



Connectors with ODU integrated shield-termination platform



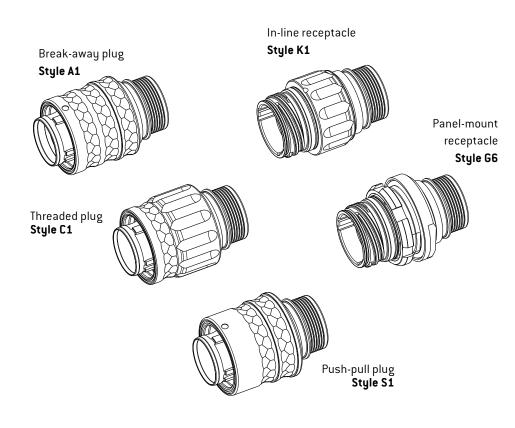


TABLE OF CONTENTS

ASSEMBLY STEP BY STEP 03 - 05
CONNECTORS WITH CRIMP TERMINATION

GENERAL NOTES 06
SHIELDING TERMINATION 07

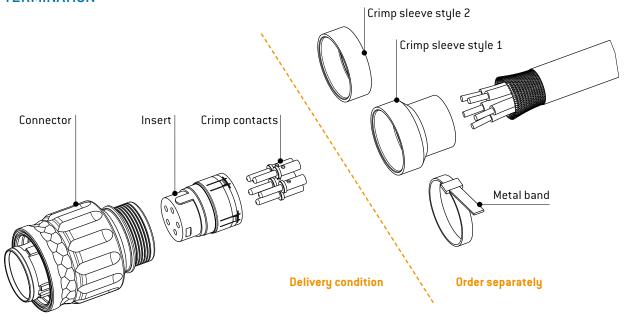
CABLE INTERFACE 08





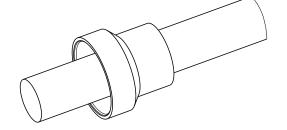
ASSEMBLY STEP BY STEP

CONNECTORS WITH CRIMP TERMINATION



Step 1

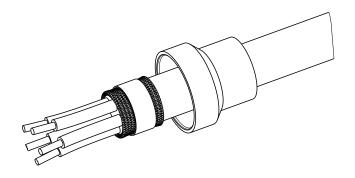
➤ Slide crimp sleeve over the cable. The crimp sleeve is not needed if a metal band is used for fastening the shield to the crimp area. The crimp sleeve has to be ordered separatly. For more information please see page-7.





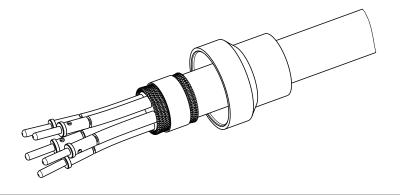
Step 2

► Strip cable and conductors (see page 6). Fold back the shield and use fastening tape (e.g. Würth: 09920019) to fasten it temporarily to the cable jacket.



Step 3

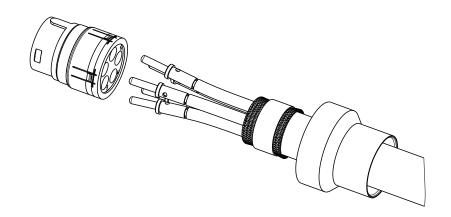
► Crimp the contacts to the wires. For recommended tools and instructions please see crimp contact specification D00016300.



Step 4

▶ Press the terminated contacts into the contact cavities according to the application-specific pinout instructions.

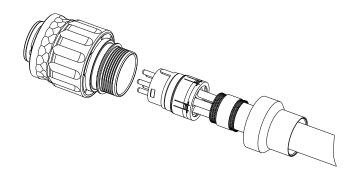
Tools can also be found on <u>crimp contact specification D00016300.</u>





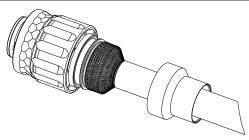
Step 5

▶ Put the assembled insert with the cable into the housing. Align the exterior key of the insert with the interior keyway of the connector. Press the insert assembly into the connector. If inserted correctly, there should be an audible "click."



Step 6

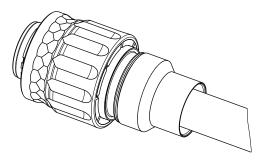
▶ Remove the fastening tape and lay the shield braid on to the crimp area.



Step 7

► Fasten the shield braid to the crimp area by means of crimping or by using a metal band. More information on page 7.

Optional: For additional sealing or to prepare for overmolding, the interior of the crimp sleeve may need to be potted. (ODU recommends Dow Corning SE 9187 L or WEVO-2K-casting resin PU552FL, depending on the application).



Step 8

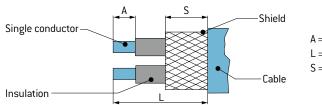
▶ Bend relief: This can be implemented by means of overmolding or by using shrink boot. More information on page 8.



GENERAL NOTES

RECOMMENDED STRIPPING LENGTH

The following table provides recommended guidelines for cable preparation.



A = Stripping length single conductor

L = Stripping length cable jacket

S = Stripping length braided shield

Shell size	Insert arrangement	Campana	Straight cable assembly		Right angled assembly			
		Contact	L	Α	S	L	Α	S
9	8 way	#22D	22	4.1	12	32	4.1	30
9	10 way	#22D	22	4.1	12	32	4.1	30
12	5 way	#16	28	6	12	37	6	35
12	18 way	#20MD	28	5.5	12	37	5.5	35
		#22D	28	4.1	12	37	4.1	35

All dimensions in mm

Tolerance: +10 %

Exceptions are noted on special instructions.

Please note concerning data rate connectors:

Before crimping, please bend the strands back slightly in the original direction.

If a shield is available for the separate pairs of wires (e.g. STP-cables),

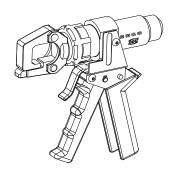
warp it around the pairs as far as possible.



SHIELD TERMINATION

CRIMP SLEEVE

Crimp tool				
Shell size Material number		ODU number		
all	50231527	080.000.026.000.000		



METAL BANDS

Crimp tool				
Shell size	Material number	ODU number		
all	50035716	080.000.058.000.000		



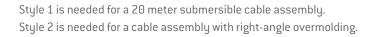
Crimp die				
Shell size Material number		ODU number		
9	50281524	080.000.026.7TE.001		
12	50286858	080.000.026.7TH.001		



Tie-dex micro bands				
Shell size Material number		ODU number		
all	50156242	921.000.004.000.248		



Crimp sleeve					
Shell size	Material number	ODU number	Style		
9	50269982	7TE.440.101.304.000	1		
9	50291239	7TE.440.101.304.001	2		
12	50270266	7TH.440.101.304.000	1		
12	50291232	7TH.440.101.304.001	2		







Style 2

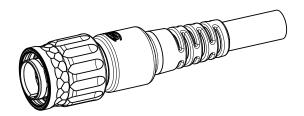


CABLE INTERFACE

ODU connectors are designed for overmolding. A heatshrinkable bend relief is also possible.

ODU OVERMOLDING

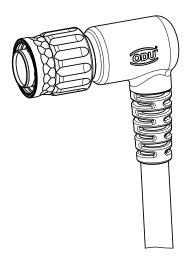
We provide complete solution with straight and right-angled overmolding on request.



Straight heat shrink boot option					
Shell size	Material number	ODU number	Hellermann	TE Connectivity	
all	50157036	921.000.010.008.084	401-52880	202D121-3-60	

ODU stock parts are written in **bold numbers**.

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

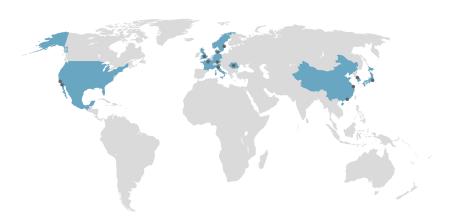


Right angle heat shrink boot option						
Shell size	Material number	ODU number	Hellermann			
all	50157039	921.000.010.008.087	411-52480			





ODU GROUP WORLDWIDE



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.

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.hk

ODU Denmark ApS

Phone: +45 2233 5335 E-mail: sales@odu-denmark.dk www.odu-denmark.dk

ODU-France SARL

Phone: +33 1 3935-4690 E-mail: sales@odu.fr www.odu.fr

ODU Italia S.R.L.

Phone: +39 331 8708847 E-mail: sales@odu-italia.it www.odu-italia.it

ODU Japan K.K.

Phone: +81 3 6441 3210 E-mail: sales@odu.co.jp www.odu.co.jp

ODU Korea Inc.

Phone: +82 2 6964 7181 E-mail: sales@odu-korea.kr www.odu-korea.kr

ODU Romania Manufacturing SRL

Phone: +40 269 704638 E-mail: sales@odu-romania.ro www.odu-romania.ro

ODU Scandinavia AB

Phone: +46 176 18262 E-mail: <u>sales@odu.se</u> www.odu.se

ODU-UK Ltd.

Phone: +44 330 002 0640 E-mail: sales@odu-uk.co.uk www.odu-uk.co.uk

ODU-USA Inc.

Phone: +1 805 484-0540 E-mail: sales@odu-usa.com www.odu-usa.com

Further information and specialized representatives can be found at: www.odu-connectors.com/contact

