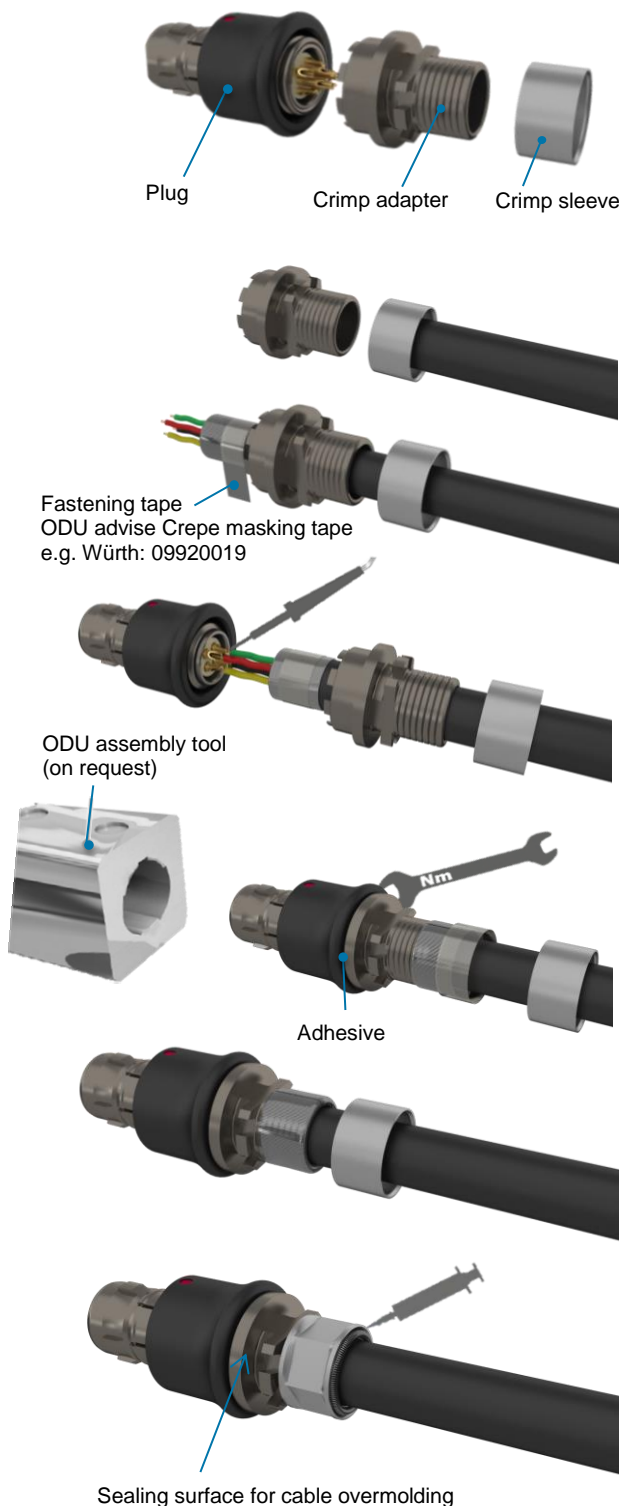


# ODU AMC S1 PUSH-PULL PLUGS ASSEMBLY INSTRUCTION

## 1 Assembly sequence



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.

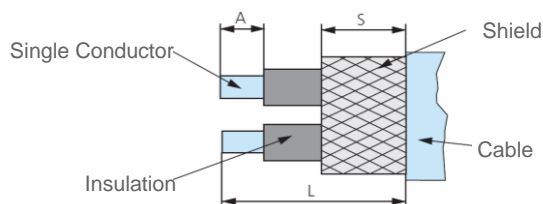
- Slide crimp sleeve and crimp adapter over the cable. The crimp sleeve is not needed if a metal band is used for fastening the shield to the crimp adapter.
- Strip the cable and conductors<sup>1)</sup>. Fold back the shield and use fastening tape to fasten it temporarily to the cable jacket. Tin-plate this wires if needed.
- Solder the wires, noting the placement of each wire according to your wiring chart. Clean the solder area with Isopropylalcohol and brush.
- Screw the crimp adapter on so that it is flush, observing torque values (see page 3). Secure the screw thread with adhesive<sup>2)</sup>.
- Remove the fastening tape and lay the shield braid on to the crimp adapter.
- 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)
- Bend relief: This can be implemented by means of overmolding or by using shrink boot. More information see page 5.

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)

# ODU AMC S1 PUSH-PULL PLUGS 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!



A = Stripping length single conductor  
L = Stripping length cable jacket  
S = Stripping length braided shield

Size	Contact $\varnothing$	With standard crimp adapter for ODU overmolding						With special crimp adapter for heatshrinkable solution <sup>3)</sup>					
		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
4.5 (E)	2.0	13	5.4	8	30	5.4	25	17.5	5.4	8	34.5	5.4	34.5
	0.7	20	3.7	20	40	3.7	30	20	3.7	20	40	3.7	30

All dimensions in mm  
Tolerance: +10 %

Exceptions are noted on special instructions.

### Note for data-rate-connectors

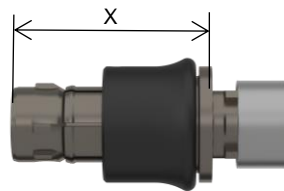
Before soldering, twist the strands back slightly in the original direction. If a shield is available for the separately pairs of wires (e.g. STP-Cables), wrap it around the pairs as far as possible.

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

# ODU AMC S1 PUSH-PULL PLUGS ASSEMBLY INSTRUCTION

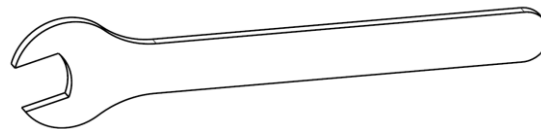
## 3 Assembly crimp adapter

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



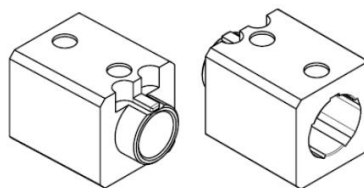
### 3.1 Spann wrench

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



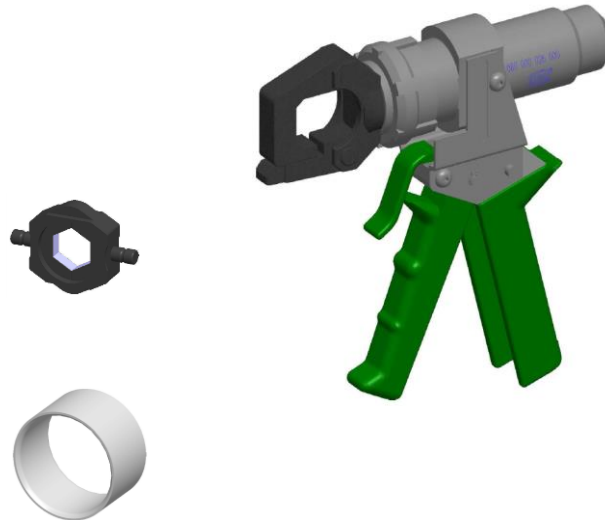
# ODU AMC S1 PUSH-PULL PLUGS ASSEMBLY INSTRUCTION

## 4 Assembly crimp sleeve

### 4.1 Crimp tool ODU

Hand-crimptong	
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.

# ODU AMC S1 PUSH-PULL PLUGS ASSEMBLY INSTRUCTION



A PERFECT ALLIANCE.

## 5 Cable interface

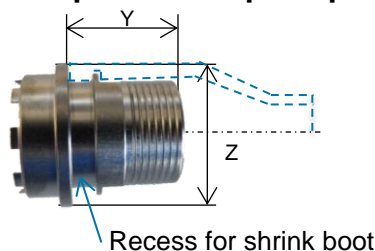
ODU connectors are designed for overmolding. A heatshrinkable bend relief is also possible. ODU recommend a special crimp adapter to be ordered separately for heatshrinkable solution. See chapter 5.2.

### 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	-	<b>202K111-25-0</b>
1	KabelØ <6mm	921.000.010.008.103	-
	KabelØ >6mm	921.000.010.008.085	<b>401-52780</b>
1.5	921.000.010.008.085	<b>401-52780</b>	202K121-25-01
2+3	921.000.010.008.084	<b>401-52880</b>	202D121-3-60
4.5	921.000.010.008.089	<b>401-55780</b>	202K142-25-01

ODU stock parts are the bold numbers.



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

### 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)