

XK bayonet Miniature Connector

- **Coupling: Bayonet (IP65、IP67)**
- **Terminal: Solder**



- ① Convenient and Fast ② Firm ③ Resistance to shock and vibration ④ Corrosion resistant



No need 4 mounting nut !



Stainless steel bolts

Mounting Plate





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★ Please contact sales for customization!



High-tech Enterprise Certificate



Foreign Invested Advanced



Enterprise Credit Rating AAA

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)》
- IEC60512 《Connectors for electronic equipment-Tests and measurements》

Environmental

Overvoltage Category	II / III	Frequency	50/60Hz
Relative Humidity	95% at 40°C ± 2°C		
Salty Spray Corrosion	≥96h	IEC60512-11-7	
Protection Degree	IP65/IP67	IEC60529	
Degree of Pollution	2/3		
Flame Resistance	UL94V-0		
Liquid Resistance	Oil, Mineral oil, Acid, Alkali		

Mechanical Features

Vibration	10-500Hz 5g<1μs	IEC60512-6d
Shock	50g 11ms	IEC60512-6C
Mechanical Life	≥500 Cycles	IEC60512-9-1

Electric Features

Operating Temperature	Lower limit-55°C ; Upper limit+125°C				
Insulation Resistance	Normal Temperature≥5000MΩ; Damp Heat≥100MΩ				
Diameter of Contacts (mm)	0.8	1.0	1.5	1.6	2.5
Rated Current (A)	3A	5A	10A	13A	20A
Rated Voltage (V _{AC})	See Contacts Arrangement 6 ~ 8				
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 _{AC}) [50/60Hz]	See Contacts Arrangement 6 ~ 8 Remark: For High Altitude Low Pressure Environment, Refer to GB/T4797.2-2005				
Screen	According to customer requirements				

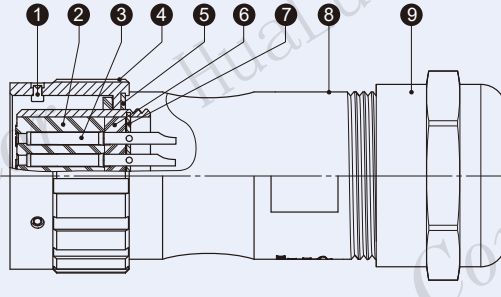
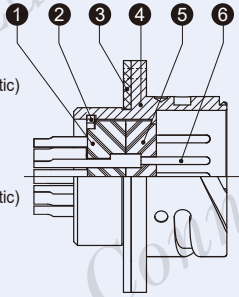
Material: RoHS

Shell	Copper alloy (Plating Ni-Cr)
Contact	Brass (Gold) (Remark: φ2.5 Silver)
Insert	Plastic UL Certificate
	CTI≥600V
	Flame resistance UL94V-0

Sectional View

Square Flange Receptacle

- ① Insulator (engineering plastic)
- ② Retainer ring
- ③ Gasket (rubber)
- ④ Shell (copper alloy)
- ⑤ Insulator (engineering plastic)
- ⑥ Pin (male)

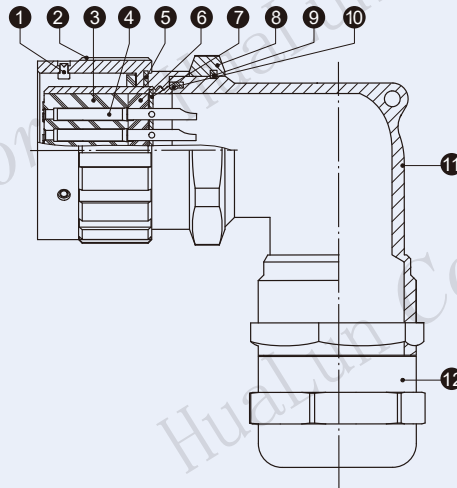
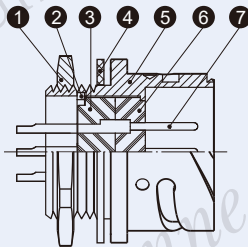


Straight Plug

- ① Ball (stainless steel)
- ② Insulator (engineering plastic)
- ③ Socket (female)
- ④ Locking ring (copper alloy)
- ⑤ Retainer ring
- ⑥ Insulator (engineering plastic)
- ⑦ Retainer ring
- ⑧ Shell (copper alloy)
- ⑨ IP65/IP67 Outlet

Circular Flange Receptacle

- ① Fastening nut
- ② Retainer ring
- ③ Insulator (engineering plastic)
- ④ Gasket (rubber)
- ⑤ Shell (copper alloy)
- ⑥ Insulator (engineering plastic)
- ⑦ Pin (male)



90° Angled Plug

- ① Ball (stainless steel)
- ② Locking ring (copper alloy)
- ③ Insulator (engineering plastic)
- ④ Socket (female)
- ⑤ Retainer ring
- ⑥ Insulator (engineering plastic)
- ⑦ Retainer ring
- ⑧ Nut
- ⑨ Retainer ring
- ⑩ Seal ring (rubber)
- ⑪ Shell (copper alloy)
- ⑫ IP65/IP67 Outlet

Part Number (Explanation)

Receptacle ① (Panel Mounted)

e.g. **XK** **12** **K** **4** **L**

① ② ③ ④ ⑤

Explanation

① **XK**: Type (miniature, bayonet)

② **12**: Shell Spec. See Page 6~8

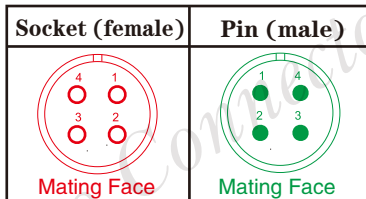
∅ Spec.
10mm
12mm
16mm
18mm

③ **K**: Contact (Female) Socket

J: Contact (Male) Pin

④ No. of Contacts

Sample

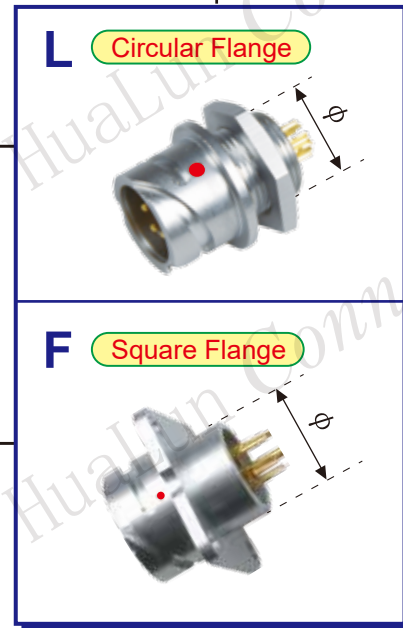


Insert Spec. See Page 6~8

⑤ **L**: Circular Flange Receptacle

F: Square Flange Receptacle

See Page 9-10



■ Shell Spec. Size See Page 9~10

Part Number (Explanation)

Receptacle ②

(Free)

e.g. XK 12 K 4 LC I

① ② ③ ④ ⑤ ⑥

Explanation

① **XK**: Type (miniature, bayonet)

② **12**: Shell Spec. See Page 6~8

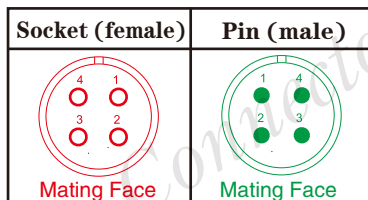
③ **K**: Contact
(Female) Socket

J: Contact
(Male) Pin

④ No. of Contacts



Sample



Remark Wiring Face



Wiring Face

Insert Spec. See Page 6~8

⑤ **LC**: Free Receptacle

See Page 11

⑥ **I**、**II**: Outlet

See Page 12



■ Shell Spec. Size See Page 11

Part Number (Explanation)

Plug

e.g. **XK** **12** **K** **4** **C** **I** **-EMC**

1
2
3
4
5
6
7

Explanation

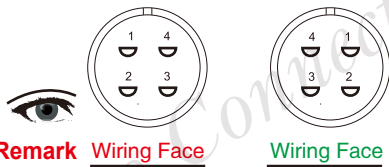
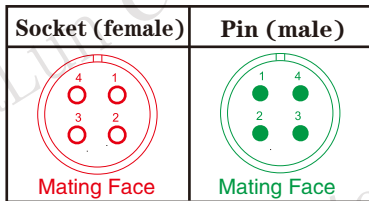
1 XK: Type (miniature, bayonet)

2 12: Shell Spec. See Page 6~8

3 K: Contact
(Female) Socket

J: Contact
(Male) Pin

4 No. of Contacts



Insert Spec. See Page 6~8

5 C: Straight Plug

W: 90° Angled Plug

See Page 12

6 I、**II**: Outlet

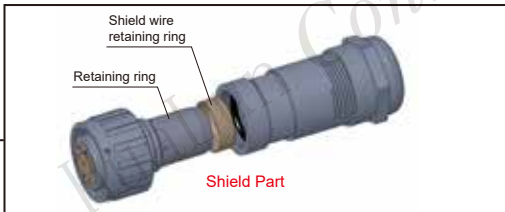
See Page 12

7 -EMC: Shield



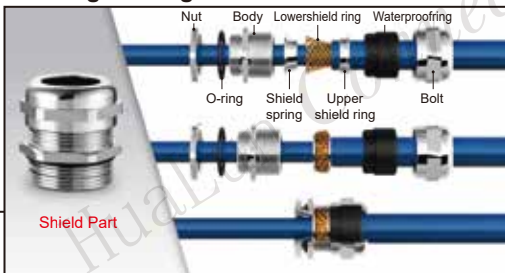
■ Shell Spec. Size See Page 12

Straight Plug-EMC



Add shield wire retaining ring and retaining ring in straight shell

90° Angled Plug-EMC



Add shield ring and spring in outlet

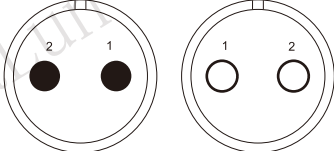
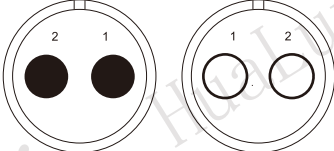
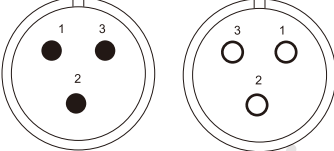
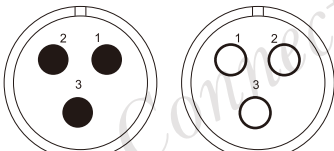
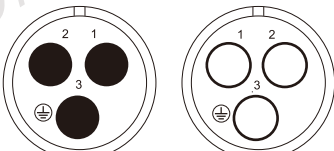
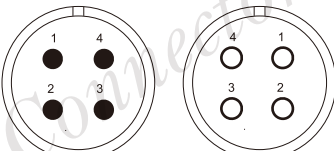
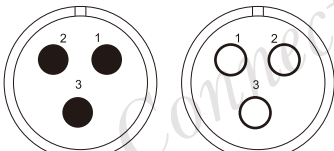
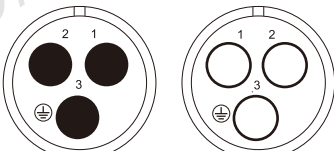
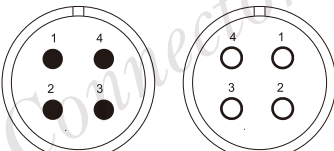
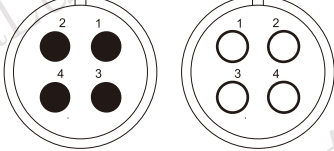
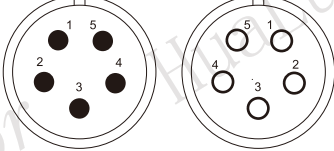
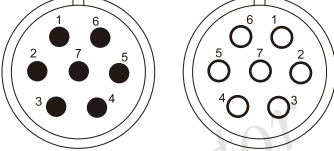
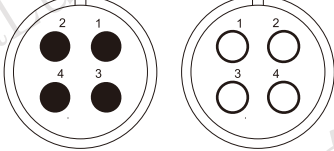
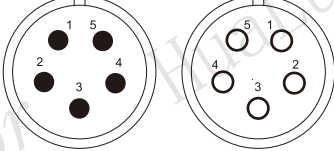
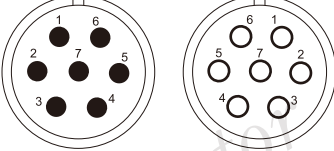
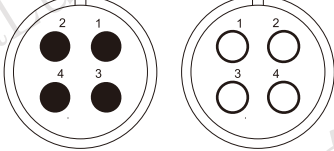
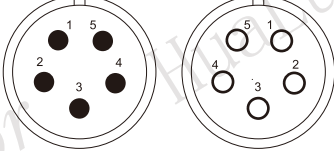
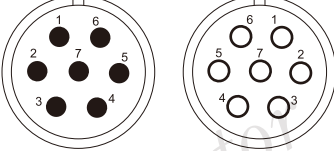
Contacts Arrangement

Table 1

Spec.	XK10			
Qty. of Contacts	2	3	4	5
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×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	40V	32V	63V	32V
Withstand Voltage(50/60Hz)	840V	840V	840V	500V
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	<0.3mm ²	<0.3mm ²
Spec.	XK12			
Qty. of Contacts	2	3	4	
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)	
Contact Diameter×Qty.	φ 1.6 × 2	φ 1.0 × 3	φ 1.0 × 4	
Rated Current	13A	5A	5A	
Rated Voltage	250V	160V	100V	
Withstand Voltage(50/60Hz)	1390V	1000V	840V	
Wire Gauge	1~2mm ²	0.5~0.75mm ²	0.5~0.75mm ²	
Spec.	XK12			
Qty. of Contacts	5	6	7	
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)	
Contact Diameter×Qty.	φ 1.0 × 5	φ 1.0 × 6	φ 1.0 × 7	
Rated Current	5A	5A	5A	
Rated Voltage	63V	32V	32V	
Withstand Voltage(50/60Hz)	840V	500V	500V	
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²	

Contacts Arrangement

Table 2

Spec.	XK16					
Qty. of Contacts	2		2a		3	
Contacts Arrangement						
Contact Diameter×Qty.	φ 1.5 × 2		φ 2.5 × 2		φ 1.0 × 3	
Rated Current	10A		20A		5A	
Rated Voltage	250V		200V		250V	
Withstand Voltage (50/60Hz)	1500V		1000V		1000V	
Wire Gauge	1~1.5mm ²		1.5~2.5mm ²		0.5~0.75mm ²	
Spec.	XK16					
Qty. of Contacts	3a		3b		4	
Contacts Arrangement						
Contact Diameter×Qty.	φ 1.5 × 3		φ 2.5 × 3		φ 1.0 × 4	
Rated Current	10A		20A		5A	
Rated Voltage	250V		200V		250V	
Withstand Voltage (50/60Hz)	1500V		1500V		1000V	
Wire Gauge	1~1.5mm ²		1.5~2.5mm ²		0.5~0.75mm ²	
Spec.	XK16					
Qty. of Contacts	4a		5		7	
Contacts Arrangement						
Contact Diameter×Qty.	φ 1.5 × 4		φ 1.0 × 5		φ 1.0 × 7	
Rated Current	10A		5A		5A	
Rated Voltage	200V		125V		80V	
Withstand Voltage (50/60Hz)	1000V		1000V		840V	
Wire Gauge	1~1.5mm ²		0.5~0.75mm ²		0.5~0.75mm ²	

Contacts Arrangement

Table 3

Spec.	XK16					
Qty. of Contacts	8		9		10	
Contacts Arrangement						
	Pin (male)	Socket (female)	Pin (male)	Socket (female)	Pin (male)	Socket (female)
Contact Diameter×Qty.	φ 1.0 × 8		φ 1.0 × 9		φ 1.0 × 10	
Rated Current	5A		5A		5A	
Rated Voltage	80V		50V		50V	
Withstand Voltage (50/60Hz)	500V		840V		840V	
Wire Gauge	0.5~0.75mm ²		0.5~0.75mm ²		0.5~0.75mm ²	
Spec.	XK16		XK18			
Qty. of Contacts	12		3		6	
Contacts Arrangement						
	Pin (male)	Socket (female)	Pin (male)	Socket (female)	Pin (male)	Socket (female)
Contact Diameter×Qty.	φ 1.0 × 12		φ 2.5 × 3		φ 1.6 × 6	
Rated Current	5A		20A		13A	
Rated Voltage	32V		250V		160V	
Withstand Voltage (50/60Hz)	370V		1500V		840V	
Wire Gauge	0.5~0.75mm ²		1.5~2.5mm ²		1~2mm ²	
Spec.	XK18					
Qty. of Contacts	8			14		
Contacts Arrangement						
	Pin (male)	Socket (female)	Pin (male)	Socket (female)	Pin (male)	Socket (female)
Contact Diameter×Qty.	φ 1.6 × 3		φ 1.0 × 5		φ 1.0 × 14	
Rated Current	13A		5A		5A	
Rated Voltage	160V		840V		100V	
Withstand Voltage (50/60Hz)	840V		840V		840V	
Wire Gauge	1~2mm ²		0.5~0.75mm ²		0.5~0.75mm ²	

Circular Flange Receptacle Drawings & Dimensions

L - Circular Flange

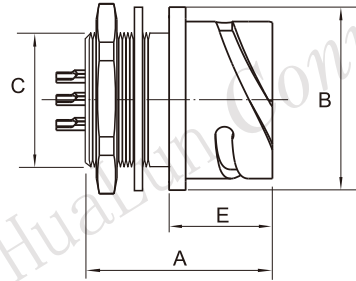


Table 4

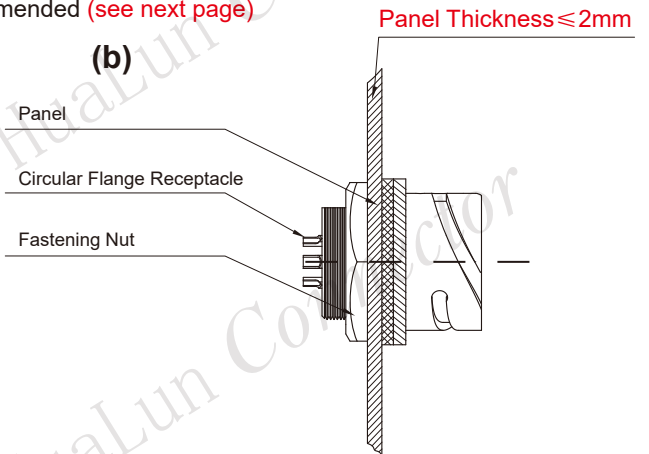
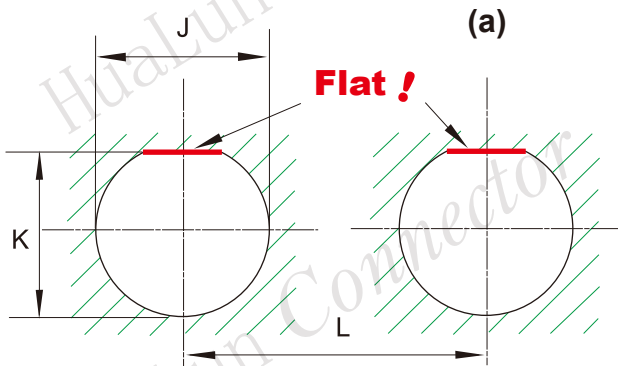
Unit: mm

Spec.	A	B	C	E
XK10	20.5	φ15	M10×0.75	11.5
XK12	20.5	φ18	M12×0.75	11.5
XK16	21	φ23	M16×0.75	12
XK18	21	φ25	M18×1	12

Mounting Hole Dimensions

Remark:

- ① Prevent receptacle loosening and roating, its upper part should be cut flat as figure (a)
- ② If there is condition to cut flat, square flange receptacle is recommended (see next page)

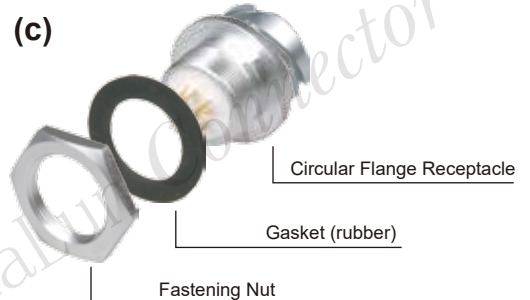


Circular Flange Receptacle Mounting Hole Data

Table 5

Unit: mm

Spec.	J	K	L (min)
XK10	φ10.1	9.5	26
XK12	φ12.1	11.5	30
XK16	φ16.2	15.5	36
XK18	φ18.2	17.5	38





TUV SUD



ISO9001 ISO14001 ISO45001

Square Flange Receptacle Drawings & Dimensions

F - Square Flange

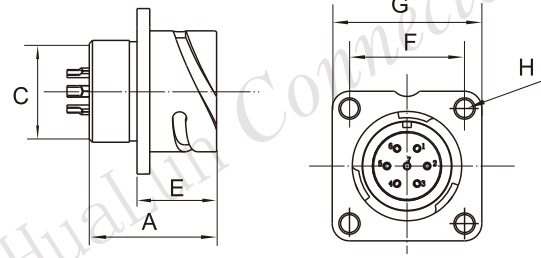
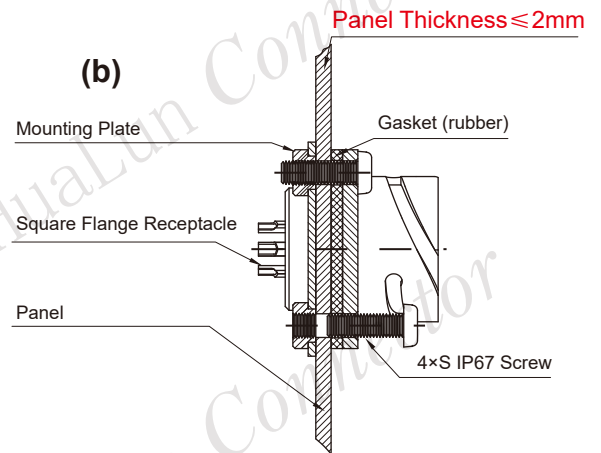
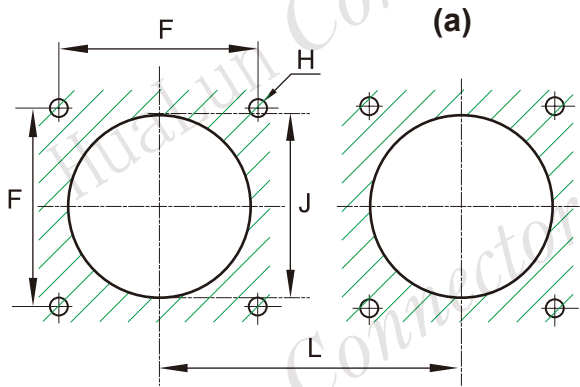


Table 6

Unit: mm

Spec.	A	C	E	F	G	H
XK10	20	$\phi 10$	11.5	12 ± 0.1	17	4- $\phi 2.3$
XK12	20	$\phi 12$	11.5	14 ± 0.1	19	4- $\phi 2.3$
XK16	20	$\phi 16$	12	20 ± 0.1	26	4- $\phi 3.2$
XK18	20	$\phi 18$	12	22 ± 0.1	28	4- $\phi 3.2$

Mounting Hole Dimensions

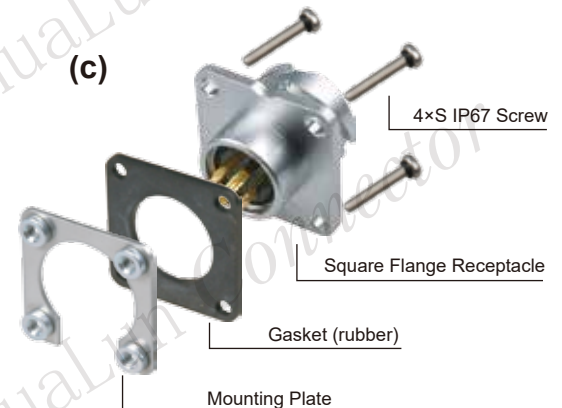


Square Flange Receptacle Mounting Hole Data

Table 7

Unit: mm

Spec.	F	J	H	L (min)	4×S Screw
XK10	12 ± 0.1	$\phi 10.2$	4- $\phi 2.3$	26	M2
XK12	14 ± 0.1	$\phi 12.2$	4- $\phi 2.3$	28	
XK16	20 ± 0.1	$\phi 16.3$	4- $\phi 3.2$	36	M3
XK18	22 ± 0.1	$\phi 18.3$	4- $\phi 3.2$	38	



Mounting Plate

The Size of Mounting Plate

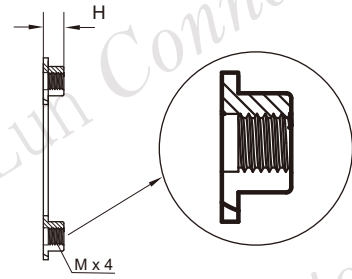
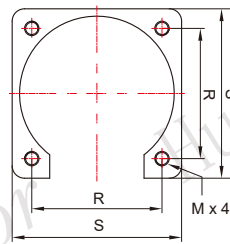


Table 8

Unit: mm

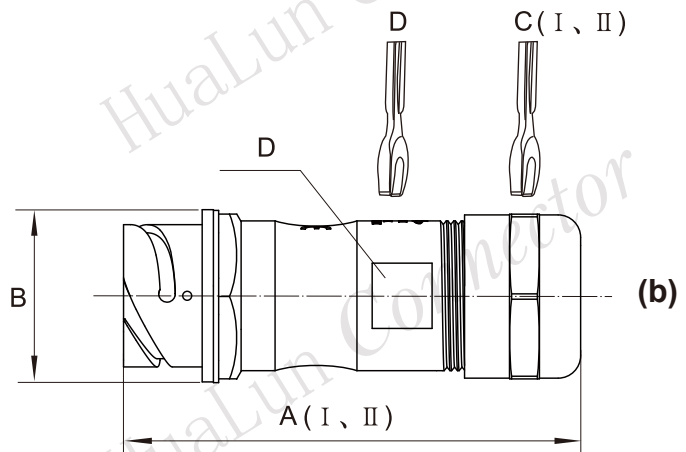
Order No.	Shell Spec	R	S	H	Thread M	Screw Spec
A10-K	XK10	12.00	16.00	2.60	M2	M2 x 10
A12-K	XK12	14.00	18.00			
A16	XK16	20.00	26.00		M3	M3 x 10
A18	XK18	22.00	28.00			

Shell Size for Free Receptacle

Free Receptacle - LC



(a)



(b)

Table 9

Unit: mm

Spec.	AI (max)	AII (max)	B	CI	CII	D
XK10	-	50	φ 15	-	14	12 × 6
XK12	50	56	φ 18	14	17	13 × 7
XK16	56	63	φ 23	17	22	18 × 8
XK18	63	64	φ 25	22	24	21 × 9

Shell Size for Plug

Straight Plug - C

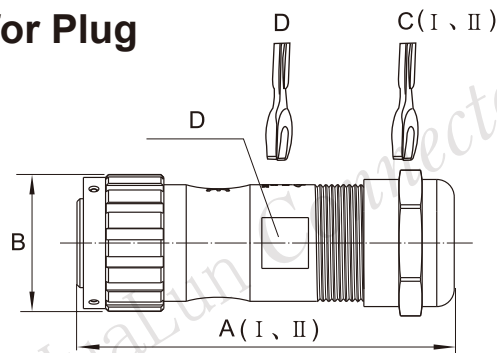


Table 10

Unit: mm

Spec.	AI (max)	AII (max)	B	CI	CII	D
XK10	-	50	φ14	-	14	12 × 6
XK12	50	56	φ17	14	17	14 × 7
XK16	56	62	φ22	17	22	18 × 8
XK18	62	64	φ24.5	22	24	21 × 9

90° Angled Plug - W

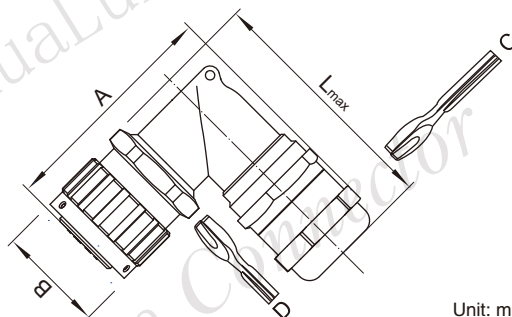


Table 11

Unit: mm

Spec.	A	B	C	D	L _{max}
XK10	41	φ14	14	14	51
XK12	45	φ17	17	17	56.5
XK16	50	φ22	20	22	60.5
XK18	52.5	φ24.5	22	24	67

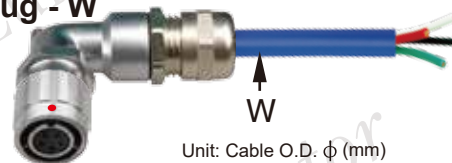
IP65/IP67 Outlet of Sealed Accessory

Straight Plug - C



Type CI, CII

90° Angled Plug - W



Unit: Cable O.D. φ (mm)

Table 12

Spec.	Type CI	Type CII	W
	Cable O.D. φ	Cable O.D. φ	Cable O.D. φ
XK10	φ 3-φ6.5		φ 3-φ6.5
XK12	φ 3-φ6.5	φ 4-φ8	φ 4-φ8
XK16	φ 4-φ8	φ 7-φ12	φ 5-φ10
XK18	φ 7-φ12	φ 10-φ14	φ 7-φ12

IP67 Metal Protective Caps

Circular Flange Receptacle Cap

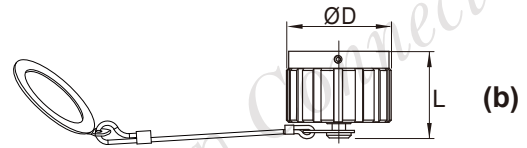
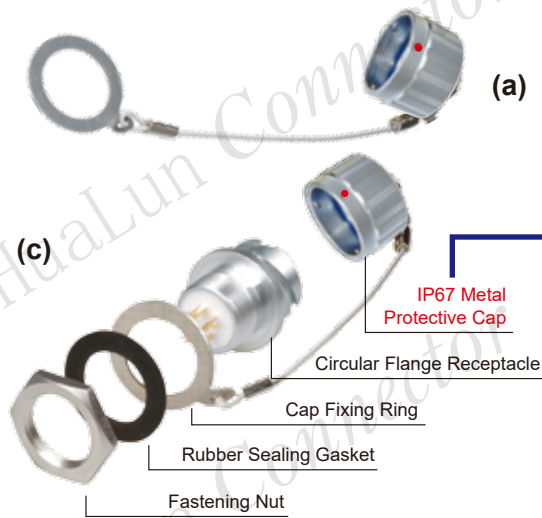


Table 13

Unit: mm

Circular Flange Receptacle Cap Order Code	D	L
XK10-LG	16.1	14.8
XK12-LG	18.3	14.8
XK16-LG	23.5	16.3
XK18-LG	25.4	16.3

Square Flange Receptacle Cap

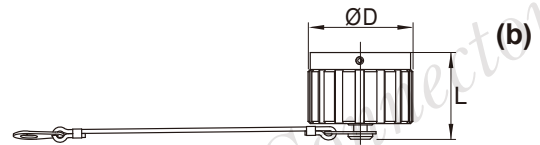
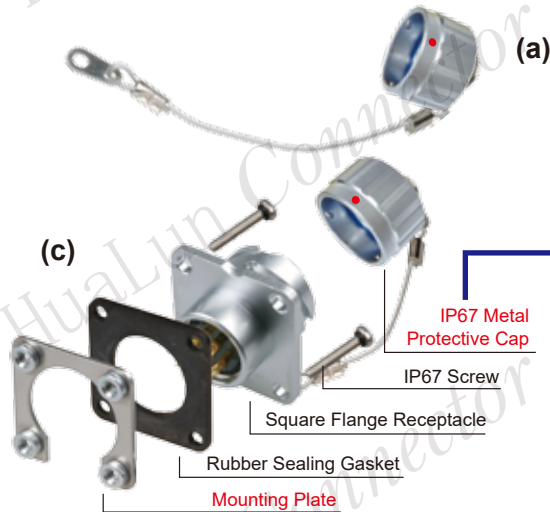


Table 14

Unit: mm

Square Flange Receptacle Cap Order Code	Mounting Plate Order Code	D	L
XK10-FG	A10-K	16.1	14.8
XK12-FG	A12-K	18.3	14.8
XK16-FG	A16	23.5	16.3
XK18-FG	A18	25.4	16.3

Plug Cap

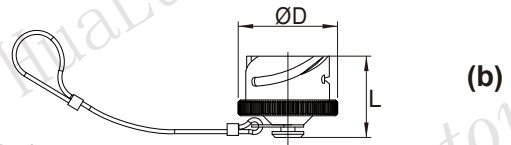
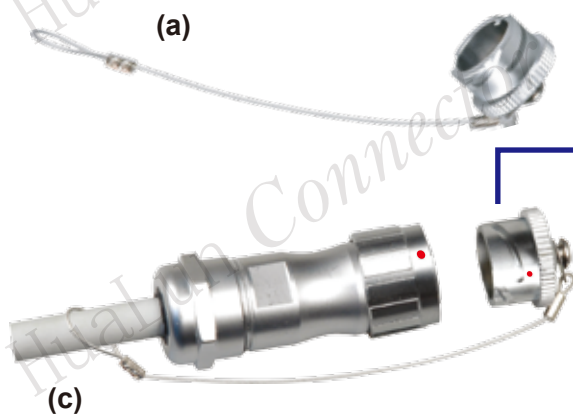
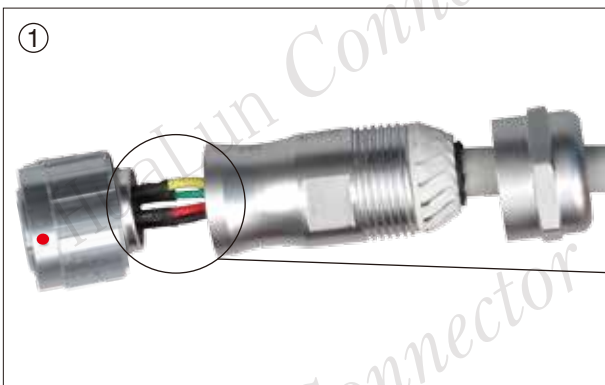


Table 15

Unit: mm

Plug Cap Order Code	D	L
XK10-CG	14	17.3
XK12-CG	17	17.3
XK16-CG	22	17.3
XK18-CG	24.5	17.3

Plug Assembling



Thermal shrinkable sleeve must be used at weld joint for insulation!





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