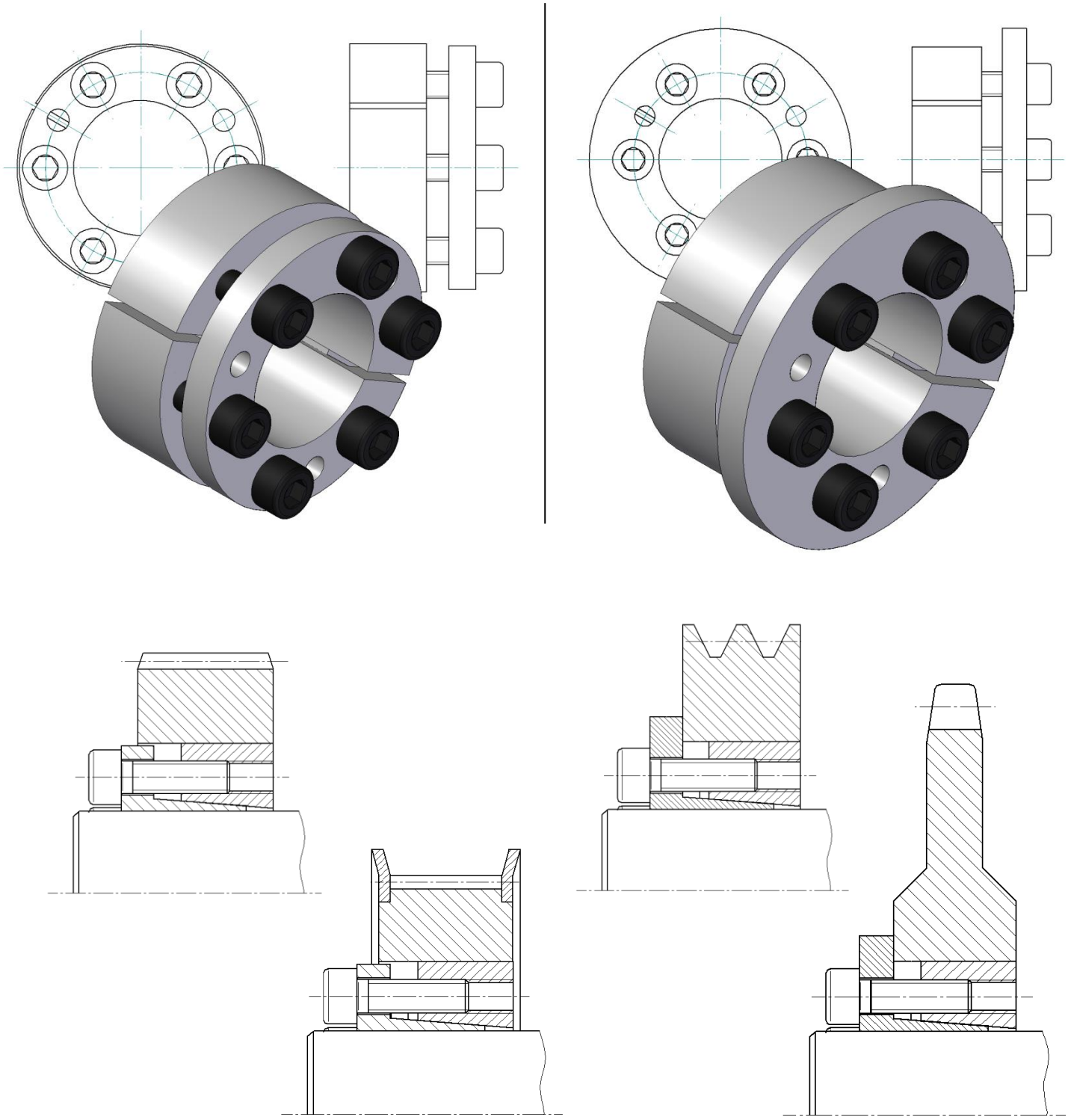
Locking Device KBS 13 / KBS 15 / KBS 16



KBS 13 / KBS 15 / KBS 16 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 13** **KBS 15 / KBS 16**

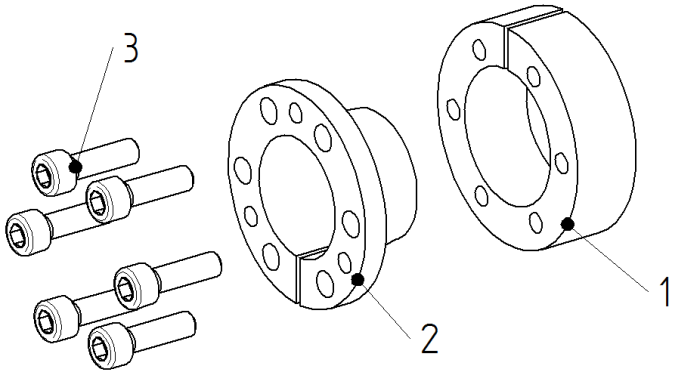


Image 2) KBS 13

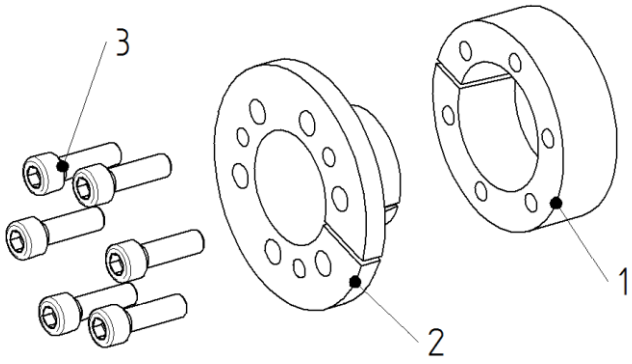


Image 3) KBS 15 / 16

Component	Quantity	Description
1	1	outer ring (slotted)
2	1	inner ring (slotted)
3	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 mandatory tolerance (h8/H8).
- Contact surfaces of locking device as well as contact surfaces of shaft and hub must be cleaned (see image 3). Then apply a thin layer of low viscosity oil (e.g. Ballistol oil or Klüber Quietsch-Ex).

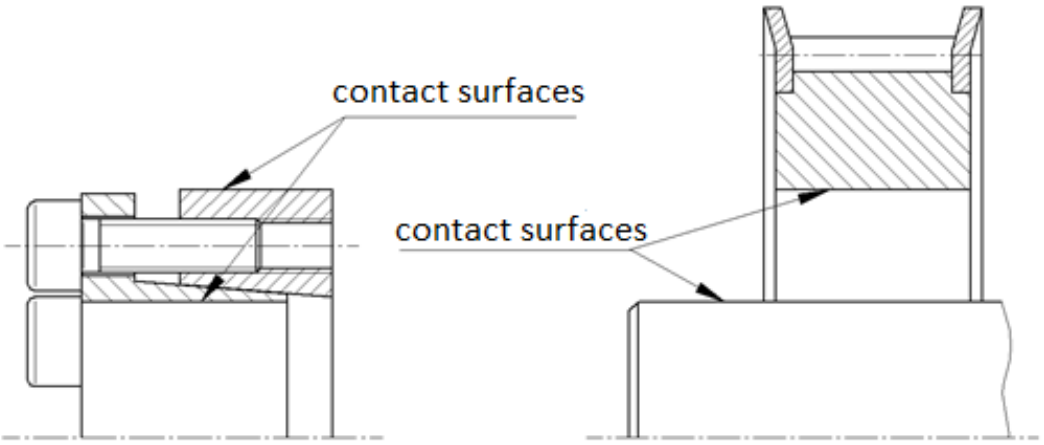


Image 3) Cleaning the contact surfaces

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

- Slightly loosen the clamping screws. Then insert the locking device KBS 13 / KBS 15 / KBS 16 between shaft and hub. (Using the KBS 15 / KBS 16, the hub must fit the flange!)
- 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 13				
Thread Size M	M6	M8	M10	M12	M14
Tightening Torque T_A [Nm]	14	35	70	125	190

Locking Device	KBS 15 / 16				
Thread Size M	M6	M8	M10	M12	M14
Tightening Torque T_A [Nm]	17	41	83	145	230

Information!	Assembly of the KBS 13 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 evenly with a ¼-turn. Increase loosening torque gradually until the outer ring (component 1) and the inner ring (component 2) are separated.
- Remove the loosened clamping set between shaft and hub.

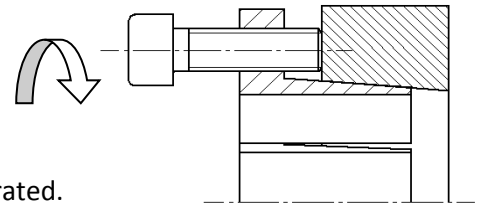


Image 5) Loosening the locking device

Attention!	Non-observance of these instructions or non-consideration of operating conditions selecting the clamping set may impair the function.

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