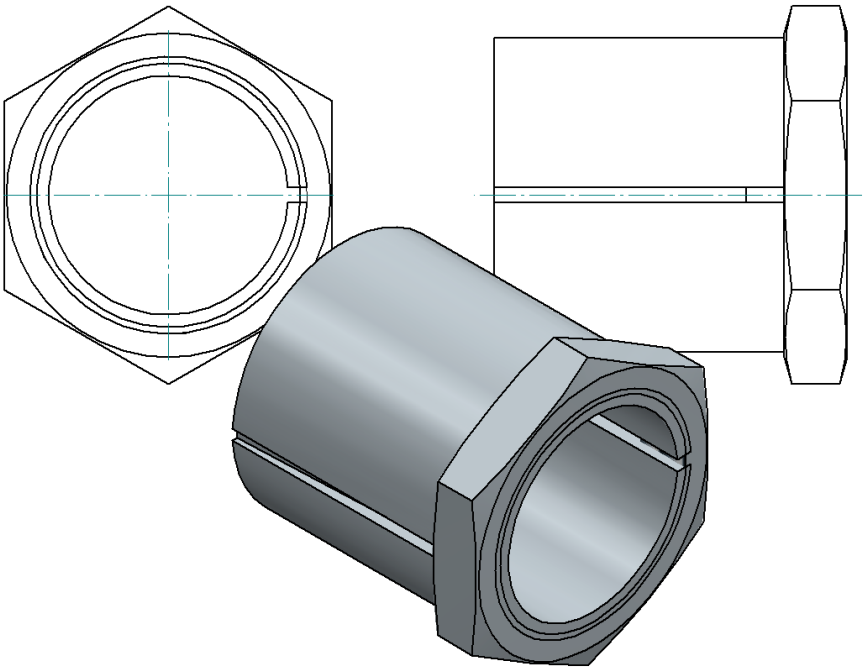
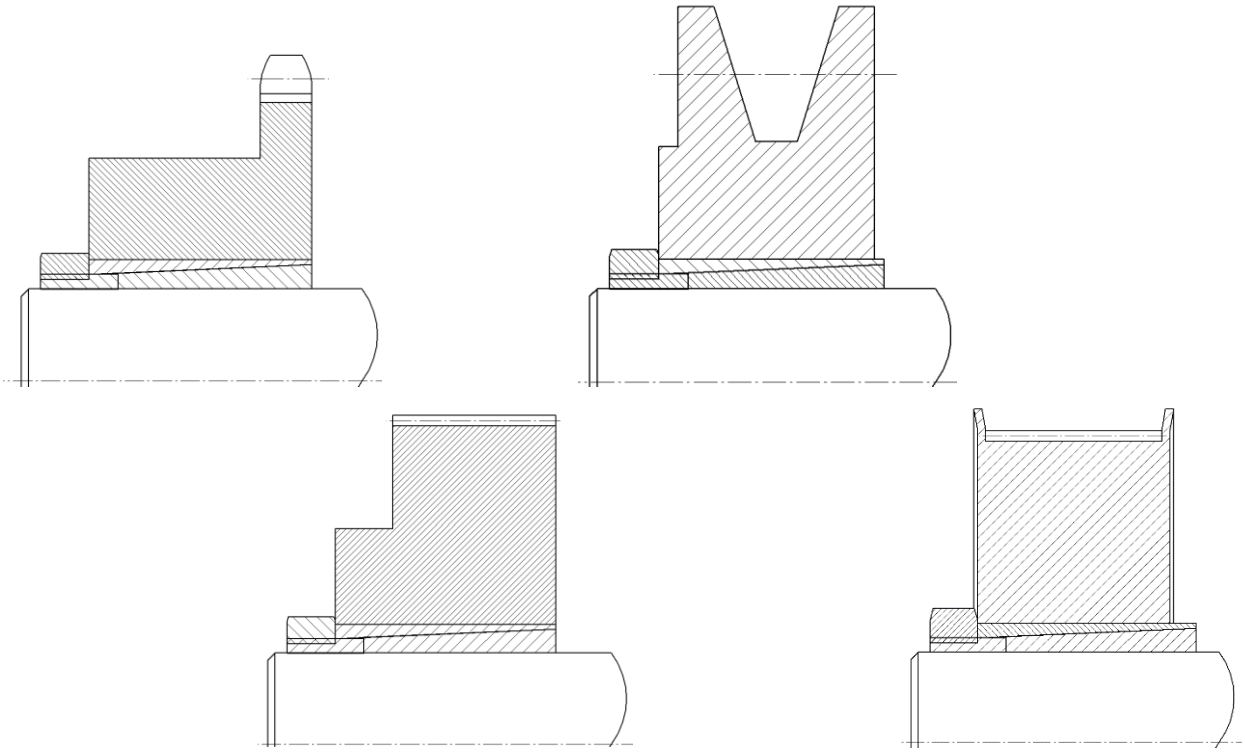
# Locking Device KBS 57





The **KBS 57 Locking Device** is a frictionally engaged shaft-hub connection for cylindrical shafts and bores without keyway.

## Characteristics

- generally delivered fully assembled
- self-centering
- true-running accuracy **0,02 – 0,04 mm**

### *Tolerances, Surfaces*

- one accurate rotating process is sufficient: **Rz ≤ 16 µm**
- maximum permissible tolerance: **d = h8/H8 – Shaft/Hub**

## Components of locking device KBS 57

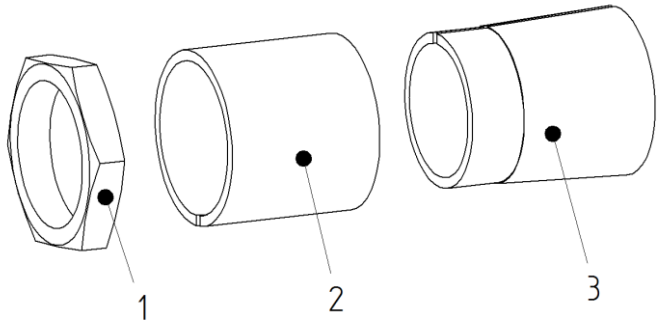



*Image 1) KBS 57*

| Component | Quantity | Description |
|---|---|---|
| 1 | 1 | Hexagon nut |
| 2 | 1 | Outer ring (slotted) |
| 3 | 1 | Inner ring (slotted) |

**Information!**

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

## Assembly of the locking device

- Check the shaft- and hub position regarding the permitted tolerance (h8/H8).
- Clean contact surfaces both of the locking device, the shaft and the hub (see image 2). Then apply a thin layer of low viscosity oil (e.g. Ballistol Universal Oil or Klüber Quietsch Ex).

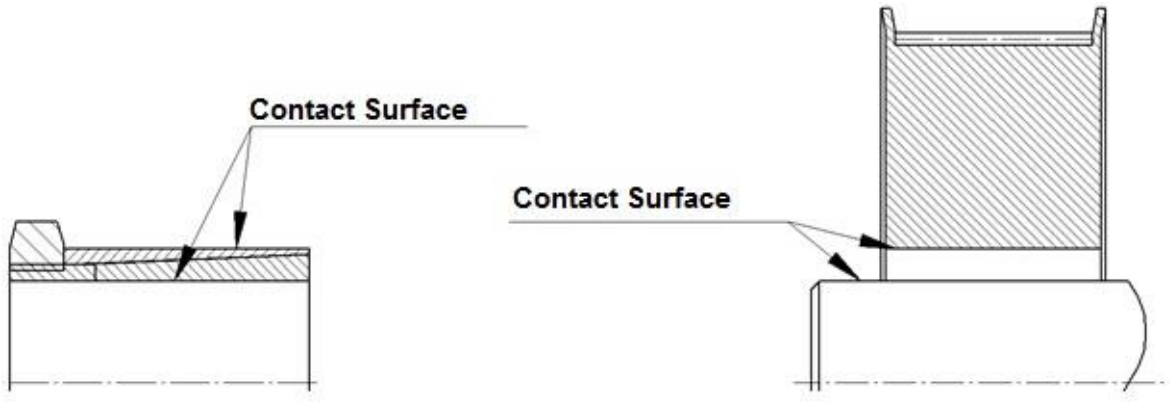



*Image 2) Cleaning the contact surfaces*

| | |
|---|---|
| **Attention!** | You must not use any oil or grease that increases the friction coefficient significantly. Oil-free assembly may result in deviating table and calculation values. |

- Slightly loosen the hexagon nut (component 1). Insert locking device KBS 57 between shaft and hub.
- Slightly tighten the hexagon nut manually and align the locking device with the hub.
- Tighten the hexagon nut to the torque stated in table1.

**Table 1:**

| Locking device | KBS 57 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| Size d x D | 4 x 8 | 5 x 10 | 6 x 10 | 6,35 x 10 | 7 x 12 | 8 x 14 |
| Wrench size SW | 8 | 10 | 10 | 10 | 12 | 16 |
| Torque $T_A$ [Nm] | 4 | 5 | 8 | 8 | 9 | 15 |
| | | | | | | |
| Size d x D | 9 x 14 | 9,52 x 14 | 10 x 17 | 11 x 17 | 12 x 17 | 14 x 20 |
| Wrench size SW | 16 | 16 | 18 | 18 | 18 | 22 |
| Torque $T_A$ [Nm] | 15 | 15 | 19 | 19 | 19 | 25 |

| Size d x D | 15 x 20 | 15,88 x 23 | 16 x 23 | 17 x 23 | 19 x 25 | 20 x 28 |
|---|---|---|---|---|---|---|
| Wrench size SW | 22 | 26 | 26 | 26 | 26 | 30 |
| Torque $T_A$ [Nm] | 25 | 27 | 27 | 27 | 30 | 32 |

| Size d x D | 25 x 32 | 30 x 37 | 35 x 43 | 40 x 50 |
|---|---|---|---|---|
| Wrench size SW | 34 | 38 | 48 | 55 |
| Torque $T_A$ [Nm] | 42 | 47 | 52 | 58 |

**Information!**

During assembly, there might be an axial displacement of the hub relative to the shaft, using the KBS 57.

## Disassembly of the locking device

**Danger!**

Loosened of falling drive components can cause personal injury or machine damages. Secure the drive components prior to disassembly.

- Loosen the clamping nut (component1).
- Turn the clamping nut counter-clockwise until locking device KBS 57 can be moved.
- Remove the loosened locking device.

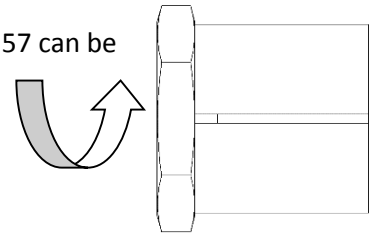


*Image 3) Loosening the locking device*

**Attention!**

Non-compliance with these instructions as well as disregarded operating conditions dimensioning the locking device can influence the function of the locking device.

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