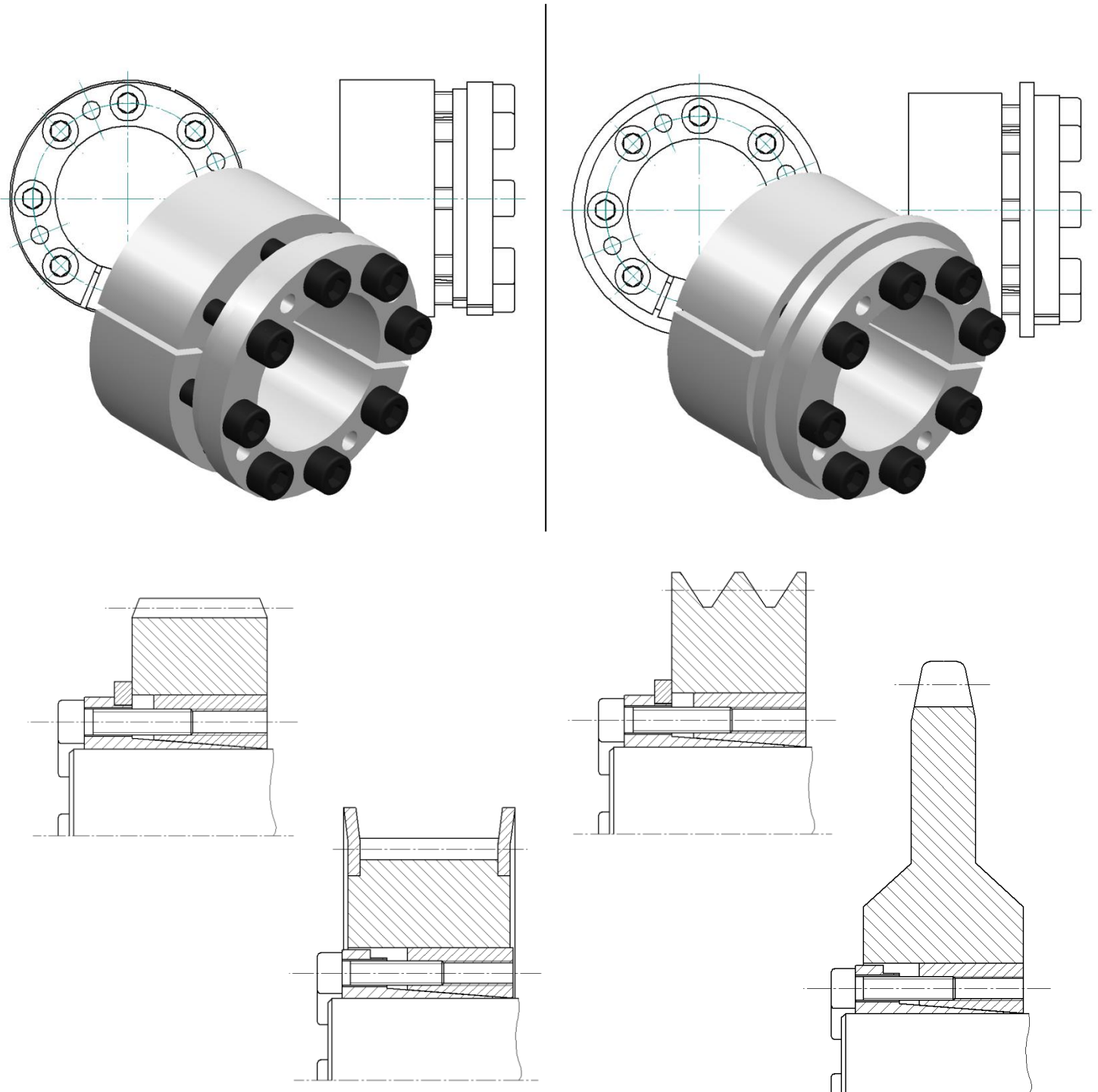




Locking Device KBS 70 / KBS 71



KBS 70 / KBS 71 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 locking device

KBS 70

KBS 71

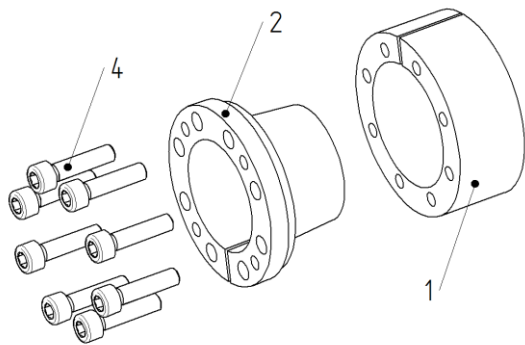


Image 2) KBS 70

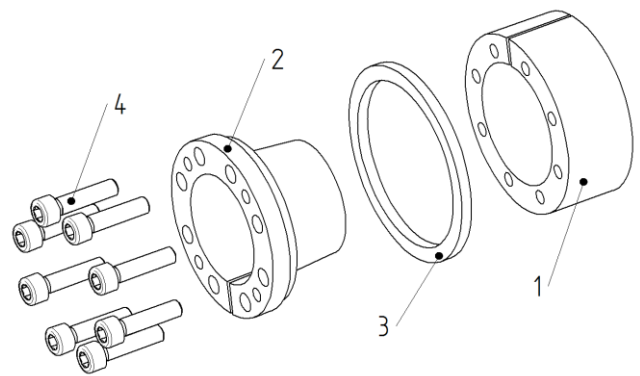


Image 3) KBS 71

Component	Quantity	Description
1	1	outer ring (slotted)
2	1	inner ring (slotted)
3	1	axial ring
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).
- Clean contact surfaces of locking device as well as contact surfaces of shift and hub (see image 3). Then apply a thin layer of low viscosity oil (e.g. Ballistol oil or Klüber Quietsch-Ex)

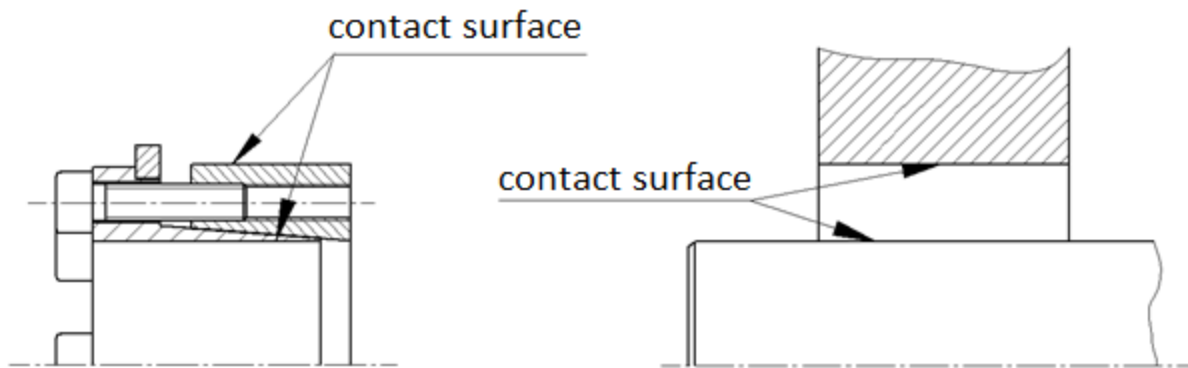


Image 4) Cleaning the contact surfaces



ATTENTION!

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

- Slightly loosen the clamping screws. Insert clamping set KBS 70 / KBS 71 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 70 / KBS 71				
Thread Size M	M6	M8	M10	M12	M14
Tightening Torque T _A [Nm]	17	41	83	145	230



Information!

Assembly of the KBS 70 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 ring (component 1) (see image 5)
- Tighten clamping screws crosswise and evenly with a $\frac{1}{4}$ -turn. Increase loosening torque gradually until the outer ring (component 1) and the inner ring (component 2) are separated.
- Remove the loosened locking device between shaft and hub.

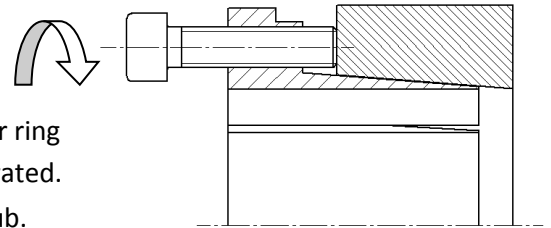


Image 5) Loosening the locking device



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.*