









# For unsealed Connectors Series L (IP 50)





1. Slide Back nut and Collet over the cable.



- 2. Strip cable and wire
- 3. Pre-tinning of strands recommended



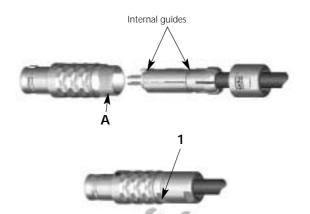
**4.** Solder each wire to the corresponding contact



**5.** Bend cable shield outwards, assemble half shells.



**6.** Slide the EMI-Ring against the sleeve and clamp the shield between it.



- 7. Now you can put the assembled cable into the plug-housing. If needed, secure thread (A) with locking glue.
- **8.** Screw back nut on the plug, hold against flat 1 and fasten cable in the housing\*.

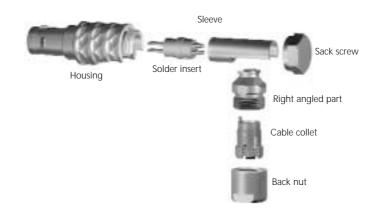
Attention! Torque value:

Size	00	0	1	2	3	4
Nm	0.5	0.6	1.0	2.0	3.5	4

Now the plug is assembled.



## For unsealed right-angle plug connectors (IP 50), series L





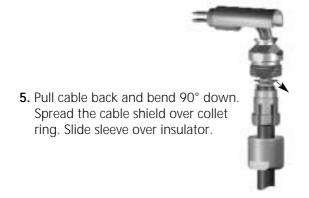
**1.** Slide back nut, collet, right-angled-part and sleeve over the cable.



- 2. Strip cable and wire
- 3. Pre-tinning of strands recommended



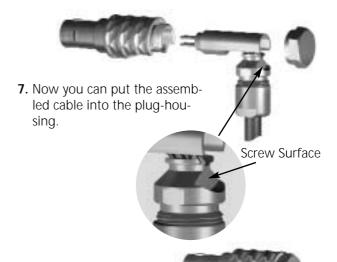
**4.** Solder each wire to the corresponding contact (Crimp version see straight Connector to Page 119)



**6.** Slide the collet against the right-angled-part and clamp the shield between it. Screw back-nut (1) on the rigth-angled-part and hold against on the flat A. If needed, secure thread (A) with locking glue.

Attention! Torque value:

Size	00	0	1	2	3	4	l
Nm	0,5	0,6	1,0	2,0	3,5	8	1



8. Mount back-screw (2) on the plug and fasten cable in the housing \*. If needed, secure thread with locking glue.

**Attention!** Torque value:

Size 00 0 1 2 3 4 Nm 0,2 0,3 0,4 0,9 1,3 2,0

Now the plug is assembled.

## For sealed connectors (IP 68) Series K





**1.** Slide Back nut, Collet, Seal Ring and EMI-Ring over the cable.

#### **Crimp termination**

Detail information see page 106-111



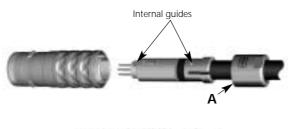
- 2. Strip cable and wire
- 3. Fit wire into the contact barrel and crimp



**4.** Insert contacts into insulator, use the insertion tool to push them in









#### Solder termination



- 2. Strip cable and wire
- 3. Pre-tinning of strands recommended



- **4.** Solder each wire to the corresponding contact
- **5.** Bend cable shield outwards, assemble half shells.
- **6.** Slide the EMI-Ring against the sleeve and clamp the shield between it.
- 7. Now you can put the assembled cable into the plug-housing. If needed, secure thread (A) with locking glue.
- **8.** Screw back nut on the plug and fasten cable in the housing\*.

Attention! Torque value:

Size	0	1	2	3	4
Nm	0.6	1.0	2,0	3.5	4

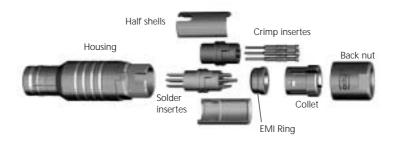
Now the plug is assembled.

\* ODU-Spanner-Wrench: see page 112

Watertight connectors require a grommet seal designed for the intended cable. We require either the exact specification or a sample of the cable.



## For unsealed connectors Series B (IP 50)





**1.** Slide Back nut, Collet, Seal Ring and EMI-Ring over the cable.

#### **Crimp termination**

Detail information see page 106-111



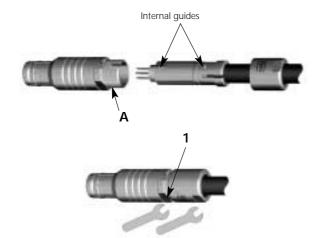
- 2. Strip cable and wire
- 3. Fit wire into the contact barrel and crimp



**4.** insert contacts into insulator, use the insertion tool to push them in







#### Solder termination



- 2. Strip cable and wire
- 3. Pre-tinning of strands recommended



- 4. Solder each wire to the corresponding contact
- **5.** Bend cable shield outwards, assemble half shells.
- **6.** Slide the EMI-Ring against the sleeve and clamp the shield between it.
- 7. Now you can put the assembled cable into the plug-housing. If needed, secure thread (A) with locking glue.
- **8.** Screw back nut on the plug, hold against flat 1 and fasten cable in the housing\*.

Now the plug is assembled.

## For unsealed right-angle plug connectors (IP 50), series B





**1.** Slide back nut, collet, EMI-ring and right-angled-part over the cable.



- 2. Strip cable and wire
- 3. Pre-tinning of strands recommended

4. Solder each wire to the corresponding contact



Size 0 | 1 | 2 | 3 | Nm | 0,6 | 1,0 | 2,0 | 3,5



5. Pull cable back and bend 90° down.
Place halfshells over insulator.



8. Mount back-screw (2) on the plug and fasten cable in the housing. If needed, secure thread with locking glue.

Attention! Torque value:

Size 0 1 2 3 Nm 0,3 0,4 0,9 1,3

Now the plug is assembled.



## For sealed connectors Series B (IP 68)





**1.** Slide Back nut, Collet, Seal Ring and EMI-Ring over the cable.

#### **Crimp termination**

Detail information see page 106-111



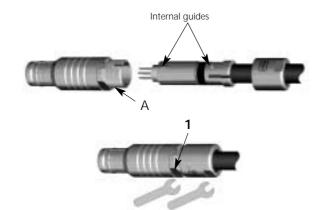
- 2. Strip cable and wire
- 3. Fit wire into the contact barrel and crimp



**4.** Insert contacts into insulator, use the insertion tool to push them in







#### **Solder termination**



- 2. Strip cable and wire
- 3. Pre-tinning of strands recommended



- 4. Solder each wire to the corresponding contact
- **5.** Bend cable shield outwards, assemble half shells.
- **6.** Slide the EMI-Ring against the sleeve and clamp the shield between it.
- 7. Now you can put the assembled cable into the plug-housing. If needed, secure thread (A) with locking glue.
- **8.** Screw back nut on the plug, hold against flat 1 and fasten cable in the housing\*.

**Attention!** Torque value:

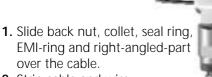
Size	0	1	2	3
Nm	0.6	1.0	2.0	3.5

Now the plug is assembled.

\* ODU-Spanner-Wrench: see page 112

Watertight connectors require a grommet seal designed for the intended cable. We require either the exact specification or a sample of the cable.

For sealed right-angle plug connectors (IP 68) Series B



- 2. Strip cable and wire
- **3.** Pre-tinning of strands recommended



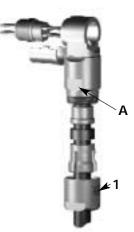
6. Slide collet, seal ring and EMI-ring against the right-angled-part and clamp the shield between EMI-ring and right-angled-part.

Screw back-nut (1) on the right-angled-part and hold against on flat (A). Please halfshell over insulator.

If needed, secure thread with locking glue.







4. Solder each wire to the corresponding contact (Crimp version see straight Connector to Page 121)



**7.** Now you can put the assembled cable into the plug-housing.



8. Mount back-screw (2) on the plug and fasten cable in the housing. If needed, secure thread with locking glue.

**Attention!** Torque value:

Size 0 Nm 0,3

Now the plug is assembled.



# Torque for back-nuts

#### Torque for styles

- Straight plug S1; S2; S3; S4

- Right-angled-plug W1; W2; W3; W4 - Break-apart-plug A5; A6; A7; A8

- In-line-receptacle K1; K2; K3; K4

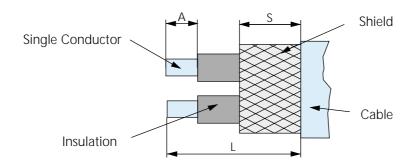
- Receptacle G6; G7

Size	00 0		1	2	3	4
Torque	0,5 Nm	0,6 Nm	1,0 Nm	2,0 Nm	3,5 Nm	4 Nm

1 Nm = 8,85 inch-pounds

# **Cable Preparation:**

The following Table provides recommended guidelines for cable preparation:



 $A = Stripping \ length \ single \ conductor$ 

L = Stripping length cable jacket

S = Stripping length braided shield

	Contact	Solder Termination Crimp Termination					ation
Size	Ø	L	А	S	L	А	S
Size 00	0.5	5	2	2	_	_	_
Size 0	0.5	7	2	2,5	_	-	-
	0.7	7	2	2,5	10	3	2,5
	0.9	7	2	2,5	10	3	2,5
Size 1	0.5	9	2	2,5	_	_	_
	0.7	9	2	2,5	12	3	2,5
	0.9	9	2	2,5	12	3	2,5
	1.3	_	_	-	_	_	_
Size 2	0.5	11	2	2,5	_	_	_
	0.7	11	2	2,5	14	3	2,5
	0.9	11	2	2,5	14	3	2,5
	1.3	11	2	2,5	14	3	2,5
	1.6	11	2	2,5	14	3	2,5
	2.0	_	_	_	_	_	_
Size 3	0.5	13	2	2,5	_	_	_
	0.7	13	2	2,5	17	3	2,5
	0.9	13	2	2,5	17	3	2,5
	1.3	13	2	2,5	17	3	2,5
	1.6	13	2	2,5	17	3	2,5
	2.0	_	_	-	_	_	_
	3.0	_	_	_	_	_	_

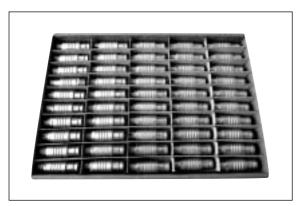
All dimensions in mm

Tolerance: + 10 %

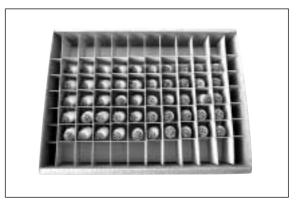
Exceptions are noted on special instructions. Right-angle plugs have special instructions.

# **Standard Packing**

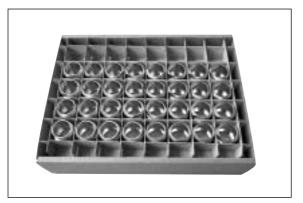
# • Plug



Housing



**Contact Inserts** 



**Back Nut** 



Accessories (Collet nuts, Cable Bend Reliefs etc.)

# Receptacles



Receptacles with Solder- Crimp- and PCB-Contacts

There are different packings possible, due to different sizes, quantities, styles ect.