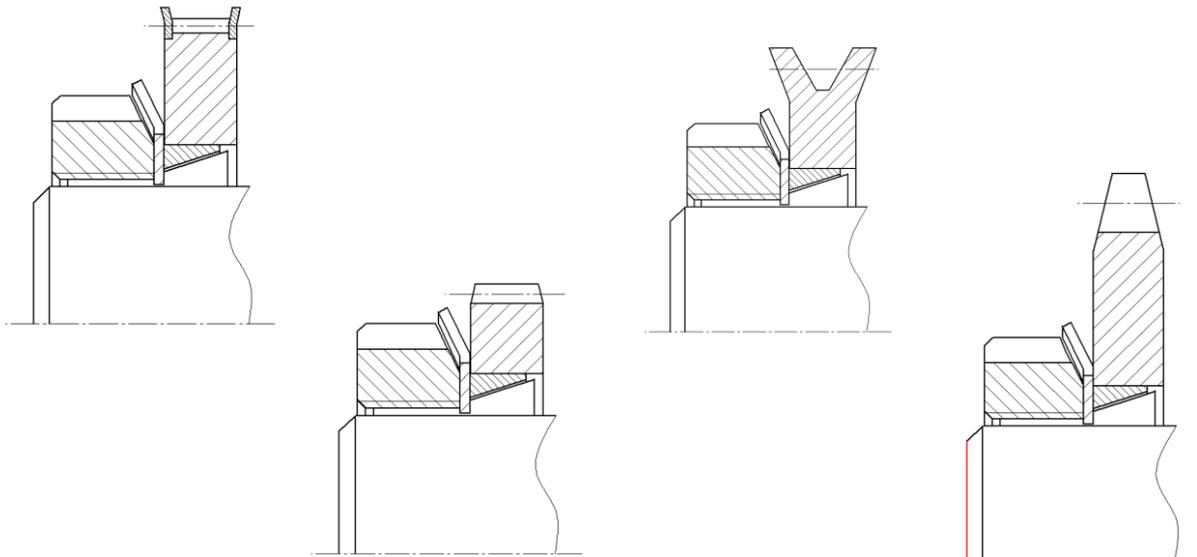
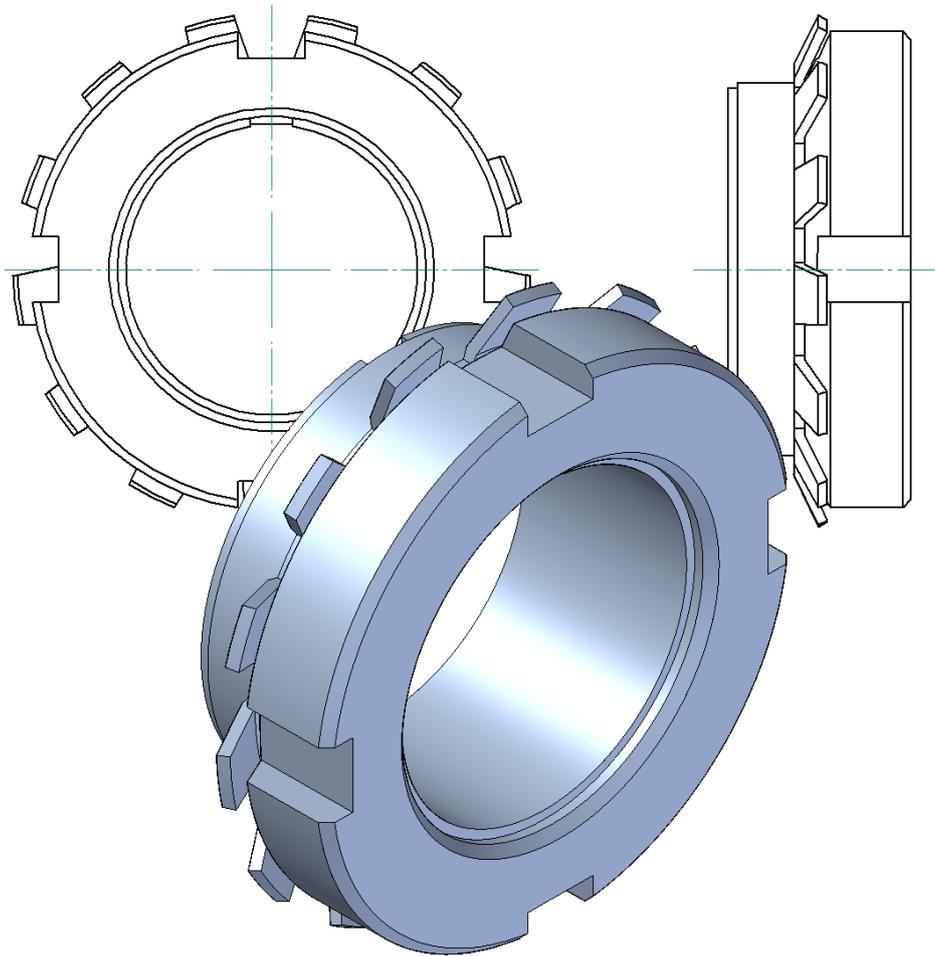




Locking Device KBS 51



KBS 51 Locking Device is a frictionally engaged detachable shaft-hub connection for cylindrical shafts and bores without keyway.





Features

- delivered in mounted condition
- non 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 51

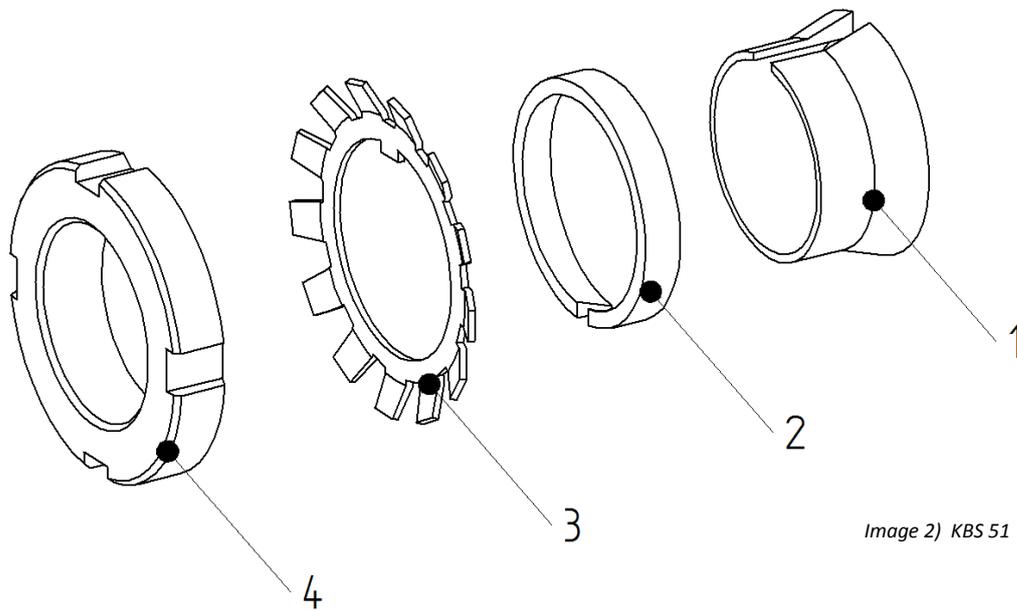


Image 2) KBS 51

Component	Quantity	Description
1	1	inner ring (slotted)
2	1	outer ring (slotted)
3	1	locking plate
4	1	slotted nut



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 (h9/H9).
- 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)

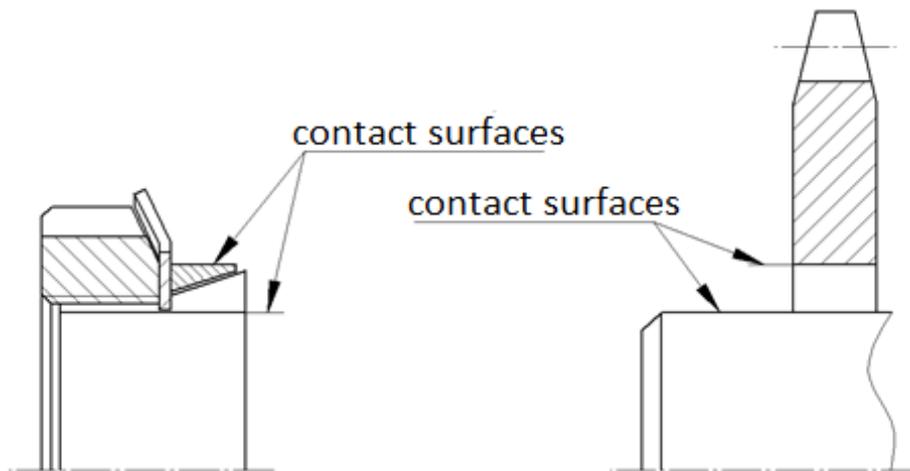


Image 3) Cleaning the contact surfaces



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 slotted nut. Insert clamping set KBS 51 between shaft and hub.
- Slightly tighten the slotted nut manually and align the clamping set with the hub.
- Tighten slotted nut evenly and gradually with the tightening torque specified in table 1. Repeat this procedure until a $\frac{1}{4}$ -turn is no longer possible.
- Bent the aligned tab of the locking plate into the slot of the nut.

Table 1:

Locking Device	KBS 51					
Size slotted nut M	M20x1	M25x1,5	M30x1,5	M35x1,5	M40x1,5	M45x1,5
Tightening Torque T _A [Nm]	95	160	220	340	480	680
Size slotted nut M	M50x1,5	M55x2	M60x2	M65x2	M75x2	
Tightening Torque T _A [Nm]	870	970	1100	1300	2000	



Information!

Assembly of the KBS 51 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.

- Bend up the locking tab of the locking plate (see image 5)
- Loosen and unscrew the slotted nut. (see image 5.1)
- Remove the loosened clamping set between shaft and hub.

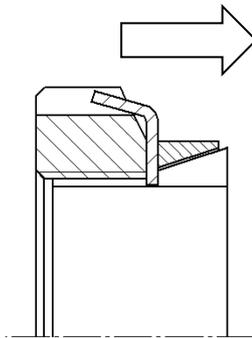


Image 5) Loosening the locking plate

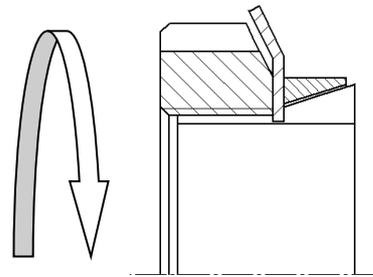


Image 5.1) Loosening the slotted nut



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.

