

# Altech Corp.®



**Sensor & Actuator Cables  
and Connectors**

**M8 - Field Wired Connectors**

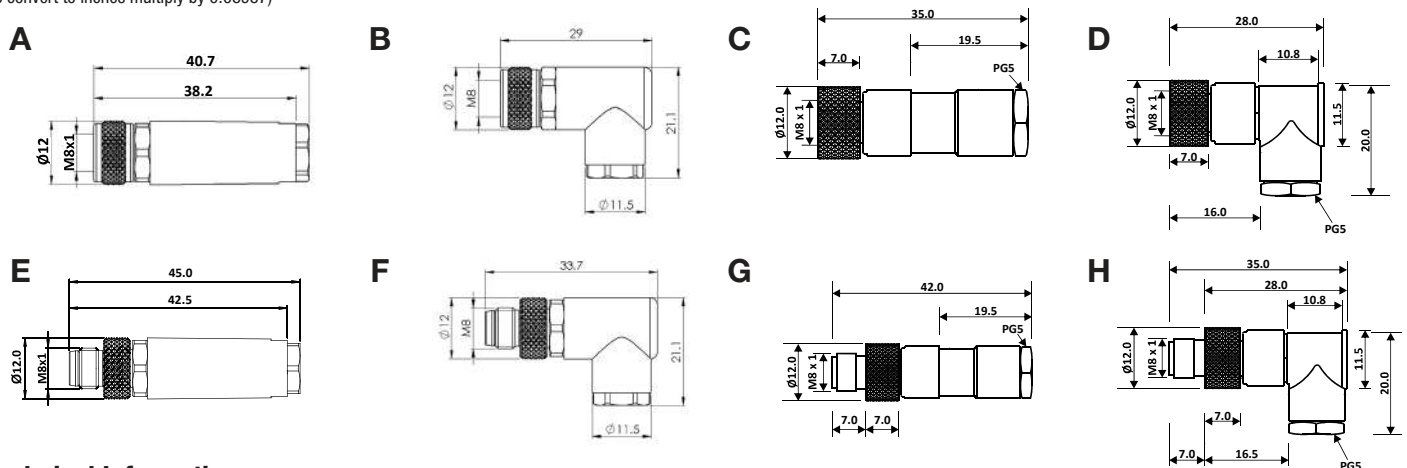
- Female and Male versions
- 3 and 4 pole
- Screw & Solder Connection
- A Coding



**Straight & Angled Connectors**

No. Poles	Male/Female	Pin Configuration	Cat No.	Terminal Type	Orientation	Drawing No.
3	Female		CNF08-S3SP0-BP5	Screw Terminals	Straight	A
			CNF08-R3SP0-BP5	Screw Terminals	Angled	B
			CNF08-S3LP0-BP5	Solder Terminals	Straight	C
			CNF08-R3LP0-BP5	Solder Terminals	Angled	D
3	Male		CNM08-S3SP0-BP5	Screw Terminals	Straight	E
			CNM08-R3SP0-BP5	Screw Terminals	Angled	F
			CNM08-S3LP0-BP5	Solder Terminals	Straight	G
			CNM08-R3LP0-BP5	Solder Terminals	Angled	H
4	Female		CNF08-S4SP0-BP5	Screw Terminals	Straight	A
			CNF08-R4SP0-BP5	Screw Terminals	Angled	B
			CNF08-S4LP0-BP5	Solder Terminals	Straight	C
			CNF08-R4LP0-BP5	Solder Terminals	Angled	D
4	Male		CNM08-S4SP0-BP5	Screw Terminals	Straight	E
			CNM08-R4SP0-BP5	Screw Terminals	Angled	F
			CNM08-S4LP0-BP5	Solder Terminals	Straight	G
			CNM08-R4LP0-BP5	Solder Terminals	Angled	H

**Dimensions (mm)**  
(to convert to inches multiply by 0.03937)



**Technical Information**

**General Specification**

Operating Voltage	30V
Current Rating	3A (Screw), 4A (Solder)
Insulation Resistance	>=100 MΩ
Temperature Range	-25°C...+75°C
Protection Degree	IP67

**Material Specification**

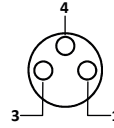
Grip Material	Nylon 66
Contact	CU-Zn
Contact Plating	Gold Plated
Contact Carrier	Nylon 66
O-Ring	Neoprene
Grip Color	Black
Cable Gland	PG5
Coupling Nut	Nickel-Plated Brass

## M8 - Molded Female Cable Assemblies

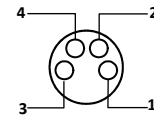
- Female Connector to Flying Lead
- Straight and Angled Connectors
- PVC & PUR Cable
- 3 and 4 pole Connectors
- 1, 2, 5, 10m standard cable length
- Custom cable length available



**Straight Connector**



**Angled Connector**



### Straight Connectors

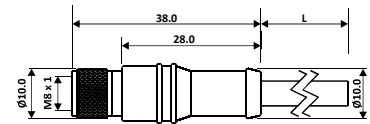
Cable Type	Cable Length	Wire Size	3 Pole Cat No.	4 Pole Cat No.
PVC	1m	24AWG	CBF08-S33N0-01BPVC	CBF08-S44N0-01BPVC
	1m	22AWG	CBF08-S33N0-01BP34	CBF08-S44N0-01BP34
	2m	24AWG	CBF08-S33N0-02BPVC	CBF08-S44N0-02BPVC
	2m	22AWG	CBF08-S33N0-02BP34	CBF08-S44N0-02BP34
	5m	24AWG	CBF08-S33N0-05BPVC	CBF08-S44N0-05BPVC
	5m	22AWG	CBF08-S33N0-05BP34	CBF08-S44N0-05BP34
PUR	1m	24AWG	CBF08-S33N0-01BPUR	CBF08-S44N0-01BPUR
	2m	24AWG	CBF08-S33N0-02BPUR	CBF08-S44N0-02BPUR
	5m	24AWG	CBF08-S33N0-05BPUR	CBF08-S44N0-05BPUR

### Angled Connectors

Cable Type	Cable Length	Wire Size	3 Pole Cat No.	4 Pole Cat No.
PVC	1m	24AWG	CBF08-R33N0-01BPVC	CBF08-R44N0-01BPVC
	1m	22AWG	CBF08-R33N0-01BP34	CBF08-R44N0-01BP34
	2m	24AWG	CBF08-R33N0-02BPVC	CBF08-R44N0-02BPVC
	2m	22AWG	CBF08-R33N0-02BP34	CBF08-R44N0-02BP34
	5m	24AWG	CBF08-R33N0-05BPVC	CBF08-R44N0-05BPVC
	5m	22AWG	CBF08-R33N0-05BP34	CBF08-R44N0-05BP34
PUR	1m	24AWG	CBF08-R33N0-01BPUR	CBF08-R44N0-01BPUR
	2m	24AWG	CBF08-R33N0-02BPUR	CBF08-R44N0-02BPUR
	5m	24AWG	CBF08-R33N0-05BPUR	CBF08-R44N0-05BPUR

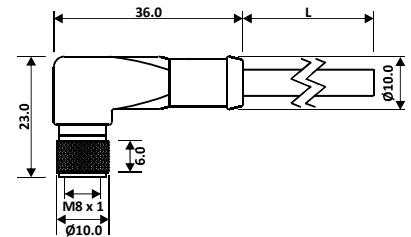
#### Dimensions (mm) /

(to convert to inches multiply by 0.03937)



#### Dimensions (mm) /

(to convert to inches multiply by 0.03937)



## Technical Information

### General Specification

Operating Voltage	60V	30V
Current Rating	4A	4A
Insulation Resistance	$\geq 100 \text{ M}\Omega$	$\geq 100 \text{ M}\Omega$
Temperature Range	$-25^\circ\text{C} \dots +75^\circ\text{C}$	$-25^\circ\text{C} \dots +75^\circ\text{C}$
Protection Degree	IP67	IP67

### Material Specification

Grip Material	PU	PU
Contact	CU-Zn	CU-Zn
Contact Plating	Gold Plated	Gold Plated
Contact Carrier	Nylon 66	Nylon 66
O-Ring	Neoprene	Neoprene
Grip Color	Black	Black
Coupling Nut	Nickel-Plated Brass	Nickel-Plated Brass

### Cable Specifications

Cable Type	PVC/ PUR	PVC/ PUR
Cable Color	Black*	Black*
Wire Size	22AWG (BP34) 24AWG (BPVC, BPUR)	22AWG (BP34) 24AWG (BPVC, BPUR)
Cable Diameter	4.4mm	4.8mm

\*Other colors available, please contact Altech.

M12 - Field Wired Connectors

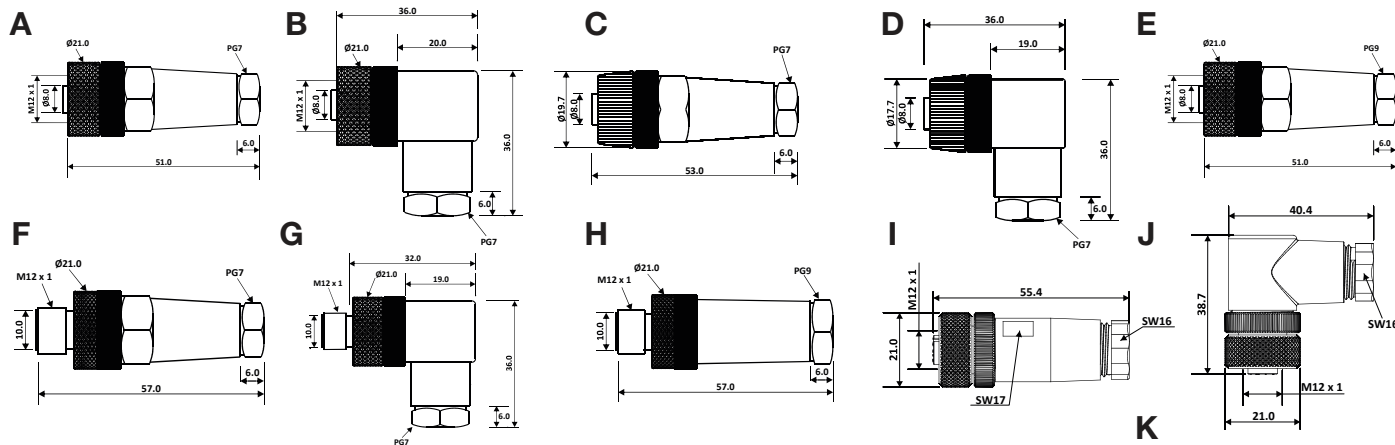
- Female and Male versions
- 4, 5 and 8 pole
- Screw Connection Terminals
- A Coding



Straight & Angled Connectors

No. Poles	Male/Female	Pin Configuration	Cat No.	Terminal Type	Orientation	Cable Gland	Coupling	Drawing No.
4	Female		CNF12-S4SP0-BP7	Screw Terminals	Straight	PG7	Brass-nickel	<b>A</b>
			CNF12-R4SP0-BP7	Screw Terminals	Angled	PG7	Brass-nickel	<b>B</b>
			CNF12-S4SP0-PP7	Screw Terminals	Straight	PG7	Nylon 66	<b>C</b>
			CNF12-R4SP0-PP7	Screw Terminals	Angled	PG7	Nylon 66	<b>D</b>
4	Male		CNM12-S4SP0-BP7	Screw Terminals	Straight	PG7	Brass-nickel	<b>F</b>
			CNM12-R4SP0-BP7	Screw Terminals	Angled	PG7	Brass-nickel	<b>G</b>
			CNM12-S4SP0-BP9	Screw Terminals	Straight	PG9	Brass-nickel	<b>H</b>
5	Female		CNF12-S5SP0-BP7	Screw Terminals	Straight	PG7	Brass-nickel	<b>A</b>
			CNF12-R5SP0-BP7	Screw Terminals	Angled	PG7	Brass-nickel	<b>B</b>
			CNF12-S5SP0-PP7	Screw Terminals	Straight	PG7	Nylon 66	<b>C</b>
			CNF12-R5SP0-PP7	Screw Terminals	Angled	PG7	Nylon 66	<b>D</b>
			CNF12-S5SP0-BP9	Screw Terminals	Straight	PG9	Brass-nickel	<b>E</b>
5	Male		CNM12-S5SP0-BP7	Screw Terminals	Straight	PG7	Brass-nickel	<b>F</b>
			CNM12-R5SP0-BP7	Screw Terminals	Angled	PG7	Brass-nickel	<b>G</b>
			CNM12-S5SP0-BP9	Screw Terminals	Straight	PG9	Brass-nickel	<b>H</b>
8	Female		CNF12-S8SP0-BP9	Screw Terminals	Straight	PG9	Brass-nickel	<b>I</b>
			CNF12-R8SP0-BP9	Screw Terminals	Angled	PG9	Brass-nickel	<b>J</b>
8	Male		CNM12-S8SP0-BP9	Screw Terminals	Straight	PG9	Brass-nickel	<b>K</b>
			CNM12-R8SP0-BP9	Screw Terminals	Straight	PG9	Brass-nickel	<b>L</b>

Dimensions (mm) / (to convert to inches multiply by 0.03937)



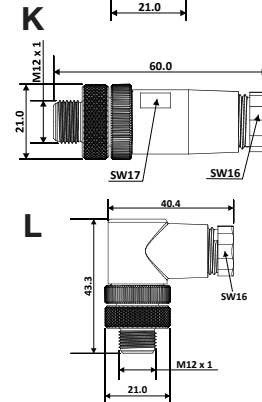
Technical Information

General Specification

Operating Voltage	250V (4 pole), 60V (5 pole), 30V (8 pole)
Current Rating	4A (4, 5 pole), 2A (8 pole)
Insulation Resistance	>=100 MΩ
Temperature Range	-25°C...+75°C
Protection Degree	IP67

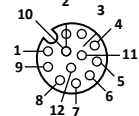
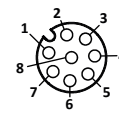
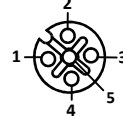
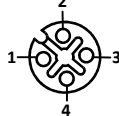
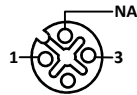
Material Specification

Grip Material	Nylon 66
Contact	CU-Zn
Contact Plating	Gold Plated
Contact Carrier	Nylon 66
O-Ring	Neoprene
Grip Color	Black
Cable Gland	PG7 (BP7), PG9 (BP9)
Coupling Nut	Nickel-Plated Brass (BP7), Nylon 66 (PP7)



**M12 Molded Female Cable Assemblies**

- Female Connector to Flying Lead
- Straight and Angled Connectors
- PVC & PUR Cable
- 3, 4, 5, 8 and 12 pole Connectors
- 1, 2, 5, 10m standard cable length
- Custom cable length available



**Straight Connector**

Cable Type	Cable Length	3 Pole Cat No.	4 Pole Cat No.	5 Pole Cat No.	8 Pole Cat No.	12 Pole Cat No.
PVC	1m	CBF12-S43N0-01BPVC	CBF12-S44N0-01BPVC	CBF12-S55N0-01BPVC	CBF12-S88N0-01BPVC	CBF12-S12N0-01BPVC
	1m	CBF12-S43N0-01BP34	CBF12-S44N0-01BP34	CBF12-S55N0-01BP34	-	-
	2m	CBF12-S43N0-02BPVC	CBF12-S44N0-02BPVC	CBF12-S55N0-02BPVC	CBF12-S88N0-02BPVC	CBF12-S12N0-02BPVC
	2m	CBF12-S43N0-02BP34	CBF12-S44N0-02BP34	CBF12-S55N0-02BP34	-	-
	5m	CBF12-S43N0-05BPVC	CBF12-S44N0-05BPVC	CBF12-S55N0-05BPVC	CBF12-S88N0-05BPVC	CBF12-S12N0-05BPVC
	5m	CBF12-S43N0-05BP34	CBF12-S44N0-05BP34	CBF12-S55N0-05BP34	-	-
PUR	1m	CBF12-S43N0-01BPUR	CBF12-S44N0-01BPUR	CBF12-S55N0-01BPUR	CBF12-S88N0-01BPUR	CBF12-S12N0-01BPUR
	2m	CBF12-S43N0-02BPUR	CBF12-S44N0-02BPUR	CBF12-S55N0-02BPUR	CBF12-S88N0-02BPUR	CBF12-S12N0-02BPUR
	5m	CBF12-S43N0-05BPUR	CBF12-S44N0-05BPUR	CBF12-S55N0-05BPUR	CBF12-S88N0-02BPUR	CBF12-S12N0-05BPUR

**Angled Connector**

PVC	1m	CBF12-R43N0-01BPVC	CBF12-R44N0-01BPVC	CBF12-R55N0-01BPVC	CBF12-R88N0-01BPVC	CBF12-R12N0-01BPVC
	1m	CBF12-R43N0-01BP34	CBF12-R44N0-01BP34	CBF12-R55N0-01BP34	-	-
	2m	CBF12-R43N0-02BPVC	CBF12-R44N0-02BPVC	CBF12-R55N0-02BPVC	CBF12-R88N0-02BPVC	CBF12-R12N0-02BPVC
	2m	CBF12-R43N0-02BP34	CBF12-R44N0-02BP34	CBF12-R55N0-02BP34	-	-
	5m	CBF12-R43N0-05BPVC	CBF12-R44N0-05BPVC	CBF12-R55N0-05BPVC	CBF12-R88N0-05BPVC	CBF12-R12N0-05BPVC
	5m	CBF12-R43N0-05BP34	CBF12-R44N0-05BP34	CBF12-R55N0-05BP34	-	-
PUR	1m	CBF12-R43N0-01BPUR	CBF12-R44N0-01BPUR	CBF12-R55N0-01BPUR	CBF12-R88N0-01BPUR	CBF12-R12N0-01BPUR
	2m	CBF12-R43N0-02BPUR	CBF12-R44N0-02BPUR	CBF12-R55N0-02BPUR	CBF12-R88N0-02BPUR	CBF12-R12N0-02BPUR
	5m	CBF12-R43N0-05BPUR	CBF12-R44N0-05BPUR	CBF12-R55N0-05BPUR	CBF12-R88N0-05BPUR	CBF12-R12N0-05BPUR

**Technical Information**

**General Specification**

Operating Voltage	250V	250V	60V	30V	30V
Current Rating	4A	4A	4A	2A	2A
Insulation Resistance	>=100 MΩ	>=100 MΩ	>=100 MΩ	>=100 MΩ	>=100 MΩ
Temperature Range	-25°C...+75°C	-25°C...+75°C	-25°C...+75°C	-25°C...+75°C	-25°C...+75°C
Protection Degree	IP67	IP67	IP67	IP67	IP67

**Material Specification**

Grip Material	PU	PU	PU	PU	PU
Contact	CU-Zn	CU-Zn	CU-Zn	CU-Zn	CU-Zn
Contact Plating	Gold Plated	Gold Plated	Gold Plated	Gold Plated	Gold Plated
Contact Carrier	Nylon 66	Nylon 66	Nylon 66	Nylon 66	Nylon 66
O-Ring	Neoprene	Neoprene	Neoprene	Neoprene	Neoprene
Grip Color	Black	Black	Black	Black	Black
Coupling Nut	Nickel-Plated Brass	Nickel-Plated Brass	Nickel-Plated Brass	Nickel-Plated Brass	Nickel-Plated Brass

**Cable Specification**

Cable Type	PVC/ PUR	PVC/ PUR	PVC/ PUR	PVC/ PUR	PVC/ PUR
Cable Color	Black*	Black*	Black*	Black*	Black*
Wire Size	22AWG (BP34, BPUR), 24AWG (BPVC)	22AWG (BP34, BPUR), 24AWG (BPVC)	22AWG (BP34, BPUR), 24AWG (BPVC)	24 AWG	26 AWG
Cable Diameter	4.8mm	4.8mm	5.5mm	6.4mm	6.5mm

\*Other colors available, please contact Altech.

## Overview and Ordering Information

### Molded Sensor & Actuator Cable Assemblies

- Female/ Male Connectors to Open Cable
- Straight and Angled Connectors
- PVC and PUR Cables
- M8 and M12 versions
- 2, 5, 10m standard length
- Custom length available



CB	F	12	-	S	4	4	N	0	-	02	B	PVC	
<b>TYPE</b> CB = Cable Assembly	<b>M/F</b> M = Male F = Female	<b>Size</b> 08 = M8 12 = M12		<b>Orientation</b> S = Straight R = Right Angled	<b>Pins</b> 4 5 8 12	<b>No. Wires</b> 3 4 5 8 12	<b>Shielded</b> S = Shielded N = Non Shielded	<b>LEDs</b> 0 2 3		<b>Cable Length</b> 02 = 2m 05 = 5m 10 = 10m -	<b>Cable Color</b> B = Black G = Green U = Blue O = Orange T = Teal Y = Yellow		<b>Cable Type / Cross Section</b> PVC PUR TPE P34 : PVC 22AWG P75 : PVC 18 AWG PTFE

### Field-Wired Connectors

- Female/ Male Versions
- M8 and M12 versions
- Straight and Angled Connectors
- M8: 3, 4 pole
- M12: 4, 5, 8 pole
- Screw/ Solder Terminals
- A-Coding



1	2	3	-	4	5	6	7	8	-	9	10	11	
CN	F	12	-	S	3	S	P	0	-	B	P	7	
<b>TYPE</b> CN = Field-Wired Connector	<b>M/F</b> M = Male F = Female	<b>Size</b> 08 = M08 12 = M12		<b>Orientation</b> S = Straight R = Right Angled	<b>Pins</b> 3 4 5	<b>Connection</b> S = Screw L = Solder	<b>Housing Material</b> P = Plastic (PA66) B = Brass S = Stainless Steel Z = Zin Die Cast	<b>LEDs</b> 0 2 3		<b>Coupling Nut</b> B = Brass P = Plastic		<b>Cable Outlet MOC</b> P = Plastic B = Brass Z = Zinc Casted S = Stainless Steel	<b>Cable Outlet</b> 7 = PG7 9 = PG9

### Panel Feed-Through Connectors

- Female/ Male Versions
- M8 and M12 versions
- Front/ Rear Mount connectors
- M8: 3, 4 pole
- M12: 4, 5, 8, 12 pole
- Custom cable length
- A-Coding



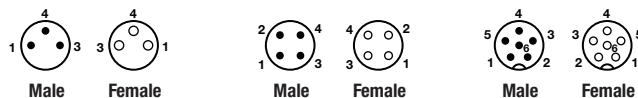
1	2	3	-	4	5	6	7	8	-	9	10	
CP	F	12	-	F	P	B	R	5	-	P	2	
<b>TYPE</b> CP = Panel Mount Connector	<b>M/F</b> M = Male F = Female	<b>Size</b> 08 = M08 12 = M12		<b>Mounting</b> F = Front R = Rear	<b>Mounting</b> P = PG9 M = M16	<b>MOC</b> B = Brass P = Plastic S = Stainless Steel	<b>MOC</b> L = Plastic (PA66) R = Brass S = Stainless Steel Z = Zin Die Cast	<b>Pins</b> 3 4 5 8 12		<b>Connection</b> P = Pre-Wired S = Solder / PCB		<b>Cable Outlet MOC</b> 0 = No Wire R = PCB Mount 1 = 100mm 2 = 200mm 3 = 300mm 5 = 500mm

**Bulkhead Connectors | M8 - Panel Feed-Through Connectors**

- Male/ Female M8 to open lead
- Solder versions
- PCB versions
- 3, 4, 6 pole Connectors
- Custom cable length available
- Brass Housing
- IP67 Rating
- A-Coding

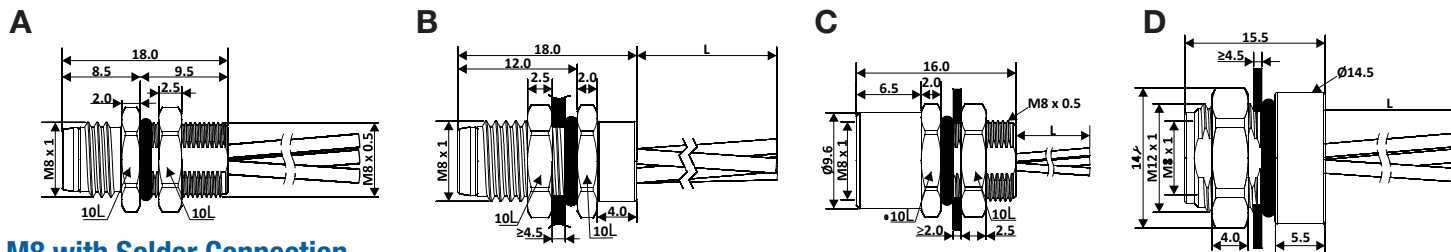


**M8 with Assembled Wires (500mm length)**



Wire Type	Mounting	Male/ Female	Panel Thread	3 Pole Cat No.	4 Pole Cat No.	6 Pole Cat No.	Drawing No.
PVC	Front	Male	M08X0.5 mm	ALBKM08-FM8BR3-P5	ALBKM08-FM8BR4-P5	ALBKM08-FM8BR6-P5	<b>A</b>
		Female	M08X0.5 mm	ALBKF08-FM8BR3-P5	ALBKF08-FM8BR4-P5	ALBKF08-FM8BR6-P5	<b>B</b>
	Rear	Male	M08X0.5 mm	ALBKM08-RM8BR3-P5	ALBKM08-RM8BR4-P5	ALBKM08-RM8BR6-P5	<b>C</b>
		Female	M12x1mm	ALBKF08-RM12BR3-P5	ALBKF08-RM12BR4-P5	ALBKF08-RM8BR6-P5	<b>D</b>
TPE	Front	Male	M08X0.5 mm	ALBKM08-FM8BR3-T5	ALBKM08-FM8BR4-T5	ALBKM08-FM8BR6-T5	<b>A</b>
		Female	M08X0.5 mm	ALBKF08-FM8BR3-T5	ALBKF08-FM8BR4-T5	ALBKF08-FM8BR6-T5	<b>B</b>
	Rear	Male	M08X0.5 mm	ALBKM08-RM8BR3-T5	ALBKM08-RM8BR4-T5	ALBKM08-RM8BR6-T5	<b>C</b>
		Female	M12x1mm	ALBKF08-RM12BR3-T5	ALBKF08-RM12BR4-T5	ALBKF08-RM8BR6-T5	<b>D</b>

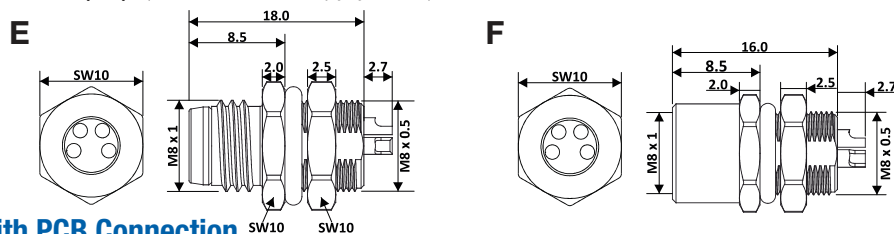
Dimensions (mm) / (to convert to inches multiply by 0.03937)



**M8 with Solder Connection**

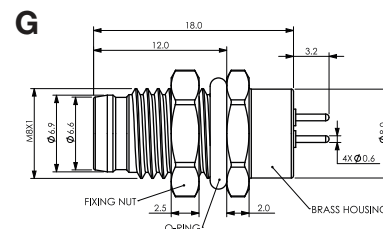
Termination	Mounting	Male/ Female	Panel Thread	3 Pole Cat No.	4 Pole Cat No.	Drawing No.
Solder	Front	Male	M08X0.5 mm	ALBKM08-FM8BR3-SL	ALBKM08-FM8BR4-SL	<b>E</b>
		Female	M08X0.5 mm	ALBKF08-FM8BR3-SL	ALBKF08-FM8BR4-SL	<b>F</b>

Dimensions (mm) / (to convert to inches multiply by 0.03937)



**M8 with PCB Connection**

Termination	Mounting	Male/ Female	Panel Thread	3 Pole Cat No.	4 Pole Cat No.	Drawing No.
PCB	Front	Male	M08X0.5 mm	ALBKM08-RM8BR3-S0	ALBKM08-RM8BR4-S0	<b>G</b>



**Technical Information**

**General Specification**

Operating Voltage	60V/ 30V (3,4 pole)
Current Rating	3A
Insulation Resistance	≥100 MΩ
Temperature Range	-25°C...+75°C
Protection Degree	IP67

**Material Specification**

Housing Material	Brass Ni Plated
Contact	CU-Zn
Contact Plating	Gold Plated
Contact Carrier	Nylon 66
O-Ring	Neoprene