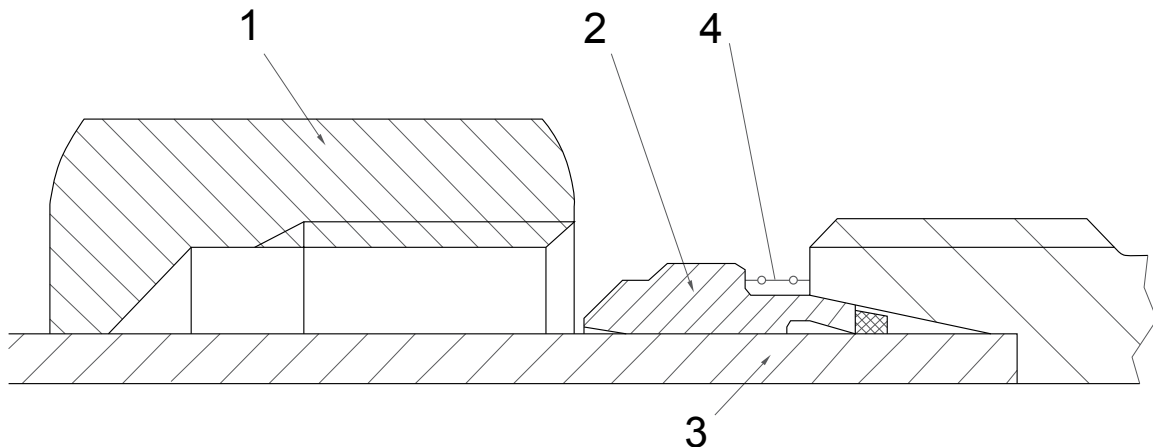





# ASSEMBLY INSTRUCTION DSW RING

The DSW is a result of the rigorous development of a cutting ring with elastomer sealing, as was demanded by the market. The ring can be used in standardised screw coupling systems with a 24° cone in accordance with ISO 8434-1.



## Assembly in the hardened pre-assembly connecting piece (VM)

1. Oil the pre-assembly connecting piece and 45° shoulder of the DSW. Gates lubricant paste should be used for rustproof steel.
2. Slide the union nut (1) and DSW ring (2) onto the end of pipe to be installed (3), whereby it must be ensured that the shoulder of the DSW ring of the union nut faces the union nut.
3. Insert the tube end with slid-on elements into the pre-assembly connecting piece.  
 If the end of tube does not fit correctly, the assembly will be carried out improperly.
4. Screw on the union nut by hand onto pre-assembly connecting pieces until hand tight and tighten until the pipe no longer turns. Then turn another approx. 1/2 turn.
5. **FINAL ASSEMBLY:** Put the thus pre-mounted tube into the screw socket and screw the cutting ring surface – connecting piece surface (4) are pressed together. When it is brought into position, a very clear increase in force is noticeable. Connecting pieces must be held in place with a wrench.

### CHECK FOR PROPER ASSEMBLY:

The connecting surface of the cutting ring and the connecting piece surface must lie against each other. It may spring back slightly after disassembly.

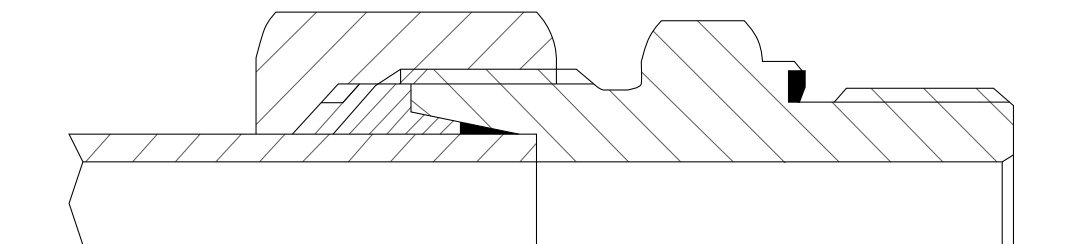
## Direct assembly in tube fitting

1. Oil the screw socket and 45° shoulder of the DSW. Gates sliding paste is to be used with rustproof steel.
2. Push union nut (1) and DSW ring (2) onto the tube end to be mounted (3), whereby it must be ensured that the shoulder of the DSW ring is facing the union nut.
3. Put the tube end with the slid-on elements into the 24° cone of the connecting pieces.
4. Tighten the union nut by hand.
5. Press the tube end firmly into position in the connecting piece (assembly will not be correct if it is not properly brought into position) and tighten the union nut until there is a clearly perceptible increase in force (approx. 1 turn).
6. Remove and examine union nut to check whether the gap (4) between DSW ring and connecting piece has been closed.

## Re-assemblies in case of operational damage to the elastomer sealing

1. After removing the union nut, the sealing ring can be taken off.
2. Slide on the new sealing ring (trapezoidal washer) - with the large surface towards the cutting ring - onto the tube.
3. Put the tube end into the screw socket and screw in until there is a clearly noticeable increase in force.

It is essential that you hold the connecting pieces with a wrench when tightening. If the sealing ring is pushed onto the pipe ensure that it is not damaged.



## PIPE QUALITY

We recommend the use of seamless precision steel tube with dimensions in accordance with DIN EN ISO 10305 Part 4, Material: E235, NBK.

Tubes made from rust and acid-proof material must be seamlessly cold-drawn, scale-free and heat-treated in accordance with DIN EN 10216-5 - X6 CrNiMoTi17-12-2-CFD and exhibit tolerances in accordance with DIN EN ISO 10305-1.