

ODU MEDI-SNAP[®]

Assembly instruction



ASSEMBLY INSTRUCTIONS

General notes 03

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

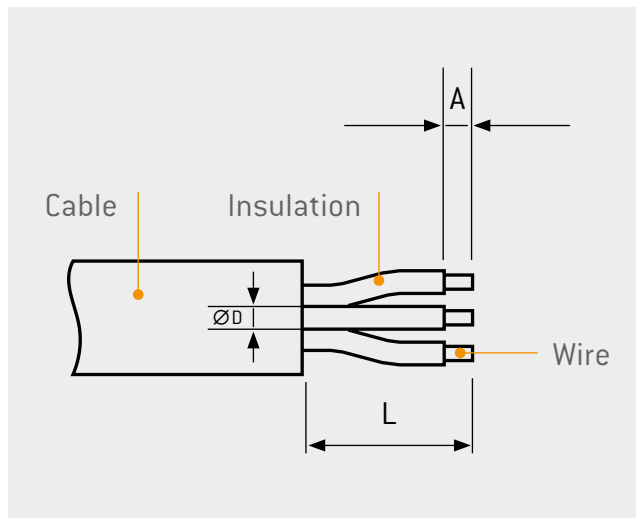
Size 2 | **Straight plug** 16 – 17

Size 2 | **Break-away plug** (straight version) 18 – 19

Size 3.5 | **Straight plug** 20 – 21

General notes

Recommended stripping length



Tolerance L [in mm]

Lenghts	Tolerance cable sheath L
up to 20	± 1.0
21 to 50	± 2.0

Strand stripping length A

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

Cable stripping length L

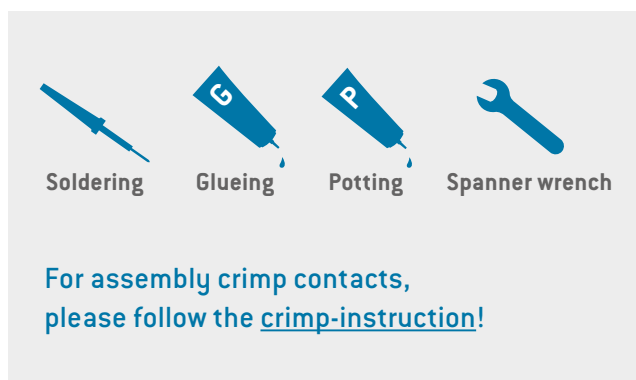
Size	Stripping length
1	12 mm
2	15 mm
3.5	18 mm

Tolerance A [in mm]

Lenghts	Tolerance wire A
up to 5	± 0.5
6 to 10	± 1.0

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 ± 0.1 Nm	0.5 ± 0.1 Nm	1.5 ± 0.3 Nm
Right-angled plug clamping cap	0.30 ± 0.1 Nm	–	–
Right-angled plug clamping nut	0.25 ± 0.1 Nm	–	–
In-line receptacle	0.25 ± 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!

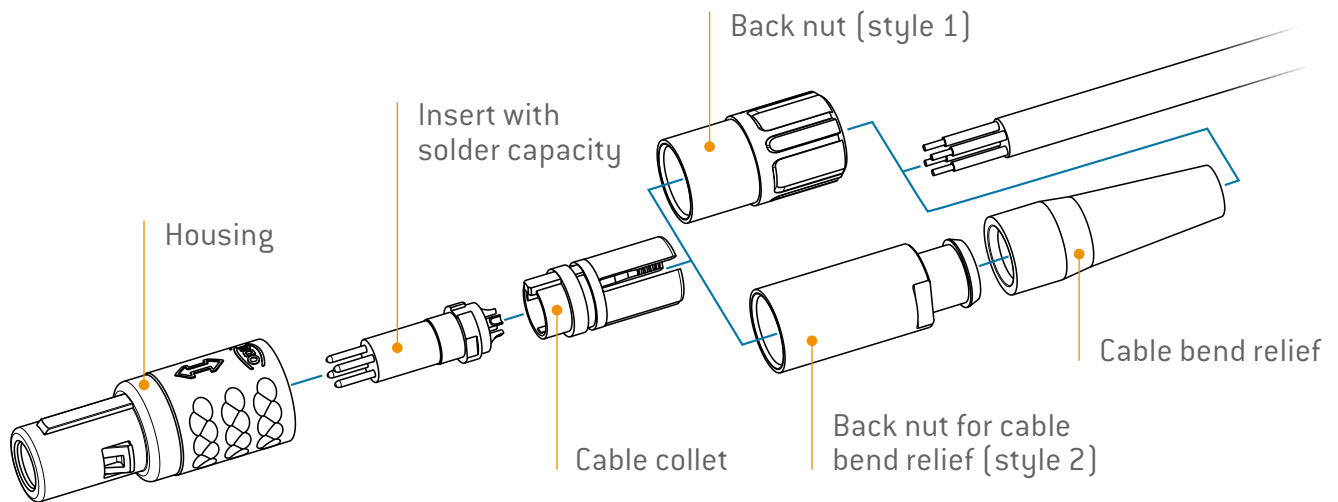
For voltages > 50 V AC and > 75 V DC, an additional protective measure (fault protective measure) to the basic insulation (basic protective measure) given by our connector is required according to IEC 60364-4-41:2005 + A1:2017 [DIN VDE 0100-410:2018-10]. The standard describes in more detail which protective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

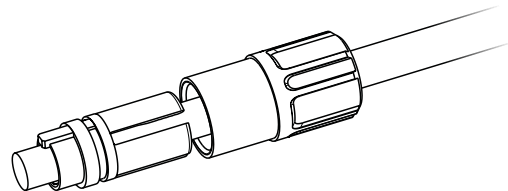
Assembly straight plug | Size 1

Push-pull styles S1, S2, S4



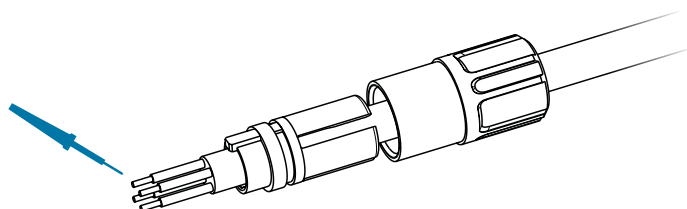
Step 1

- Slide back nut and cable collet over the cable.



Step 2

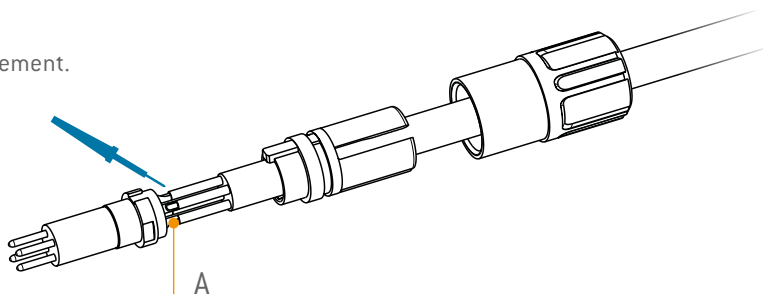
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



Step 3

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

Recommended cleaning agent:
Isopropyl alcohol

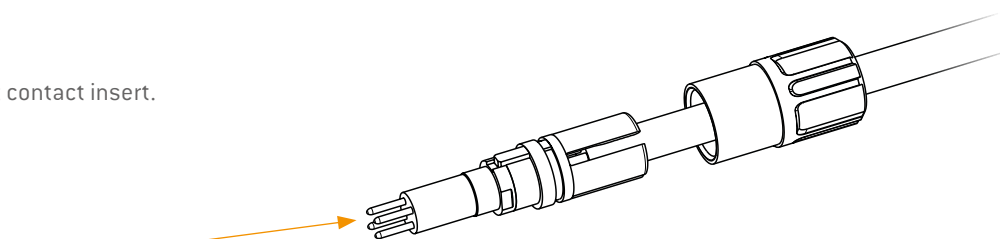


Step 4

- Slide the cable collet against contact insert.

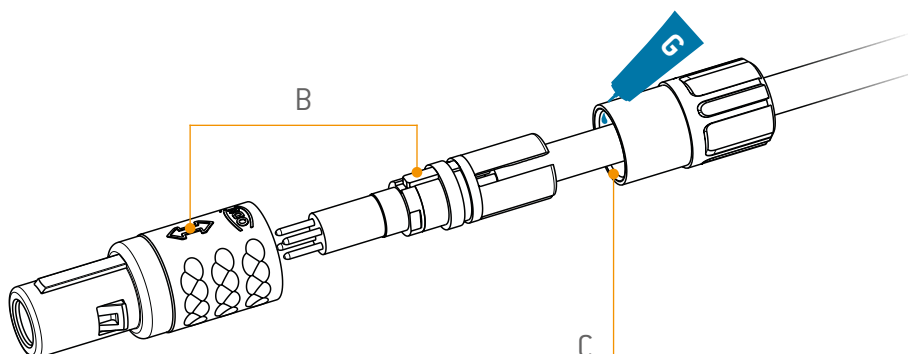
ATTENTION!

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).

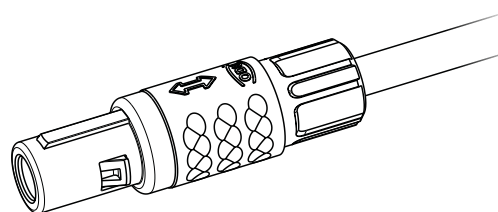


Step 6

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

ATTENTION!

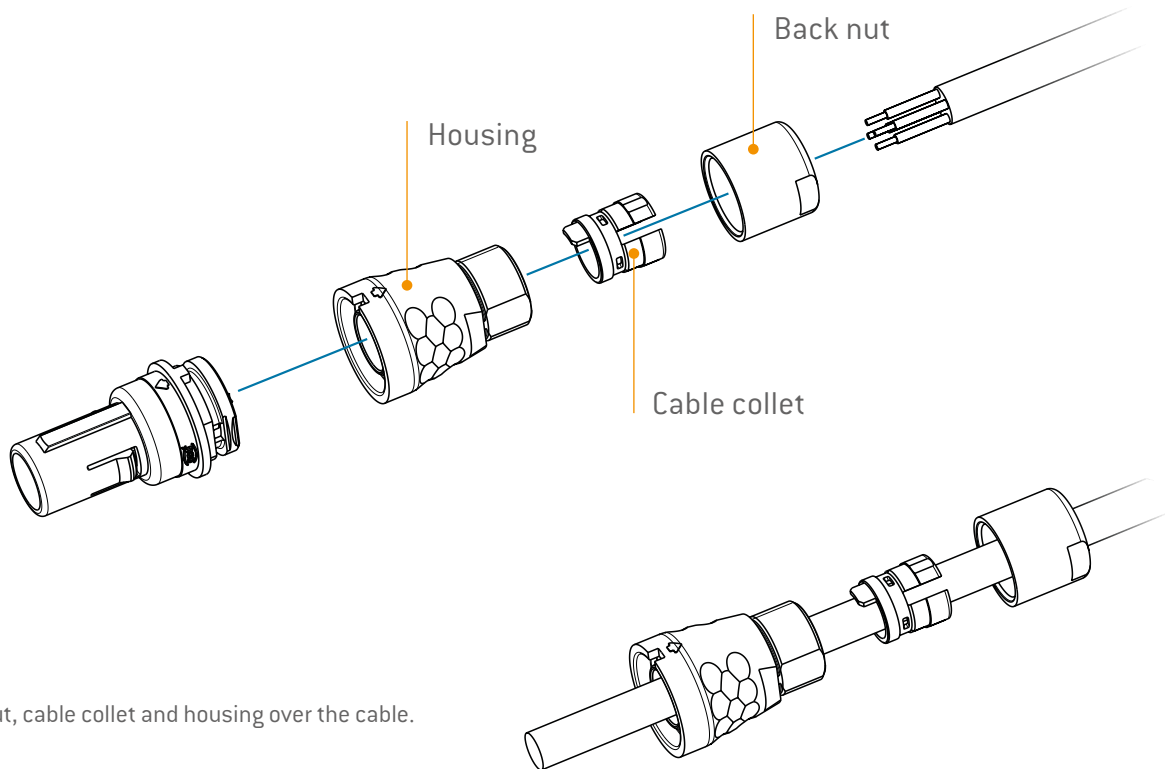
Consider tightening torque ([see page 3](#)).



Assembly break-away plug | Size 1

Straight version

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

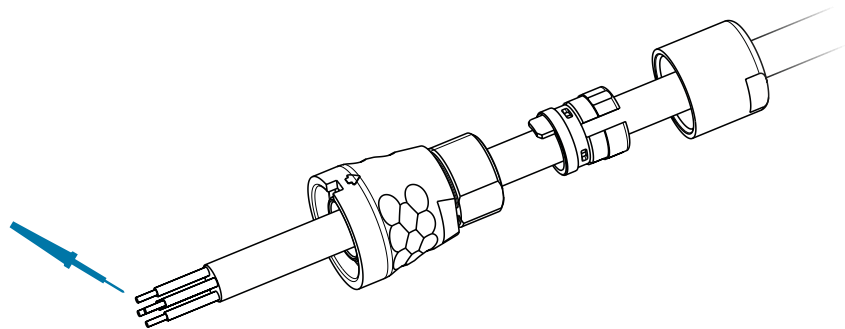


Step 1

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

Step 2

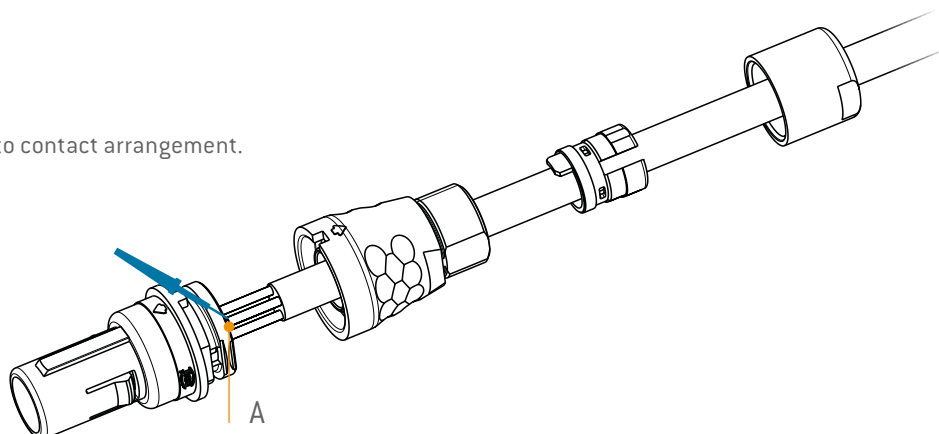
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



Step 3

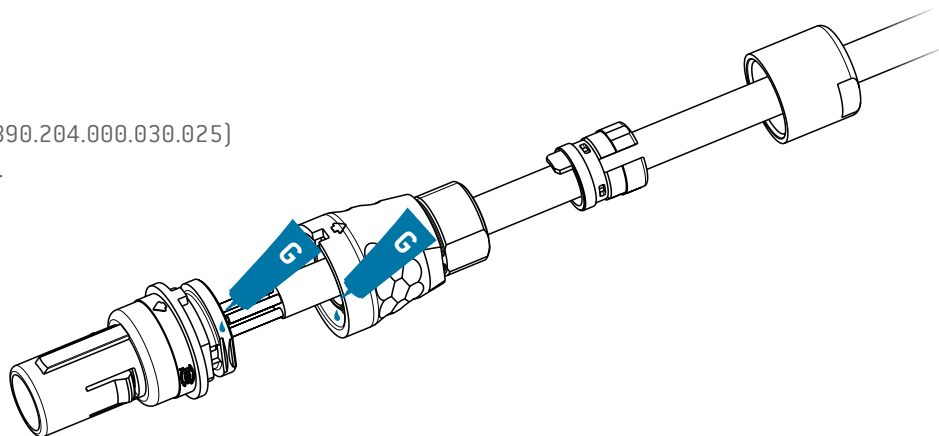
- Solder the litz wires (A) according to contact arrangement.

Recommended cleaning agent:
Isopropyl alcohol



Step 4

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



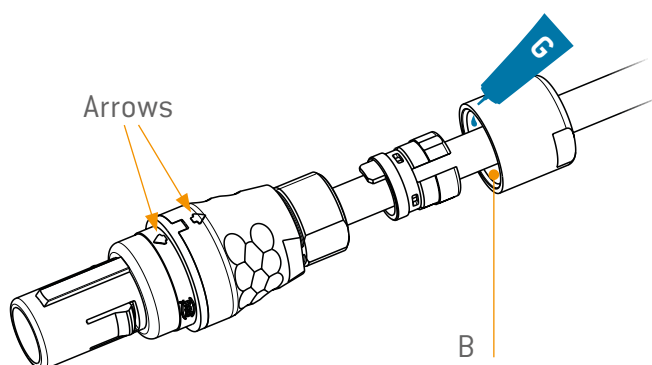
Step 5

- ▶ Push housing onto plug without a gap.

ATTENTION!

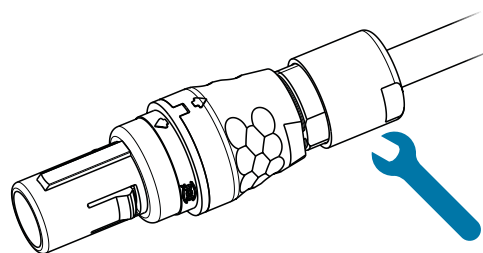
Consider position of arrows (see datasheet).

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



Step 6

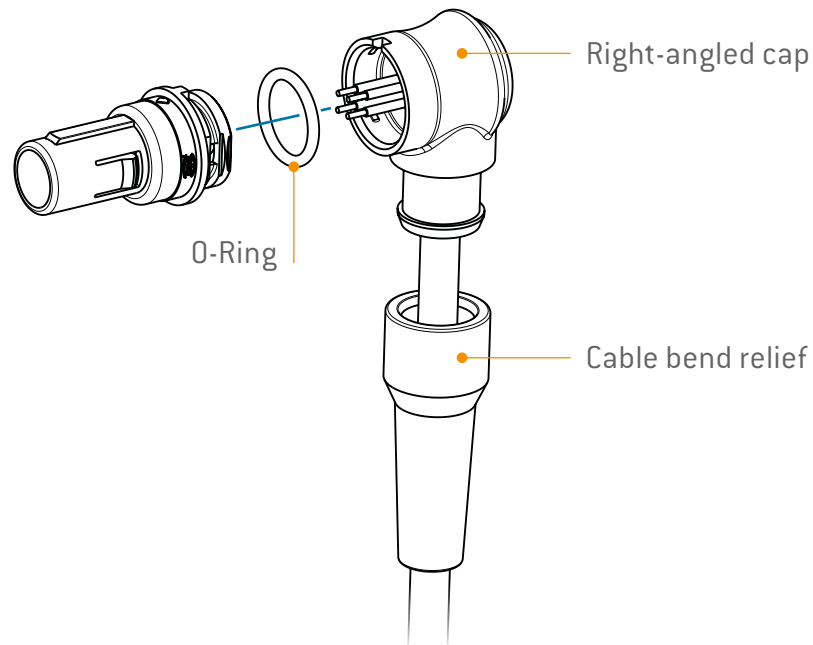
- ▶ Slide the cable collet in the housing.
- ▶ Slide the back nut over the back shell and tighten it with 0.3 Nm.



Assembly break-away plug | Size 1

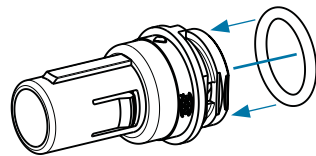
Right-angled version

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



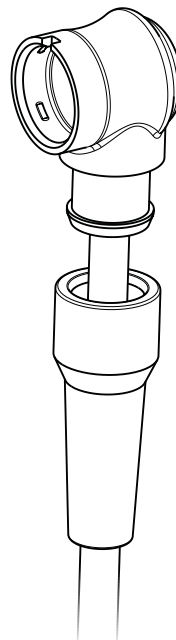
Step 1

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



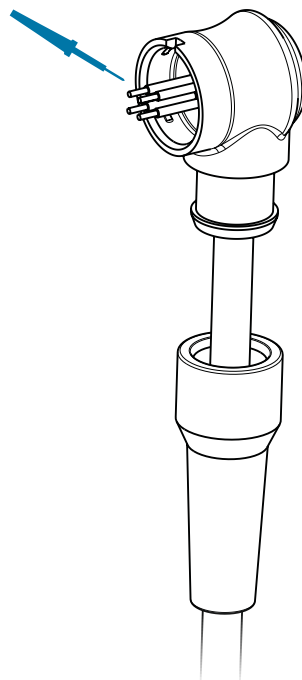
Step 2

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



Step 3

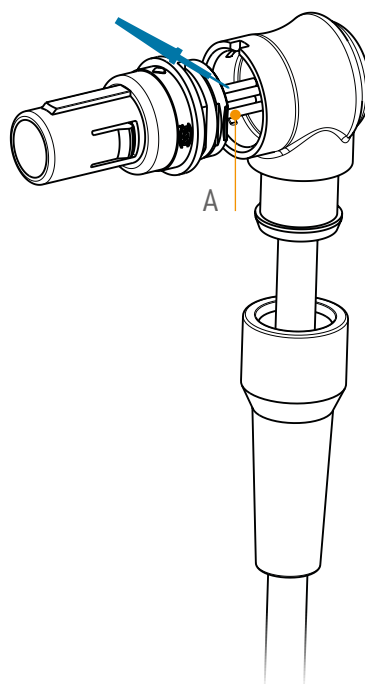
- ▶ Strip cable and wire (see page 3).
- ▶ Pre-tin strands.



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!

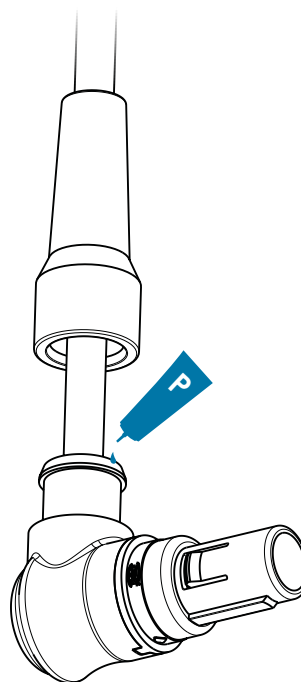
Consider position of codings (see datasheet).

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

Recommendation of ODU for standard PVC jackets:

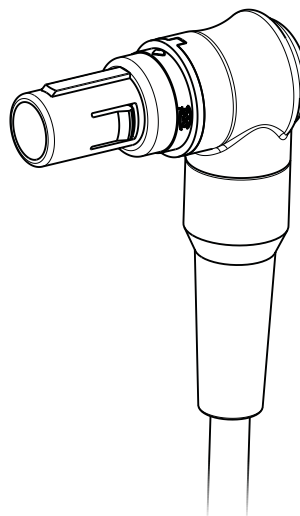
WEVO PU552FL

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



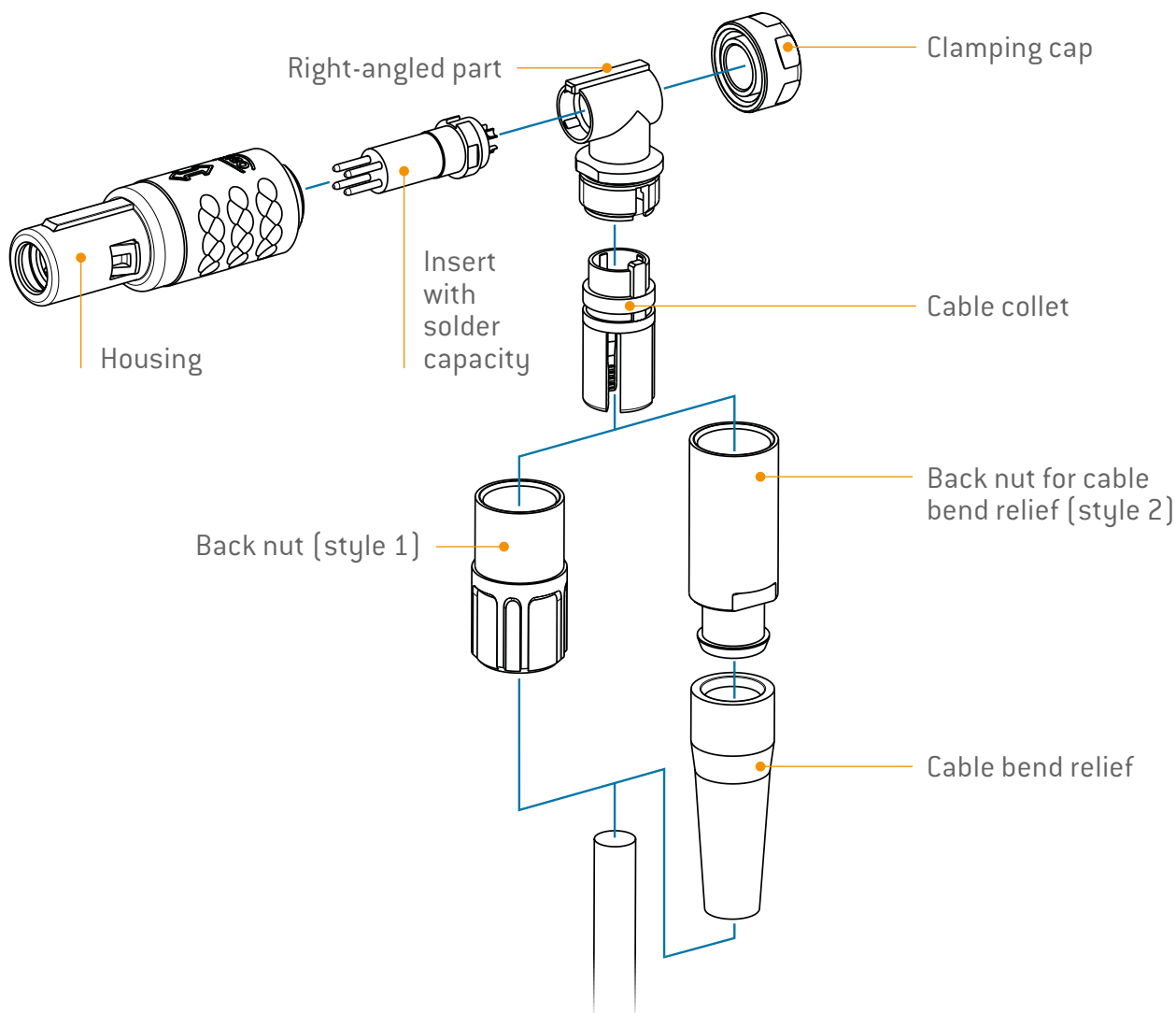
Step 6

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



Assembly right-angled plug | Size 1

Push-pull styles W1, W2

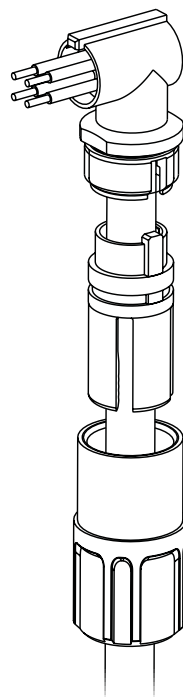


Step 1

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

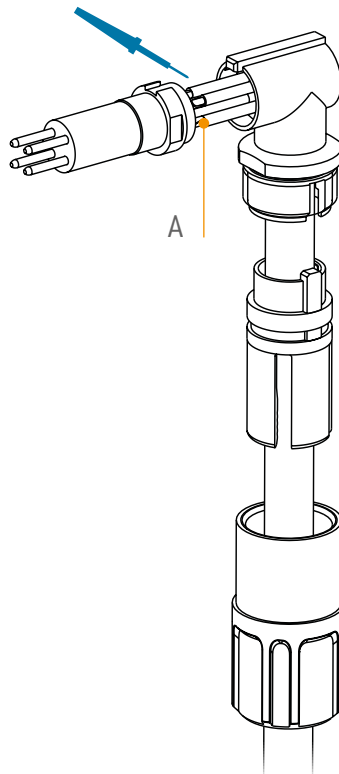
Step 2

- 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:

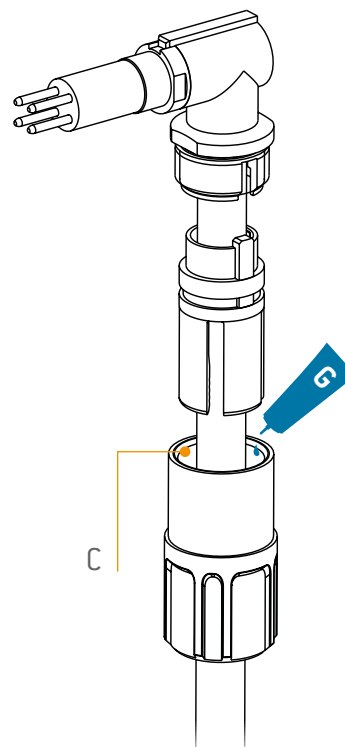
Isopropyl alcohol

Step 5

- Slide the right-angled part against contact insert.

ATTENTION!

Don't damage the contacts.



Step 6

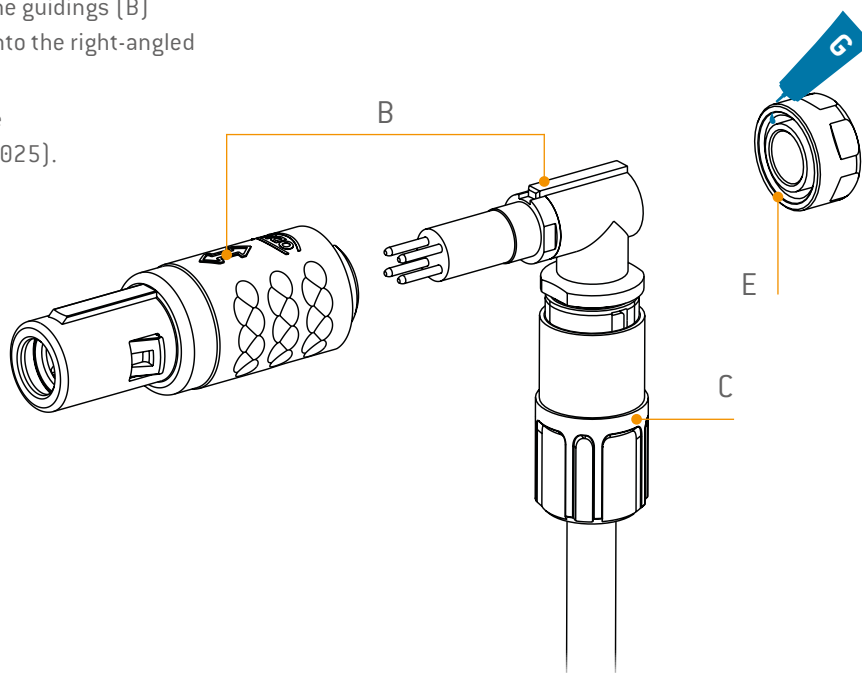
- Slide the cable collet against right-angled part.
- If necessary, secure thread (C) with glue Scotch-Weld DP190 (890.204.000.030.025).

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](#)).

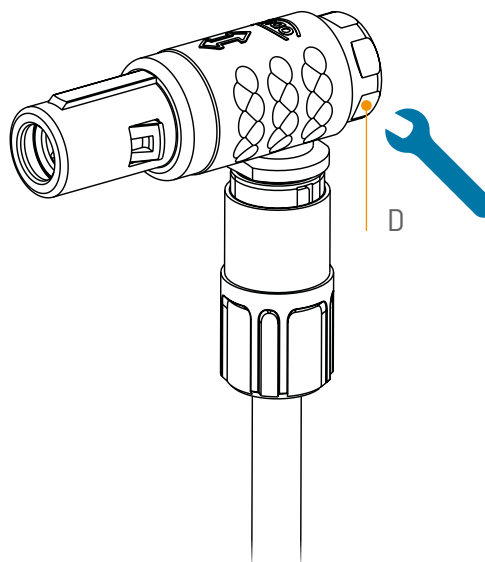


Step 8

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

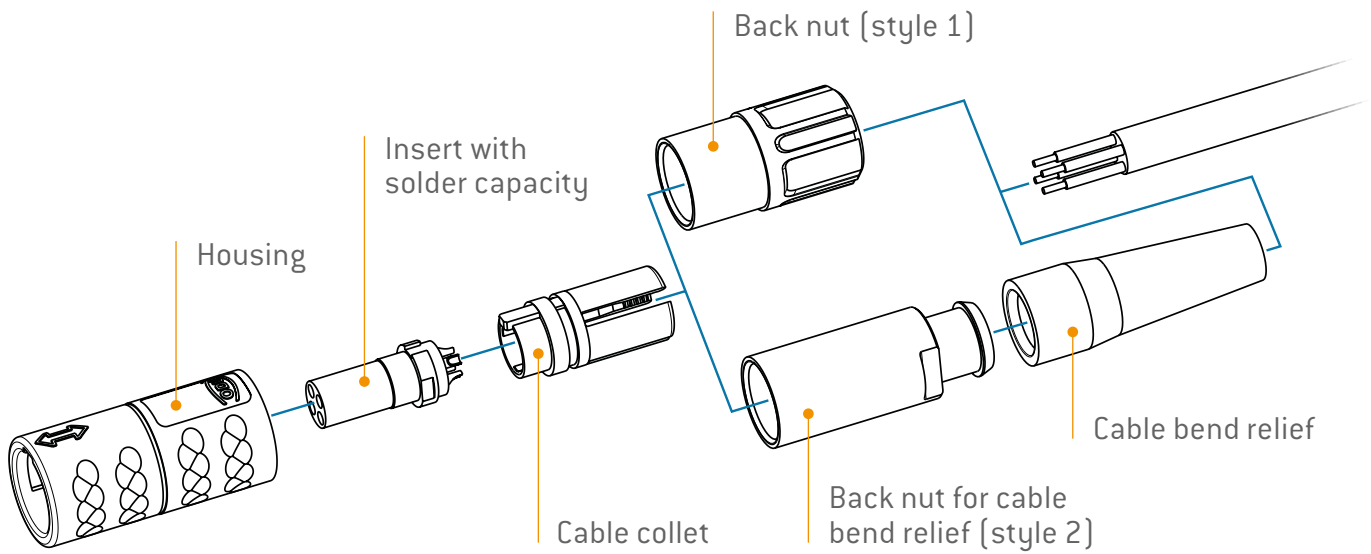
ATTENTION!

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



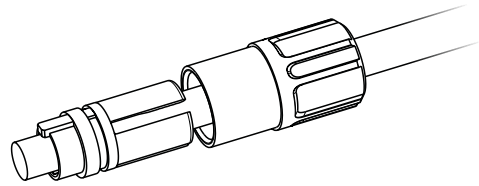
Assembly in-line receptable | Size 1

In-line receptacle styles K1, K2



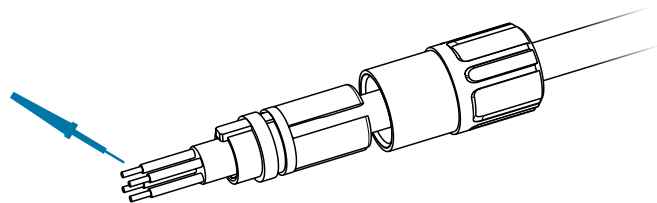
Step 1

- Slide back nut and cable collet over the cable.



Step 2

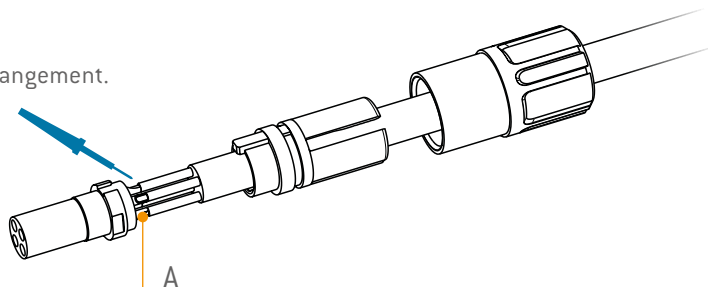
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



Step 3

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

Recommended cleaning agent:
Isopropyl alcohol

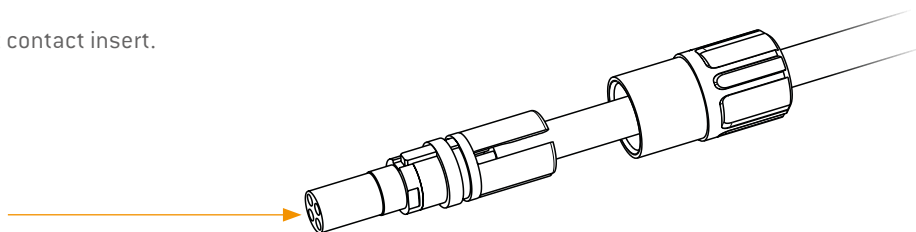


Step 4

- Slide the cable collet against contact insert.

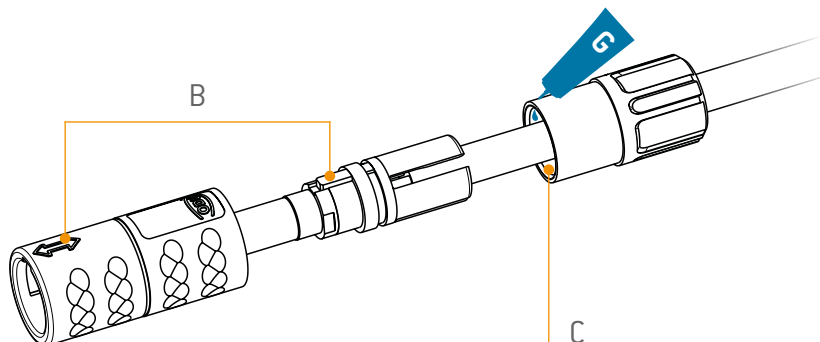
ATTENTION!

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].

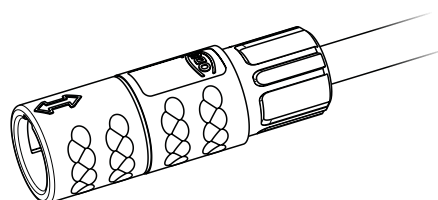


Step 6

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

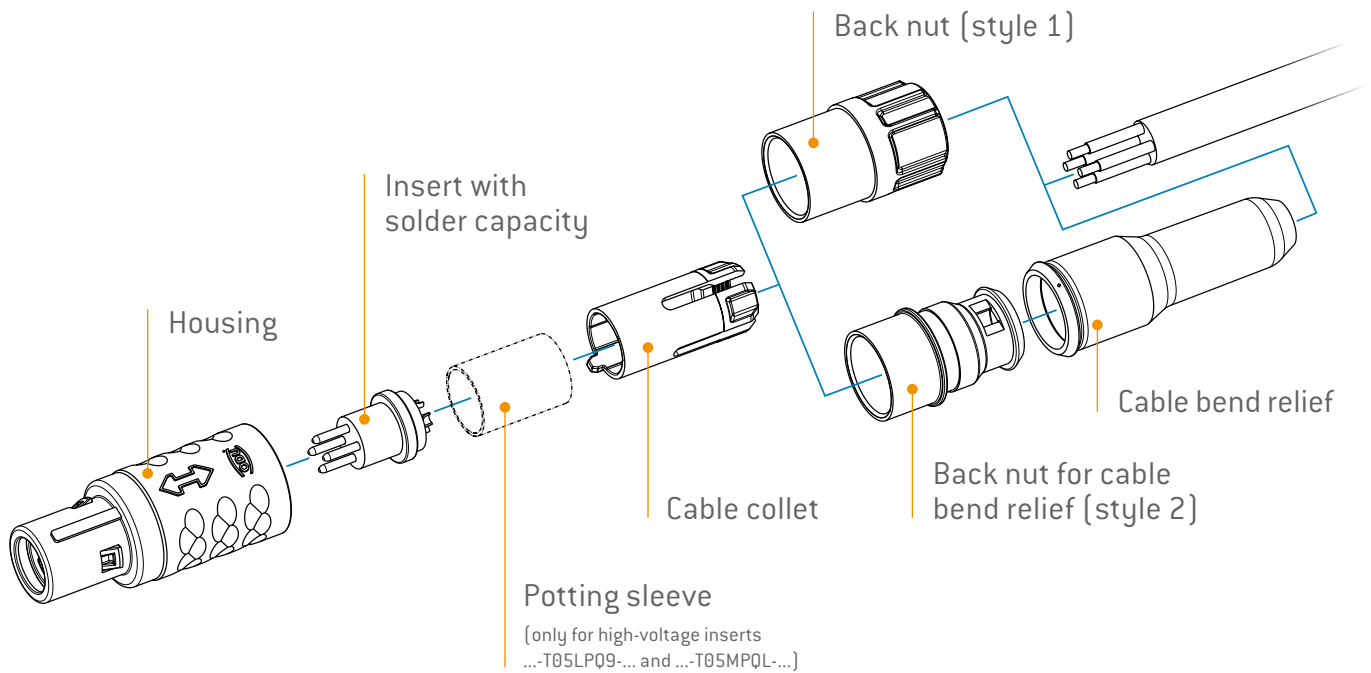
ATTENTION!

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



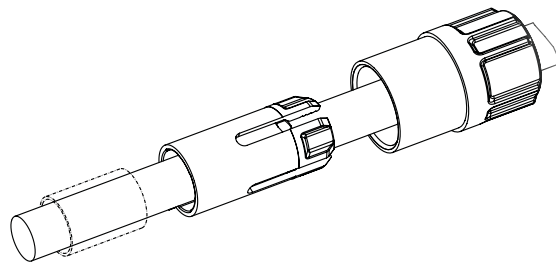
Assembly straight plug | Size 2

Push-pull styles S1, S4



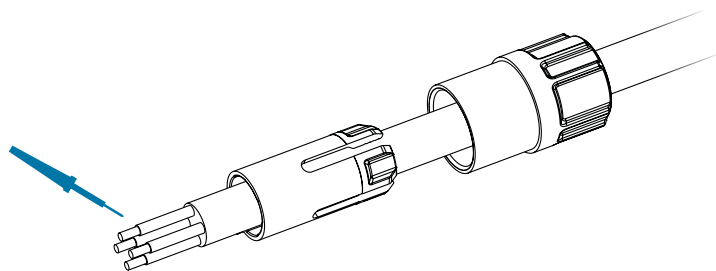
Step 1

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



Step 2

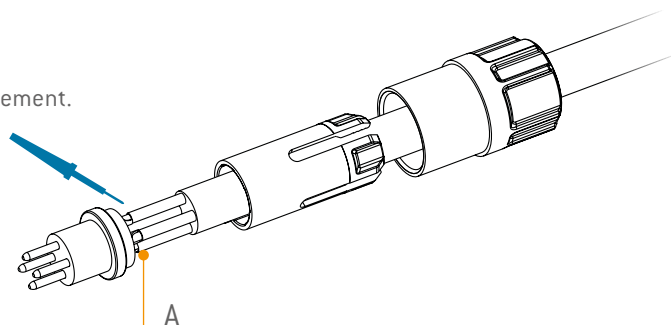
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



Step 3

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

Recommended cleaning agent:
Isopropyl alcohol

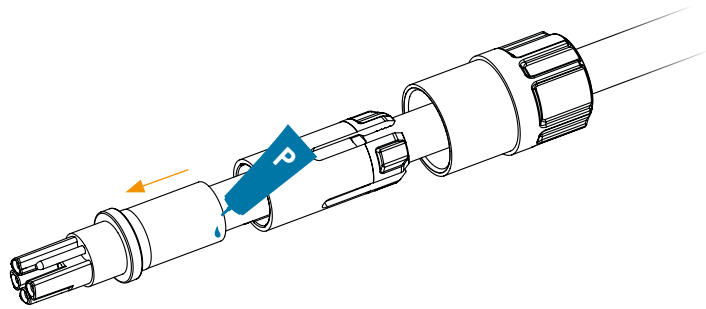


Step 3.1

[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

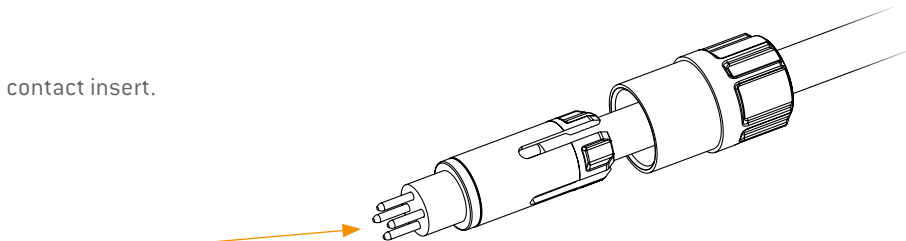


Step 4

- ▶ Slide the cable collet against contact insert.

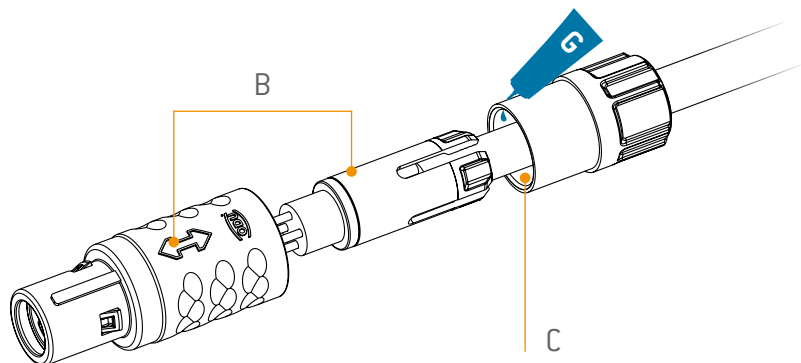
ATTENTION!

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].

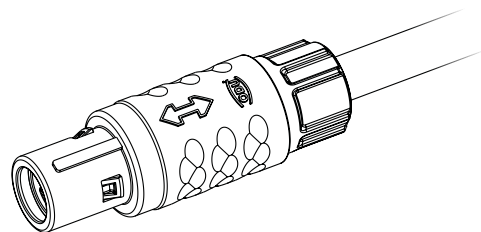


Step 6

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

ATTENTION!

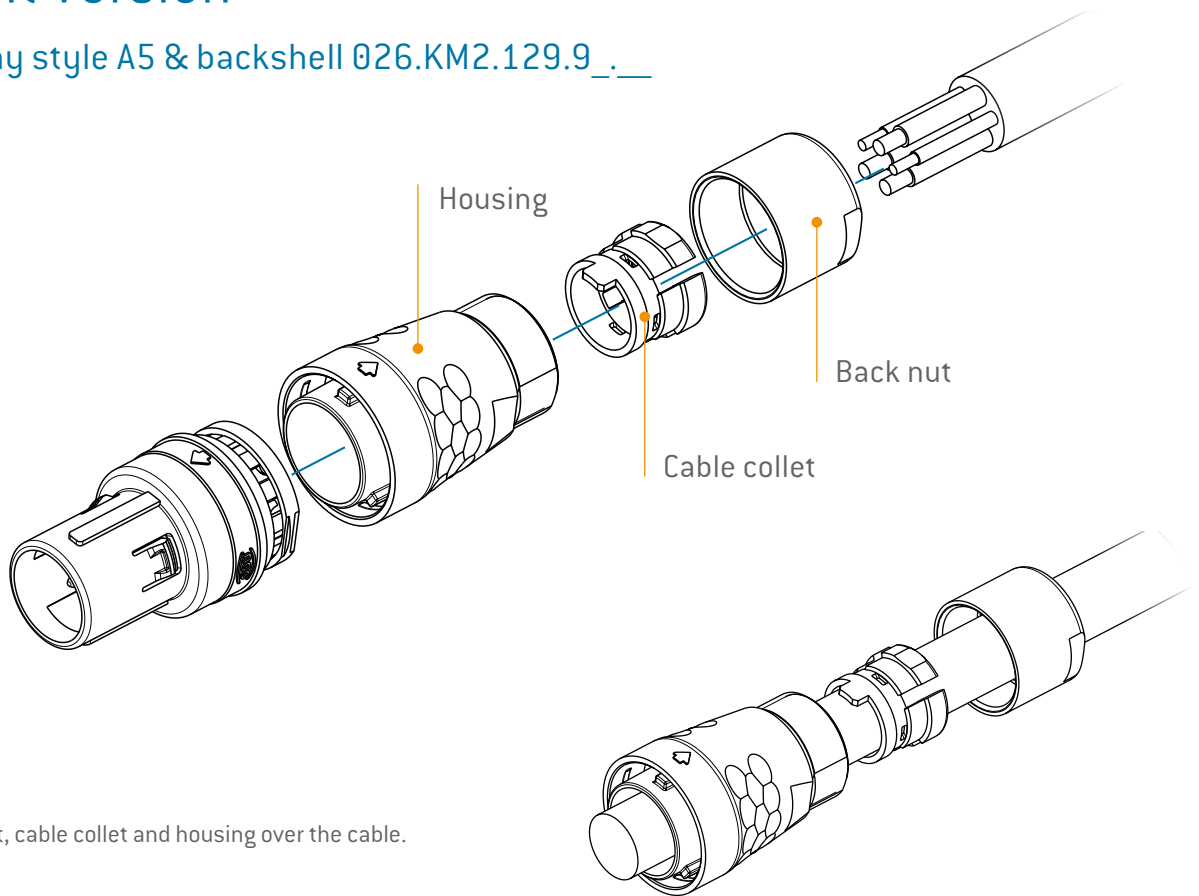
Consider tightening torque ([see page 3](#)).



Assembly break-away plug | Size 2

Straight version

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

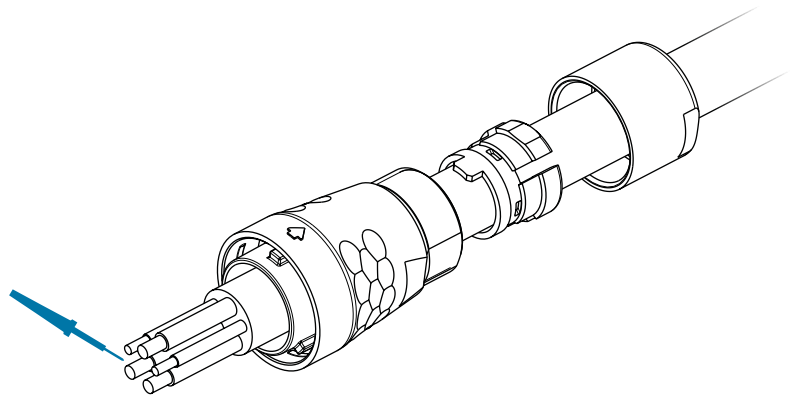


Step 1

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

Step 2

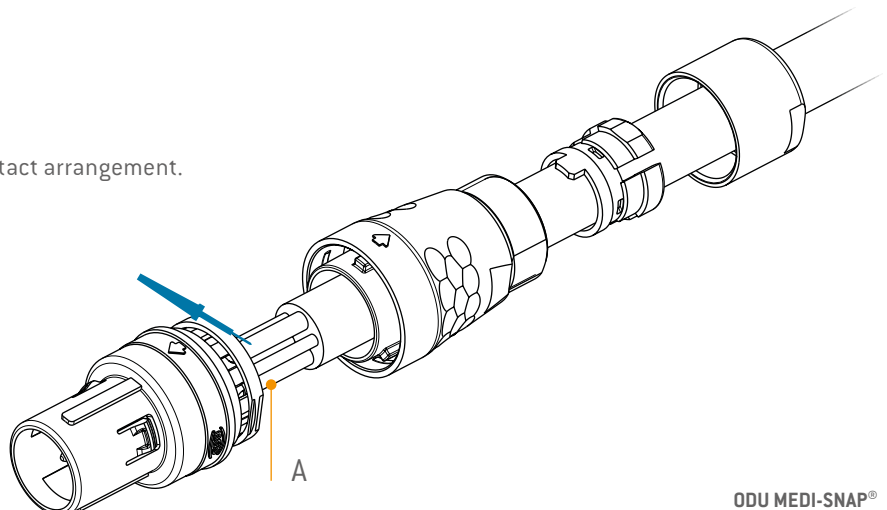
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



Step 3

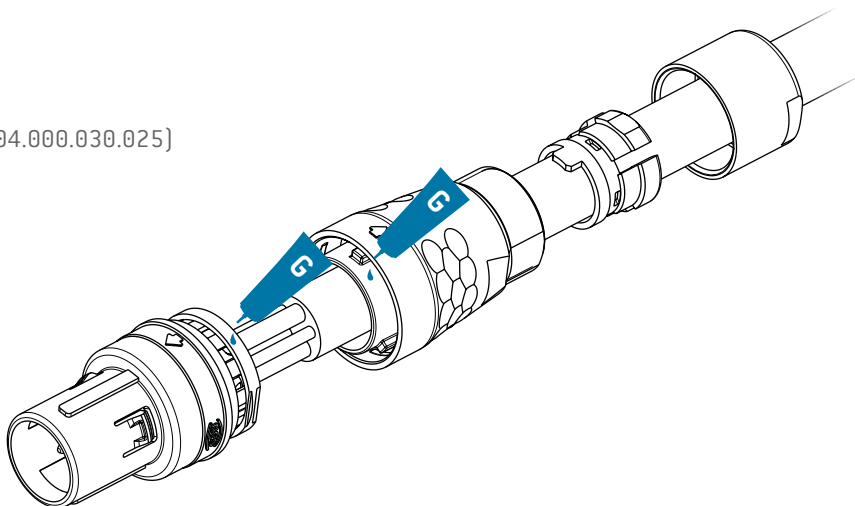
- Solder the litz wires (A) according to contact arrangement.

Recommended cleaning agent:
Isopropyl alcohol



Step 4

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



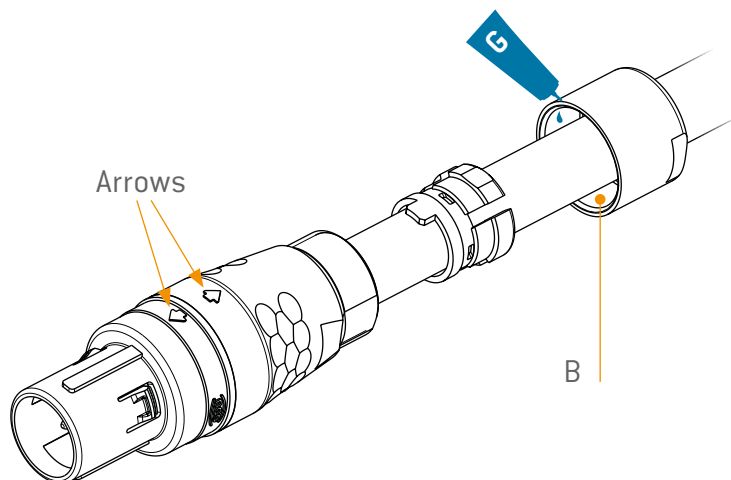
Step 5

- ▶ Push housing onto plug without a gap.

ATTENTION!

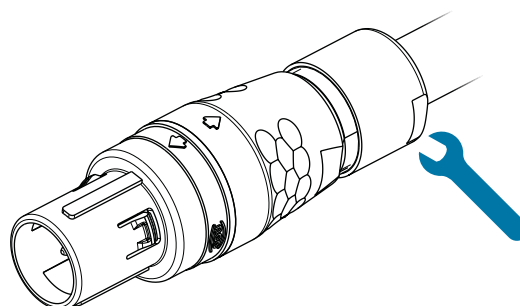
Consider position of arrows (see datasheet).

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



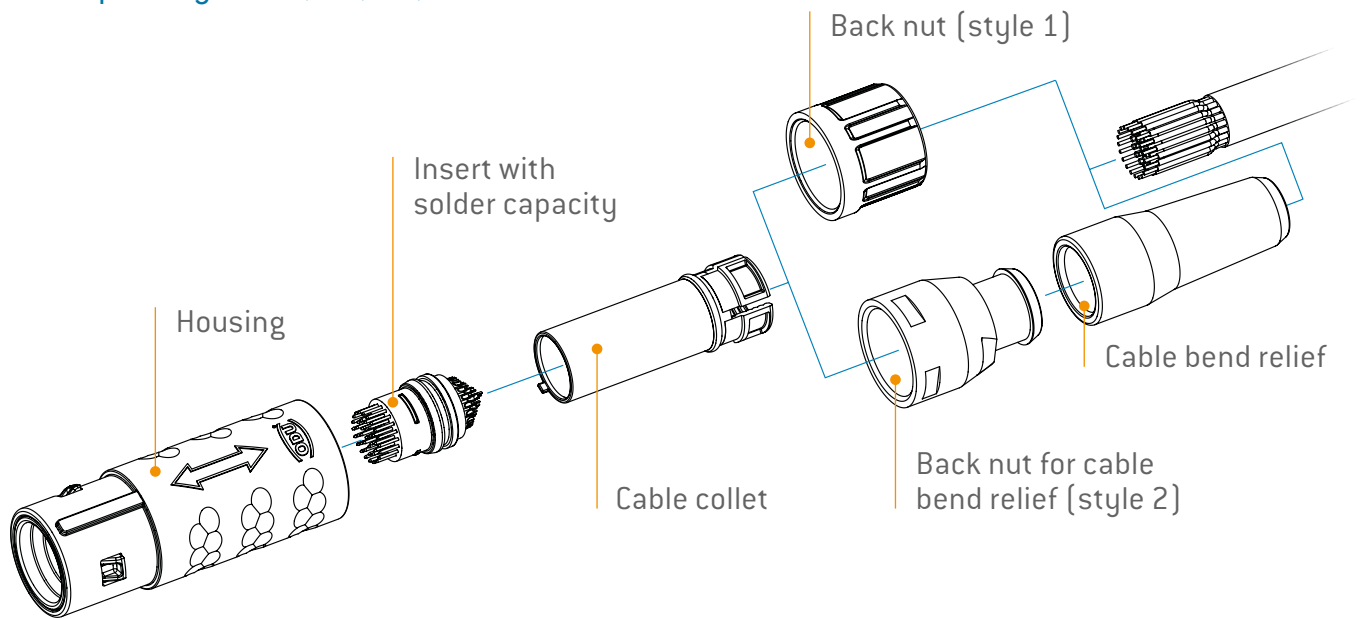
Step 6

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



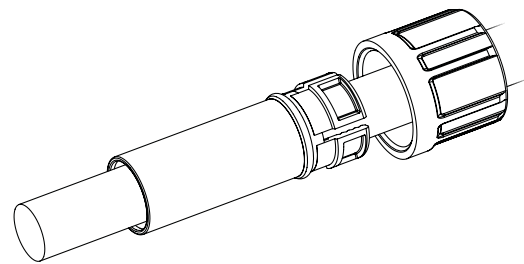
Assembly straight plug | Size 3.5

Push-pull styles S1, S2, S3, S4



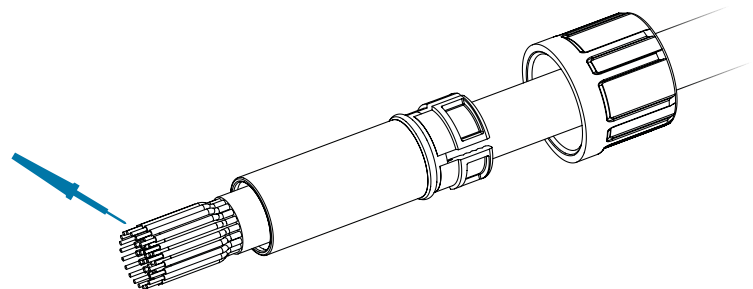
Step 1

- Slide back nut and cable collet over the cable.



Step 2

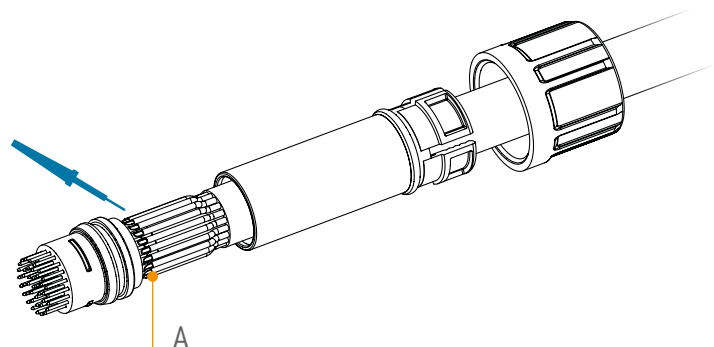
- Strip cable and wire ([see page 3](#)).
- Pre-tin strands.



Step 3

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

Recommended cleaning agent:
Isopropyl alcohol

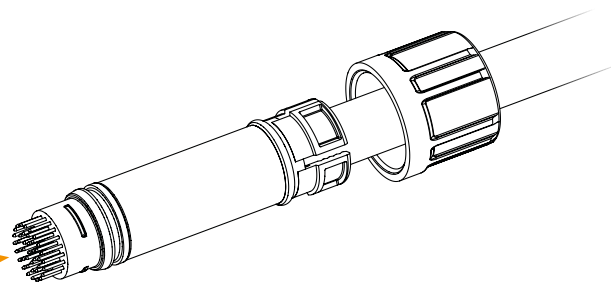


Step 4

- ▶ 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.

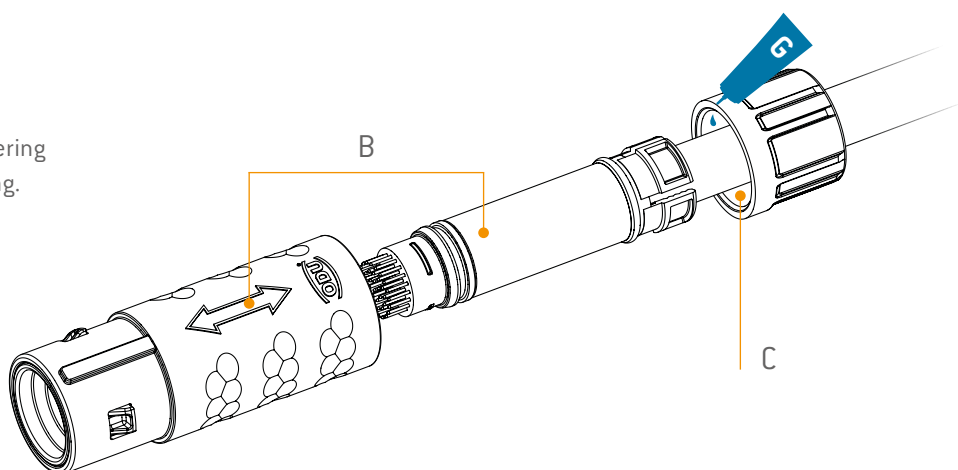
ATTENTION!

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).

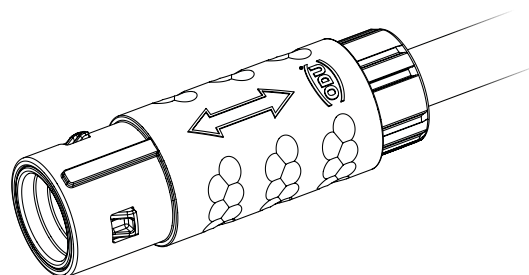


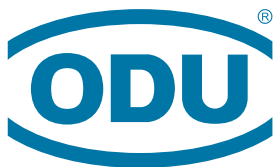
Step 6

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

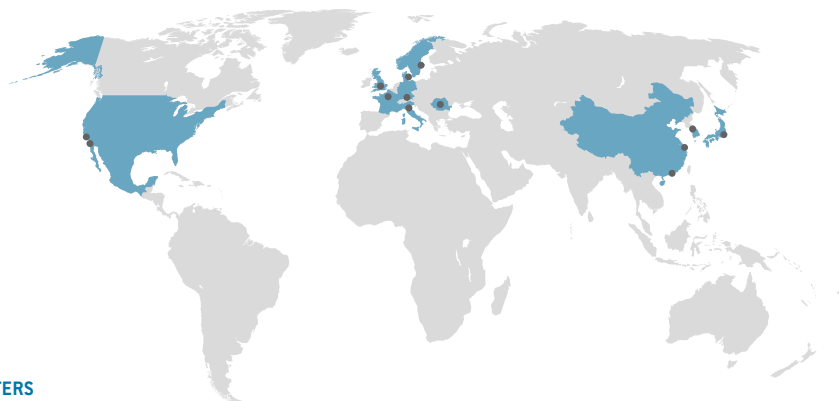
ATTENTION!

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

SALES LOCATIONS

ODU (Shanghai)

International Trading Co., Ltd.

Phone: +86 21 58347828-0

E-mail: sales@odu.com.cn

www.odu.com.cn

ODU (HK) Trading Co., Ltd.

Phone: +852 3963-9588

E-mail: sales@odu.hk

www.odu-connectors.com

ODU Denmark ApS

Phone: +45 2233 5335

E-mail: sales@odu-denmark.dk

www.odu-connectors.com/da

ODU-France SARL

Phone: +33 1 3935-4690

E-mail: sales@odu.fr

www.odu-connectors.com/fr

ODU Italia S.R.L.

Phone: +39 331 2223929

E-mail: sales@odu-italia.it

www.odu-connectors.com/it

ODU Japan K.K.

Phone: +81 3 6441 3210

E-mail: sales@odu.co.jp

www.odu-connectors.com/ja

ODU Korea Inc.

Phone: +82 2 6964 7181

E-mail: sales@odu-korea.kr

www.odu-connectors.com/ko

ODU Romania Manufacturing SRL

Phone: +40 269 704638

E-mail: sales@odu-romania.ro

www.odu-connectors.com/ro

ODU Scandinavia AB

Phone: +46 176 18266

E-mail: sales@odu.se

www.odu-connectors.com/sv

ODU-UK Ltd.

Phone: +44 330 002 0640

E-mail: sales@odu-uk.co.uk

www.odu-connectors.com/uk

ODU-USA Inc.

Phone: +1 805 484-0540

E-mail: sales@odu-usa.com

www.odu-connectors.com/us

Further information and specialized
representatives can be found at:

www.odu-connectors.com/contact

PRODUCTION AND LOGISTICS SITES

Germany Otto Dunkel GmbH

China ODU (Shanghai) Connectors Manufacturing Co., Ltd.

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

Romania ODU Romania Manufacturing SRL

USA ODU North American Logistics Inc.



Simply scan the QR code
to download the entire publication.

All dimensions are in mm. Some figures are for illustrative purposes only. Subject to change without notice. Errors and omissions excepted. We reserve the right to change our products and their technical specifications at any time in the interest of technical improvement. This publication supersedes all prior publications.