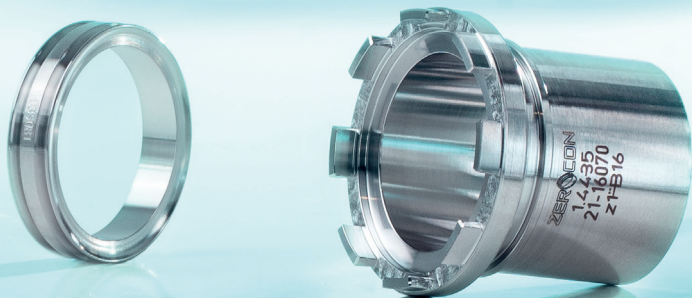


ASSEMBLY INSTRUCTION

ZeroCon Union Orbital Welding



MA-ZC
10.2024 Rev. 2

Focus in details®

schwer
fittings



Safety Instructions

■ General safety regulations

Please pay attention to **general safety regulations** when working with tools and machines. Wear protective clothing!

■ Pipeline and medium

Before assembly or disassembly make sure, the tube or pipeline **is not under pressure**. Take care **not to apply any additional tension or stress** to the coupling, when setting up the pipeline.

Do not exceed any **temperature or pressure limits**. Pay attention when using dangerous or harmful mediums. Respect the **temperature at the pipeline**.

■ Workplace

Keep your workplace clean. Make sure you have the all necessary material available before starting the assembly.

■ Wear Safety glasses

Some workers just remove chips from the tubes by using pressurized air. Dust and chips can harm your eyes, therefore **wear safety glasses**.

■ Foreign particles

Take care that the coupling is **free of dirt and foreign particles** before assembly. Contaminated parts may cause leakages.



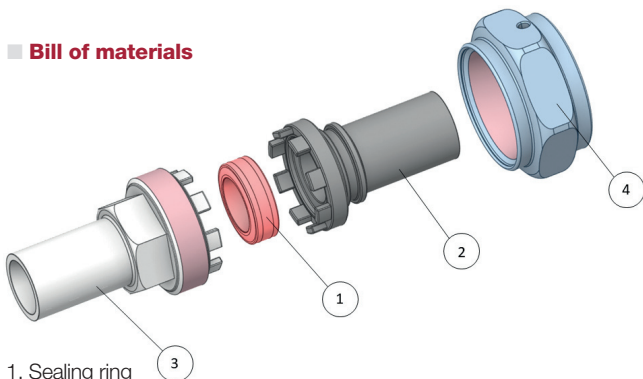
Content

■ Assembly Instruction	4
■ Disassembly	8
■ Certificate	11

■ **Note:**

The high-density ZC screw connection must always be installed under the cleanest possible conditions. It must always be ensured that all sealing and functional surfaces of the individual parts are free of dirt and foreign particles.

■ **Bill of materials**

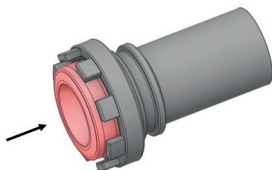


1. Sealing ring
2. Insert part
3. Threaded connection
4. Nut



Assembly Instruction

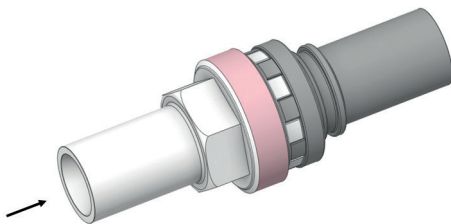
Step 1



Insert the sealing ring pos. 1 into the Insert part pos. 2.

► The sealing ring centres itself and is firmly seated in the Insert of the orbital welding.

Step 2



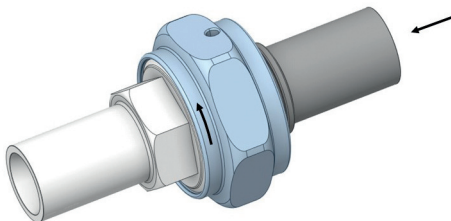
Attach the counterpart with threaded connection pos. 3 to the insert part. The crown tips must engage with each other.

► Connection self-centred through the sealing ring.



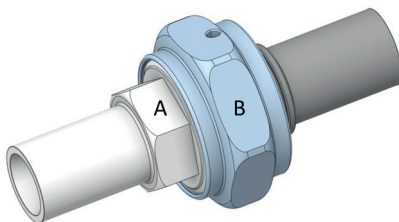
Assembly Instruction

Step 3



1. Set up the nut pos. 4.
2. Hand tighten the nut.

Step 4

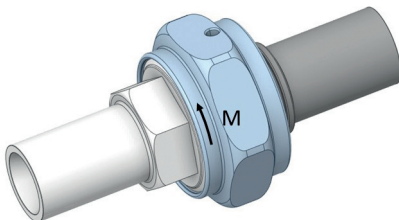


1. Hold the connection in place by fixing the hexagon A with a suitable open-ended wrench.
2. Place the torque wrench on hexagon B of the nut pos. 4.



Assembly Instruction

Step 5



1. Tighten the nut pos. 4 with the defined torque M (see table 1).
2. The assembly is complete, if all screws are tightened with the torque M.

	System 1 (N6-4LiAg)	System 2 (N10-4LiAg)	System 3 (N13-4LiAg)	System 4 (N19-4LiAg)	System 5 (N25-4LiAg)
ISO	---	---	13,5 mm	17,2 mm	21,3 mm
DIN	6 mm	8 mm; 10 mm	12 mm; 13 mm	18 mm; 19 mm	23 mm
INCH	1/4"	3/8"	1/2"	3/4"	1"
Torque M	20 Nm	35 Nm	45 Nm	70 Nm	95 Nm

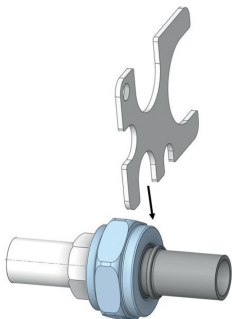


Disassembly



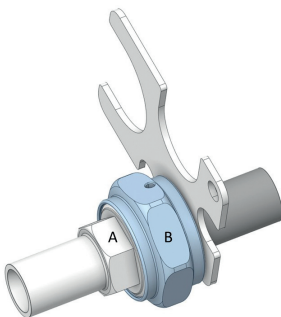
Disassembly

Step 1



1. Attach the dismantling tool into the insert part pos.2.

Step 2

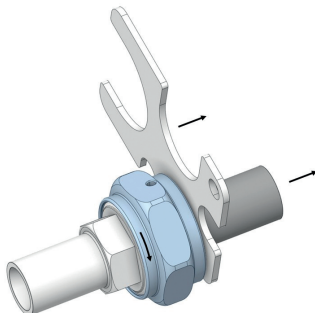


1. Fix hexagon A with an open-ended wrench.
2. Attach an open-ended wrench on hexagon B of the nut pos. 4.



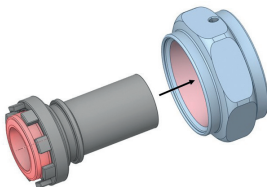
Disassembly

Step 3



1. Loosen the nut pos.4 by turning the open-ended wrench in contact with the wrench flat B.
2. Unscrew the nut.
 - ▶ The two connecting pieces pos. 2 and 3 separate from each other.
 - ▶ Normally the sealing ring pos. 1 will remain stuck in one of the two connecting pieces.

Step 4



Sealing ring pos. 1 remains stuck in the insert part pos. 2:

- ▶ Remove the nut ▶ keep going with step 5

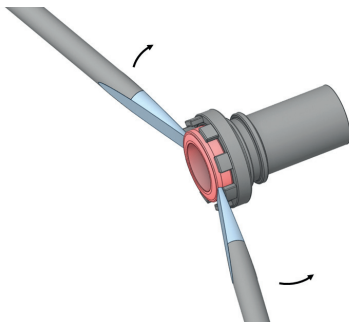
Sealing ring pos. 1 remains stuck in the threaded connection pos. 3:

- ▶ Keep going with step 6



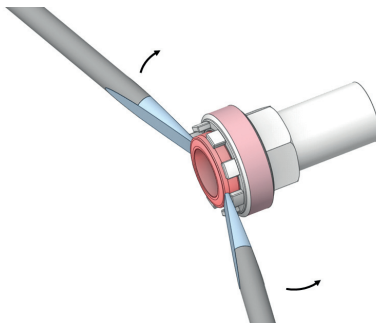
Disassembly

Step 5



1. Attach the screwdrivers on the groove of sealing ring pos. 1.
2. Alternately levering with the screwdrivers and repeatedly applying the screwdrivers around the circumference loosens the sealing ring from the insert part.

Step 6



1. Attach the screwdrivers on the groove of sealing ring pos. 1.
2. Alternately levering with the screwdrivers and repeatedly applying the screwdrivers around the circumference loosens the sealing ring from the threaded connection.



Disassembly

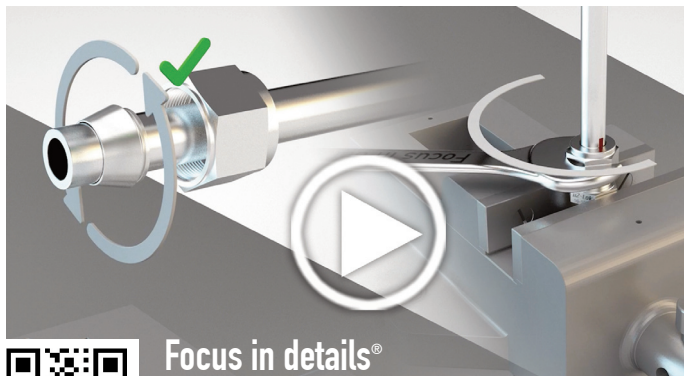


Installation Videos

■ Installation Videos

Our installation videos can be found at:

www.schwer.com



Focus in details®
eShop

schwer
fittings

Schwer Fittings GmbH
Hans-Schwer-Platz 1
D-78588 Denkingen

Tel.: +49 (0) 74 24 / 98 25-0
info@schwer.com
www.schwer.com