

# ODU MINI-SNAP<sup>®</sup> SERIES F



Assembly instructions

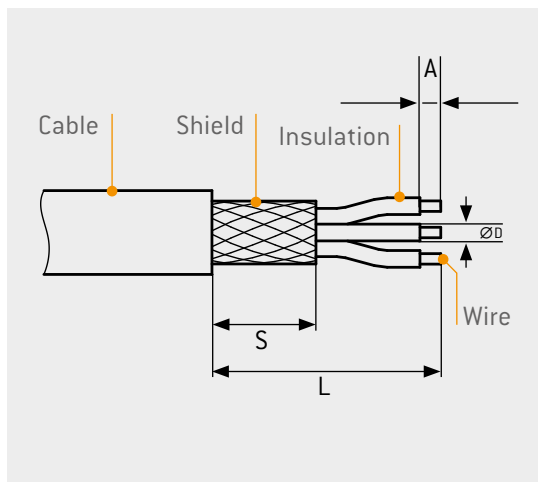


# ASSEMBLY INSTRUCTIONS

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# General notes

## Recommended stripping length



## Cable stripping length L in mm

	Size	Straight		Right-angled	
		Solder	Crimp	Solder	Crimp
IP50	0	6	8	15	14
	1	10	14	13	16
	1.5	12	16	25	25
	2	11	15	22	30
	3	14	18	30	30
IP68	0	6	8	18	20
	1	9	14	25	30
	1.5	12	16	30	30
	2	10	15	27	30
	3	14	18	30	40
Super Shorty	0	15	15		
	1	12	16		
	1.5	13	16		
	2	11	16		
	3	14	12		

## Shield stripping length S in mm

Series F	
Size	Stripping length
0	4.0
1	4.0
1.5	4.0
2	4.0
3	5.0
Super shorty (all sizes)	8.0

## Strand stripping length A in mm

SOLDER		CRIMP	
AWG	Stripping length	AWG	Stripping length
12	4.5 + ØD	14-18	6.7
14 18 20	3.3 + ØD	18-20	5.0
22 26	2.8 + ØD	20-24	4.7
28	2.3 + ØD	22-26	4.7
		28-32	4.7

## Tightening torque moment in Nm

Recommended tightening torques are depending on the cable strength.

Size	0	1	1.5	2	3
Back nut	0.6	1.0	1.5	2.0	3.5
Back-screw (right-angled plug)	0.3	0.4	0.6	0.9	1.3

# General notes

## Recommended glue for the back nut

Loctite® 243™, ODU part number 890.204.000.030.031

**Recommended cleaning agent:** Isopropyl alcohol

## Tools / Accessories

ODU open-ended spanner and crimping tools see  
ODU MINI-SNAP® series F catalog section accessories and tools.



For assembly of crimp contacts,  
please follow the [crimp-instruction!](#)

All shown connectors are according to IEC 61984:2008  
(VDE 0627:2009-11).

## Safety instructions

[For applications which do not run within the safety extra-low voltage (SELV)].

According to IEC 60364-4-41:2005 + A1:2017 (DIN VDE 0100-410:2018-10), two independent protective measures must be combined to create appropriate safety precautions against electric shock: one basic protective measure and one fault protective measure.

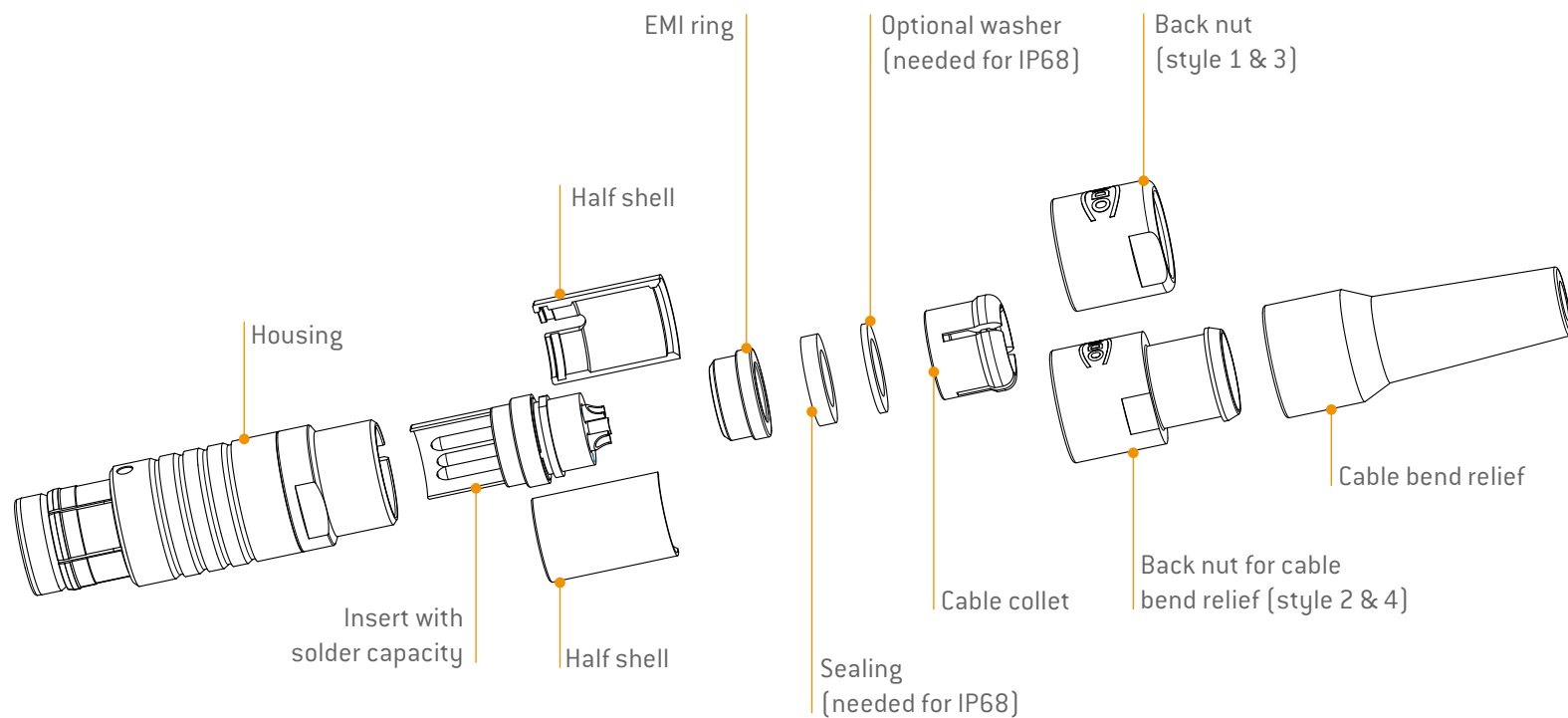
### ATTENTION!

For voltages > 50 V AC and > 75 V DC, an additional protective measure (fault protective measure) to the basic insulation (basic protective measure) given by our connector is required according to IEC 60364-4-41:2005 + A1:2017 (DIN VDE 0100-410:2018-10). The standard describes in more detail which protective measures are suitable and permitted.

In this case the following must be observed for our connectors:

- The live side must be the socket-insert side.
- It is mandatory to glue the back nut with the recommended adhesive.

# Overview of series F straight plug and inline-receptacle

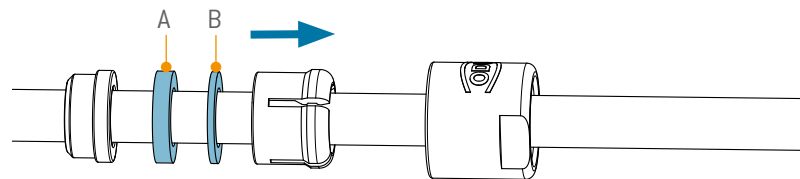


# Assembly of series F

## straight plug and inline-receptacle

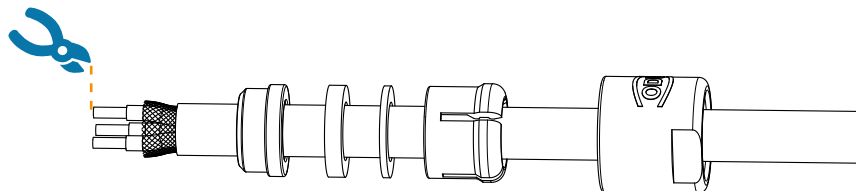
### Step 1

- ▶ Slide cable bend relief (needed for style 2 & 4), back nut, cable collet, washer (needed for IP68) [B], sealing (needed for IP68) [A] and EMI ring over the cable.



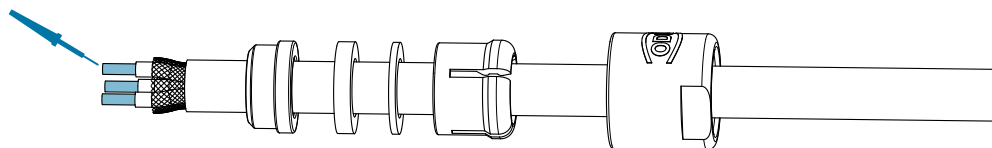
### Step 2

- ▶ Strip cable and wire according to reference table ([see page 03](#)).



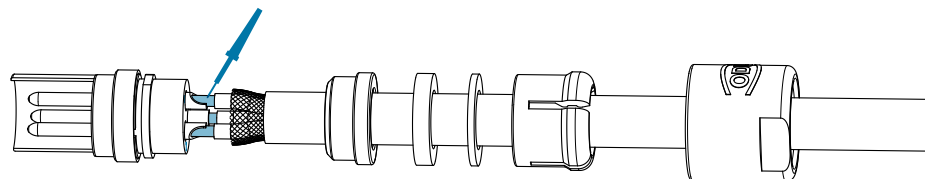
### Step 3

- ▶ Pre-tin strands.



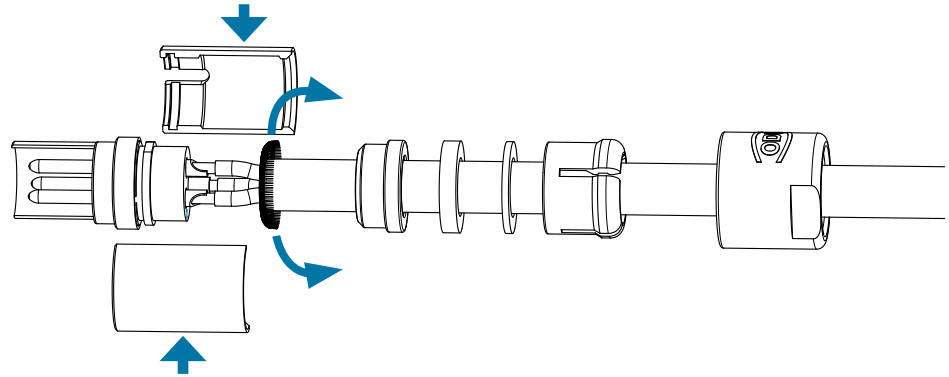
### Step 4

- ▶ Solder the wires according to contact arrangement.



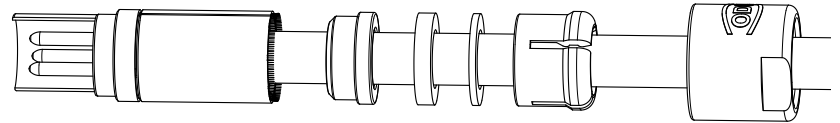
## Step 5

- ▶ Bend cable shield outwards, assemble half shells.



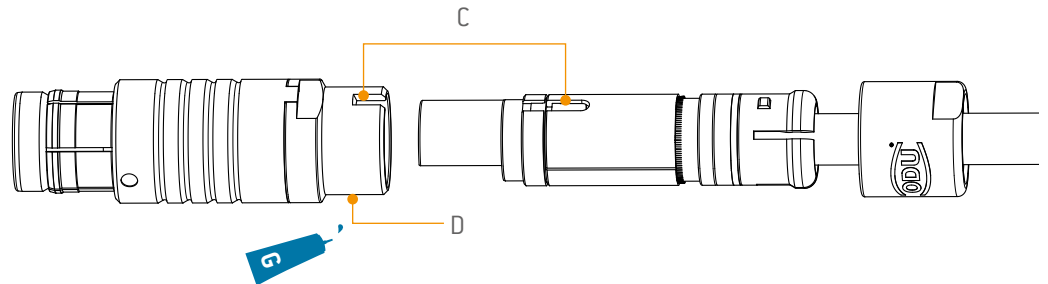
## Step 6

- ▶ Slide the EMI ring, sealing, washer and the cable collet against the half-shells and clamp the shield against it.



## Step 7

- ▶ Insert the complete assembly into the connector housing while respecting the **guidings** [C]. If necessary, secure **thread** [D] with adhesive ([see page 04](#)).



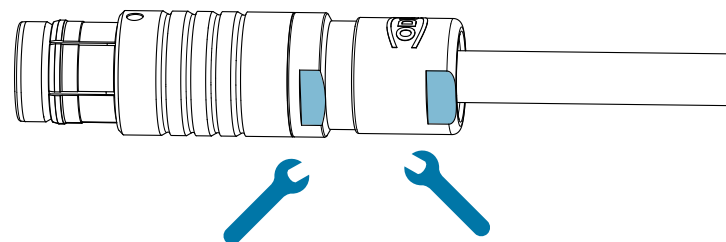
## Step 8

- ▶ Screw back nut on the assembled plug, counterhold by means of the **spanner** and hold against with ODU spanner wrench.

### ATTENTION!

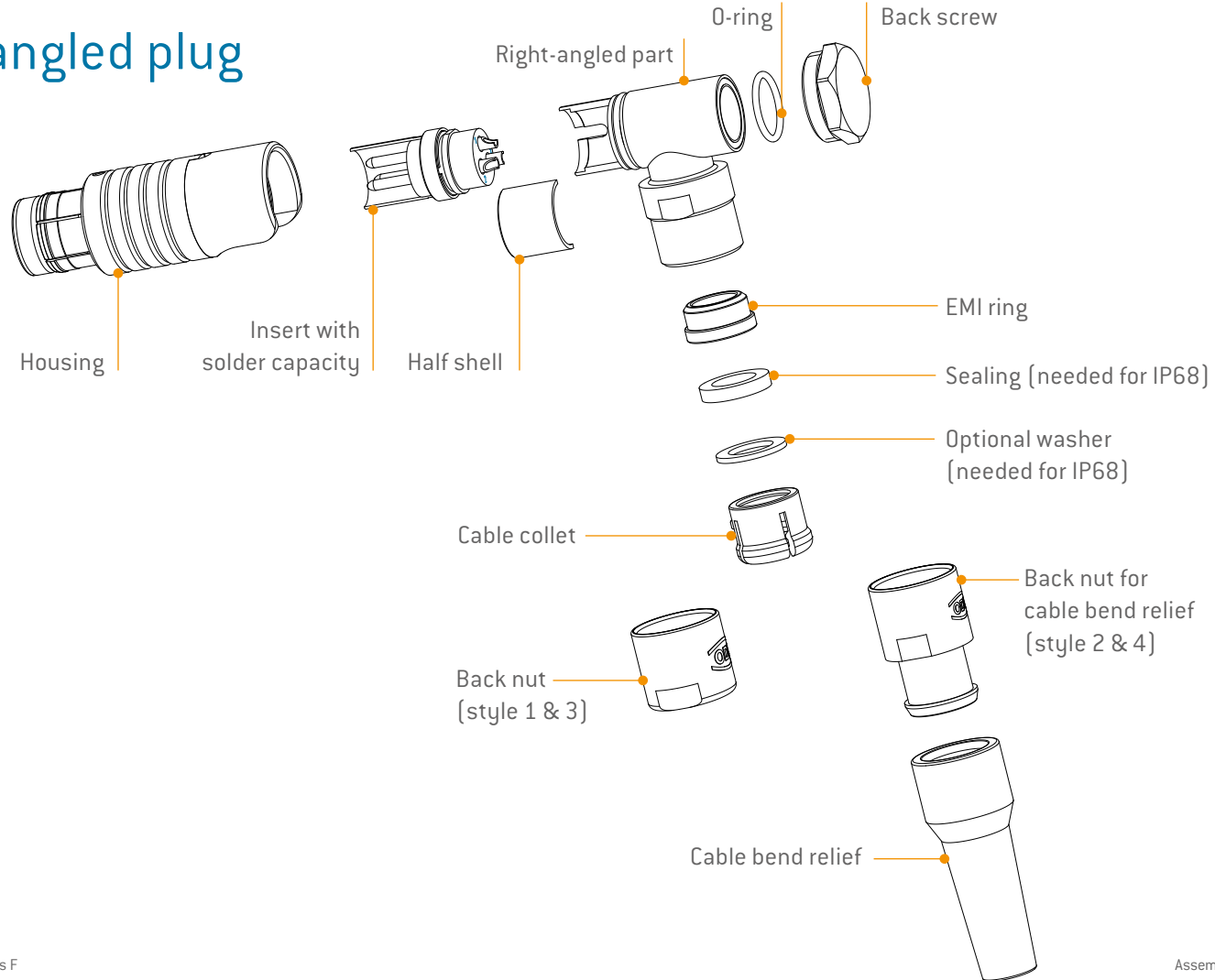
Consider tightening torque [\[see page 03\]](#).

The assembly is finished.





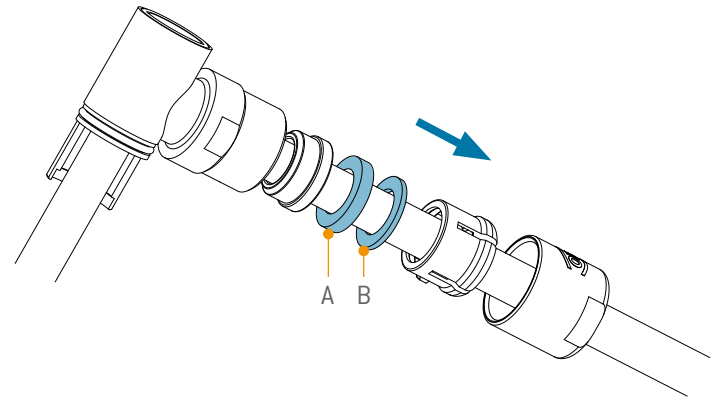
# Overview of series F right-angled plug



# Assembly of series F right-angled plug

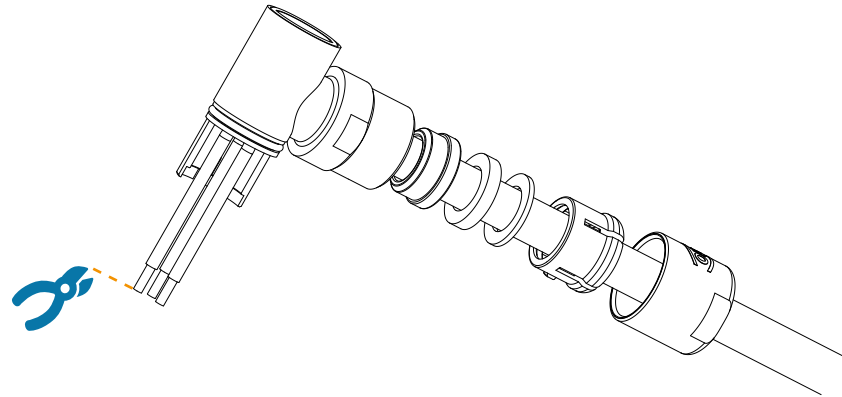
## Step 1

- ▶ Slide cable bend relief (needed für style 2 & 4), back nut, cable collet, washer (needed for IP68) [B], sealing (needed for IP68) [A] and EMI ring over the cable.



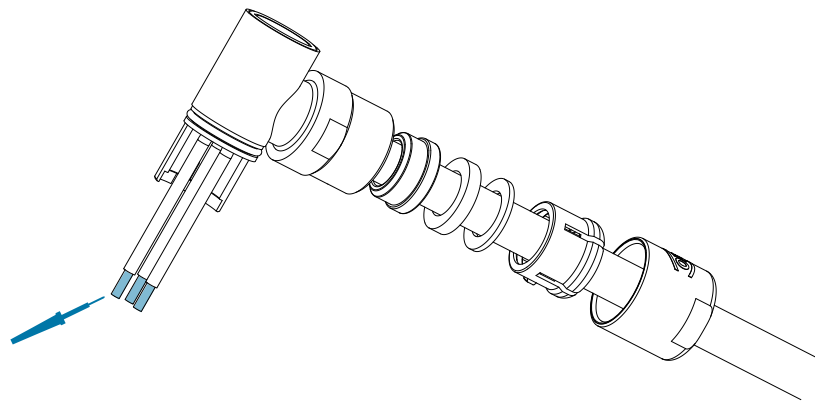
## Step 2

- ▶ Strip cable and wire according to reference table ([see page 03](#)).



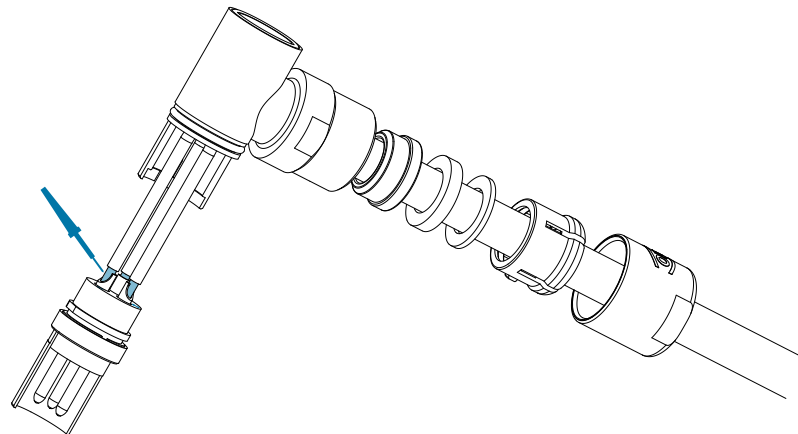
## Step 3

- ▶ Pre-tin **strands**.



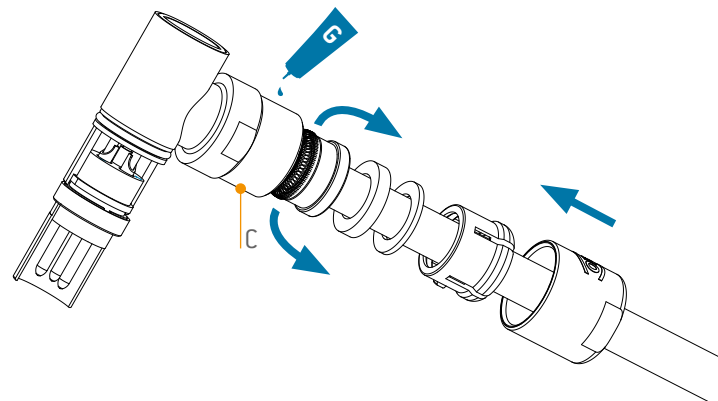
## Step 4

- ▶ Solder the **wires** according to contact arrangement.



## Step 5

- ▶ Bend cable shield outwards, place half-shells and right-angled part over the insulator. If necessary, secure **thread** [C] with adhesive ([see page 04](#))

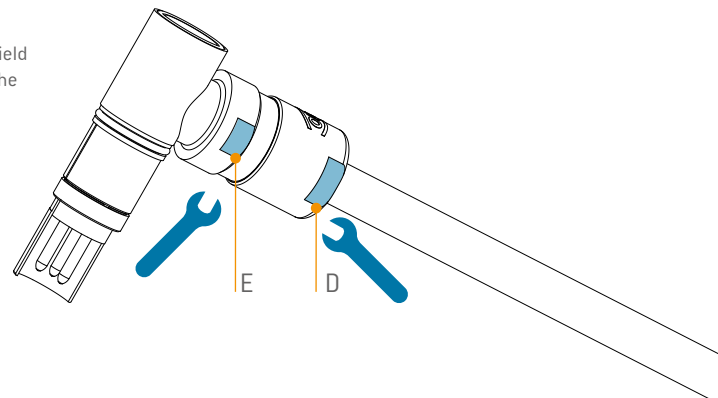


## Step 6

- ▶ Slide EMI ring, sealing, washer and cable collet against the right-angled part, and clamp shield between EMI ring and right-angled part. Screw the **back nut** [D], counterhold by means of the **spanner** at [E] and tighten it with ODU spanner wrench.

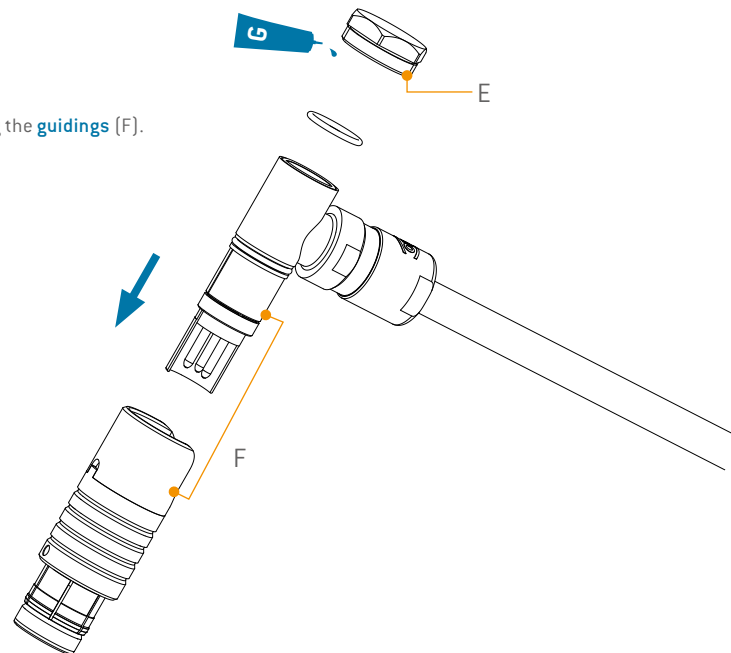
### ATTENTION!

Consider tightening torque ([see page 03](#)).



## Step 7

- ▶ Insert the complete assembly into the connector housing while respecting the **guidings** (F).  
If necessary, secure **thread** (E) with adhesive ([see page 04](#)).



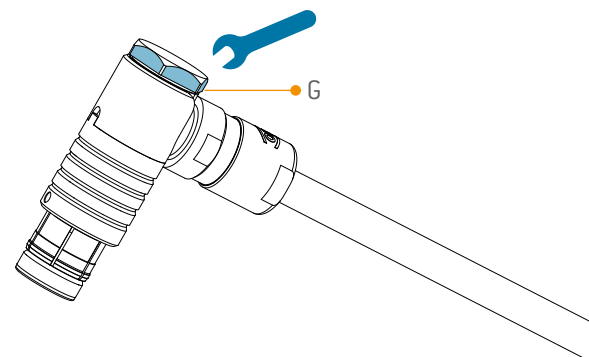
## Step 8

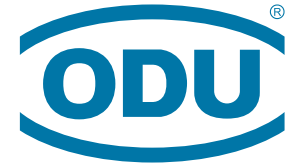
- ▶ Mount back screw on the assembled plug and counterhold by means of the **spanner** at (G) with ODU spanner wrench.

### ATTENTION!

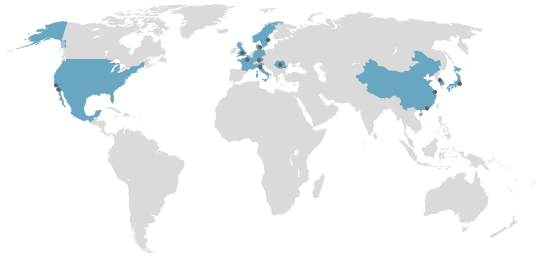
Consider tightening torque ([see page 03](#)).

The assembly is finished.





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