

XK bayonet Miniature Connector

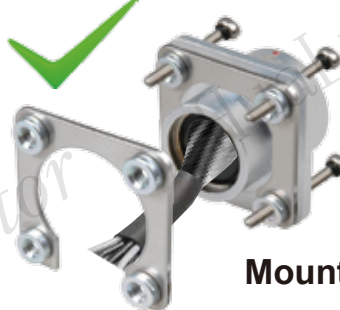
- **Coupling: Bayonet (IP67)**
- **Terminal: Solder**



- 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℃ ± 2℃		
Salty Spray Corrosion	≥96h	IEC60512-11-7	
Protection Degree	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				

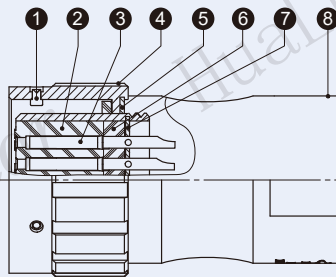
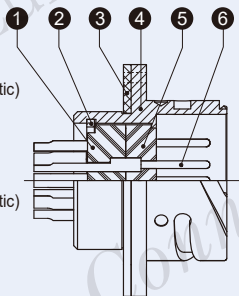
Material: RoHS

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)

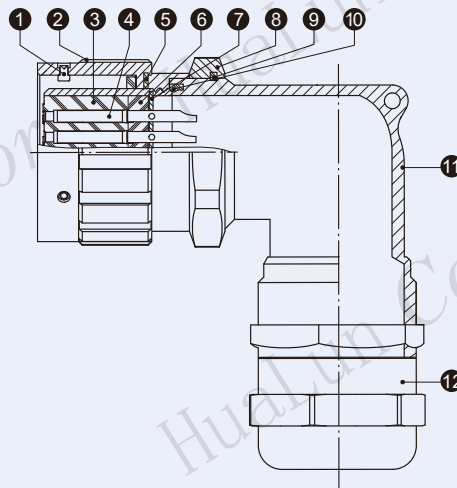
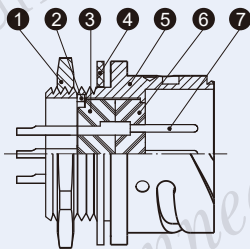


Straight Plug

- 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

Socket (female)	Pin (male)
Mating Face	Mating Face

Remark Wiring Face

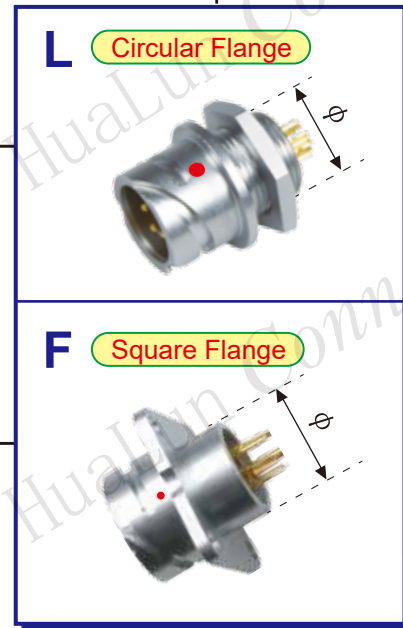
Wiring Face

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

Socket (female)	Pin (male)
Mating Face	Mating Face



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



Sample

Socket (female)	Pin (male)
Mating Face	Mating Face



Remark Wiring Face



Wiring Face

Insert Spec. See Page 6~8

⑤ **C**: Straight Plug

W: 90° Angled Plug

See Page 12

⑥ **I**、**II**: Outlet

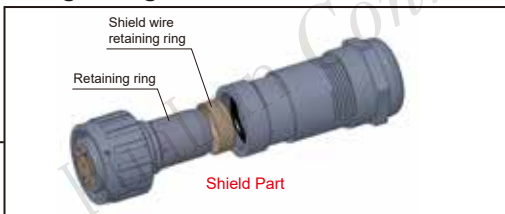
See Page 12

⑦ **-EMC**: Shield



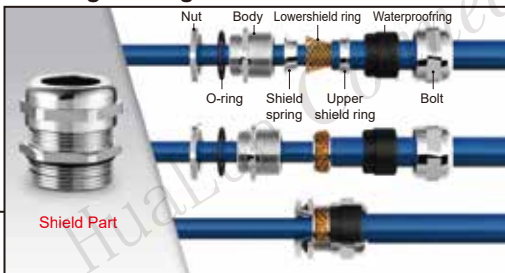
■ Shell Spec. Size See Page 12

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

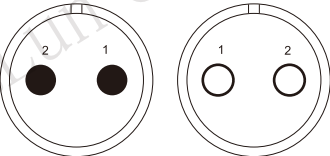
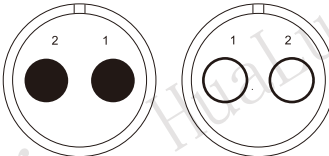
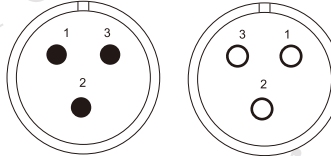
Spec.	XK10			
Qty. of Contacts	2	3	4	5
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×Qty.	φ 1.0 × 2	φ 1.0 × 3	φ 0.8 × 4	φ 0.8 × 5
Rated Current	5A	5A	3A	3A
Rated Voltage	40V	32V	63V	32V
Withstand Voltage(50/60Hz)	840V	840V	840V	500V
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	<0.3mm ²	<0.3mm ²

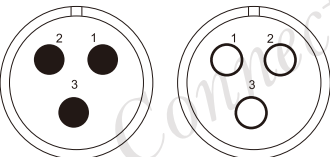
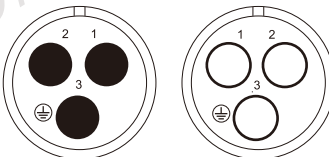
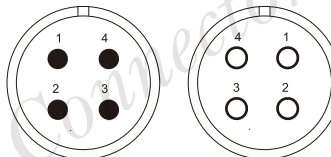
Spec.	XK12		
Qty. of Contacts	2	3	4
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×Qty.	φ 1.6 × 2	φ 1.0 × 3	φ 1.0 × 4
Rated Current	13A	5A	5A
Rated Voltage	250V	160V	100V
Withstand Voltage(50/60Hz)	1390V	1000V	840V
Wire Gauge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

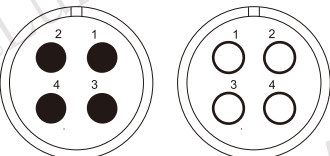
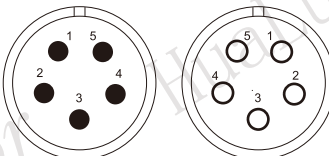
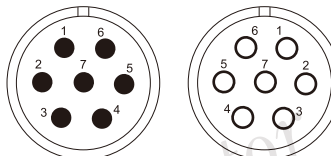
Spec.	XK12		
Qty. of Contacts	5	6	7
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×Qty.	φ 1.0 × 5	φ 1.0 × 6	φ 1.0 × 7
Rated Current	5A	5A	5A
Rated Voltage	63V	32V	32V
Withstand Voltage(50/60Hz)	840V	500V	500V
Wire Gauge	0.5~0.75mm ²	0.5~0.75mm ²	0.5~0.75mm ²

Contacts Arrangement

Table 2

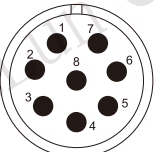
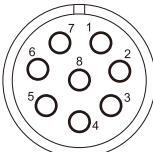
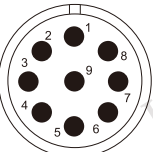
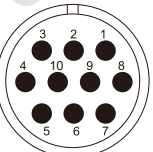
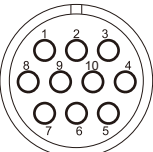
Spec.	XK16		
Qty. of Contacts	2	2a	3
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×Qty.	φ 1.5 × 2	φ 2.5 × 2	φ 1.0 × 3
Rated Current	10A	20A	5A
Rated Voltage	250V	200V	250V
Withstand Voltage (50/60Hz)	1500V	1000V	1000V
Wire Gauge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

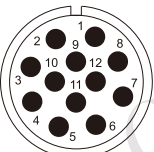
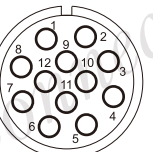
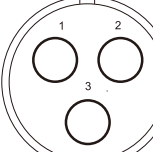
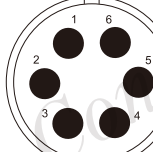
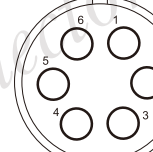
Spec.	XK16		
Qty. of Contacts	3a	3b	4
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×Qty.	φ 1.5 × 3	φ 2.5 × 3	φ 1.0 × 4
Rated Current	10A	20A	5A
Rated Voltage	250V	200V	250V
Withstand Voltage (50/60Hz)	1000V	1500V	1000V
Wire Gauge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

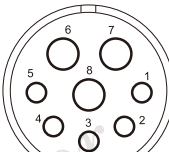
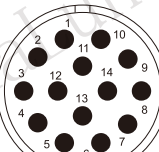
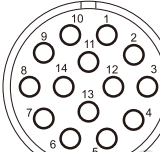
Spec.	XK16		
Qty. of Contacts	4a	5	7
Contacts Arrangement	 Pin (male) Socket (female)	 Pin (male) Socket (female)	 Pin (male) Socket (female)
Contact Diameter×Qty.	φ 1.5 × 4	φ 1.0 × 5	φ 1.0 × 7
Rated Current	10A	5A	5A
Rated Voltage	200V	125V	80V
Withstand Voltage (50/60Hz)	1000V	1000V	840V
Wire Gauge	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.	$\phi 1.0 \times 8$		$\phi 1.0 \times 9$		$\phi 1.0 \times 10$	
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		XK18	
Qty. of Contacts	12		3		6	
Contacts Arrangement						
	Pin (male)	Socket (female)	Pin (male)	Socket (female)	Pin (male)	Socket (female)
Contact Diameter×Qty.	$\phi 1.0 \times 12$		$\phi 2.5 \times 3$		$\phi 1.6 \times 6$	
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)	
Contact Diameter×Qty.	$\phi 1.6 \times 3$			$\phi 1.0 \times 5$		
Rated Current	13A			5A		
Rated Voltage	160V			100V		
Withstand Voltage (50/60Hz)	840V			840V		
Wire Gauge	1~2mm ²			0.5~0.75mm ²		

Circular Flange Receptacle Drawings & Dimensions

L - Circular Flange

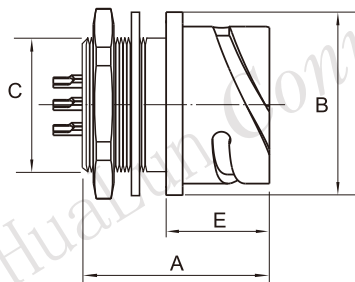


Table 4

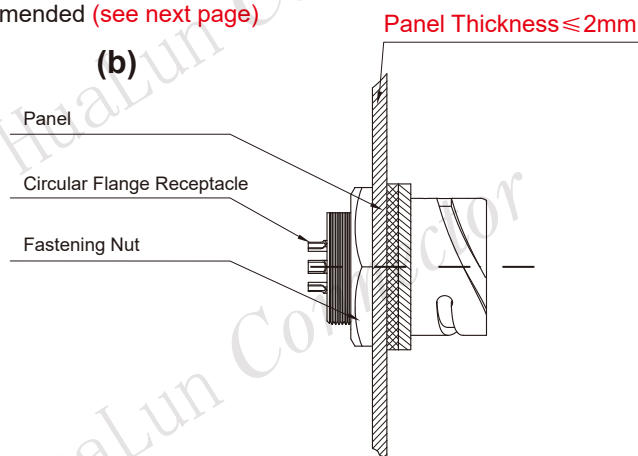
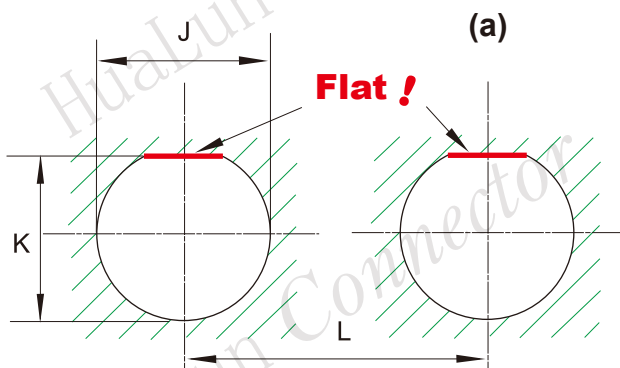
Unit: mm

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



Square Flange Receptacle Drawings & Dimensions

F - Square Flange

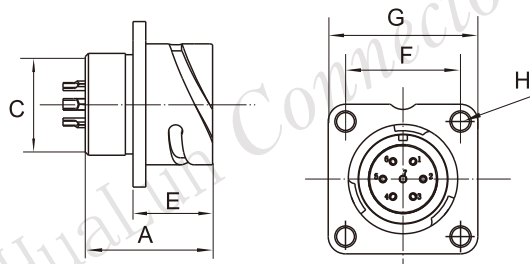
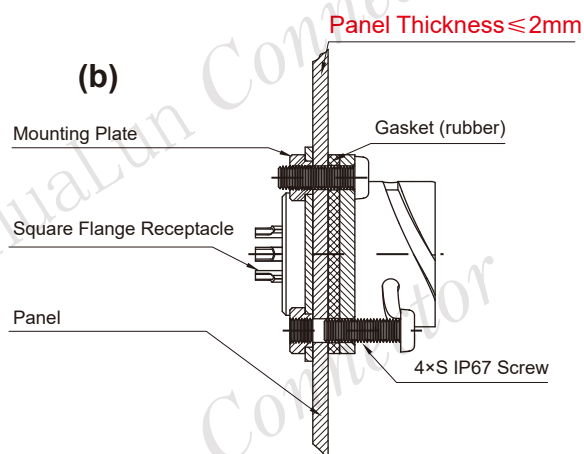
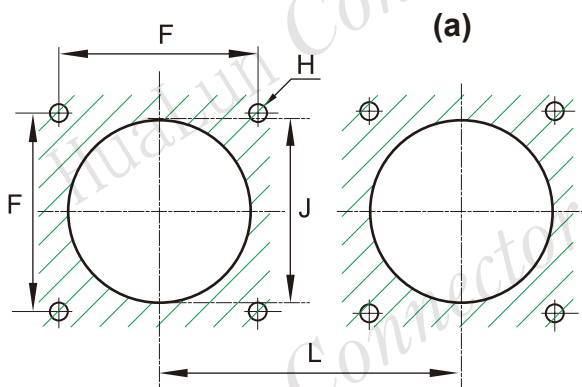


Table 6

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

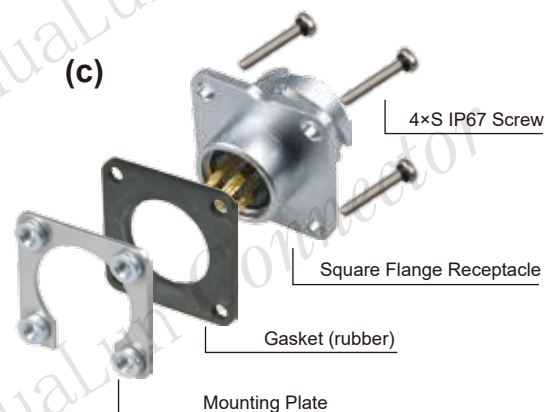


Square Flange Receptacle Mounting Hole Data

Table 7

Unit: mm

Spec.	F	J	H	L (min)	4xS 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

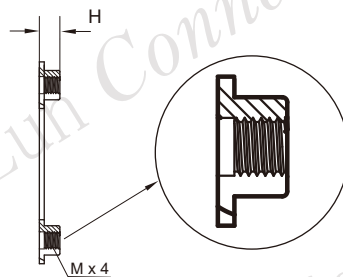
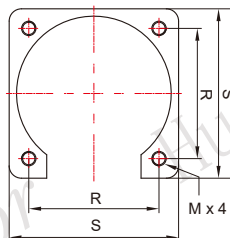
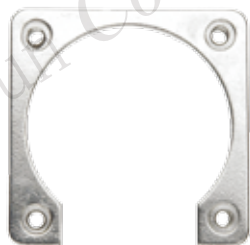


Table 8

Unit: mm

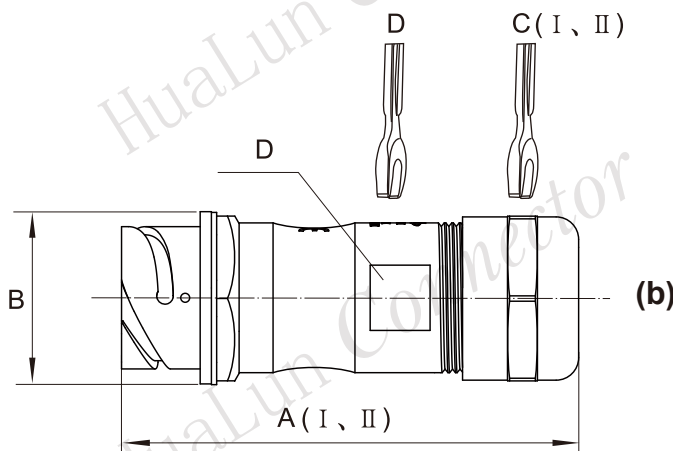
Order No.	Shell Spec	R	S	H	Thread M	Screw Spec
A10-K	XK10	12.00	16.00	2.60	M2	M2 x 10
A12-K	XK12	14.00	18.00			
A16	XK16	20.00	26.00		M3	M3 x 10
A18	XK18	22.00	28.00			

Shell Size for Free Receptacle

Free Receptacle - LC



(a)



(b)

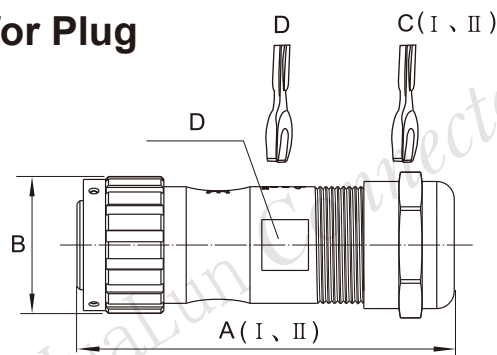
Table 9

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

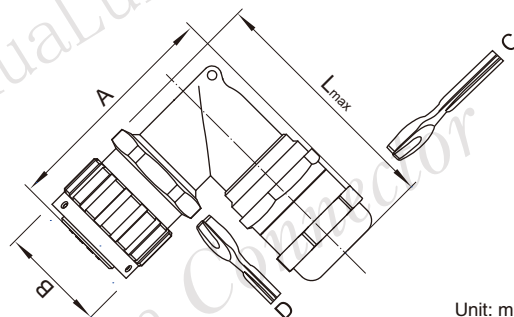


Unit: mm

Table 10

Spec.	A I (max)	A II (max)	B	CI	CII	D
XK10	-	50	$\phi 14$	-	14	12 × 6
XK12	50	56	$\phi 17$	14	17	14 × 7
XK16	56	62	$\phi 22$	17	22	18 × 8
XK18	62	64	$\phi 24.5$	22	24	21 × 9

90° Angled Plug - W



Unit: mm

Table 11

Spec.	A	B	C	D	L _{max}
XK10	41	$\phi 14$	14	14	51
XK12	45	$\phi 17$	17	17	56.5
XK16	50	$\phi 22$	20	22	60.5
XK18	52.5	$\phi 24.5$	22	24	67

IP67 Outlet of Sealed Accessory

Straight Plug - C



Type CI, CII

90° Angled Plug - W

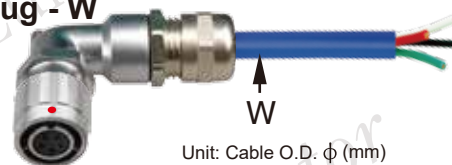

Unit: Cable O.D. ϕ (mm)

Table 12

Spec.	Type CI	Type CII	W
	Cable O.D. ϕ	Cable O.D. ϕ	Cable O.D. ϕ
XK10	$\phi 3-\phi 6.5$		$\phi 3-\phi 6.5$
XK12	$\phi 3-\phi 6.5$	$\phi 4-\phi 8$	$\phi 4-\phi 8$
XK16	$\phi 4-\phi 8$	$\phi 7-\phi 12$	$\phi 5-\phi 10$
XK18	$\phi 7-\phi 12$	$\phi 10-\phi 14$	$\phi 7-\phi 12$

IP67 Metal Protective Caps

Circular Flange Receptacle Cap

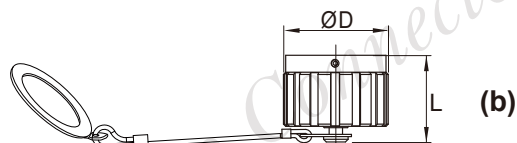
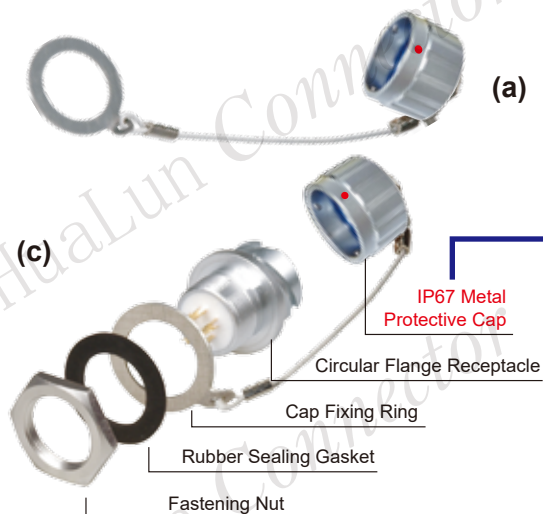


Table 13

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

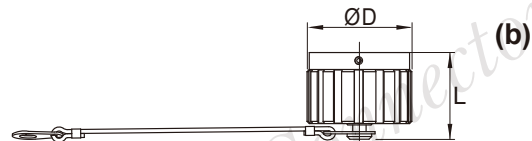
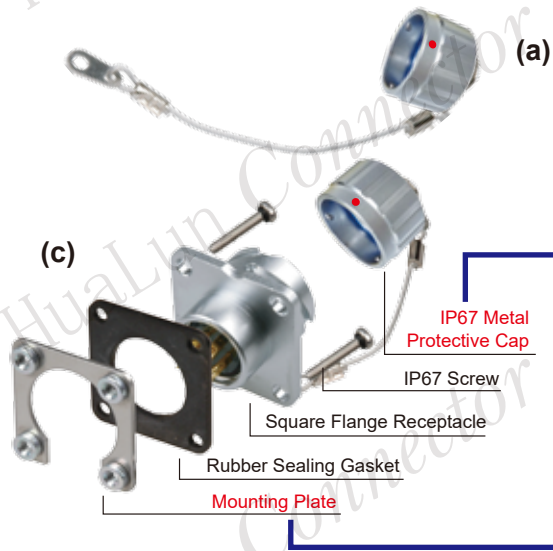


Table 14

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

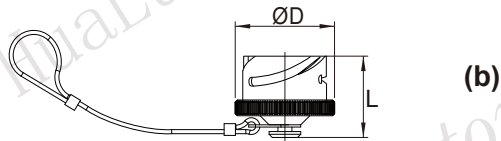
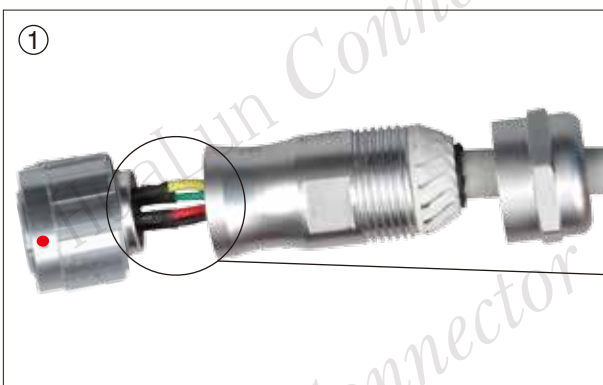


Table 15

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!



Suggestion: Please apply glue to the thread and tighten to avoid mis-disassembling



Anti-roll wheel

Spec.: XK10
XK12
XK16
XK18



Flat wrench

Spec.: XK10
XK12
XK16
XK18



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