

# ODU MEDI-SNAP<sup>®</sup>

Assembly instruction



ASSEMBLY INSTRUCTIONS

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Size 1 | **Straight plug** ..... 04 – 05

Size 1 | **Break-away plug** (straight & right-angled versions) ..... 06 – 10

Size 1 | **Right-angled plug** ..... 11 – 13

Size 1 | **In-line receptacle** ..... 14 – 15

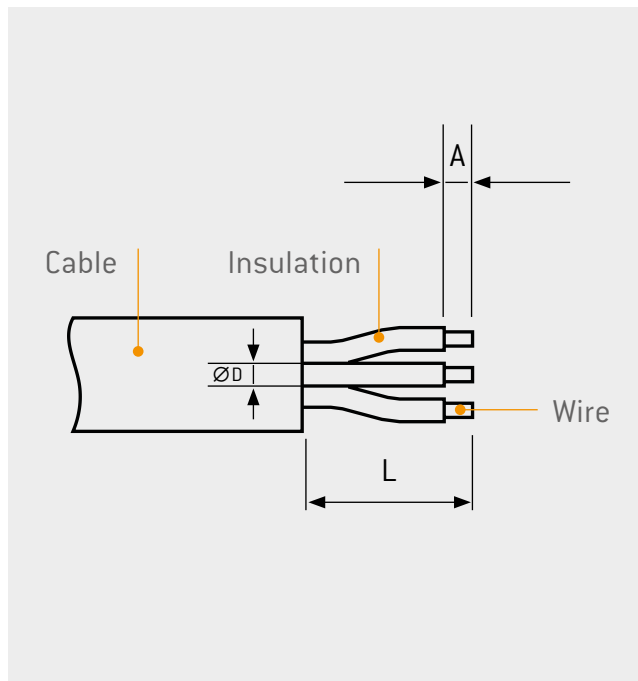
Size 2 | **Straight plug** ..... 16 – 17

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Size 3.5 | **Straight plug** ..... 20 – 21

# General notes

## Recommended stripping length



### Strand stripping length A

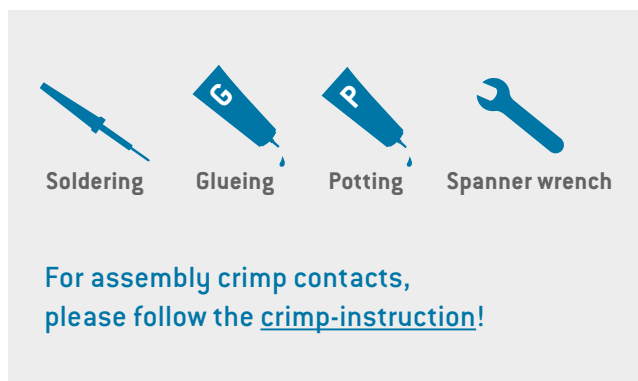
SOLDER	
AWG	Stripping length Drill depth + Strand diameter
18 20	$3.3 + \varnothing D$
22 26	$2.8 + \varnothing D$
28	$2.3 + \varnothing D$
CRIMP	
AWG	Stripping length
20–24	4.7 mm
22–26	4.7 mm

### Cable stripping length L

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

## Tools / Accessories

ODU open-ended spanner and crimping tools see  
ODU MEDI-SNAP® 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 Nm	0.5 Nm	1.5 Nm
Right-angled plug clamping cap	0.30 Nm	–	–
Right-angled plug clamping nut	0.25 Nm	–	–
In-line receptacle	0.25 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!

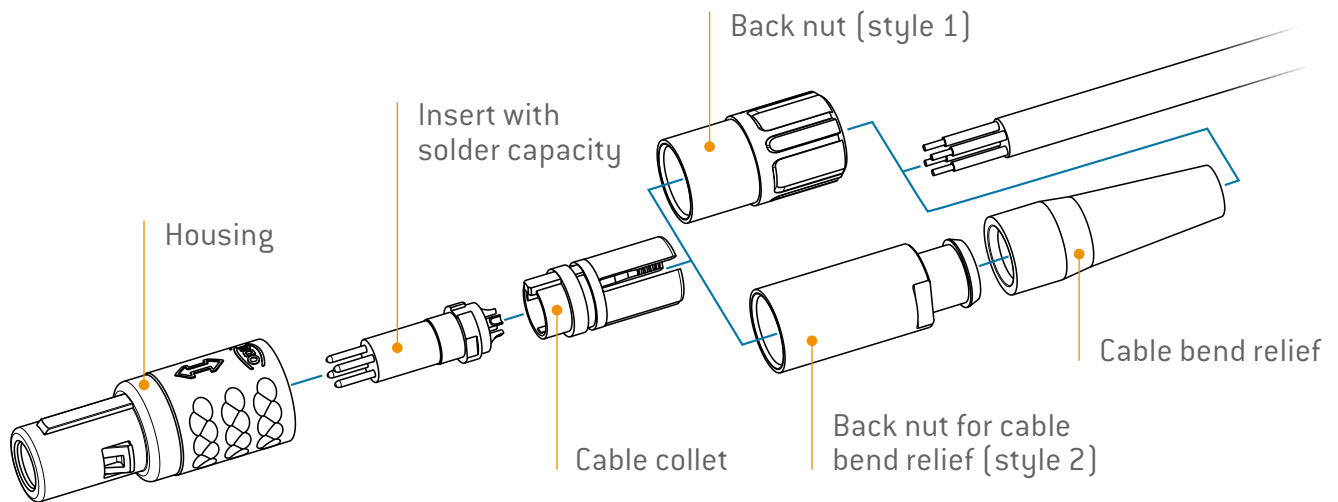
For voltages > 50 V AC and > 75 V DC, an additional protective measure (fault protective measure) to the basic insulation (basic protective measure) given by our connector is required according to IEC 60364-4-41:2005 + A1:2017 [DIN VDE 0100-410:2018-10]. The standard describes in more detail which protective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

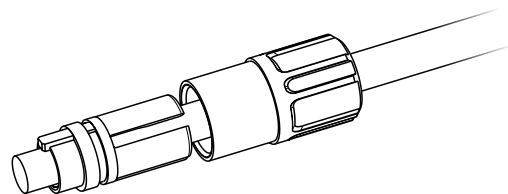
# Assembly straight plug | Size 1

Push-pull styles S1, S2, S4



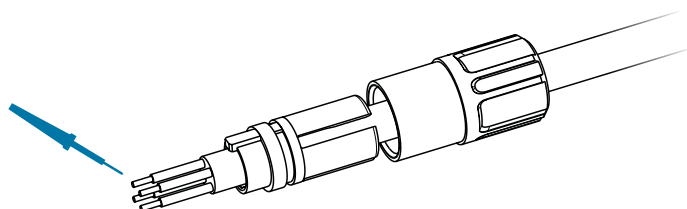
## Step 1

- Slide back nut and cable collet over the cable.



## Step 2

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

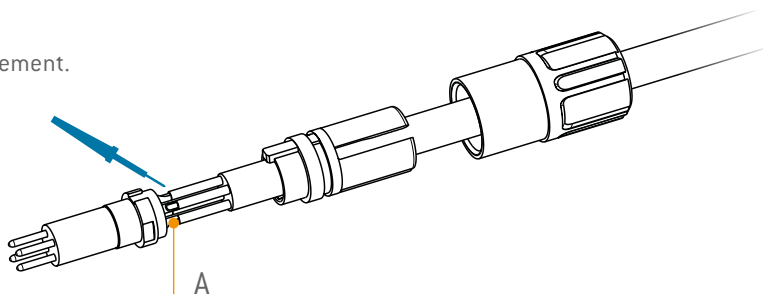




## Step 3

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

**Recommended cleaning agent:**  
Isopropyl alcohol

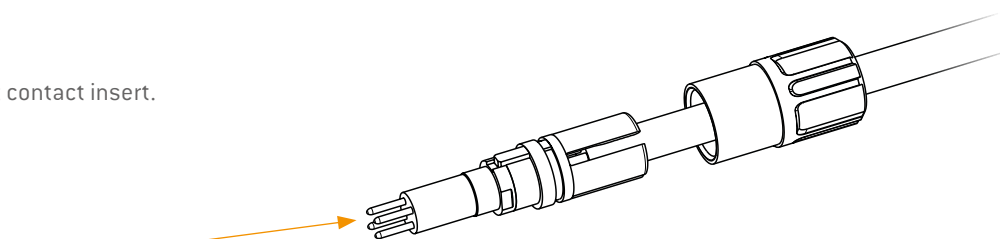


## Step 4

- Slide the cable collet against contact insert.

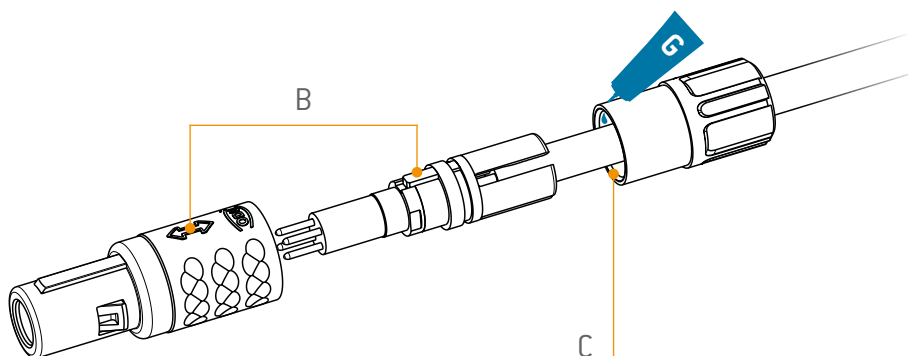
### ATTENTION!

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).

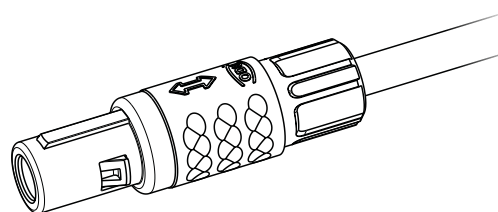


## Step 6

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

### ATTENTION!

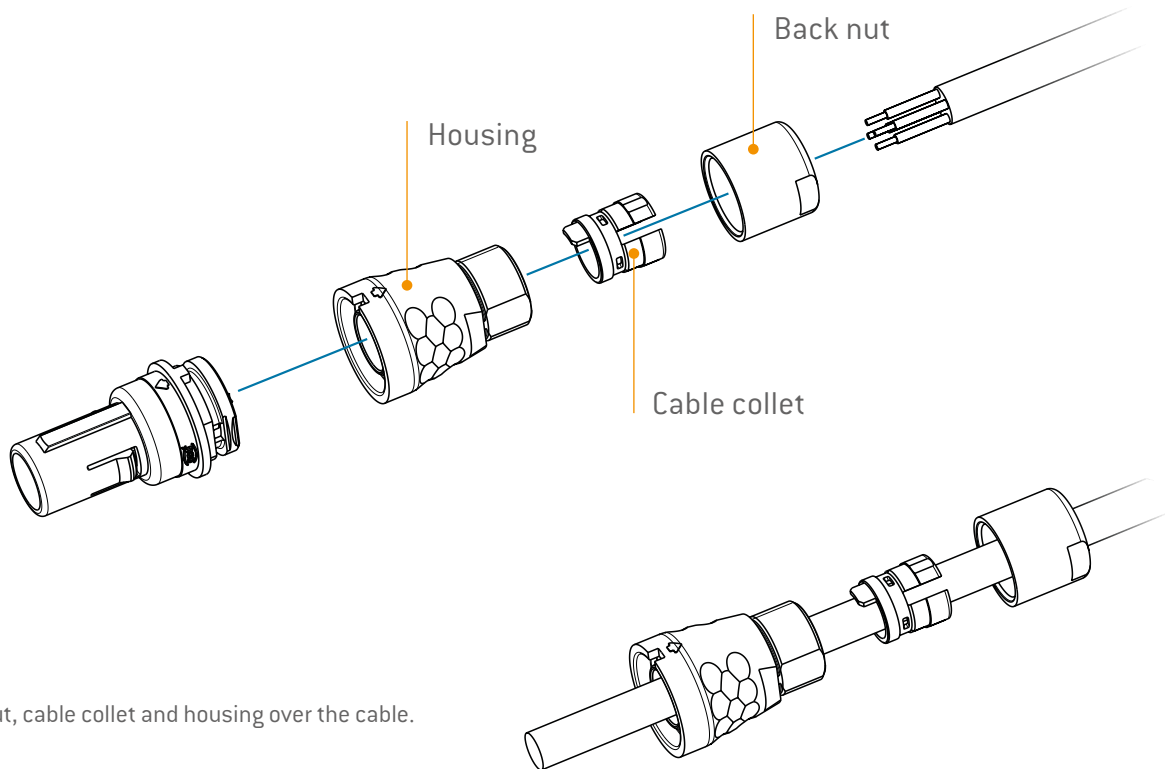
Consider tightening torque ([see page 3](#)).



# Assembly break-away plug | Size 1

## Straight version

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

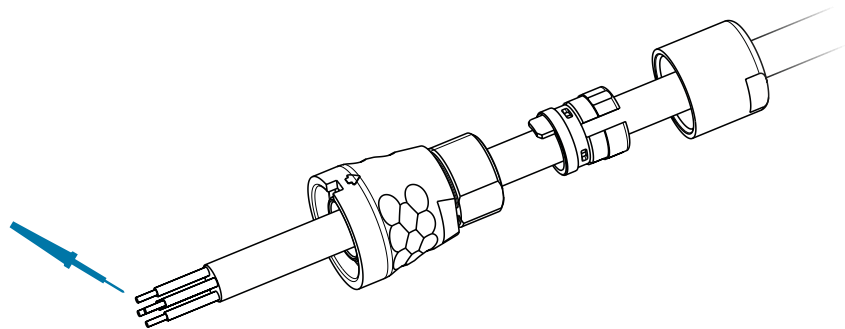


### Step 1

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

### Step 2

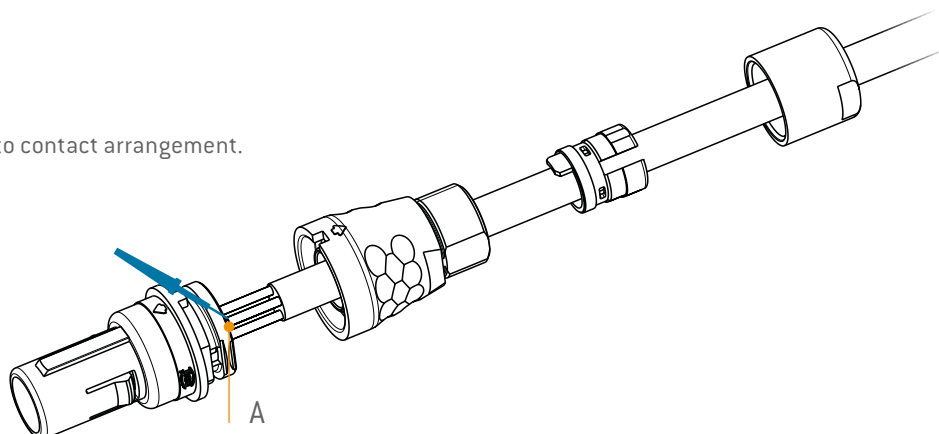
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



### Step 3

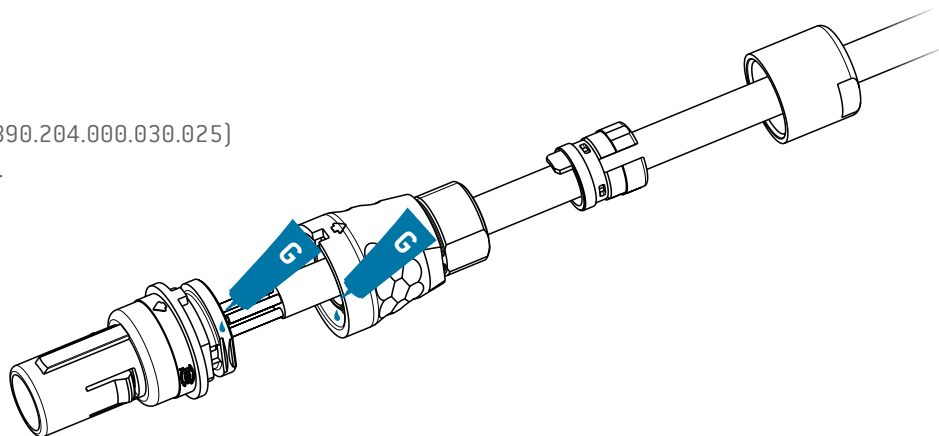
- Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol



## Step 4

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



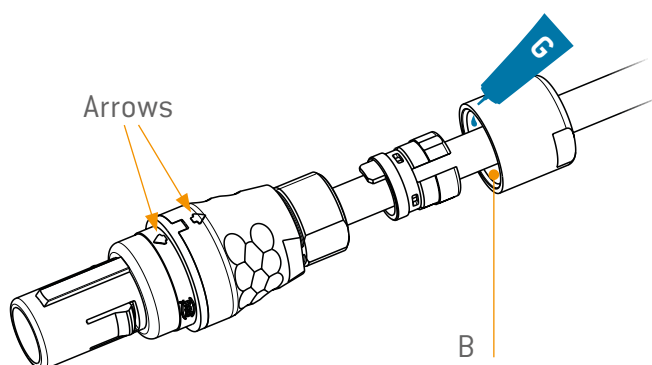
## Step 5

- ▶ Push housing onto plug without a gap.

### ATTENTION!

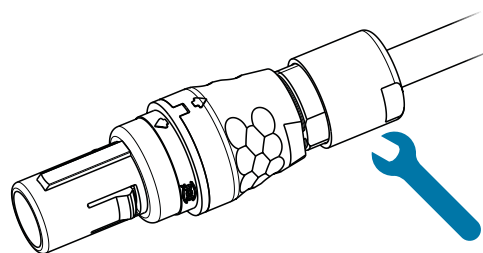
Consider position of arrows (see datasheet).

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



## Step 6

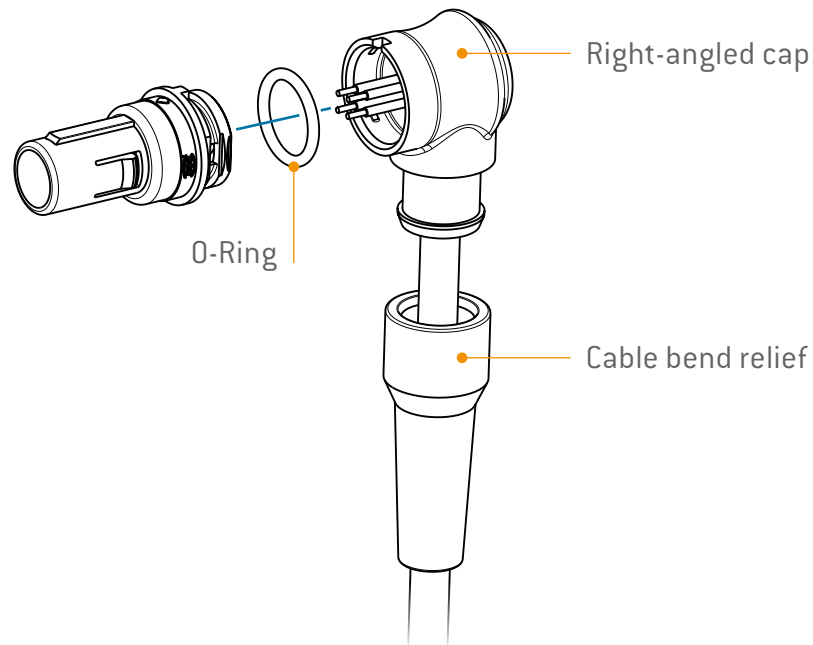
- ▶ Slide the cable collet in the housing.
- ▶ Slide the back nut over the back shell and tighten it with 0.3 Nm.



# Assembly break-away plug | Size 1

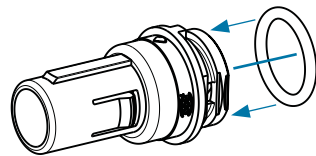
## Right-angled version

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



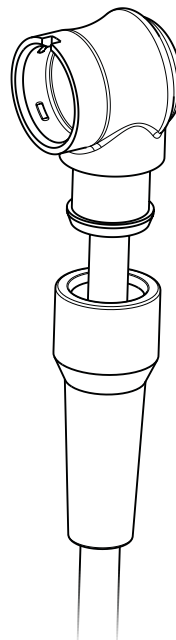
### Step 1

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



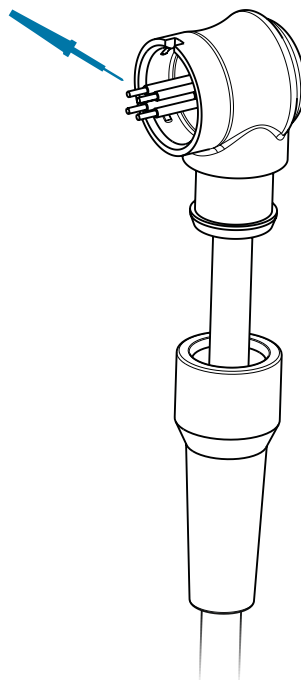
### Step 2

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



## Step 3

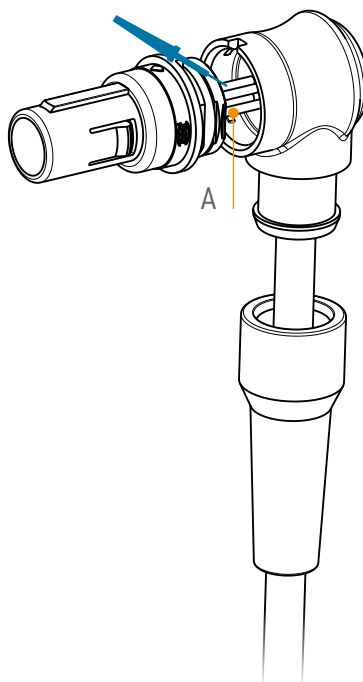
- ▶ Strip cable and wire (see page 3).
- ▶ Pre-tin strands.



## 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!

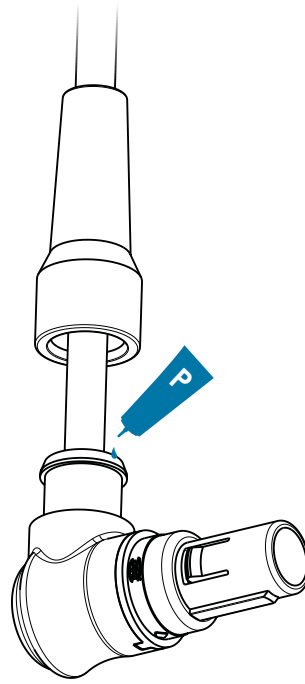
Consider position of codings (see datasheet).

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

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

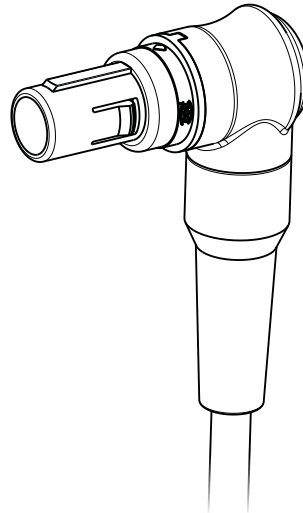
WEVO PU552FL

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



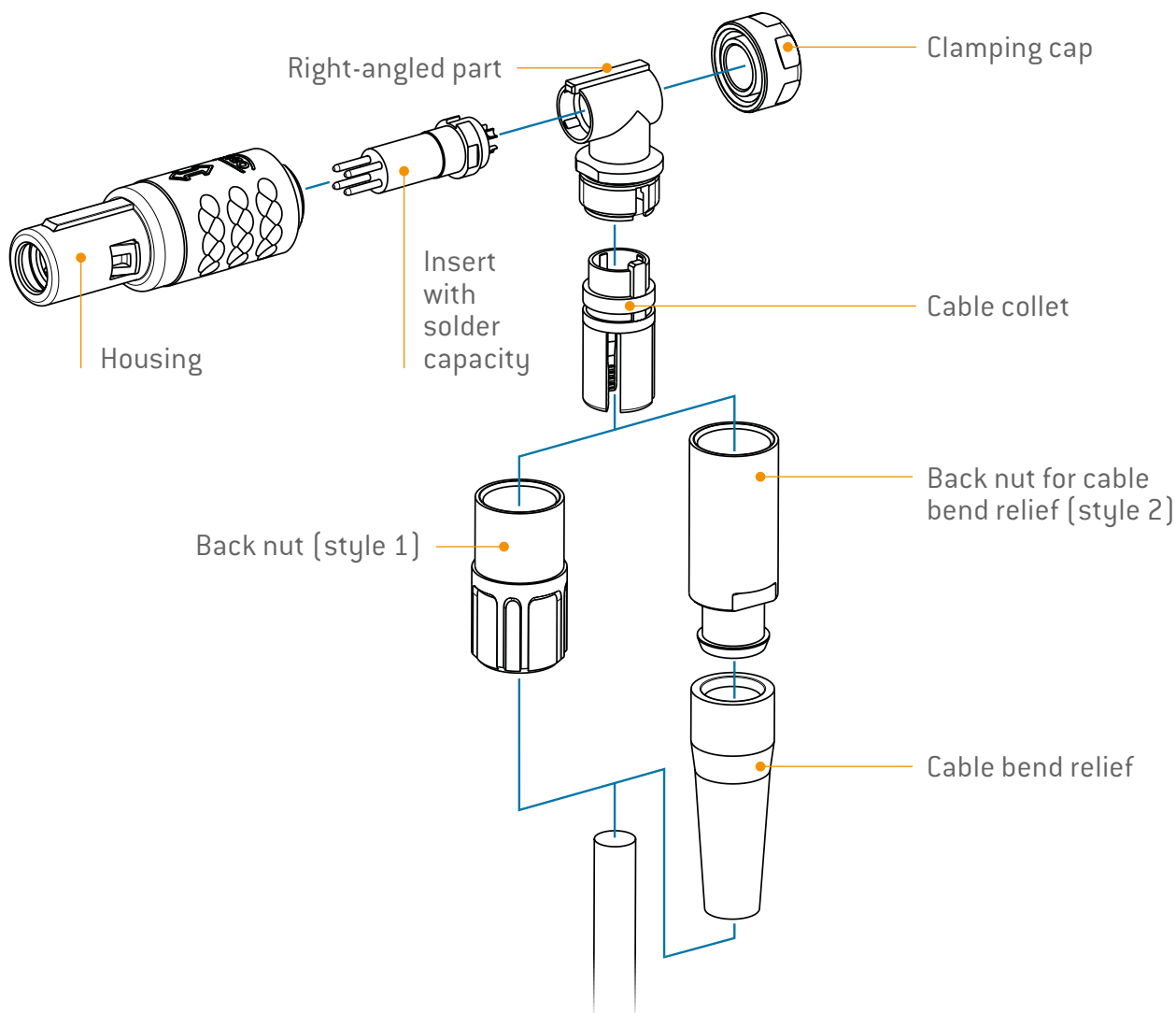
## Step 6

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



# Assembly right-angled plug | Size 1

Push-pull styles W1, W2

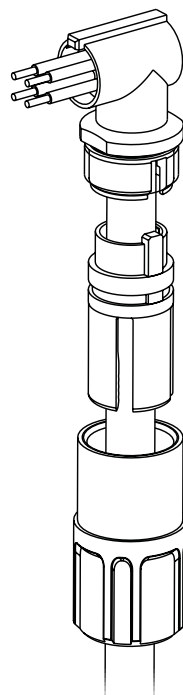


## Step 1

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

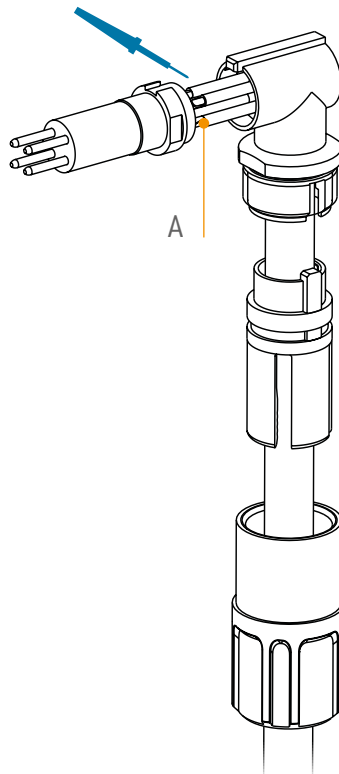
## Step 2

- 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:**

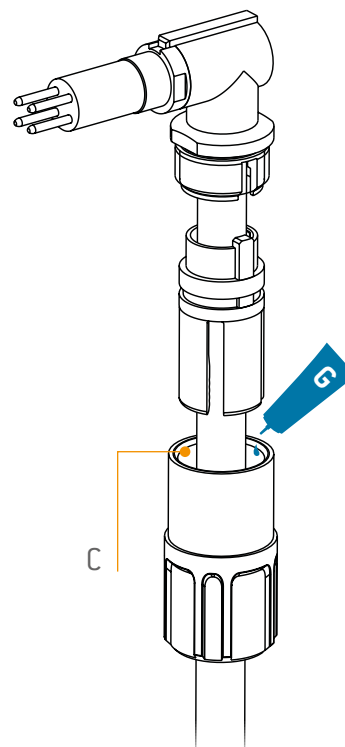
Isopropyl alcohol

## 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).

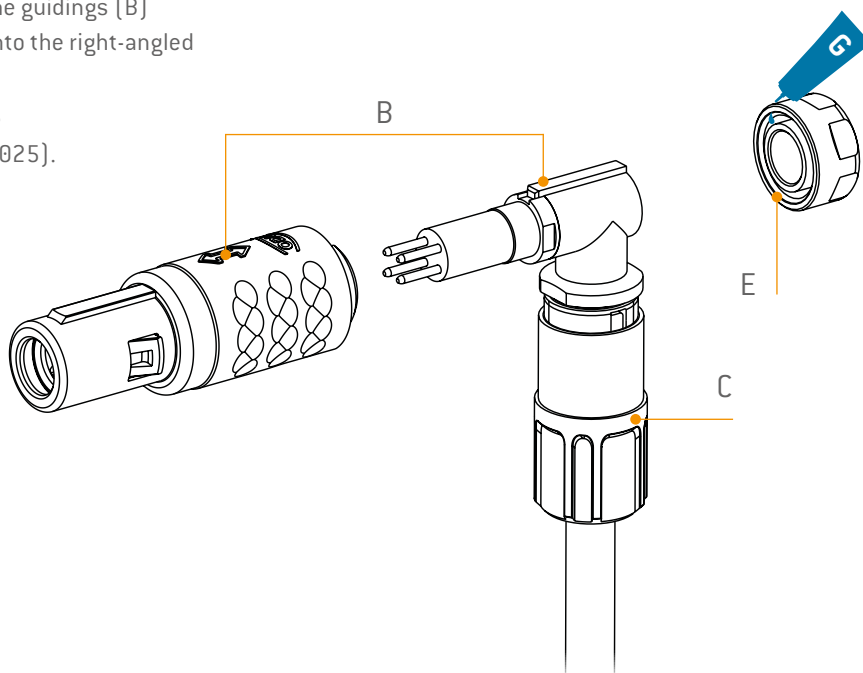


## Step 7

- ▶ 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](#)).

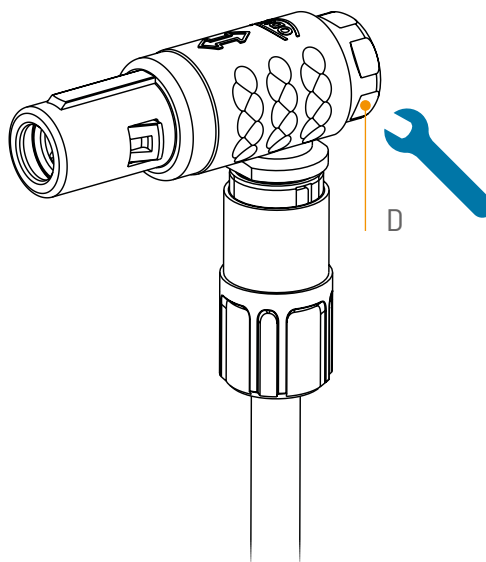


## Step 8

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

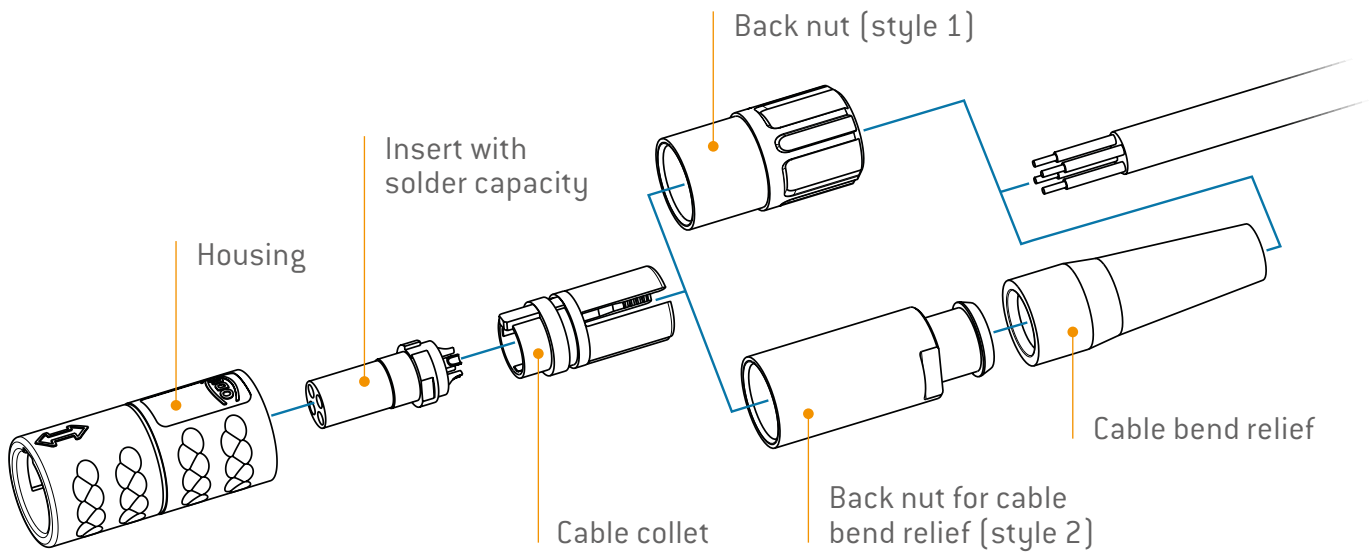
### ATTENTION!

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



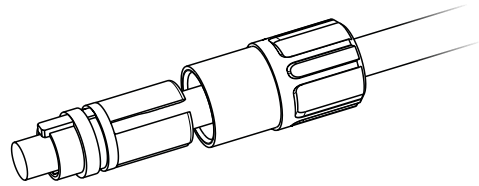
# Assembly in-line receptable | Size 1

In-line receptacle styles K1, K2



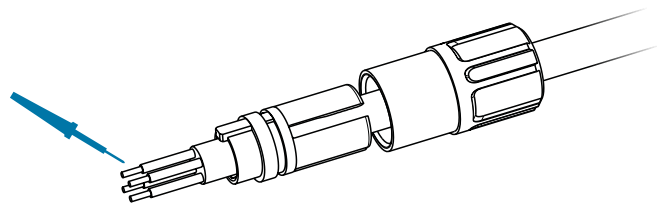
## Step 1

- Slide back nut and cable collet over the cable.



## Step 2

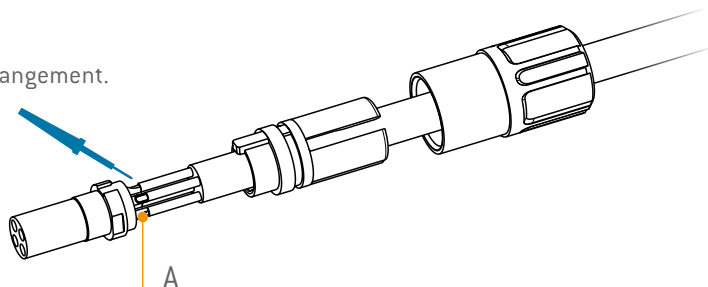
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



## Step 3

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

**Recommended cleaning agent:**  
Isopropyl alcohol

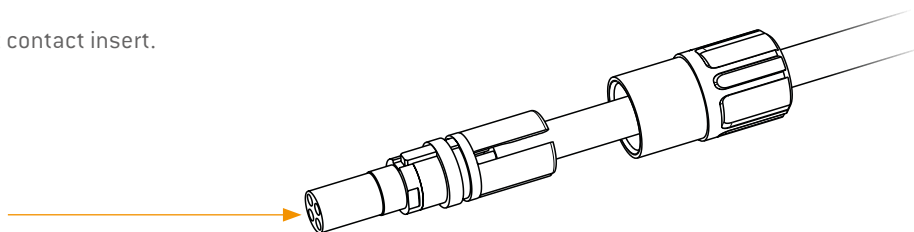


## Step 4

- Slide the cable collet against contact insert.

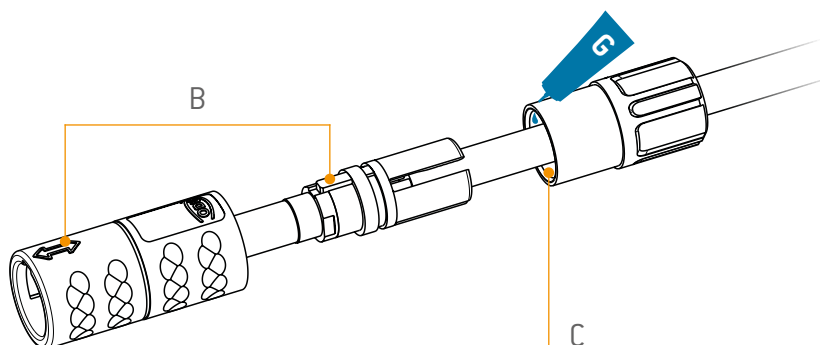
### ATTENTION!

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].

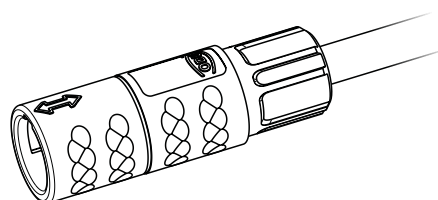


## Step 6

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

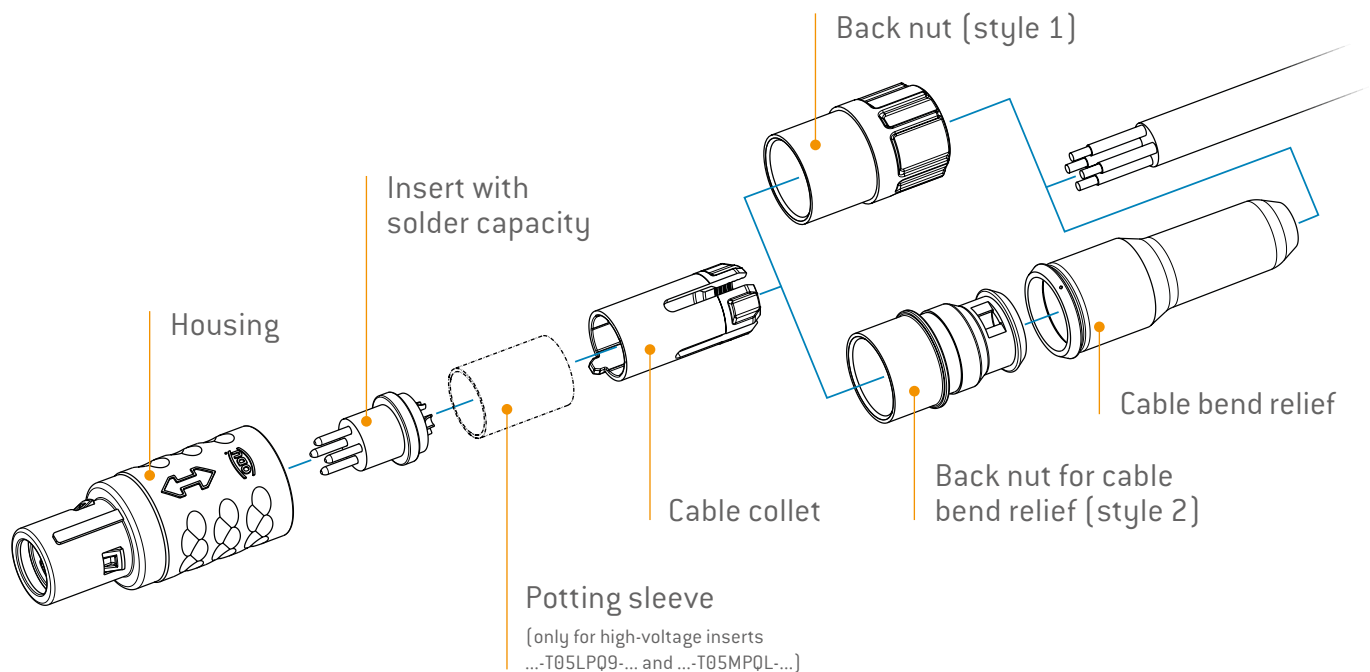
### ATTENTION!

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



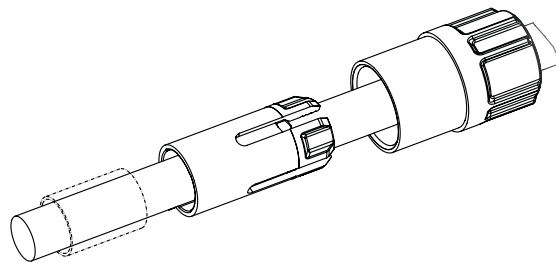
# Assembly straight plug | Size 2

Push-pull styles S1, S4



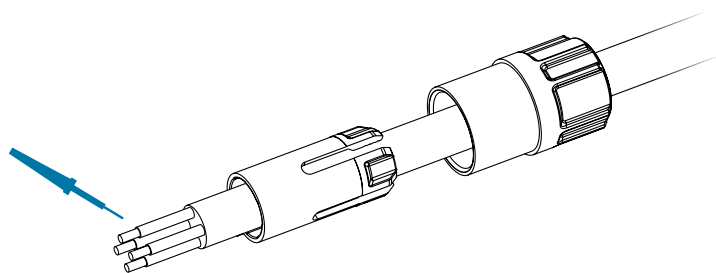
## Step 1

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



## Step 2

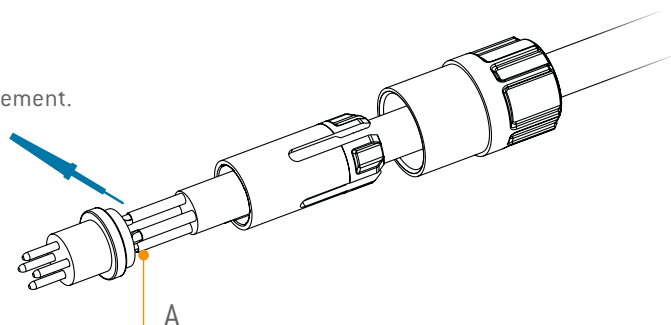
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



## Step 3

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

**Recommended cleaning agent:**  
Isopropyl alcohol

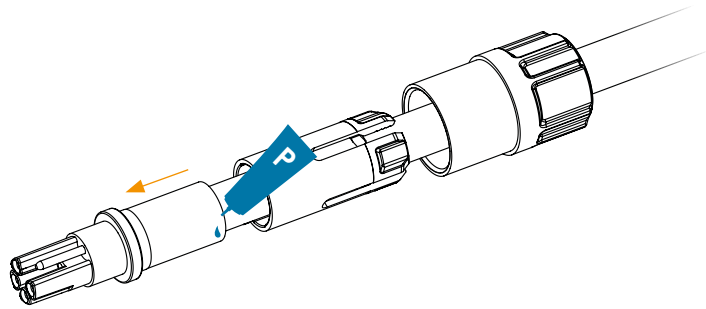


## Step 3.1

[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

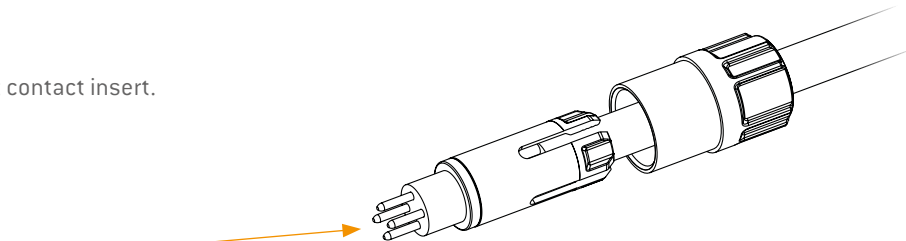


## Step 4

- ▶ Slide the cable collet against contact insert.

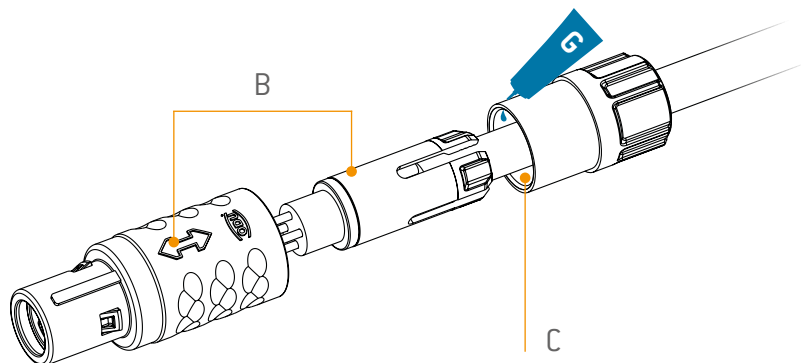
**ATTENTION!**

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].

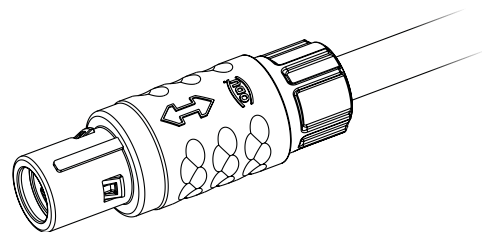


## Step 6

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

**ATTENTION!**

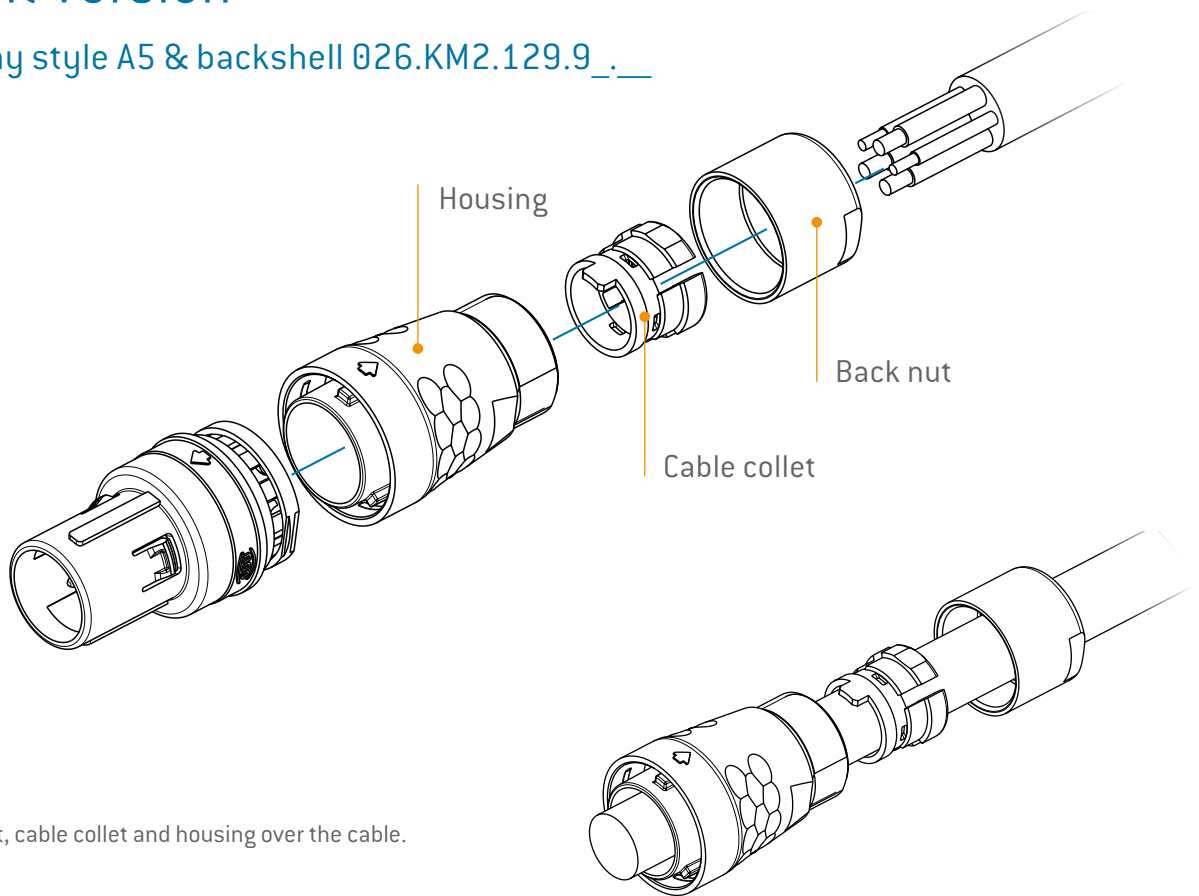
Consider tightening torque ([see page 3](#)).



# Assembly break-away plug | Size 2

## Straight version

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

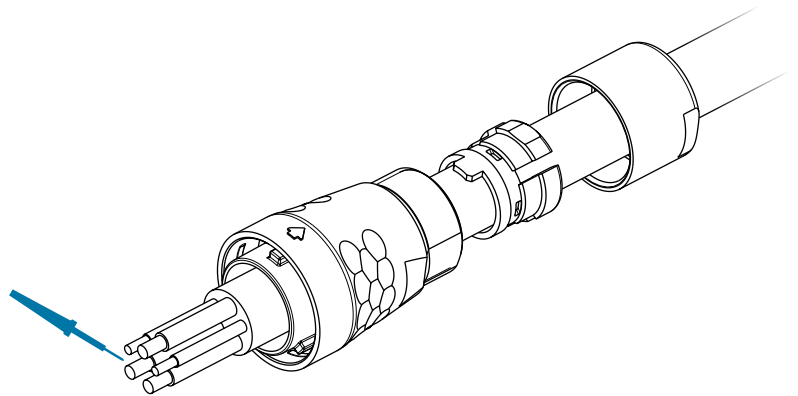


### Step 1

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

### Step 2

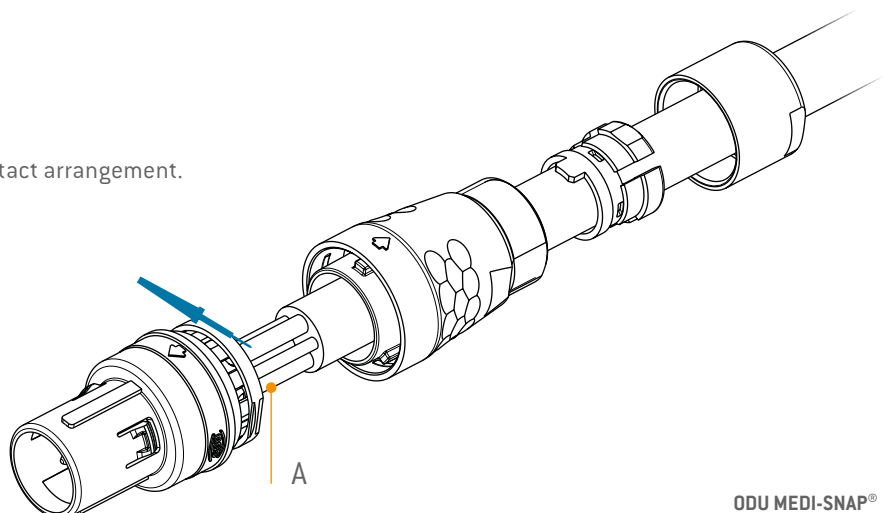
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



### Step 3

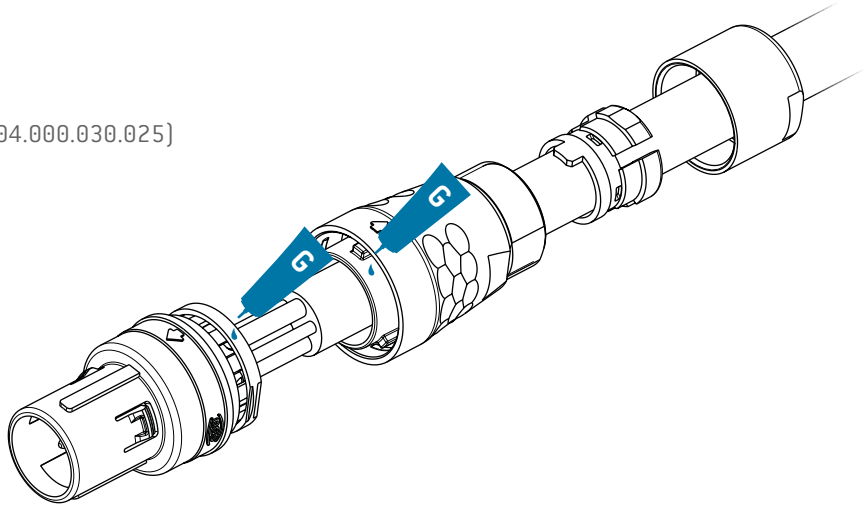
- Solder the litz wires (A) according to contact arrangement.

**Recommended cleaning agent:**  
Isopropyl alcohol



## Step 4

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



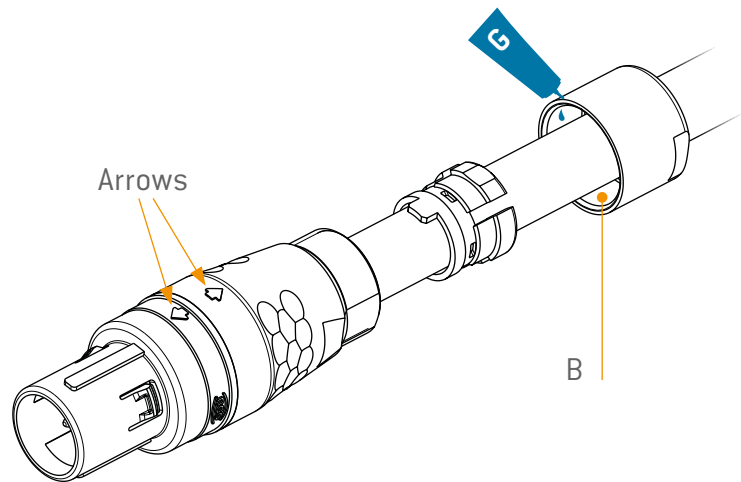
## Step 5

- ▶ Push housing onto plug without a gap.

### ATTENTION!

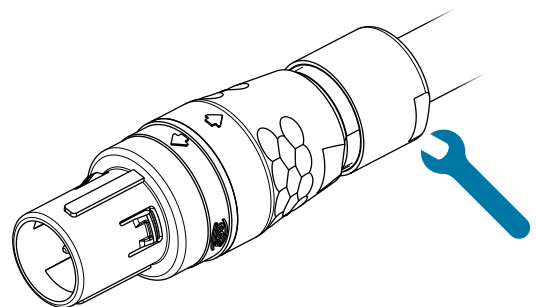
Consider position of arrows (see datasheet).

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



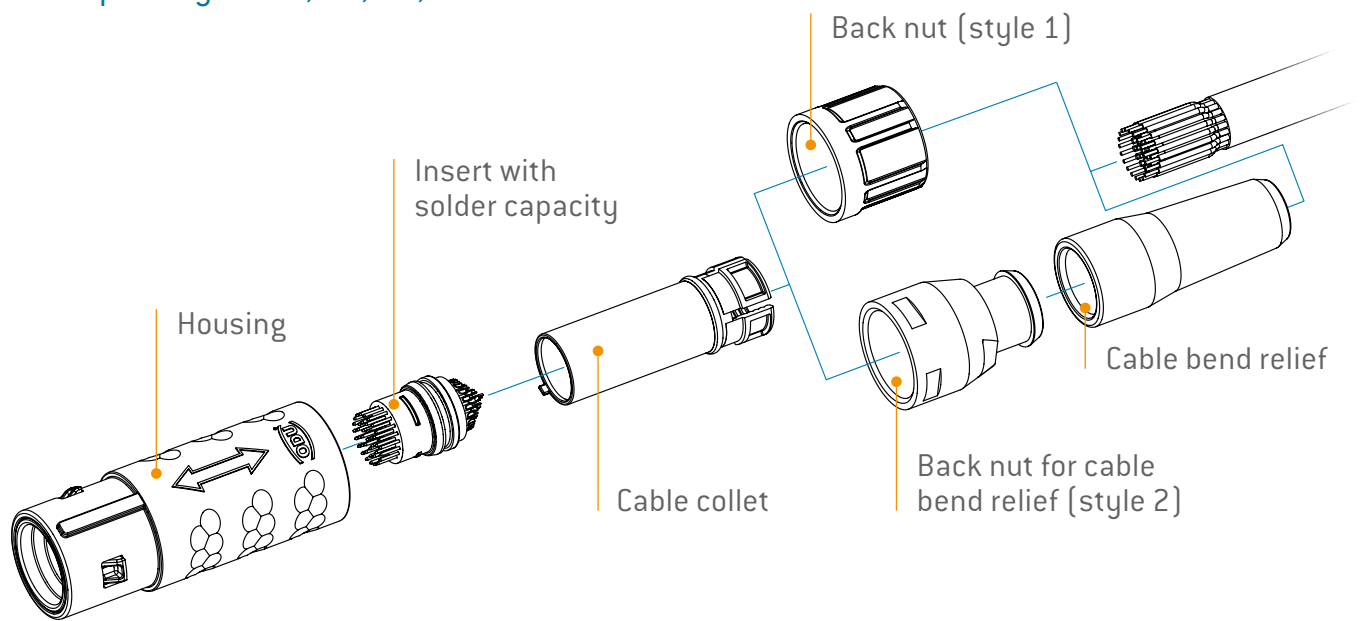
## Step 6

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



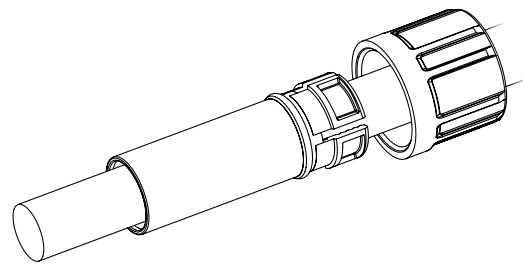
# Assembly straight plug | Size 3.5

Push-pull styles S1, S2, S3, S4



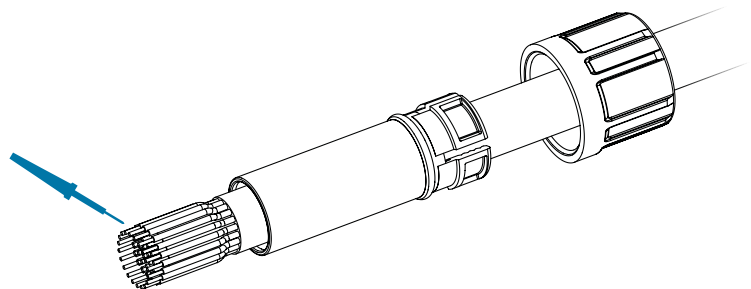
## Step 1

- Slide back nut and cable collet over the cable.



## Step 2

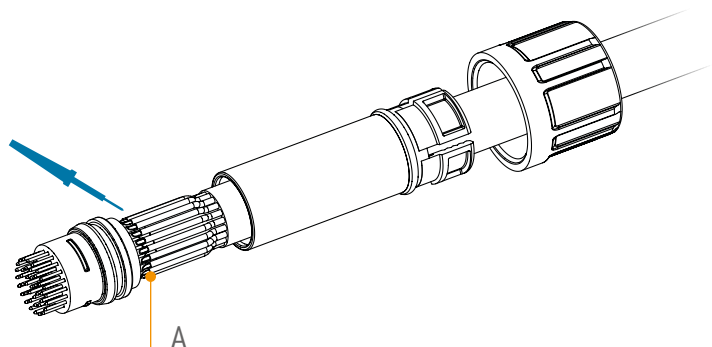
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



## Step 3

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

**Recommended cleaning agent:**  
Isopropyl alcohol



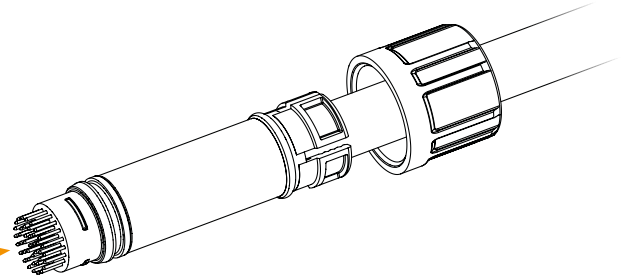


## Step 4

- ▶ 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.

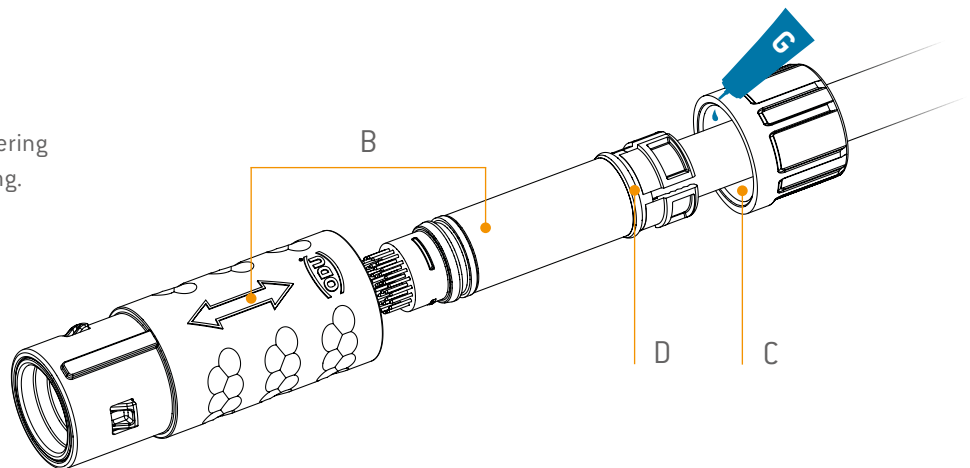
### ATTENTION!

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).
- ▶ If necessary, dampen the seal (D) with drinking water for easier assembly

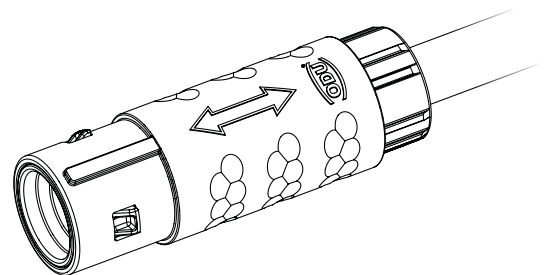


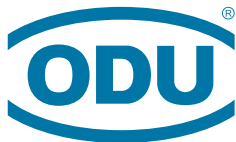
## Step 6

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

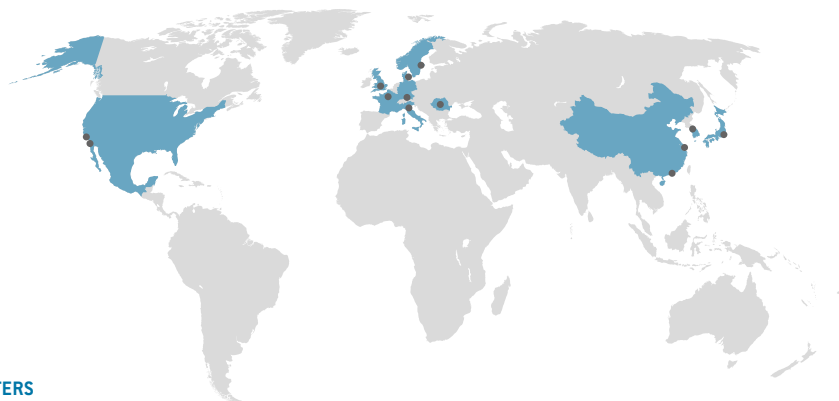
### ATTENTION!

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





## ODU GROUP WORLDWIDE



### HEADQUARTERS

#### ODU GmbH & Co. KG

Pregelstraße 11, 84453 Mühldorf a. Inn, Germany

Phone: +49 8631 6156-0, Fax: +49 8631 6156-49, E-mail: [sales@odu.de](mailto:sales@odu.de)

### SALES LOCATIONS

#### ODU (Shanghai)

International Trading Co., Ltd.

Phone: +86 21 58347828-0

E-mail: [sales@odu.com.cn](mailto:sales@odu.com.cn)

[www.odu.com.cn](http://www.odu.com.cn)

#### ODU (HK) Trading Co., Ltd.

Phone: +852 3963-9588

E-mail: [sales@odu.hk](mailto:sales@odu.hk)

[www.odu.hk](http://www.odu.hk)

#### ODU Denmark ApS

Phone: +45 2233 5335

E-mail: [sales@odu-denmark.dk](mailto:sales@odu-denmark.dk)

[www.odu-denmark.dk](http://www.odu-denmark.dk)

#### ODU-France SARL

Phone: +33 1 3935-4690

E-mail: [sales@odu.fr](mailto:sales@odu.fr)

[www.odu.fr](http://www.odu.fr)

#### ODU Italia S.R.L.

Phone: +39 331 8708847

E-mail: [sales@odu-italia.it](mailto:sales@odu-italia.it)

[www.odu-italia.it](http://www.odu-italia.it)

#### ODU Japan K.K.

Phone: +81 3 6441 3210

E-mail: [sales@odu.co.jp](mailto:sales@odu.co.jp)

[www.odu.co.jp](http://www.odu.co.jp)

#### ODU Korea Inc.

Phone: +82 2 6964 7181

E-mail: [sales@odu-korea.kr](mailto:sales@odu-korea.kr)

[www.odu-korea.kr](http://www.odu-korea.kr)

#### ODU Romania Manufacturing SRL

Phone: +40 269 704638

E-mail: [sales@odu-romania.ro](mailto:sales@odu-romania.ro)

[www.odu-romania.ro](http://www.odu-romania.ro)

#### ODU Scandinavia AB

Phone: +46 176 18262

E-mail: [sales@odu.se](mailto:sales@odu.se)

[www.odu.se](http://www.odu.se)

#### ODU-UK Ltd.

Phone: +44 330 002 0640

E-mail: [sales@odu-uk.co.uk](mailto:sales@odu-uk.co.uk)

[www.odu-uk.co.uk](http://www.odu-uk.co.uk)

#### ODU-USA Inc.

Phone: +1 805 484-0540

E-mail: [sales@odu-usa.com](mailto:sales@odu-usa.com)

[www.odu-usa.com](http://www.odu-usa.com)

Further information and specialized representatives can be found at:

[www.odu-connectors.com/contact](http://www.odu-connectors.com/contact)

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

**Romania** ODU Romania Manufacturing SRL

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