

# BKL

## WITH CLAMPING HUB 2 - 500 Nm



### PROPERTIES

#### FEATURES

- ▶ easy to mount
- ▶ light weight and low moment of inertia

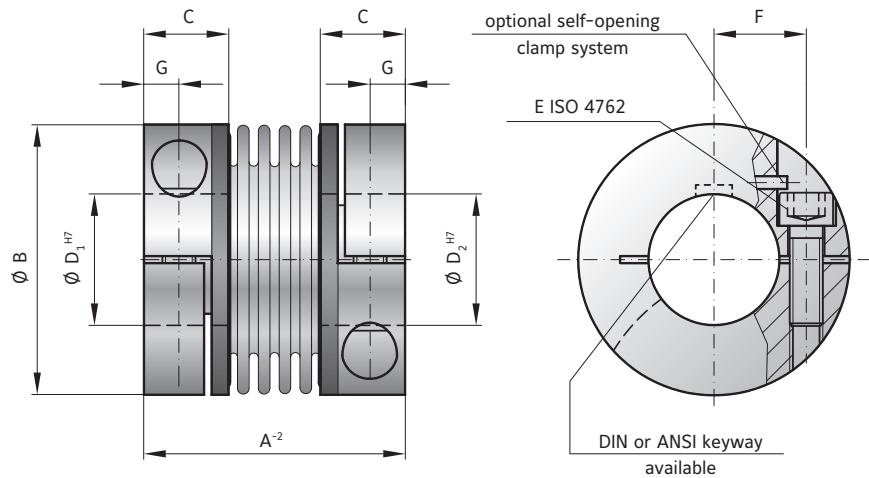
Two clamping hubs concentrically mounted to flexible bellows. Brief overloads of up to 1.5x the rated torque are acceptable.

#### MATERIAL

- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs:** see table

#### DESIGN

**Optional:** self-opening clamp system to open the bore during installation and removal by backing out the clamping screw.



### MODEL BKL

| SIZE   |             | 2                 | 4.5               | 10                | 15                | 30                | 60                | 80                | 150               | 300               | 500               |
|--|-------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Rated torque (Nm)  | $T_{KN}$    | 2                 | 4.5               | 10                | 15                | 30                | 60                | 80                | 150               | 300               | 500               |
| Overall length (mm)  | $A^{-2}$    | 30                | 40                | 44                | 58                | 68                | 79                | 92                | 92                | 109               | 114               |
| Outside diameter (mm)  | B           | 25                | 32                | 40                | 49                | 56                | 66                | 82                | 82                | 110               | 123               |
| Fit length (mm)  | C           | 10                | 13                | 13                | 21.5              | 26                | 28                | 32.5              | 32.5              | 41                | 42.5              |
| Inside diameter possible from $\emptyset$ to $\emptyset$ H7 (mm) | $D_{1/2}$   | 4-12.7            | 6-16              | 6-24              | 8-28              | 10-32             | 14-35             | 16-42             | 19-42             | 24-60             | 35-62             |
| Fastening screw ISO 4762   | E           | M3                | M4                | M4                | M5                | M6                | M8                | M10               | M10               | M12               | M16               |
| Tightening torque of the fastening screw (Nm)                    |             | 2.3               | 4                 | 4.5               | 8                 | 15                | 40                | 70                | 85                | 120               | 200               |
| Distance between centerlines (mm)                                | F           | 8                 | 11                | 14                | 17                | 20                | 23                | 27                | 27                | 39                | 41                |
| Distance (mm)  | G           | 4                 | 5                 | 5                 | 6.5               | 7.5               | 9.5               | 11                | 11                | 13                | 17                |
| Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> )                 | $J_{ges}$   | 0.002             | 0.007             | 0.016             | 0.065             | 0.12              | 0.3               | 0.75              | 1.8   0.8         | 7.5   3.1         | 11.7   4.9        |
| Hub material   |             | AL optional steel | AL optional steel | AL optional steel | AL optional steel | AL optional steel | AL optional steel | AL optional steel | steel optional AL | steel optional AL | steel optional AL |
| Approximate weight (kg)  |             | 0.02              | 0.05              | 0.06              | 0.16              | 0.25              | 0.4               | 0.7               | 1.7   0.75        | 3.8   1.6         | 4.9   2.1         |
| Torsional stiffness ( $10^3$ Nm/rad)                             | $C_T$       | 1.5               | 7                 | 9                 | 23                | 31                | 72                | 80                | 141               | 157               | 290               |
| Axial $\pm$ (mm)   | Max. values | 0.5               | 1                 | 1                 | 1                 | 1                 | 1.5               | 2                 | 2                 | 2                 | 2.5               |
| Lateral $\pm$ (mm)   |             | 0.2               | 0.2               | 0.2               | 0.2               | 0.2               | 0.2               | 0.2               | 0.2               | 0.2               | 0.2               |
| Angular $\pm$ (degree)   |             | 1                 | 1                 | 1                 | 1                 | 1                 | 1                 | 1                 | 1                 | 1                 | 1                 |
| Axial spring stiffness (N/mm)                                    | $C_a$       | 8                 | 35                | 30                | 30                | 50                | 67                | 44                | 77                | 112               | 72                |
| Lateral spring stiffness (N/mm)                                  | $C_r$       | 50                | 350               | 320               | 315               | 366               | 679               | 590               | 960               | 2940              | 1450              |

| ORDERING EXAMPLE   | BKL | 80 | 26 | 22.23 | XX |
|--|-----|----|----|-------|----|
| Model  | ●   |    |    |       |    |
| Size   |     | ●  |    |       |    |
| Bore D1 H7   |     |    | ●  |       |    |
| Bore D2 H7   |     |    |    | ●     |    |
| Special designation only (e.g. anodized hubs).   |     |    |    |       |    |
| For custom features place an XX at the end of the part number and describe the special requirements (e.g. BKL / 80 / 26 / 22.23 / XX; XX=finely balanced for 25,000 rpm) |     |    |    |       |    |