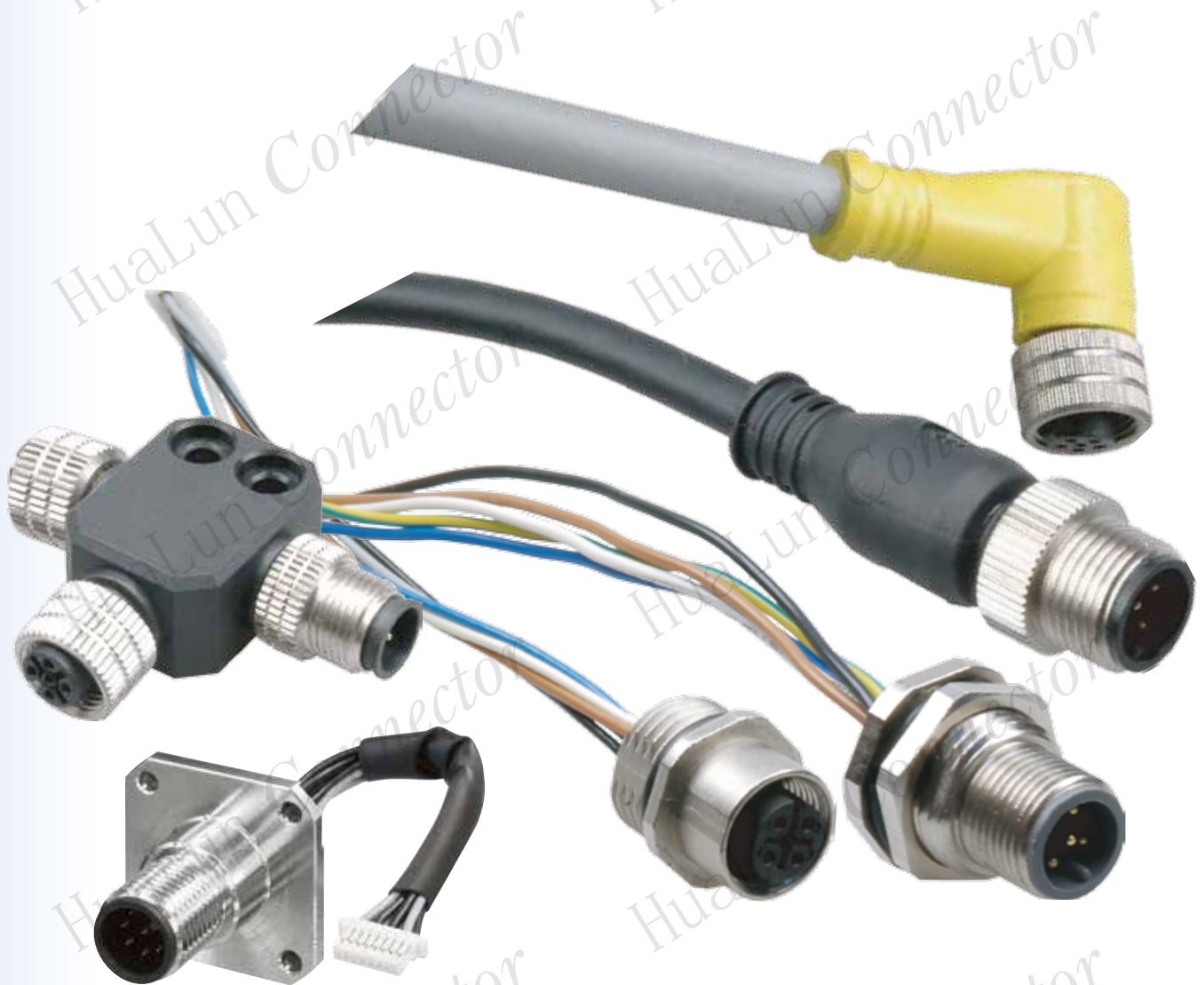


M12 Series Prefabricated





CERTIFICATE



ISO9001



ISO14001



ISO45001



High-tech Enterprise Certificate



Foreign Invested Advanced



Enterprise Credit Rating AAA



Software Copyright



ISO9001, ISO1400, ISO45001



UL for YD series

M12 Series Connector



Hualun M12 Series Connector

- Made according to IEC61076-2-101
- Halogen free material and compliant to RoHS
- Shell protection degree IP66 and IP67, and can intermateable with equivalent connectors

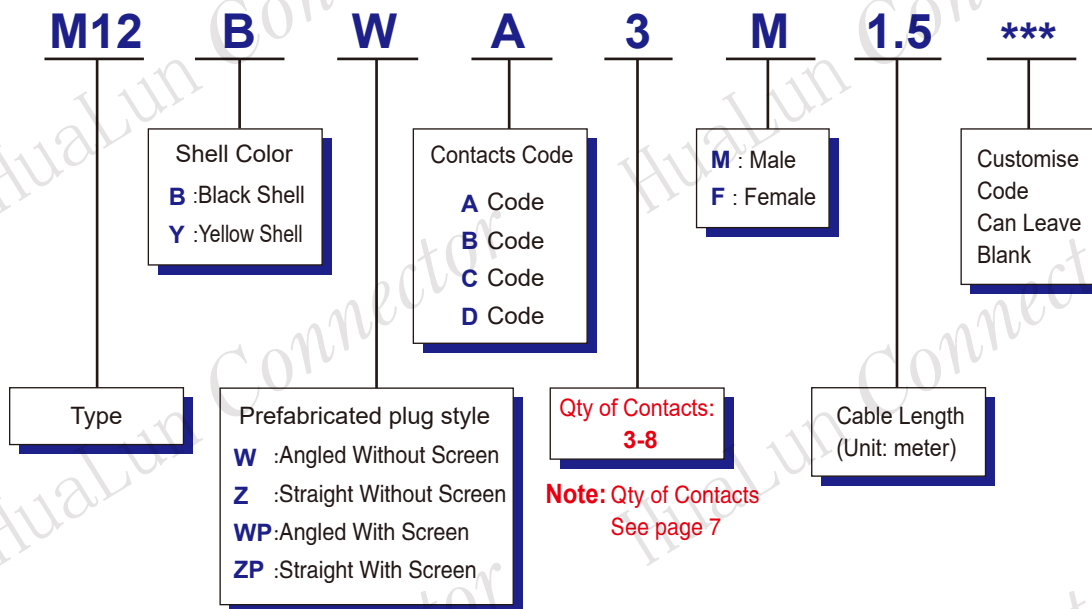
- Protection Degree: IP67 When Mated
- Ambient Temperature: -40℃~+85℃
- Wire Terminal Style: Crimp
- Wire Gauge: 0.34mm²
- Material of Contacts: Brass
- Finish of Contacts: Ni / Au
- Insulator Material: PA66
- Shell Material: TPU
- Cable: PUR
- Fix Connector Shell Types: ① Circular Flange ② Square Flange
- Fix Connector Mounting Types: ① Front Mounting ② Back Mounting
- Free Connector Shell Types: ① Straight ② Angled ③ T Adapter ④ Y Adapter
- Free Connector Molding Types: ① Single Connector ② Double Connectors
- Cable Length: 1.5m, 3m, 5m, 7.5m, and customized length
- Contacts Arrangement Code: A、B、C、D

Electrical Data

Qty of Contacts	Rated Current	Rated Voltage	Withstand Voltage	Pollution Degree	Contact Resistance	Insulation Resistance
M12 -3	4A	250V	1400V	3 ^b	< 10m Ω	>10 ¹⁰ Ω
M12 -4	4A	250V	1400V	3 ^b	< 10m Ω	>10 ¹⁰ Ω
M12 -5	4A	60V	1000V	3 ^b	< 10m Ω	>10 ¹⁰ Ω
M12 -6	2A	30V	650V	3 ^b	< 10m Ω	>10 ¹⁰ Ω
M12 -8	2A	30V	650V	3 ^b	< 10m Ω	>10 ¹⁰ Ω

— Part Number —

Single Free Connector



Examples:

M12BWA5M1.5

M12 connectors, black, angled Without Screen, A type, 5 contacts, male, cable length 1.5m, See picture below:



Examples:

M12YZPA3F7.5

M12 connectors, yellow, straight With Screen, A type, 3 contacts, female, cable length 7.5m, See picture below:



— Part Number —

Double Free Connectors

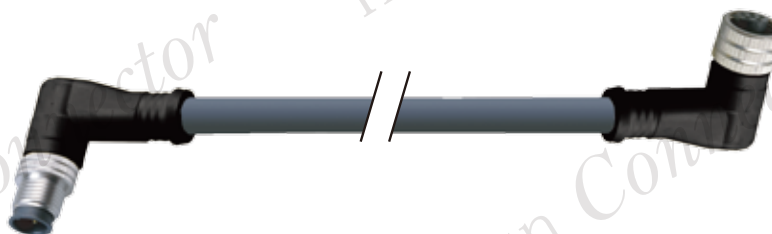
M12	B	W	A	3	M	1.5	//	W	A	3	F	***
Type	Shell Color B:Black Shell Y:Yellow Shell		Contacts Code A Code B Code C Code D Code		M : Male F : Female				芯位编码 A Code B Code C Code D Code		F : Female M : Male	
	Prefabricated plug style W :Angled Without Screen Z :Straight Without Screen WP :Angled With Screen ZP :Straight With Screen			Qty of Contacts: 3-8 Note: Qty of Contacts See page 7		Cable Length (Unit: meter)		Prefabricated plug style W :Angled Without Screen Z :Straight Without Screen WP :Angled With Screen ZP :Straight With Screen		Qty of Contacts: 3-8 Note: Qty of Contacts See page 7		Customise Code Can Leave Blank

Examples:

M12BWA3M1.5 // BWA3F

M12 connector, black, angled Without Screen, A type, 3 contacts, male, cable length 1.5m //

M12 connector, black, angled Without Screen, A type, 3 contacts, female, See picture below:

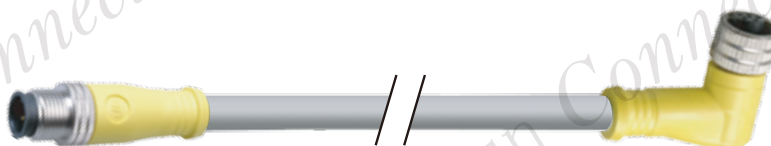


Examples:

M12YZPA5M3.5 // YWPA5F

M12 connector, yellow, straight With Screen, A type, 5 contacts, male,cable length 3.5m //

M12 connector, yellow, straight With Screen, A type, 5 contacts, female, See picture below:



— Part Number —

Circular Fixed Connectors

M12

HY

A

3

F

M16

1.5

QY: Circular Fixed
Front Panel Mounting
HY: Circular Fixed
Back Panel Mounting

Qty of Contacts:
3-8

Note: Qty of Contacts
See page 7

Tightening thread standard
M: Metric
Blank for M
PG: PG 9
PG must be marked

Type

Contacts Code

A Code
B Code
C Code
D Code

F : Female
M : Male

Cable Length
(Unit: meter)



M12QY-M



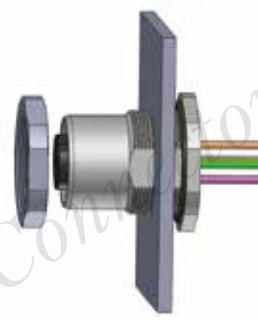
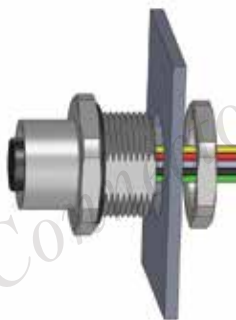
M12QY-F



M12HY-M

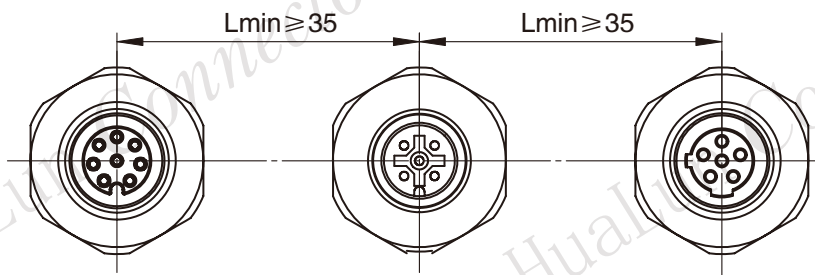


M12HY-F



Circular Fixed Connectors Mounting Space Figure

Mounting Hole See P13



— Part Number —

Square Flange Fixed Connectors

M12

HF

A

3

F

S

1.5

QY: Square Flange Fixed
Front Panel Mounting
HY: Square Flange Fixed
Back Panel Mounting

Qty of Contacts:
3-8

Note: Qty of Contacts
See page 7

P: Copper Shell
S: Stainless Steel Shell

Type

Contacts Code

A Code
B Code
C Code
D Code

F : Female
M : Male

Cable Length
(Unit: meter)



M12QF-M



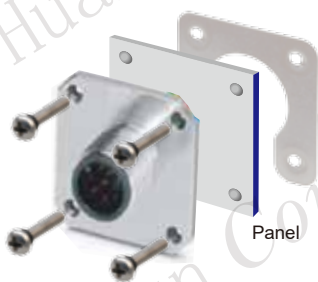
M12QF-F



M12HF-M

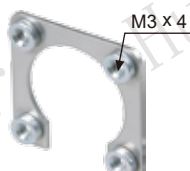


M12HF-F

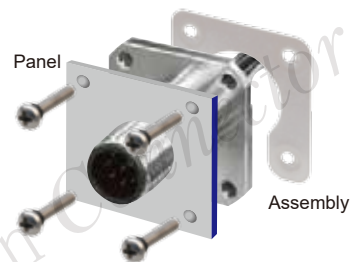


Front

Assembly Nut Plate



Assembly Nut Plate

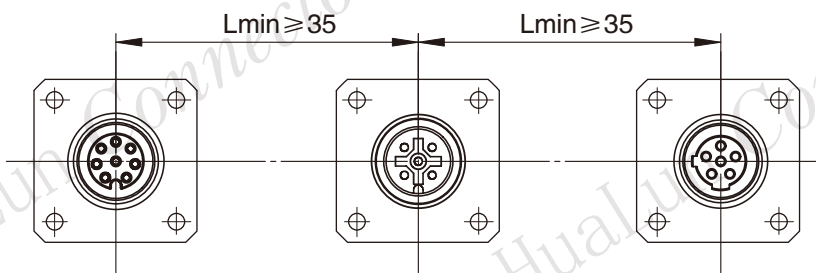


Rear

Assembly Nut Plate

Square Flange Fixed Connectors Mounting Space Figure

Mounting Hole See P14



Contacts Arrangement

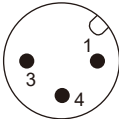
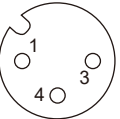
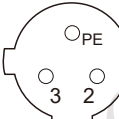
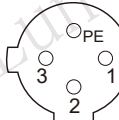
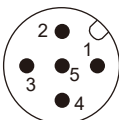
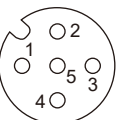
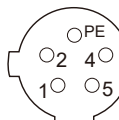
A A Code	B B Code	C C Code	D D Code
M Pin	M Pin	M Pin	M Pin
F Socket	F Socket	F Socket	F Socket
 	 	 	 
 		 	
 		 	
 		 	

Table 1 Cable Length

Cable Length	1.5m	3m	5m	7.5m	Choose Cable
--------------	------	----	----	------	--------------

Table 2 Wiring Diagram

Male port		Female port		Double port	
	BN BK BU		BN BK BU		BN BK BU
	BN WH BK BU		BN WH BK BU		BN WH BK BU
	BN WH BK BU GY		BN WH BK BU GY		BN WH BK BU GY
	WH BN GN YE GY PK BU RD		WH BN GN YE GY PK BU RD		WH BN GN YE GY PK BU RD

Contacts Contact No.	3	4	5	6	7	8
1	BN	BN	BN	WH	WH	WH
2	—	WH	WH	BN	BN	BN
3	BU	BU	BU	GN	GN	GN
4	BK	BK	BK	YE	YE	YE
5	—	—	GY	GY	GY	GY
6	—	—	—	PK	PK	PK
7	—	—	—	—	BU	BU
8	—	—	—	—	—	RD

WH: White; BN: Brown; GN: Green; YE: Yellow; GY: Gray; PK: Pink; BU: Blue; RD: Red

Single Free Connector

M - Male Straight Connector



B=Black

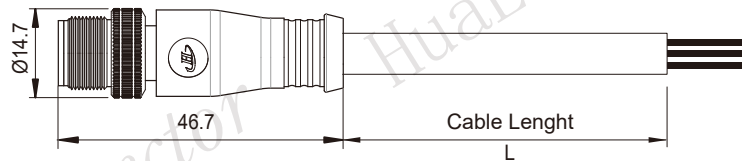


Y=Yellow

Spec:

- ① Contacts Arrangement See Page 7
- ② Cable Length See Page 7 Table 1
- ③ Wiring Diagram See Page 8 Table 2

Drawing



F - Female Straight Connector



B=Black

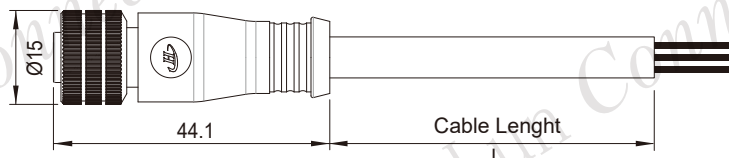


Y=Yellow

Spec:

- ① Contacts Arrangement See Page 7
- ② Cable Length See Page 7 Table 1
- ③ Wiring Diagram See Page 8 Table 2

Drawing



Single Free Connector

M - Male 90° Angled Connector

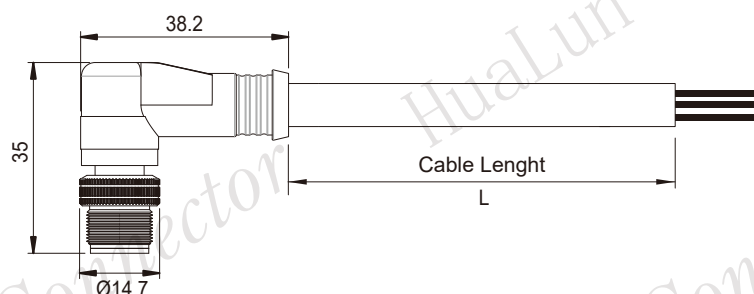
B=Black

Y=Yellow

Spec:

- ① Contacts Arrangement See Page 7
- ② Cable Length See Page 7 Table 1
- ③ Wiring Diagram See Page 8 Table 2

Drawing



F - Female 90° Angled Connector

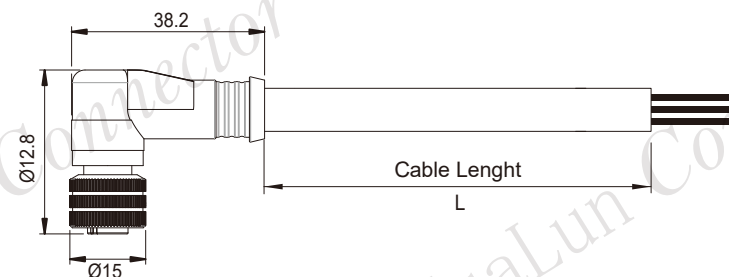
B=Black

Y=Yellow

Spec:

- ① Contacts Arrangement See Page 7
- ② Cable Length See Page 7 Table 1
- ③ Wiring Diagram See Page 8 Table 2

Drawing



Double Free Connector

M//F - Male Straight//Female Straight



B=Black

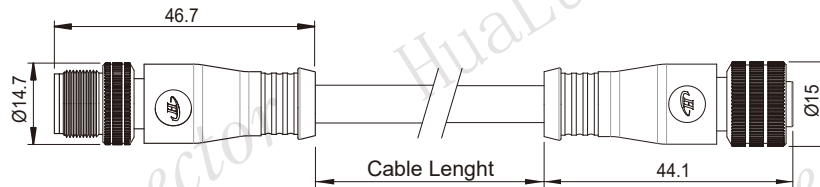


Y=Yellow

Spec:

- ① Contacts Arrangement See Page 7
- ② Cable Length See Page 7 Table 1
- ③ Wiring Diagram See Page 8 Table 2

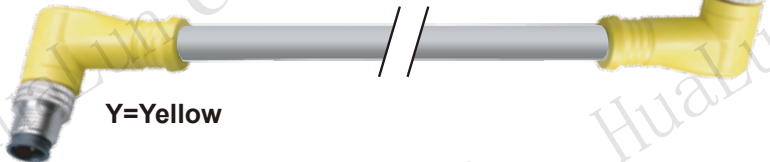
Drawing



M//F - Male 90° Angled//Female 90° Angled



B=Black

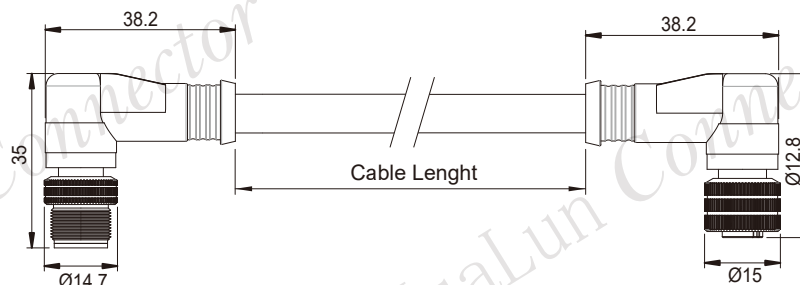


Y=Yellow

Spec:

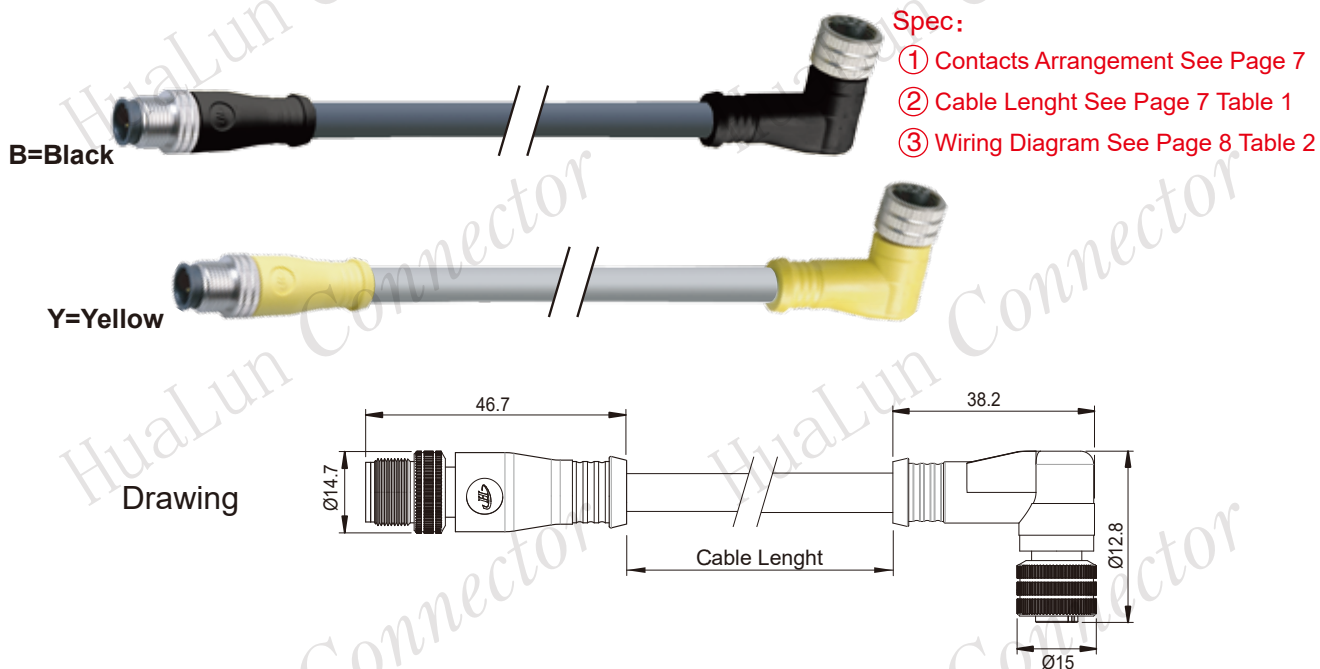
- ① Contacts Arrangement See Page 7
- ② Cable Length See Page 7 Table 1
- ③ Wiring Diagram See Page 8 Table 2

Drawing

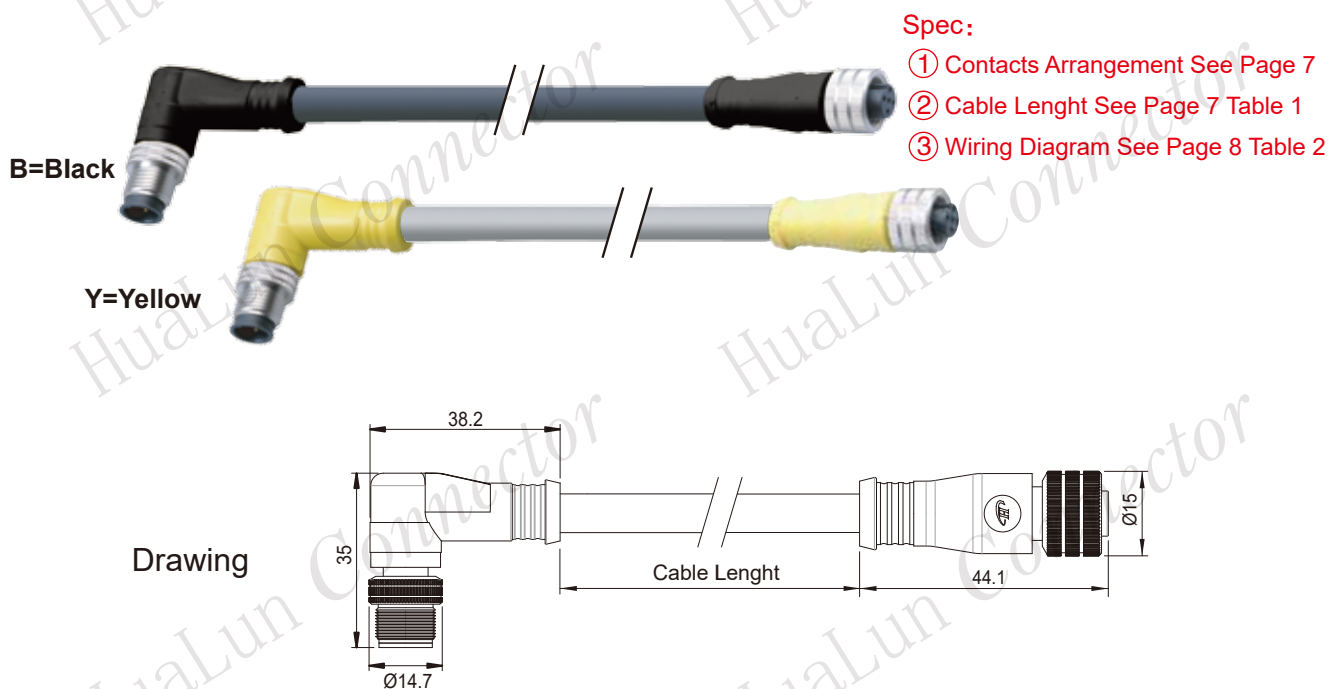


Double Free Connector

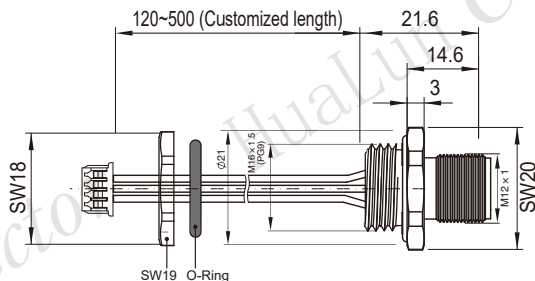
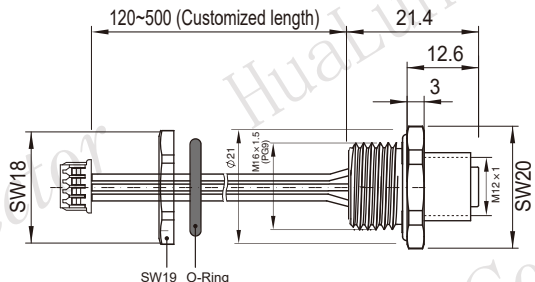
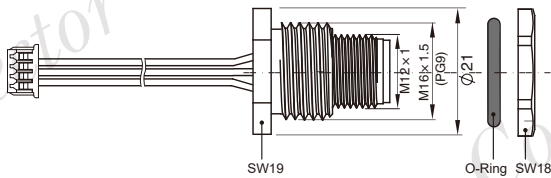
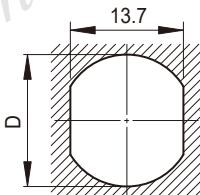
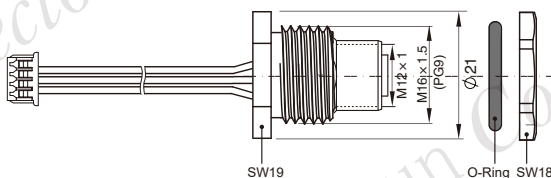
M//F - Male Straight//Female 90° Angled



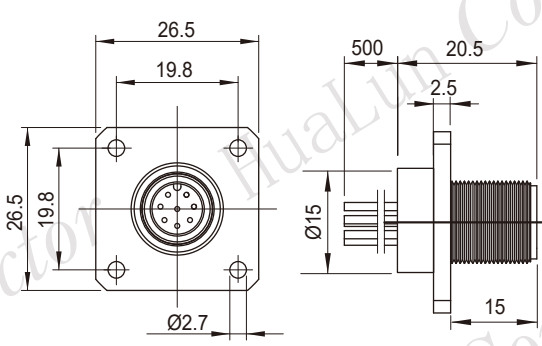
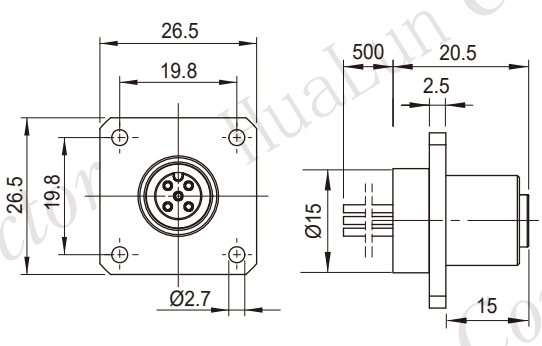
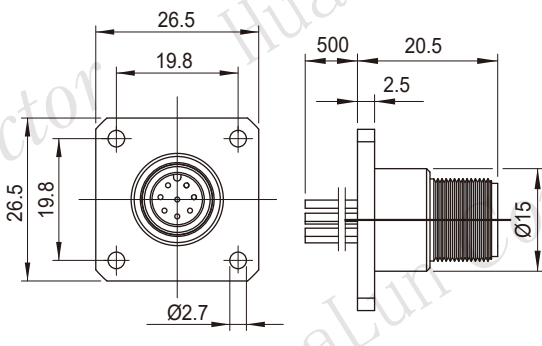
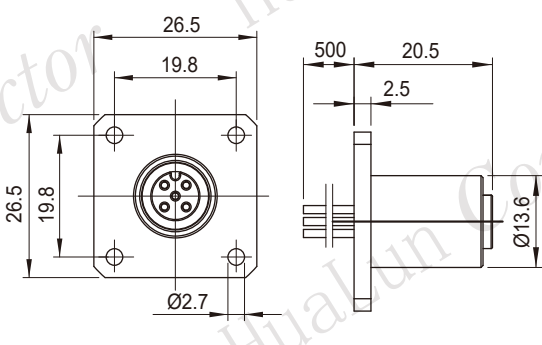
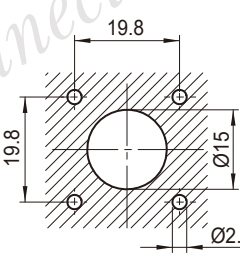
M//F - Male 90° Angled//Female Straight



Circular Fixed Connectors (See Page 7)

Front Panel Mounting(QY)	Identification	Drawing	Mounting Hole Dimention						
► M: Male M12QY Contacts Arrangement See Page 7 									
► F: Female M12QY Contacts Arrangement See Page 7 									
Back Panel Mounting(HY)	Identification	Drawing							
► M: Male M12HY Contacts Arrangement See Page 7 			 <table><tr><th>Diameter</th><th>D</th></tr><tr><td>M</td><td>Ø16.1</td></tr><tr><td>PG9</td><td>15.2</td></tr></table>	Diameter	D	M	Ø16.1	PG9	15.2
Diameter	D								
M	Ø16.1								
PG9	15.2								
► F: Female M12HY Contacts Arrangement See Page 7 									

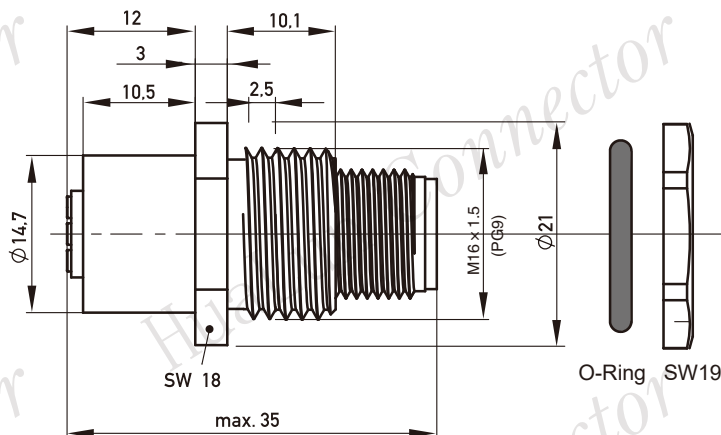
Square Flange Fixed Connectors (See Page 7)

Front Panel Mounting(QF)	Identification	Drawing	Mounting Hole Dimention
► M: Male M12QF Contacts Arrangement See Page 7 			
► F: Female M12QF Contacts Arrangement See Page 7 			
Back Panel Mounting(HF)	Identification	Drawing	Mounting Hole Dimention
► M: Male M12HF Contacts Arrangement See Page 7 			
► F: Female M12HF Contacts Arrangement See Page 7 			

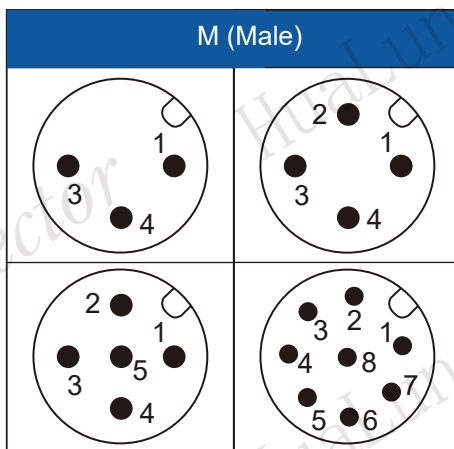
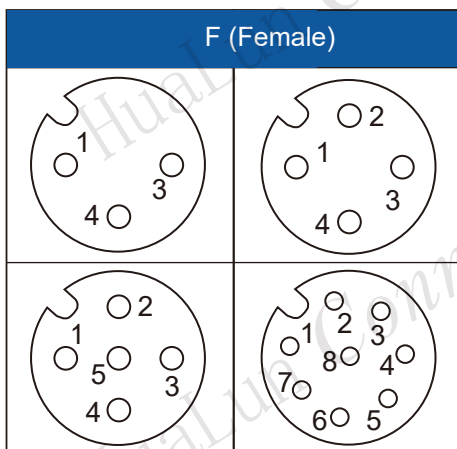
Male & Female Adapter



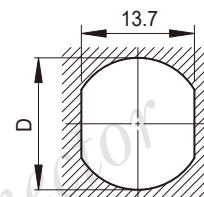
Part Number **M12SYA** (see contact arrangement)



A Contact Arrangement



Mounting Hole Dimensions



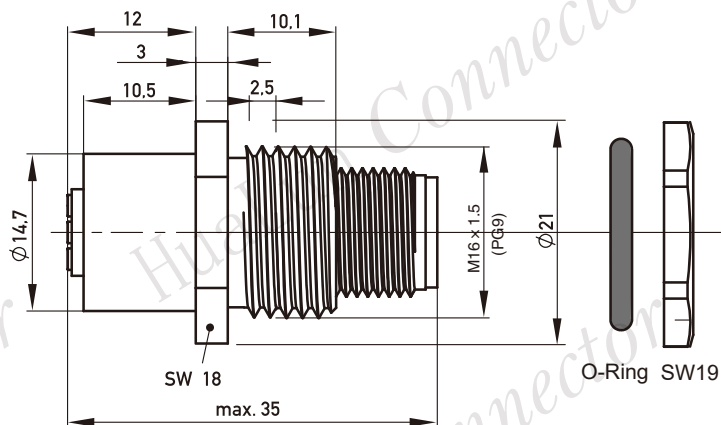
System	Diameter	D
M	M16 x 1.5	Ø16.1
PG	PG9	15.2

Unit in mm.

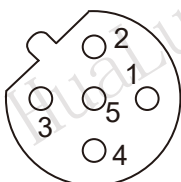
Male & Female Adapter



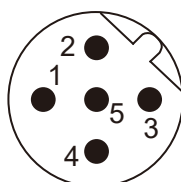
Part Number **M12SYB5**



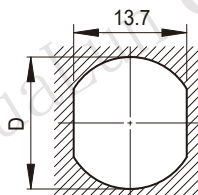
5 Contacts Female
F Female



5 Contacts Male
M Male



Mounting Hole Dimensions



System	Diameter	D
M	M16 x 1.5	Ø16.1
PG	PG9	15.2

Unit in mm.

M12 T Adapter

Technical Characteristics

Rated Current: 4A
Rated Voltage: 60V
Qty of Contacts: 5
Contact Resistance: $\leq 5\text{m}\Omega$

Insulation Resistance: $\geq 1\text{G}\Omega$
Ambient Temperature: $-25^{\circ}\text{C}\sim+85^{\circ}\text{C}$
Contacts Arrangement Code: A
Retardant: UL94-V0

Identification

Female A Code
50cm Wire, 0.5mm^2

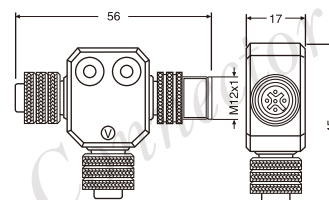


Female A Code
50cm Wire, 0.5mm^2

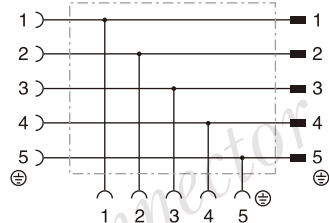
Male A Code
50cm Wire,
 0.5mm^2

M12T

Drawing



Circuit Diagram



M12 Y Adapter

Technical Characteristics

Rated Current: 4A
Rated Voltage: 60V
Qty of Contacts: 5
Contact Resistance: $\leq 5\text{m}\Omega$

Insulation Resistance: $\geq 1\text{G}\Omega$
Ambient Temperature: $-25^{\circ}\text{C}\sim+85^{\circ}\text{C}$
Contacts Arrangement Code: A
Retardant: UL94-V0

Identification



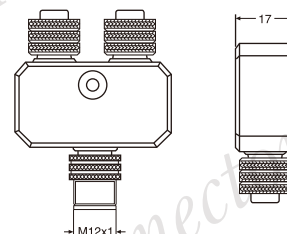
Male A Code
50cm Wire, 0.5mm^2
5 Contacts

Male A Code
50cm Wire, 0.5mm^2
5 Contacts

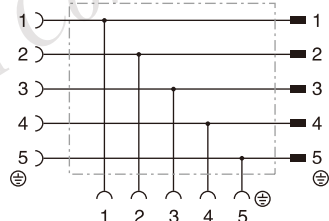
Female A Code
50cm Wire, 0.5mm^2
5 Contacts

M12Y

Drawing



Circuit Diagram





SHANGHAI HUALUN INSTRUMENTS & ELECTRONICS CO., LTD.
上海华伦仪表电子有限公司

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www.hualunconnector.com
www.hualunconnectors.com

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ADD: Factory building 1 & 3, Jinjiang Industrial
Park, Qianyang Rd271, Shanghai
邮编(P.C.): 200333

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