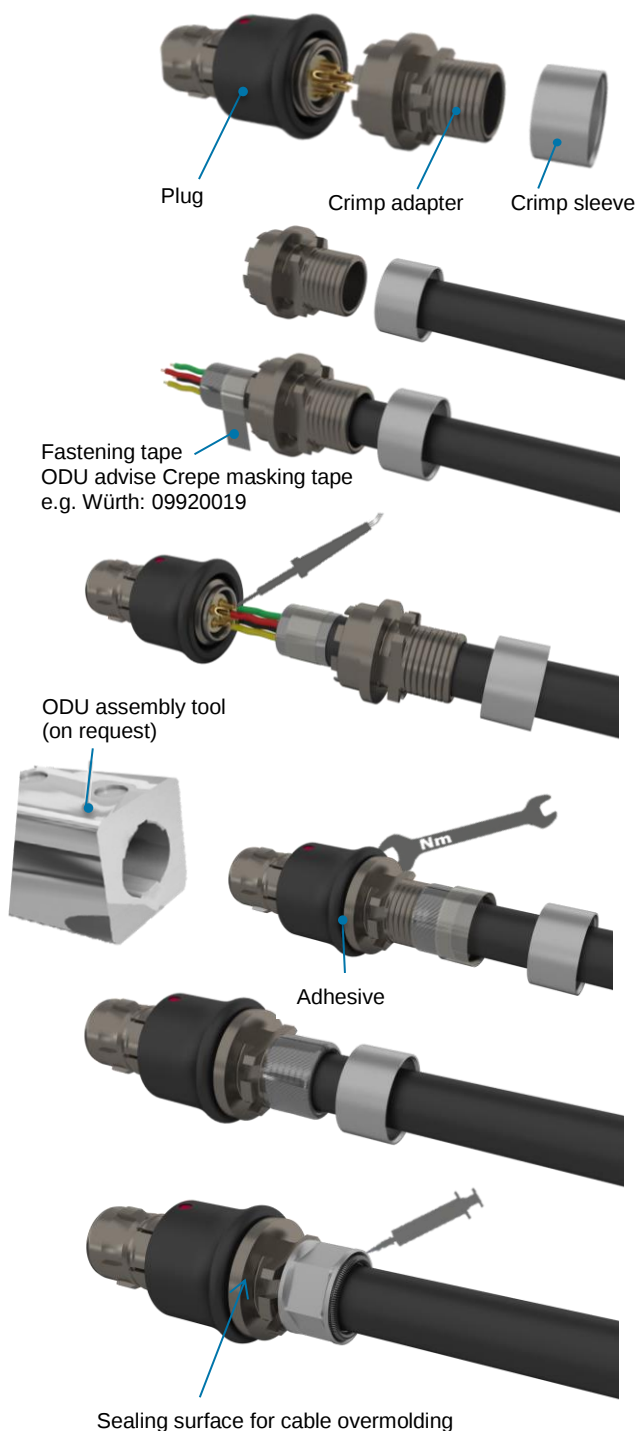


ASSEMBLY INSTRUCTION



ODU AMC® S1 Push-pull plugs

1. Cable assembly



- 1) Additional information for cable preparation etc. please see page 2 and following
- 2) Secure the crimp adapter on housing with adhesive (ODU advise Loctite 2701)

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Size	max. cable Ø mm
0	5.5
1	6.5
1.5 (A)	8.0
2	10.0
3	11.5
4.5 (E)	17.5

Note: Cable with foil shield such as foiled twisted pair-cable (FTP) not suitable for shield termination mentioned below.

1. Slide crimp sleeve and crimp adapter over the cable. The crimp sleeve is not needed if a metal band is used for fastening the shield to the crimp adapter.
2. Strip the cable and conductors¹⁾. Fold back the shield and use fastening tape to fasten it temporarily to the cable jacket. Tin-plate this wires if needed.
3. Solder the wires, noting the placement of each wire according to your wiring chart. Clean the solder area with Isopropylalcohol and brush.
4. Screw the crimp adapter on so that it is flush, observing torque values (see page 3). Secure the screw thread with adhesive²⁾.
5. Remove the fastening tape and lay the shield braid on to the crimp adapter.
6. Fasten the shield braid to the crimp adapter by means of crimping or by using a metal band. More information see page 4.
Encapsulate the interior of the crimp adapter to secure the soldered points (ODU advise WEVO-2K-casting resin PU552FL)
7. Bend relief: This can be implemented by means of overmolding or by using shrink boot. More information see page 5.

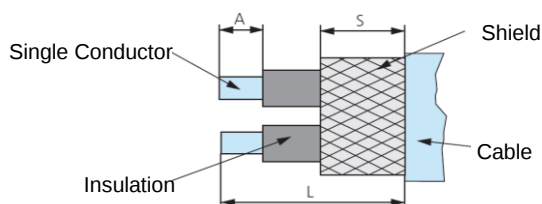
ASSEMBLY INSTRUCTION



2. Cable Preparation – straight cable exit / right angle cable exit

The following table provides recommended guidelines for cable preparation.

The according stripping measures have to be checked before assembly!



Stripping lengths cable jacket (L)	
Length in mm	Tolerance in mm
< 20	± 1
> 20 - 50	± 2
> 50 - 100	± 3

Stripping lengths single conductor (A)	
Length in mm	Tolerance in mm
< 5	± 0.5
> 5 - 10	± 1
> 10 - 20	± 2

Stripping length braided shield (S)	
Length in mm	Tolerance in mm
< 10	± 1
> 10 - 20	± 2

Size	Contact ø	With standard crimp adapter for ODU overmolding						With special crimp adapter for heatshrinkable solution ³⁾					
		Straight cable assembly			Right angle cable assembly			Straight cable assembly			Right angle cable assembly		
		L	A	S	L	A	S	L	A	S	L	A	S
0	0.5	9	3.5	8	14	3.5	14	11	3.5	8	16	3.5	16
	0.6	9	3.5	8	14	3.5	14	11	3.5	8	16	3.5	16
	0.7	9	3.7	8	14	3.7	14	11	3.7	8	16	3.7	16
	0.9	9	3.7	8	14	3.7	14	11	3.7	8	16	3.7	16
1	0.5	11	3.5	8	15	3.5	15	13.5	3.5	8	17.5	3.5	17.5
	0.6	11	3.5	8	15	3.5	15	13.5	3.5	8	17.5	3.5	17.5
	0.7	11	3.7	8	15	3.7	15	13.5	3.7	8	17.5	3.7	17.5
	0.9	11	3.7	8	15	3.7	15	13.5	3.7	8	17.5	3.7	17.5
1.5 (A)	0.5	11	3.5	8	15	3.5	15	13.5	3.5	8	17.5	3.5	17.5
	0.6	11	3.5	8	15	3.5	15	13.5	3.5	8	17.5	3.5	17.5
	0.7	11	3.7	8	15	3.7	15	13.5	3.7	8	17.5	3.7	17.5
2	0.5	11	3.5	8	15	3.5	15	13.5	3.5	8	18.5	3.5	18.5
	0.7	11	3.7	8	15	3.7	15	14.5	3.7	8	18.5	3.7	18.5
	0.9	11	3.7	8	15	3.7	15	14.5	3.7	8	18.5	3.7	18.5
	1.3	11	4.1	8	15	4.1	15	14.5	4.1	8	18.5	4.1	18.5
3	0.5	13	3.5	8	30	3.5	25	17.5	3.5	8	34.5	3.5	34.5
	0.7	13	3.7	8	30	3.7	25	17.5	3.7	8	34.5	3.7	34.5
	0.9	13	3.7	8	30	3.7	25	17.5	3.7	8	34.5	3.7	34.5
	2.0	13	5.4	8	30	5.4	25	17.5	5.4	8	34.5	5.4	34.5
4.5 (E)	0.7	20	3.7	20	40	3.7	30	20	3.7	20	40	3.7	30

Exceptions are noted on special instructions.

Note for data-rate-connectors

Before soldering, twist the strands back slightly in the original direction. If a shield is available for the separately pairs of wires (e.g. STP-Cables), wrap it around the pairs as far as possible.

3) Special crimp adapter to be ordered separately. See chapter 5.2.

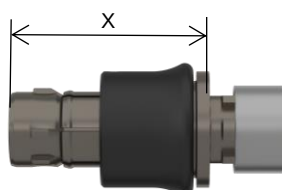
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ASSEMBLY INSTRUCTION



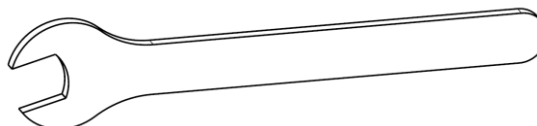
3. Assembly crimp adapter

Size	Torque Nm	Reference Dimension x mm
0	0.5	22.0
1	1.0	23.9
1.5 (A)	1.5	23.5
2	2.0	25.9
3	2.5	29.1
4.5 (E)	3.0	38.7



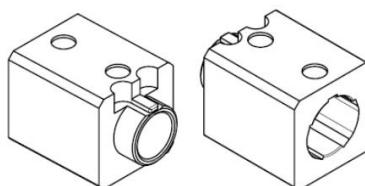
3.1 Spann wrench

Size	Part number	Wrench size
0	598.700.001.011.000	7
1	598.700.001.001.000	8
1.5 (A)	598.700.001.002.000	10
2	598.700.001.003.000	12
3	598.700.001.005.000	14
4.5 (E)	598.700.001.018.000	21



3.2 Assembly tool

Size	Part number
0	700.645.900.320.000
1	701.645.900.320.000
1.5 (A)	715.645.900.320.000
2	702.645.900.320.000
3	703.645.900.320.000
4.5 (E)	745.645.900.320.000



ASSEMBLY INSTRUCTION

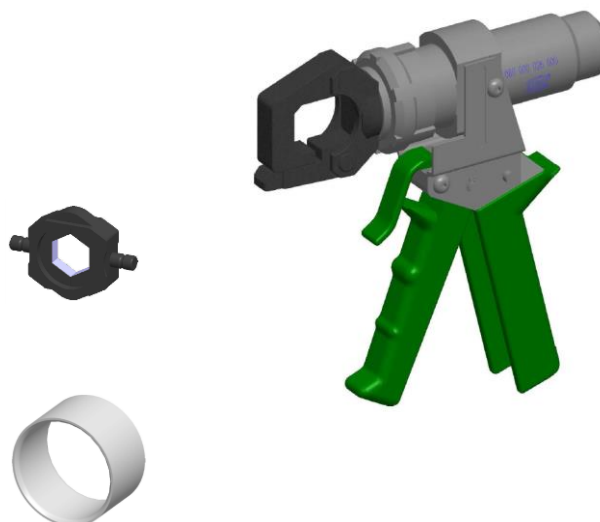


4. Assembly crimp sleeve

4.1 Crimp tool ODU

Hand-crimp tool	
Size	Part number
all	080.000.026.000.000

Crimp dies	
Size	Part number
0	080.000.026.700.000
1	080.000.026.701.000
1.5 (A)	080.000.026.715.000
2	080.000.026.702.000
3	080.000.026.703.000



To connect the shielding with the crimp.

4.2 Band-It Bands

Hand-crimptong	
Size	Part number
all	080.000.058.000.000

Tie-Dex Micro Bands	
Size	Part number
0-3	921.000.004.000.248
4,5 (E)	921.000.004.000.249



To connect the shielding with the crimp adapter, using a Tie-Dex Micro Band.

ASSEMBLY INSTRUCTION



5. Cable interface

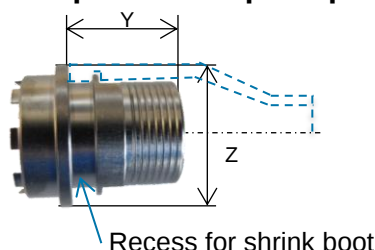
ODU connectors are designed for overmolding. A heatshrinkable bend relief is also possible. ODU recommend a special crimp adapter to be ordered separately for heatshrinkable solution. See chapter 5.2.

5.1 ODU overmolding

We provide complete solution with straight and right-angle overmolding on request.



5.2 Special Crimp adapter for heatshrinkable solution



Size	Special crimp adapter	Y	Z	SW
0	700.645.260.659.003	11.5	11.9	8
1	701.645.260.659.003	12	13.9	9
1.5	715.645.260.659.003	12	15.5	11
2	702.645.260.659.003	13	17.6	12
3	703.645.260.659.003	14	21.6	14

5.3 Heatshrinkable straight solution

Size	Part number		
	ODU	Hellermann	TE Connectivity
0	921.000.010.008.103	-	202K111-25-0
1	KabelØ <6mm	921.000.010.008.103	-
	KabelØ >6mm	921.000.010.008.085	401-52780
1.5	921.000.010.008.085	401-52780	202K121-25-01
2+3	921.000.010.008.084	401-52880	202D121-3-60
4.5	921.000.010.008.089	401-55780	202K142-25-01



The image can vary depending on size and variant of this shrinking tube.

ODU stock parts are the bold numbers.

5.4 Heatshrinkable right-angle solution

Size	Part number	
	ODU	Hellermann
0	921.000.010.008.115	411-08480
1	KabelØ <6mm	921.000.010.008.115
	KabelØ >6mm	921.000.010.008.087
1.5-3	921.000.010.008.087	411-52480
4.5	921.000.010.008.111	411-56480



The image can vary depending on size and variant of this shrinking tube.

To a better adhesion of the heatshrink boots on housing and cable, ODU recommend to work with anepoxyd-adhesion e.g. Hellermann V9500, TE Connectivity S1125. (Take care of Hellermann/TE Connectivity work instruction)

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ODU:

[701.645.260.659.003](#) [921.000.010.008.084](#) [921.000.010.008.087](#) [921-000-010-008-084](#) [921-000-010-008-087](#) [701-645-260-659-003](#)