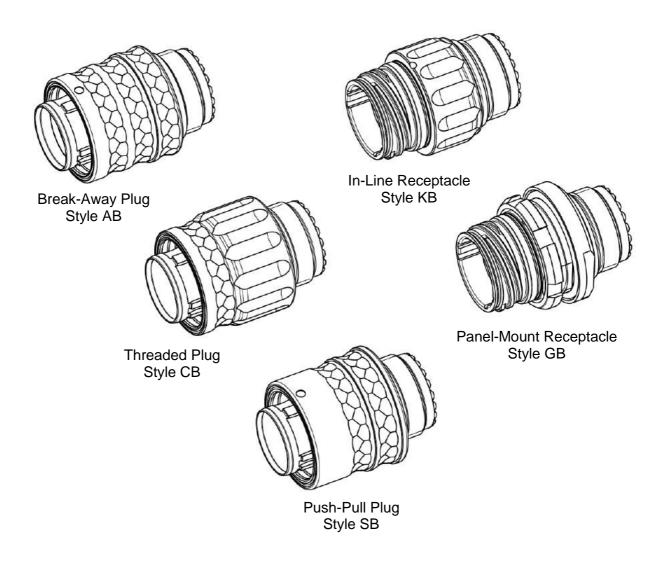


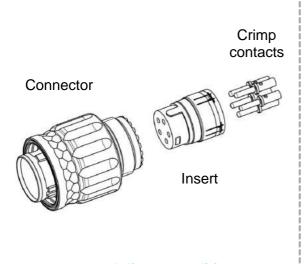
CONNECTOR TYPES

WITH BACKSHELL TERMINATION ACC. MIL-DTL-38999 SERIES III

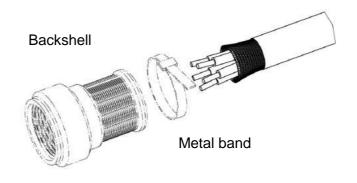




ASSEMBLY



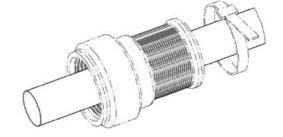
delivery condition



order separately

STEP 1

Slide backshell and metal band over the cable. If the metal band is needed or not depends on the used backshell.





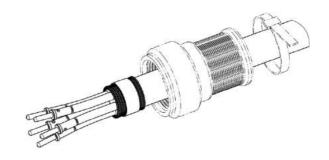
STEP 2

Strip cable and conductors (see page 5). Fold back the shield and use fastening tape (e.g. Würth: 09920019) to fasten it temporarily to the cable jacket.



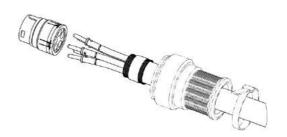
STEP 3

Crimp the contacts to the wires. For recommended tools and instructions see contact information D00016300.



STEP 4

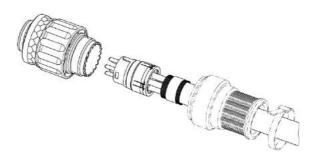
Press the terminated contacts into the contact cavities according to the application-specific pinout instructions. Use the insertion tools if required. Information on these tools can also be found in contact information D00016300.





STEP 5

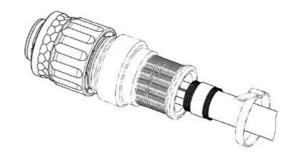
Align the exterior key of the insert with the interior keyway of the connector. Press the insert assembly into the connector housing. If inserted correctly, there should be an audible "click."



STEP 6

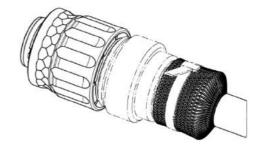
Depending on the used backshell, the further assembly process might be different. Take care of a related work instruction, if there is one.

Screw the backshell tight on the connector.



STEP 7

Remove the fastening tape and lay the shield braid on to the backshell. Fasten the shield braid to the crimp area by using a metal band. More information on page 6.



STEP 8

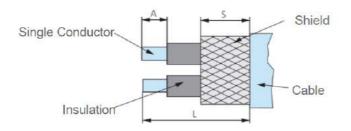
Bend relief: Depending on the used backshell, an aditional bend relief is needed. This can be implemented by using shrink boot. More information on page 7.



GENERAL NOTES

RECOMMENDED STRIPPING LENGTH

The following table provides recommended guidelines for cable preparation. Mentioned backshells can be ordered from ODU. For more information see D00016302.



A = Stripping length single conductor

L = Stripping length cable jacket

S = Stripping length braided shield

Shell Size	Insert Arrangement	Contact	Backshell acc. M85049/88- _N03 ¹⁾		88-	Backshell acc. M85049/90- _N03 ¹⁾		Backshell acc. M85049/18_N ¹⁾²⁾			
			L	Α	S	L	Α	S	L	Α	S
9	8 way	#22D	49	4.1	15	80	4.1	15	54	4.1	12
9	10 way	#22D	49	4.1	15	80	4.1	15	54	4.1	12
12	5 way	#16	55	6	15	86	6	15	60	6	12
12	18 way	#20MD	55	5.5	15	86	5.5	15	60	5.5	12
		#22D	55	4.1	15	86	4.1	15	60	4.1	12

All dimensions in mm Tolerance: +10%

Exceptions are noted on special instructions.

Note for data-rate-connectors:

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

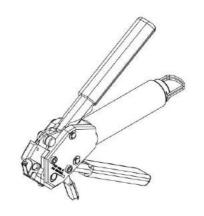
¹⁾ Replace the first underline with the needed shell size. For a connector shell size 9 replace it with 9, for a connector shell size 12 replace it with 13.

²⁾ Replace the second underline with the needed clamp size. This depends on the used cable.



SHIELD TERMINATION METAL BANDS

Crimp tool					
Shell Size	Material number	ODU number			
all	50035716	080.000.058.000.000			



Tie-Dex Micro Bands					
Shell Size	Material number	ODU number			
all	50156242	921.000.004.000.248			





CABLE INTERFACE

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 the bold numbers.

RIGHT ANGLE HEAT SHRINK BOOT OPTION

Shell Size	Material number	ODU number	Hellermann
all	50157039	921.000.010.008.087	411-52480

For 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)