

XS-(IP67) Miniature Connectors

Industry signal Power supply

■ Coupling: push-pull, Fast coupling and separation

■ Degrees of protection IP65/IP67



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CERTIFICATE



High-tech Enterprise Certificate



Foreign Invested Advanced



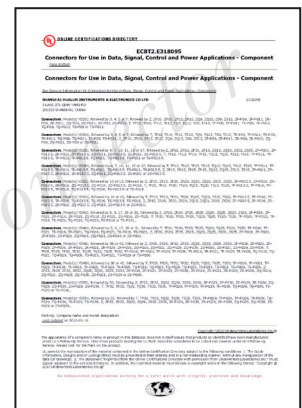
Enterprise Credit Rating AAA



Software Copyright



ISO9001, ISO14001, ISO45001



UL for YD series



TUV SUD



ISO9001

ISO14001

ISO45001



华伦连接器

HuaLun Connector

Design & Standard

- IEC/EN61984 《Connectors—Safety requirements and tests》
- IEC60664-1 Clearance, creepage distance & solid insulation
- IEC60529/GB4208 《Degrees of protection provided by enclosures (IP Code) 》
- GB/T2423.18-2012 《environmental-test 2》
- IEC60512 《Connectors for electronic equipment-Tests and measurements》
- NFF61030 (Normes francaises) 《Railway rolling stock-Electrical connectors》
- GB/T4797.2 《Natural environmental conditions for electrical and electronic products》

Environmental

Overvoltage Category	II/ III	Frequency	50/60Hz
Relative Humidity	95% at 40℃ ± 2℃		
Salty Spray Corrosion	>96hours, GB/T2423.18(3)		
Protection Degree	IP65/IP67		
Degree of Pollution	2/3		
Flame Resistance	UL94V-0		
Liquid Resistance	Oil, Mineral oil, Acid, Alkali		

Mechanical Features

Vibration	SINE10~100Hz; 2g	NFF61030
Shock	Acceleration 30g,18ms	
Mechanical Life	≥500 Cycles	

Material: RoHS

Shell	Copper Alloy (Chromium)
Contact	Brass (Gold, Silver)
Insert	Plastic UL Certificate
	Grade 1 ^b ; CTI≥600V
	Flame resistance UL94V-0; Insulation 10 ¹⁶

Electric Features

Operating Temperature	Lower limit-55℃ ; Upper limit+125℃				
Insulation Resistance	Normal Temperature≥5000MΩ ; Damp Heat≥100MΩ				
Diameter of Contacts(mm)	0.8	1.0	1.5	1.6	2.5
Rated Current	3A	5A	10A	13A	20A
Rated Voltage(VAC)	See Contacts Arrangement				
Wire Gauge(mm ²)	<0.3	0.5 ~ 0.75	1 ~ 1.5	1 ~ 2	1.5 ~ 2.5
Contact Resistance (mΩ)	<8	<5	<2.5	<2.25	<1
Withstand Voltage (V _{rms}) [50/60Hz]	See Contacts Arrangement Remark: For High Altitude Low Pressure Environment, Refer to GB/T4797.2-2005				
Screen	According to customer requirements				

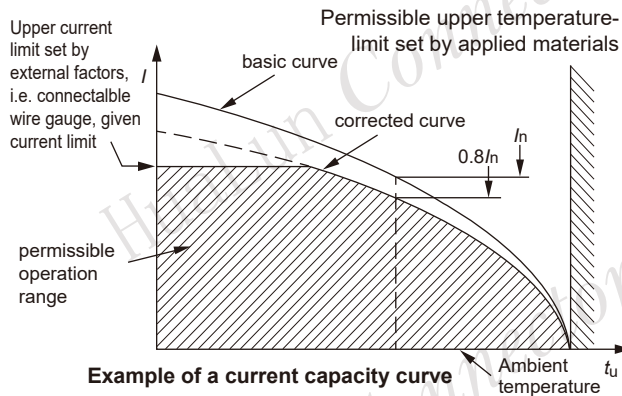
Reference value of withstand Voltage drop in high altitude environment

Withstand Voltage (V _{rms})	altitude <2000m	840	1000	1380	1500	2000
	altitude 2001m ~ 3000m	750	900	1240	1350	1800
	altitude 3001m ~ 4000m	650	780	1080	1170	1560
		↓	↓	↓	↓	↓

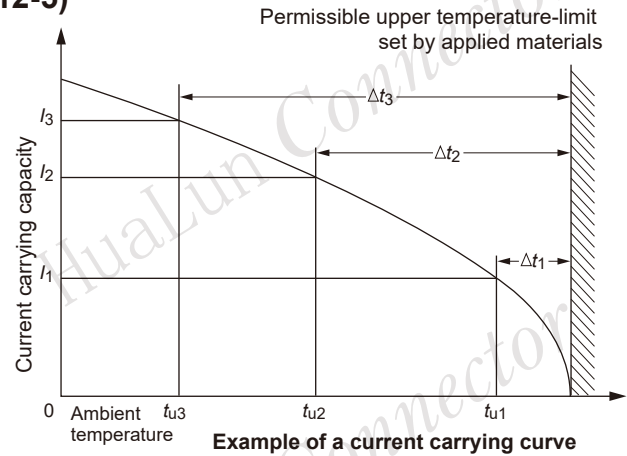
★ Please contact sales for customization!

Current-Carrying Capacity

Current-Carrying Capacity Curve (IEC/EN 60512-5)

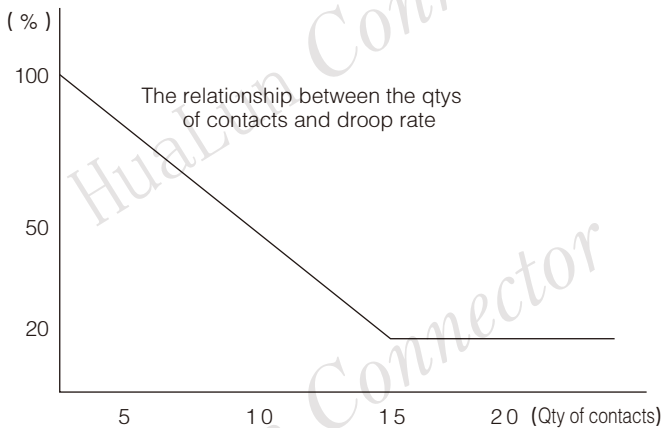


- ◆ The rated current is the continuous, not interrupted current a connector can take when simultaneous power on all contacts is given, without exceeding the maximum temperature.



- ◆ In practice it is not usual to load all terminals simultaneously with the maximum current. In such a case one contact can be loaded with a higher current as permitted by the current capacity curve, if less than 20% of the whole is loaded.
- ◆ It is recommended to proceed in accordance with the relevant rules of the DIN IEC 60512 part 3.

Current-carrying capacity tends to decline with its contacts increaaing



Derated curve table

Qty of contacts	droop rate %	Qty of contacts	droop rate %	Qty of contacts	droop rate %
1	0	6	28.6	11	57.1
2	5.7	7	34.3	12	62.9
3	11.4	8	40	13	68.6
4	17.1	9	45.7	14	74.3
5	22.9	10	51.4	15 above	80

Total capacity (A) = (single contact) rated current x Qty of contacts x (1-Droop rate%)

Sample 1: XS12-4 Total capacity

$$\text{Total capacity} = 5A (\phi 1.0) \times 4 \times (1-17.1\%) = 16.6 A$$

Sample 2: XS18-14 Total capacity

$$\text{Total capacity} = 5A (\phi 1.0) \times 14 \times (1-74.3\%) = 18 A$$

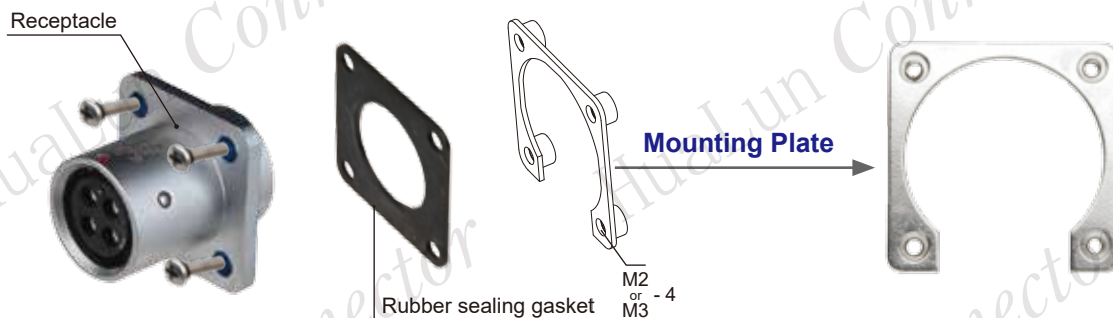
Remark: The current of Single contact could be overall distribution for remands, but the total capacity not over the LIMITED value.

Mounting Plate

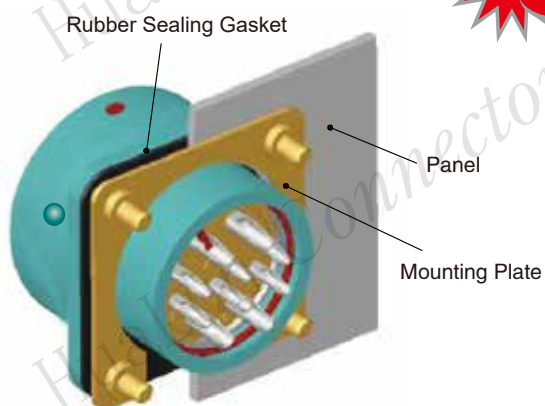
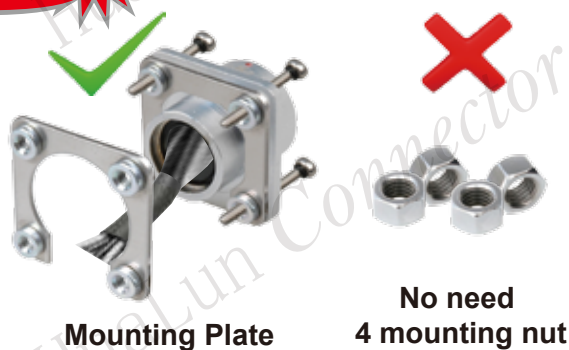
The Feature of Mounting Plate

1. Convenient and Fast

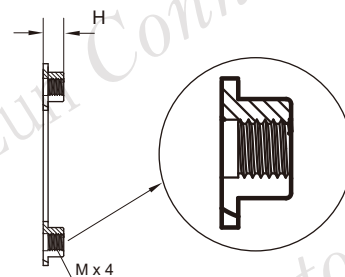
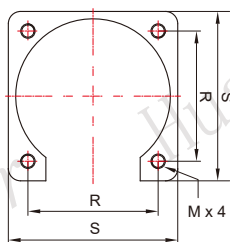
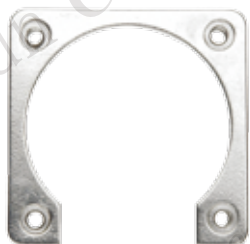
2. Firm



Front Mounting


Special Recommendation


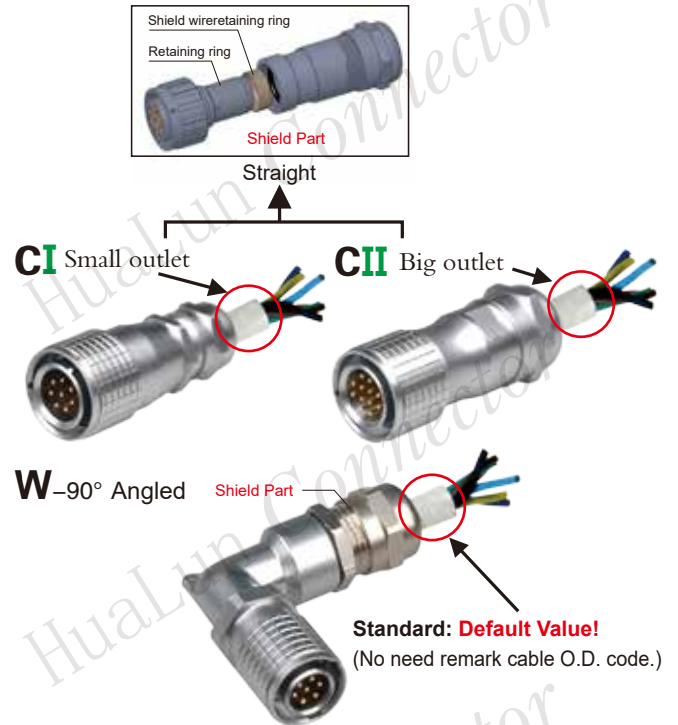
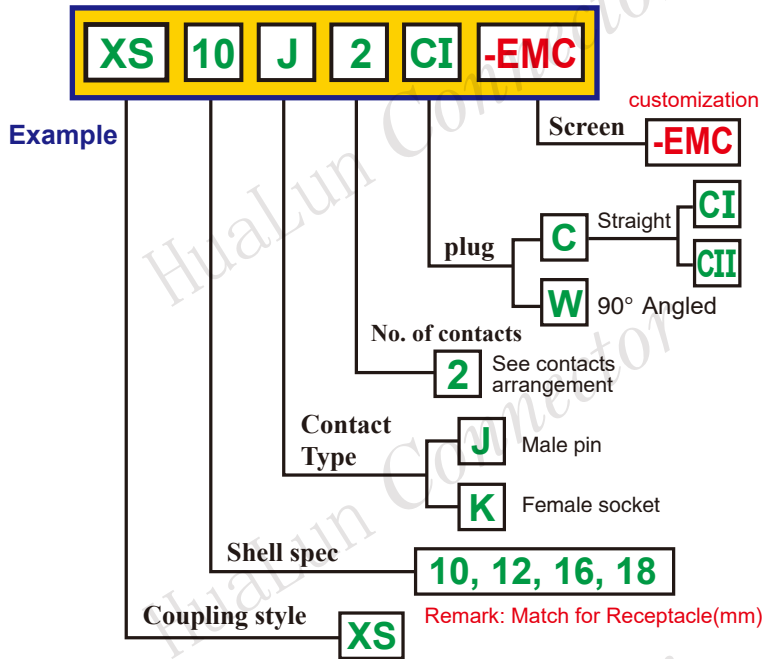
The Size of Mounting Plate



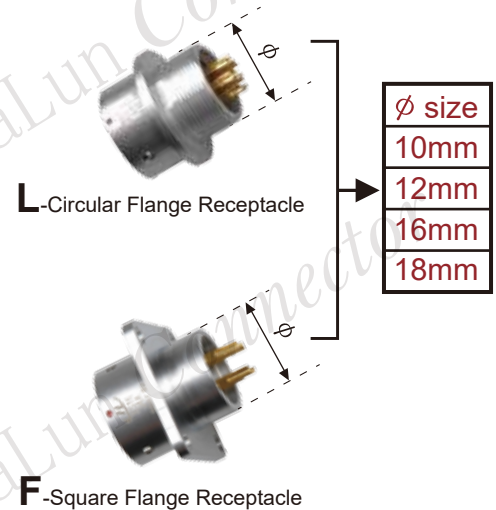
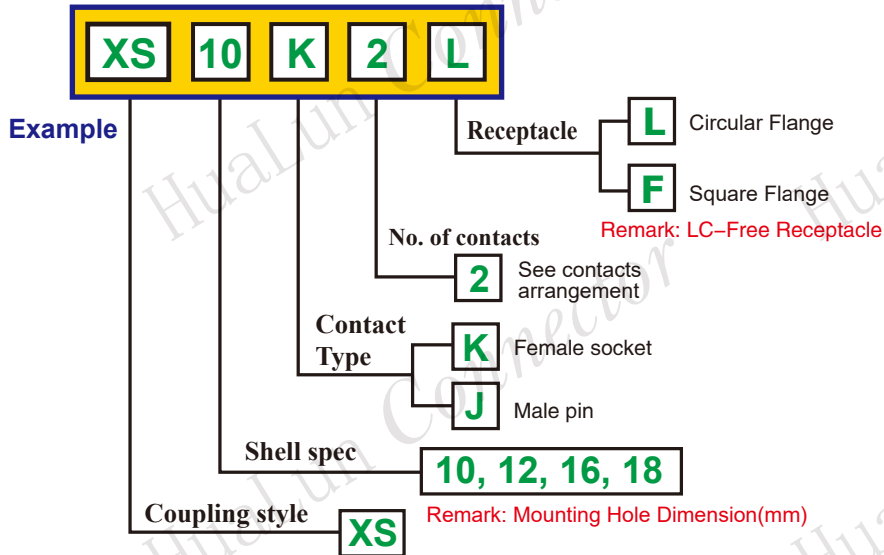
Order No.	Shell Spec	R	S	H	Thread M	Screw Spec
A10	10	11.00	16.00	2.60	M2	M2 x 10
A12	12	13.00	18.00			
A16	16	20.00	26.00		M3	M3 x 10
A18	18	22.00	28.00			

Plug & Receptacle Order Code

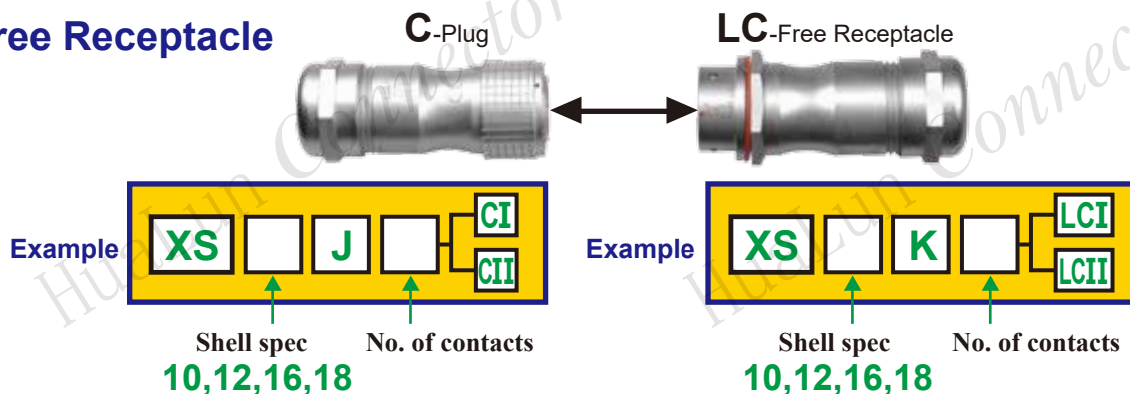
◆ Plug



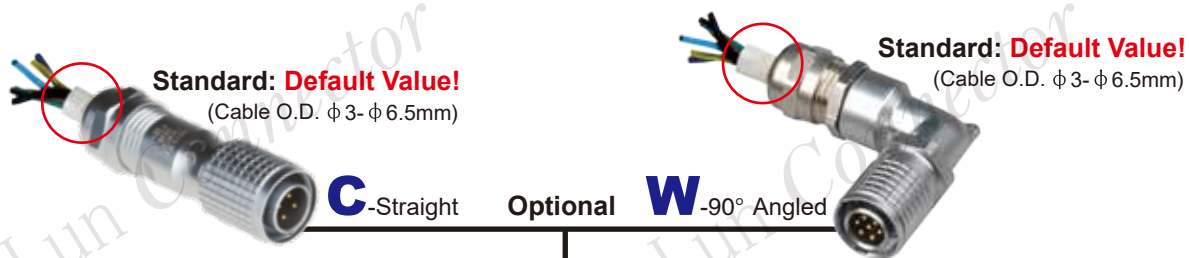
◆ Receptacle Panel Mounting



◆ Free Receptacle



XS10 Male Plug Type



Order Code

XS10J

Qty. of Contacts

C or W



Remark: Plug Shell Size See Page 16

J (Male)



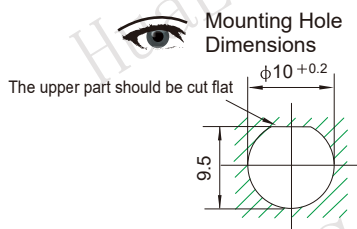
Optional

Contacts Arrangement

φ: mm

Qty. of Contacts	2	3	4	5
Contacts Arrangement				
Diameter of contacts×Qty.	φ 1.0 × 2	φ 1.0 × 3	φ 0.8 × 4	φ 0.8 × 5
Rated Current	5A	5A	3A	3A
Rated Voltage	160VAC	125VAC	165VAC	125VAC
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	<0.3mm ²	<0.3mm ²

XS10 Female Receptacle Type

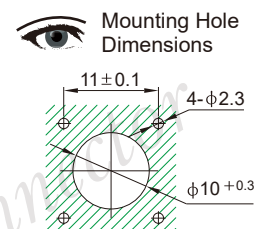


L -Circular Flange

Optional



F -Square Flange



Order Code

XS10K

Qty. of Contacts

L or F



Remark: Receptacle Shell Size See Page 16

K (Female)



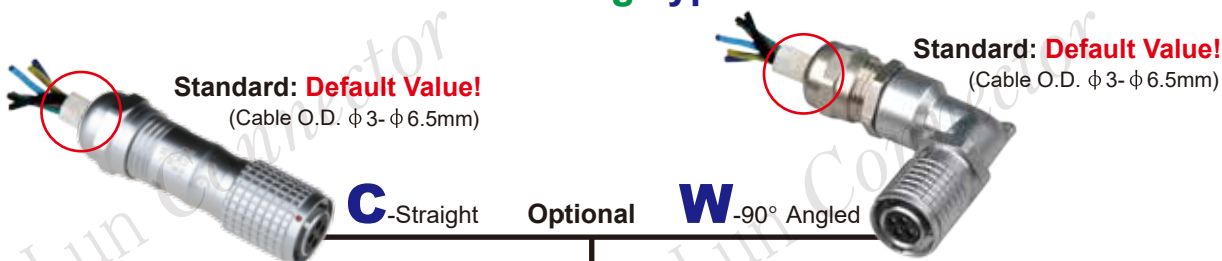
Optional

Contacts Arrangement

φ: mm

Qty. of Contacts	2	3	4	5
Contacts Arrangement				
Diameter of contacts×Qty.	φ 1.0 × 2	φ 1.0 × 3	φ 0.8 × 4	φ 0.8 × 5
Rated Current	5A	5A	3A	3A
Rated Voltage	160VAC	125VAC	160VAC	125VAC
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	<0.3mm ²	<0.3mm ²

XS10 Female Plug Type



Order Code

XS10K

Qty. of Contacts

C or W



Remark: Plug Shell Size See Page 16

K (Female)

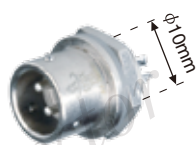
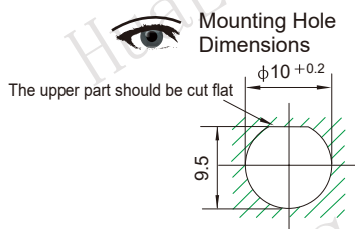
Optional

Contacts Arrangement

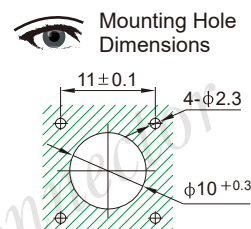
ϕ : mm

Qty. of Contacts	2	3	4	5
Contacts Arrangement				
Diameter of contacts×Qty.	ϕ 1.0 × 2	ϕ 1.0 × 3	ϕ 0.8 × 4	ϕ 0.8 × 5
Rated Current	5A	5A	3A	3A
Rated Voltage	160V	125V	160V	125V
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	<0.3mm ²	<0.3mm ²

XS10 Male Receptacle Type



Optional



Order Code

XS10J

Qty. of Contacts

L or F



Remark: Receptacle Shell Size See Page 16

J (Male)

Optional

Contacts Arrangement

ϕ : mm

Qty. of Contacts	2	3	4	5
Contacts Arrangement				
Diameter of contacts×Qty.	ϕ 1.0 × 2	ϕ 1.0 × 3	ϕ 0.8 × 4	ϕ 0.8 × 5
Rated Current	5A	5A	3A	3A
Rated Voltage	160V	125V	160V	125V
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	<0.3mm ²	<0.3mm ²



TUV SUD



ISO9001

ISO14001

ISO45001



华伦连接器

HuaLun Connector

XS12 Male Plug Type

Cable O.D. _____

Optional Configuration: **CI** or **CII****CI**: $\phi 3 - \phi 6.5\text{mm}$ **CII**: $\phi 4 - \phi 8\text{mm}$ **C**-Straight

Optional

W-90° AngledStandard: **Default Value!**(Cable O.D. $\phi 4 - \phi 8\text{mm}$)

Order Code

XS12J

Qty. of Contacts

CI or **CII** or **W**

Remark: Plug Shell Size See Page 16

J (Male)

Optional

Contacts Arrangement

 ϕ : mm

Qty. of Contacts	2	3	4	5	6	7
Contacts Arrangement						
Diameter of contacts × Qty.	$\phi 1.6 \times 2$	$\phi 1.0 \times 3$	$\phi 1.0 \times 4$	$\phi 1.0 \times 5$	$\phi 1.0 \times 6$	$\phi 1.0 \times 7$
Rated Current	13A	5A	5A	5A	5A	5A
Rated Voltage	250V	250V	200V	200V	125V	125V
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1~2mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

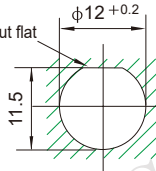
XS12 Female Receptacle Type



Mounting Hole Dimensions

 $\phi 12 \pm 0.2$

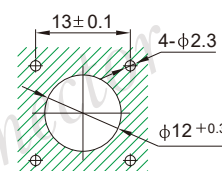
The upper part should be cut flat

**L**-Circular Flange

Optional

**F**-Square Flange

Mounting Hole Dimensions



Order Code

XS12K

Qty. of Contacts

L or **F**

Remark: Receptacle Shell Size See Page 16

K (Female)

Optional

Contacts Arrangement

 ϕ : mm

Qty. of Contacts	2	3	4	5	6	7
Contacts Arrangement						
Diameter of contacts × Qty.	$\phi 1.6 \times 2$	$\phi 1.0 \times 3$	$\phi 1.0 \times 4$	$\phi 1.0 \times 5$	$\phi 1.0 \times 6$	$\phi 1.0 \times 7$
Rated Current	13A	5A	5A	5A	5A	5A
Rated Voltage	250V	250V	200V	200V	125V	125V
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1~2mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

XS12 Female Plug Type

Cable O.D.

Optional Configuration:

CI or **CII**

CI: $\phi 3 - \phi 6.5\text{mm}$

CII: $\phi 4 - \phi 8\text{mm}$

Standard: **Default Value!**

(Cable O.D. $\phi 4 - \phi 8\text{mm}$)

C - Straight

Optional

W - 90° Angled

Order Code

XS12K

Qty. of Contacts

CI or **CII** or **W**



Remark: Plug Shell Size See Page 16

K (Female)

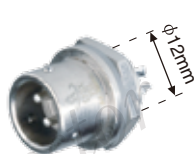
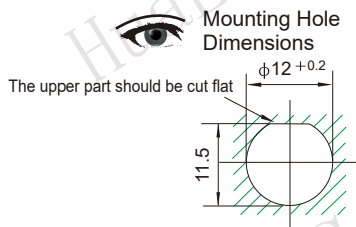
Optional

Contacts Arrangement

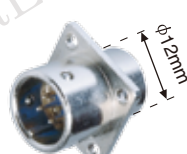
ϕ : mm

Qty. of Contacts	2	3	4	5	6	7
Contacts Arrangement						
Diameter of contacts × Qty.	$\phi 1.6 \times 2$	$\phi 1.0 \times 3$	$\phi 1.0 \times 4$	$\phi 1.0 \times 5$	$\phi 1.0 \times 6$	$\phi 1.0 \times 7$
Rated Current	13A	5A	5A	5A	5A	5A
Rated Voltage	250VAC	250VAC	200VAC	200VAC	125VAC	125VAC
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1~2mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

XS12 Male Receptacle Type

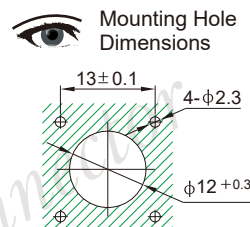


L - Circular Flange



F - Square Flange

Optional



Order Code

XS12J

Qty. of Contacts

L or **F**



Remark: Receptacle Shell Size See Page 16

J (Male)

Optional

Contacts Arrangement

ϕ : mm

Qty. of Contacts	2	3	4	5	6	7
Contacts Arrangement						
Diameter of contacts × Qty.	$\phi 1.6 \times 2$	$\phi 1.0 \times 3$	$\phi 1.0 \times 4$	$\phi 1.0 \times 5$	$\phi 1.0 \times 6$	$\phi 1.0 \times 7$
Rated Current	13A	5A	5A	5A	5A	5A
Rated Voltage	250VAC	250VAC	200VAC	200VAC	125VAC	125VAC
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1~2mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²



TUV SUD



ISO9001

ISO14001

ISO45001



华伦连接器
HuaLun Connector

XS16 Male Plug Type

Cable O.D. _____

Optional Configuration:

CI or **CII****CI**: $\phi 4$ - $\phi 8$ mm**CII**: $\phi 7$ - $\phi 12$ mm**C**-Straight

Optional

W-90° AngledStandard: **Default Value!**(Cable O.D. $\phi 5$ - $\phi 10$ mm)

Order Code

XS16J

Qty. of Contacts

CI or **CII** or **W**

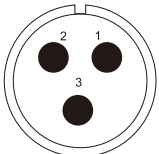
Remark: Plug Shell Size See Page 16

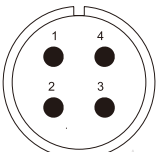
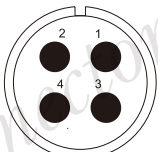
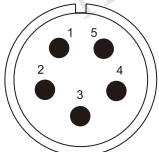
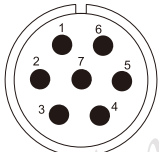
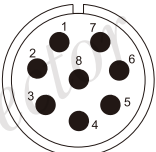
J (Male)

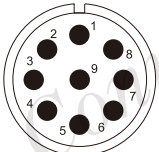
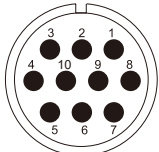
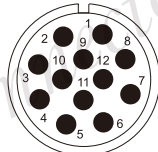
Optional

Contacts Arrangement

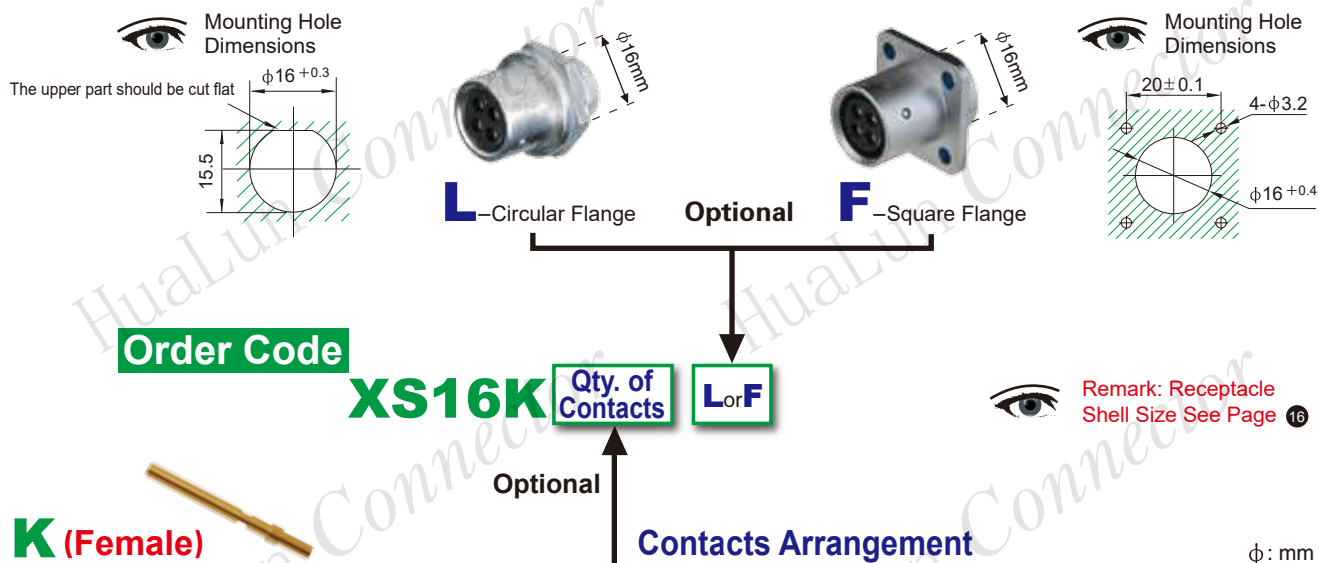
 ϕ : mm

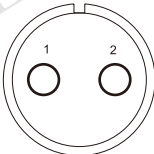
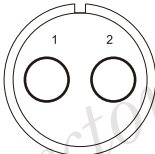
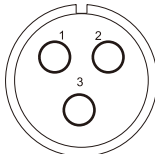
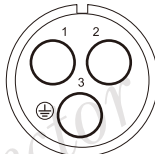
Qty. of Contacts	2	2a	3	3a	3b
Contacts Arrangement					
Diameter of contacts×Qty.	φ 1.5 × 2	φ 2.5 × 2	φ 1.0 × 3	φ 1.5 × 3	φ 2.5 × 3
Rated Current	10A	20A	5A	10A	20A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	2000Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)
Wire Gauge	1~1.5mm ²	1.5~2.5mm ²	0.5~0.75mm ²	1~1.5mm ²	1.5~2.5mm ²

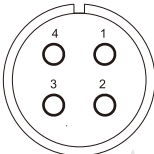
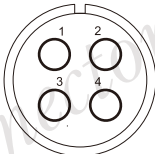
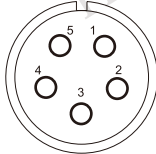
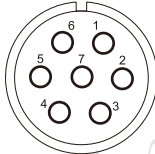
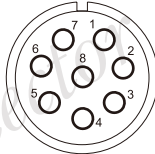
Qty. of Contacts	4	4a	5	7	8
Contacts Arrangement					
Diameter of contacts×Qty.	φ 1.0 × 4	φ 1.5 × 4	φ 1.0 × 5	φ 1.0 × 7	φ 1.0 × 8
Rated Current	5A	10A	5A	5A	5A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	1~1.5mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

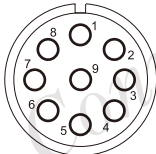
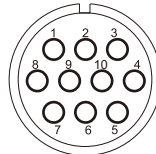
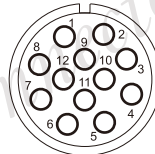
Qty. of Contacts	9	10	12
Contacts Arrangement			
Diameter of contacts×Qty.	φ 1.0 × 9	φ 1.0 × 10	φ 1.0 × 12
Rated Current	5A	5A	5A
Rated Voltage	160VAC	125VAC	125VAC
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

XS16 Female Receptacle Type



Qty. of Contacts	2	2a	3	3a	3b
Contacts Arrangement					
Diameter of contacts×Qty.	φ 1.5 × 2	φ 2.5 × 2	φ 1.0 × 3	φ 1.5 × 3	φ 2.5 × 3
Rated Current	10A	20A	5A	10A	20A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	2000Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)
Wire Gauge	1~1.5mm ²	1.5~2.5mm ²	0.5~0.75mm ²	1~1.5mm ²	1.5~2.5mm ²

Qty. of Contacts	4	4a	5	7	8
Contacts Arrangement					
Diameter of contacts×Qty.	φ 1.0 × 4	φ 1.5 × 4	φ 1.0 × 5	φ 1.0 × 7	φ 1.0 × 8
Rated Current	5A	10A	5A	5A	5A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	1~1.5mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

Qty. of Contacts	9	10	12
Contacts Arrangement			
Diameter of contacts×Qty.	φ 1.0 × 9	φ 1.0 × 10	φ 1.0 × 12
Rated Current	5A	5A	5A
Rated Voltage	160VAC	125VAC	125VAC
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²



TUV SUD



CE



RoHS

ISO9001

ISO14001

ISO45001



华伦连接器
HuaLun Connector

XS16 Female Plug Type

Cable O.D.

Optional Configuration:

CI or CII

CI: $\phi 4 - \phi 8\text{mm}$ CII: $\phi 7 - \phi 12\text{mm}$

C-Straight

Optional

W-90° Angled

Standard: **Default Value!**
(Cable O.D. $\phi 5 - \phi 10\text{mm}$)

Order Code

XS16K

Qty. of Contacts

CI or CII or W



Remark: Plug Shell
Size See Page 16

K (Female)

Optional

Contacts Arrangement

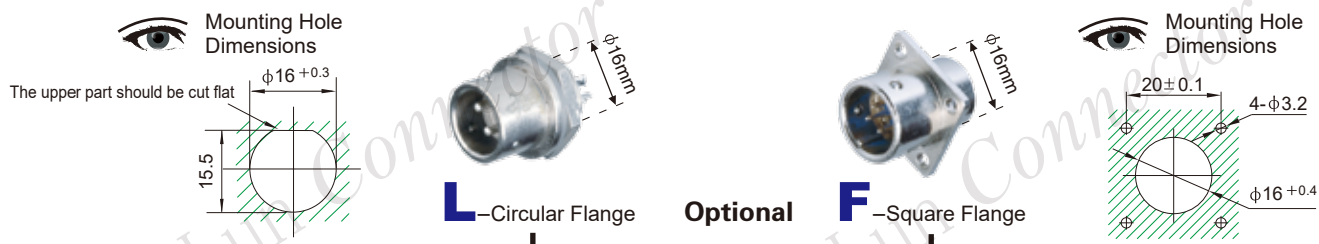
 ϕ : mm

Qty. of Contacts	2	2a	3	3a	3b
Contacts Arrangement					
Diameter of contacts×Qty.	$\phi 1.5 \times 2$	$\phi 2.5 \times 2$	$\phi 1.0 \times 3$	$\phi 1.5 \times 3$	$\phi 2.5 \times 3$
Rated Current	10A	20A	5A	10A	20A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	2000Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)
Wire Gauge	1~1.5mm ²	1.5~2.5mm ²	0.5~0.75mm ²	1~1.5mm ²	1.5~2.5mm ²

Qty. of Contacts	4	4a	5	7	8
Contacts Arrangement					
Diameter of contacts×Qty.	$\phi 1.0 \times 4$	$\phi 1.5 \times 4$	$\phi 1.0 \times 5$	$\phi 1.0 \times 7$	$\phi 1.0 \times 8$
Rated Current	5A	10A	5A	5A	5A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	1~1.5mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

Qty. of Contacts	9	10	12
Contacts Arrangement			
Diameter of contacts×Qty.	$\phi 1.0 \times 9$	$\phi 1.0 \times 10$	$\phi 1.0 \times 12$
Rated Current	5A	5A	5A
Rated Voltage	160VAC	125VAC	125VAC
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

XS16 Male Receptacle Type



Order Code

XS16J

Qty. of Contacts

L or F



Remark: Receptacle Shell Size See Page 16

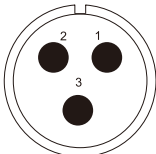
J (Male)

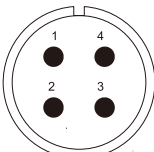
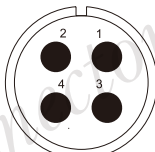
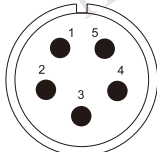
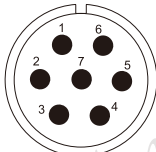
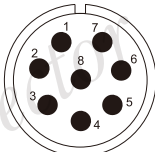


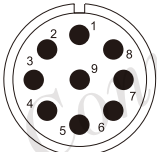
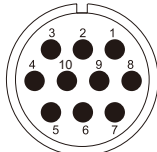
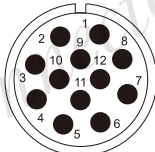
Optional

Contacts Arrangement

φ : mm

Qty. of Contacts	2	2a	3	3a	3b
Contacts Arrangement					
Diameter of contacts×Qty.	φ 1.5 × 2	φ 2.5 × 2	φ 1.0 × 3	φ 1.5 × 3	φ 2.5 × 3
Rated Current	10A	20A	5A	10A	20A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	2000Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)
Wire Gauge	1~1.5mm ²	1.5~2.5mm ²	0.5~0.75mm ²	1~1.5mm ²	1.5~2.5mm ²

Qty. of Contacts	4	4a	5	7	8
Contacts Arrangement					
Diameter of contacts×Qty.	φ 1.0 × 4	φ 1.5 × 4	φ 1.0 × 5	φ 1.0 × 7	φ 1.0 × 8
Rated Current	5A	10A	5A	5A	5A
Rated Voltage	250VAC	250VAC	250VAC	250VAC	250VAC
Withstand Voltage	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1380Vrms (50/60Hz)	1000Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	1~1.5mm ²	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

Qty. of Contacts	9	10	12
Contacts Arrangement			
Diameter of contacts×Qty.	φ 1.0 × 9	φ 1.0 × 10	φ 1.0 × 12
Rated Current	5A	5A	5A
Rated Voltage	160VAC	125VAC	125VAC
Withstand Voltage	1000Vrms (50/60Hz)	840Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²



TUV SUD



ISO9001

ISO14001

ISO45001



华伦连接器
HuaLun Connector

XS18 Male Plug Type

Cable O.D.

Optional Configuration:

CI or CII

CI: $\phi 7 - \phi 12\text{mm}$ CII: $\phi 10 - \phi 14\text{mm}$

C

-Straight

Optional

W

-90° Angled

Standard: Default Value!

(Cable O.D. $\phi 7 - \phi 12\text{mm}$)

Order Code

XS18J

Qty. of
Contacts

CI or CII or W

Remark: Plug Shell
Size See Page 16

J (Male)



Optional

Contacts Arrangement

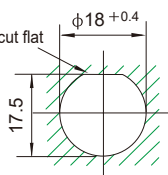
 ϕ : mm

Qty. of Contacts	3	6	8	14
Contacts Arrangement				
Diameter of contacts × Qty.	$\phi 2.5 \times 3$	$\phi 1.6 \times 6$	$\phi 1.6 \times 3$ $\phi 1.0 \times 5$	$\phi 1.0 \times 14$
Rated Current	20A	13A	13A 5A	5A
Rated Voltage	250VAC	250VAC	200VAC	200VAC
Withstand Voltage	1500Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1.5~2.5mm ²	1~2mm ²	1~2mm ² 0.5~0.75mm ²	0.5~0.75mm ²

XS18 Female Receptacle Type

Mounting Hole
Dimensions

The upper part should be cut flat

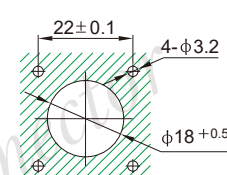


L -Circular Flange

Optional



F -Square Flange

Mounting Hole
Dimensions

Order Code

XS18K

Qty. of
Contacts

L or F

Remark: Receptacle
Shell Size See Page 16

K (Female)



Optional

Contacts Arrangement

 ϕ : mm

Qty. of Contacts	3	6	8	14
Contacts Arrangement				
Diameter of contacts × Qty.	$\phi 2.5 \times 3$	$\phi 1.6 \times 6$	$\phi 1.6 \times 3$ $\phi 1.0 \times 5$	$\phi 1.0 \times 14$
Rated Current	20A	13A	13A 5A	5A
Rated Voltage	250VAC	250VAC	200VAC	200VAC
Withstand Voltage	1500Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1.5~2.5mm ²	1~2mm ²	1~2mm ² 0.5~0.75mm ²	0.5~0.75mm ²

XS18 Female Plug Type

Cable O.D.

Optional Configuration:

CI or **CII**

CI: $\phi 7 - \phi 12\text{mm}$

CII: $\phi 10 - \phi 14\text{mm}$

Standard: **Default Value!**

(Cable O.D. $\phi 7 - \phi 12\text{mm}$)

C-Straight

Optional

W-90° Angled

Order Code

XS18K

Qty. of Contacts

CI or **CII** or **W**



Remark: Plug Shell Size See Page 16

K (Female)

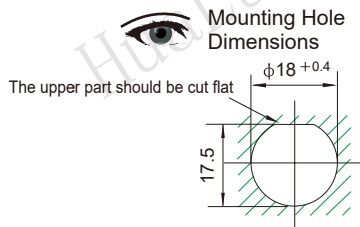
Optional

Contacts Arrangement

ϕ : mm

Qty. of Contacts	3	6	8	14
Contacts Arrangement				
Diameter of contacts×Qty.	$\phi 2.5 \times 3$	$\phi 1.6 \times 6$	$\phi 1.6 \times 3$ $\phi 1.0 \times 5$	$\phi 1.0 \times 14$
Rated Current	20A	13A	13A 5A	5A
Rated Voltage	250VAC	250VAC	200VAC	200VAC
Withstand Voltage	1500Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1.5~2.5mm ²	1~2mm ²	1~2mm ² 0.5~0.75mm ²	0.5~0.75mm ²

XS18 Male Receptacle Type

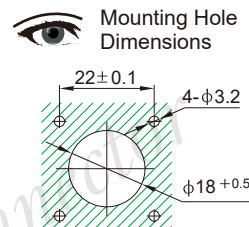


L-Circular Flange

Optional



F-Square Flange



Order Code

XS18J

Qty. of Contacts

L or **F**



Remark: Receptacle Shell Size See Page 16

J (Male)

Optional

Contacts Arrangement

ϕ : mm

Qty. of Contacts	3	6	8	14
Contacts Arrangement				
Diameter of contacts×Qty.	$\phi 2.5 \times 3$	$\phi 1.6 \times 6$	$\phi 1.6 \times 3$ $\phi 1.0 \times 5$	$\phi 1.0 \times 14$
Rated Current	20A	13A	13A 5A	5A
Rated Voltage	250VAC	250VAC	200VAC	200VAC
Withstand Voltage	1500Vrms (50/60Hz)	1000Vrms (50/60Hz)	1000Vrms (50/60Hz)	840Vrms (50/60Hz)
Wire Gauge	1.5~2.5mm ²	1~2mm ²	1~2mm ² 0.5~0.75mm ²	0.5~0.75mm ²

Plug Drawings & Dimensions

C – Straight

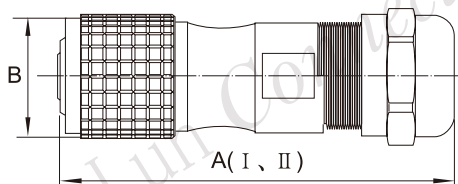


Table 1

Unit: mm

Spec.	A I (max)	A II (max)	B
10	-	50	φ14
12	50	56	φ17
16	56	62	φ22
18	62	64	φ24.5

W – 90° Angled

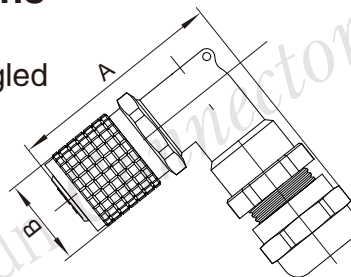


Table 2

Unit: mm

Spec.	A	B
10	41	φ14
12	45	φ17
16	50	φ22
18	52.5	φ24.5

Receptacle Drawings & Dimensions

L – Circular Flange

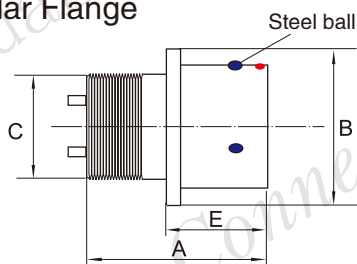


Table 3

Unit: mm

Spec.	A	B	C	E
10	20	φ15	M10×0.75	11
12	20	φ18	M12×0.75	10.5
16	20	φ23	M16×0.75	11
18	20	φ25	M18×1	11

F – Square Flange

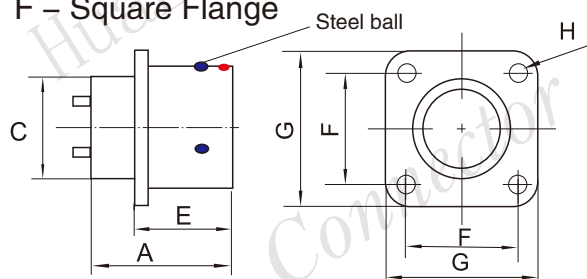


Table 4

Unit: mm

Spec.	A	C	E	F	G	H
10	20	φ10	11.5	11±0.1	16	4-φ2.3
12	20	φ12	11.5	13±0.1	18	4-φ2.3
16	20	φ16	12	20±0.1	26	4-φ3.2
18	20	φ18	12	22±0.1	28	4-φ3.2

Receptacle Mounting Hole Dimensions

Circular Flange Receptacle Mounting Hole Data

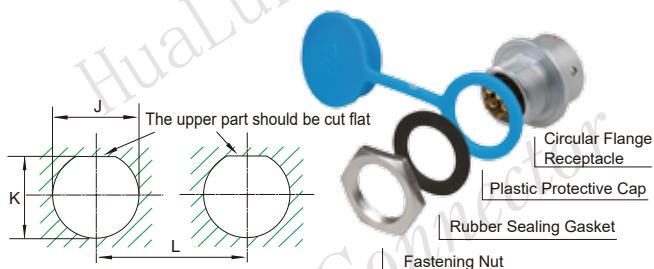


Table 5

Unit: mm

Spec.	J	K	L (min)
10	φ10.2	9.5	26
12	φ12.2	11.5	30
16	φ16.3	15.5	36
18	φ18.4	17.5	38

Square Flange Receptacle Mounting Hole Data

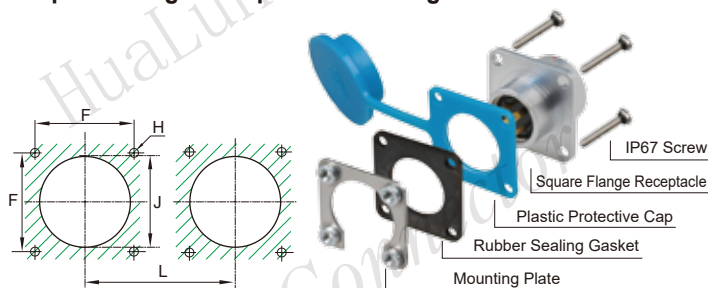


Table 6

Unit: mm

Spec.	F	J	H	L (min)
10	11±0.1	φ10.3	4-φ2.3	26
12	13±0.1	φ12.3	4-φ2.3	28
16	20±0.1	φ16.4	4-φ3.2	36
18	22±0.1	φ18.5	4-φ3.2	38

IP67 Metal Protective Caps

Circular Flange Receptacle Cap

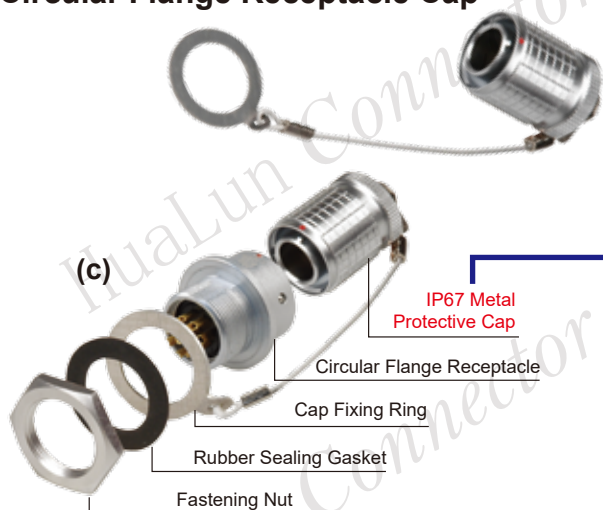


Table 7

Unit: mm

Circular Flange Receptacle Cap Order Code	D	L
XS10-LG	14	27.3
XS12-LG	17	27.3
XS16-LG	22	27.3
XS18-LG	24.5	27.3

Square Flange Receptacle Cap

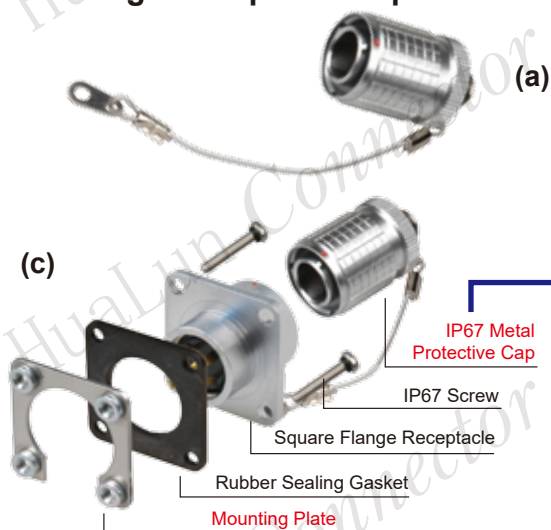


Table 8

Unit: mm

Square Flange Receptacle Cap Order Code	Mounting Plate Order Code	D	L
XS10-FG	A10	14	27.3
XS12-FG	A12	17	27.3
XS16-FG	A16	22	27.3
XS18-FG	A18	24.5	27.3

Plug Cap



Table 9

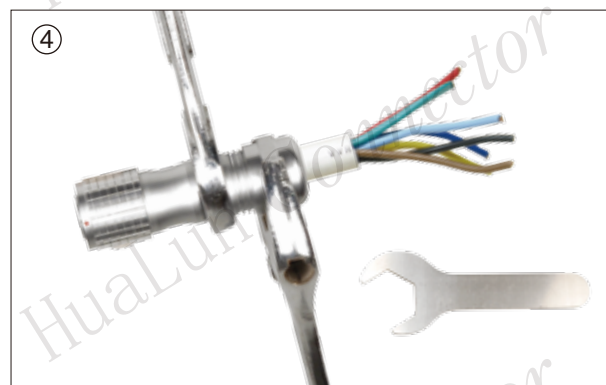
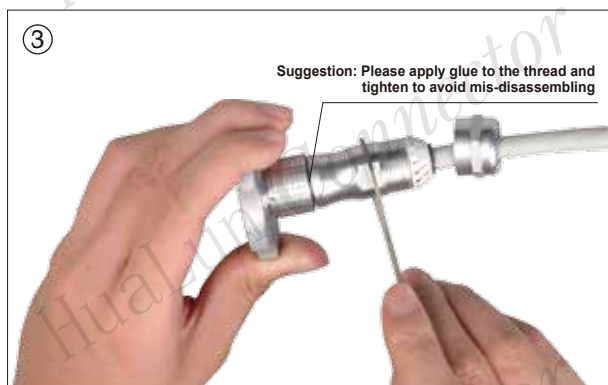
Unit: mm

Plug Cap Order Code	D	L
XS10-CG	14	17.3
XS12-CG	17	17.3
XS16-CG	22	17.3
XS18-CG	24.5	17.3

Plug Assembling

SAFETY NOTICE

This part should **not be open**,
Please follow the instruction.





SHANGHAI HUALUN INSTRUMENTS & ELECTRONICS CO., LTD.
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