# **Bellows couplings**

# **Model BKM**

Follow-up model to replace couplings 393

**BKM** 11995 BE

12 / 2008

■ Rated torque: 50 Ncm

- Absolutely backlash free and with torsional rigidity
- Positive locking junction through clamping hubs with one hexagon socket set screw acc. ISO 4029 on each side
- Bellow, clamping hubs and set screws in stainless steel
- Conforms to RoHS



## **Bellows couplings BKM**

A stainless steel bellow provides compensation for both misaligment or axial displacement between the two shafts. The couplings are particularly suitable for the rotationally stiff driving of high resolution angle transducers.

For the BKM coupling each of the shafts are attached with hexagon socket set screws. The hubs and set screws are also in stainless steel.

The service life of the couplings ( number of turns or changes of load ) depends on the following factors and can therefore only be reliably determined in practical tests: Torque and moment of inertia of the driven transducer, actual parallel and/or angular offset, axial play in the driven shafts and the ambient temperature must be taken into consideration.

#### **Technical data**

Operating torque (max.): 50 NcmOperating speed (max.): 20 000 rpm

(> 20.000 rpm balanced)

■ Parallel misalignment (max.): ≤ 0,25 mm (lateral displacement)

Axial deviation (max.): ≤ 0,6 mm
 Angular misalignment (max.): ≤ 2°

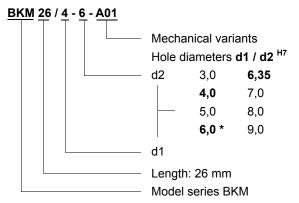
■ Torsional stiffness (max.): 170 Nm / rad ■ Moment of inertia: 1,3 gcm²

■ Operating temperature: - 40 °C .... + 150 °C

■ Material: Stainless steel, 1.4301

10 g approx. (at hole diameter d1 / d2 = 6 mm)

#### **Order code format**



\* Preferred values bold

# Assembly notes:

- 1. The tolerance on the hub and shaft connection are from 0.01 to 0.08 mm
- 2. When mounting the coupling ensure that the metal bellows are not damaged or bent.
- 3. During mounting, the torque and axis misalignment may exceed the value specified without the operation of the coupling being restricted.
- 4. However, for continuous operation, the specified axial and lateral misalignments must not be exceeded. Only then the coupling will provide infinite performance. Lateral axis misalignment requires special attention.
- 5. An additional set screw locking are not necessary.

## **Dimensions in mm**

Mass:

