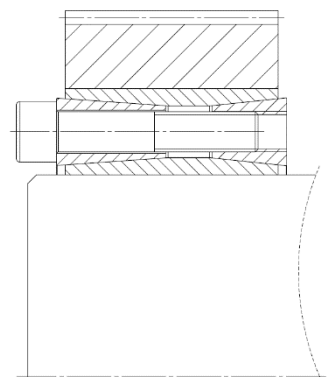
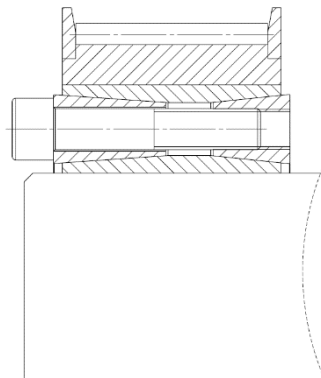
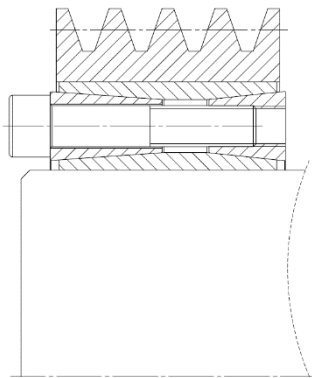
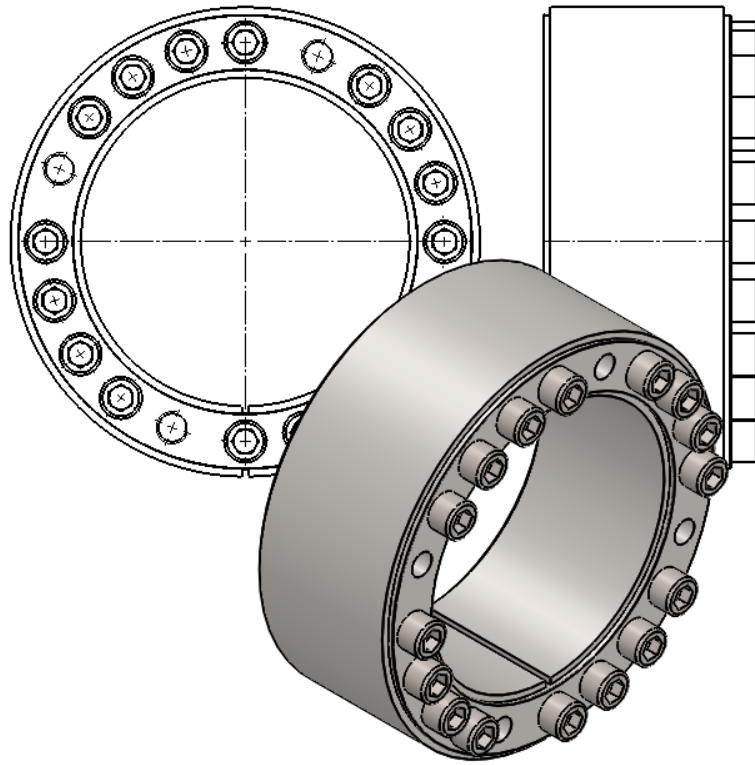




## Locking Device KBS 10



**KBS 10 Locking Device** is a frictionally engaged detachable shaft-hub connection for cylindrical shafts and bores without keyway.





### Features

- delivered in mounted condition
- self-centering
- concentricity **0,02 – 0,04 mm**

### Tolerances, Surfaces

- a good turning process is sufficient: **Rz ≤ 16 µm**
- maximum tolerance: **d = h11/H11 – shaft/hub**

### Components of the locking device KBS 10

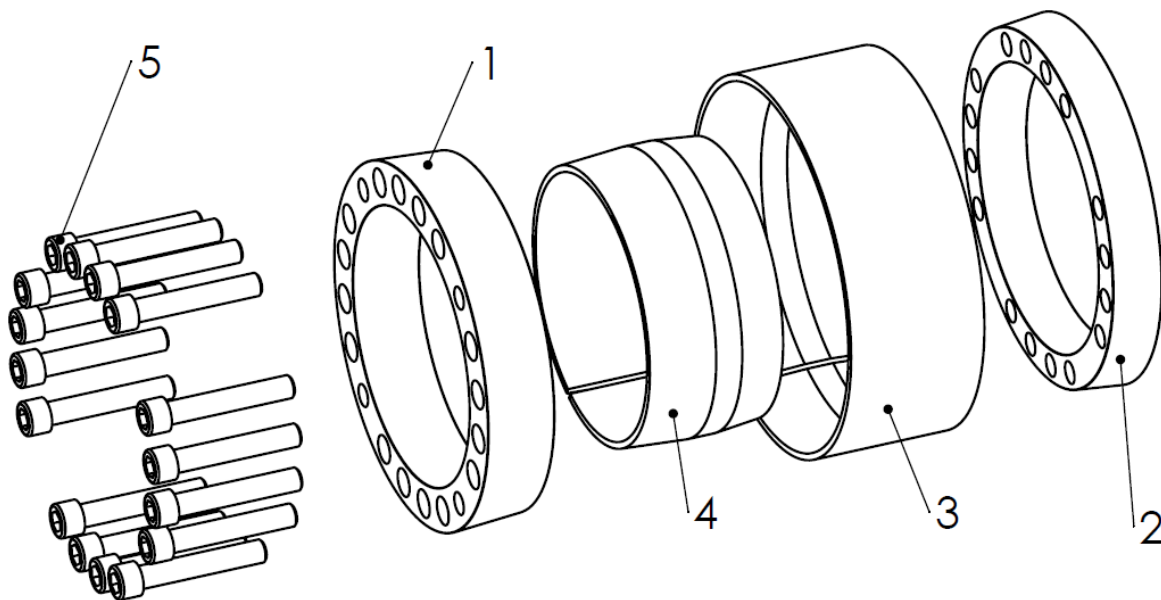


Image 2) KBS 10

Component	Quantity	Description
1	1	front pressure ring
2	1	rear pressure ring
3	1	outer ring (slotted)
4	1	inner ring (slotted)
5	see catalogue	socket head screw DIN EN ISO 4762



#### Information!

Contaminated or used locking devices have to be detached and cleaned prior to installation. Then apply a thin layer of low viscosity oil (e.g. Ballistol all-purpose oil or Klüber Quietsch-Ex).





**Assembly of the locking device**

- Check shaft- and hub-position regarding the stipulated tolerance (h11/H11).
- Contact surfaces of locking device as well as contact surfaces of shaft and hub have to be cleaned (see image 3). Then apply a thin layer of low viscosity oil (e.g. Ballistol Öl or Klüber Quietsch-Ex).

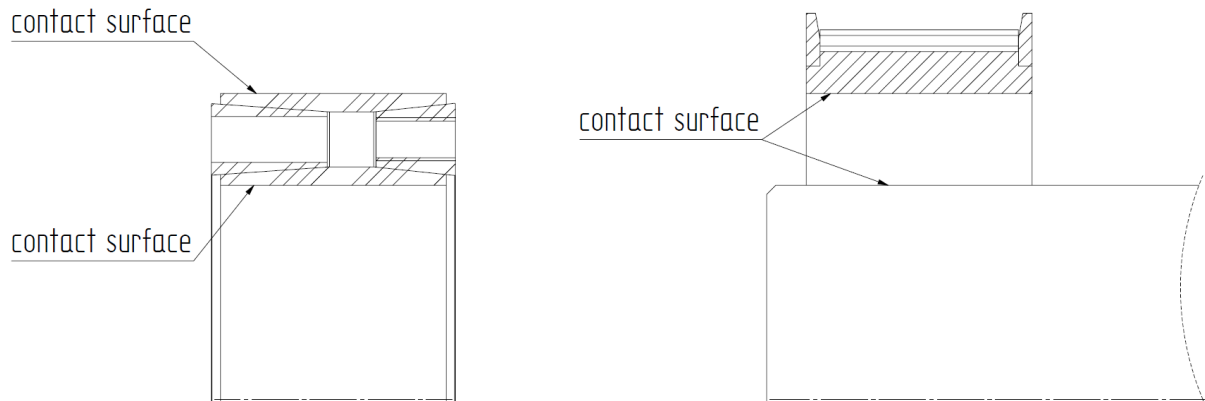


Image 3) cleaning the contact surfaces



**ATTENTION!**

Do not use any oil, grease or sliding-grease paste reducing the coefficient of friction significantly. Oil-free assembly of the locking device may result in different values shown in the table and the values calculated.

- Slightly loosen the clamping screws. Then insert the locking device KBS 10 between shaft and hub.
- Slightly tighten the clamping screws manually and align the locking device with the hub.
- Tighten clamping screws crosswise and evenly in several turns with the tightening torque specified in table 1. Repeat this procedure until a 1/4-turn is no longer possible. Then tighten the clamping screws in sequence according to the specified tightening torque.

**Table 1:**

Locking Device	KBS 10					
Thread Size M	M10	M12	M14	M16	M18	M20
Tightening Torque $T_A$ [Nm]	84	145	235	365	500	710



### Disassembly of the locking device



**DANGER!**

Loosened or falling drive components may result in personal injuries or damage to machines. Please secure all drive components prior to disassembly.

- Loosen all clamping screws by 3-4 threads.
- Screw the clamping screws into the draw-off thread of the outer pressure ring (component 1) (see image 4).
- Tighten clamping screws crosswise and evenly with a  $\frac{1}{4}$  -turn. Increase loosening torque gradually until one of both pressure ring (component 1/2) are separated.
- Remove the loosened locking device between shaft and hub.

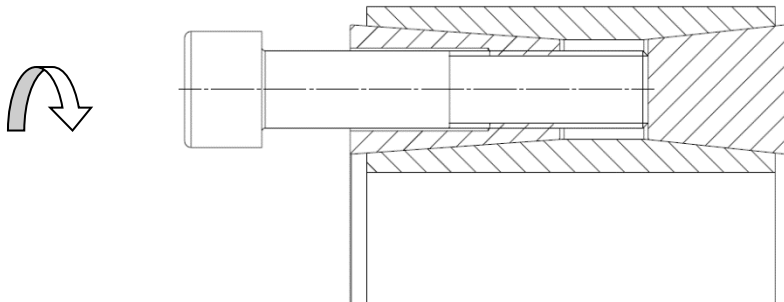


Image 4) Loosening the pressure ring



**Attention!**

Non-observance of these instructions or non-consideration of operating conditions selecting the locking device may impair the function.

**Disposal:** *Defective locking devices must be cleaned and scrapped.*

