





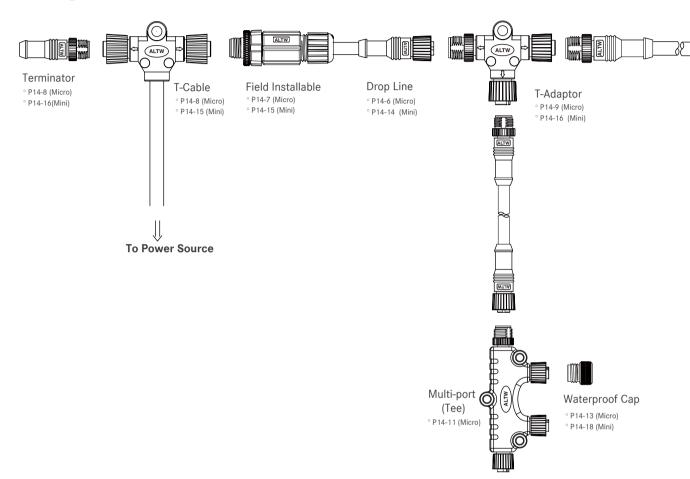
# CATALOGUE

http://www.amphenolltw.com



# **NMEA 2000 Connector**

# **Range Overview**

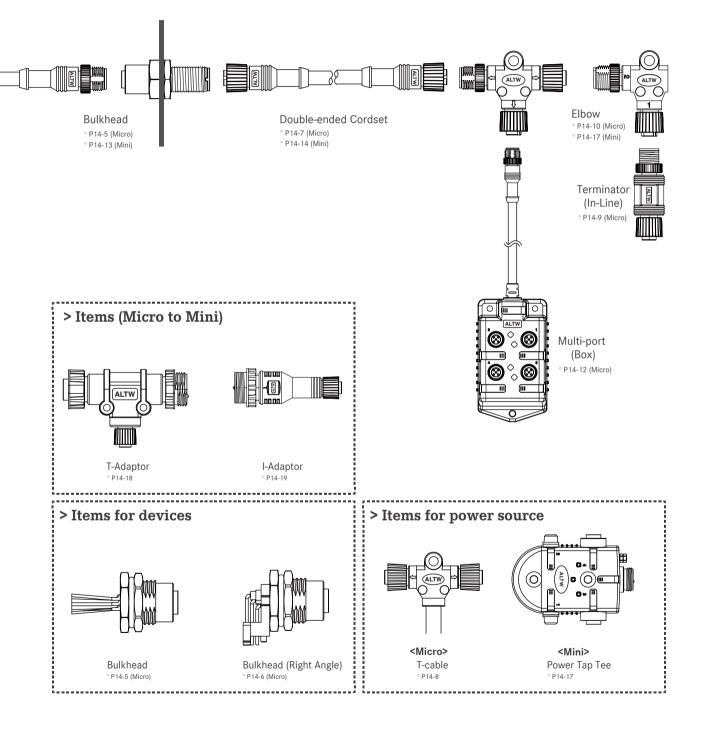


#### About NMEA 2000

Amphenol LTW Technology expands its coverage targeting the marine industry that features the NMEA 2000 standard.

The NMEA 2000 standard contains the requirements of a serial data communications network to inter-connect marine electronic equipment on vessels. It is multi-master and self-configuring, and there is no central network controller. Equipment designed to this standard will have the ability to

share data, including commands and status with other compatible equipment over a status with other compatible equipment over a single channel.





# Specification

Identifications	Micro(AWG: 22 AWG, 24 AWG) Mini(AWG: 18 AWG, 15 AWG)
Description	Micro: Bulkhead (With Wire / Double-ended / Right Angle) Cable (Drop Line / Double-ended Cordset / Field Installable / T-Cable) Network Terminator (Single-ended / In-line) Adaptor (T-Adaptor / Elbow) Multi-port Waterproof Cap Mini: Bulkhead (Double-ended) Cable (Drop Line / Double-ended Cordset / Field Installable / T-Cable) Network Terminator (Single-ended) Adaptor (T-Adaptor / Elbow) Power Tap Tee Waterproof Cap Mini to Micro: Adaptor (T-Adaptor / I-Adaptor)
Current Rating / Data	4A, 8A
Material	Contacts: Copper Alloy, Gold Plated Contacts Holder: PA
Waterproof Rating	IP67~68
Temperature Range	Receptacle: -40°C~85°C Overmolded with Cable: -20°C~80°C Field Installable: Nylon+GF: -40°C~105°C PU: -20°C~85°C * Higer working temperature upon request.

# **Contact Configuration**

	Micro-C	Mini-C
	4A	8A
	FF or MM	FF or MM
4Pin		
5Pin		

Number of Contacts: Ex.2 contacts (02)
Connector (Housing) Gender: Male(M) or Female(F)
Contact Gender: Male(M) or Female(F)



# **Cabling Information**

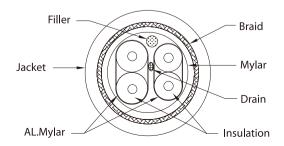
#### **⊠** Micro

#### NMEA Approved

(A): (24#\*1P+AL) + (22#\*1P+AL) + Drain + Mylar + Braid

#### Conforming

**(A):** (24#\*1P+AL) + (22#\*1P+AL) + Drain + AL + Braid **(B):** (22#\*1P+AL) + (18#\*1P+AL) + Drain + AL + Braid



\* Design and specification are subject to change without notice.

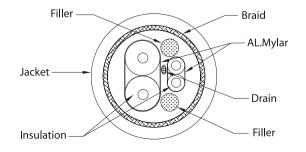
### ⊔ Mini

#### NMEA Approved

(C): (18#\*1P+AL) + (15#\*1P+AL) + Drain + Braid

#### Conforming

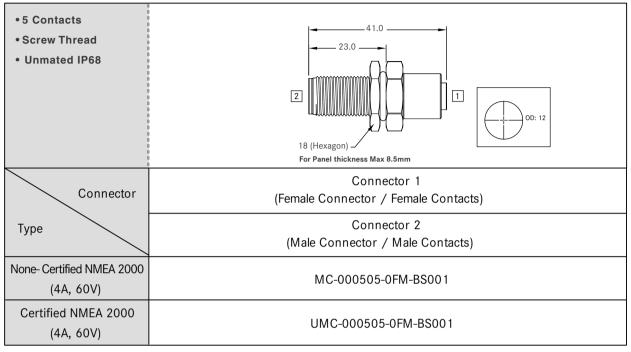
(C): (18#\*1P+AL) + (16#\*1P+AL) + Drain + AL+Braid





# **Find Our Standard Products**

### ↘ Micro > Bulkhead (Double-ended)



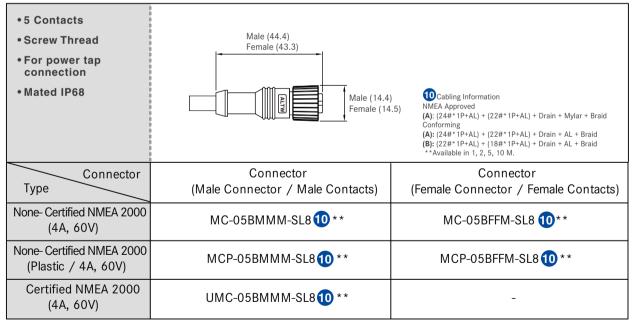
#### ↘ Micro > Bulkhead

<ul> <li>5 Contacts</li> <li>Screw Thread</li> <li>For device side</li> <li>Unmated IP68</li> </ul>	* Front Fastened Male: 25.9 Female:22.9 Male: 20.5 Female:20.0 U DD: 15.4 18 (Hexagon)	* Rear Fastened Male: 24.5 Female:28.0 Male: 22.0 Female:22.6 Unit of the second secon
Connector	Connector	Connector
Type	(Male Connector / Male Contacts)	(Female Connector / Female Contacts)
None- Certified NMEA 2000	MC-05PMMS-SF8001	MC-05PFFS-SF8001
(4A, 60V)	MC-05PMMS-SH8001	MC-05PFFS-SH8001

#### \* IP 68 (Unmated) Male (29.5) \* IP 67 (Mated) 5 Contacts Male (24.8) Female (29.0) Screw Thread Female (25.5) Male (20.5) Female (20.0) Male (16.2) For device side Female (16.9) Maximum Panel Maximum Panel Unmated IP68 / Thickness: 4.5mm Thickness: 3.0mm Mated IP67 OD: 12.2 OD: 15.4 -10.5--13.6 14.0 (Hexagon) 15.0 (Hexagon) 18.0 (Hexagon) Connector Connector Connector Type (Male Connector / Male Contacts) (Female Connector / Female Contacts) None-Certified NMEA 2000 12-05PFFR-SF7001 12-05PMMR-SF7001 (4A, 60V) 12-05PFFR-SF8001 12-05PMMR-SF8001 None-Certified NMEA 2000 12P-05PFFR-SF8001 12P-05PMMR-SF8001 (Plastic / 4A, 60V)

### ↘ Micro > Bulkhead (Right Angle)

#### ↘ Micro > Cable > Drop Line



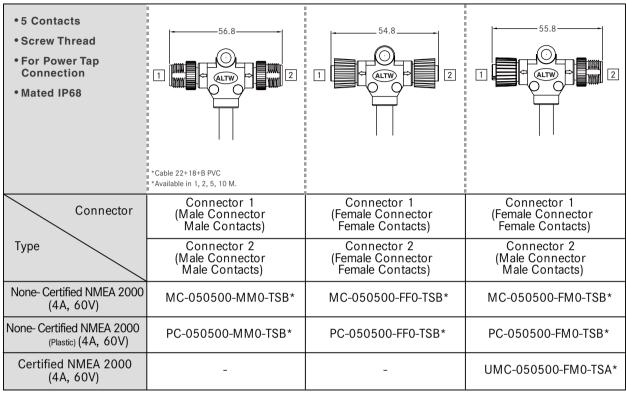


#### • 5 Contacts Screw Thread Mated IP68 ALTW 2 1 \*Available in 1, 2, 5, 10 M \*Cable 22+24+B PVC Connector 1 Connector 1 Connector 1 (Male Connector (Male Connector (Female Connector Connector Male Contacts) Female Contacts) Male Contacts) Connector 2 Connector 2 Connector 2 Type (Male Connector (Female Connector (Female Connector Female Contacts) Female Contacts) Male Contacts) None-Certified NMEA 2000 MC-000505-0MM-CS\* MC-000505-0FF-CS\* MC-000505-0MF-CS\* (4A, 60V) None-Certified NMEA 2000 PC-000505-0MM-CS\* PC-000505-0FF-CS\* PC-000505-0MF-CS\* (Plastic / (4A, 60V) Certified NMEA 2000 UMC-000505-0MF-CSA\* (4A, 60V)

#### ↘ Micro > Cable > Double-ended Cordset

### ↘ Micro > Cable > Field Installable

<ul> <li>5 Contacts</li> <li>Screw Thread</li> <li>Screw-in Contacts</li> <li>Mated IP68</li> </ul>	61.3 Male (21.3) Female (20.8) 52.3 • Conforming to NMEA	70.0 TO.0 20.8 20.8 * NMEA approved	
Connector Type	Connector (Male Connector / Male Contacts)	Connector (Female Connector / Female Contacts)	
None- Certified NMEA 2000 (4A, 60V)	12-05BMMB-SL7001 12-05BMMB-SR7001 (Ø4.5 ~Ø6.0mm; 18AWG Max.)	12-05BFFB-SL7001 12-05BFFB-SR7001 (Ø4.5 ~Ø6.0mm; 18AWG Max.)	
None- Certified NMEA 2000 (Plastic / 4A, 60V)	12P-05BMMB-SL7001 12P-05BMMB-SR7001 (Ø4.5 ~Ø6.0mm; 18AWG Max.)	12P-05BFFB-SL7001 12P-05BFFB-SR7001 (Ø4.5 ~Ø6.0mm; 18AWG Max.)	
Certified NMEA 2000 (4A, 60V)	UMC-05BMMB-SL7001 (Ø4.5 ~Ø7.5mm; 18AWG Max.)	UMC-05BFFB-SL7001 (Ø4.5 ~Ø7.5mm; 18AWG Max.)	

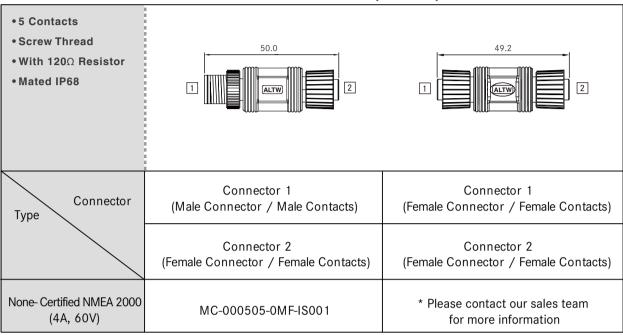


#### $\square$ Micro > Cable > T-Cable

#### ↘ Micro > Network terminator > Terminator

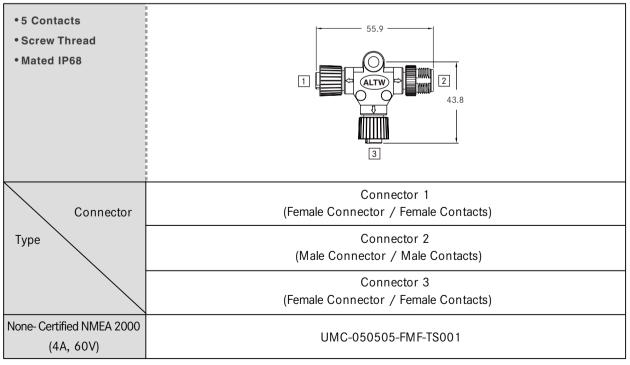
<ul> <li>5 Contacts</li> <li>Screw Thread</li> <li>With 120Ω Resistor</li> <li>Mated IP68</li> </ul>			
Connector Type	Connector (Male Connector / Male Contacts)	Connector (Female Connector / Female Contacts)	
None- Certified NMEA 2000 (4A, 60V)	MC-05BMMT-SL8001	MC-05BFFT-SL8001	
None-Certified NMEA 2000 (Plastic / 4A, 60V)	MCP-05BMMT-SL8001	MCP-05BFFT-SL8001	
Certified NMEA 2000 (4A, 60V)	UMC-05BMMT-SL8001	UMC-05BFFT-SL8001	

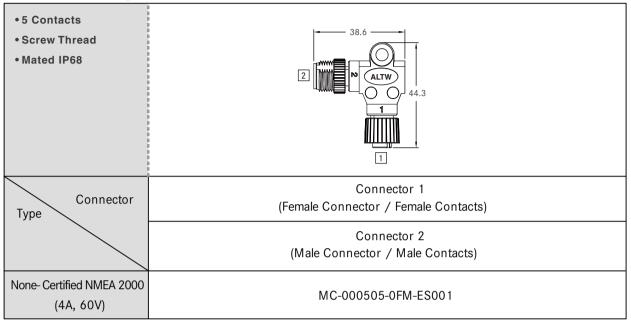




#### ↘ Micro > Network Terminator > Terminator (In-Line)

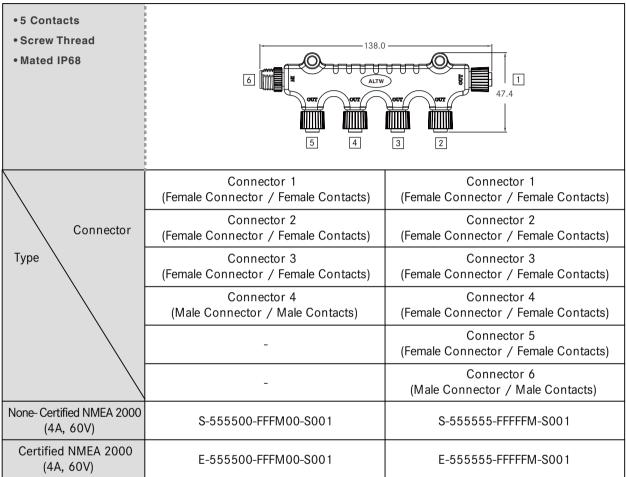
## ↘ Micro > Adaptor > T-Adaptor



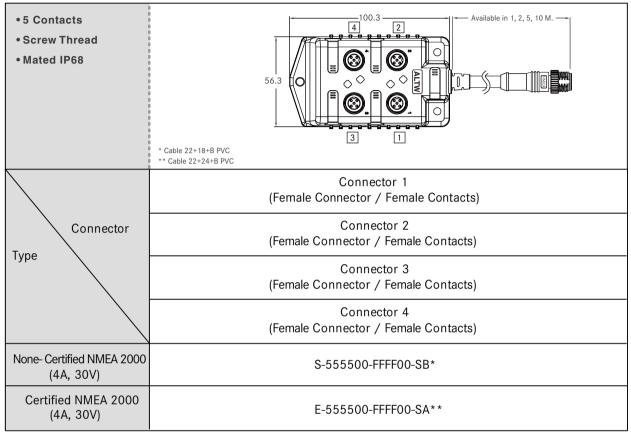


#### ↘ Micro > Adaptor > Elbow



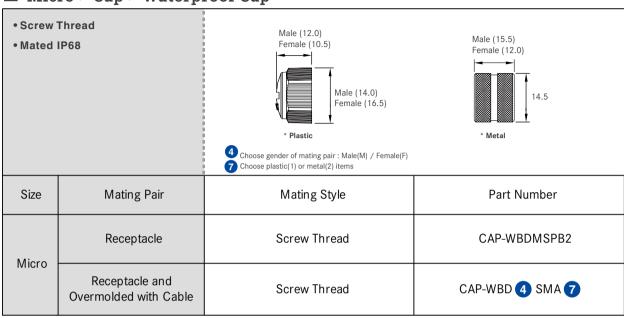


#### ↘ Micro > Adaptor > T-Adaptor

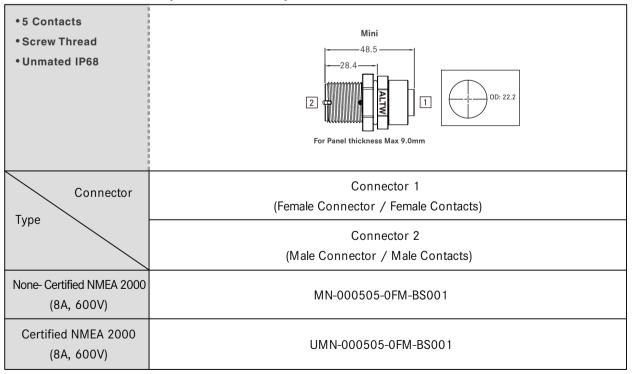


#### ↘ Micro > Multi-port > Box

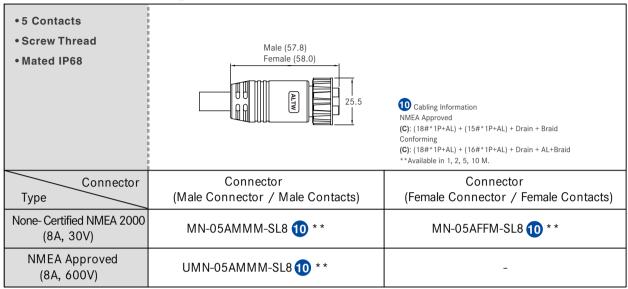




## ↘ Mini > Bulkhead (Double-ended)

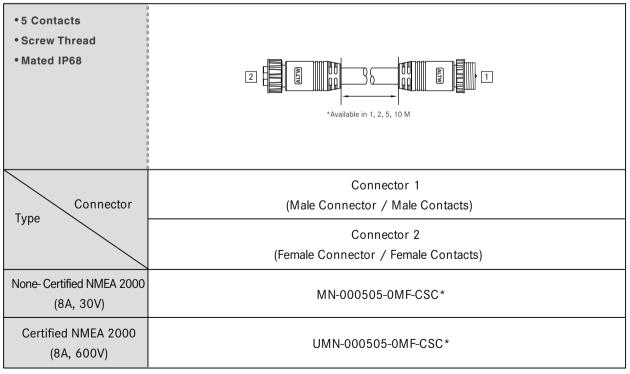


#### ↘ Micro > Cap > Waterproof Cap

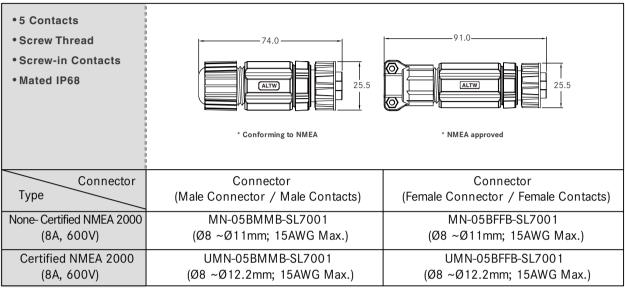


#### $\square$ Mini > Cable > Drop Line

### ↘ Mini > Cable > Double-ended Cordset

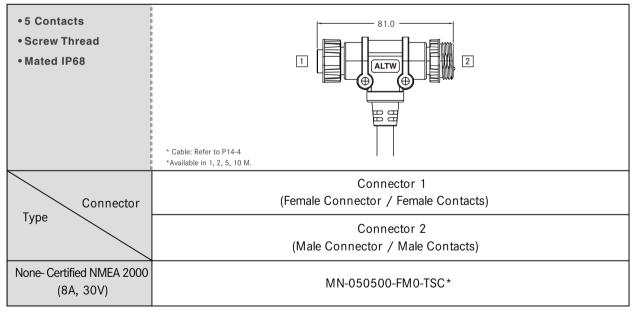


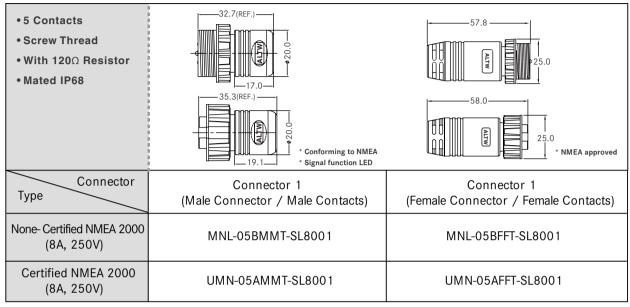




#### ↘ Mini > Cable > Field Installable

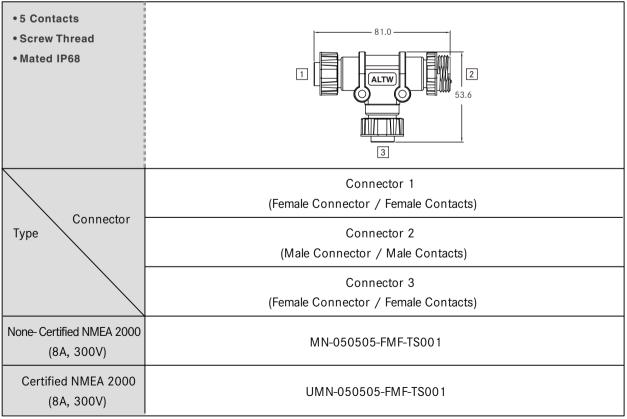
### $\square$ Mini > Cable > T-Cable





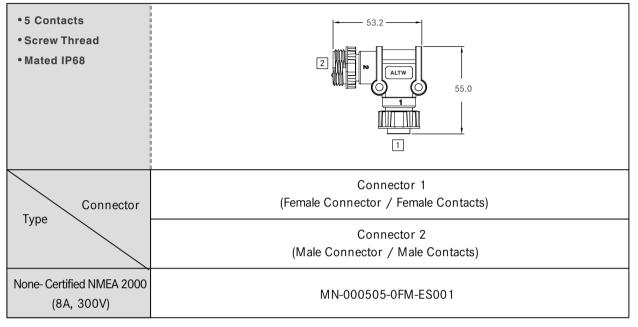
### ↘ Mini > Network Terminator > Terminator

### ↘ Mini > Adaptor > T-Adaptor

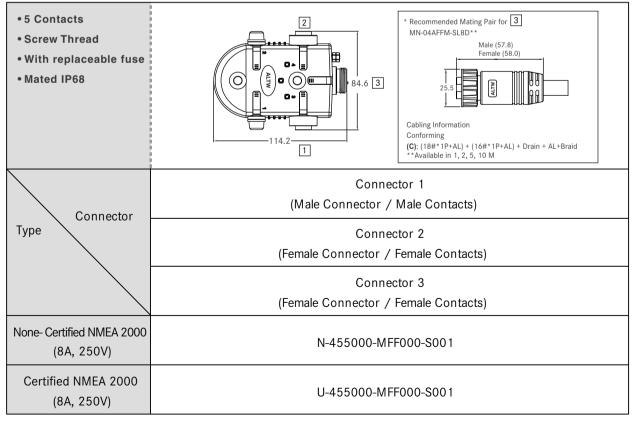




#### ↘ Mini > Adaptor > Elbow

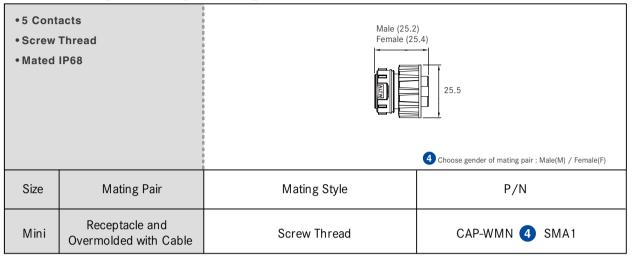


## rightarrow Mini > Power Tap Tee



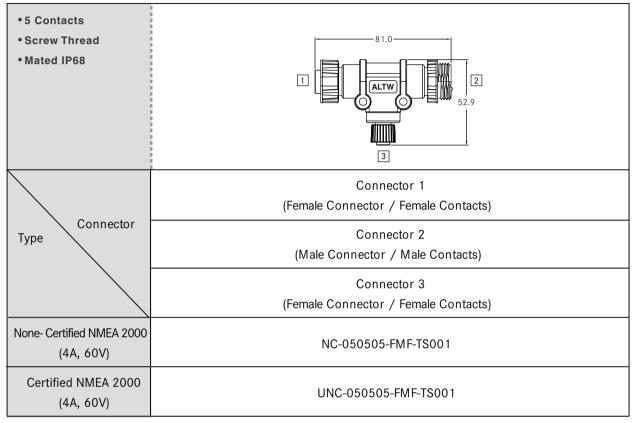
<sup>14-17</sup> Amphenol LTW Technology Co., Ltd.

#### ↘ Mini > Cap > Waterproof Cap

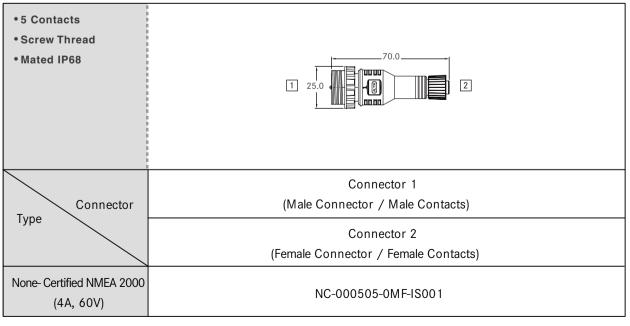




#### **△** Mini to Micro > Adaptor > T-Adaptor



### ↘ Mini to Micro > I-Adaptor



<sup>14-19</sup> Amphenol LTW Technology Co., Ltd.

# Memo

A 1 41
 Scan to visit our website

#### Amphenol LTW Technology Co., Ltd.

5F-3, No.51, Sec.4, Zhongyang Rd., Tucheng Dist., New Taipei City 236, Taiwan Telephone: +886-2-77416888 Fax: +886-2-77416999 www.amphenolltw.com

#### **Kunshan Factory**

No. 62, DaTong Road, Development Zone, Kunshan City, JiangSu Province, 215333 China Telephone: +86-512-5761-0501 Fax: : +86-512-5761-0515

#### For further information, please contact :

Sales & Marketing Department | Email : sales@ltw-tech.com