



**RenhotecPRO.com**  
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Renhotecpro.com is a department of Renhotec Group Ltd focus on professional connectors, cable assemblies for harsh environment, especial for Industrial or Military use. Our goals is to provide high performance connectors and cables with reliable quality and reasonable price.



WE MAKE  
CONNECTION  
EASIER

# M SERIES

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## SENSOR CONNECTOR PRODUCT PRESENTATION

## Description

M5 circular connectors, the connector of 5mm metric size with thread locking mechanism, is one of the smallest connectors in factory automation industry, it is mainly designed for the application of connecting the 5MM factory automation sensors. In recent years, it is largely used for signal transmission of the industrial measurement camera and electric bicycles. M5 connector is very compact and convenient for the application in narrow installment places.

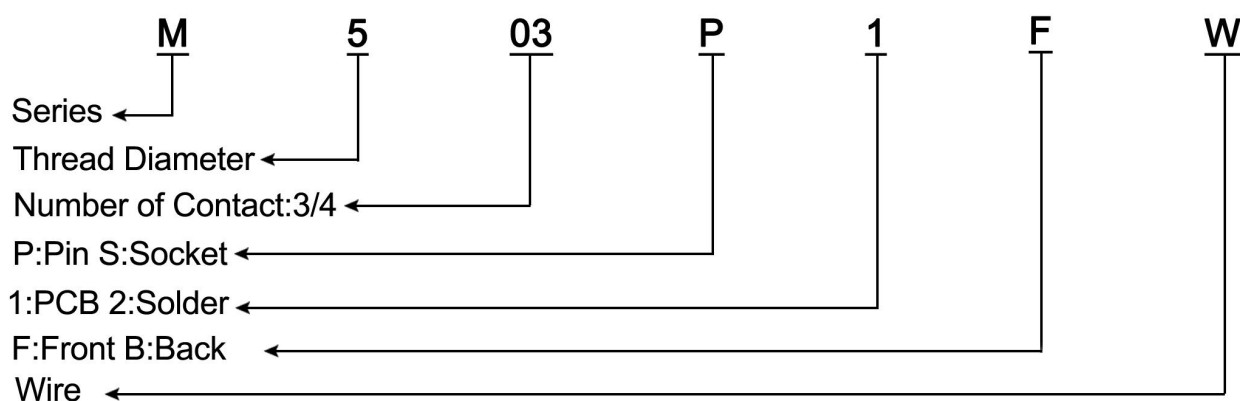
## Applications


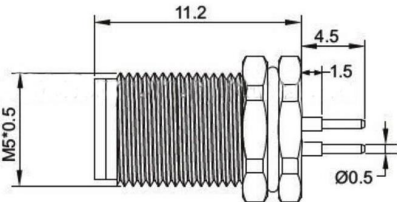

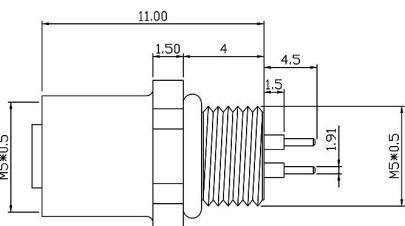

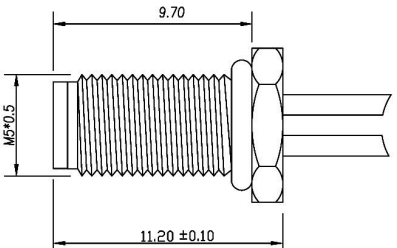

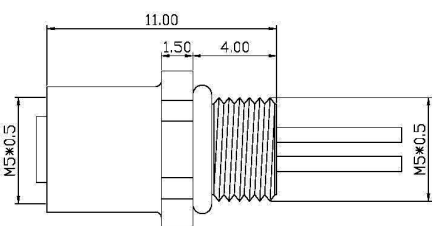

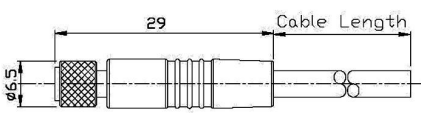

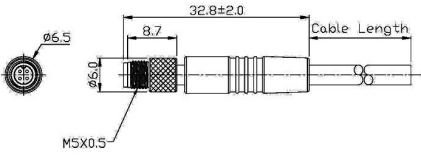
- Miniature sensors
- Industrial camera
- Electrical bike
- Packaging, Labeling & Logistic
- Factory automation and fieldbus module

## Quality Statement

- Screws/ nuts: Brass with 120μ nickel plated, CNC parts.
- Male contacts: Brass C3604, 3μ gold plated on nickel base, machined solid pin.
- Female contacts: Phosphor bronze C5441 with 3μ gold plated on nickel base, machined solid pin.
- Temperature Range: Dynamic -25 ~ 80°C, Static: -40 ~ 80°C/105°C
- Protection degree: IP67 in locked status, IP68 base on customer specific requirements.
- ROHS compliant.

## Order Information

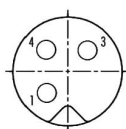


Description-Figure	Drawing	Contacts	Order P/N
<b>M5 Male Solder/PCB Front Mount Connector</b> 		3	M5-03-P-1
		4	M5-04-P-1
<b>M5 Female Solder/PCB Rear Mount Connector</b> 		3	M5-03-S-1
		4	M5-04-S-1
<b>M5 Male Solder Front Mount Connector With Wires</b> 		3	M5-03-P-2-F-W
		4	M5-04-P-2-F-W
<b>M5 Female Solder Rear Mount Connector With Wires</b> 		3	M5-03-S-2-B-W
		4	M5-04-S-2-B-W
<b>M5 Female Straight Molded Cable</b> 		3	M5-03-S-2-W
		4	M5-04-S-2-W
<b>M5 Male Straight Molded Cable</b> 		3	M5-03-P-2-W
		4	M5-04-P-2-W

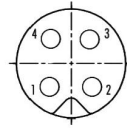
## Electrical &amp; Mechanical data

Standard	IEC 61076-2-104
Gender	Male/Female
Number of Contacts	3/4 Pin
Coding	A-Code
Termination	Solder/PCB
Cable length	Base on customer request
Contacts plating	Gold plated, thickness 1U"
Connection type	Front Mount /Back Mount
Orientation	Straight
Insert/ Housing	TPU
Overmold/ Shel	Metal shell
Rated current	1 A
Connector contacts	Brass with gold plated
Rated Voltage	60V
Ambient temperature	-20°C~+80°C
Coupling nut/screw	Brass with nickel plated screw
Insulation resistance	≥100 MΩ
Sealing	Epoxy resin
Contacts resistance	≤ 5 MΩ
Shielding	Non-Shielded
IP rating	IP67

## Male Front View

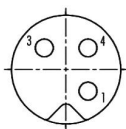


1 棕 / brown  
2 未安装 / not assembled  
3 蓝 / blue  
4 黑 / black

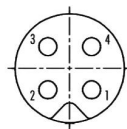


1 棕 / brown  
2 白 / white  
3 蓝 / blue  
4 黑 / black

## Female Front View



1 棕 / brown  
2 未安装 / not assembled  
3 蓝 / blue  
4 黑 / black



1 棕 / brown  
2 白 / white  
3 蓝 / blue  
4 黑 / black



## Description

The M8 connector is designed for the device connection for sensor/actuator boxes, field-bus modules and industrial controllers. It provides with 3, 4, 5, 6, 8 contacts configuration cable and panel receptacles, most of the connectors are either factory PUR/PVC cable overmolded or supplied with attached wire leads. 360° EMC shielding is available as option. With 8mm threaded joint, quick and easy mating and locking, even in places difficult to reach, anti vibration locking design

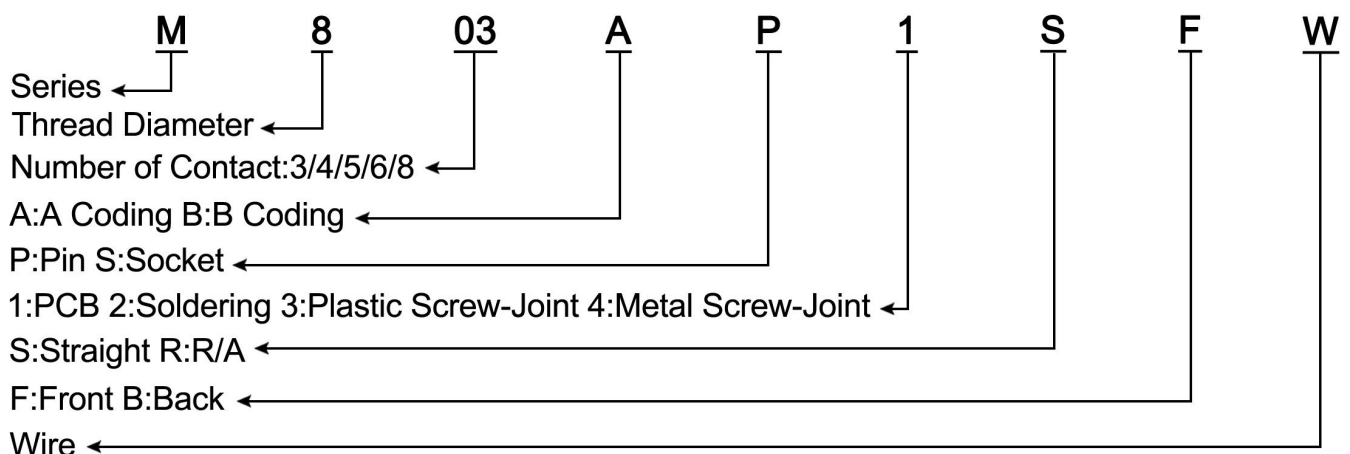
## Applications

- Miniature sensors
- Industrial camera
- Electrical bike
- Packaging, Labeling & Logistic
- Factory automation and fieldbus module

## Quality Statement

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- Temperature Range: Dynamic -25 ~ 80°C, Static: -40 ~ 80°C/105°C
- Protection degree: IP67 in locked status, IP68 base on customer specific requirements.
- ROHS compliant.

## Order Information


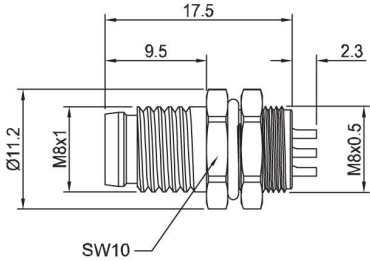

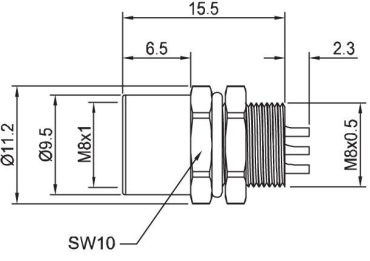

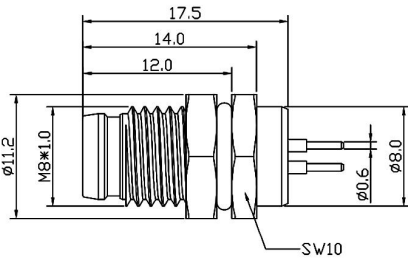



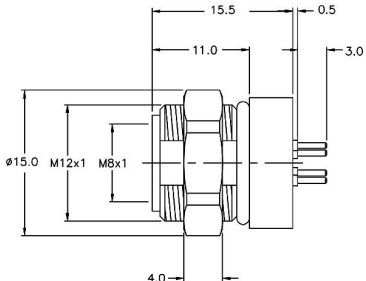

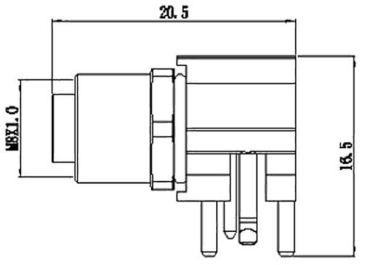

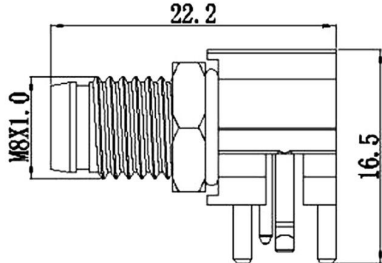

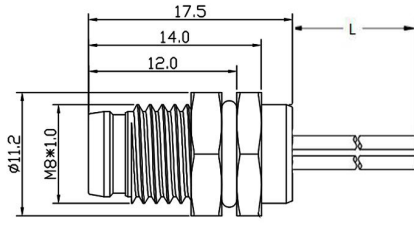

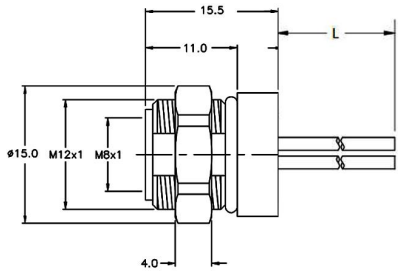
## M8 A-Coding Panel Receptacles


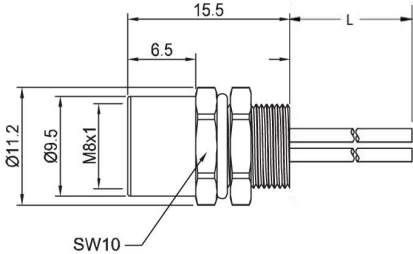

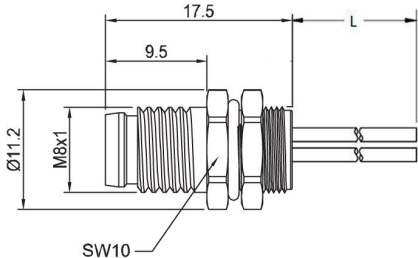
### Description

The M8 panel receptacles are ideal for compact and space-sensitive industrial applications. RENHOTECH M8 panel connectors are available with solder termination and PCB panel assembly type, with rear mounting and front mounting.

- Operating voltage 60V/ 30V, rated current 3A/1A.
- 3, 4, 5 (B-Coding), 6, 8 poles are available.
- Protection degree IP67.
- Temperature range: -40°C~+105°C.
- Cable length 1m, 2m, 3m or upon customized specification.
- UL94-V0 flame retardant degree.

Description-Figure	Drawing	Contacts	Order P/N
M8 Male Solder/PCB Back Mount Connector 		3	M8-03-A-P-1-S-B
		4	M8-04-A-P-1-S-B
		6	M8-06-A-P-1-S-B
		8	M8-08-A-P-1-S-B
M8 Female Solder/PCB Back Mount Connector 		3	M8-03-A-S-1-S-B
		4	M8-04-A-S-1-S-B
		6	M8-06-A-S-1-S-B
		8	M8-08-A-S-1-S-B
M8 Male Solder/PCB Front Mount Connector 		3	M8-03-A-P-1-S-F
		4	M8-04-A-P-1-S-F
		6	M8-06-A-P-1-S-F
		8	M8-08-A-P-1-S-F

Description-Figure	Drawing	Contacts	Order P/N
<b>M8 Female Solder/PCB Front Mount Connector</b> 		3	M8-03-A-S-1-S-F
		4	M8-04-A-S-1-S-F
		6	M8-06-A-S-1-S-F
		8	M8-08-A-S-1-S-F
<b>M8 Female R/A PCB Mount Connector</b> 		3	M8-03-A-S-1-R
		4	M8-04-A-S-1-R
<b>M8 Male R/A PCB Mount Connector</b> 		3	M8-03-A-P-1-R
		4	M8-04-A-P-1-R
<b>M8 Male Front Mount Connector With Wires</b> 		3	M8-03-A-P-2-S-F-W
		4	M8-04-A-P-2-S-F-W
		6	M8-06-A-P-2-S-F-W
		8	M8-08-A-P-2-S-F-W
<b>M8 Female Front Mount Connector With Wires</b> 		3	M8-03-A-S-2-S-F-W
		4	M8-04-A-S-2-S-F-W
		6	M8-06-A-S-2-S-F-W
		8	M8-08-A-S-2-S-F-W


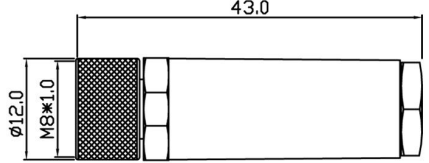

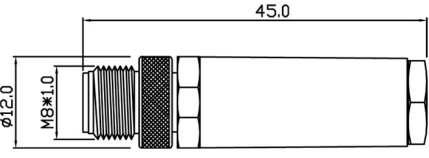

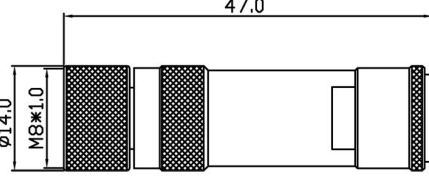
Description-Figure	Drawing	Contacts	Order P/N
<b>M8 Female Back Mount Connector With Wires</b> 		3	M8-03-A-S-2-S-B-W
		4	M8-04-A-S-2-S-B-W
		6	M8-06-A-S-2-S-B-W
		8	M8-08-A-S-2-S-B-W
<b>M8 Male Front Mount Connector With Wires</b> 		3	M8-03-A-P-2-S-F-W
		4	M8-04-A-P-2-S-F-W
		6	M8-06-A-P-2-S-F-W
		8	M8-08-A-P-2-S-F-W

## M8 A-Coding Field Wireable Connector


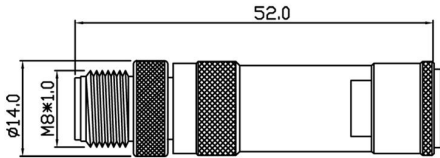

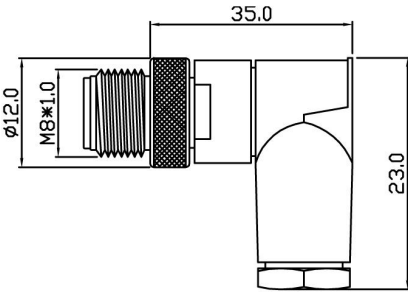

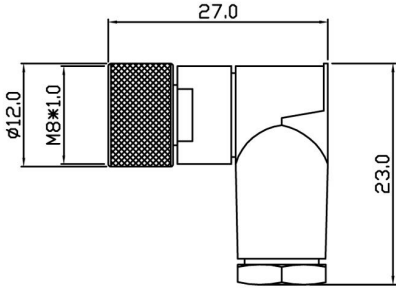
### Description

The field installable connectors permit high flexibility for wiring in the field. For quick assembly of often differing cable lengths, RENHOTECH supplies straight male and female type connectors for free assembly with screw type wire connection.

- Screwing termination contacts.
- Protection degree IP67.
- 3-Pole, 4-Pole are available.
- Temperature range: -40°C~+125°C.
- Operating voltage 250V-AD, current 4A.

Description-Figure	Drawing	Contacts	Order P/N
M8 Female Straight Plastic With Screw Termination 		3	M8-03-A-S-3-S
		4	M8-04-A-S-3-S
M8 Male Straight Plastic With Screw Termination 		3	M8-03-A-P-3-S
		4	M8-04-A-P-3-S
M8 Female Straight Metal With Screw Termination 		3	M8-03-A-S-4-S
		4	M8-04-A-S-4-S




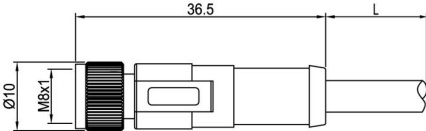

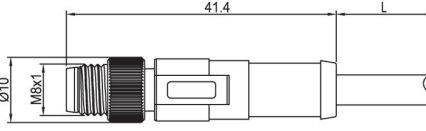

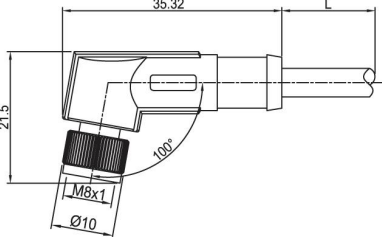

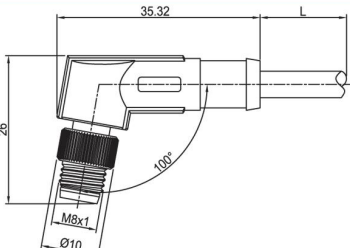
Description-Figure	Drawing	Contacts	Order P/N
M8 Male Straight Metal With Screw Termination 		3	M8-03-A-P-4-S
		4	M8-04-A-P-4-S
M8 Male R/A Plastic With Screw Termination 		3	M8-03-A-P-3-R
		4	M8-04-A-P-3-R
M8 Female R/A Plastic With Screw Termination 		3	M8-03-A-S-3-R
		4	M8-04-A-S-3-R

## M8 A Coding Pre-Molded Cable Connector

### Description

The M8 connectors provide 3/4/6/8 position factory PUR/PVC overmolded cable and the length is depend on customers requests .

- Degree of protection IP67.
- 3, 4, 6, 8 poles are available.
- Operating voltage 60V, 30V-DC/AC, Rated current 4A, 1A.
- Cable length customized, PUR and PVC cable for options.
- Anti-vibration locking screw design.


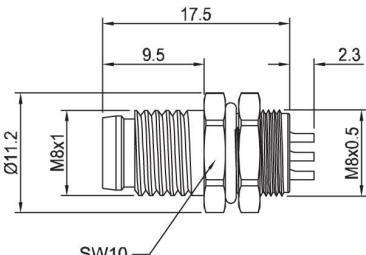

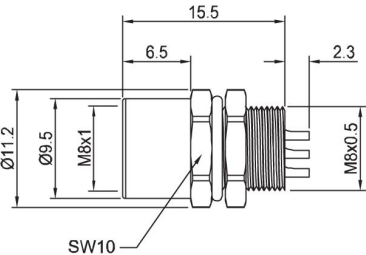

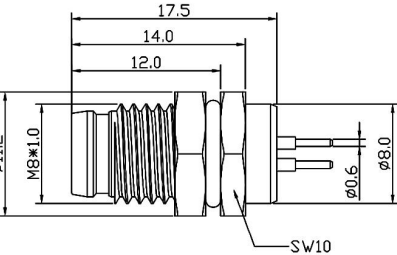
Description-Figure	Drawing	Contacts	Order P/N
<b>M8 Straight Female Molded Cable</b> 		3	M8-03-A-S-2-S-W
		4	M8-04-A-S-2-S-W
		6	M8-06-A-S-2-S-W
		8	M8-08-A-S-2-S-W
<b>M8 Straight Male Molded Cable</b> 		3	M8-03-A-P-2-S-W
		4	M8-04-A-P-2-S-W
		6	M8-06-A-P-2-S-W
		8	M8-08-A-P-2-S-W
<b>M8 R/A Female Molded Cable</b> 		3	M8-03-A-S-2-R-W
		4	M8-04-A-S-2-R-W
		6	M8-06-A-S-2-R-W
		8	M8-08-A-S-2-R-W
<b>M8 R/A Male Molded Cable</b> 		3	M8-03-A-P-2-R-W
		4	M8-04-A-P-2-R-W
		6	M8-06-A-P-2-R-W
		8	M8-08-A-P-2-R-W


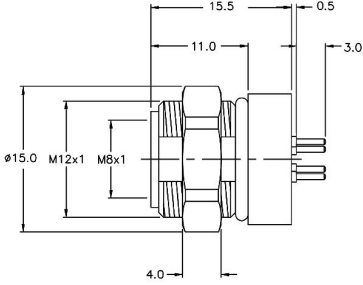

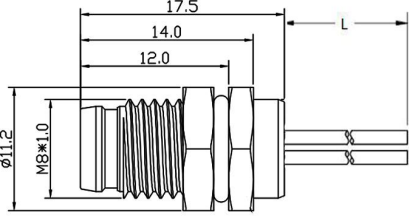

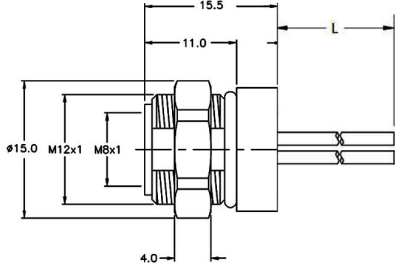

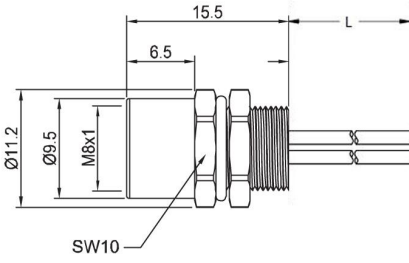

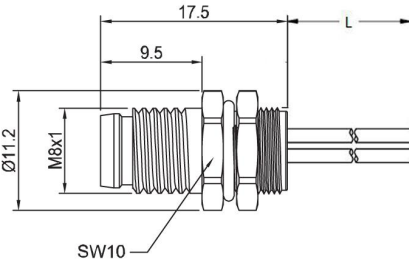
## M8 B-Coding Panel Receptacle


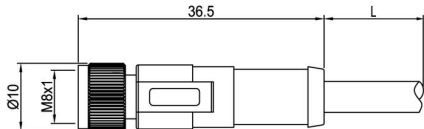

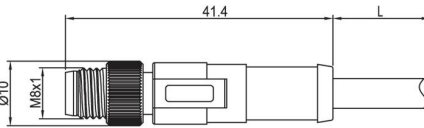
### Description

The M8 panel receptacles are ideal for compact and space-sensitive industrial applications. RENHOTECH M8 panel connectors are available with solder termination and PCB panel assembly type, with rear mounting and front mounting.

- Only 5 poles(B-Coding)is available.
- Operating voltage 60V, rated current 3A.
- Protection degree IP67.
- Temperature range: -40°C~+105°C.
- Cable length 1m, 2m, 3m or upon customized specification.
- UL94-V0 flame retardant degree.

Description-Figure	Drawing	Contacts	Order P/N
M8 Male Solder/PCB Back Mount Connector 		5	M8-05-B-P-1-S-B
M8 Female Solder/PCB Back Mount Connector 		5	M8-05-B-S-1-S-B
M8 Male Solder/PCB Front Mount Connector 		5	M8-05-B-P-1-S-F

Description-Figure	Drawing	Contacts	Order P/N
<p>M8 Female Solder/PCB Front Mount Connector</p> 		5	M8-05-B-S-1-S-F
<p>M8 Male Front Mount Connector With Wires</p> 		5	M8-05-B-P-2-S-F-W
<p>M8 Female Front Mount Connector With Wires</p> 		5	M8-05-B-S-2-S-F-W
<p>M8 Female Back Mount Connector With Wires</p> 		5	M8-05-B-S-2-S-B-W
<p>M8 Male Front Mount Connector With Wires</p> 		5	M8-05-B-P-2-S-F-W

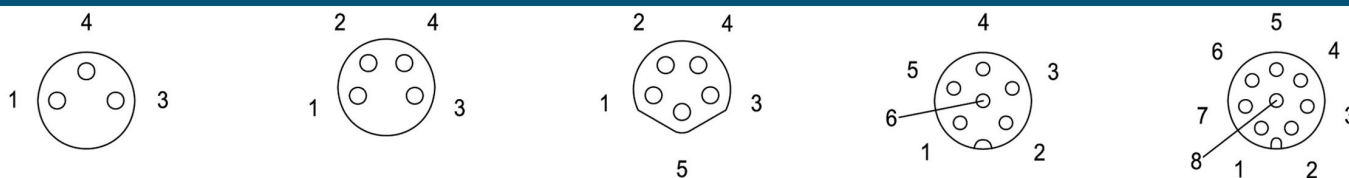
Description-Figure	Drawing	Contacts	Order P/N
M8 Straight Female Molded Cable 		5	M8-05-B-S-2-S-W
M8 Straight Male Molded Cable 		5	M8-05-B-P-2-S-W



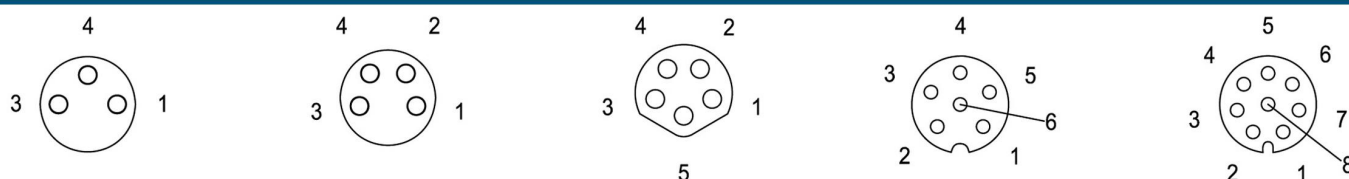
## Electrical &amp; Mechanical data

Standard	IEC 61076-2-104
Gender	Male/Female
Number of Contacts	3/4/5/6/8Pin
Coding	A/B Code
Termination	Soldering/PCB/Srew-Joint
Cable length	Base on customer request
Contacts plating	Gold plated, thickness 1U"
Connection type	Single ended cable/Double ended cable
Orientation	Straight/Right Angle
Insert/ Housing	TPU
Overmold/ Shell	TPU
Connector contacts	Brass with gold plated
Rated current	4A : 3/4/5PIN 1.5A : 6/8PIN
Rated Voltage	60V: 3/4/5PIN 30V: 6/8PIN
Ambient temperature	-25°C~+80°C
Coupling nut/screw	Brass with nickel plated screw
Insulation resistance	≥100 MΩ
Sealing	O-ring
Contacts resistance	≤ 5 MΩ
Shielding	Non-Shielded
IP rating	IP67
Cable gland/Outlet	PG7 (4 ~ 6mm)

## Male Front View



## Female Front View



## Description

The M12 connector is designed for the device connection for sensor/actuator boxes, field-bus modules and industrial controllers. It provides with 3, 4, 5, 8, 12 contacts configuration cable and panel receptacles, most of the connectors are either factory PUR/PVC cable overmolded or supplied with attached wire leads. 360° EMC shielding is available as option. With 12mm threaded joint, quick and easy mating and locking, even in places difficult to reach, anti vibration locking design.

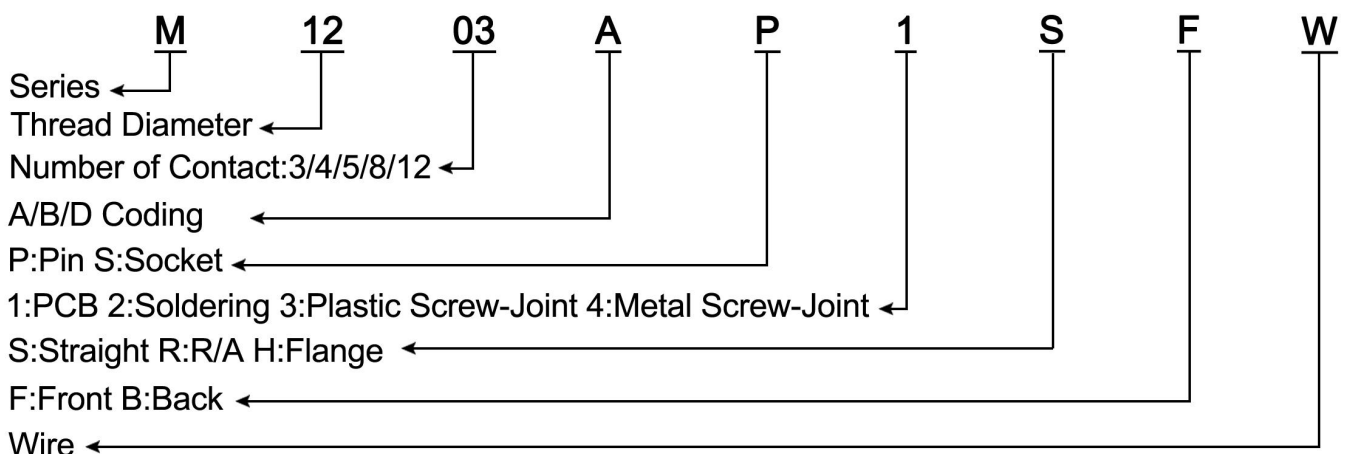
## Applications

- Miniature sensors
- Industrial camera
- Electrical bike
- Packaging, Labeling & Logistic
- Factory automation and fieldbus module

## Quality Statement

- Screws/ nuts: Brass with 120μ nickel plated, CNC parts.
- Male contacts: Brass C3604, 3μ gold plated on nickel base, machined solid pin.
- Female contacts: Phosphor bronze C5441 with 3μ gold plated on nickel base, machined solid pin.
- Temperature Range: Dynamic -25 ~ 80°C, Static: -40 ~ 80°C/105°C
- Protection degree: IP67 in locked status, IP68 base on customer specific requirements.
- ROHS compliant.

## Order Information


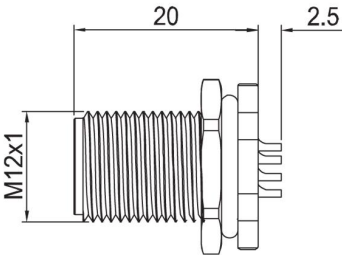

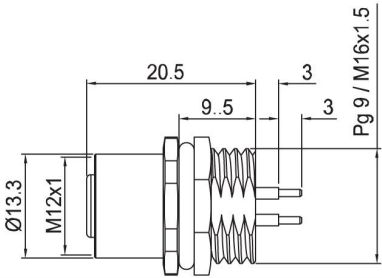

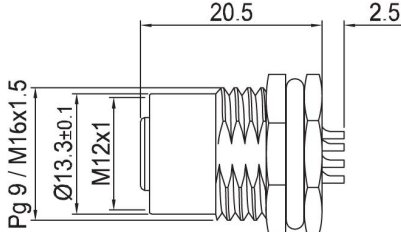



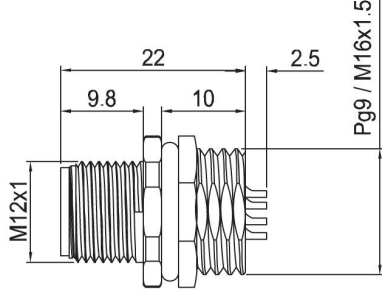

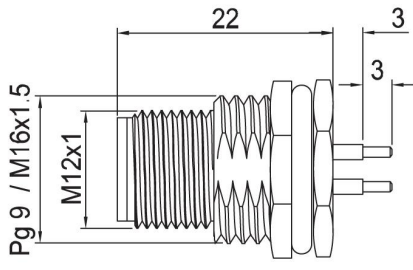

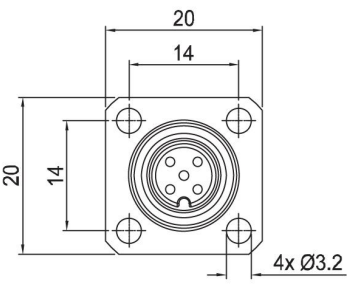

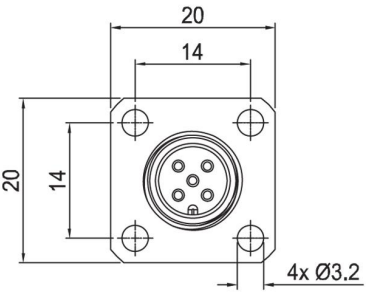

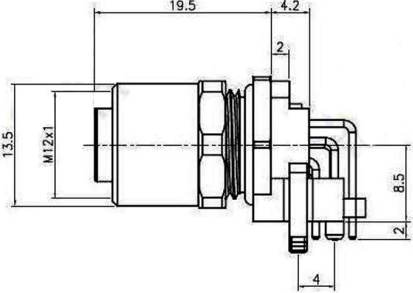
## M12 A Coding Panel Receptacles

### Description


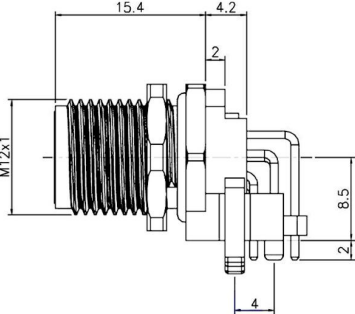

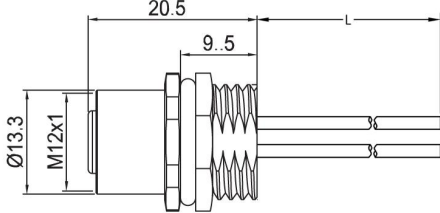

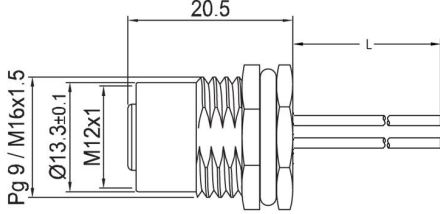

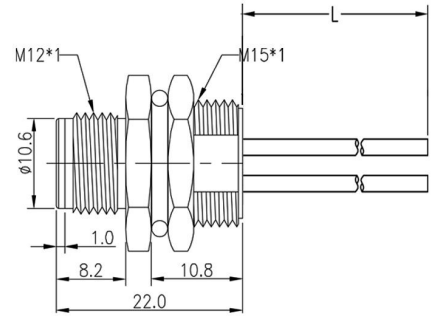
The M12 panel mount connectors either soldered with single wires or with PCB Pins, as the signal or data Input/Output connecting port, provide quick connection between the field Devices and cables. RENHOTEC offers a complete line of M12 panel mount connector solutions for enclosure, panel and PCB applications. These M12 connectors are offered in both male and female versions and are rated to IP67. These connectors are designed for both front mounting and rear mounting panel fixing.

- 3, 4, 5, 8, 12 poles are available.
- Operating voltage 300V-DC/ 250V-AC/ 60V/ 30V, current 4A / 1.5A.
- Protection degree IP67.
- Temperature range: -40°C~+125°C.
- UL94-V0 flame retardant degree.
- Ground Pin available for option.

Description-Figure	Drawing	Contacts	Order P/N
M12 Male PCB/Solder Front Mount Connector 		3	M12-03-A-P-1-S-F
		4	M12-04-A-P-1-S-F
		5	M12-05-A-P-1-S-F
		8	M12-08-A-P-1-S-F
		12	M12-12-A-P-1-S-F
M12 Female PCB/Solder Back Mount Connector 		3	M12-03-A-S-1-S-B
		4	M12-04-A-S-1-S-B
		5	M12-05-A-S-1-S-B
		8	M12-08-A-S-1-S-B
		12	M12-12-A-S-1-S-B
M12 Female PCB/Solder Front Mount Connector 		3	M12-03-A-S-1-S-F
		4	M12-04-A-S-1-S-F
		5	M12-05-A-S-1-S-F
		8	M12-08-A-S-1-S-F
		12	M12-12-A-S-1-S-F

Description-Figure	Drawing	Contacts	Order P/N
M12 Male PCB/Solder Back Mount Connector 		3	M12-03-A-P-1-S-B
		4	M12-04-A-P-1-S-B
		5	M12-05-A-P-1-S-B
		8	M12-08-A-P-1-S-B
		12	M12-12-A-P-1-S-B
M12 Male PCB/Solder Front Mount Connector 		3	M12-03-A-P-1-S-F
		4	M12-04-A-P-1-S-F
		5	M12-05-A-P-1-S-F
		8	M12-08-A-P-1-S-F
		12	M12-12-A-P-1-S-F
M12 Male Flange PCB/Solder Connector 		3	M12-03-A-P-1-H
		4	M12-04-A-P-1-H
		5	M12-05-A-P-1-H
		8	M12-08-A-P-1-H
		12	M12-12-A-P-1-H
M12 Female Flange PCB/Solder Connector 		3	M12-03-A-S-1-H
		4	M12-04-A-S-1-H
		5	M12-05-A-S-1-H
		8	M12-08-A-S-1-H
		12	M12-12-A-S-1-H
M12 R/A Female PCB Connector 		3	M12-03-A-S-1-R
		4	M12-04-A-S-1-R
		5	M12-05-A-S-1-R
		8	M12-08-A-S-1-R
		12	M12-12-A-S-1-R



Description-Figure	Drawing	Contacts	Order P/N
<b>M12 R/A Male PCB Connector</b> 		3	M12-03-A-P-1-R
		4	M12-04-A-P-1-R
		5	M12-05-A-P-1-R
		8	M12-08-A-P-1-R
		12	M12-12-A-P-1-R
<b>M12 Female Back Mount Connector With Wires</b> 		3	M12-03-A-S-2-S-B-W
		4	M12-04-A-S-2-S-B-W
		5	M12-05-A-S-2-S-B-W
		8	M12-08-A-S-2-S-B-W
		12	M12-12-A-S-2-S-B-W
<b>M12 Female Front Mount Connector With Wires</b> 		3	M12-03-A-S-2-S-F-W
		4	M12-04-A-S-2-S-F-W
		5	M12-05-A-S-2-S-F-W
		8	M12-08-A-S-2-S-F-W
		12	M12-12-A-S-2-S-F-W
<b>M12 Male Back Mount Connector With Wires</b> 		3	M12-03-A-P-2-S-F-W
		4	M12-04-A-P-2-S-F-W
		5	M12-05-A-P-2-S-F-W
		8	M12-08-A-P-2-S-F-W
		12	M12-12-A-P-2-S-F-W


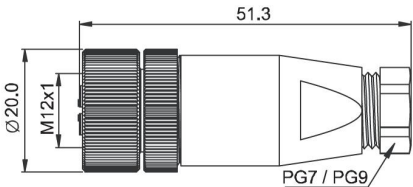

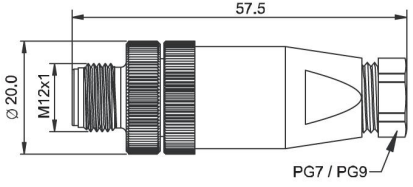

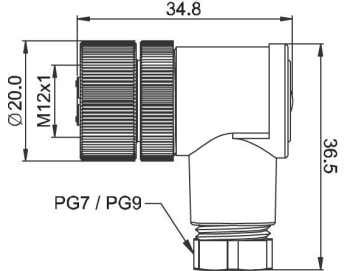



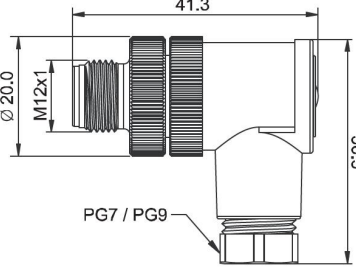

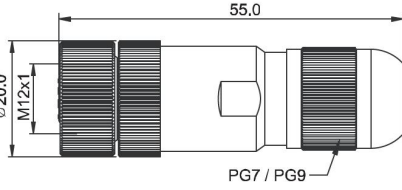

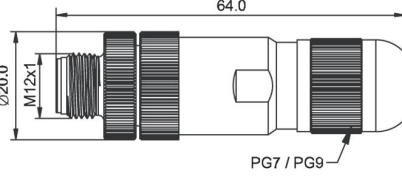

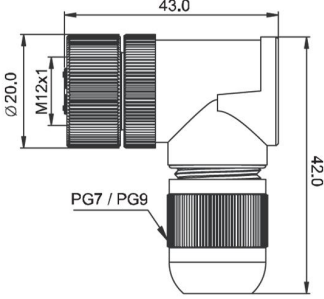

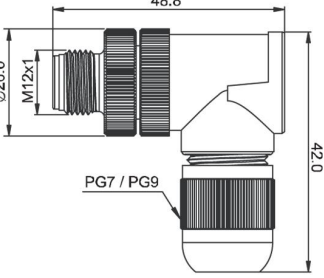
## M12 A Coding Field Wireable Connectors

### Description

RENHOTECH provides field installable plug options. The Field Wireable/ Installable connectors permit high flexibility for wiring in the field for quick assembly and disassembly, it will also save the cable cost when connector replacing is necessary.

- Screwing termination contacts.
- Protection degree IP67.
- 3, 4, 5, 8, 12 poles are available.
- Operating voltage 300V-DC/ 250V-AC/ 60V/ 30V, current 4A / 1.5A.
- PA+GF Housing / Metal shell.

Description-Figure	Drawing	Contacts	Order P/N
M12 Female Straight Plastic With Screw Termination 		3	M12-03-A-S-3-S
		4	M12-04-A-S-3-S
		5	M12-05-A-S-3-S
		8	M12-08-A-S-3-S
		12	M12-12-A-S-3-S
M12 Male Straight Plastic With Screw Termination 		3	M12-03-A-P-3-S
		4	M12-04-A-P-3-S
		5	M12-05-A-P-3-S
		8	M12-08-A-P-3-S
		12	M12-12-A-P-3-S
M12 Female R/A Plastic With Screw Termination 		3	M12-03-A-S-3-R
		4	M12-04-A-S-3-R
		5	M12-05-A-S-3-R
		8	M12-08-A-S-3-R
		12	M12-12-A-S-3-R


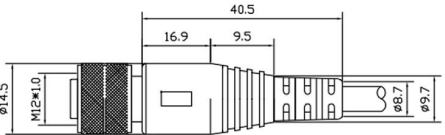

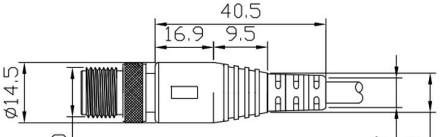

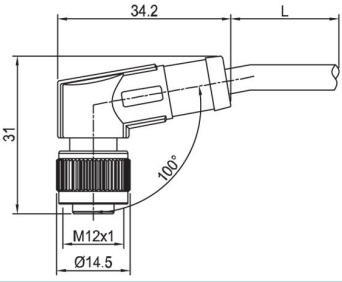

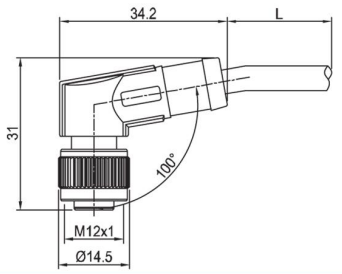
Description-Figure	Drawing	Contacts	Order P/N
<b>M12 Male R/A Plastic With Screw Termination</b> 		3	M12-03-A-P-3-R
		4	M12-04-A-P-3-R
		5	M12-05-A-P-3-R
		8	M12-08-A-P-3-R
		12	M12-12-A-P-3-R
<b>M12 Female Straight Metal With Screw Termination</b> 		3	M12-03-A-S-4-S
		4	M12-04-A-S-4-S
		5	M12-05-A-S-4-S
		8	M12-08-A-S-4-S
<b>M12 Male Straight Metal With Screw Termination</b> 		3	M12-03-A-P-4-S
		4	M12-04-A-P-4-S
		5	M12-05-A-P-4-S
		8	M12-08-A-P-4-S
<b>M12 Female R/A Metal With Screw Termination</b> 		3	M12-03-A-S-4-R
		4	M12-04-A-S-4-R
		5	M12-05-A-S-4-R
		8	M12-08-A-S-4-R
<b>M12 Male R/A Metal With Screw Termination</b> 		3	M12-03-A-P-4-R
		4	M12-04-A-P-4-R
		5	M12-05-A-P-4-R
		8	M12-08-A-P-4-R

## M12 A Coding Molded Cables

### Description

RENHOTECH have designed and developed the M12 cable plugs with superior quality for the reliable connections in harsh industrial conditions and climatic environments.

- Cable length base on customer requesting.
- Protection degree IP67.
- 3, 4, 5, 8, 12 poles are available.
- Operating voltage 250V/60V/30V; Current range: 4A, 2A, 1.5A .
- Anti-vibration locking screw design.


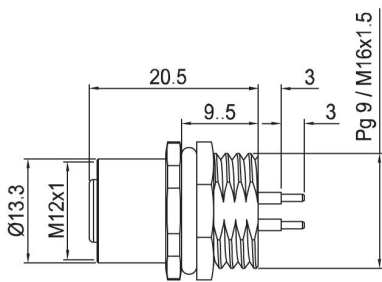

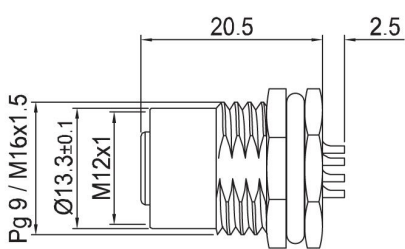

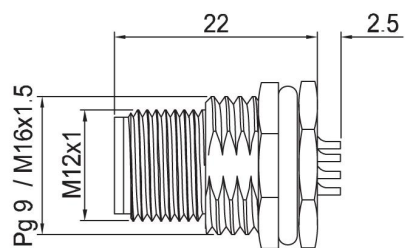
Description-Figure	Drawing	Contacts	Order P/N
M12 Straight Female Molded Cable 		3	M12-03-A-S-2-S-W
		4	M12-04-A-S-2-S-W
		6	M12-06-A-S-2-S-W
		8	M12-08-A-S-2-S-W
		12	M12-12-A-S-2-S-W
M12 Straight Male Molded Cable 		3	M12-03-A-S-2-S-W
		4	M12-04-A-S-2-S-W
		6	M12-06-A-S-2-S-W
		8	M12-08-A-S-2-S-W
		12	M12-12-A-S-2-S-W
M12 R/A Female Molded Cable 		3	M12-03-A-S-2-R-W
		4	M12-04-A-S-2-R-W
		6	M12-06-A-S-2-R-W
		8	M12-08-A-S-2-R-W
		12	M12-12-A-S-2-R-W
M12 R/A Male Molded Cable 		3	M12-03-A-S-2-R-W
		4	M12-04-A-S-2-R-W
		6	M12-06-A-S-2-R-W
		8	M12-08-A-S-2-R-W
		12	M12-08-A-S-2-R-W


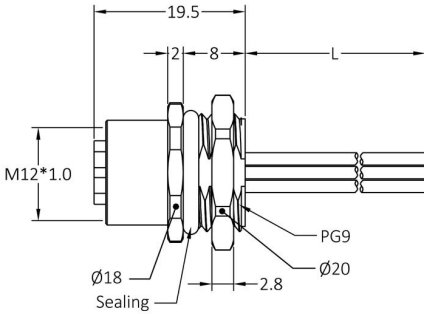

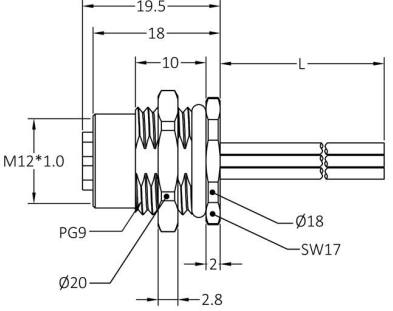
## M12 B-Coding Panel Receptacles

### Description

The M12 B-Coding panel mount connectors either soldered with single wires or with PCB Pins, as the signal or data Input/Output connecting port, provide quick connection between the field Devices and cables.

- 5 poles contacts.
- Operating voltage 60V, rated current 4A.
- Protection degree IP67.
- Temperature range: -40°C~+125°C.
- UL94-V0 flame retardant degree.
- Ground (PE) Pin available for option.

Description-Figure	Drawing	Contacts	Order P/N
M12 Female Solder/PCB Back Mount Connector 		5	M12-05-B-S-1-S-B
M12 Female Solder/PCB Front Mount Connector 		5	M12-05-B-S-1-S-F
M12 Male Solder/PCB Front Mount Connector 		5	M12-05-P-S-1-F

Description-Figure	Drawing	Contacts	Order P/N
M12 Female Back Mount Connector with Wires 		5	M12-05-B-S-1-S-B-W
M12 Female Front Mount Connector with Wires 		5	M12-05-B-S-1-S-F-W







## M12 B-Coding Field Wireable Connectors

### Description

The Field Wireable (installable) connectors permit high flexibility for wiring in the field for quick assembly and disassembly, it is also save the cable cost when connector replacing is necessary, for the B-Coding assembly type connectors RENHOTEC provides options of either EMC shielding type metal shell or plastic type connector body.

- Screwing termination contacts.
- Degree of protection IP67.
- Only 5 poles are available.
- Operating voltage 60V, current 4A.
- PA+GF Housing / Metal shell.


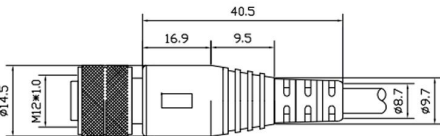

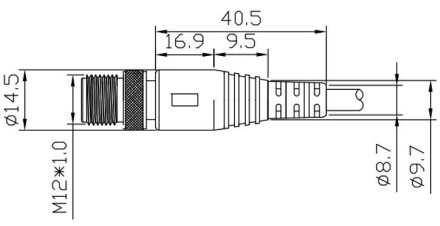
Description-Figure	Drawing	Contacts	Order P/N
<b>M12 Female Straight Plastic With Screw Termination</b> 		5	M12-05-B-S-3-S
<b>M12 Male Straight Plastic With Screw Termination</b> 		5	M12-05-B-P-3-S
<b>M12 Female Straight Metal With Screw Termination</b> 		5	M12-05-B-S-4-S
<b>M12 Male Straight Metal With Screw Termination</b> 		5	M12-05-B-P-4-S

## M12 B-Coding Cables (Cordsets)

### Description

The M12 B-Coded cable plugs with 12mm metric thread locking mechanism, based on IEC 61076-2-101 standard, it is the most commonly used connector in the Fieldbus of factory automation. Renhotec have designed and developed the M12 B-Code cables with superior quality for the reliable connections in harsh industrial conditions and climatic environments.

- Cable length base on customer requesting.
- Protection degree IP67.
- 5 poles per connector.
- Operating voltage 60V; Current range: 4A.
- Anti-vibration locking screw design.


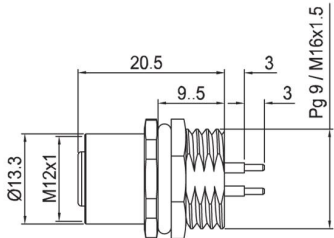

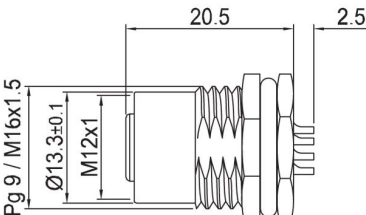

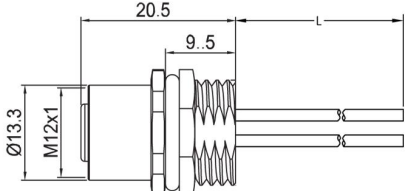

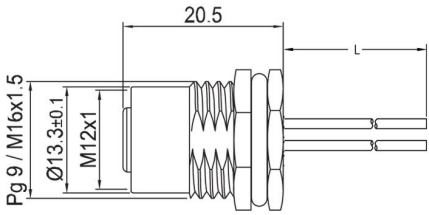
Description-Figure	Drawing	Contacts	Order P/N
M12 Straight Female Molded Cable 		5	M12-05-B-S-2-S-W
M12 Straight Male Molded Cable 		5	M12-05-B-S-2-S-W

## M12 D-Coding Panel Receptacles

### Description

Panel connector (receptacles) as the data input/output connecting port, the M12 D-Coding panel connector is typically used to carry data or signals between controllers or controllers to devices to make events happen deterministically or on a pre-defined schedule. RENHOTEC offers Industrial Ethernet Panel Connectors of M12 D-Coding, M12 X-Code and RJ45 receptacles with Rugged Constructions and Reliable Performance.

- Soldering contacts and PCB contacts for option.
- Degree of protection IP67.
- Temperature range: -40°C~+125°C.
- UL94-V0 flame retardant degree.
- Ground Pin available for option.


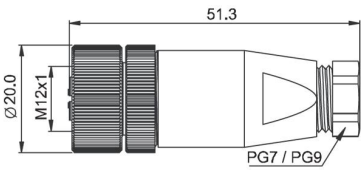



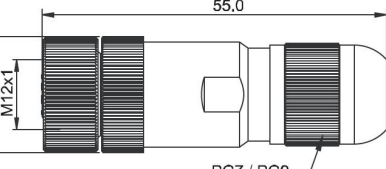

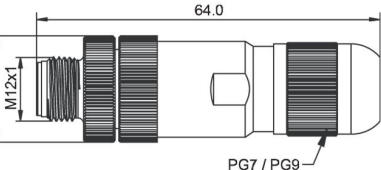
Description-Figure	Drawing	Contacts	Order P/N
<b>M12 Female Solder/PCB Back Mount Connector</b> 		4	M12-04-D-S-1-S-B
<b>M12 Female Solder/PCB Front Mount Connector</b> 		4	M12-04-D-S-1-S-F
<b>M12 Female Back Mount Connector with Wires</b> 		4	M12-04-D-S-2-S-B-W
<b>M12 Female Front Mount Connector with Wires</b> 		4	M12-04-D-S-2-S-F-W

## M12 D-Coding Field Wireable Connectors

### Description

RENHOTECH also provides M12 D-Coding field installable connectors as the cable plug options. The Field wireable/installable connectors allows high flexibility for field quick assembly and disassembly when differing cable lengths or replacing the connectors is necessary. The wire termination is realized by very quick and easy screw driving.

- Screwing termination contacts.
- Protection degree IP67.
- Temperature range: -40°C~+125°C.
- UL94-V0 flame retardant degree.
- EMI shielded metal housing.

Description-Figure	Drawing	Contacts	Order P/N
M12 Female Straight Plastic With Screw Termination 		4	M12-04-D-S-3-S
M12 Male Straight Plastic With Screw Termination 		4	M12-04-D-P-3-S
M12 Female Straight Metal With Screw Termination 		4	M12-04-D-S-4-S
M12 Male Straight Metal With Screw Termination 		4	M12-04-D-P-4-S


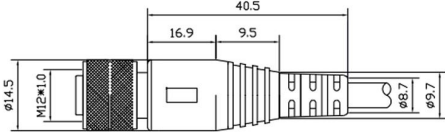

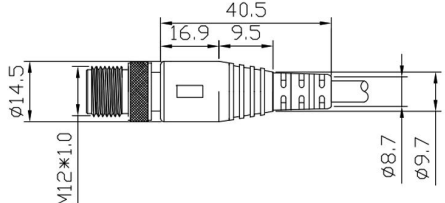


## M12 D-Coding Cables (Cordsets)

### Description

The M12 D-Coded cable with 12mm metric thread locking mechanism, based on IEC 61076-2-101 standard, it is the most commonly used connector in the factory automation and industrial Ethernet. RENHOTEC developed the industrial Ethernet cable with M12 D-Coding connectors, which meet the demands of the Ethernet/IP, EtherCAT, Powerlink. The designing of the connectors have already considered various industrial stringent application environments, such as waterproof, harsh temperature shocking, hydrolysis resistant, oil resistant, and anti-chemical, corrosion resistance, UV resistance, abrasion resistance, plug mating force and endurance performance.

- LAN CAT 5e 2 Pair twisted, SFTP cable.
- Cable length can be customized.
- EMI Shielding design available.
- IP67 Protection degree.
- Standard IEC 61076-2-101 D-Coding 4 pole connection interface.
- Operating voltage 250V; Current range: 4A.
- Anti-vibration design.

Description-Figure	Drawing	Contacts	Order P/N
M12 Straight Female Molded Cable 		4	M12-04-D-S-2-S-W
M12 Straight Male Molded Cable 		4	M12-04-D-S-2-S-W


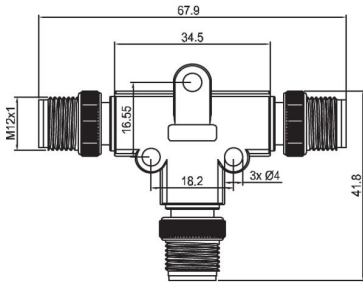

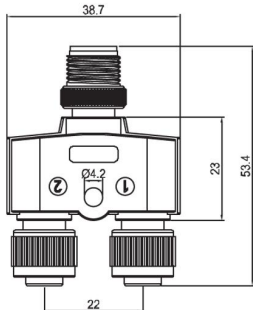


## M12 Y-Splitter/T-Splitter

### Description

RENHOTECH Provides M12 Y-Connector and T-Connector .The adapter splits wires into 2 separate connectors, allowing installation of two single-channel input or output devices to each port of hardwired distribution box. Connectors are available with parallel circuits, which allow input or output signals to run or trigger devices simultaneously.

- 3, 4, 5, 8 poles are available.
- Operating voltage 250V-AC/ 60V/30V, Rated current 4A, 2A.
- Temperature range: -40°C~+80°C.
- Protection degree IP67.


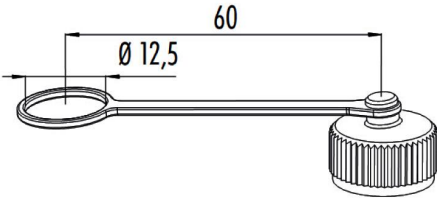

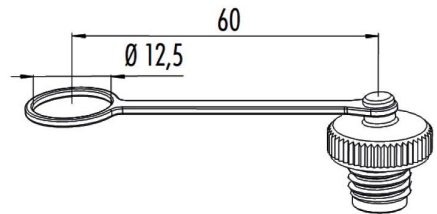
Description-Figure	Drawing	Contacts	Order P/N
T Type Male-2 Female 		3	M12-3T
		4	M12-4T
		5	M12-5T
		8	M12-8T
Y Type Male-2 Female 		3	M12-3Y
		4	M12-4Y
		5	M12-5Y
		8	M12-8Y

## M12 Dust Caps

### Description

The M12 Connector dust caps are available for both male and female connectors using when it is under the unplugged open status, which can keep it from dust or water invading.

- Nylon cap and TPU strips.
- For both Panel receptacle connectors and extension cable connectors.
- IP65, IP67 Protection degree.

Description-Figure	Drawing	Order P/N
Cap(Internal Thread) 		M12-C1
Cap(External Thread) 		M12-C2

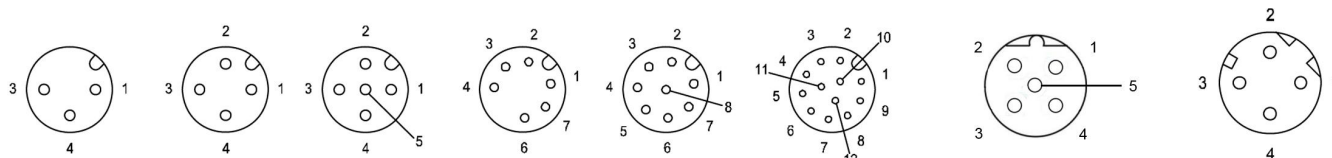
## Electrical &amp; Mechanical data

Standard	IEC 61076-2-101
Gender	Male/Female
Number of Contacts	3/4/5/8/12Pin
Coding	A/B Code
Termination	Soldering/PCB/Srew-Joint
Cable length	Base on customer's request
Contacts plating	Gold plated, thickness 1U"
Connection type	Single ended cable/Double ended cable
Orientation	Straight/Right Angle
Insert/ Housing	NYLON66 + GF
Overmold/ Shell	Metal shell
Connector contacts	Brass with gold plated
Rated current	4A : 3/4/5PIN 2A : 8PIN 1.5A: 12PIN
Rated Voltage	250V: 3/4/5PIN 60V: 8PIN 30V: 12PIN
Ambient temperature	-40°C~+90°C
Coupling nut/screw	Brass with nickel plated screw
Insulation resistance	≥100 MΩ
Sealing	Epoxy resin
Contacts resistance	≤ 5 MΩ
Shielding	Non-Shielded
IP rating	IP67

## Male Front View Coding A

## Coding B

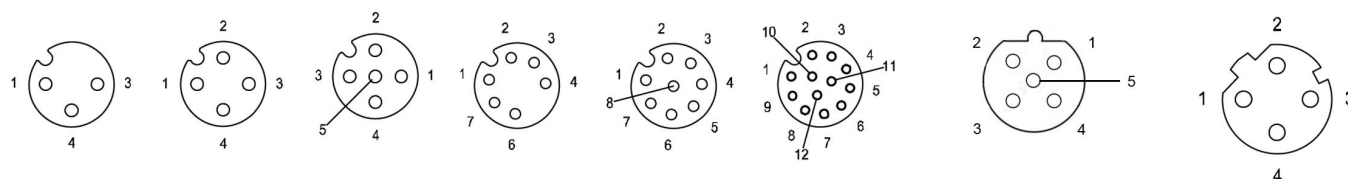
## Coding D



## Female Front View Coding A

## Coding B

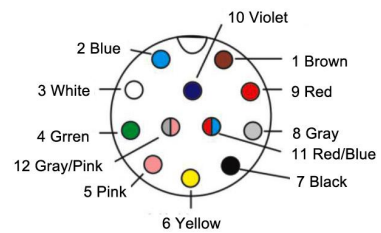
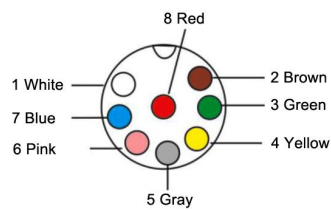
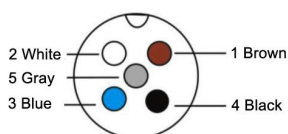
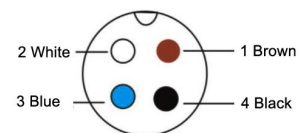
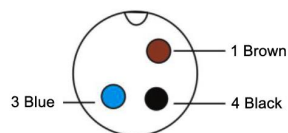
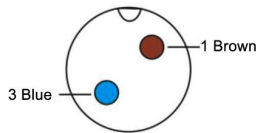
## Coding D



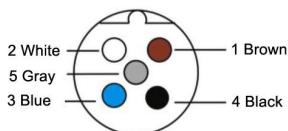
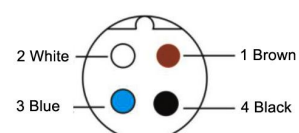
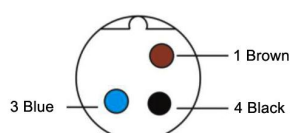
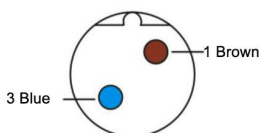
# M12

## M12 Male Pinout Drawing(A/B/D)

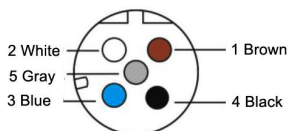
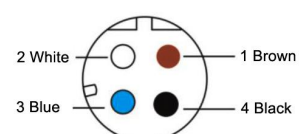
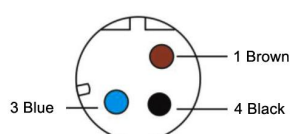
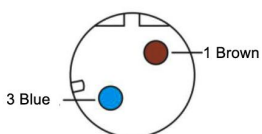
### A Code



### B Code



### D Code



1.Brown  
2.White  
3.Blue  
4.Black

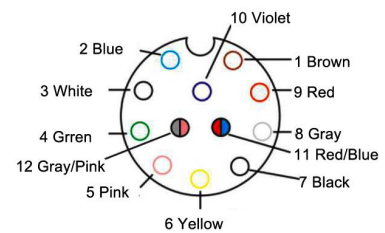
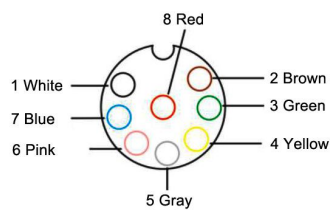
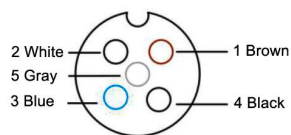
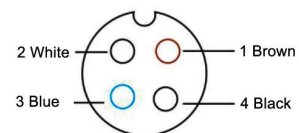
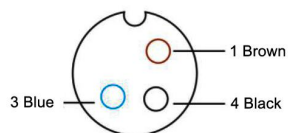
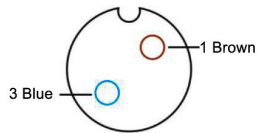
1.Brown  
2.White  
3.Blue  
4.Black  
5.Gray

1.White  
2.Brown  
3.Green  
4.Yellow  
5.Gray  
6.Pink  
7.Blue  
8.Red

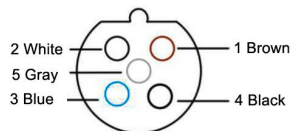
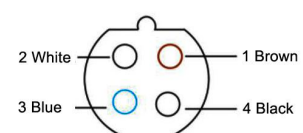
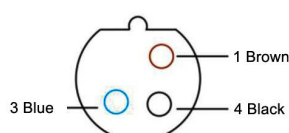
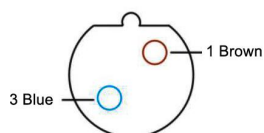
1.Brown  
2.Blue  
3.White  
4.Green  
5.Pink  
6.Yellow  
7.Black  
8.Gray  
9.Red  
10.Violet  
11.Red/Blue  
12.Gray/Pink

## M12 Female Pinout Drawing(A/B/D)

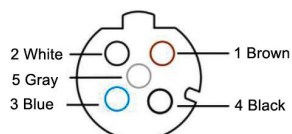
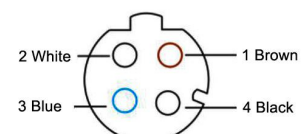
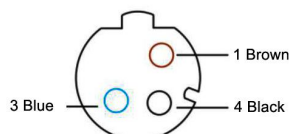
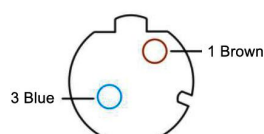
## A Code



## B Code



## D Code



1.Brown  
2.White  
3.Blue  
4.Black

1.Brown  
2.White  
3.Blue  
4.Black  
5.Gray

1.White  
2.Brown  
3.Green  
4.Yellow  
5.Gray  
6.Pink  
7.Blue  
8.Red

1.Brown  
2.Blue  
3.White  
4.Green  
5.Pink  
6.Yellow  
7.Black  
8.Gray  
9.Red  
10.Violet  
11.Red/Blue  
12.Gray/Pink