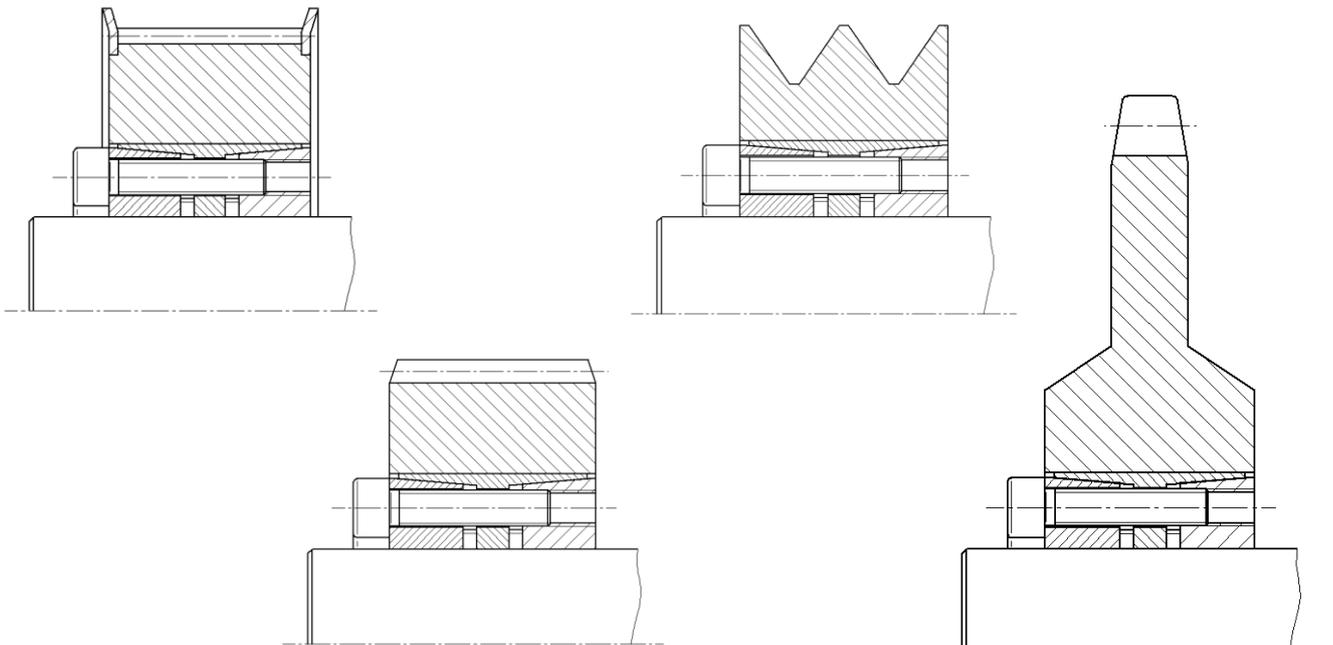
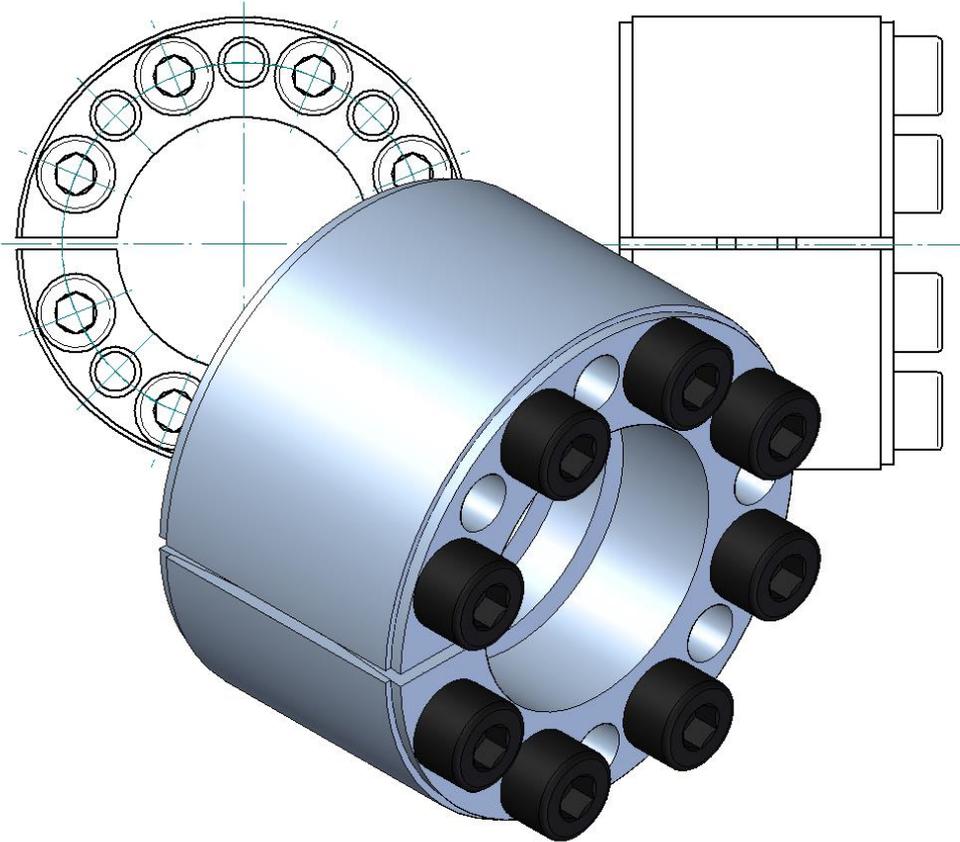




Locking Device KBS 18



KBS 18 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 = h8/H8 – shaft/hub**

Components of the locking device KBS 18

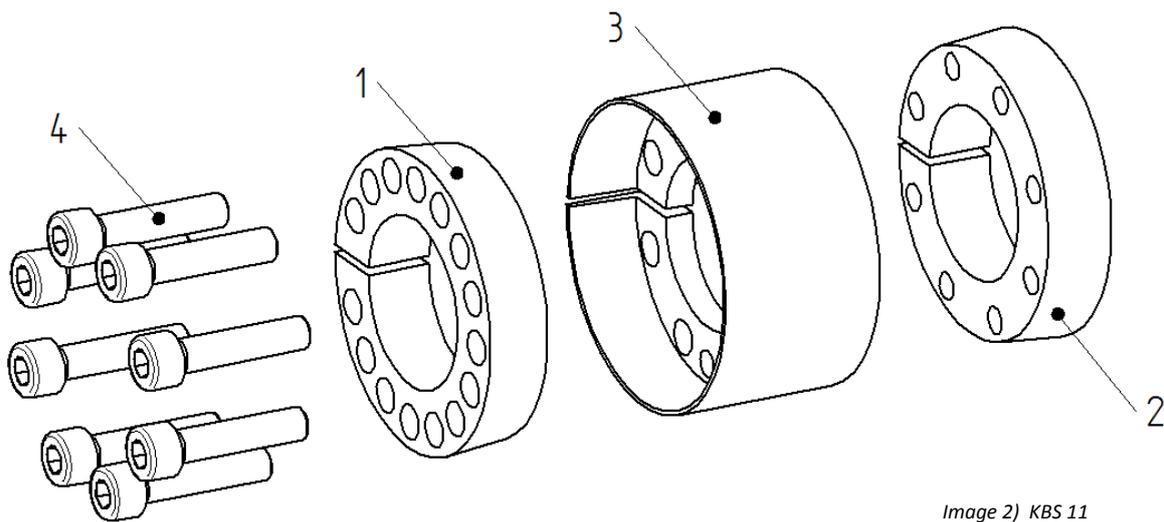


Image 2) KBS 11

Component	Quantity	Description
1	1	front pressure ring (slotted)
2	1	rear pressure ring (slotted)
3	1	external ring (slotted)
4	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 (h8/H8).
- Contact surfaces of locking device as well as contact surfaces of shaft and hub have to be cleaned (see image 4). Then apply a thin layer of low viscosity oil (e.g. Ballistol Öl or Klüber Quietsch-Ex).

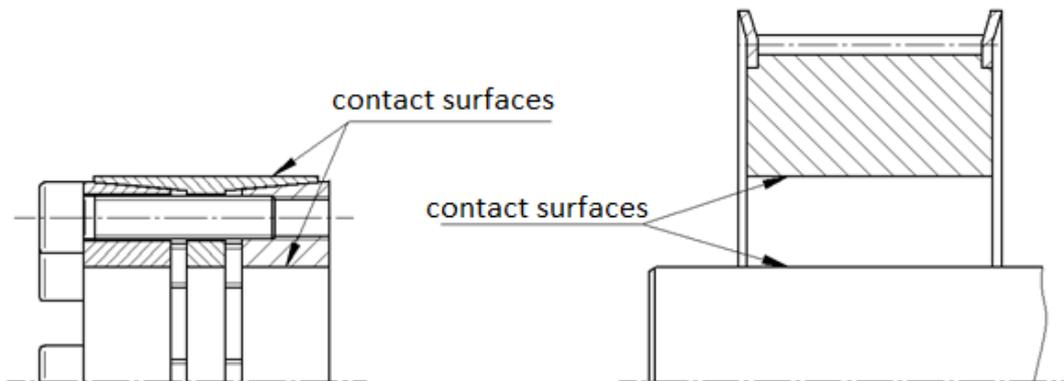


Image 3) cleaning the contact surfaces



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 18 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 18						
Thread Size M	M6	M8	M10	M12	M14	M16	M20
Tightening Torque T _A [Nm]	17	41	83	145	230	355	690



Information!

Assembly of the KBS 18 may result in an axial displacement between hub and shaft.



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 evenly in sequence and unscrew them.
- 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 ¼ -turn. Increase loosening torque gradually until the outer pressure ring (component 1) and the outer ring (component 2) are separated.
- Screw clamping screws into the draw-off thread of the outer ring (component 3) (see image 5).
- Tighten clamping screws crosswise and evenly with a ¼ -turn. Increase loosening torque gradually until the inner pressure ring (component 2) and the outer ring (component 3) are separated.
- Remove the loosened locking device between shaft and hub.

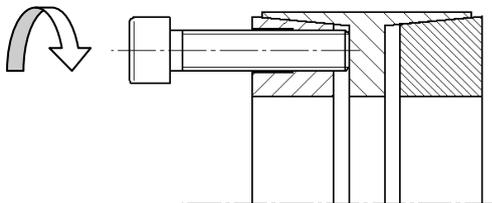


Image 4) Loosening the outer pressure ring

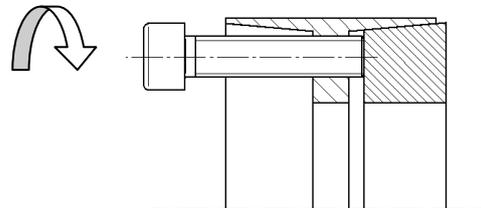


Image 5) Loosening the inner pressure ring



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.