. Grease fittings are optionally available.

The DBM/DBF Series is just one of many within our broad line of industrial/commercial rod ends. For full product line detail, contact us for a comprehensive catalog or visit www.cablecraft.com and download individual product data sheets and other product information.







DBM/DBF Industrial/Commercial Rod Ends 4-Piece, Bronze Race, Oil Impregnated, Metric

### **Applications:**

Numerous precision mechanical motion transfer devices/applications, includina:

- Industrial equipment
- Precision machinery

#### **Features:**

- Oil impregnated bronze raceway delivers longer maintenance cost (high precision, frictionless performance)
- Can be used in a wide range of temperatures (including ultra high temp): -30°F — 300°F (-34°C —149°C)
- Offered in studded and right or left-handed versions
- Special custom alloy construction available
- Custom assemblies can be built to your specifications
- Meets ISO 12240 (DIN 648)





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# **Material**

# Ball

- 52100 Steel
   Rc 56 Min.
- Hard Chrome Plated

# Body

- Low Carbon Steel
- Zinc Plated, Clear Dichromate Treated

## Race

- Sintered Phosphor Bronze
- Oil Impregnated



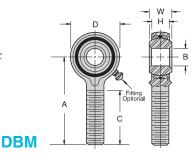


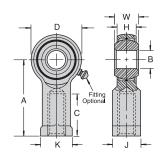










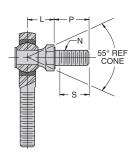


**DBF** 

| DBM Chart                         |        |                   |               |               |                      |                  |                  |                |                       |                  |                   |
|-----------------------------------|--------|-------------------|---------------|---------------|----------------------|------------------|------------------|----------------|-----------------------|------------------|-------------------|
| Part Number  Right Left Hand Hand |        | <b>B</b><br>+.063 | W             | Н             | Α                    | С                | D                |                | Ultimate              |                  |                   |
|                                   |        | 013               | ±.13          | ±.05          | ±.25                 | Min.             | ±.13             | 6g             | Radial<br>Static Load | Ball             |                   |
|                                   |        | Ball<br>Bore      | Ball<br>Width | Body<br>Width | Centerline<br>Length | Thread<br>Length | Head<br>Diameter | Thread<br>Size | Capacity<br>(Newtons) | Diameter<br>Ref. | Weight<br>(Grams) |
| DBM5                              | DBML5  | 5                 | 8             | 6.00          | 33                   | 20               | 18               | M5x0.8         | 3,000                 | 13               | 15                |
| DBM6                              | DBML6  | 6                 | 9             | 6.75          | 36                   | 22               | 20               | M6x1.0         | 4,000                 | 16               | 20                |
| DBM8                              | DBML8  | 8                 | 12            | 9.00          | 42                   | 25               | 24               | M8x1.25        | 8,000                 | 19               | 35                |
| DBM10                             | DBML10 | 10                | 14            | 10.50         | 48                   | 29               | 28               | M10x1.5        | 13,000                | 22               | 50                |
| DBM12                             | DBML12 | 12                | 16            | 12.00         | 54                   | 33               | 32               | M12x1.75       | 17,000                | 26               | 65                |
| DBM14                             | DBML14 | 14                | 19            | 13.50         | 60                   | 36               | 36               | M14x2.0        | 24,000                | 29               | 100               |
| DBM16                             | DBML16 | 16                | 21            | 15.00         | 66                   | 40               | 42               | M16x2.0        | 28,500                | 32               | 179               |
| DBM20                             | DBML20 | 20                | 25            | 18.00         | 78                   | 47               | 50               | M20x1.5        | 42,000                | 40               | 289               |

| DBF Chart     |              |                          |                  |                  |                      |                  |                  |                |                  |                      |                                   |                  |                   |
|---------------|--------------|--------------------------|------------------|------------------|----------------------|------------------|------------------|----------------|------------------|----------------------|-----------------------------------|------------------|-------------------|
| Part N        | lumber       | <b>B</b><br>+.063<br>013 | <b>W</b><br>±.13 | <b>H</b><br>±.05 | <b>A</b><br>±.25     | <b>C</b><br>Min. | <b>D</b><br>±.13 | 6H             | <b>K</b><br>± .2 | <b>J</b><br>+ 0<br>2 | Ultimate<br>Radial<br>Static Load | Ball             |                   |
| Right<br>Hand | Left<br>Hand | Ball<br>Bore             | Ball<br>Width    | Body<br>Width    | Centerline<br>Length | Thread<br>Length | Head<br>Diameter | Thread<br>Size | W.F.<br>Diameter | W.F.<br>Width        | Capacity<br>(Newtons)             | Diameter<br>Ref. | Weight<br>(Grams) |
| DBF5          | DBFL5        | 5                        | 8                | 6.00             | 27                   | 10               | 18               | M5x0.8         | 11               | 9                    | 6,000                             | 13               | 15                |
| DBF6          | DBFL6        | 6                        | 9                | 6.75             | 30                   | 12               | 20               | M6x1.0         | 13               | 11                   | 7,000                             | 16               | 19                |
| DBF8          | DBFL8        | 8                        | 12               | 9.00             | 36                   | 16               | 24               | M8x1.25        | 16               | 14                   | 12,000                            | 19               | 30                |
| DBF10         | DBFL10       | 10                       | 14               | 10.50            | 43                   | 20               | 28               | M10x1.5        | 19               | 17                   | 14,500                            | 22               | 40                |
| DBF12         | DBFL12       | 12                       | 16               | 12.00            | 50                   | 22               | 32               | M12x1.75       | 5 22             | 19                   | 17,000                            | 26               | 75                |
| DBF14         | DBFL14       | 14                       | 19               | 13.50            | 57                   | 22               | 36               | M14x2.0        | 25               | 22                   | 24,000                            | 29               | 124               |
| DBF16         | DBFL16       | 16                       | 21               | 15.00            | 64                   | 28               | 42               | M16x2.0        | 27               | 22                   | 28,500                            | 32               | 174               |
| DRF20         | DRFI 20      | 20                       | 25               | 18 00            | 77                   | 33               | 50               | M20x1 5        | 34               | 32                   | 45 000                            | 40               | 358               |

Chart Notes: 1. For standard lubrication fitting, add "Z" to suffix. Example: DBM10Z 2. This series is also available in a studded configuration. Specify by adding "S" to suffix. Example: DBM10S 3. All dimensions are listed in millimeters unless otherwise noted.



|   | S                    | tuddec          | l Dime          | Dimensions                        |                |  |  |  |  |  |
|---|----------------------|-----------------|-----------------|-----------------------------------|----------------|--|--|--|--|--|
|   | Rod End<br>Bore Size | <b>L</b><br>REF | <b>P</b> ± .030 | <b>S</b><br>Min. Thread<br>Length | <b>N</b><br>6g |  |  |  |  |  |
| ĺ | 5mm                  | 9.0             | 13.0            | 10.0                              | M5x.8          |  |  |  |  |  |
|   | 6mm                  | 10.0            | 14.0            | 11.0                              | M6x1.0         |  |  |  |  |  |
|   | 8mm                  | 12.0            | 17.5            | 14.0                              | M8x1.25        |  |  |  |  |  |
|   | 10mm                 | 16.5            | 23.0            | 19.5                              | M10x1.5        |  |  |  |  |  |
|   | 12mm                 | 19.5            | 28.5            | 24.5                              | M12x1.75       |  |  |  |  |  |
|   | 14mm                 | 20.5            | 33.0            | 29.0                              | M14x2.0        |  |  |  |  |  |
|   | 16mm                 | 24.0            | 38.0            | 34.0                              | M16x2.0        |  |  |  |  |  |
|   |                      |                 |                 |                                   |                |  |  |  |  |  |

# **WARNING!**

Since the manufacturer is unable to determine all applications in which a part may be placed, it is the user's responsibility to determine the suitability of the part for its intended use. This is especially true where safety is a factor. Incorrect application or installation may result in property damage, bodily injury, or death. For technical assistance, call 260-749-5105.



2110 Summit Street New Haven, Indiana USA 46774 Tel 260 749-5105 Fax 260 749-5677

4401 South Orchard Street Tacoma, Washington 98411 USA Tel 253 475-1080 Fax 253 474-1623 Diplocks Way-South Road Hailsham, East Sussex BN27 3JF, England Tel 44 1323 841510 Fax 44 1323 845848

Printed in USA

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