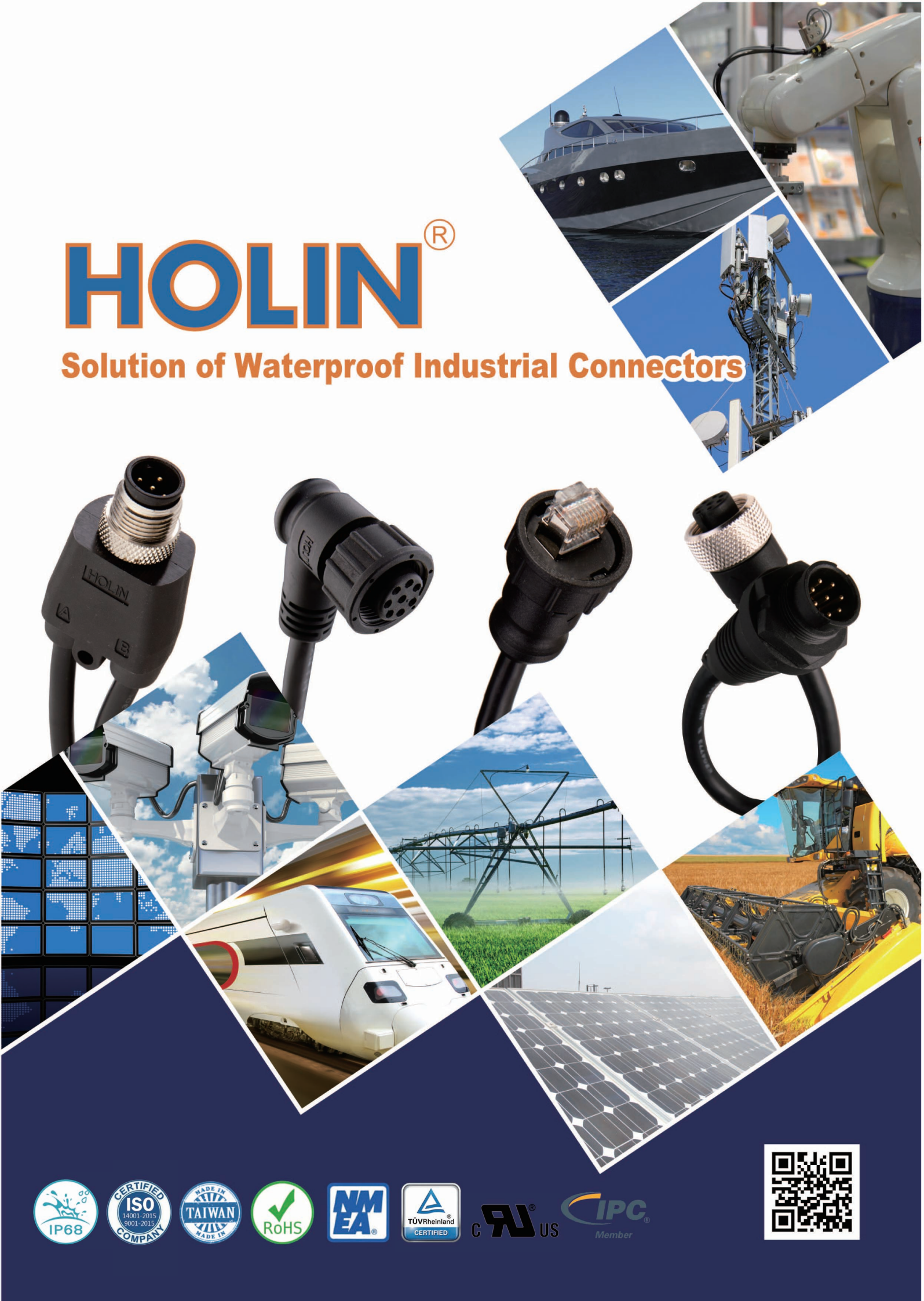


# HOLIN<sup>®</sup>

## Solution of Waterproof Industrial Connectors



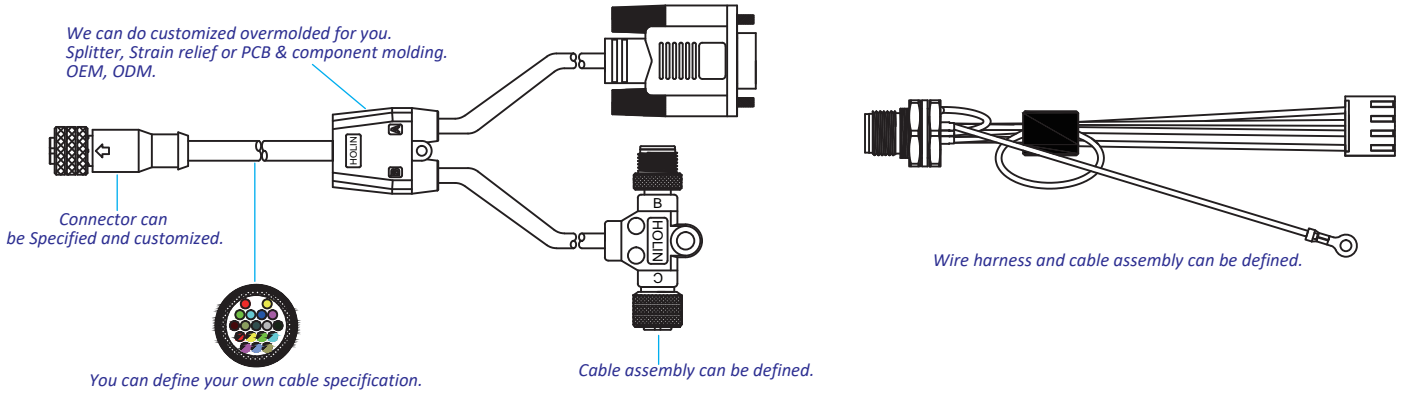


### Customized Designs to Production

Holin-Tech doesn't simply supply standard size products but manufacture industrial connector assemblies according to customer's requirements. We assist in the development of your new product from concept to design, tooling, prototyping, to finished product for your specific applications.

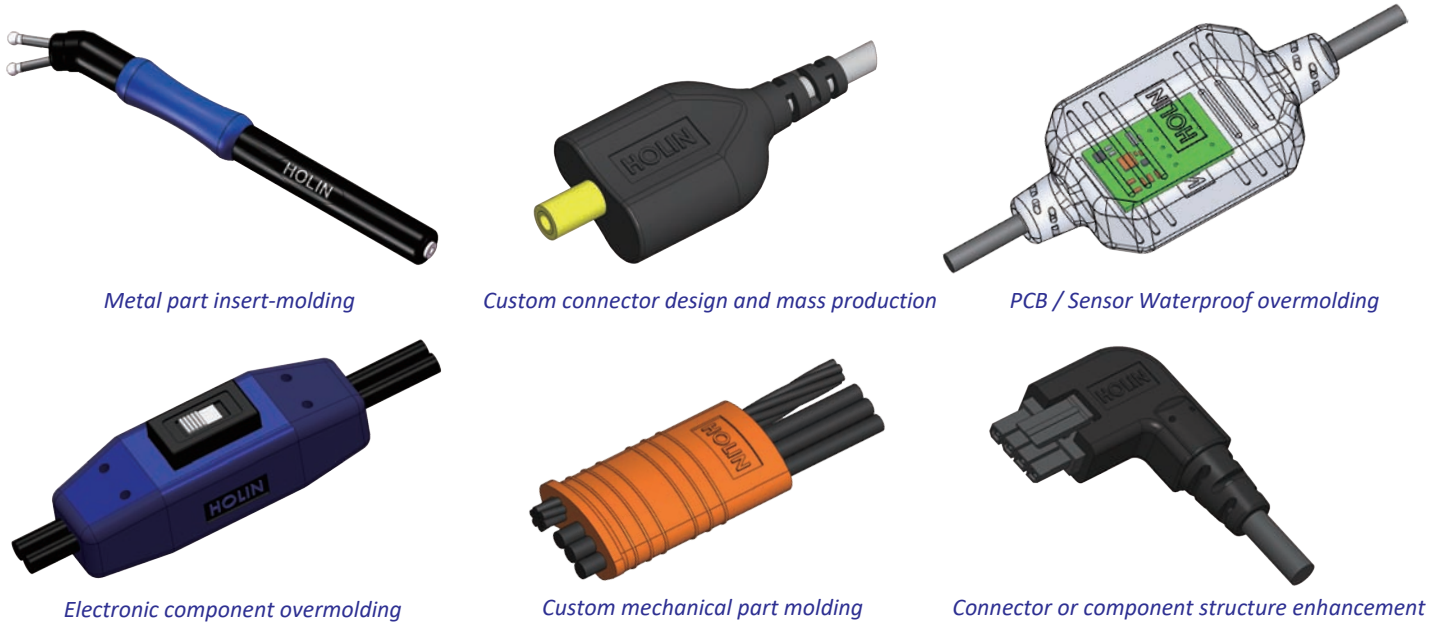
#### Custom Wire Harness & Molded-cable Manufacturing for Your Specific Applications

We specialize in custom harnesses for the widest diversity of cable and connector types, across the whole spectrum of industries. We built your unique Molded Cable Assemblies according to your specified shapes, sizes, pin configuration and cable materials to suit Ethernet, Automation, Marine, Transportation Applications...etc.



#### Custom Molding services for specific applications

In addition to the production of typical molded-cable assemblies, we also offer Custom Molding services, such as PCB waterproof molding, Sensor waterproof molding, Custom molding, Metal parts with Plastic injection molding, CNC Turned Parts & Pressed Metal Parts.



#### Electromechanical Box Builds and Assembly

Holin-Tech offers Customized waterproof junction box for power or signal, Outdoor weatherproof enclosure with pre-installed waterproof RJ45 / USB / HDMI connectors series.

Final assembly of the enclosure will generally include assembling a PCB into an enclosure, wiring the PCB to external connectors and power, final assembly testing and packaging.







## ▼ Certificate ▼



ISO 9001:2015



ISO 14001:2015



TUV

NOTICE OF COMPLETION  
AND  
AUTHORIZATION TO APPLY THE UL MARK



IPI ADDENDUM

November 27, 2017

HTP ASIA TECHNOLOGY CO LTD  
1 Alley 18 Lane 364  
Guangfu Rd  
Bade  
Taoyuan Hsien, 334 Taiwan

Our Reference: File E496758, Vol. 1      Order 12019713  
Your Reference:  
Project Scope: New file for wiring harness, UL+cUL, assembly type (MFR ac # 319741, Party site # 615984 - HTP ASIA TECHNOLOGY CO LTD)

UL Approved for Wiring Harness Manufacturing



Member of International Marine Electronics Association



IPC Member





## ▼ About us ▼

HTP Asia Technology Co., Ltd. (HOLIN-TECH) is a leading manufacturer and supplier specialized in Development, Manufacturer for High Quality Waterproof / Harsh Environment Connectors, Customized Cable Assemblies and Accessories. We are an ISO9001 & 14001 Certified Company.D&B D-U-N-S Registered Member, No.658689653.

Our IP66~68 Rating,RoHS Compliant Connector Series have been widely used for Electronic Interconnection, Signal/Data Networking, Automation Industry, Marine Field, Security Surveillance and Outdoor Lighting around the World. We look forward to having the opportunity to work with you.

### Our Capabilities & Services:

Waterproof Connector & Cable Ass'y, Industrial Wrie Harness, PCB Assembly, Design-in Assistance.

OEM/ODM and Complete Solution Services.

Mold / Tooling Making,Plastic Injection Products.

CNC Sheet Metal Housing for Custom Connector.

In-house Design and Custom Manufacturing ensures short Delivery Time.

Out-Sourcing for Related Parts and Assembling Service.

100% In House OQC Testing to Final Packaging & Logistic Assistance.

## ▼ M series Industrial Sensor Connectors ▼



- ▶ Overview -----Page 01
- ▶ M5 Size-----Page 03
- ▶ M8 Size-----Page 04
- ▶ M12 Size -----Page 09

## ▼ Waterproof Circular Connectors ▼



- ▶ Overview-----Page 17
- ▶ A-Size (7/16" -28 UNS) -----Page 20
- ▶ B-Size (5/8" -27 UNS) -----Page 21
- ▶ C-Size (13/16" -28 UNS) -----Page 22
- ▶ D-Size (1" -20 UNEF)-----Page 23
- ▶ E-Size (1 3/16" -20 UNS)-----Page 24
- ▶ P-Size (C16)-----Page 24

## ▼ Waterproof Industrial I/O Solution ▼



- ▶ USB2.0 / 3.0-----Page 26
- ▶ Mini / Micro USB --Page 27
- ▶ BNC -----Page 28
- ▶ RJ45 (C-size) -----Page 29
- ▶ RJ45 (D-size)-----Page 30
- ▶ HDMI A type-----Page 31
- ▶ HDMI C type-----Page 32





## Connector Type Overview

**Panel-Mounting Connectors**

- Hex Nut**  
Material: Brass, Nickel plated.  
Or Nylon + GF, UL Approved.
- Gasket or O-ring**
- Pin Type:** Solder Bucket / PCB DIP.  
Assembly or wire harness can be customized.
- Connector Housing**  
Material: Brass, Nickel plated.  
Or Nylon + GF, UL Approved.
- Connector Insert**  
Material: Nylon + GF, UL Approved.
- Pin**  
Material: Brass, gold plated 6u".  
Pin Gender: Female / Male.  
Pin Size and Arrangement can be customized.

**Overmolded Connector Assemblies**

- Pin**  
Material: Brass, gold plated 6u".  
Pin Gender: Female / Male.  
Pin Size and Arrangement can be customized.
- Connector Insert**  
Material: Nylon + GF, UL Approved.
- Coupling nut / Screw nut / Ring nut**  
Material: Brass, Nickel plated.  
Or Nylon + GF, UL Approved.
- Overmolded**  
Material: PUR, PVC, PE or customized.
- Cable**  
UL2464 Cable or customized.

**Accessories**

*Caps & Adaptors*

**Field-Attachable Connectors**

- Pin**  
Material: Brass, gold plated 6u".  
Pin Gender: Female / Male.  
Pin Size and Arrangement can be customized.
- Connector Insert**  
Material: Nylon + GF, UL Approved.
- Screw Nut**  
Material: Brass, Nickel plated.
- Hood**  
Material: Nylon, UL Approved.

## Specification

Connector Size	M5	M8	M12
IEC Standard	61076-2-105	61076-2-104	A, B, C, D, P coding: 61076-2-101 K, L, M, S, T coding: 61076-2-111 X coding: 61076-2-109
Coding	A	A, B, K	A, B, C, D, K, L, M, P, S, T, X
Number of Pins	3, 4	2, 3, 4, 5, 6, 7, 8	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
Rated Voltage	60V A.C or D.C	30V, 50V, 60V A.C or D.C	30V, 48V, 60V, 63V, 250V, 630V, 800V A.C or D.C
Rated Current	1A	1.5A, 3A	0.5A, 1.5A, 2A, 4A, 8A, 12A

Compact and Lightweight designed M-style connectors are well suited for withstand Harsh Industrial Environments, while providing reliable data and power transmission to automated machinery, they protect against dirt, water, vibration/shock and temperature extremes, Sealed to IP68 when mated.

Available in 3 industry standard sizes like the M5/5mm, M8/8mm and M12/12mm connectors.

M5 is for the Miniature Sensor, the product line offers 3 and 4 position cable cordsets and a range of panel-mounted receptacles.

The Compact and Reliable M8 system is Suitable for Industrial control Networks where Small Sensors and Actuators are Required. Available in A/B/K Coding.

The M12 connectors have a very high mechanical and electrical rigidity and are resistant against dirt and humidity, M12 offers many different cable connectors, panel mounted receptacles, field attachable connectors, M12 to RJ45 adapter, as well as its accessories.

Our M12 Series have Industry-Standard for various applications:

- A-code: used with sensors and actuators
- B-code: used with Fieldbus connections
- C-code: (dual keyway) Primarily used with AC sensors and actuators
- D-code: used with 100Mb Ethernet
- X-code: used with Gigabit-Ethernet
- P-Code: various other uses
- K, L, M, S, T code: High Power transmission for up to 12A. For DC or AC applications up to 800V.

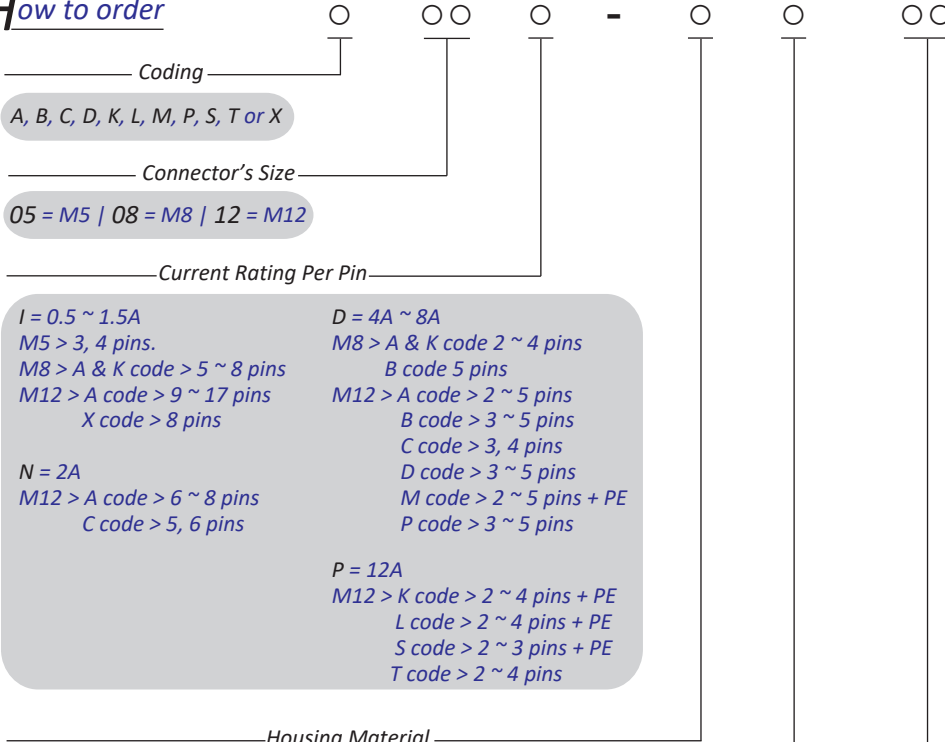
Field Installable M8 & M12 Connector, use to make custom patch cable from existing cables, turn a prewired sensor into a quick disconnect, Terminate field devices on an I/O Block.





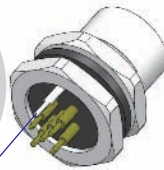


## How to order



**Housing Material**

M = Metal (Brass, Nickel Plated)  
S = Metal (Brass, Nickel Plated)  
Panel-Mounting Connector > Shielding Pin.  
Overmolded-Connector > With Shielding Cable.  
P = Plastic (Nylon + GF, UL Approval).



Shielding Pin

### Connector Gender

2 = Female

1 = Male



### Number of Pins

Size	Coding	Existing Number of Pins
M5	A	03, 04
M8	A	02, 03, 04, 05, 06, 07, 08
	B	05
	K	04, 05, 06, 07, 08
M12	A	02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17
	B	03, 04, 05
	C	03, 04, 05, 06
	D	03, 04, 05
	K	03(2+PE), 04(3+PE), 05(4+PE)
	L	03(2+PE), 04(3+PE), 05(4+PE)
	M	03(2+PE), 04(3+PE), 05(4+PE), 06(5+PE)
	P	03(2+PE), 04(3+PE), 05(4+PE)
	S	03(2+PE), 04(3+PE)
	T	02, 03, 04
	X	08

### Connector Type

#### Panel Side Connector

- HSR = Solder Bucket Pin, Rear Mounting, Hex Flange.
- HSF = Solder Bucket Pin, Front Mounting, Hex Flange.
- HPR = PCB Pin, Rear Mounting, Hex Flange.
- CSF = Solder Bucket Pin, Front Mounting, Circular Flange.
- CPF = PCB Pin, Front Mounting, Circular Flange.
- HPRR = R/A PCB Pin, Rear Mounting, Hex Flange.

#### Cable Size Connector

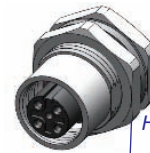
- SN = Straight Over-molded Connector.
- SM = Straight Over-molded Connector. (With Strain Relief)
- RN = R/A Over-molded Connector.
- SA = Field-Attachable Connector.



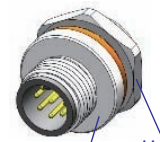
Solder Bucket Pin



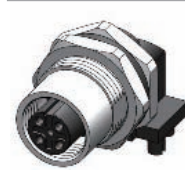
PCB Pin



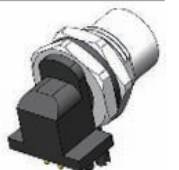
Hex Flange  
Hex Nut  
Rear Mounting



Hex Nut  
Circular Flange  
Hex Nut  
Front Mounting



R/A PCB pin  
Rear Mounting



Straight Over-Molded



R/A Over-Molded



Field-Attachable Connector



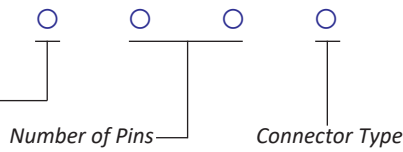


## M5 Ordering Code

P/N: A05I-M

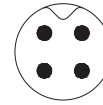
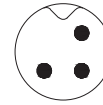
Connector Gender

2 = Female  
1 = Male

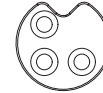


## Pin Assignment Front View

Male Pins



Female Pins



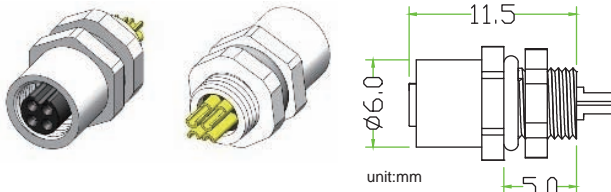
3 Pins  
1A

4 Pins  
1A

60V AC / 60V DC

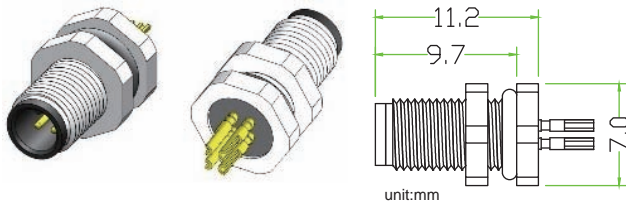
60V AC / 60V DC

## Panel-Mounting Connectors (M5)



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	05	I	M	2	03, 04	HSF

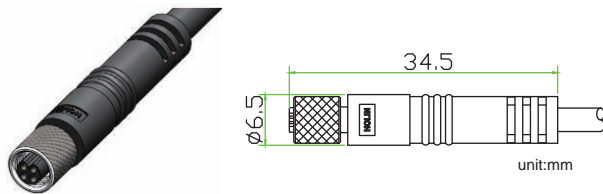
※ Front Mounting.  
※ HSF > Solder Bucket Pin.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	05	I	M	1	03, 04	HSR, HPR

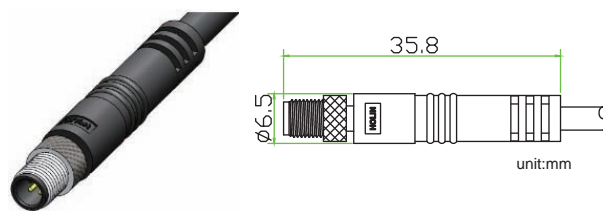
※ Rear Mounting.  
※ HSR > Solder Bucket Pin.  
※ HPR > PCB Pin.

## Overmolded Connectors (M5)



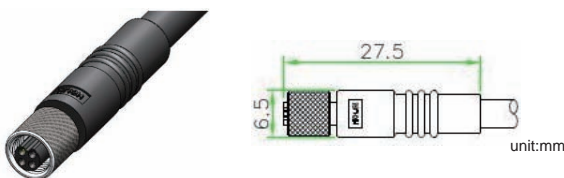
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	05	I	M	2	03, 04	SM

※ Overmolded with Strain Relief.  
※ Cable: UL2464 or Customized.



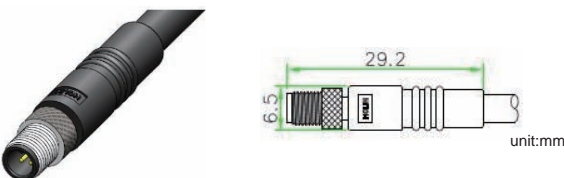
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	05	I	M	1	03, 04	SM

※ Overmolded with Strain Relief.  
※ Cable: UL2464 or Customized.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	05	I	M	2	03, 04	SN

※ Overmolded without Strain Relief.  
※ Cable: UL2464 or Customized.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	05	I	M	1	03, 04	SN

※ Overmolded without Strain Relief.  
※ Cable: UL2464 or Customized.

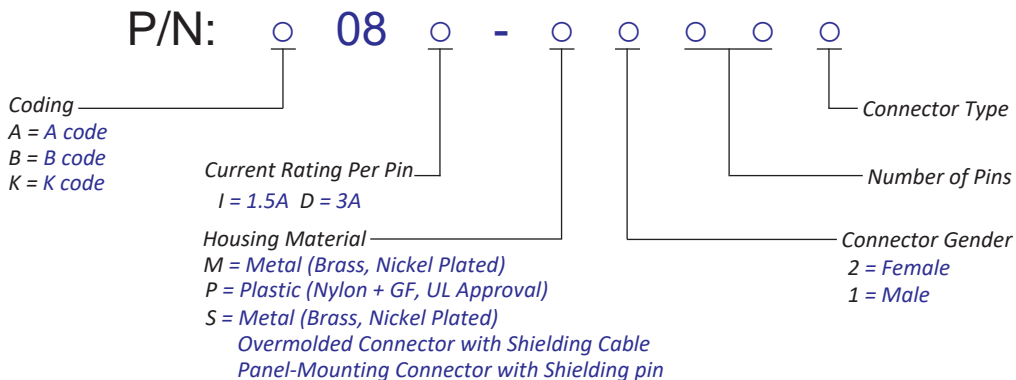


# HOLIN<sup>®</sup> M Series Sensor Connectors

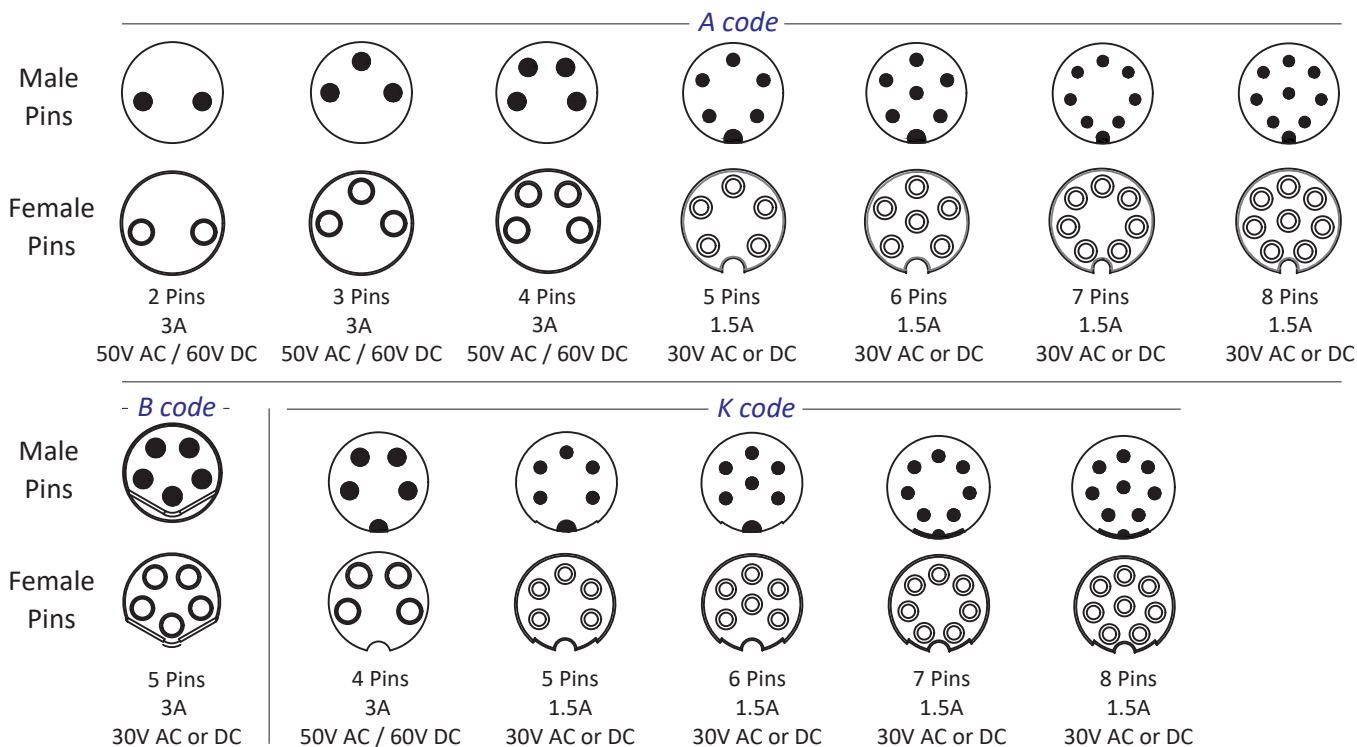
## IP66~68 Protection



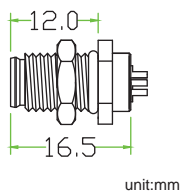
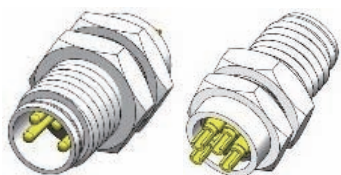
### M8 Ordering Code



### Pin Assignment Front View

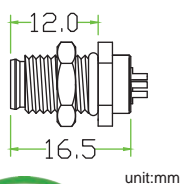


### Panel-Mounting Connectors (M8)



Part Number						
Coding	Connetor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M	1	02~08	HSR HPR

※ Rear Mounting.  
 ※ HSR > Solder Bucket Pin.  
 ※ HPR > PCB Pin.



Part Number						
Coding	Connetor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	P	1	02~08	HSR HPR

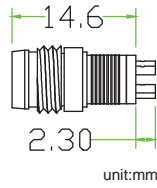
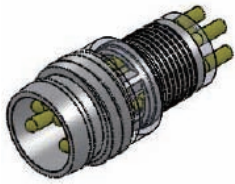
※ Rear Mounting.  
 ※ HSR > Solder Bucket Pin.  
 ※ HPR > PCB Pin.





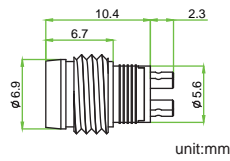
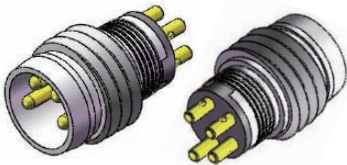


## Panel-Mounting Connectors (M8)



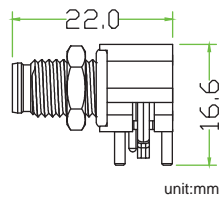
Part Number						
Coding	Connctor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	08	D	M	1	04	CS-L14.6

※ Front Mounting.  
※ LED assembly can be customized.



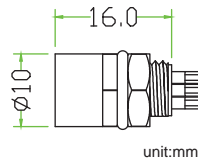
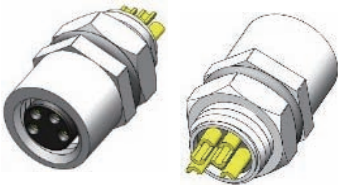
Part Number						
Coding	Connctor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	08	D	M	1	04	CS-L10.4 CP-L10.4

※ Front Mounting.  
※ CS-L10.4 > Solder Bucket Pin.  
※ CP-L10.4 > PCB Pin.



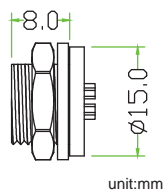
Part Number						
Coding	Connctor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	08	D	P	1	02~04	HPRR

※ Rear Mounting.  
※ HPRR > R/A PCB Pin.



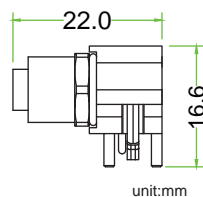
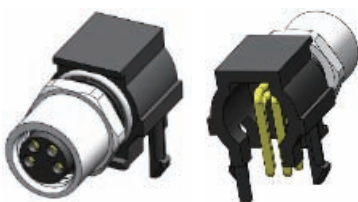
Part Number						
Coding	Connctor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M	2	02~08	HSF

※ Front Mounting.  
※ HSF > Solder Bucket Pin.



Part Number						
Coding	Connctor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M	2	02~08	CSR-12

※ Rear Mounting.  
※ CSR-12 > Solder Bucket Pin.



Part Number						
Coding	Connctor Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A	08	D	M	2	02~04	HPRR

※ Rear Mounting.  
※ HPRR > R/A PCB Pin.

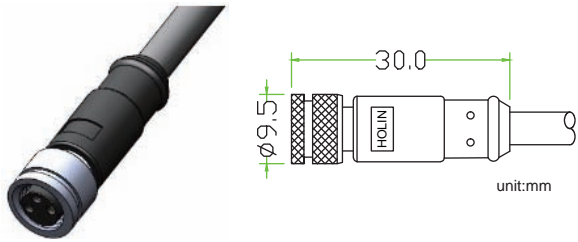


# HOLIN<sup>®</sup> M Series Sensor Connectors

## IP66~68 Protection

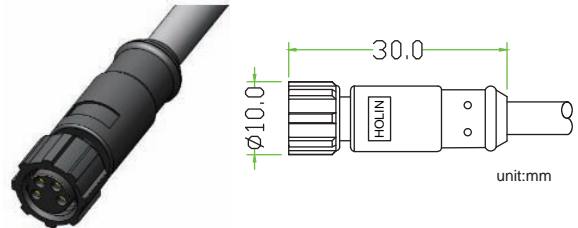


### Overmolded Connectors (M8)



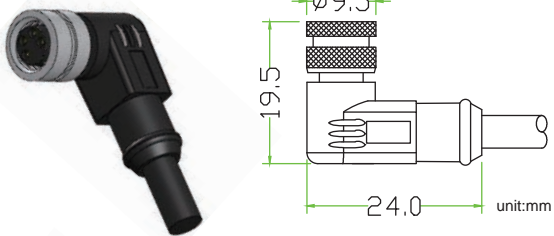
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M, S	2	02~08	SN

※ Cable: UL2464 cable or Customized.  
 ※ M > Cable without Shielding.  
 ※ S > Cable with Shielding.



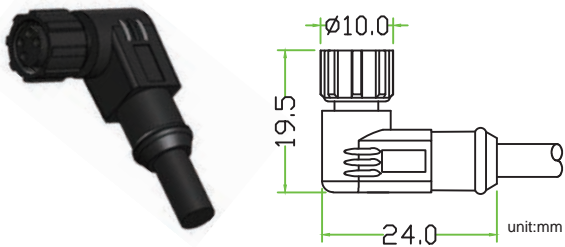
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	P	2	02~08	SN

※ Cable: UL2464 cable or Customized.  
 ※ P > Plastic Locking Nut.



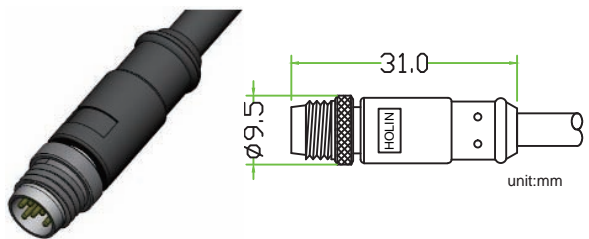
Part Number						
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A, B, K	08	I, D	M, S	2	02~08	RN

※ Cable: UL2464 cable or Customized.  
 ※ M > Cable without Shielding.  
 ※ S > Cable with Shielding.



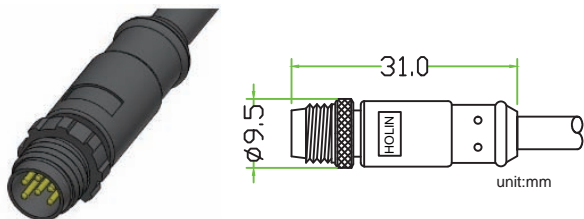
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	P	2	02~08	RN

※ Cable: UL2464 cable or Customized.  
 ※ P > Plastic Locking Nut.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M, S	1	02~08	SN

※ Cable: UL2464 cable or Customized.  
 ※ M > Cable without Shielding.  
 ※ S > Cable with Shielding.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	P	1	02~08	SN

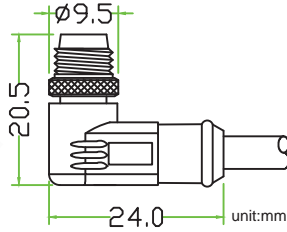
※ Cable: UL2464 cable or Customized.  
 ※ P > Plastic Locking Nut.



# HOLIN<sup>®</sup> M Series Sensor Connectors IP66~68 Protection

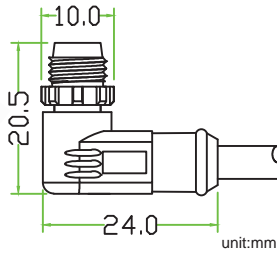


## Overmolded Connectors (M8)



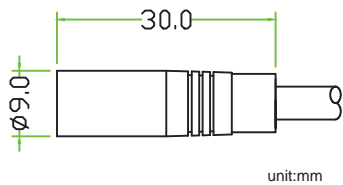
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M, S	1	02~08	RN

※ Cable: UL2464 cable or Customized.  
 ※ M > Cable without Shielding.  
 ※ S > Cable with Shielding.



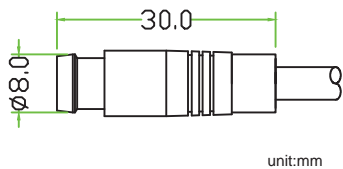
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	P	1	02~08	RN

※ Cable: UL2464 cable or Customized.  
 ※ P > Plastic Locking Nut.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	N	2	02~08	SN

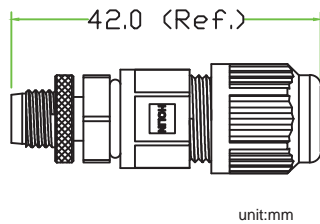
※ Cable: UL2464 cable or Customized.  
 ※ N > Plastic, Push & Pull Connection. (IP65 Only)



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	N	1	02~08	SN

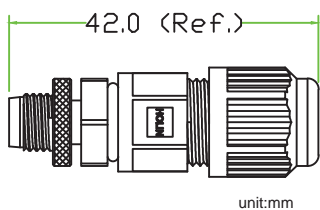
※ Cable: UL2464 cable or Customized.  
 ※ N > Plastic, Push & Pull Connection. (IP65 Only)

## Field-Attachable Connectors (M8)



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M	2	02~08	SA

UL US  
 ※ Suitable Cable OD: 2.5~6.0mm.  
 ※ UL approved for A code only.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, K	08	I, D	M	1	02~08	SA

UL US  
 ※ Suitable Cable OD: 2.5~6.0mm.  
 ※ UL approved for A code only.





# HOLIN<sup>®</sup> M Series Sensor Connectors IP66~68 Protection



## Accessories (M8)

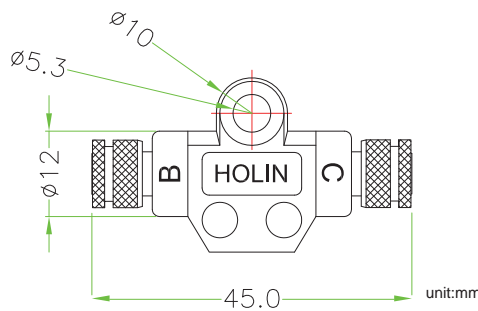


Waterproof Cap For Male Connectors.  
Material: Nylon + GF (UL Approval)

Waterproof Cap For Female Connectors.  
Material: Nylon + GF (UL Approval)

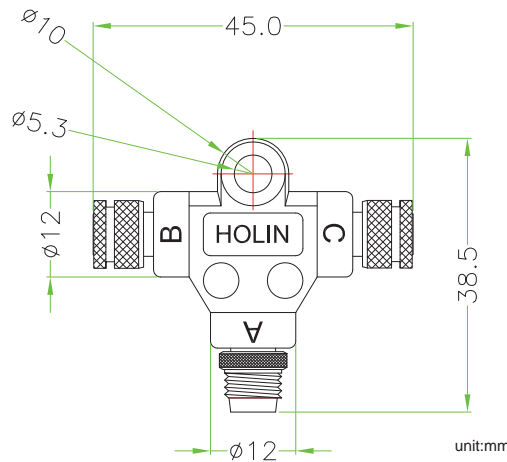


## I Adapter / Splitter



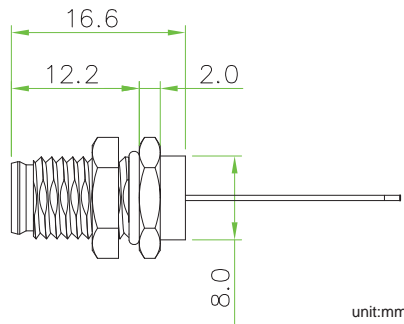
M8 I Adapter / Splitter  
Coding, Connector Gender and Pins  
can be Specified.

## T Adapter / Splitter



M8 T Adapter / Splitter  
Coding, Connector Gender and Pins  
can be Specified.

## Waterproof LED

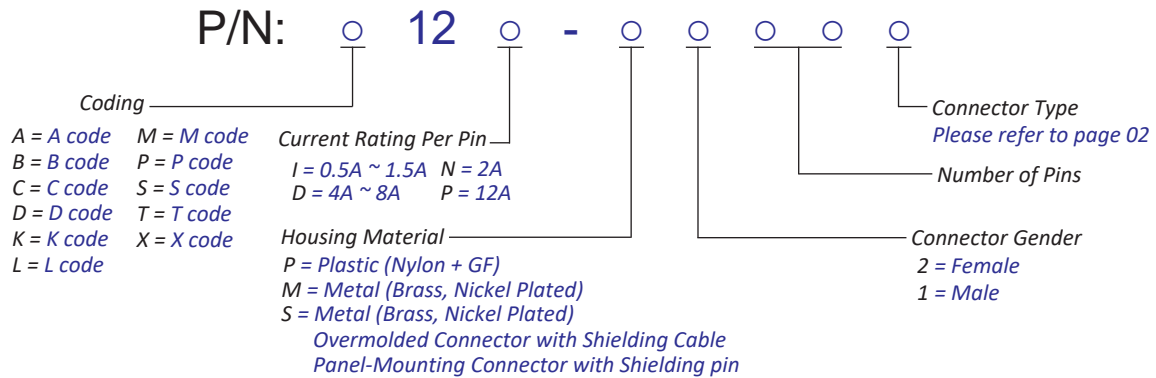


P/N: LED08-5RHSR  
LED can be specified.

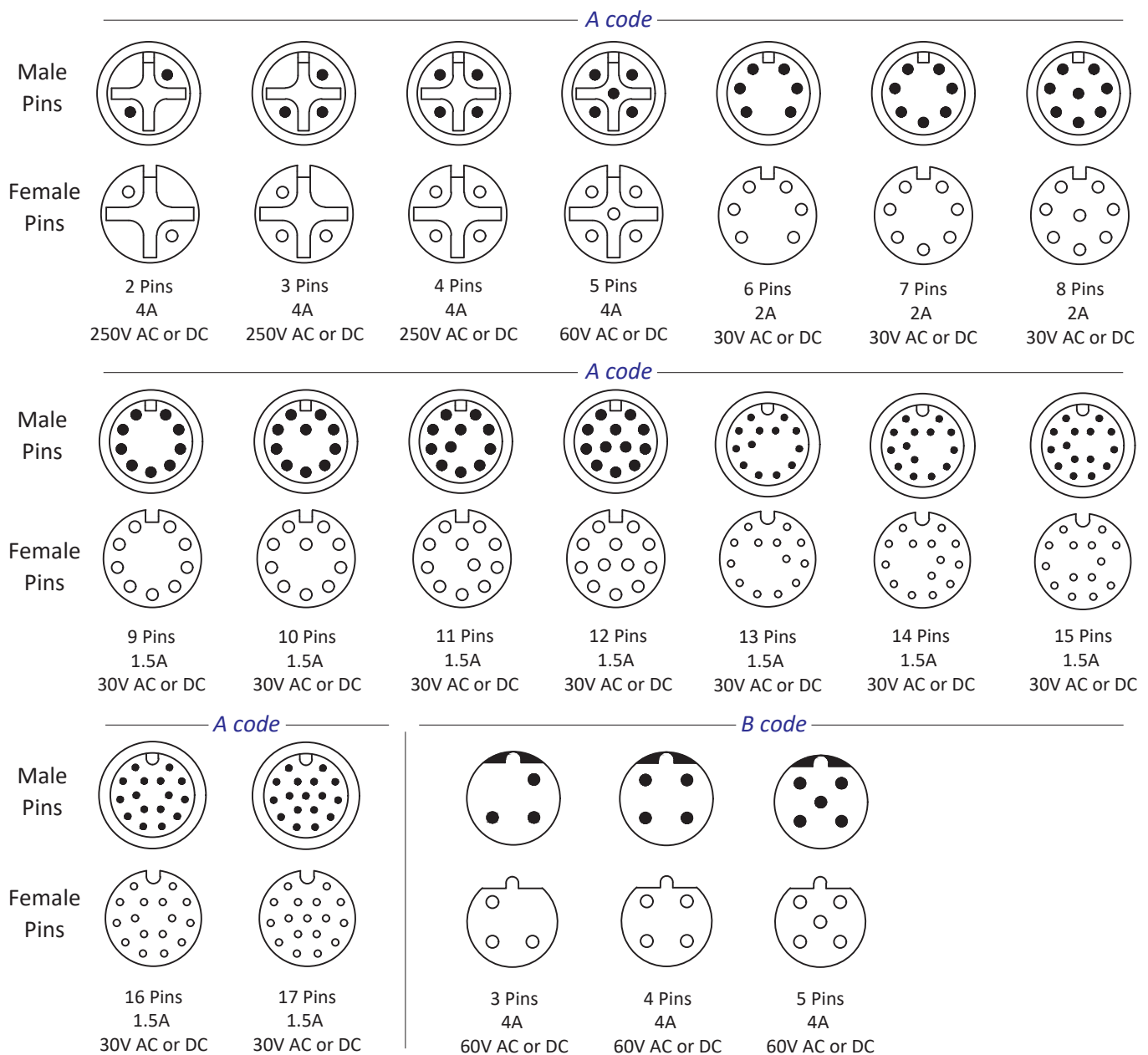




## M12 Ordering Code

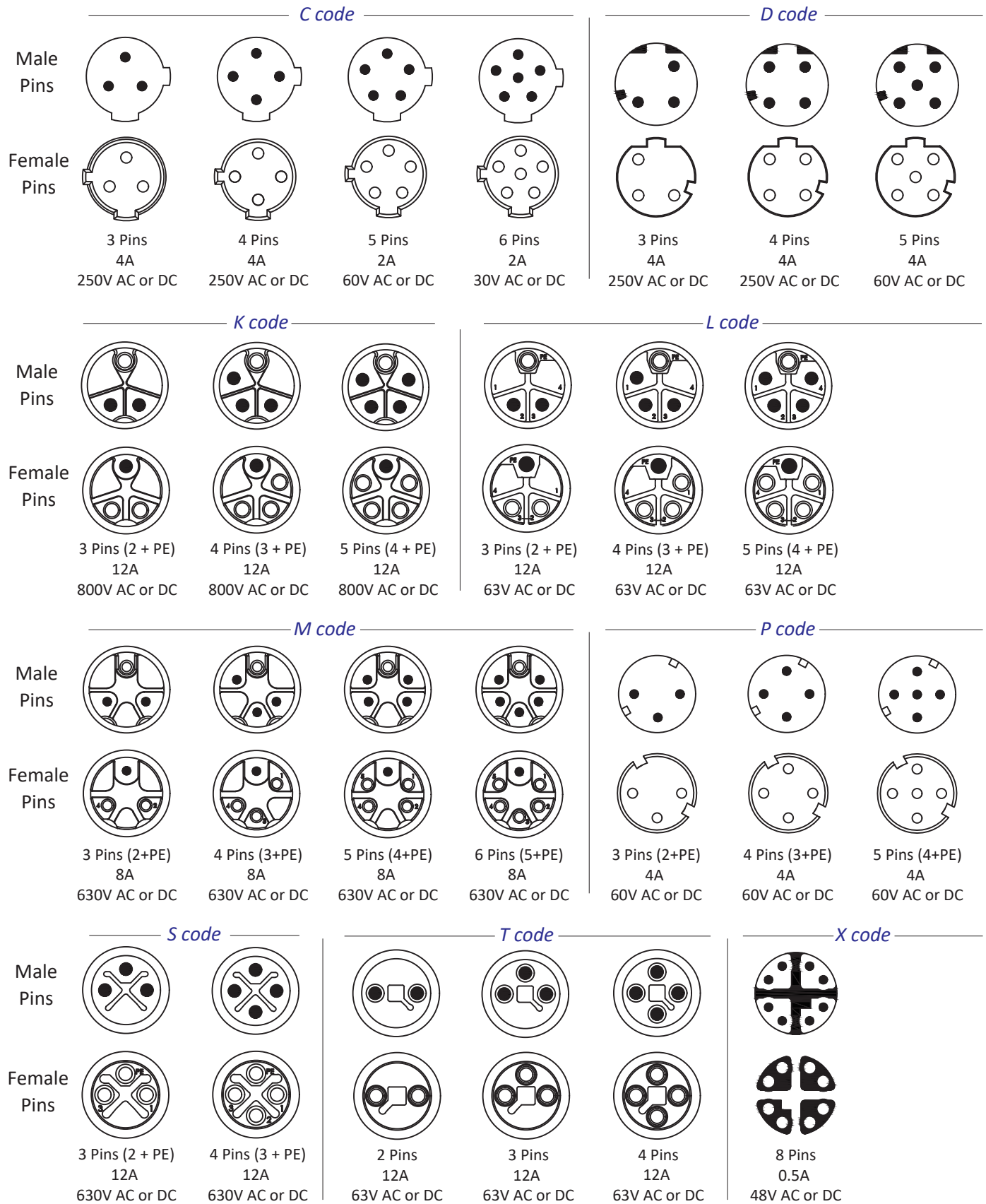


### Pin Assignment Front View





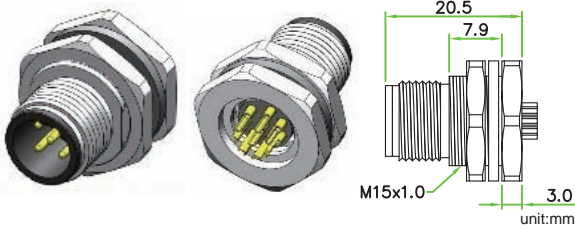
## M12 Pin Assignment Front View





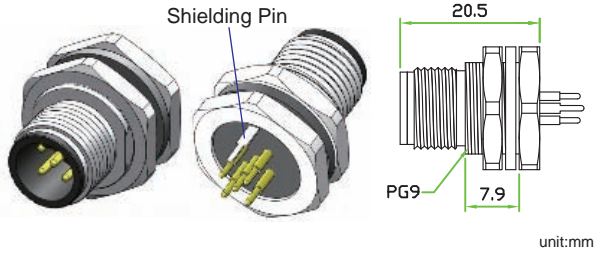


## Panel-Mounting Connectors (M12)



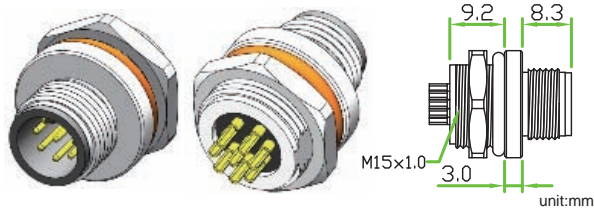
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M	1	02~17	HSR, HPR

※ Rear Mounting.  
 ※ HSR > Solder Bucket Pin.  
 ※ HPR > PCB Pin.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	S	1	02~17	HSR, HPR

※ Rear Mounting.  
 ※ S > PCB Pin with a Shielding Pin.



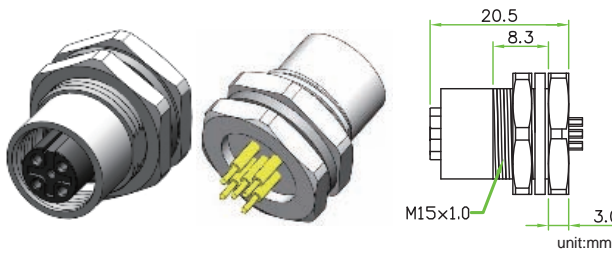
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M	1	02~17	CSF, CPF

※ Front Mounting.  
 ※ CSF > Solder Bucket Pin.  
 ※ CPF > PCB Pin.



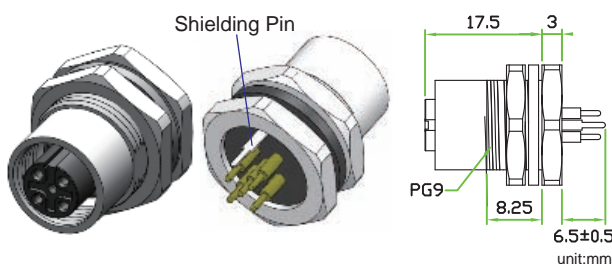
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	P	1	02~17	HSR, HPR

※ Rear Mounting.  
 ※ P > Plastic Housing.  
 ※ HSR > Solder Bucket Pin.  
 ※ HPR > PCB Pin.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M	2	02~17	HSR, HPR

※ Rear Mounting.  
 ※ HSR > Solder Bucket Pin.  
 ※ HPR > PCB Pin.



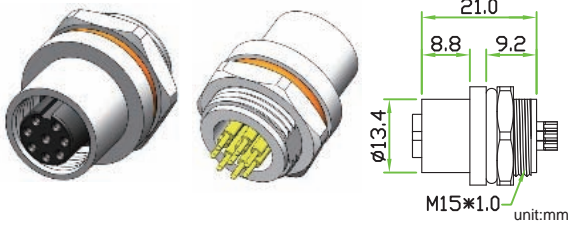
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	S	2	02~17	HPR

※ Rear Mounting.  
 ※ S > PCB Pin with a Shielding Pin.



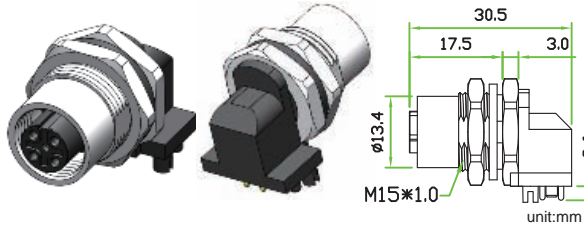


### Panel-Mounting Connectors (M12)



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, C, D, K, L M, P, S, T, X	12	I, N, D, P	M	2	02~17	CSF, CPF

- ※ Front Mounting.
- ※ CSF > Solder Bucket Pin.
- ※ CPF > PCB Pin.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, D	12	D	M	2	03~05	HPRR

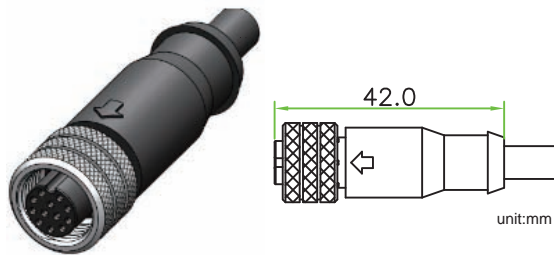
- ※ Rear Mounting.
- ※ HPRR > Right Angle PCB Pin.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, C, D, K, L M, P, S, T, X	12	I, N, D, P	P	2	02~17	HSR, HPR

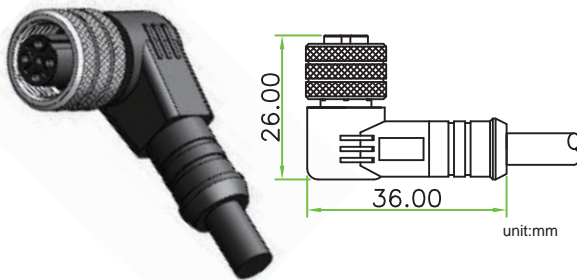
- ※ Rear Mounting.
- ※ P > Plastic Housing.
- ※ HSR > Solder Bucket Pin.
- ※ HPR > PCB Pin.

### Overmolded Connectors (M12)



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, C, D, K, L M, P, S, T, X	12	I, N, D, P	M, S	2	02~17	SN

- ※ Cable: UL2464 cable or Customized.
- ※ M > Cable without Shielding.
- ※ S > Cable with Shielding.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, B, C, D, K, L M, P, S, T, X	12	I, N, D, P	M, S	2	02~17	RN

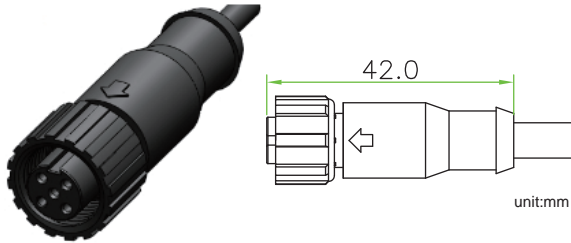
- ※ Connector's key direction can be specified.
- ※ Cable: UL2464 cable or Customized.
- ※ M > Cable without Shielding.
- ※ S > Cable with Shielding.



# HOLIN<sup>®</sup> M Series Sensor Connectors IP66~68 Protection

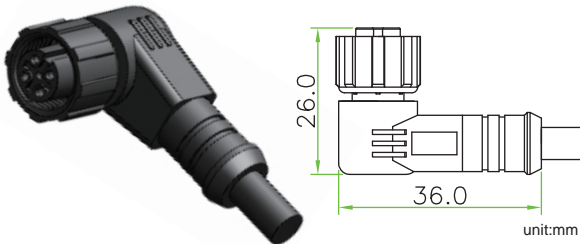


## Overmolded Connectors (M12)



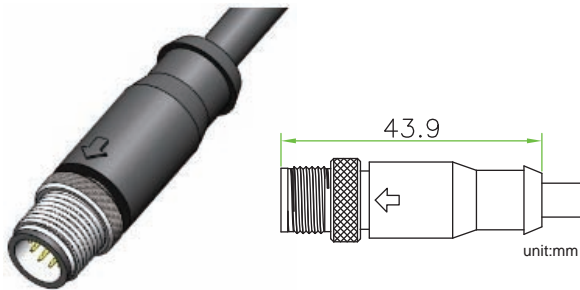
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	P	2	02~17	SN

※ Cable: UL2464 cable or Customized.  
※ P > Plastic Ring Nut.



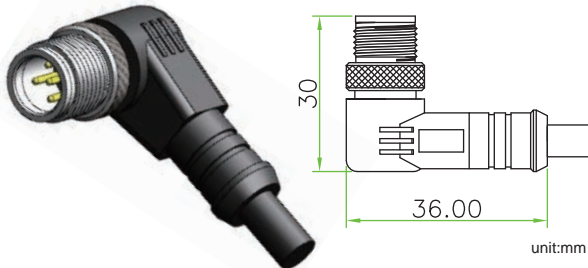
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	P	2	02~17	RN

※ Connector's key direction can be specified.  
※ Cable: UL2464 cable or Customized.  
※ P > Plastic Ring Nut.



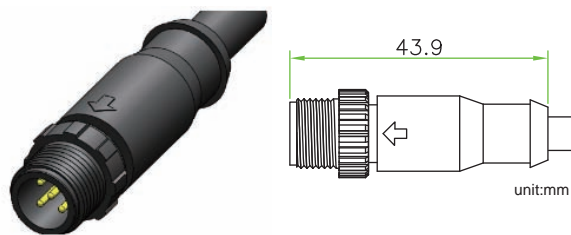
Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M, S	1	02~17	SN

※ Cable: UL2464 cable or Customized.  
※ M > Cable without Shielding.  
※ S > Cable with Shielding.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M, S	1	02~17	RN

※ Connector's key direction can be specified.  
※ Cable: UL2464 cable or Customized.  
※ M > Cable without Shielding.  
※ S > Cable with Shielding.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	P	1	02~17	SN

※ Cable: UL2464 cable or Customized.  
※ P > Plastic Ring Nut.



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	P	1	02~17	RN

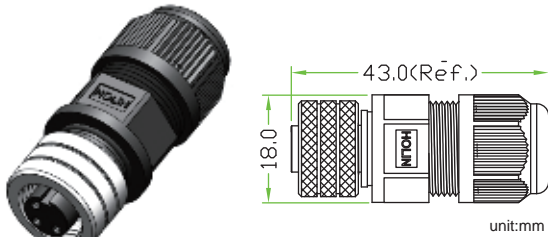
※ Connector's key direction can be specified.  
※ Cable: UL2464 cable or Customized.  
※ P > Plastic Ring Nut.





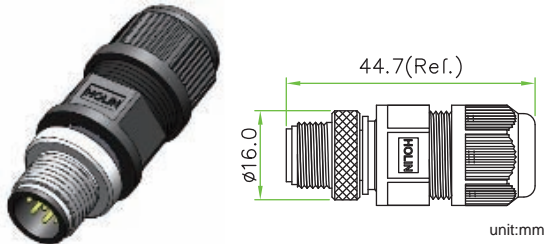


### Field-Attachable Connectors (M12)



Part Number							
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type	
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M	2	02~17	SA	

※ Suitable Cable OD: 3.0~8.0 or 9.0mm.



Part Number							
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type	
A,B,C,D,K,L M,P,S,T,X	12	I, N, D, P	M	1	02~17	SA	

※ Suitable Cable OD: 3.0~8.0 or 9.0mm.

### Accessories (M12)



P/N: 12P-WCAP-MA  
Waterproof Cap For Male Connectors.  
Material: Nylon + GF (UL Approval)



P/N: 12P-WCAP-MB  
Waterproof Cap For Male Connectors. Chain for hanging on Panel Mounting Connector.  
Material of Cap: Nylon + GF (UL Approval).  
Material of Chain: Rubber.



P/N: 12P-WCAP-MC  
Waterproof Cap For Male Connectors. Chain for M3 Screw.  
Material of Cap: Nylon + GF (UL Approval).  
Material of Chain: Rubber.



P/N: 12P-WCAP-FA  
Waterproof Cap For Female Connectors.  
Material: Nylon + GF (UL Approval)



P/N: 12P-WCAP-FB  
Waterproof Cap For Female Connectors. Chain for hanging on Panel Mounting Connector.  
Material of Cap: Nylon + GF (UL Approval).  
Material of Chain: Rubber.



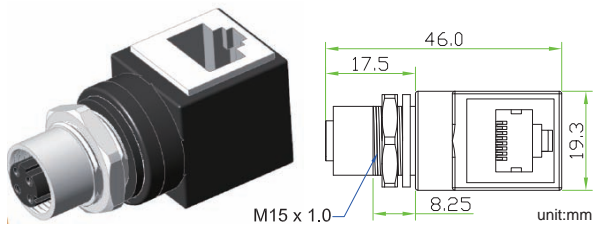
P/N: 12P-WCAP-FC  
Waterproof Cap For Female Connectors. Chain for M3 Screw.  
Material of Cap: Nylon + GF (UL Approval).  
Material of Chain: Rubber.





### Accessories (M12)

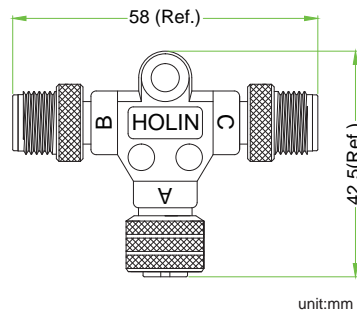
#### M12 to RJ45 Adaptor



Part Number						
Coding	Connector Size	Rated Current	Housing Material	Connector Gender	Number of Pins	Connector Type
A, D, X	12	IRJI	M	2	03~08	RJ

※ Pin connection can be specified.

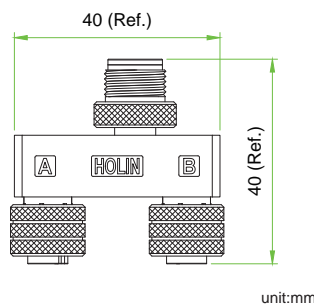
#### T Adapter / Splitter



M12 T Adapter / Splitter

Coding, Connector Gender and Pins can be Specified.

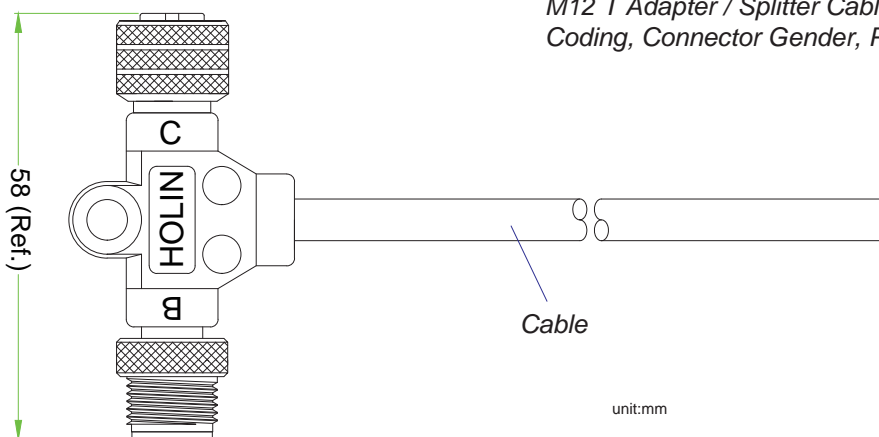
#### Y Adapter / Splitter



M12 Y Adapter / Splitter

Coding, Connector Gender and Pins can be Specified.

#### T Adapter / Splitter Cable Assembly



M12 T Adapter / Splitter Cable Assembly.

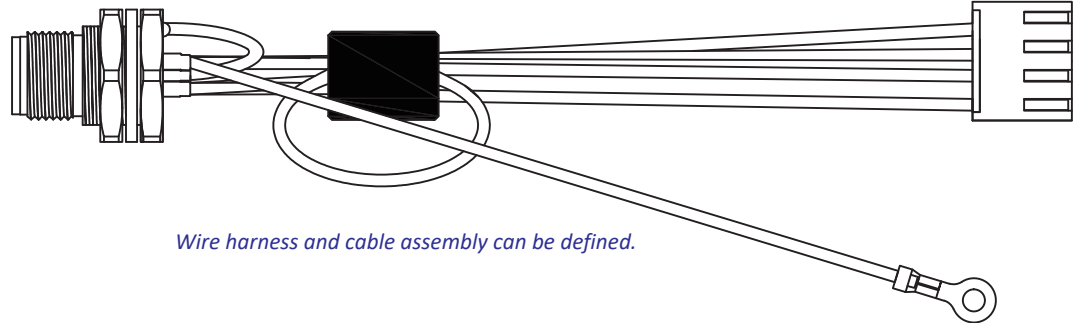
Coding, Connector Gender, Pins and Cable spec can be Specified.



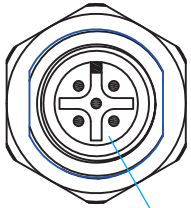


*Specified your own Industrial Sensor Connectors*

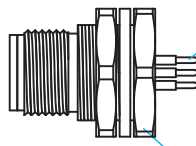
### Panel-Mounting Connector



*Wire harness and cable assembly can be defined.*

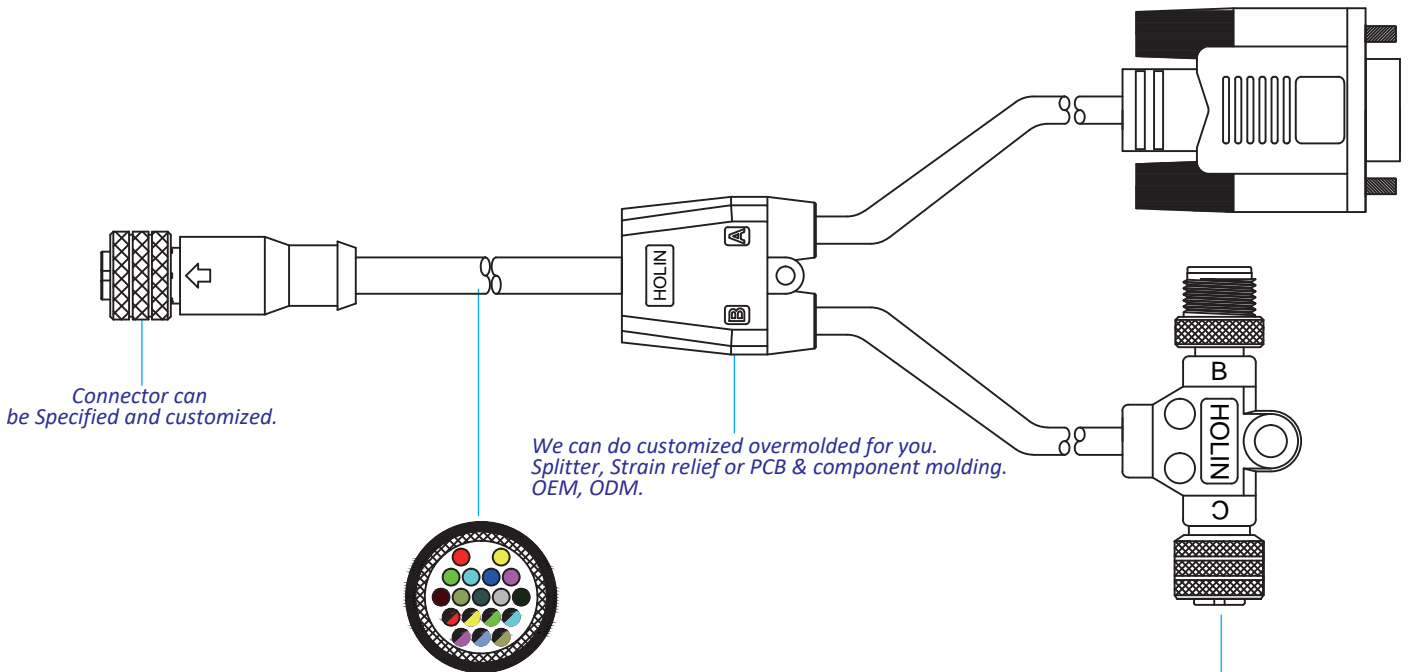


*Pin Arrangement, Coding, Combination  
Can be Customized.*



*PCB Pin Dimension can be Customized.  
Connector's Body Shape Can be Customized.*

### Molded Cable Assemblies



*Connector can be Specified and customized.*

*We can do customized overmolded for you.  
Splitter, Strain relief or PCB & component molding.  
OEM, ODM.*



*UL2464 Cable or Customized Specification.  
You can define your own cable specification.*

*Cable assembly can be defined.*

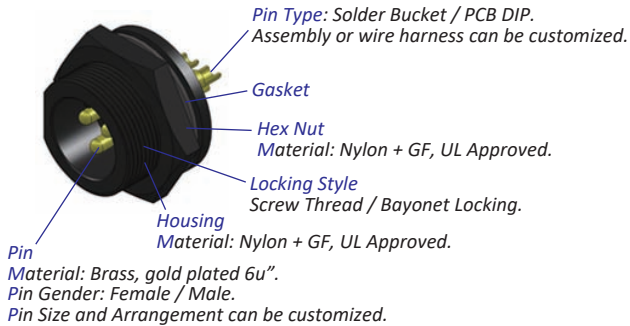






## Connector Type Overview

### Panel-Mounting Connectors



### Overmolded Connector Assemblies



### Accessories

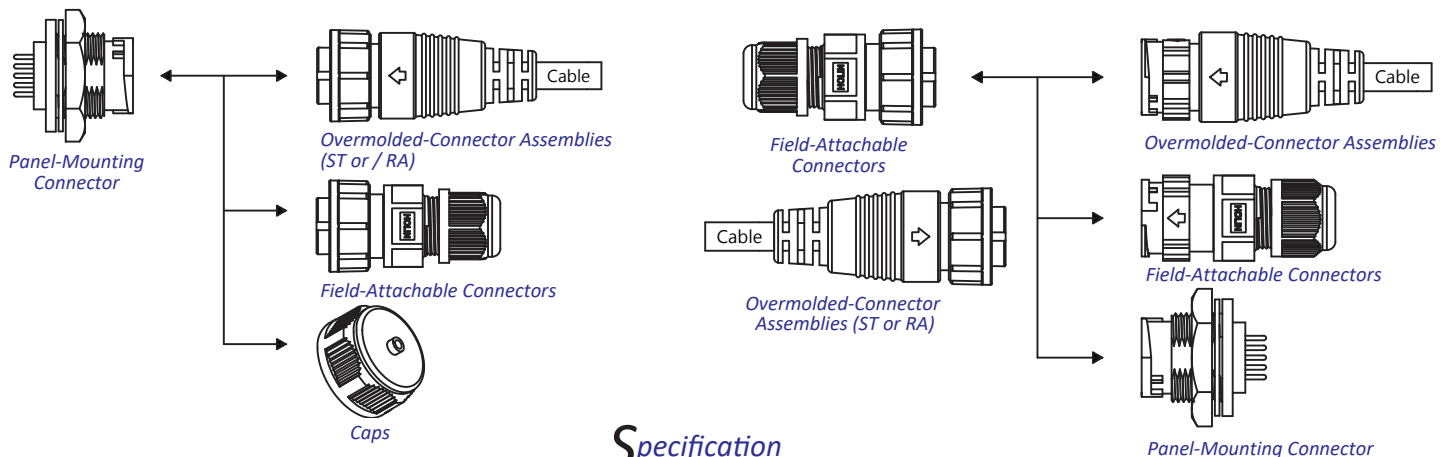


**Caps**  
Waterproof Cap  
Material: Nylon + GF, UL Approved.

### Field-Attachable Connectors



## Connector Mating Parts Overview



## Specification

Our IP66~68 Rating Circular Connectors are designed to meet the high requirements of Industrial Applications under Harsh Environmental Conditions. Feature Waterproof, Dust Tight, Environmental Sealing, Anti-Vibration. Complete A/B/C/D/E/P sizes, available with Panel Chassis Mount Cable side, Overmolding or Field Attachable, Straight or Angled to meet wide range of Applications.

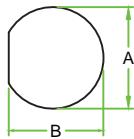
Waterproof Rating	IP66~68
Temperature Range	Panel-Mounting Connector: -40°C ~ 105°C Overmolded Connector: -20°C ~ 80°C Field-Attachable Connector: -40°C ~ 105°C
Contact Resistance	≤10mΩ
Insulation Resistance	≥100MΩ at DC500V
Durability	1000 cycles
Breakdown Voltage	≥AC 1,000V 1 minute. ≥ 500V / 1 minute (1.5~5A)



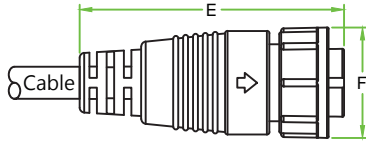


## Connector's Dimension Overview

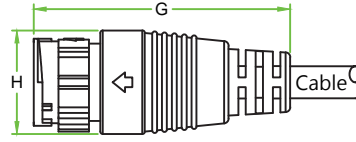
Recommended Panel-Cut out



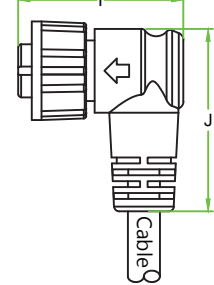
Overmolded-Connector Assemblies (Female Socket)



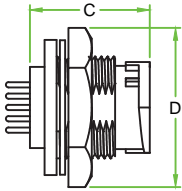
Overmolded-Connector Assemblies (Male Socket)



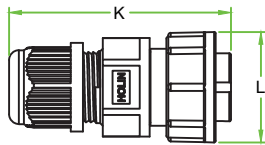
Overmolded-Connector Assemblies (Female Socket)



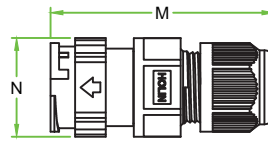
Panel-Mounting Connectors (Male Socket)



Field-Attachable Connectors (Female Socket)



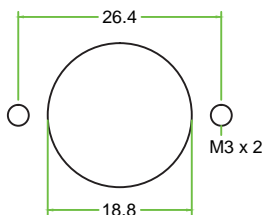
Field-Attachable Connectors (Male Socket)



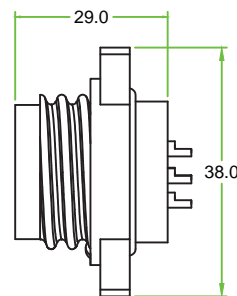
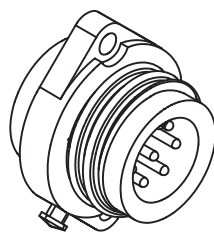
		Dimension (Reference), Unit: mm.													
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
Connector Size	A-Size	11.1	10.0	18.4	18.0	36.5	14.6	36.0	13.5	32.2	23.3	44.5	14.6	41.4	13.5
	B-Size	15.5	14.6	18.0	23.9	55.4	20.0	53.2	16.5	33.6	38.5	48.0	20.0	46.2	15.3
	C-Size	20.5	19.1	16.9	29.4	54.0	25.5	52.0	21.0	N/A		45.0	25.5	45.5	20.0
	D-Size	25.6	23.7	17.9	33.2	59.2	28.5	57.3	26.2	46.2	48.5	54.0	28.5	54.5	25.4
	E-Size	30.0	29.0	17.5	40.0	69.3	36.0	N/A							

### Dimension of P-Size

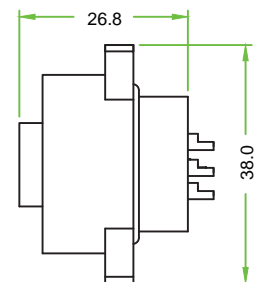
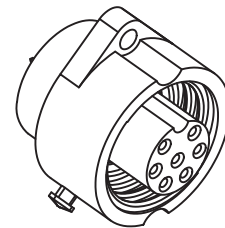
Recommended Panel-Cut out



Panel-Mounting Connectors (Male Socket)



Panel-Mounting Connectors (Female Socket)

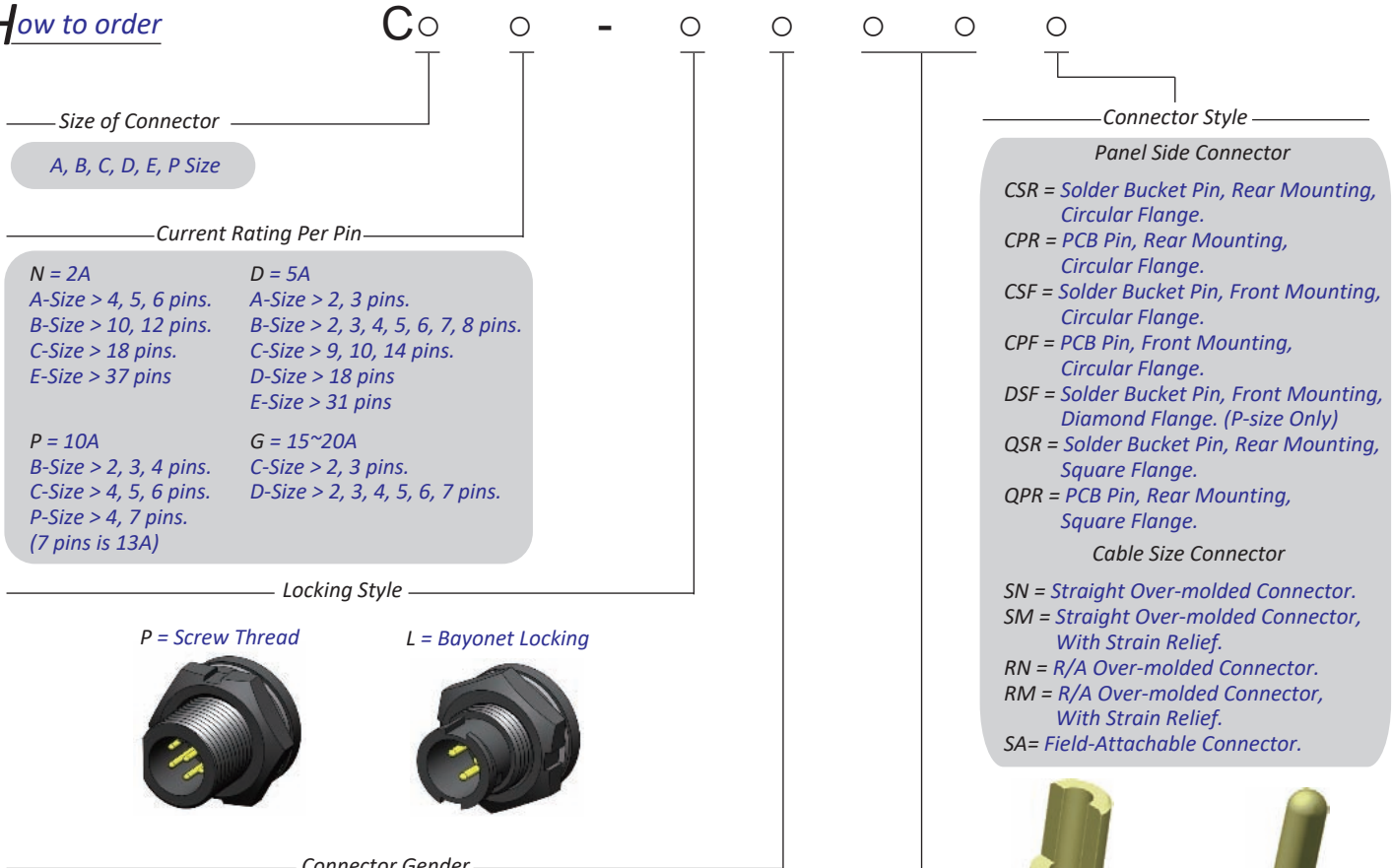


		Dimension (Reference), Unit: mm.										
		Panel-Mounting Connector										
		E	F	G	H	I	J	K	L	M	N	
Connector Size	P-Size	Please Check Dimension of C16	56.1	30.0	57.0	29.4	N/A		61.0	30.0	60.0	29.4





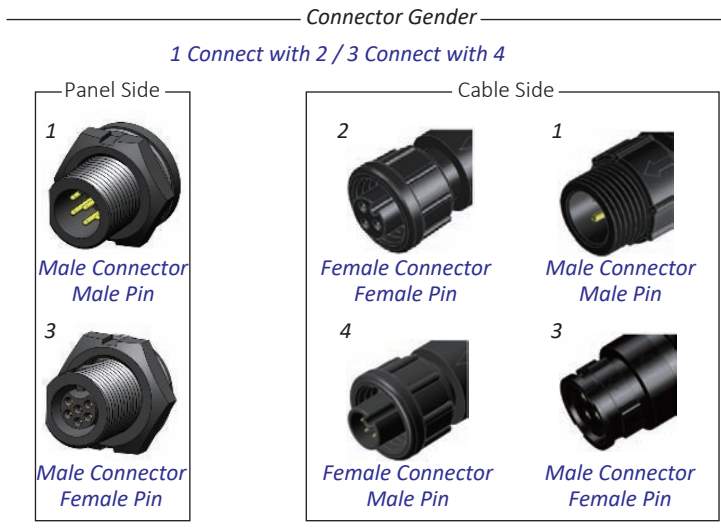
## How to order



Size of Connector  
A, B, C, D, E, P Size

Current Rating Per Pin

N = 2A	D = 5A
A-Size > 4, 5, 6 pins.	A-Size > 2, 3 pins.
B-Size > 10, 12 pins.	B-Size > 2, 3, 4, 5, 6, 7, 8 pins.
C-Size > 18 pins.	C-Size > 9, 10, 14 pins.
E-Size > 37 pins	D-Size > 18 pins
	E-Size > 31 pins
P = 10A	G = 15~20A
B-Size > 2, 3, 4 pins.	C-Size > 2, 3 pins.
C-Size > 4, 5, 6 pins.	D-Size > 2, 3, 4, 5, 6, 7 pins.
P-Size > 4, 7 pins. (7 pins is 13A)	



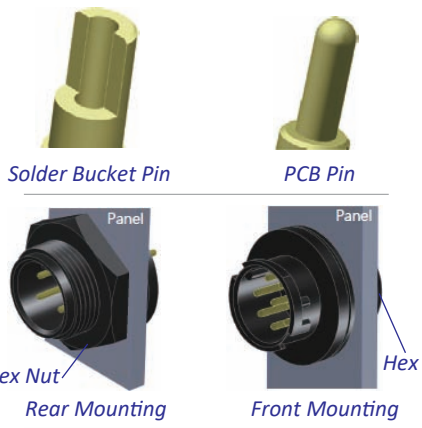
Connector Style

Panel Side Connector

CSR = Solder Bucket Pin, Rear Mounting, Circular Flange.  
CPR = PCB Pin, Rear Mounting, Circular Flange.  
CSF = Solder Bucket Pin, Front Mounting, Circular Flange.  
CPF = PCB Pin, Front Mounting, Circular Flange.  
DSF = Solder Bucket Pin, Front Mounting, Diamond Flange. (P-size Only)  
QSR = Solder Bucket Pin, Rear Mounting, Square Flange.  
QPR = PCB Pin, Rear Mounting, Square Flange.

Cable Size Connector

SN = Straight Over-molded Connector.  
SM = Straight Over-molded Connector, With Strain Relief.  
RN = R/A Over-molded Connector.  
RM = R/A Over-molded Connector, With Strain Relief.  
SA = Field-Attachable Connector.



Size	Existing Number of Pins
A	2, 3, 4, 5, 6.
B	2, 3, 4, 5, 6, 7, 8, 10, 12, Hybrid (PWR + Signal).
C	2, 3, 4, 5, 6, 9, 10, 12, 14, 18.
D	2, 3, 4, 5, 6, 7, 18, Hybrid (PWR + Signal).
E	31, 37.
P	4, 7.

#. Pin Can be customized.







## A Size Connector's Overview

Part Number:	CA	○	-	○	○	○○	○
Connector Type	Size	Current Rating		Locking Style	Connector Gender	Number of Pins	Connector Type
Panel-Mounting	A-Size	N, D		P, L	1, 3	02, 03, 04, 05, 06	CSR, CPR, QSR, QPR, CSF, CPF
Over-molded					1, 2, 3, 4		SN, RN
Field-Attachable					1, 2, 3, 4		SA

N = 2A > 4, 5, 6 Pins  
D = 5A > 2, 3 Pins

P = Screw Thread  
L = Bayonet Locking

**Rear Mounting:**  
 CSR = Circular Flange, Solder Bucket Pin.  
 CPR = Circular Flange, PCB Pin.  
 QSR = Square Flange, Solder Bucket Pin.  
 QPR = Square Flange, PCB Pin.

**Front Mounting:**  
 CSF = Circular Flange, Solder Bucket Pin.  
 CPF = Circular Flange, PCB Pin.

SN = Straight Over-molded Connector.  
 RN = R/A Over-molded Connector.  
 SA = Field-Attachable Connector.

Connector Gender: 1 (connect with 2)

Male Connector, Male Pin > CAx-x1xxxx					
Number of Pins	02	03	04	05	06
Pin Assignment Front View					
Current Rating Per Pin	5A	5A	2A	2A	2A

Connector Gender: 2 (connect with 1)

Female Connector, Female Pin > CAx-x2xxxx					
Number of Pins	02	03	04	05	06
Pin Assignment Front View					
Current Rating Per Pin	5A	5A	2A	2A	2A

Connector Gender: 3 (connect with 4)

Male Connector, Female Pin > CAx-x3xxxx					
Number of Pins	02	03	04	05	06
Pin Assignment Front View					
Current Rating Per Pin	5A	5A	2A	2A	2A

Connector Gender: 4 (connect with 3)

Female Connector, Male Pin > CAx-x4xxxx					
Number of Pins	02	03	04	05	06
Pin Assignment Front View					
Current Rating Per Pin	5A	5A	2A	2A	2A





## B Size Connector's Overview

Part Number:	CB	○	-	○	○	○○	○
Connector Type	Size	Current Rating	Locking Style		Connector Gender	Number of Pins	Connector Type
Panel-Mounting	B-Size	N, D, P, PD	P, L		1, 3	02, 03, 04, 05, 06, 07, 08, 10, 12, 24 = Hybrid 2 + 4 pins	CSR, CPR, CSF, CPF
Over-molded					1, 2, 3, 4		SN, SM, RM
Field-Attachable					1, 2, 3, 4		SA

N = 2A > 10, 12 Pins  
 D = 5A > 2, 3, 4, 5, 6, 7, 8 Pins  
 P = 10A > 2, 3, 4 Pins  
 PD = 10A x 2 + 5A x 4 Pins  
 Hybrid 2 + 4 pins.

P = Screw Thread  
 L = Bayonet Locking

CSR = Solder Bucket Pin, Rear Mounting.  
 CPR = PCB Pin, Rear Mounting.  
 CSF = Solder Bucket Pin, Front Mounting.  
 CPF = PCB Pin, Front Mounting.

SN = Straight Over-molded Connector.  
 SM = Straight Over-molded Connector.  
 With Strain Relief.  
 RM = R/A Over-molded Connector.  
 With Strain Relief.  
 SA = Field-Attachable Connector.

### Connector Gender: 1 (Connect with 2)

Male Connector, Male Pin > CBx-x1xxx						
Number of Pins	02	03	04	03	04	04
Pin Assignment Front View						
Current Rating Per Pin	10A	10A	10A	5A	5A	5A
Number of Pins	05	06	07	08	10	12
Pin Assignment Front View						
Current Rating Per Pin	5A	5A	5A	5A	2A	2A

### Connector Gender: 2 (Connect with 1)

Female Connector, Female Pin > CBx-x2xxx						
Number of Pins	02	03	04	03	04	04
Pin Assignment Front View						
Current Rating Per Pin	10A	10A	10A	5A	5A	5A
Number of Pins	05	06	07	08	10	12
Pin Assignment Front View						
Current Rating Per Pin	5A	5A	5A	5A	2A	2A

### Connector Gender: 3 (Connect with 4)

Male Connector, Female Pin > CBx-x3xxx									
Number of Pins	02	03	04	02	03	04	05	06	24 (2+4)
Pin Assignment Front View									
Current Rating Per Pin	10A	10A	10A	5A	5A	5A	5A	5A	10A + 5A

### Connector Gender: 4 (Connect with 3)

Female Connector, Male Pin > CBx-x4xxx										
Number of Pins	02	03	04	02	03	04	05	06	24 (2+4)	
Pin Assignment Front View										
Current Rating Per Pin	10A	10A	10A	5A	5A	5A	5A	5A	10A + 5A	





### Size Connector's Overview

Part Number:	CB	○	-	○	○	○○	○
Connector Type	Size	Current Rating		Locking Style	Connector Gender	Number of Pins	Connector Type
Panel-Mounting	C-Size	N, D, P, G	P, L		1, 3	02, 03, 04, 05, 06, 09, 10, 12, 14, 18	CSR, CPR, CSF, CPF
Over-molded					1, 2, 3, 4		SN, SM, RM
Field-Attachable					1, 2, 3, 4		SA

N = 2A > 18 Pins  
 D = 5A > 9, 10, 12, 14 Pins  
 P = 10A > 4, 5, 6 Pins  
 G = 20A > 2, 3 Pins

P = Screw Thread  
 L = Bayonet Locking

CSR = Solder Bucket Pin, Rear Mounting. SN = Straight Over-molded Connector.  
 CPR = PCB Pin, Rear Mounting. SM = Straight Over-molded Connector.  
 CSF = Solder Bucket Pin, Front Mounting. With Strain Relief.  
 CPF = PCB Pin, Front Mounting. RM = R/A Over-molded Connector.  
 With Strain Relief.  
 SA = Field-Attachable Connector.

### Connector Gender: 1 (Connect with 2)

Male Connector, Male Pin > CCx-x1xxx										
Number of Pins	02	03	04	05	06	09	10	12	14	18
Pin Assignment Front View										
Current Rating Per Pin	20A	20A	10A	10A	10A	5A	5A	5A	5A	2A

### Connector Gender: 2 (Connect with 1)

Female Connector, Female Pin > CCx-x2xxx										
Number of Pins	02	03	04	05	06	09	10	12	14	18
Pin Assignment Front View										
Current Rating Per Pin	20A	20A	10A	10A	10A	5A	5A	5A	5A	2A

### Connector Gender: 3 (Connect with 4)

Male Connector, Female Pin > CCx-x3xxx			
Number of Pins	03	05	09
Pin Assignment Front View			
Current Rating Per Pin	20A	10A	5A

### Connector Gender: 4 (Connect with 3)

Female Connector, Male Pin > CCx-x4xxx			
Number of Pins	03	05	09
Pin Assignment Front View			
Current Rating Per Pin	20A	10A	5A







### D Size Connector's Overview

Part Number:	CD	○	-	○	○	○○	○
Connector Type	Size	Current Rating		Locking Style	Connector Gender	Number of Pins	Connector Type
Panel-Mounting	D-Size	D, G, GD		P, L	1, 3	02, 03, 04, 05, 06, 07, 18	CSR, CPR, QSR, QPR
Over-molded						Hybrid: 32, 33, 34, 35, 36, 37	SM, RM
Field-Attachable					1, 2, 3, 4	32 = 3+2, 33 = 3+3.....37 = 3+7	SA

D = 5A > 18 Pins  
 G = 20A > 2, 3, 4, 5, 6, 7 Pins  
 GD = 20A + 5A > Hybrid Pins

P = Screw Thread  
 L = Bayonet Locking

Rear Mounting

CSR = Circular Flange, Solder Bucket Pin.  
 CPR = Circular Flange, PCB Pin.  
 QSR = Square Flange, Solder Bucket Pin.  
 QPR = Square Flange, PCB Pin.

SM = Straight Over-molded Connector.  
 With Strain Relief.  
 RM = R/A Over-molded Connector.  
 With Strain Relief.  
 SA = Field-Attachable Connector.

Connector Gender: 1 (Connect with 2)

Male Connector, Male Pin > CDx-L1xxx							
Number of Pins	02	03	04	05	06	07	18
Pin Assignment Front View							
Current Rating Per Pin	20A	20A	20A	20A	20A	20A	5A

Connector Gender: 2 (Connect with 1)

Female Connector, Female Pin > CDx-L2xxx							
Number of Pins	02	03	04	05	06	07	18
Pin Assignment Front View							
Current Rating Per Pin	20A	20A	20A	20A	20A	20A	5A

Connector Gender: 3 (Connect with 4)

Male Connector, Female Pin > CDx-L3xxx							
Number of Pins	32 (3+2)	33 (3+3)	34 (3+4)	35 (3+5)	36 (3+6)	37 (3+7)	18
Pin Assignment Front View							
Current Rating Per Pin	20A + 5A	20A + 5A	20A + 5A	20A + 5A	20A + 5A	20A + 5A	5A

Connector Gender: 4 (Connect with 3)

Female Connector, Male Pin > CDx-L4xxx							
Number of Pins	32 (3+2)	33 (3+3)	34 (3+4)	35 (3+5)	36 (3+6)	37 (3+7)	18
Pin Assignment Front View							
Current Rating Per Pin	20A + 5A	20A + 5A	20A + 5A	20A + 5A	20A + 5A	20A + 5A	5A





### E-Size Connector's Overview

Part Number:	CE	○	-	○	○	○○	○
Connector Type	Size	Current Rating		Locking Style	Connector Gender	Number of Pins	Connector Type
Panel-Mounting	E-Size	N, D		P, L	3	31, 37	QSR, QPR
Over-molded					4		SM

N = 2A > 37 Pins  
D = 5A > 31 Pins

P = Screw Thread  
L = Bayonet Locking

QSR = Solder Bucket Pin, Square Flange, Rear Mounting.  
SM = Straight Over-molded Connector with Strain Relief.

Connector Gender: 3 (Connect with 4)

Male Connector, Female Pin > CEx-L3xxx		
Number of Pins	31	37
Pin Assignment Front View		
Current Rating Per Pin	5A	2A



Connector Gender: 4 (Connect with 3)

Female Connector, Male Pin > CEx-L4xxx		
Number of Pins	31	37
Pin Assignment Front View		
Current Rating Per Pin	5A	2A

### P-Size Connector's Overview

Part Number:	CP	○	-	○	○	○○	○
Connector Type	Size	Current Rating		Locking Style	Connector Gender	Number of Pins	Connector Type
Panel-Mounting	P-Size	P		P	1, 2	04, 07	DSF
Over-molded							SN
Field-Attachable							SA

P = 10A

P = Screw Thread

DSF = Solder Bucket Pin, Diamond Flange, Screw Front Mounting.  
SN = Straight Over-molded Connector.  
SA = Field-Attachable Connector.

Connector Gender: 1 (Connect with 2)

Male Connector, Male Pin > CPP-P1xxx		
Number of Pins	04 (3 + PE)	07 (6 + PE)
Pin Assignment Front View		
Current Rating Per Pin	13A	10A



Connector Gender: 2 (Connect with 1)

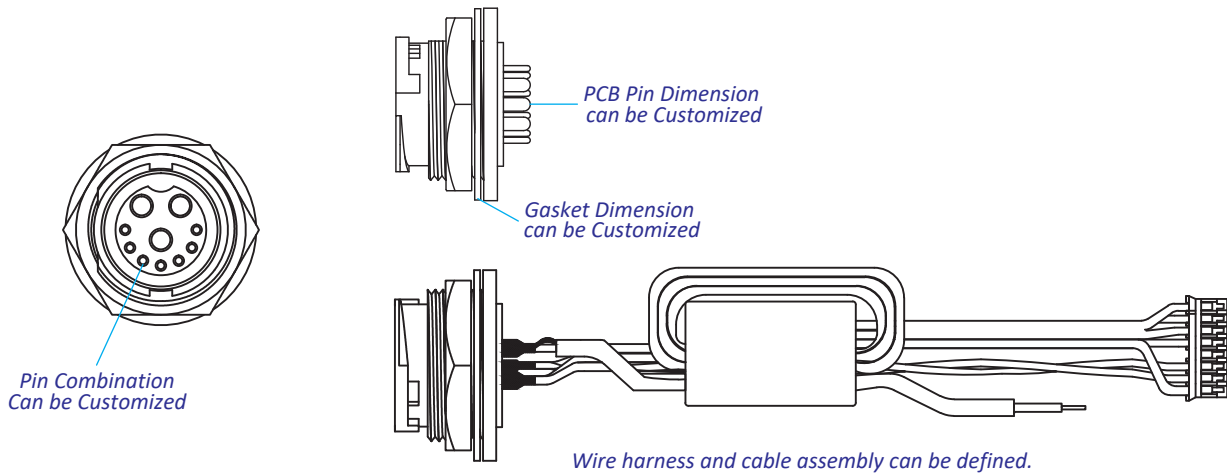
Female Connector, Female Pin > CPP-P2xxx		
Number of Pins	04 (3 + PE)	07 (6 + PE)
Pin Assignment Front View		
Current Rating Per Pin	13A	10A



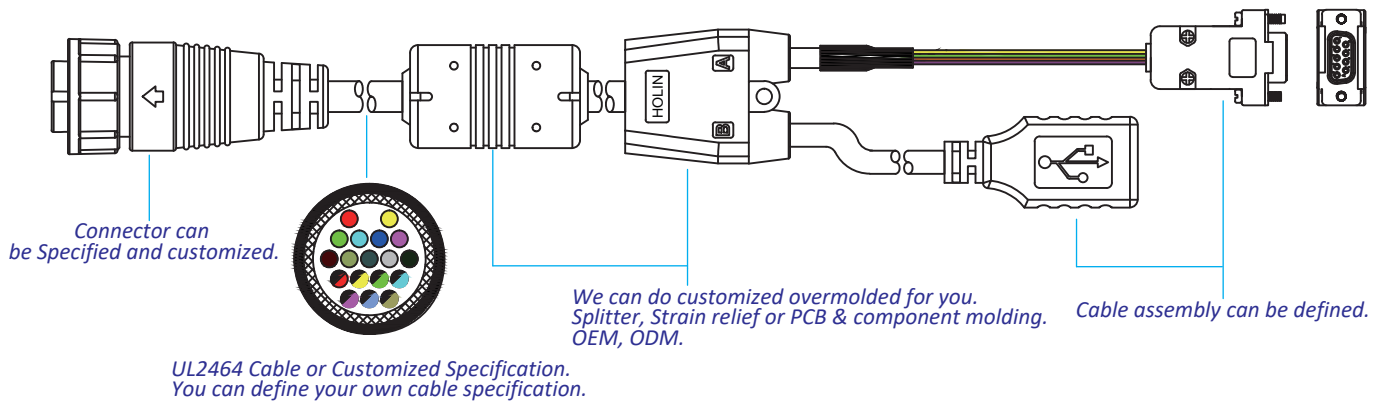


*Specified your own waterproof I/O solution*

### Panel-Mounting Connector



### Molded Cable Assemblies



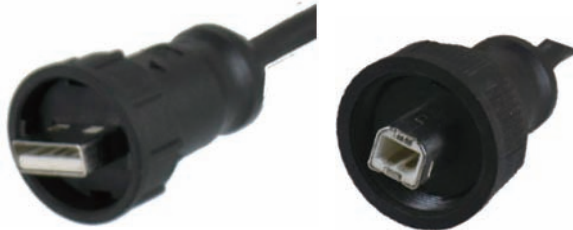




Part Number					
Connector Series	Version	Connector Type	Locking Style	Connector Gender	Connector Style
USB	2 = USB2.0	AC = A type	P = Screw Thread	3 = Jack	Please check following information
	3 = USB3.0	BC = B type	L = Bayonet Locking	4 = Plug	

## Waterproof USB Over-Molded Plug Assembly

Connector Style: **SN**



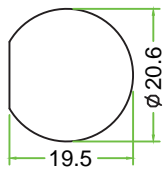
## Waterproof USB Over-Molded Jack Assembly

Connector Style: **CSM** (USB 2.0 Only)

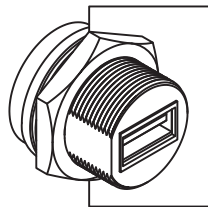


## Waterproof USB Panel Mounting Jack

Dimension of Panel Cut-Out



Rear Mounting



Front View of Connector



Rear View of Connector



Connector Style: **C01**  
Pitch 2.0mm Pin header  
USB2.0 only.

Connector Style: **C02**  
Pitch 2.0mm R/A Pin header  
USB2.0 only.

Connector Style: **C03**  
Pitch 2.0mm Wafer  
USB2.0 only.

Connector Style: **C04**  
Pitch 2.0mm R/A Wafer  
USB2.0 only.

Connector Style: **C10**  
PCB with Solder eyes  
USB2.0, 3.0.

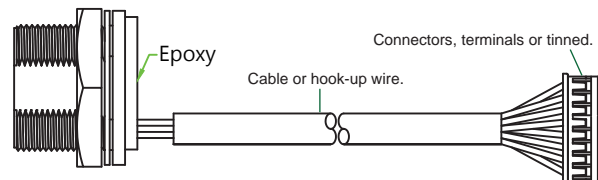


Connector Style: **CSJ**  
Straight Jack.  
USB2.0, 3.0. A or B type.



Connector Style: **CRJ**  
R/A Jack.  
USB2.0, 3.0. A or B type.

Panel Connectors can be customized with cable assembly



## Waterproof Caps



-P/N: CCX-WCAP-MA  
Cap without chain.



-P/N: CCX-WCAP-MB  
Chain for hanging on  
Panel Connectors.



-P/N: CCX-WCAP-MC  
Hole for M3 Screw.



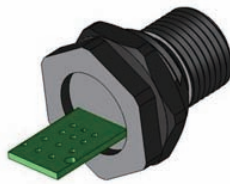


### Waterproof Mini USB Over-Molded Plug Assembly

P/N: MUB-P4SN



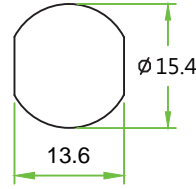
Rear View of Connector



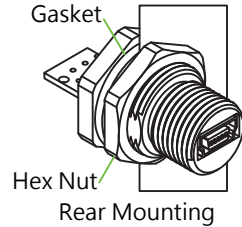
P/N: MUB-P3C10  
PCB with Solder eyes

### Waterproof Mini USB Panel Mounting Jack

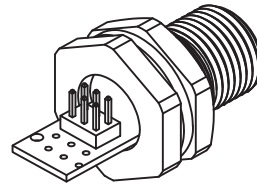
Dimension of Panel Cut-Out



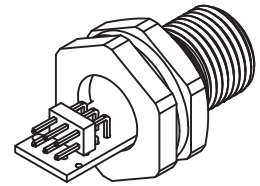
Rear Mounting



Front View of Connector



P/N: MUB-P3HPRS  
Pitch 2.0mm Pin header



P/N: MUB-P3HPRR  
Pitch 2.0mm R/A Pin header

### Waterproof Micro USB Over-Molded Plug Assembly

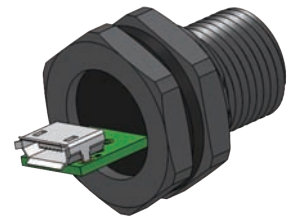
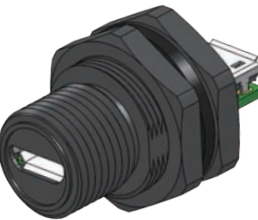
P/N: USBMCB12-P4SM-xxM



### Waterproof Caps



P/N: 12P-WCAP-MA  
Waterproof Cap For Male Connectors.  
Material: Nylon + GF (UL Approval)



P/N: 12P-WCAP-MB  
Waterproof Cap For Male Connectors. Chain for hanging on Panel Mounting Connector.  
Material of Cap: Nylon + GF (UL Approval).  
Material of Chain: Rubber.



P/N: 12P-WCAP-MC  
Waterproof Cap For Male Connectors. Chain for M3 Screw.  
Material of Cap: Nylon + GF (UL Approval).  
Material of Chain: Rubber.

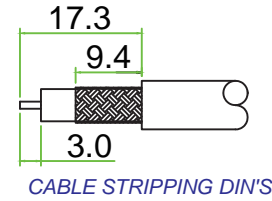
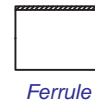
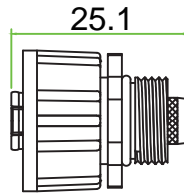




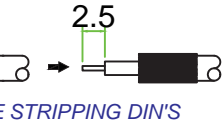
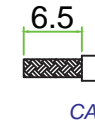
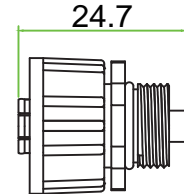
### Waterproof BNC Field-Attachable Plug



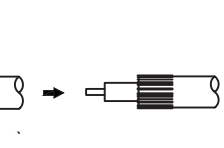
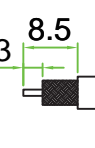
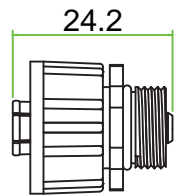
-P/N: BNCB-P4SA-01  
For Cable 5CFB.



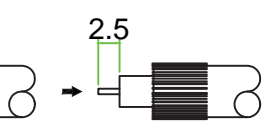
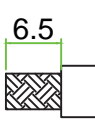
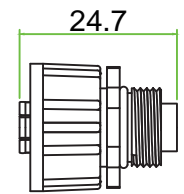
-P/N: BNCB-P4SA-02  
For Cable RG174.



-P/N: BNCB-P4SA-03  
For Cable RG58.

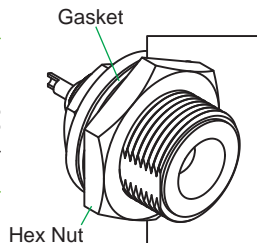
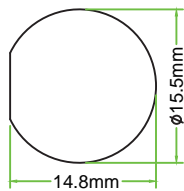


-P/N: BNCB-P4SA-04  
For Cable RG59.



### Waterproof BNC Panel Mounting Connector

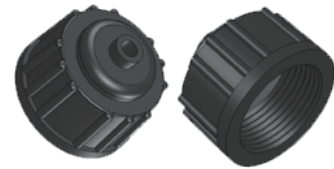
### Waterproof Caps



-P/N: BNCB-P3CS

Dimension of  
Panel Cut-Out

Rear Mounting



-P/N: CBP-WCAP-MA  
Cap without chain.



-P/N: CBP-WCAP-MB  
Chain for hanging on  
Panel Connectors.



-P/N: CBP-WCAP-MC  
-Chain for M3 Screw.







		Part Number		
Connector Series		Locking Style	Connector Gender	Connector Style
RJ45C	-	P = Screw Thread L = Bayonet Locking	3 = Jack 4 = Plug	Please check following information

## Waterproof RJ45 Over-Molded Assembly

Connector Style: **SN** (Plug)      Connector Style: **CSN** (Jack)



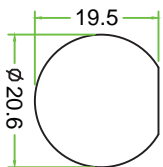
## Waterproof RJ45 Field-Attachable Plug

Connector Style: **SAS** (Shield Plug)  
Connector Style: **SA** (Non-Shield Plug)

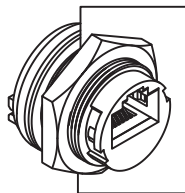


## Waterproof RJ45 Panel Mounting Jack

Dimension of  
Panel Cut-Out



Rear Mounting



Front View of Connector



Rear View of Connector



Connector Style: **C01**  
Pitch 2.0mm Pin header

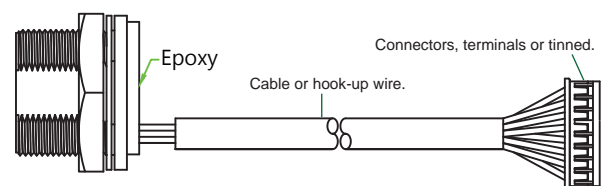
Connector Style: **C02**  
Pitch 2.0mm R/A Pin header



Connector Style: **C03**  
Pitch 2.0mm Wafer

Connector Style: **C04**  
Pitch 2.0mm R/A Wafer

Panel Connectors can be customized with cable assembly



## Waterproof Caps



-P/N: **CCX-WCAP-MA**  
Cap without chain.



-P/N: **CCX-WCAP-MB**  
Chain for hanging on  
Panel Connectors.



-P/N: **CCX-WCAP-MC**  
Hole for M3 Screw.





## Waterproof RJ45 Plug Over-Molded Assembly

P/N: RJ45D-P4SM



## Waterproof RJ45 Field-Attachable Plug

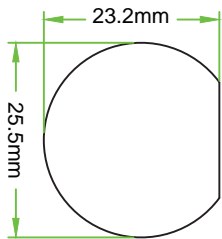
P/N: RJ45D-P4SAS (Shield Plug)

P/N: RJ45D-P4SAS (Non-Shield Plug)

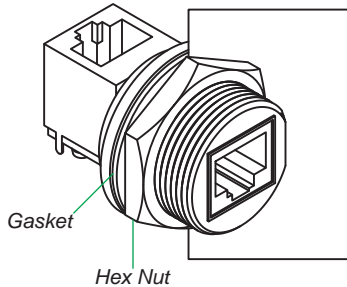


## Waterproof RJ45 Panel Mounting Jack

Dimension of  
Panel Cut-Out



Rear Mounting



-P/N: RJ45D-P3C10

-RJ45 8P8C Shielding Jack to  
PCB with Solder eyes for cable assembly.  
-Cable assembly can be defined.



-P/N: RJ45D-P3CSJ

-RJ45 Shielding Jack to Shielding Jack



-P/N: RJ45D-P3CRJ

-RJ45 Shielding Jack to Shielding Jack

## Waterproof Caps



-P/N: CDX-WCAP-MA  
Cap without chain.



-P/N: CDX-WCAP-MB  
Chain for hanging on  
Panel Connectors.

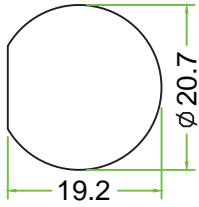


-P/N: CDX-WCAP-MC  
Hole for M3 Screw.

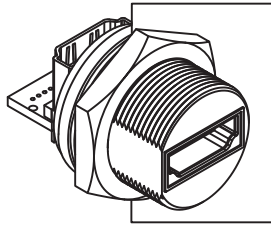


## Waterproof HDMI Panel Mounting Jacks

Dimension of Panel Cut-Out



Rear Mounting



Rear View



-P/N: HDMIAC-P3CSJ  
HDMI Jack to Jack



-P/N: HDMIAC-P3CRJ  
HDMI Jack to Jack

## Waterproof Caps



-P/N: CCX-WCAP-MA  
Cap without chain.



-P/N: CCX-WCAP-MB  
Chain for hanging on  
Panel Connectors.

-P/N: CCX-WCAP-MC  
Hole for M3 Screw.



## Waterproof HDMI Over-Molded Plug Assembly

Waterproof HDMI 19P Plug to Non-Waterproof 19P Plug.



-P/N: WHDMIAC-PA-xxM  
-xxM: Cable length. (Maximum 5 meters).

Waterproof HDMI 19P Plugs.



-P/N: WHDMIAC-PB-xxM  
-xxM: Cable length. (Maximum 5 meters).

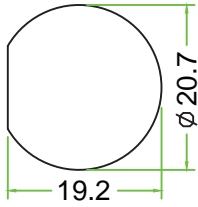




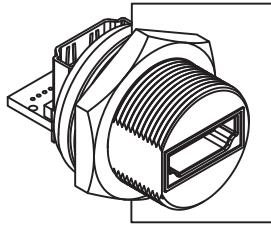


## Waterproof HDMI C Type Panel Mounting Jacks

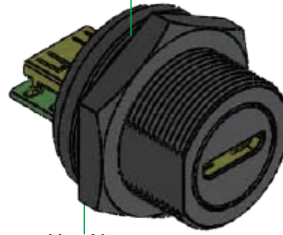
Dimension of Panel Cut-Out



Rear Mounting

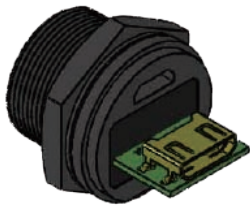


Gasket



Hex Nut

Rear View



-P/N: HDMICC-P3CSJ  
HDMI Jack to Jack.

## Waterproof Caps



-P/N: CCX-WCAP-MA  
Cap without chain.



-P/N: CCX-WCAP-MB  
Chain for hanging on  
Panel Connectors.

-P/N: CCX-WCAP-MC  
Hole for M3 Screw.



## Waterproof HDMI C type Over-Molded Plug Assembly

Waterproof HDMI C type Plug.



-P/N: HDMICC-P4SN-xM





▼ Notes ▼

