

# ODU MEDI-SNAP<sup>®</sup>

Assembly instruction

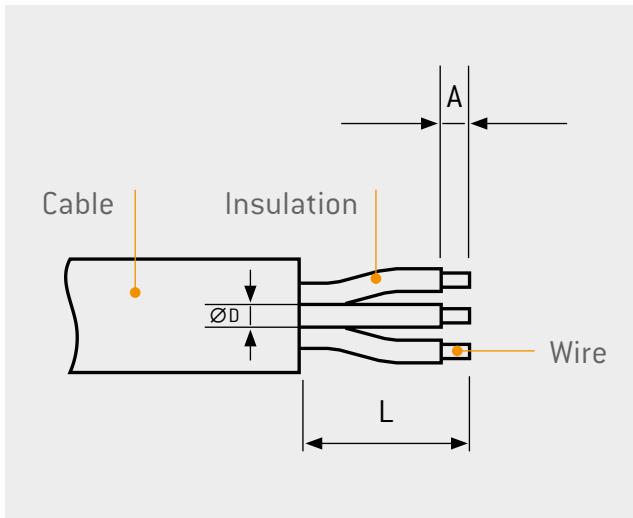


## ASSEMBLY INSTRUCTIONS

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# General notes

## Recommended stripping length



### Tolerance L [in mm]

Lenghts	Tolerance cable sheath L
up to 20	$\pm 1.0$
21 to 50	$\pm 2.0$

## Strand stripping length A

SOLDER		CRIMP	
AWG	Stripping length Drill depth + Strand diameter	AWG	Stripping length
18 20	$3.3 + \varnothing D$	20-24	4.7 mm
22 26	$2.8 + \varnothing D$	22-26	4.7 mm
28	$2.3 + \varnothing D$		

## Cable stripping length L

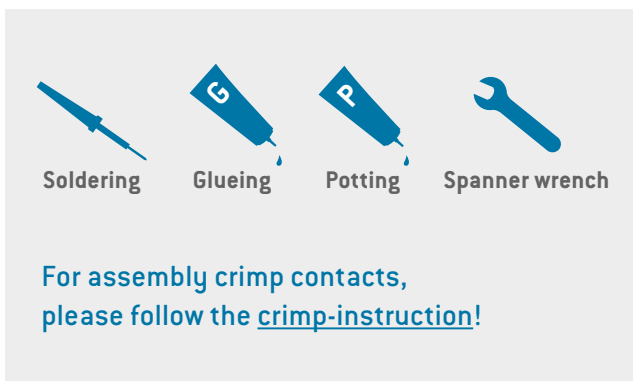
Size	Stripping length
1	12 mm
2	15 mm
3.5	18 mm

### Tolerance A [in mm]

Lenghts	Tolerance wire A
up to 5	$\pm 0.5$
6 to 10	$\pm 1.0$

## Tools / Accessories

ODU open-ended spanner and crimping tools see ODU MEDI-SNAP<sup>®</sup> catalog section accessories and tools.



## Tightening torque

Recommended tightening torques are depending on the cable strength.

	Torque moment Size 1	Torque moment Size 2	Torque moment Size 3.5
Straight plug	$0.25 \pm 0.1$ Nm	$0.5 \pm 0.1$ Nm	$1.5 \pm 0.3$ Nm
Right-angled plug clamping cap	$0.30 \pm 0.1$ Nm	–	–
Right-angled plug clamping nut	$0.25 \pm 0.1$ Nm	–	–
In-line receptacle	$0.25 \pm 0.1$ Nm	–	–

## Recommended glue for the back nut

Scotchweld (grey), ODU part number 890.204.000.030.025  
**Recommended cleaning agent:** Isopropyl alcohol

### ATTENTION!

If glues are used, that have not been released, cracks may appear after some time. Use only the indicated glues.

## 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!

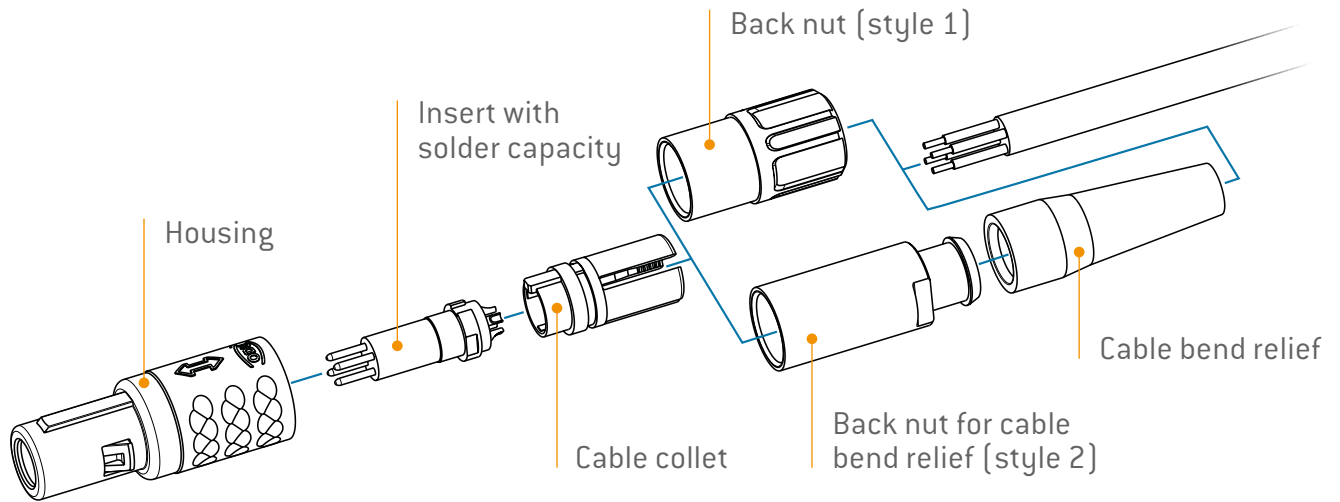
For voltages  $> 50$  V AC and  $> 75$  V DC, an additional protective measure (fault protective measure) to the basic insulation (basic protective measure) given by our connector is required according to IEC 60364-4-41:2005 + A1:2017 [DIN VDE 0100-410:2018-10]. The standard describes in more detail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

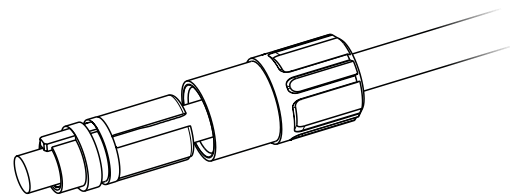
# Assembly straight plug | Size 1

Push-pull styles S1, S2, S4



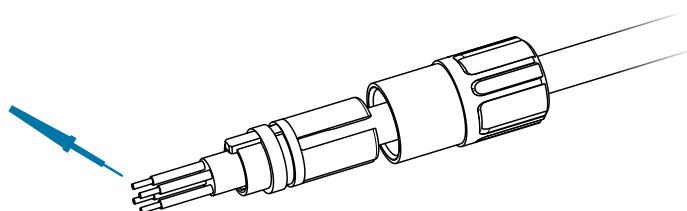
## Step 1

- ▶ Slide back nut and cable collet over the cable.



## Step 2

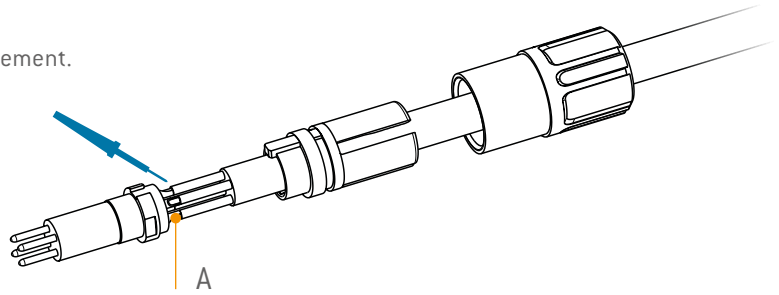
- ▶ Strip cable and wire ([see page 3](#)).
- ▶ Pre-tin strands.



## Step 3

- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol

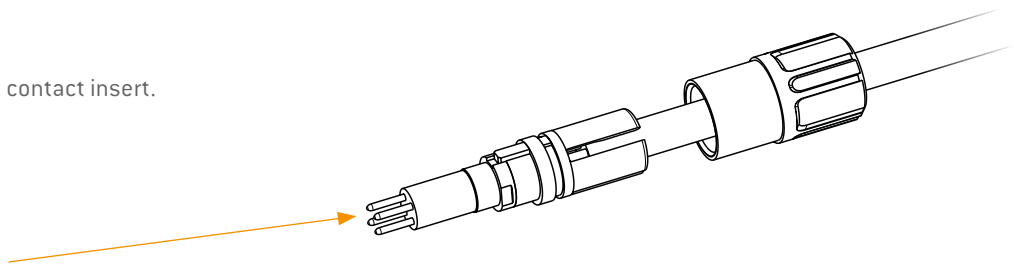


## Step 4

- ▶ Slide the cable collet against contact insert.

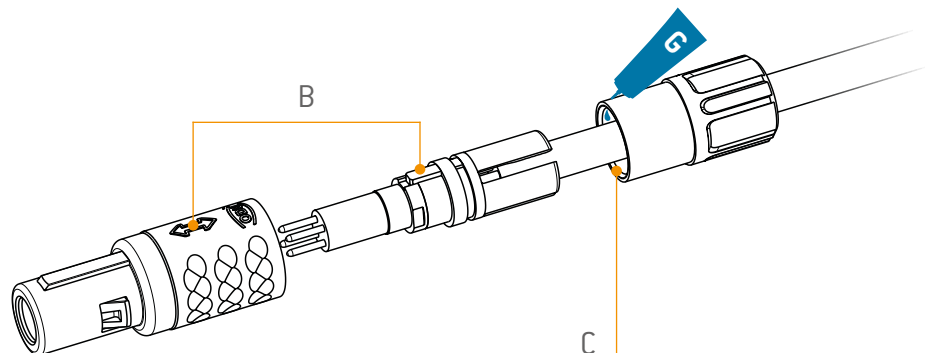
**ATTENTION!**

Don't damage the contacts.



## Step 5

- ▶ Put the assembled cable considering the guidings (B) into the housing.
- ▶ If necessary, secure thread (C) with glue Scotch-Weld DP190 (890.204.000.030.025).

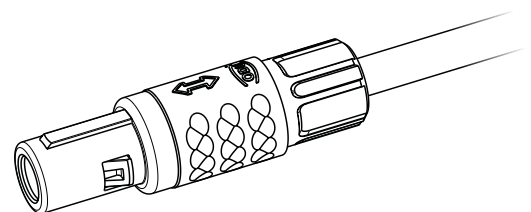


## Step 6

- ▶ Screw and fasten back nut on the assembled straight plug.

**ATTENTION!**

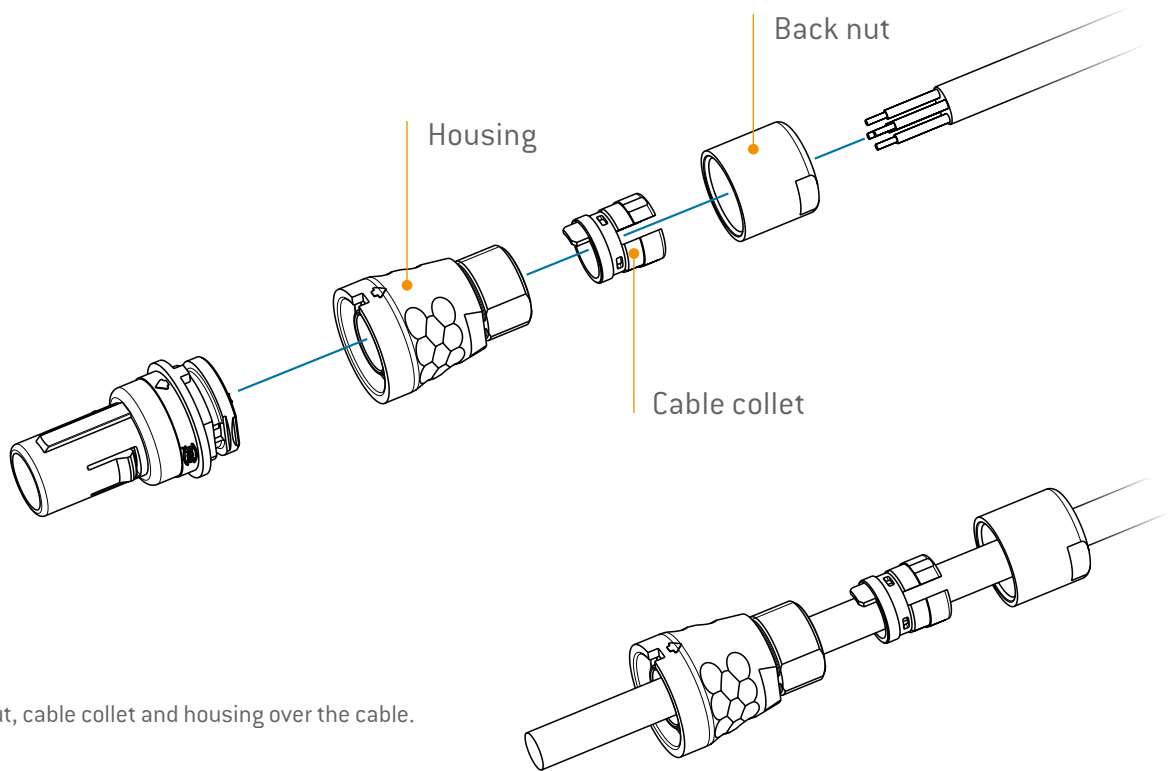
Consider tightening torque ([see page 3](#)).



# Assembly break-away plug | Size 1

## Straight version

Break-away style A5 & backshell 026.KM1.129.9\_..

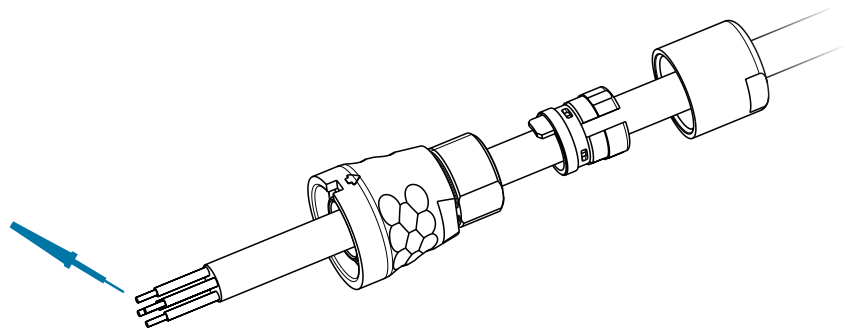


### Step 1

- ▶ Slide back nut, cable collet and housing over the cable.

### Step 2

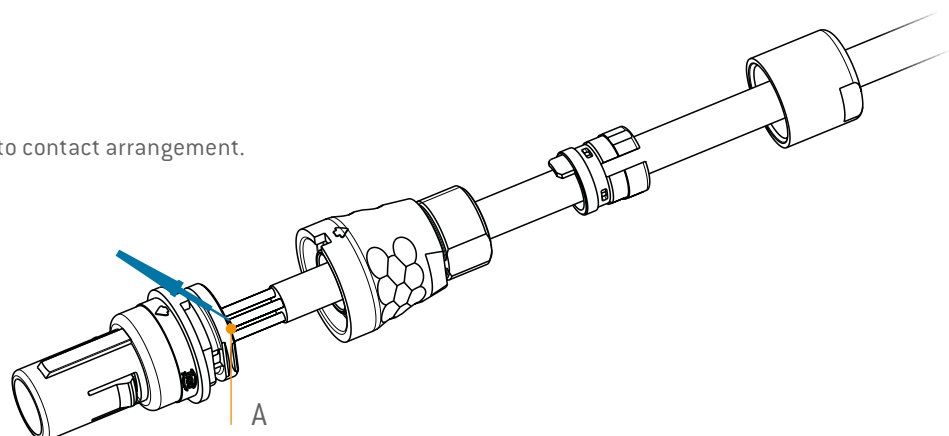
- ▶ Strip cable and wire ([see page 3](#)).
- ▶ Pre-tin strands.



### Step 3

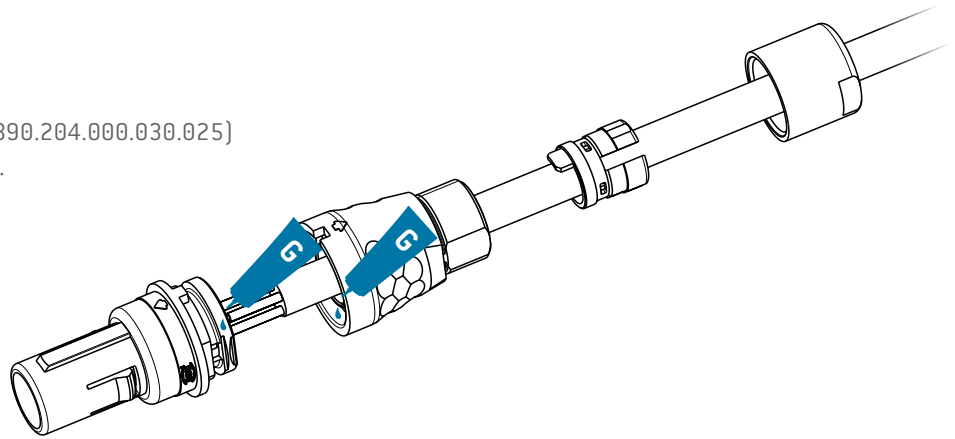
- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol



## Step 4

- ▶ Apply glue Scotch-Weld DP 190 (890.204.000.030.025) in the glue area (see datasheet).



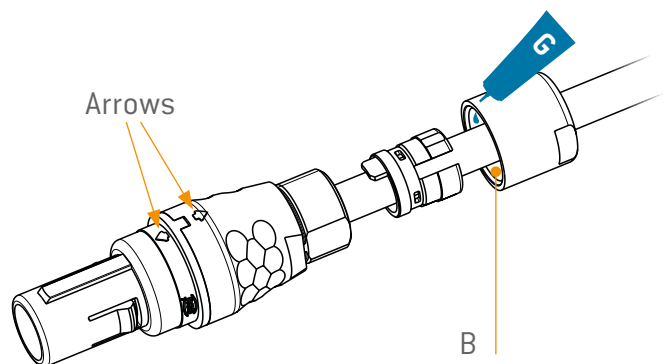
## Step 5

- ▶ Push housing onto plug without a gap.

### ATTENTION!

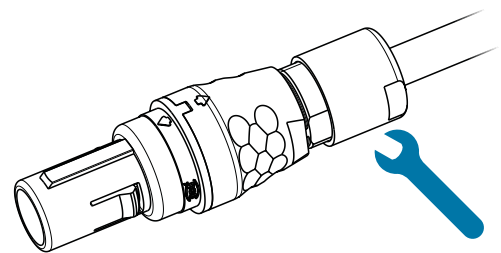
Consider position of arrows (see datasheet).

- ▶ If necessary, secure thread (B) with glue Scotch-Weld DP190 (890.204.000.030.025).



## Step 6

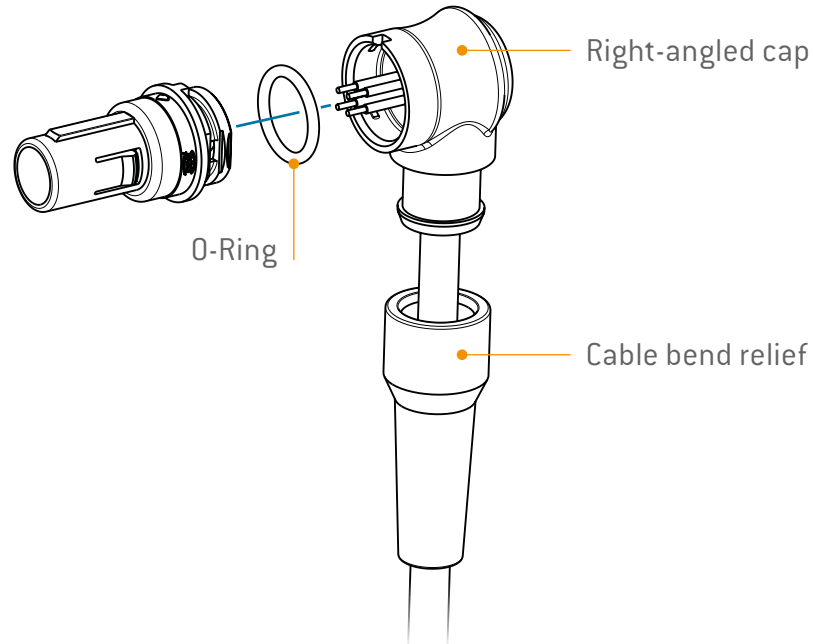
- ▶ Slide the cable collet in the housing.
- ▶ Slide the back nut over the back shell and tighten it with **0.3 Nm**.



# Assembly break-away plug | Size 1

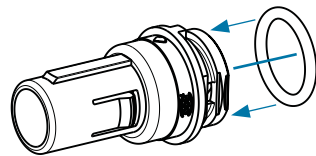
## Right-angled version

Break-away style A5 & right-angled cap 026.KM1.013.701.00\_



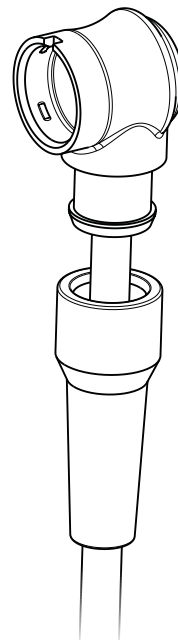
### Step 1

- ▶ Push O-ring on plug (see datasheet).



### Step 2

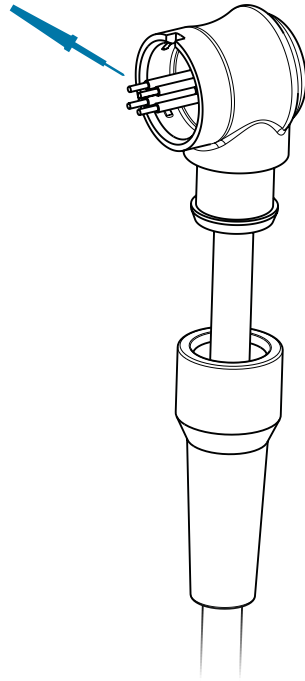
- ▶ Slide the cable bend relief and right-angled cap over the cable.





## Step 3

- ▶ Strip cable and wire (see page 3).
- ▶ Pre-tin strands.

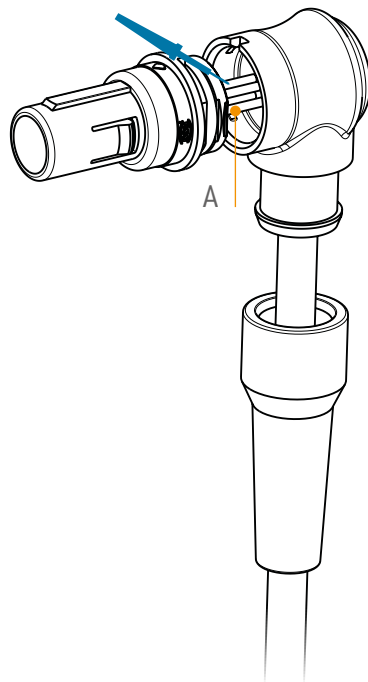


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## Step 4

- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol



## Step 5

- ▶ Push right-angled housing onto plug.

### ATTENTION!

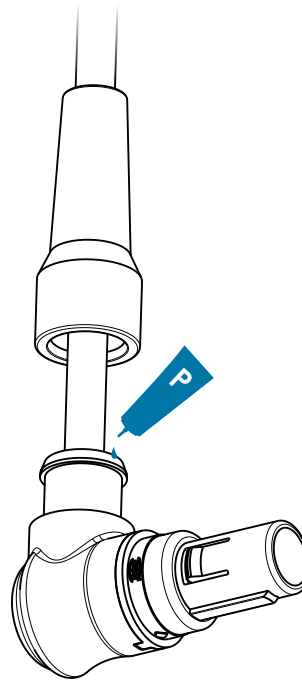
Consider position of codings (see datasheet).

- ▶ For strain relief, cast the connection area with potting material.

**Recommendation of ODU for standard PVC jackets:**

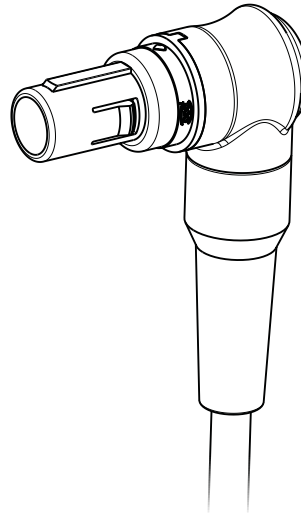
WEVO PU552FL

- ▶ Adhesion to cable sheathing must be checked by the manufacturer of the cable assembly.



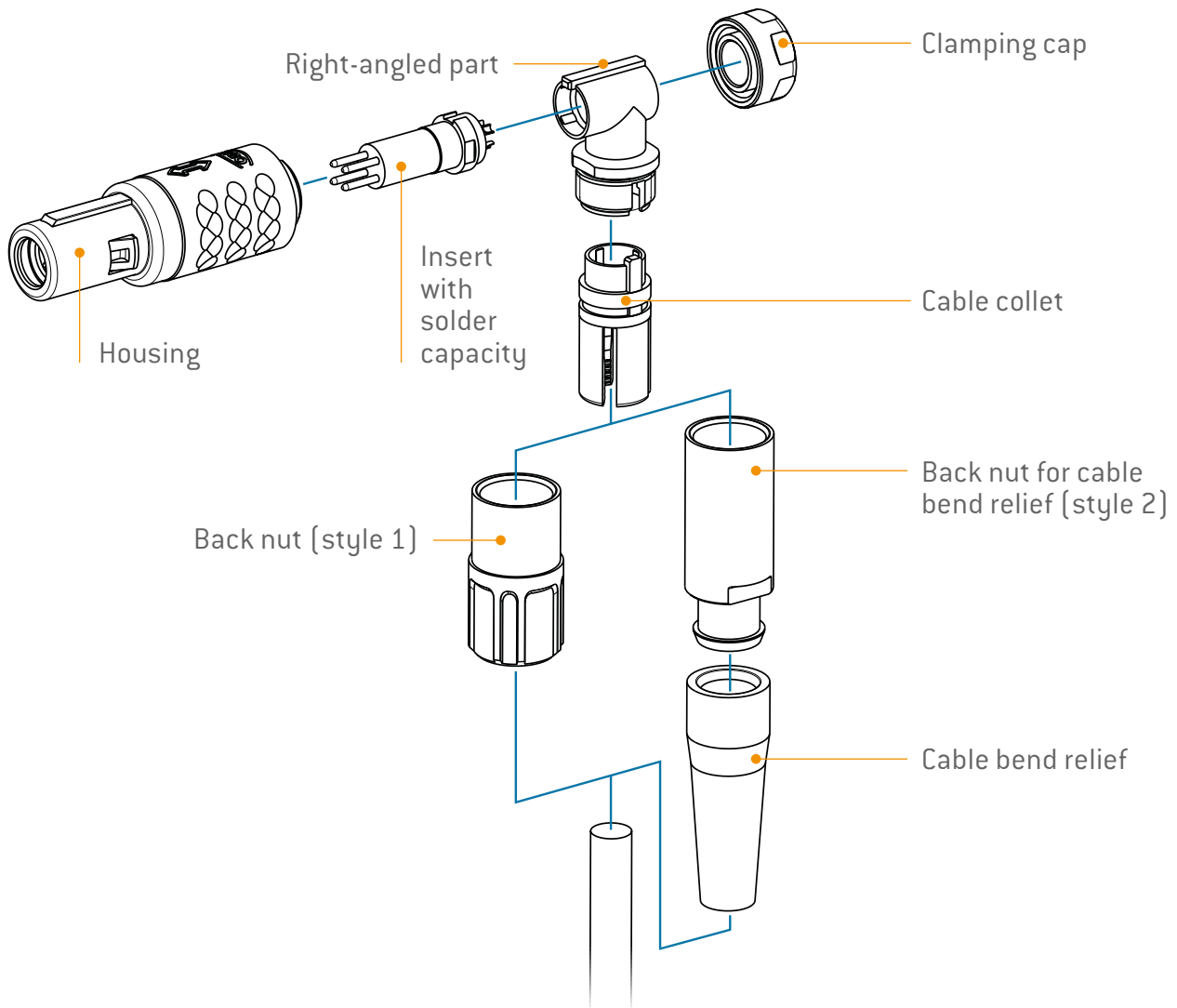
## Step 6

- ▶ Push cable bend relief over right-angled cap.



# Assembly right-angled plug | Size 1

Push-pull styles W1, W2

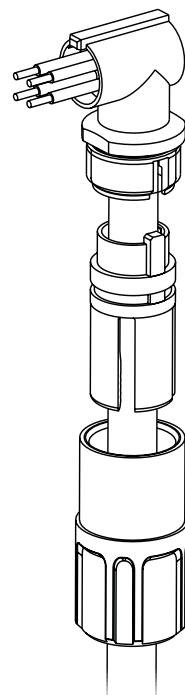


## Step 1

- ▶ Strip cable and wire ([see page 3](#)).

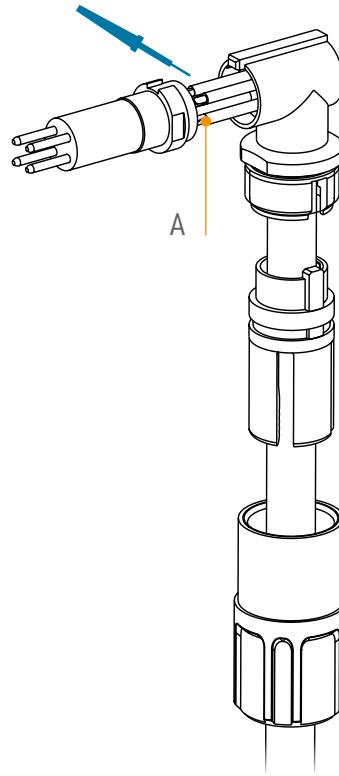
## Step 2

- ▶ Slide back nut, cable collet and right-angled part over the cable.



## Step 3

- ▶ Pre-tin strands.



## Step 4

- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**

Isopropyl alcohol

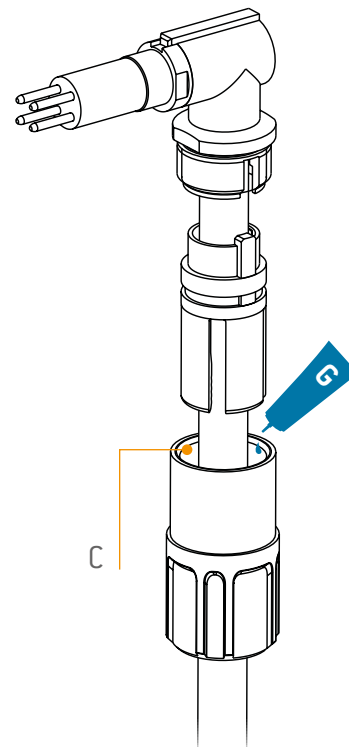
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## Step 5

- ▶ Slide the right-angled part against contact insert.

**ATTENTION!**

Don't damage the contacts.



## Step 6

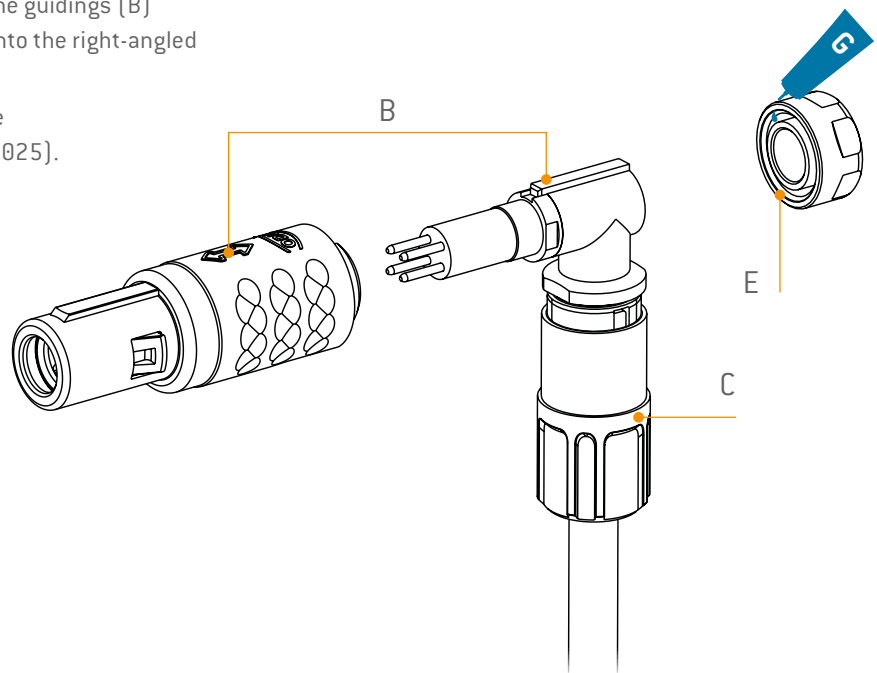
- ▶ Slide the cable collet against right-angled part.
- ▶ If necessary, secure thread (C) with glue Scotch-Weld DP190 (890.204.000.030.025).

## Step 7

- ▶ Slide the assembled cable considering the guidings (B) into the housing. Slide the cable collet into the right-angled part and screw it with the back nut (C).
- ▶ If necessary, secure thread (E) with glue Scotch-Weld DP190 (890.204.000.030.025).

### ATTENTION!

Consider tightening torque ([see page 3](#)).

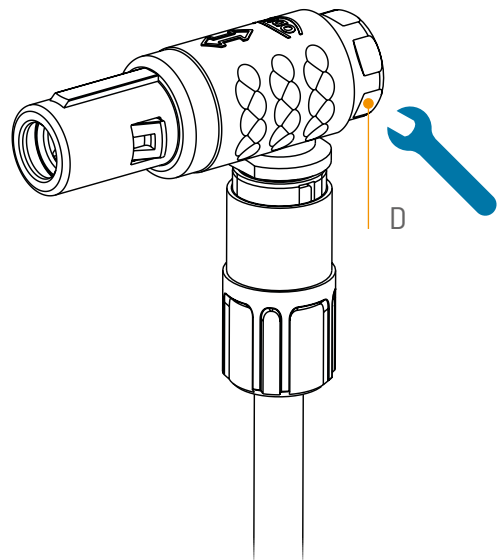


## Step 8

- ▶ Screw clamping cap on the assembled plug and fasten it with ODU spanner wrench (D).

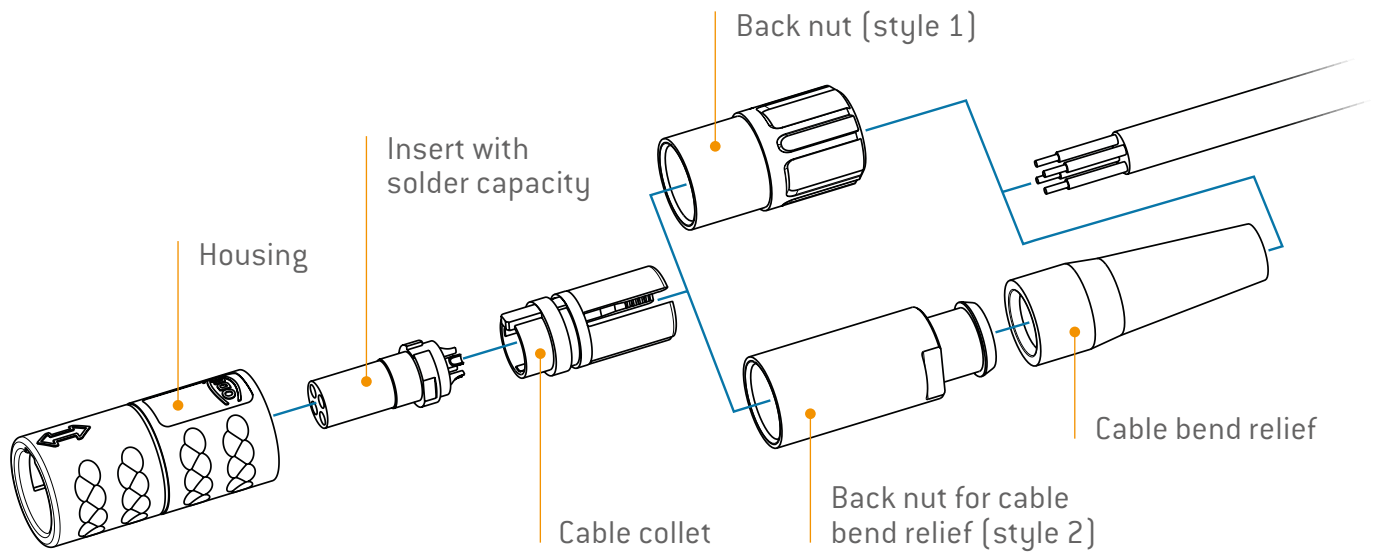
### ATTENTION!

Consider tightening torque ([see page 3](#)).



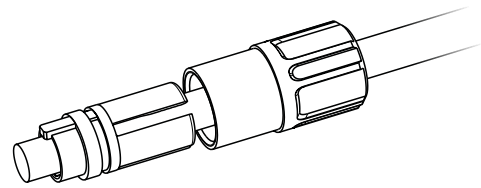
# Assembly in-line receptable | Size 1

In-line receptacle styles K1, K2



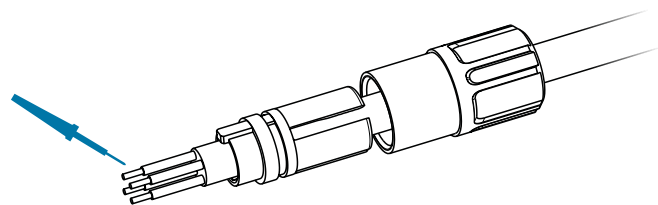
## Step 1

- ▶ Slide back nut and cable collet over the cable.



## Step 2

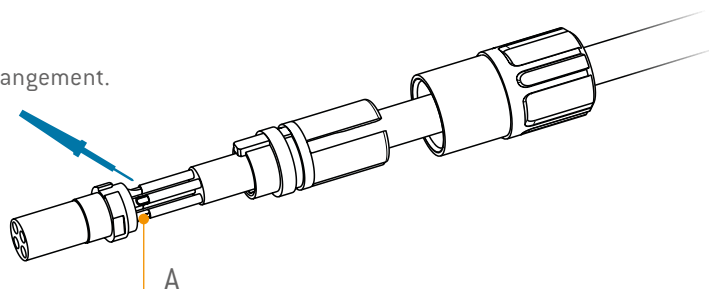
- ▶ Strip cable and wire ([see page 3](#)).
- ▶ Pre-tin strands.



## Step 3

- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol

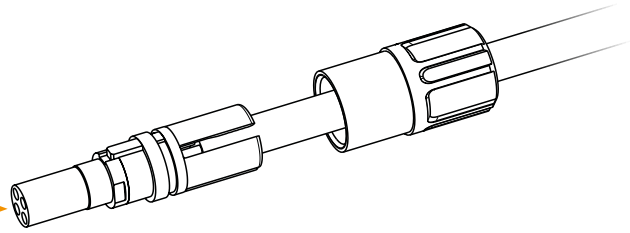


## Step 4

- ▶ Slide the cable collet against contact insert.

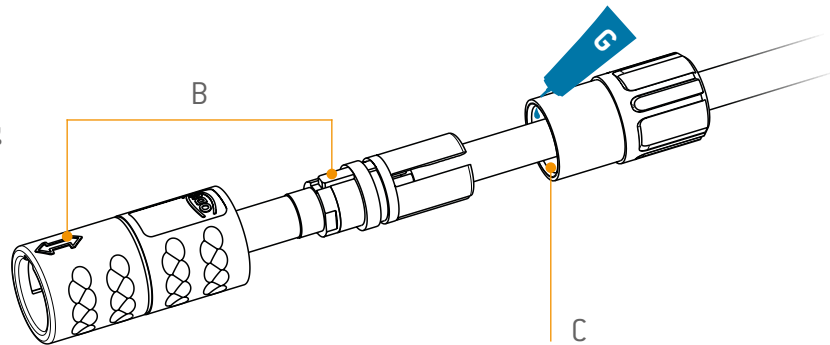
### ATTENTION!

Don't damage the contacts.



## Step 5

- ▶ Put the assembled cable considering the guidings (B) into the housing.
- ▶ If necessary, secure thread (C) with glue Scotch-Weld DP190 [890.204.000.030.025].

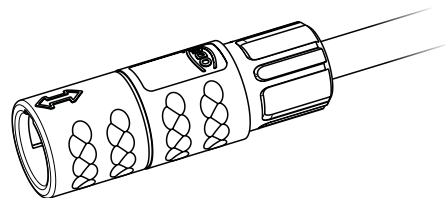


## Step 6

- ▶ Screw and fasten back nut on the assembled in-line receptacle.

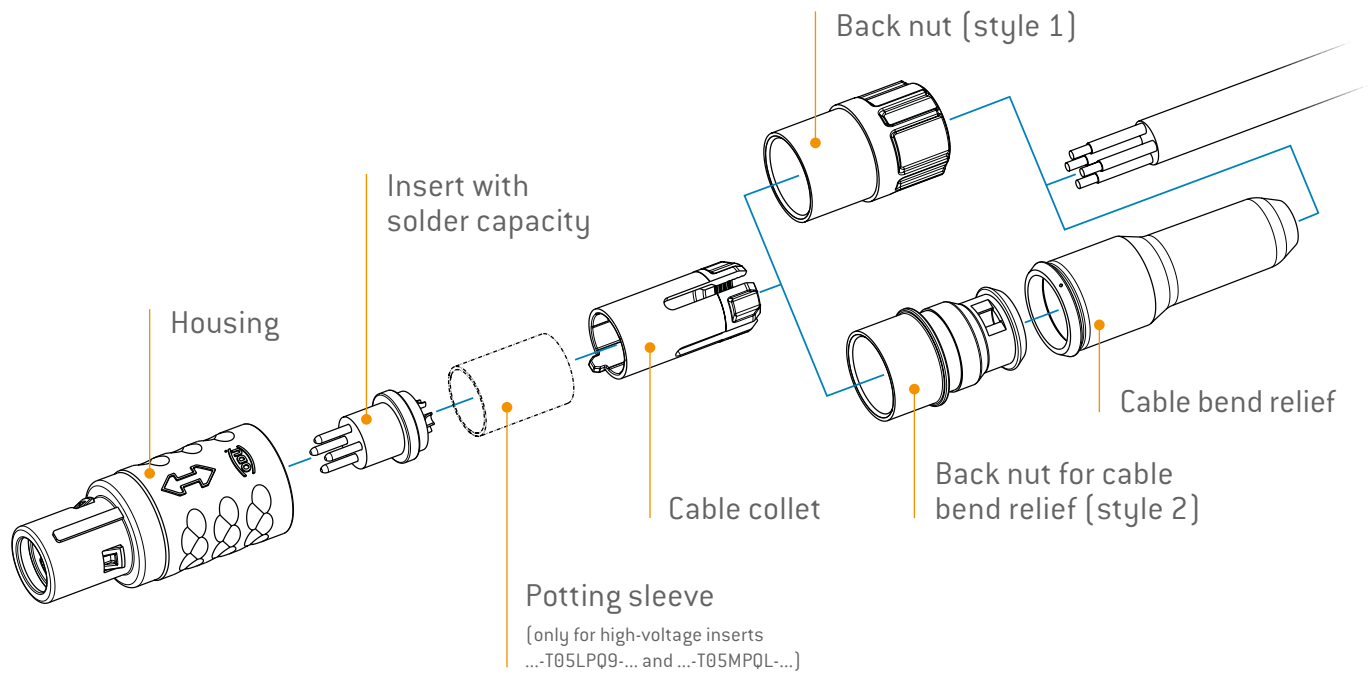
### ATTENTION!

Consider tightening torque ([see page 3](#)).



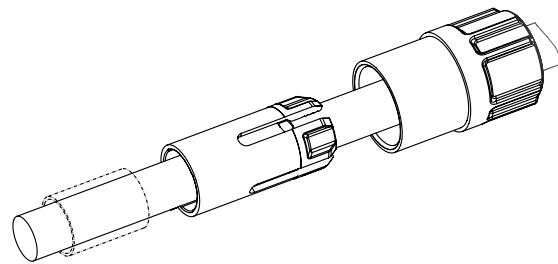
# Assembly straight plug | Size 2

Push-pull styles S1, S4



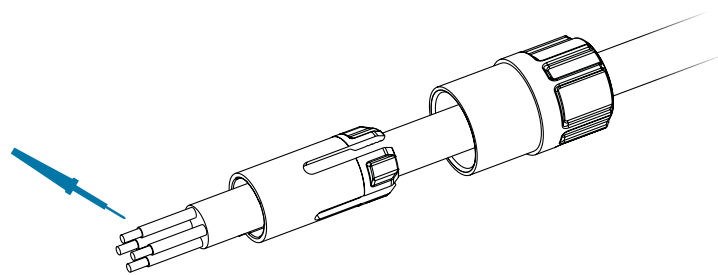
## Step 1

- ▶ Slide back nut and cable collet (optional potting sleeve) over the cable.



## Step 2

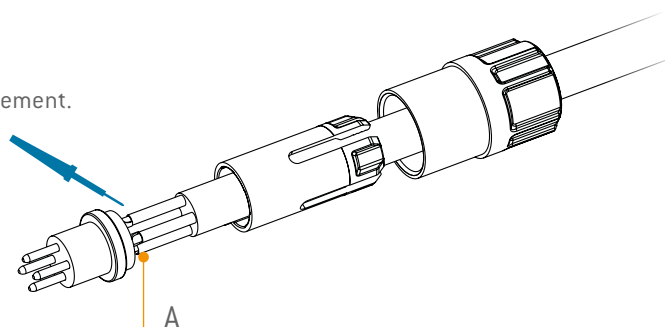
- ▶ Strip cable and wire ([see page 3](#)).
- ▶ Pre-tin strands.



## Step 3

- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol



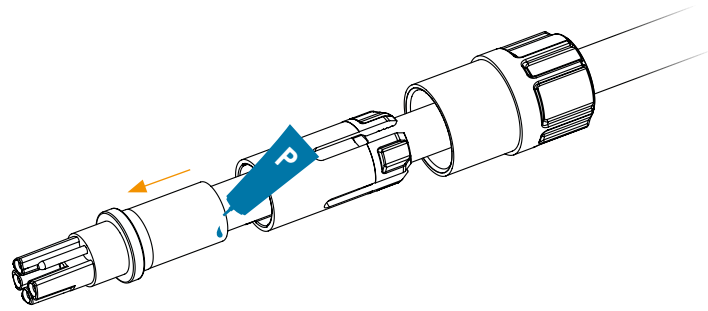


## Step 3.1

(only high-voltage inserts ...-T05LP09-... and ...-T05MP0L-...)

- ▶ Slide the potting sleeve against contact insert.
- ▶ Cast the connection area with potting material (potting material has to be suitable for cable material and all functions (e.g. insulation))

**Recommended PVC jackets:**  
WEVO PU552FL

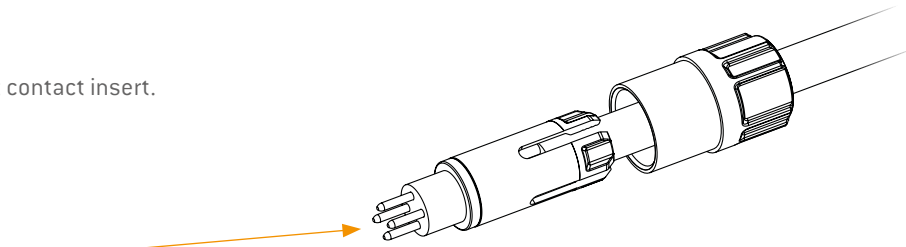


## Step 4

- ▶ Slide the cable collet against contact insert.

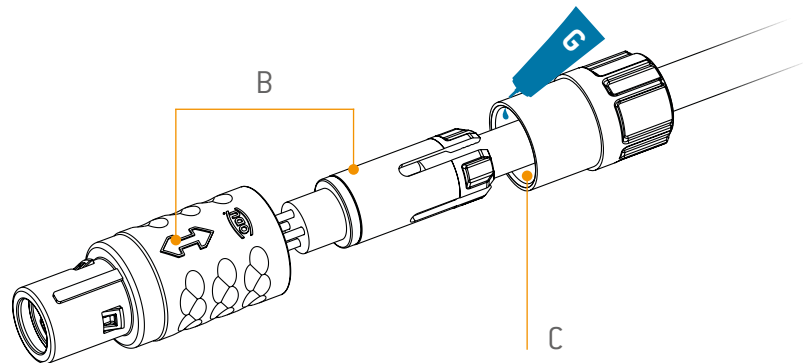
**ATTENTION!**

Don't damage the contacts.



## Step 5

- ▶ Put the assembled cable considering the guidings (B) into the housing.
- ▶ If necessary, secure thread (C) with glue Scotch-Weld DP190 (890.204.000.030.025).

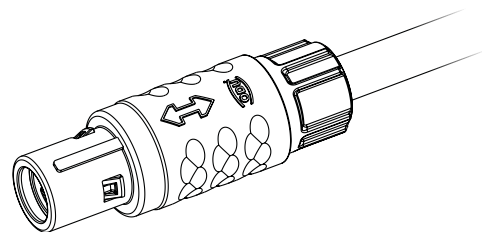


## Step 6

- ▶ Screw and fasten back nut on the assembled in-line receptacle.

**ATTENTION!**

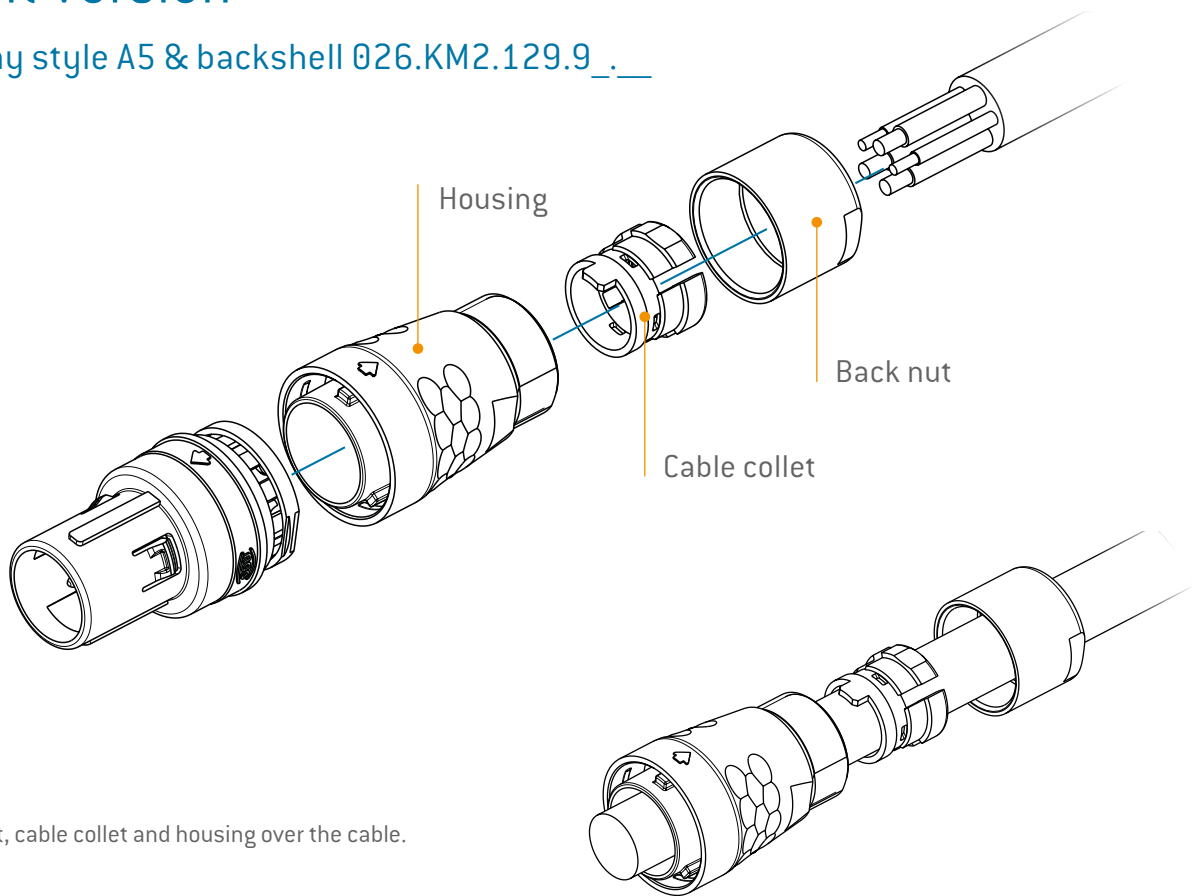
Consider tightening torque ([see page 3](#)).



# Assembly break-away plug | Size 2

## Straight version

Break-away style A5 & backshell 026.KM2.129.9\_.\_

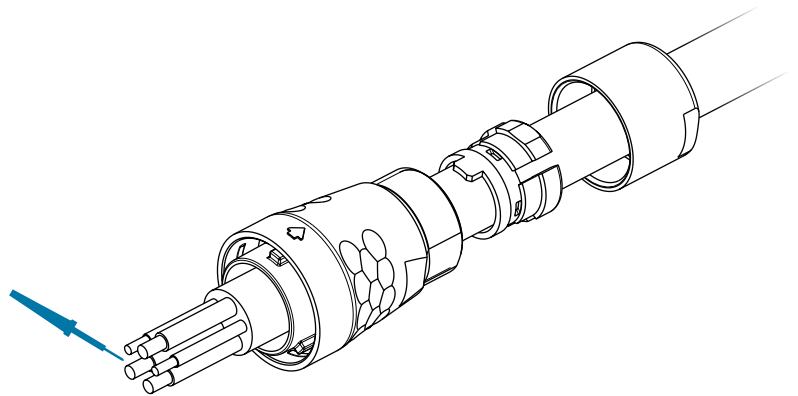


### Step 1

- ▶ Slide back nut, cable collet and housing over the cable.

### Step 2

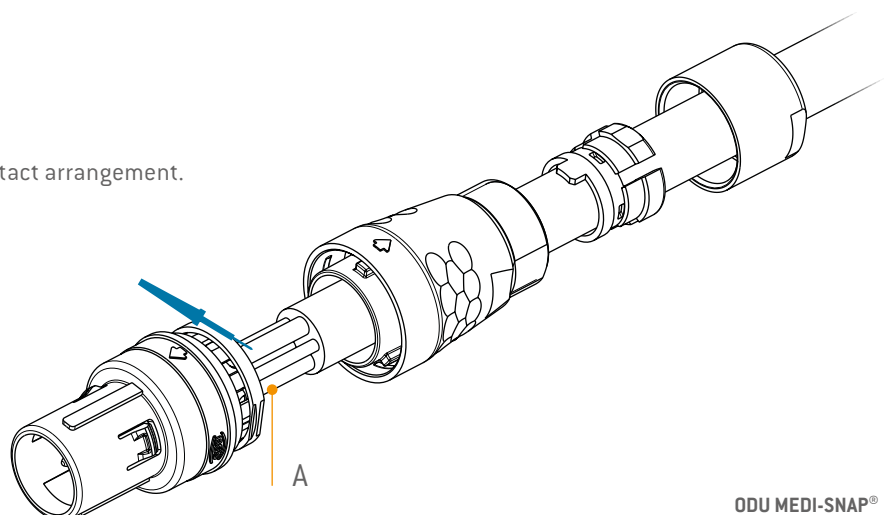
- ▶ Strip cable and wire ([see page 3](#)).
- ▶ Pre-tin strands.



### Step 3

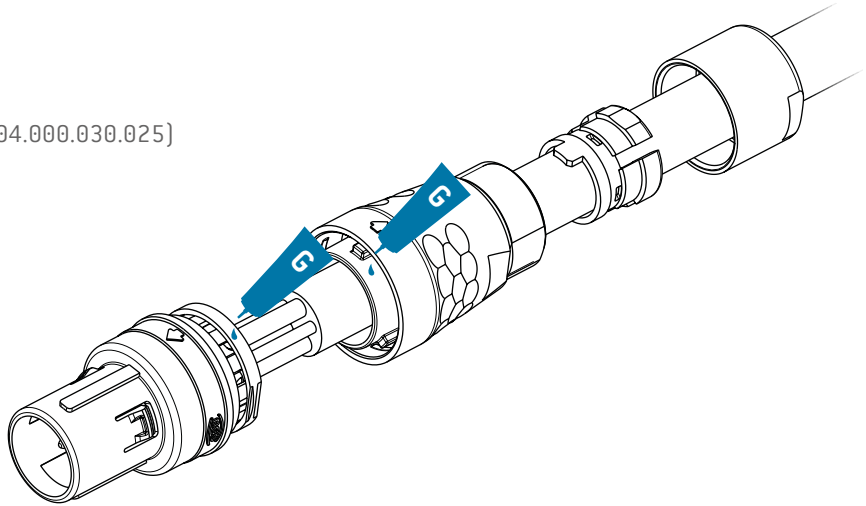
- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol



## Step 4

- ▶ Apply glue Scotch-Weld DP 190 (890.204.000.030.025) in the glue area.



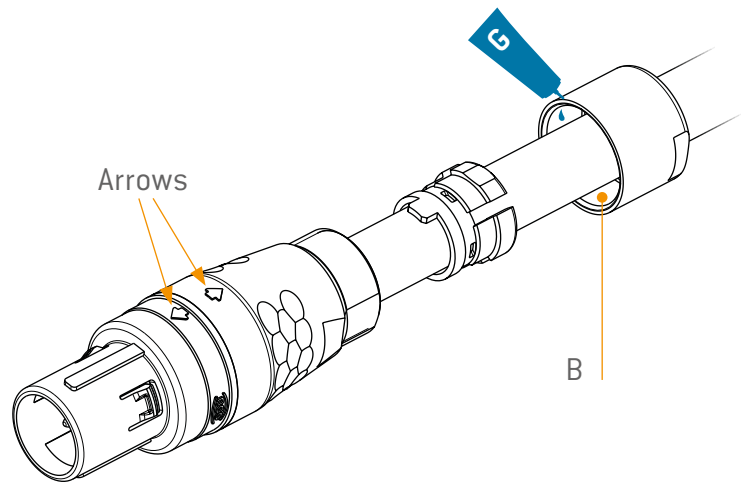
## Step 5

- ▶ Push housing onto plug without a gap.

### ATTENTION!

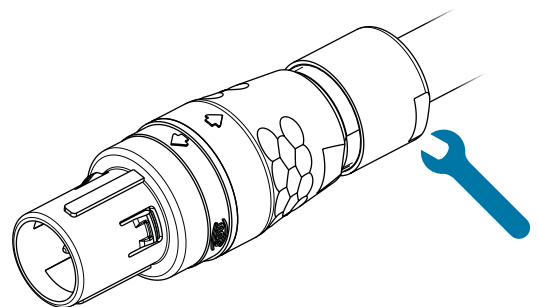
Consider position of arrows (see datasheet).

- ▶ If necessary, secure thread [B] with glue Scotch-Weld DP190 (890.204.000.030.025).



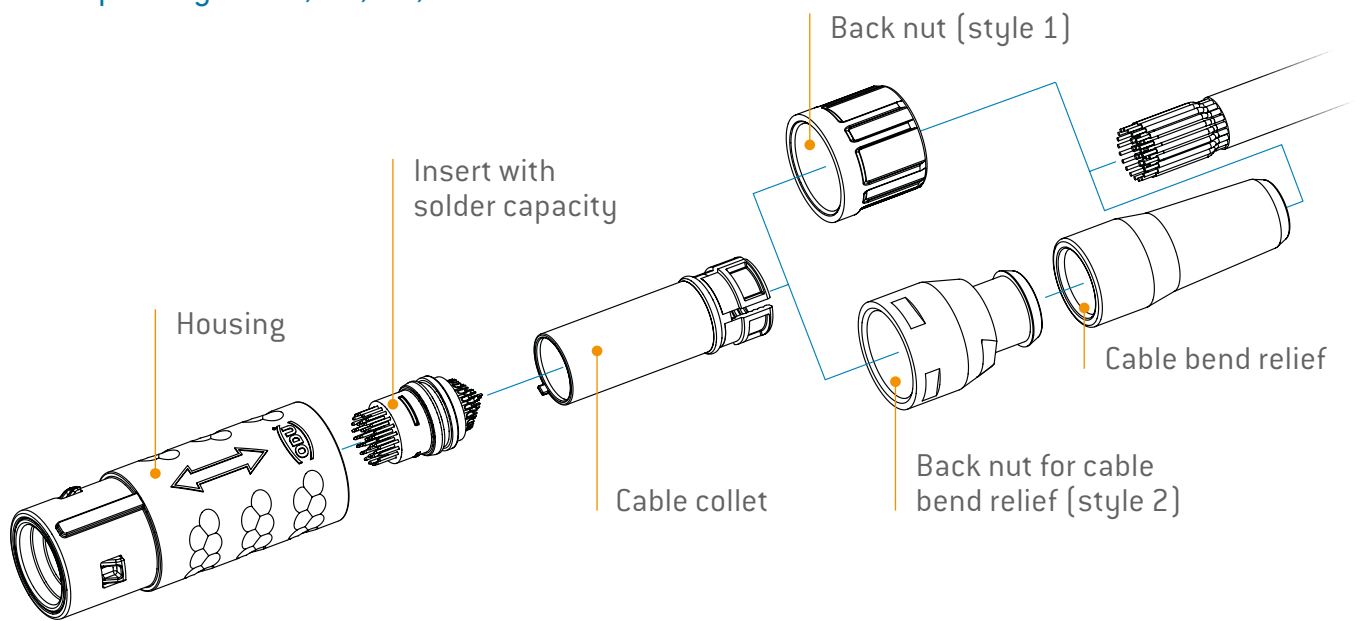
## Step 6

- ▶ Slide the cable collet in the housing.
- ▶ Slide the back nut over the back shell and tighten it with **0.5 Nm**.



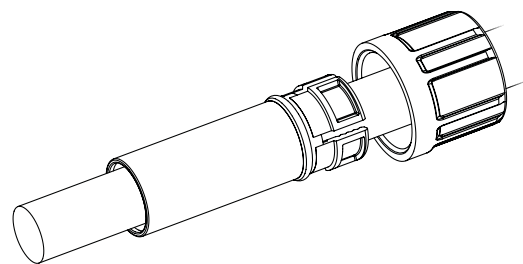
# Assembly straight plug | Size 3.5

Push-pull styles S1, S2, S3, S4



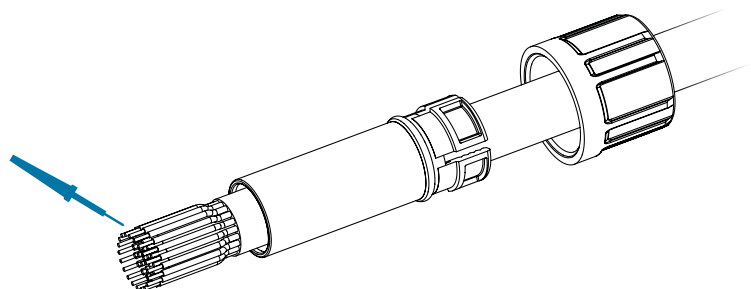
## Step 1

- ▶ Slide back nut and cable collet over the cable.



## Step 2

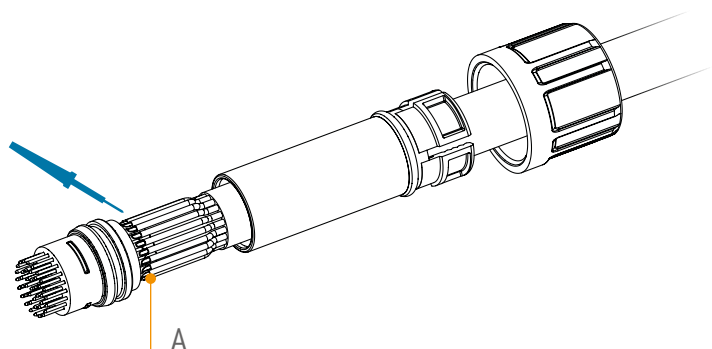
- ▶ Strip cable and wire ([see page 3](#)).
- ▶ Pre-tin strands.



## Step 3

- ▶ Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol

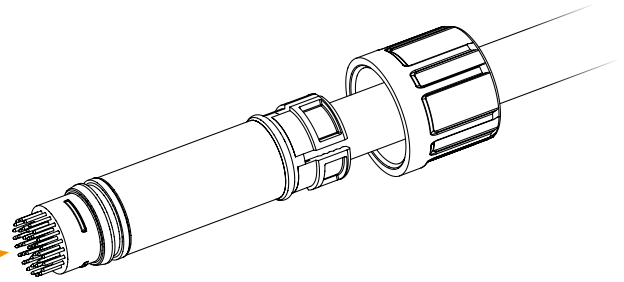


## Step 4

- ▶ Slide the cable collet against contact insert.
- ▶ Dampen the cable with drinking water before moving it.
- ▶ Slide the collet at least 30 mm when sliding it onto the insert.

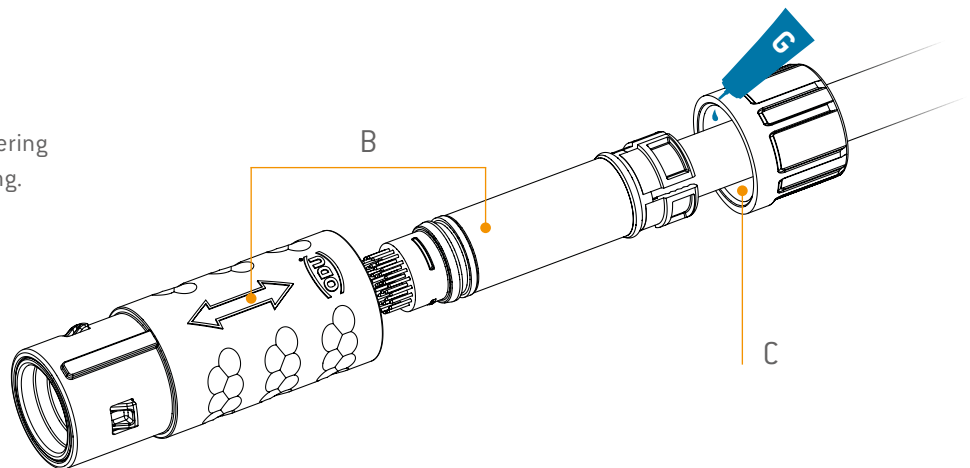
### ATTENTION!

Don't damage the contacts.



## Step 5

- ▶ Put the assembled cable considering the guidings (B) into the housing.
- ▶ If necessary, secure thread (C) with glue Scotch-Weld DP190 (890.204.000.030.025).

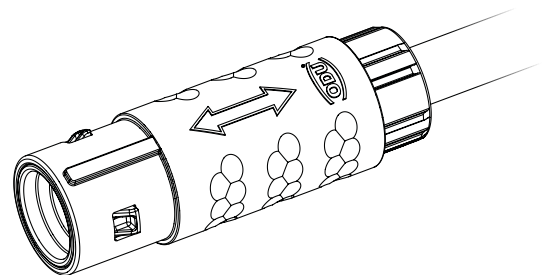


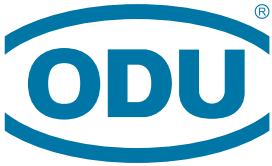
## Step 6

- ▶ Screw and fasten back nut on the assembled straight plug.

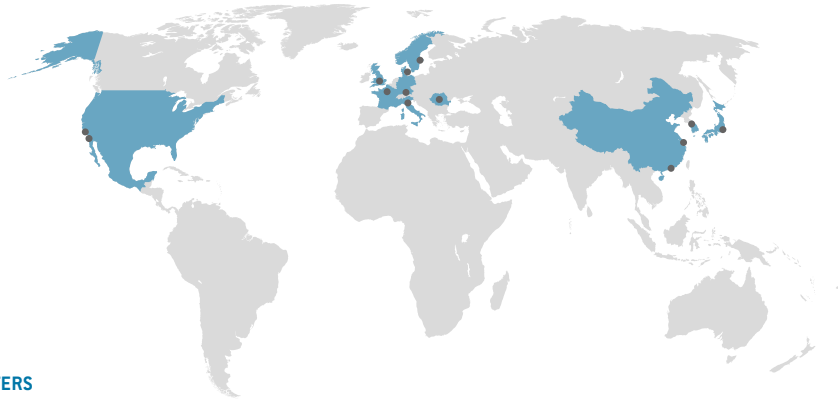
### ATTENTION!

Consider tightening torque ([see page 3](#)).





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**Mexico** ODU Mexico Manufacturing S. de R.L. de C.V.

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