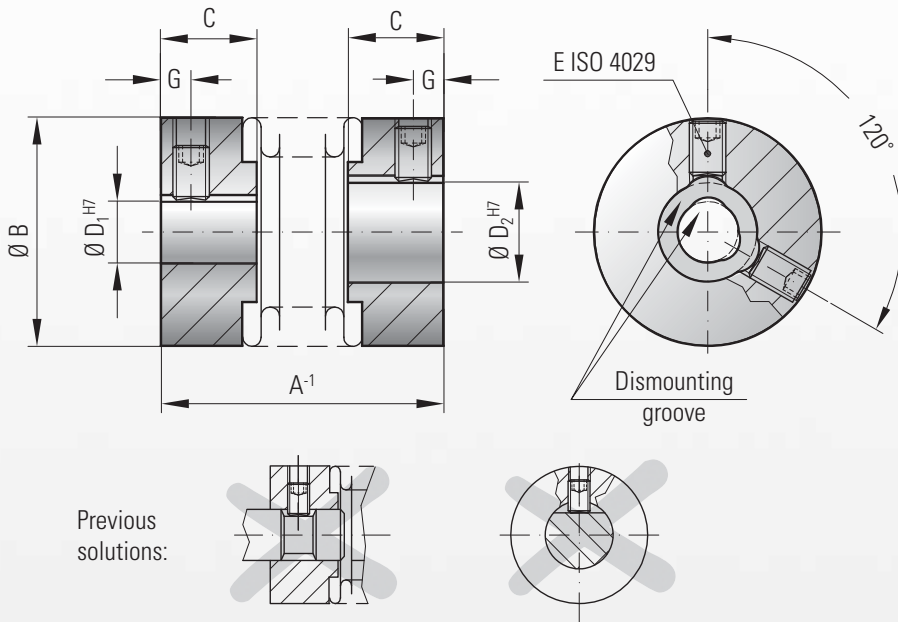




# MODEL MK1

## TECHNICAL SPECIFICATIONS



with radial set screws

### Features:

- backlash free and torsionally rigid
- cost effective design
- low moment of inertia
- compensates for 3 types of misalignment
- mounting groove or flatted shaft is not required due to integral "dismounting groove"

### Material:

Bellows made from highly flexible, high grade stainless steel; hubs made from aluminum

### Design:

With 1x or 2x ISO 4029 radial set screw per hub and integral "dismounting groove"

### Temperature range:

-30 to +110° C (-22 to +230° F)

### Speeds:

Up to 20,000 rpm; in excess of 20,000 rpm with finely balanced version

### Service life:

Maintenance free with infinite life when operated within the technical specifications

### Fit tolerance:

Overall clearance between hub and shaft  
0.01-0.08 mm

### Non standard applications:

Custom designs with various tolerances, keyways, materials, dimensions, etc. available upon request

### Ordering example

**MK1 / 5 / 26 / 4 / 5 / XX**

Model  
Series  
Overall length  
Bore Ø D1 H7  
Bore Ø D2 H7  
Non standard e.g. stainless steel

| Model MK 1                               |                     | Series      |      |        |      |     |      |      |     |      |      |     |      |      |      |      |      |      |      |     |
|--|---------------------|-------------|------|--------|------|-----|------|------|-----|------|------|-----|------|------|------|------|------|------|------|-----|
|  |                     | 0.5         |      | 1      |      | 5   |      |      | 10  |      |      | 15  |      | 20   |      | 45   |      | 100  |      |     |
| Rated torque                             | (Nm)                | $T_{KN}$    | 0.05 | 0.1    | 0.5  |     |      | 1.0  |     |      | 1.5  |     | 2.0  |      | 4.5  |      | 10   |      |      |     |
| Overall length                           | (mm)                | A           | 14   | 20     | 20   | 23  | 26   | 22   | 25  | 28   | 24   | 29  | 26   | 31   | 35   | 37   | 45   | 43   | 53   |     |
| Outside diameter                         | (mm)                | B           | 6.5  | 10     | 15   |     |      | 15   |     |      | 19   |     | 25   |      | 32   |      | 40   |      |      |     |
| Fit length                               | (mm)                | C           | 4    | 5      | 6.5  |     |      | 6.5  |     |      | 7.5  |     | 11   |      | 13   |      | 15   |      |      |     |
| Inside diameter possible from Ø to Ø H7  | (mm)                | $D_{1/2}$   | 1-3  | 1-5    | 3-9  |     |      | 3-9  |     |      | 3-12 |     | 3-16 |      | 6-22 |      | 6-28 |      |      |     |
| Standard bore H7                         | (mm)                | $D_{1/2}$   | 2    | 3      | 6    |     |      | 6    |     |      | 6/10 |     | 6/10 |      | 10   |      | 10   |      |      |     |
| Clamping screw ISO 4029                  |                     |             | 1xM2 | 1xM2.5 | 1xM3 |     |      | 1xM3 |     |      | 2xM3 |     | 2xM4 |      | 2xM5 |      | 2xM6 |      |      |     |
| Tightening torque of the assembly screws | (Nm)                | E           | 0.35 | 0.75   | 1.3  |     |      | 1.3  |     |      | 1.3  |     | 2.5  |      | 4    |      | 6    |      |      |     |
| Distance                                 | (mm)                | G           | 1.5  | 1.8    | 2    |     |      | 2    |     |      | 2    |     | 2.5  |      | 3.5  |      | 4    |      |      |     |
| Moment of inertia                        | (gcm <sup>2</sup> ) | $J_{total}$ | 0.1  | 0.4    | 1.1  | 1.2 | 1.3  | 1.3  | 1.8 | 2    | 4.7  | 5.5 | 15   | 18   | 20   | 65   | 70   | 180  | 220  |     |
| Weight                                   | (g)                 |             | 1    | 5      | 6    | 6   | 6    | 6    | 7   | 8    | 12   | 14  | 22   | 24   | 26   | 54   | 58   | 106  | 114  |     |
| Torsional stiffness                      | (Nm/rad)            | $C_T$       | 50   | 70     | 280  | 210 | 170  | 510  | 380 | 320  | 750  | 700 | 1200 | 1300 | 1200 | 7000 | 5000 | 9050 | 8800 |     |
| Axial                                    | ± (mm)              | Max. values | 0.4  | 0.4    | 0.4  | 0.5 | 0.6  | 0.4  | 0.5 | 0.6  | 0.5  | 0.7 | 0.5  | 0.6  | 0.7  | 0.7  | 1    | 1    | 1.2  |     |
| Lateral                                  | ± (mm)              |             | 0.1  | 0.15   | 0.15 | 0.2 | 0.25 | 0.15 | 0.2 | 0.25 | 0.15 | 0.2 | 0.15 | 0.2  | 0.25 | 0.2  | 0.25 | 0.2  | 0.25 | 0.3 |
| Angular                                  | ± (degree)          |             | 1    | 1      | 1    | 1.5 | 2    | 1    | 1.5 | 2    | 1.5  | 1.5 | 1.5  | 1.5  | 1.5  | 2    | 1.5  | 2    | 1.5  | 2   |

1 Nm = 8.85 in lbs