

## AF 10.2 – AF 60.2

### Assembly instructions

### Disassembly and assembly of output drive type AF - with spring loaded stem nut

#### Scope

These assembly instructions apply for the following versions of output drive type AF:

- Spring suspension in directions OPEN and CLOSE, refer to figure 1.
- Spring suspension in direction CLOSE, refer to figure 2.

#### Delivery details

Unless ordered explicitly with thread, the stem nut [3] is supplied unbored or with a pilot bore when leaving the factory. For finish machining the stem nut, disassemble stem nut from output drive type AF.

The distortion lock [8] is provided on delivery.

The grub screws [06] are part of the scope of delivery.

#### Special tools

- Adjustable hook spanner

#### Disassemble stem nut



#### **WARNING**

**Output drive type AF is subject to high pretension:  
Danger when opening!**

*Failure to observe this warning can result in serious injury.*

- For disassembly and assembly of stem nut, the spigot ring [2] of output drive type AF may NOT be released.
- The spring stack remains in the output mounting flange.
- The spring stack may only be disassembled by trained AUMA staff using the appropriate tools.

1. Remove output drive type AF after unfastening the screw [07] from multi-turn actuator/gearbox.
2. Unfasten stem nut [3] upward (actuator face) using hook spanner from locking nut [5] (figure 1) or positioning ring [6] (figure 2). The distortion lock [8] prevents the turning of locking nut [5] or positioning ring [6].
3. Remove stem nut [3] from output mounting flange. For this, a screw or eyebolt can be fastened into the thread.
4. Drill and bore stem nut [3] and cut thread.  
→ NOTE: When fixing in the chuck, make sure stem nut runs true.
5. Clean the machined stem nut [3].

#### 2. Assemble stem nut

1. Insert stem nut [3] from the top (actuator face) into output mounting flange [1] and fasten locking nut [5] (figure 1) or positioning ring [6] (figure 2) to the stop.
  2. Reverse output drive type AF, i.e. output drive side points upward.
  3. Remove distortion lock [8] after unfastening the screws [09].
  4. Secure stem nut [3] with locking nut [5] or positioning ring [6] with grub screws [06] against distortion, by:
    - Spot drill stem nut [3] through threaded holes (position [6]) in positioning ring [6] or locking nut [5].
    - Insert a drop of threadlocking adhesive (e.g. Loctite 243) into the threaded holes.
    - Insert and tightly fasten grub screws [06].
- NOTE: Grub screws [06] must not protrude from locking nut [5] or positioning ring [6].

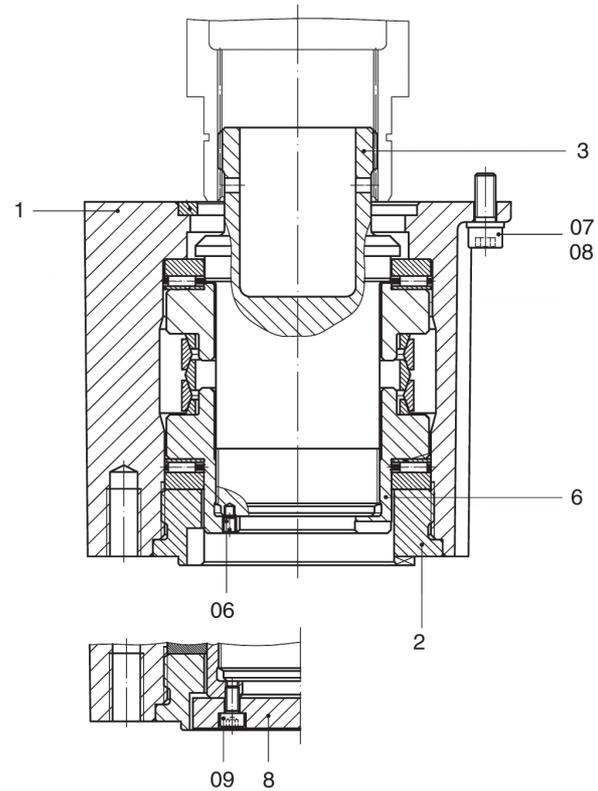
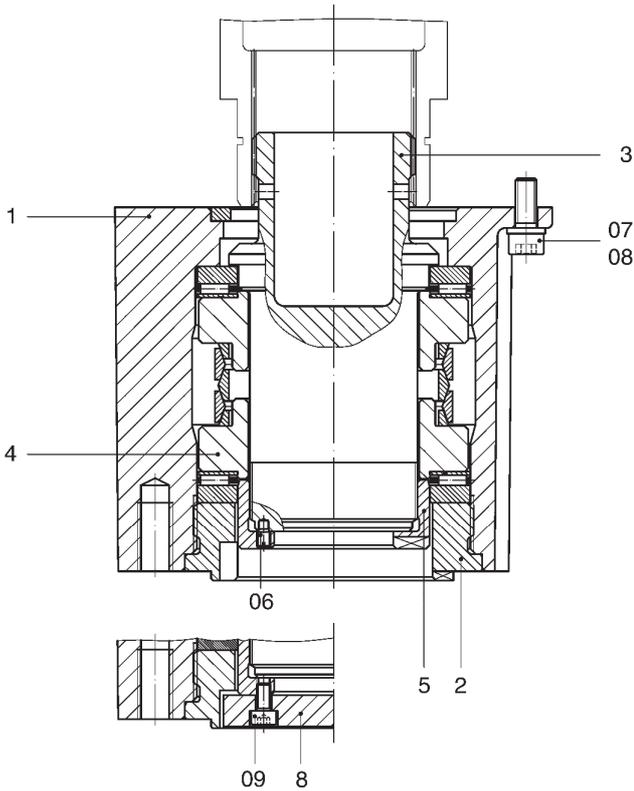
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5. Thoroughly degrease mounting surfaces of multi-turn actuator/gearbox and output mounting flange AF.
6. Mount output drive type AF using screws [07] and curved spring lock washers [08] to multi-turn actuator/gearbox.
7. Fasten screws evenly crosswise with a torque according to table "Tightening torques".

Figure 1: Spring suspension in directions OPEN and CLOSE

Figure 2: Spring suspension in direction CLOSE



Distortion lock [8] for assembly and disassembly

Distortion lock [8] for assembly and disassembly

Table: Tightening torques for screws

Screws Threads	Tightening torque TA [Nm]		
	Strength class		
	8.8	A2-70/A4-70	A2-80/A4-80
M6	11	8	10
M8	25	18	24
M10	52	36	48
M12	87	61	82
M16	214	150	200
M20	431	294	392
M30	1 489	564	–
M36	2 594	–	–