SHENZHEN AVIACONN PRECISION TECHNOLOGY CO. LTD

Web:www.aviaconn.com
Technical email: technical@aviaconn.com
Sales email: sales@aviaconn.com

ANKNOR

MILITARY CONNECTOR

Shenzhen Anknor Technology Co., Ltd. (ANKNOR) is a wholly-owned subsidiary of MOFLON, a global manufacturer of high-end precision rotary connectors. ANKNOR focuses on the research, development, production, and sales of high-precision connector products, committed to providing customized and highly reliable connection solutions for global customers.

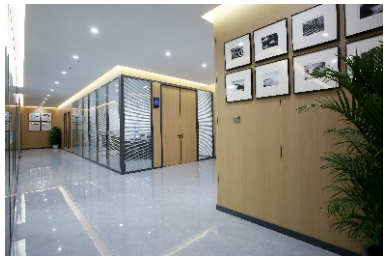
MOFLON, with its factory located in Shajing, Shenzhen, employs over 500 people and has an annual sales revenue exceeding 300 million RMB. With a 20,000 square meter high-tech factory, MOFLON is dedicated to high-end manufacturing, driving industry development with high-quality products. Its products are widely exported to developed countries in Europe, America, and Japan, and have entered the European and American aerospace and military industries. MOFLON has established long-term and friendly cooperative relationships with many internationally renowned brands. Over 60% of its products are customized, widely used in robotics, CCTV camera systems, packaging machinery, medical instruments, and automation systems. The company has also obtained ISO 9001, UL, CE, and other relevant certifications.

Leveraging the strong resources of its parent company, ANKNOR can undertake highly demanding and complex special customization needs, continuing the parent company's advantage of over 60% customized product sales. Its products include standard and customized high-precision conductive slip rings and standard and customized industrial connectors, possessing characteristics such as high precision, high stability, and strong adaptability, with performance comparable to international advanced levels.

ANKNOR's products are applied in various high-end fields, including aerospace, marine, military, robotics, automotive, medical instruments, intelligent manufacturing, automation systems, weaponry, railways, oil exploration, wind power generation, and agricultural informatization.

In the future, ANKNOR will use its parent company's technological expertise as a solid foundation, with innovation as its core driving force, to build a benchmark brand in its niche market, creating more valuable connection solutions for global customers and jointly exploring new opportunities in the industry

Office environment



PRECISE

Precise Production Control, High Quality and Efficiency

QUALITY

Rigorous testing ensures product quality

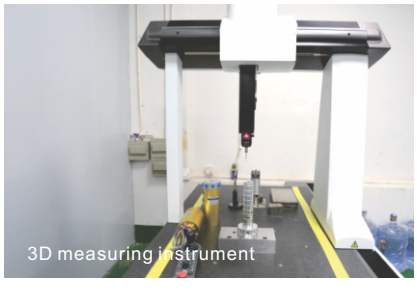

Connector vibration testing


Image size measurement


2D measuring instrument


Salt spray testing


Electroplating film thickness tester

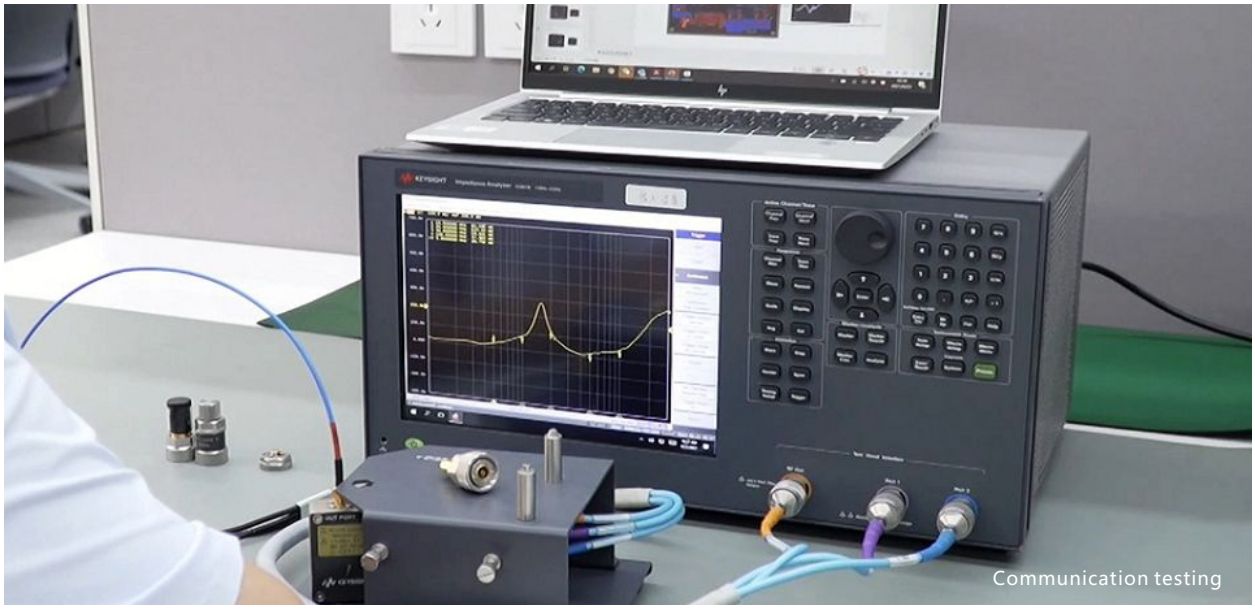

3D measuring instrument


Hardness tester


High and low temperature test chamber

Dustproof testing

Waterproof testing



Communication testing

HONOR

Honors and Qualifications

CONTENT

(Folder icon) GB2889 corresponds to MIL-STD-704

(Folder icon) GB 598 corresponds to MIL-DTL-26482

(Folder icon) GB 599 corresponds to MIL-DTL-38999

(Folder icon) GB600 corresponds to MIL-DTL-5015

CXCH-01

Series Circular Connector

The pictures are for reference only

Web: www.anknor.com Email: Info@anknor.com

Overview

This is a modified product of CXCH. Compared with the XC and CXCH series, it features an increased shell wall thickness, which enhances the product' s mechanical strength. It is widely used in equipment such as ships, postal communications, machine tools, as well as in harsh working environments.

The product has 9 types and 32 contact arrangements. Its main technical performance complies with GJB2889.

Main Technical Performance

Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 95% at 40°C
- Operating altitude: 30000m
- Vibration: Frequency 10~2000Hz, acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²

The electrical connector also has excellent performance in moisture resistance, salt spray resistance, mildew resistance, rain resistance, and dust resistance.

Electrical Performance

Contact resistance and rated current:

Specification (mm)	Contact Resistance (mΩ)	Rated Current (A)	Welding Wire Inner Diameter (mm)	Maximum Core Cross-Sectional Area of Compatible Wire (mm²)
Φ1.0	≤5	5	Φ1.4	1.0
Φ1.5	≤2.5	10	Φ2.0	1.5
Φ2.0	≤1.25	20	Φ2.5	3.0
Φ3.0	≤0.75	40	Φ3.0	6.0

External Electrical Continuity Aluminum Alloy Shell: ≤2.5mΩ

Rated voltage, withstand voltage and insulation resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage (V)	Insulation Resistance (MΩ)
Normal Temperature Condition	500	≥1500	≥5000
Humid and Hot Condition	500	≥1125	≥100

Mechanical Performance

- Housing: High-strength aluminum alloy
  Shielding coating: Zinc-plated iridescent/olive green passivation, electroless nickel plating
- Insulator: Thermosetting material
- Wire sealing body and seal ring: Silicone rubber
- Contact components:
- Material: Copper alloy
- Coating: Silver plating, gold plating
- Mechanical service life: 1000 cycles

Series Main Name	YH HL CXCH	18	T	4	K	P	W	-01
Shell Number	18, 22, 24, 27, 30, 33, 36, 39, 42							
Shell Type	T: Plug F: Square Flange Socket							
Number of Contacts	1 ~ 62							
Contact Components	Z: Silver-plated Pin Z_1: Gold-plated Pin K: Silver-plated Socket K_1: Gold-plated Socket							
Shell Coating & Rear Accessories	(Unmarked): No rear thread, anodized layer D: No rear thread, zinc-plated iridescent passivation D_1: No rear thread, electroless nickel plating D_3: No rear thread, zinc-plated olive green passivation D_{12}: No rear thread, copper alloy material D_{40}: No rear thread, stainless steel passivation E: Rear thread, optional accessories, anodized layer P: Rear thread, optional accessories, zinc-plated iridescent passivation P_1: Rear thread, optional accessories, electroless nickel plating P_3: Rear thread, optional accessories, zinc-plated olive green passivation P_{12}: Rear thread, optional accessories, copper alloy material P_{40}: Rear thread, optional accessories, stainless steel passivation							
Key Position	N Key Position: Unmarked W Key Position: -(W) X Key Position: -(X) Y Key Position: -(Y) Z Key Position: -(Z)							
Improved Product	-01							

Notes:

1.When referring to electrical connectors, the model marking uses a fractional format: the socket marking is written as the numerator, and the plug marking as the denominator (only the plug's shell coating and rear accessory type may be specified), separated by a slash.

2.The plug and socket models are marked directly on the product; the electrical connector model is for customer ordering and factory production/operation management.

3.For plugs (sockets) with optional accessories, add a "+" after the model, then specify the selected accessory (see 《XC and Its Derivative Series Electrical Connector Accessories》 for details).

Examples:

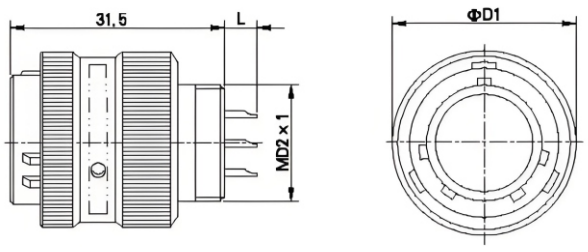
1.For the CXCH-01 series, 18-type square flange silver-plated socket (4 contacts, shielded, zinc-plated iridescent passivation, N key position), the model is:CXCH18F4KP-01

2.For the CXCH-01 series, 18-type silver-plated pin plug (4 contacts, shielded, zinc-plated iridescent passivation, N key position), the model is:CXCH18T4ZP-01

3.The electrical connector model is:CXCH18F4KP-01/P-01

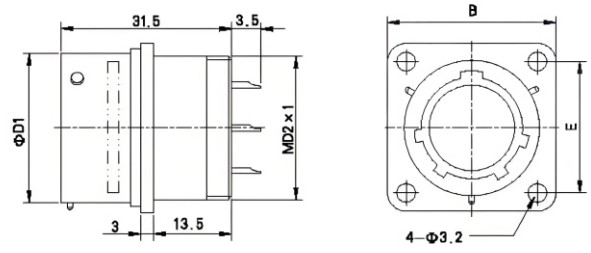
Overall Dimensions

CXCH-01 Series Plug



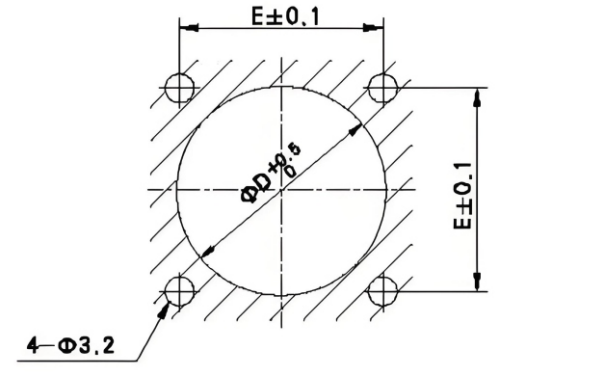
Housing Number	D1	D2
18	27.3	18
22	31.3	22
24	33.3	24
27	36.3	27
30	39.3	30
33	42.3	33
36	45.3	36
39	48.3	39
42	51.3	42

CXCH-01 Series Socket



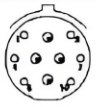
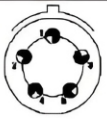
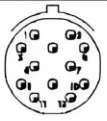
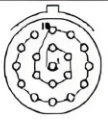
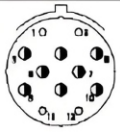
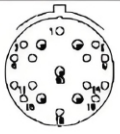
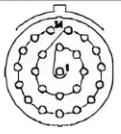
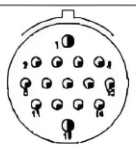
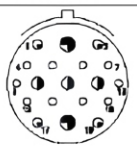
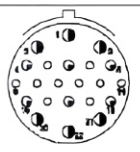
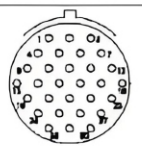
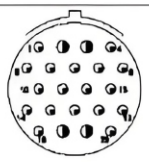
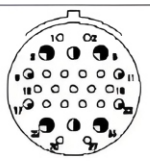
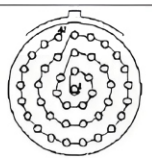
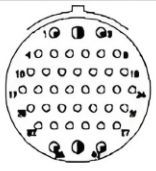
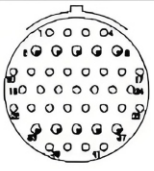
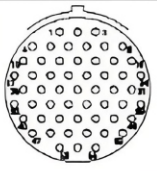
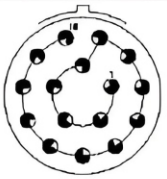
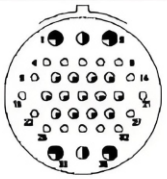
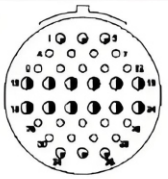
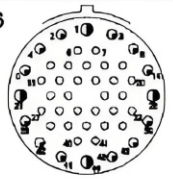
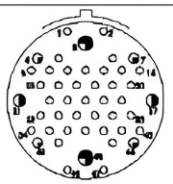
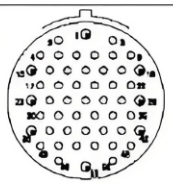
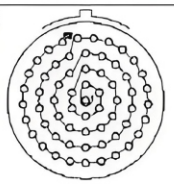
Housing Number	D1	D2	B	E
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36
42	43.7	42	46	39

Recommended Panel Cutout Dimensions



Housing Number	D	E
18	18.5	21.5
22	22.5	24
24	24.5	26
27	27.5	28
30	30.5	30
33	33.5	32.5
36	36.5	34
39	39.5	36
42	42.5	39

CXCH-01 Series Contact Arrangement (Mating Face View of Pin Insulator)

Housing Number				
18	1 	2 	3 	4 
22	4 	5 	7 	
24	10 	14 		
27	5 	12 	19 	
30	12 	19 	24 	
33	15 	19 	22 	30 
36	22 	27 	41 	
39	40 	41 	55 	
42	16 	35 	36 	46 
	47 	51 	62 	○ φ1.0 Contact Component ◔ φ1.5 Contact Component ◑ φ2.0 Contact Component ◕ φ3.0 Contact Component

CXCH Series Circular Electrical Connector

The pictures are for reference only

Overview

This is a modified product of CXCH. Compared with the XC and CXCH series, it features an increased shell wall thickness,which enhances the product' s mechanical strength. It is widely used in equipment such as ships, postal communications, machine too as well as in harsh working environments.
Its main technical performance complies with GJB289.

1. Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 95% at 40°C
- Operating altitude: 30000m
- Vibration: Frequency 10~2000Hz, acceleration 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²

This electrical connector also has good performance in moisture resistance, salt spray resistance, mildew resistance, rain resistance and dust resistance.

2. Electrical Performance

Contact resistance and rated current:

Specification (mm)	Contact Resistance (mΩ)	Rated Current (A)
Φ1.0	≤5	5
Φ1.5	≤2.5	10
Φ2.0	≤1.25	20
Φ3.0	≤0.75	40

Rated voltage, withstand voltage and insulation resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage (V)
Normal Temperature Condition	500	≥1500
Humid and Hot Condition	500	≥1125
Low Pressure Condition (1kPa)	250	≥300

Insulation Resistance: MΩ

Working Class	Standard Condition	Withstand Voltage (V)	Humid and Hot
Insulation Resistance	≥5000	≥1500	≥100

External Electrical Continuity Aluminum Alloy Shell: ≤2.5mΩ

3. Mechanical Performance

- Housing: High-strength aluminum alloy
  Shielding coating: Zinc-plated iridescent or military green passivation, electroless nickel plating
  Non-shielding coating: Anodized black
- Insulator: Thermosetting material
- Wire sealing body and sealing ring: Silicone rubber
- Contact:
  Material: Copper alloy
  Coating: Silver plating, gold plating
- Mechanical life: 1000 cycles

Web: www.anknor.com Email: Info@anknor.com

Series Main Name	YH HL CXCH	14	T	4	K	P	W
Shell Number	18, 22, 24, 27, 30, 33, 36, 39, 42						
Shell Type	T: Plug F: Square Flange Socket						
Number of Contacts	1 ~ 62						
Contact Components	Z: Silver-plated Pin Z_1: Gold-plated Pin K: Silver-plated Socket K_1: Gold-plated Socket						
Shell Coating & Rear Accessories	(Unmarked): No rear thread, anodized layer D: No rear thread, zinc-plated iridescent passivation D_1: No rear thread, electroless nickel plating D_3: No rear thread, zinc-plated olive green passivation D_{12}: No rear thread, copper alloy material D_{40}: No rear thread, stainless steel passivation E: Rear thread, optional accessories, anodized layer P: Rear thread, optional accessories, zinc-plated iridescent passivation P_1: Rear thread, optional accessories, electroless nickel plating P_3: Rear thread, optional accessories, zinc-plated olive green passivation P_{12}: Rear thread, optional accessories, copper alloy material P_{40}: Rear thread, optional accessories, stainless steel passivation						
Key Position	N Key Position: Unmarked W Key Position: -(W) X Key Position: -(X) Y Key Position: -(Y) Z Key Position: -(Z)						

Notes:

1.When referring to electrical connectors, the model marking uses a fractional format: the socket marking is written as the numerator, and the plug marking as the denominator (only the plug's shell coating and rear accessory type may be specified), separated by a slash.

2.The plug and socket models are marked directly on the product; the electrical connector model is for customer ordering and factory production/operation management.

3.For plugs (sockets) with optional accessories, add a "+" after the model, then specify the selected accessory (see 《XC and Its Derivative Series Electrical Connector Accessories》 for details).

Examples:

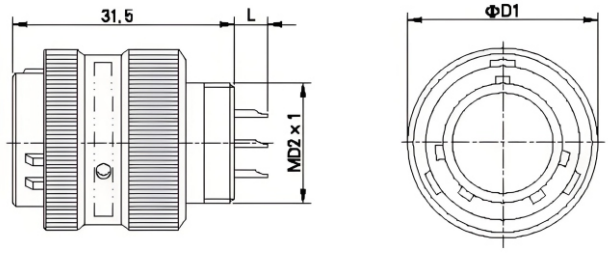
1.CXCH Series 14-Type Square Flange Silver-Plated Jack Socket: 4 contacts, shielded, no thread at the rear, zinc-plated iridescent passivation, N-keying. Model: CXCH14F4KD

2.CXCH Series 14-Type Silver-Plated Pin Plug: 4 contacts, shielded, no thread at the rear, zinc-plated iridescent passivation, N-keying. Model: CXCH14T4ZP

3.Electrical connector model: CXCH14F4KD/P

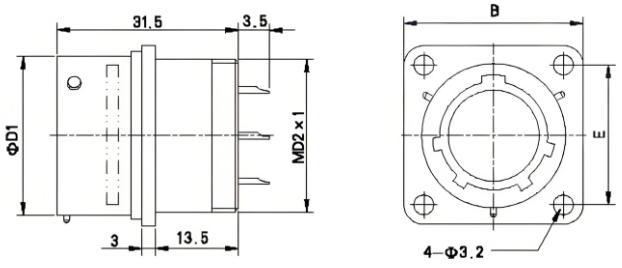
Overall Dimensions

CXCH Series Plug



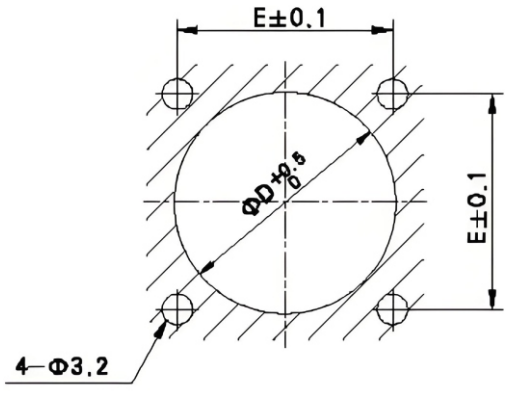
Housing Number	D1	D2
14	23.3	14
18	27.3	18
22	31.3	22
24	33.3	24
27	36.3	27
30	39.3	30
33	42.3	33
36	45.3	36
39	48.3	39

CXCH Series Socket



Housing Number	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

Recommended Panel Cutout Dimensions



Housing Number	D	E
14	14.5	19
18	18.5	21.5
22	22.5	24
24	24.5	26
27	27.5	28
30	30.5	30
33	33.5	32.5
36	36.5	34
39	39.5	36

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XCA Series Circular Electrical Connector

The pictures are for reference only

XCA Series Circular Electrical Connector

Product Brief

- Complies with GJB 289 (Chinese military standard)
- Fully interchangeable with XC series products
- Lighter in weight than XC series products of the same specification
- The rear curved cable clamp has anti-rotation and waterproof functions
- Compatible with American standard and domestic straight-diameter wires
- Bayonet-type quick connection
- Adopts double-curved spring contact holes
- Widely used in various military fields such as aviation, aerospace, and naval vessels
- Implements enterprise standard: 21E0.204.088JT

Main Technical Performance

Mechanical Performance

1.Standard and Through-Wall Sealed Adapter Sockets:

- Housing: High-strength aluminum alloy
- Housing Coating:
  Shielding coating: Zinc-plated military green passivation, electroless nickel plating
  Non-shielding coating: Anodized black
- Insulator: Thermosetting material
- Wire Sealing Body and Sealing Ring: Silicone rubber material
- Contact: Copper alloy (silver-plated or gold-plated)

2.Glass Sintered Flange Sealed Socket:

- Housing: Carbon steel
- Housing Coating: Electroplated nickel
- Insulator: Glass body
- Contact: Iron alloy (silver-plated or gold-plated)

For 1) and 2):

- Vibration: Frequency 10~2000Hz, acceleration 196m/s²
- Shock: Acceleration 980m/s²
- Constant Acceleration: 980m/s²
- Mechanical Life: 1000 cycles

Rated Voltage and Withstand Voltage:

Working Environment	Sealed Electrical Connector		Standard-Type Electrical Connector	
	Rated Voltage (V)	Withstand Voltage (V)	Rated Voltage (V)	Withstand Voltage (V)
Normal Temperature Condition	500	1500	500	1500
Humid and Hot Condition	500	750	500	1125
Low Pressure Condition (1kPa)	150	300	250	300

Insulation Resistance: MΩ

Operating Class	Standard Conditions	High Temperature	Humid and Hot
Insulation Resistance	≥5000	≥1000	≥100

Electrical Continuity Between Housings:

Aluminum Alloy Housing ≤2.5mΩ

Steel Housing ≤5mΩ

Electrical Performance

Contact Resistance and Rated Current of Contacts

Specification (mm)	Contact Resistance of Standard Type (mΩ)	Contact Resistance of Through-Wall Sealed Type (mΩ)	Contact Resistance of Flange Sealed Type (mΩ)	Rated Current (A)
≤1.0	≤5	≤10	≤15	5
≤1.5	≤2.5	≤5	≤7.5	10
≤2.0	≤1.25	≤2.5	≤3.75	20
≤3.0	≤0.75	≤1.5	≤2.25	40

Environmental Performance

Operating temperature: -55°C ~ +200°C
Relative humidity: Up to 95% at 40°C
Operating altitude: 30000m
Salt spray resistance:Chemical nickel plating: 96h
Stainless steel passivation: 1000h
Hermeticity:
Through-wall sealed adapter: Pressure difference 50.7 kPa, leak rate ≤46 Pa·cm³/sGlass-sintered hermetic type: Pressure difference 152 kPa, leak rate ≤0.1 Pa·cm³/s
The electrical connector also has excellent performance in moisture resistance, mold resistance, rain resistance, and dust resistance.

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XCA Series Plug and Socket Classification Table

Plug and Socket Type	Basic Marking	Structural Features	Notes
Crimp Plug	XCA-T$\frac{Z}{K}$...	Aluminum alloy shell (shielded or unshielded plating); Copper alloy contacts (silver-plated or gold-plated), crimped and removable; Can be equipped with either pins or sockets	Can mate with any of the following sockets
Square Panel Crimp Socket	XCA-T$\frac{Z}{K}$...	Aluminum alloy shell (shielded or unshielded plating); Copper alloy contacts (silver-plated or gold-plated), crimped and removable; Can be equipped with either pins or sockets	Two structures are available: with threaded tail (can connect accessories) and without threaded tail
Circular Crimp Socket	XCA-T$\frac{Z}{K}$...	Aluminum alloy shell (shielded or unshielded plating); Copper alloy contacts (silver-plated or gold-plated), crimped and removable; Can be equipped with either pins or sockets	Threaded tail
Square Panel Hermetic Socket (Glass Sintering)	XCA-F-M···	Steel shell (shielded plating); Iron contacts (nickel-plated or gold-plated), welded and non-removable; Only pin-equippable; Hermetic	Threaded tail
Nut-Fastened Through-Wall Hermetic Adapter (Potting Seal)	XCA-S-M··· XCA-S (3)-M ···	Aluminum alloy shell (shielded or unshielded plating); Copper alloy contacts (silver-plated or gold-plated), non-removable; Sockets outside the panel, pins inside the panel; Hermetic	The difference between the two is that XCA-S(3)-M... has a positioning flat milled on the thread, which can prevent rotation

XCA Series Crimp Contacts

Specification (mm)	Type	Color Ring	Crimp Barrel Inner Diameter (mm)	Crimp Barrel Outer Diameter (mm)	Adapted Wire Cross -Section (mm^2)	Adapted American Wire Gauge (AWG)	Adapted Wire Insulation Diameter (mm)	Crimp Tool/Locator* Code	Removal Tool Code
Φ1.0	A	Yellow	Φ1.0	Φ1.8	0.20 0.35 0.50	22 20	Φ1.1 ~ Φ2.1	XCX Y-01/DWQ-01	XCQZ-Φ1
	B	Blue	Φ1.3	Φ2.1	0.75	20 18			
Φ1.5	A	Yellow	Φ1.4	Φ2.4	0.75 1.00	18	Φ1.3 ~ Φ2.6	XCX Y-01/DWQ-01	XCQZ-Φ1.5
	B	Blue	Φ1.8	Φ2.8	1.20 1.50	16 14			
Φ2.0	A	Yellow	Φ2.1	Φ3.2	1.20 1.50	14	Φ2.5 ~ Φ3.6	XCX Y-01/DWQ-01	XCQZ-Φ2
	B	Blue	Φ2.5	Φ3.6	2.00	12			
Φ3.0	A	Yellow	Φ3.0	Φ4.2	2.50 3.00	12	Φ2.5 ~ Φ4.6	XCX Y-01/DWQ-01	XCQZ-Φ3
	B	Blue	Φ3.4	Φ4.6	4.00 5.00	10			

[Model Naming for Crimp Plugs, Square Panel Crimp Sockets and Circular Crimp Sockets]

Series Main Name	YH HL CXCH	14	T	4	K	HP1	(W)
Shell Number	14—18—22—24—27—30—33—36—39						
Shell Type	T: Plug Y: Circular Socket F: Square Panel Socket						
Number of Contacts	1~62 (refer to "Contact Arrangement Diagram")						
Contact Components	Z: Pin (silver-plated) ZI: Pin (gold-plated) K: Socket (silver-plated) KI: Socket (gold-plated)						
Shell Coating & Rear Accessories	Shielded Plating: HP1: Tail shielded locking ring (chemical plating) HP2: Tail shielded locking ring (passivated pale military green) HP3: Tail shielded locking ring (passivated pale military green) P1: Tail with thread (optional accessory, passivated pale military green) P2: Tail with thread (optional accessory, passivated pale military green) P3: Tail with thread (optional accessory, passivated zinc-plated) P40: Tail with thread (optional accessory, stainless steel) WP1: Tail clamp-type cable clamp (chemical plating) WP2: Tail clamp-type cable clamp (passivated pale military green) WP3: Tail clamp-type cable clamp (passivated pale military green) Unshielded Plating: H: Tail straight cable clamp (anodized black) E: Tail with thread (optional accessory, anodized black) W: Tail clamp-type cable clamp (anodized black) Shielded Plating (only for square panel sockets): D1: Tail without thread (chemical plating) D2: Tail without thread (passivated pale military green) D3: Tail without thread (passivated zinc-plated) D40: Tail without thread (stainless steel) Unshielded Plating (only for square panel sockets): Non-marked: Tail without thread (anodized black)						
Key Position	Unmarked—N key position, (W)—W key position, (X)—X key position, (Y)—Y key position, (Z)—Z key position						

Notes:

1. To match various cable specifications, multiple dedicated tail accessories are available. For details, refer to XC and Its Derivative Series Connectors Accessories.
2. For requests to use Type B crimp pins/sockets, note "(B)" after the model; unmarked models default to Type A crimp pins/sockets.

[Model Marking Examples]

1. XCA14FKIP1XCA series square panel socket, shell number 14, 4 contacts, Type A gold-plated socket, tail with thread (chemical plating), N key position.
2. XCA39T62ZW(W) (B)XCA series plug, shell number 39, 62 contacts, Type B silver-plated pin, tail clamp-type cable clamp, shell anodized black, W key position.

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[Model Naming for Square Panel Hermetic Sockets]

Series Main Name	YH HL XCA	14	F	4	M	(W)
Shell Number	14—18—22—24—27—30—33—36—39					
Shell Type	F: Square Panel Hermetic Socket					
Number of Contacts	1~62 (refer to "Contact Arrangement Diagram")					
Contact Type	M: Glass-sintered seal, shell electroplated, contacts silver-plated MI: Glass-sintered seal, shell electroplated, contacts gold-plated					
Key Position	Unmarked—N key position, (W)—W key position, (X)—X key position, (Y)—Y key position, (Z)—Z key position					

[Model Marking Example (Square Panel Hermetic Socket)]

XCA14F4M(W)

XCA series square panel hermetic socket, shell number 14, 4 contacts, glass-sintered seal, shell electroplated, contacts silver-plated, W key position.

[Model Naming for Through-Wall Hermetic Adapters]

Series Main Name	YH HL CXCH	14	S	4	M	D1	(W)
Shell Number	14—18—22—24—27—30—33—36—39						
Product Type	S: Nut-fastened anti-rotation through-wall adapter (socket outside panel, pin inside panel) S(3): Nut-fastened anti-rotation through-wall adapter (socket outside panel, pin inside panel)						
Number of Contacts	1~62 (refer to "Contact Arrangement Diagram")						
Specification Mark	M: Potting seal, contacts silver-plated MI: Potting seal, contacts gold-plated						
Shell Plating	Shielded Plating: D1: Chemical plating D2: Passivated pale military green D3: Passivated zinc-plated Unshielded Plating: Non-marked: Anodized black						
Key Position	Unmarked—N key position, (W)—W key position, (X)—X key position, (Y)—Y key position, (Z)—Z key position						

Notes:

For square panel-mounted through-wall hermetic adapters, the model is:

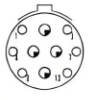
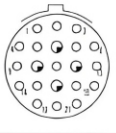
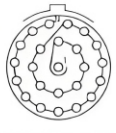
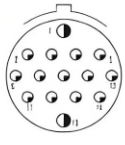
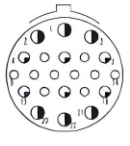
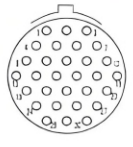
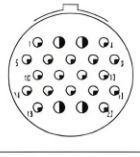
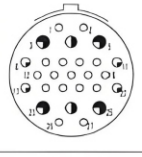
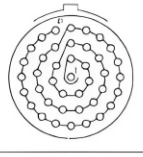
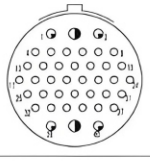
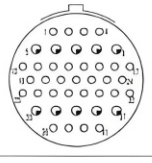
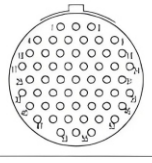
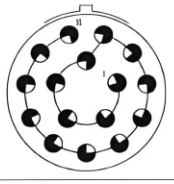
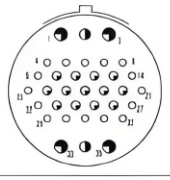
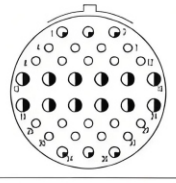
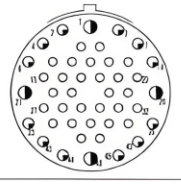
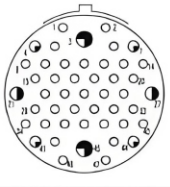
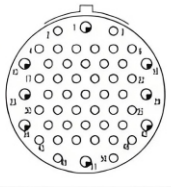
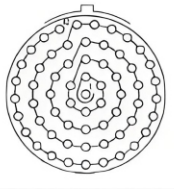
XCA-S(I)-M (same as XCA-S(1)-M)

XCA-S(2)-M (same as XCA-S(2)-M)

[Model Marking Example (Through-Wall Hermetic Adapter)]

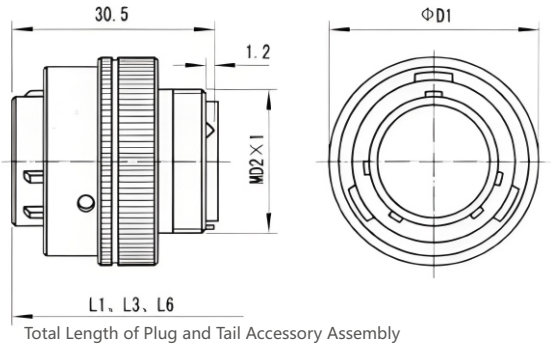
XCA14S4MD1(W)XCA series nut-fastened anti-rotation through-wall adapter (socket outside panel, pin inside panel), shell number 14, 4 contacts, potting seal, contacts silver-plated, shell chemical plating, W key position.

XCA Series Contact Arrangement (Mating Surface View of Pin Insulator)

Shell Number				
14	1 	2 	3 	4 
18	4 	5 	7 	
22	10 	14 		
24	5 	12 	19 	
27	12 	19 	21 	24 
30	15 	19 	22 	30 
33	22 	27 	41 	
36	40 	41 	55 	
39	16 	35 	36 	46 
	47 	51 	62 	○ Φ1.0 Contact ◔ Φ1.5 Contact ◑ Φ2.0 Contact ◕ Φ3.0 Contact

Overall Dimensions

[XCA Series Plugs]



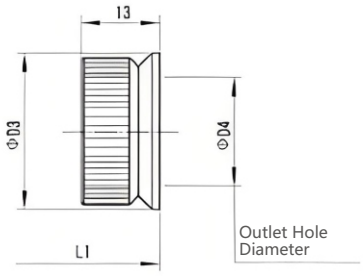
Total Length of Plug and Tail Accessory Assembly

Notes:

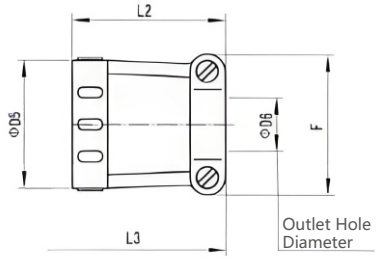
The three accessories listed in the diagram below are named together with the product model and are not supplied separately. Users can select other accessories as needed; for accessory information, please refer to "XC and Its Derivative Series ConnectorAccessories" (Page P233).

Shell Number	14	18	22	24	27	30	33	36	39
D1	24	28	32	34	37	40	43	46	49
D2	14	18	22	24	27	30	33	36	39
D3	18	22	26	28	31	34	37	40	43
D4	10	14	18	20	23	26	29	32	35
L1	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
D5	16	20	24	26	29	33	36	39	42
D6 min	5.5	8.5	8.5	10.5	10.5	15	15	21	21
D6 max	8	13	13	18	18	23	23	28	28
F	22	27	27	32	32	37	37	42	42
L2	22	22	25	25	25	30	30	30	30
L3	47.5	47.5	50.5	50.5	50.5	55.5	55.5	55.5	55.5
D7	16.5	20.5	24.5	26.5	29.5	32.5	35.5	38.5	41.5
D8 min	5	8	8	10	10	14	14	20	20
D8 max	11	15	19	21	24	26	29	32	35
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21	23	25	26	27.5	29.5	31	32.5	34
L6 max	62.5	64.5	68.5	70.5	70.5	78.5	78.5	80.5	80.5

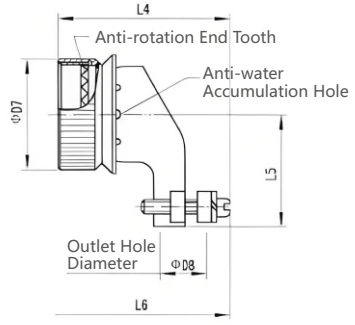
Shielding Nut



Straight Cable Clamp

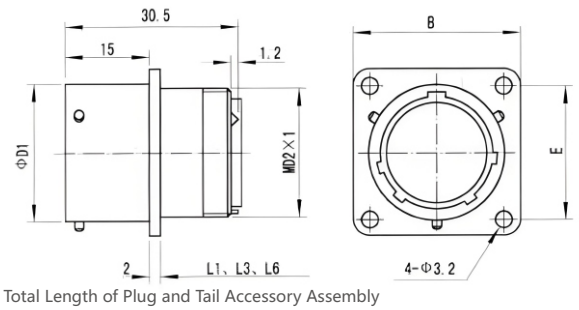


U-Type Cable Clamp



[XCA Panel Socket]

The XCA panel socket comes in two structures: with rear threads and without rear threads. Both have the same overall dimensions.
The diagram takes the threaded version (which can be fitted with accessories) as an example.
The non-threaded socket does not have a rear end tooth.



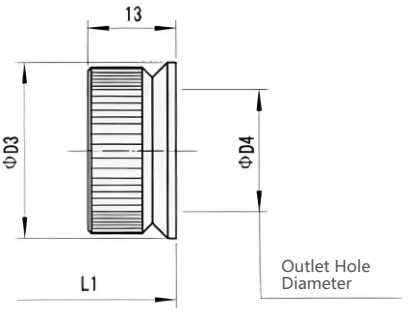
Total Length of Plug and Tail Accessory Assembly

Notes:

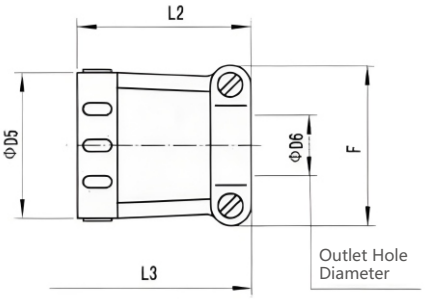
The three accessories listed in the diagram below are named together with the product model and are not supplied separately. Users can select other accessories as needed; for accessory information, please refer to "XC and Its Derivative Series ConnectorAccessories" (Page P233).

Shell Number	14	18	22	24	27	30	33	36	39
D1	15.7	19.7	23.7	25.7	28.7	31.7	34.7	37.7	40.7
D2	14	18	22	24	27	30	33	36	39
B	25	27.5	30	32	34.5	36.5	39.5	41	43
E	19	21.5	24	26	28	30	32.5	34	36
D3	18	22	26	28	31	34	37	40	43
D4	10	14	18	20	23	26	29	32	35
L1	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
D5	16	20	24	26	29	33	36	39	42
D6 min	5.5	8.5	8.5	10.5	10.5	15	15	21	21
D6 max	8	13	13	18	18	23	23	28	28
F	22	27	27	32	32	37	37	42	42
L2	22	22	25	25	25	30	30	30	30
L3	30.5	30.5	33.5	33.5	33.5	38.5	38.5	38.5	38.5
D7	16.5	20.5	24.5	26.5	29.5	32.5	35.5	38.5	41.5
D8 min	5	8	8	10	10	14	14	20	20
D8 max	11	15	19	21	24	26	29	32	35
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21	23	25	26	27.5	29.5	31	32.5	34
L6 max	45.5	47.5	51.5	53.5	53.5	61.5	61.5	63.5	63.5

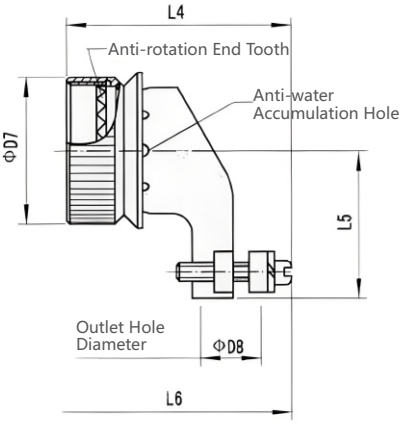
Shielding Nut



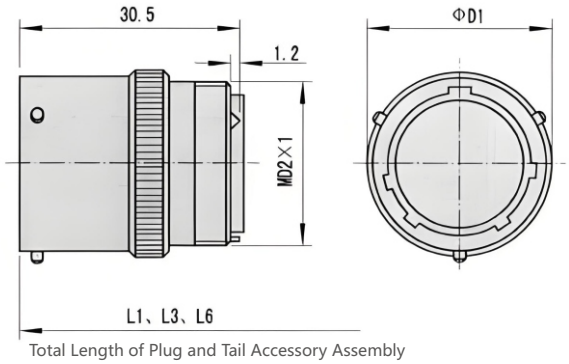
Straight Cable Clamp



U-Type Cable Clamp



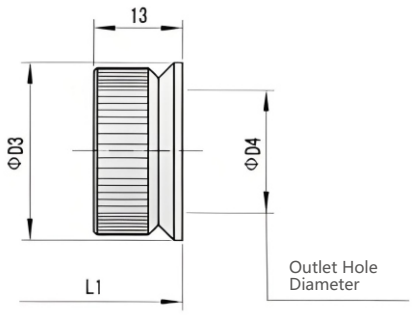
[XCA Circular Socket]



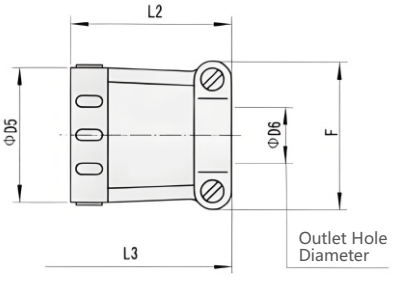
Total Length of Plug and Tail Accessory Assembly

Shell Number	14	18	22	24	27	30	33	36	39
D1	17	28	25	27	30	33	36	39	42
D2	14	18	22	24	27	30	33	36	39
D3	18	22	26	28	31	34	37	40	43
D4	10	14	18	20	23	26	29	32	35
L1	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
D5	16	20	24	26	29	33	36	39	42
D6 min	5.5	8.5	8.5	10.5	10.5	15	15	21	21
D6 max	8	13	13	18	18	23	23	28	28
F	22	27	27	32	32	37	37	42	42
L2	22	22	25	25	25	30	30	30	30
L3	47.5	47.5	50.5	50.5	50.5	55.5	55.5	55.5	55.5
D7	16.5	20.5	24.5	26.5	29.5	32.5	35.5	38.5	41.5
D8 min	5	8	8	10	10	14	14	20	20
D8 max	11	15	19	21	24	26	29	32	35
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21	23	25	26	27.5	29.5	31	32.5	34
L6 max	62.5	64.5	68.5	70.5	70.5	78.5	78.5	80.5	80.5

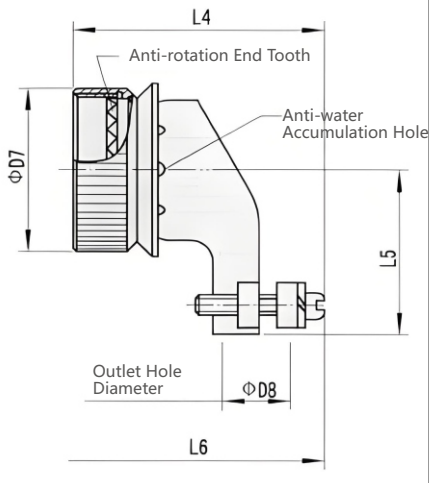
Shielding Nut



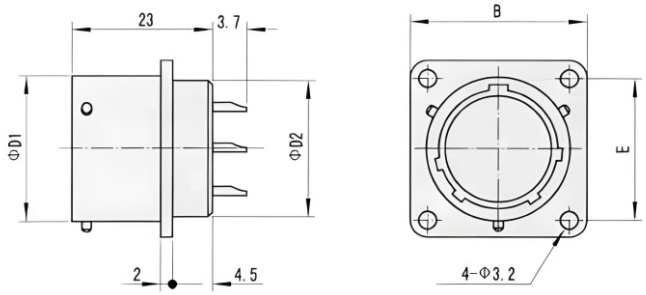
Straight Cable Clamp



U-Type Cable Clamp

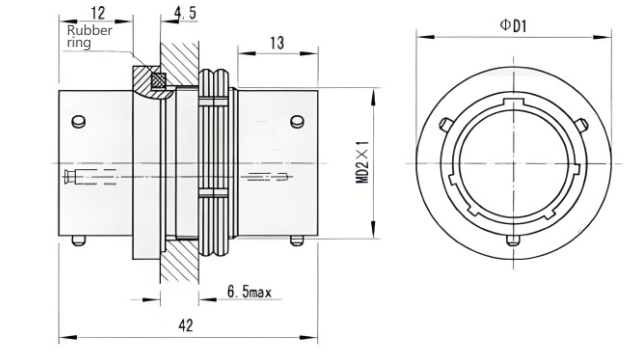


[XCA-F-M Glass Sintered Square Plate Sealed Socket]



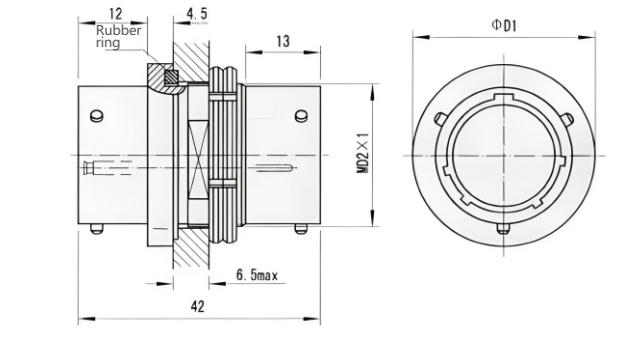
Housing Number	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

[XCA-S-M Nut-Fastened Wall-Mounted Sealed Adapter Socket (Holes on the Outside of the Panel, Pins on the Inside of the Panel)]



Housing Number	D1	D2
14	27	18
18	31	22
22	36	27
24	36	27
27	39	30
30	42	33
33	45	36
36	48	39
39	51	42

[XCA-S (3)-M Nut-Fastened Stepped Wall-Mounted Sealed Adapter Socket (Holes on the Outside of the Panel, Pins on the Inside of the Panel)]



Housing Number	D1	D2
14	27	18
18	31	22
22	36	27
24	36	27
27	39	30
30	42	33
33	45	36
36	48	39
39	51	42

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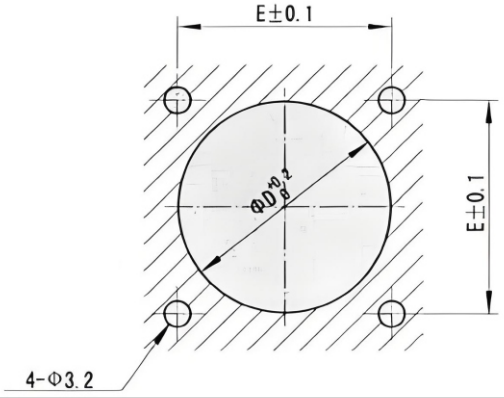
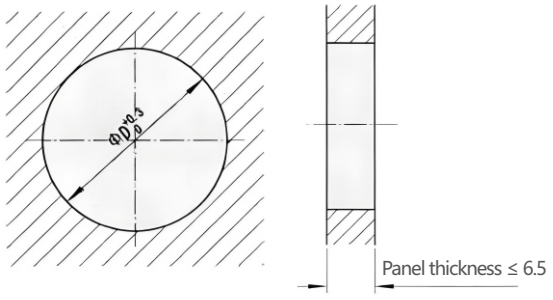
[Recommended Panel Cutting Dimensions for XCA and XCA-F-M Square Plate Socket]



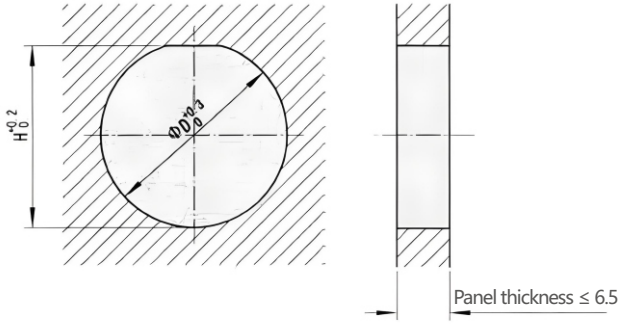
Housing Number	D	E
14	14.3	19
18	18.3	21.5
22	22.3	24
24	24.3	26
27	27.3	28
30	30.3	30
33	33.3	32.5
36	36.3	34
39	39.3	36

[Recommended Panel Cutting Dimensions for XCA-S-M Socket]



Housing Number	D
14	18.5
18	22.5
22	27.5
24	28.2
27	31.2
30	34.2
33	37.2
36	40.2
39	43.2

[Recommended Panel Cutting Dimensions for XCA-S (3)-M Socket]



Housing Number	D	H
14	18.3	17.0
18	22.3	21.0
22	27.3	25.4
24	27.3	26.4
27	30.3	29.4
30	33.3	32.4
33	36.3	35.4
36	39.3	38.4
39	42.3	41.4

XCD Series Circular Electrical Connector

The pictures are for reference only

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Overview

- For power supply use only
- Rated operating current: 25A ~ 300A
- Adopts hyperboloid spring jacks
- Multiple tail termination forms
- Five identification key positions
- Both plugs and sockets can be equipped with pins or jacks

Main Technical Performance

Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 95% at 40°C
- Operating altitude: 30000m
- Vibration: Frequency 10~2000Hz, acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²

The electrical connector also has excellent resistance to humidity, salt spray, mold, rain, and dust.

Electrical Performance

Contact resistance and rated current:

Specification (mm)	Contact Resistance mΩ	Rated Current (A)
Φ2.5	≤1.00	25
Φ3.5	≤0.50	50
Φ4.5	≤0.35	60
Φ5.5	≤0.30	100
Φ7.5	≤0.20	150
Φ9.0	≤0.17	200
Φ10	≤0.20	200
Φ12	≤0.15	250
Φ14	≤0.12	300

Rated voltage, withstand voltage and insulation resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage(V)	Insulation Resistance (MΩ)
Normal Temperature Condition	500	1500	≥5000
Humid and Hot Condition	500	750	≥750

Continuity between Housings

Aluminum alloy housing: ≤ 2.5mΩ

Mechanical Performance

- Housing: High-strength aluminum alloy with chemical nickel plating
- Insulator: Thermosetting material
- Contacts: Copper alloy with gold plating
- Mechanical service life: 1000 cycles

XCD Series Model Naming

Series Main Name	YH HL XCD	36	F	4	K_1	P_1	....
Shell Number	22—27—33—36—39—45—85						
Shell Type	T: Plug F: Square Panel Socket L: Nut-Fixed Socket						
Contact Arrangement	See "Contact Arrangement Diagram"						
Contacts	Z_1: Gold-plated Pin K_1: Gold-plated Jack						
Specification Mark	D_1: Housing with chemical nickel plating (no thread at tail) P_1: Housing with chemical nickel plating (with thread at tail)						
Key Position	N Key Position: Unmarked W Key Position: (W) X Key Position: (X) Y Key Position: (Y) Z Key Position: (Z)						

Housing Number				
22	1 1–Φ10			
27	1 1–Φ12	6 4–Φ1.5, 2–Φ3.5		
33	9 5–Φ2.5, 4–Φ3.5			
36	2 2–Φ10	3 3–Φ4.5	4 4–Φ4.5	6 5–Φ2.0, 1–Φ10
39	3 3–Φ10	4 4–Φ5.5		
45	1 1–Φ14	4 4–Φ7.5	8 4–Φ1.0, 4–Φ7.5	
85	4 1–Φ8.0, 3–Φ12			4 4–Φ16

Crimping and Soldering Contact Related Dimensions (mm)

Contact Specification	Inner Diameter of Wire Soldering Cup or Crimping Barrel	Outer Diameter of Wire Soldering Cup or Crimping Barrel	Length Extending from Housing
Φ1.5	Φ2.0	Φ2.5	6.2
Φ2.0	Φ2.5	Φ3.1	3.5
Φ2.5	Φ2.5	Φ3.1	6.2
Φ3.5	Φ4.8	Φ5.8	6.2
Φ4.5	Φ5.5	Φ6.5	8.0

Contact Specification	Inner Diameter of Wire Soldering Cup or Crimping Barrel	Outer Diameter of Wire Soldering Cup or Crimping Barrel	Length Extending from Housing
Φ5.5	Φ6.5	Φ7.5	10.0
Φ7.5	Φ9.0	Φ10.5	11.5
Φ9.0	Φ12.0	Φ17.0	
Φ10.0	Φ10.0	Φ12.0	10.0
Φ12.0	Φ15.0	Φ20.0	10.5

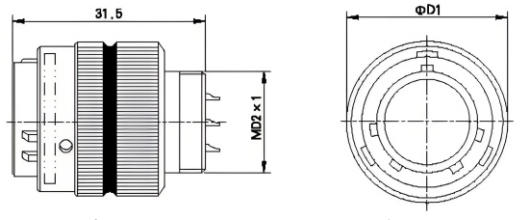
This dimension is for reference only and not to be used as an inspection basis.

*This dimension is for reference only and not to be used as an inspection basis.

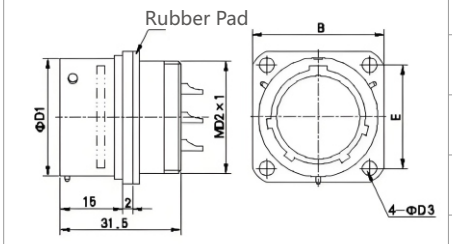
Connected to wires via soldering

Plug

Contact arrangement serial number	D1	D2
22-1	32	22
27-1 27-6	37	27
33-9	43	33
36-2 36-3 36-4 36-6	46	36
39-3 39-4	49	39
45-4 45-8	55	45

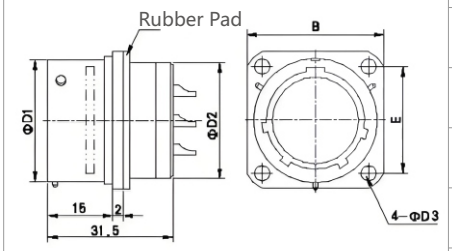


Square Panel Socket (with thread at the tail)



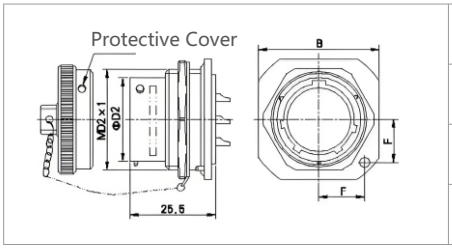
Contact Arrangement Code	D_1	D_2	D_3	B	E
27—6	28.7	27	3.2	34.5	28.0
33—9	34.7	33	3.2	39.5	32.5
36—3 36—4	37.7	36	3.2	41.0	34.0
39—4	40.7	39	3.2	43.0	36.0
45—4 45—8	46.7	45	3.7	49.0	42.0
85—4	85	85	8.5	100	82

Square Panel Socket (no thread at the tail)



Contact Arrangement Code	D_1	D_2	D_3	B	E
22—1	23.7	22	3.2	30.0	24.0
27—1 27—6	28.7	27	3.2	34.5	28.0
33—9	34.7	33	3.2	39.5	32.5
36—2 36—6	37.7	36	3.2	41.0	34.0
39—3	40.7	39	3.2	43.0	36.0

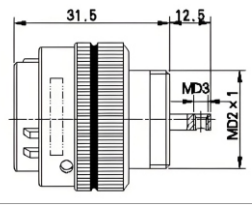
Nut-Fixed Socket

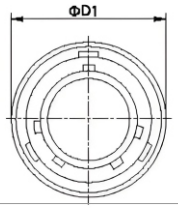


Contact Arrangement Code	D_1	D_2	B	F
36—4	42	37.7	54	19.0
39—4	45	40.7	56	20.0
45—4	51	46.7	62	22.5

Part II is connected to the wire via a threaded joint

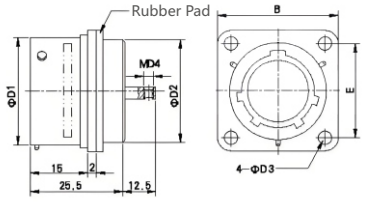
1.Plug





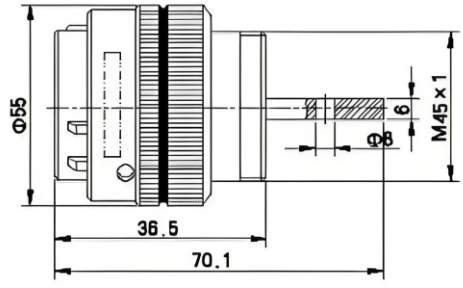
Contact Arrangement Code	D_1	D_2	D_3
22—1	32	22	5
27—1	37	27	6
36—2 36—6	46	36	5

2. Panel Mount Socket

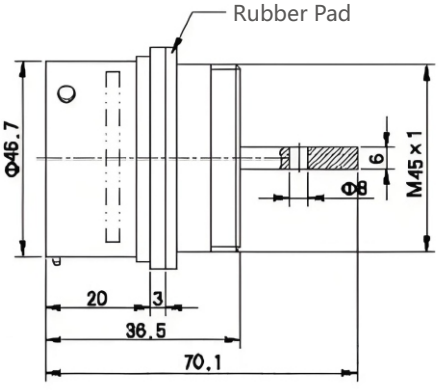


Contact Arrangement Code	D_1	D_2	D_3	B	E
22—1	23.7	22	3.2	30.0	24.0
27—1	28.7	27	3.2	34.5	28.0
36—2 36—6	37.7	36	3.2	41.0	34.0

3.Plug XCD45T1Z$_1$ (K_1, P_1)

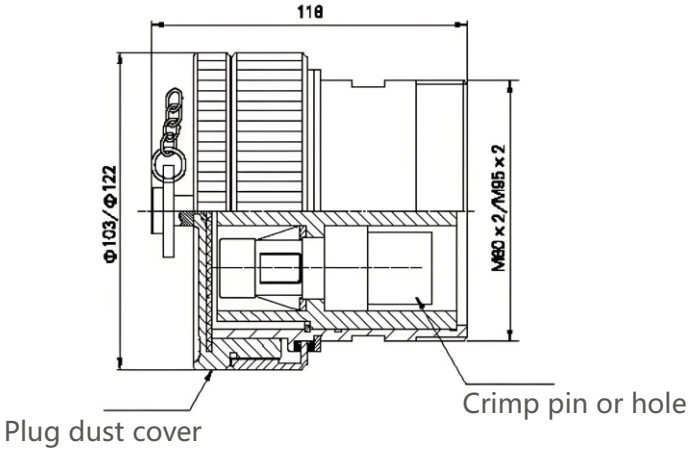


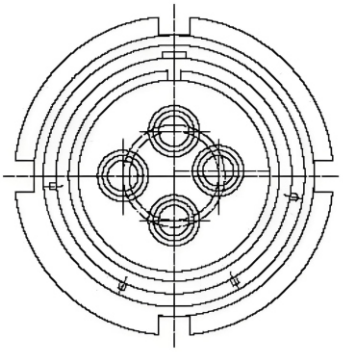
4. Socket XCD46F1K, (Z_1, J_1, P_1)



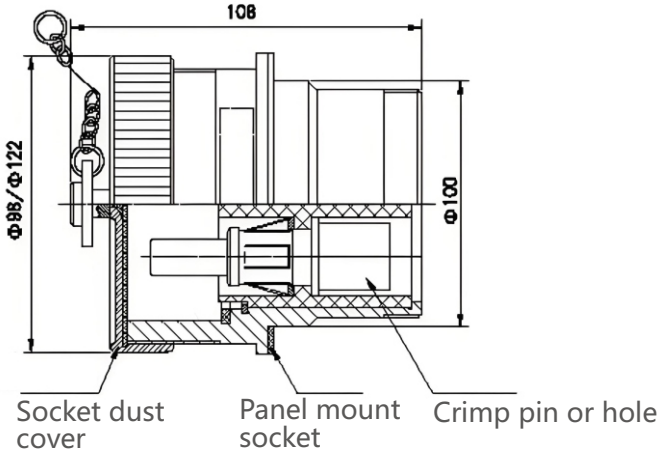
Part III is connected to the wire via crimp connection (02)

1.Plug XCD85T4K, P_1 / XCD100T4K, P_1

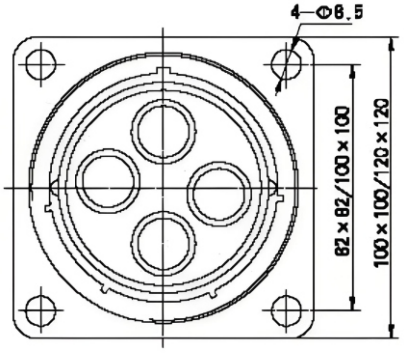




2. Socket XCD85F4Z, P_1 / XCD100F4Z, P_1



Remove the socket dust cover



XCE Series Circular Electrical Connector

The pictures are for reference only

Overview

Based on the contact arrangement of the XC series, this product retains all electrical performance while reducing the pitch between holes.It is smaller in size and lighter in weight than the XC series with the same number of cores; the contact density of this series is equivalent to the MIL-C-26482-I series.

- Bayonet-type quick connection system: Easy to operate, with secure connection, good vibration resistance and shock resistance.
- Five-key positioning: Features blind mating and anti-misplug functions.
- To avoid misplugging between electrical connectors of the same shape, five key positions are available for selection.
- High-reliability hyperboloid wire spring socket: Smooth mating and unmating, with low contact resistance.
- Termination method for plug and socket: Soldering.
- Plug and socket compatibility: Can be equipped with either pins or sockets.

Main Technical Performance

I. Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 95% at 40°C
- Operating altitude: 30000m
- Vibration: Frequency 10~2000Hz, acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²

The electrical connector also has excellent resistance to moisture, salt spray, mold, rain, and sand/dust.

II. Electrical Performance

Contact Resistance and Rated Current:

Specification (mm)	Contact Resistance (mΩ)	Rated Current (A)	Wire Solder Barrel Diameter (mm)
Φ1.0	5	5	Φ1.3
Φ1.5	2.5	20	Φ1.8
Φ2.0	1.25	40	Φ2.5
Φ3.0	0.75	40	Φ3.4

Rated Voltage, Withstand Voltage and Insulation Resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage(V)	Insulation Resistance (MΩ)
Normal Temperature Condition	500	1500	≥5000
Humid and Hot Condition	500	750	≥100
Low Air Pressure Condition (1kPa)	250	300	

Continuity Between Outer Shells
Aluminum alloy outer shell: ≤2.5mΩ

III. Mechanical Performance

- Housing: High-strength aluminum alloy
  Shielding coating: Zinc-plated iridescent/olive drab passivation, chemical nickel plating
  Non-shielding coating: Anodized black
- Insulator: Thermosetting material
- Contacts:Material: Copper alloy Coating: Silver plating, gold plating
- Mechanical Lifespan: 1000 cycles

Model Naming for XCE Series

Model Naming of Non-hermetic Plug and Receptacle

Series Main Name	YH HL XCE	14	T	4	K_1	P_1	(W)
Shell Number	12–14–18–22–24–27–30–33–36						
Shell Type	T = Plug; F = Flange Receptacle						
Number of Contacts	1 ~ 62						
Contact Type	Z_1 = Gold-plated Pin; K_1 = Gold-plated Socket						
Shell Coating	Shielded Coatings: P_1 = Threaded tail, optional accessory, chemical nickel plating P_3 = Threaded tail, optional accessory, zinc-plated olive drab passivation P_{12} = Threaded tail, copper alloy material P_{40} = Non-threaded tail, stainless steel passivation Non-shielded Coatings: E = Threaded tail, optional accessory, anodized black (only for flange receptacles) Shielded Coatings (Non-threaded tail): D_1 = Non-threaded tail, chemical nickel plating D_3 = Non-threaded tail, zinc-plated olive drab passivation D_{12} = Non-threaded tail, copper alloy material D_{40} = Non-threaded tail, stainless steel passivation Non-shielded Coatings (Non-threaded tail): (Unmarked) = Non-threaded tail, anodized black						
Key Position	N key position (unmarked); W key position (W); X key position (X); Y key position (Y); Z key position (Z)						

Notes:

To match cables of various specifications, multiple dedicated tail accessories are available. For details, please refer to XCE and Its Derivative Series Electrical Connector Accessories.

Examples

1.For the XCE Series 14 flange-mounted gold-plated socket (with threaded tail) – 4 contacts, shielded, chemical nickel plating, N key position:
Model: $XCE14FK_1P_1$

2.For the XCE Series 14 panel-mounted gold-plated pin plug – 4 contacts, shielded, chemical nickel plating, N key position:
Model: $XCE14TZ_1P_1$

Model Naming of Feedthrough/Adapter

Series Main Name	YH HL XCE	14	S	4	M_1	D_1	....
Shell Number	12–14–18–22–24–27–30–33–36						
Product Type	S = Nut-fastened wall-mounted sealed adapter (hole outside panel, pin inside panel) S_0 = Nut-fastened anti-rotation wall-mounted sealed adapter (pin outside panel, hole inside panel) S_1 = Flange-mounted wall-mounted sealed adapter (hole outside panel, pin inside panel) S_2 = Flange-mounted wall-mounted sealed adapter (pin outside panel, hole inside panel)						
Number of Contacts	1 ~ 62						
Specification Mark	M_1 = Potting seal, gold-plated contacts						
Shell Coating	Shielded Coatings: D_1 = Chemical nickel plating D_3 = Zinc-plated olive drab passivation Non-shielded Coatings:(Unmarked) = Anodized black						
Key Position	N key position (unmarked); W key position (W); X key position (X); Y key position (Y); Z key position (Z)						

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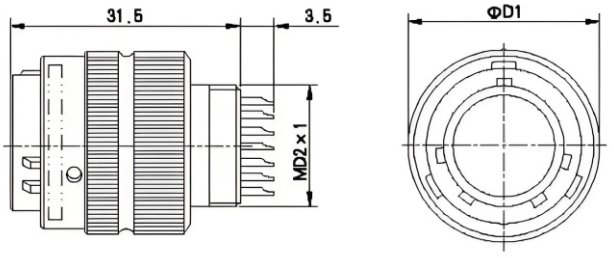
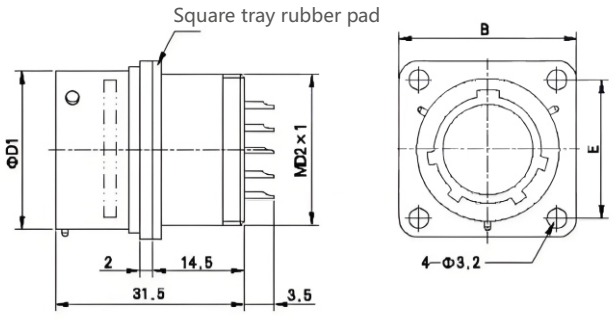
External Dimensions

XCE Plug



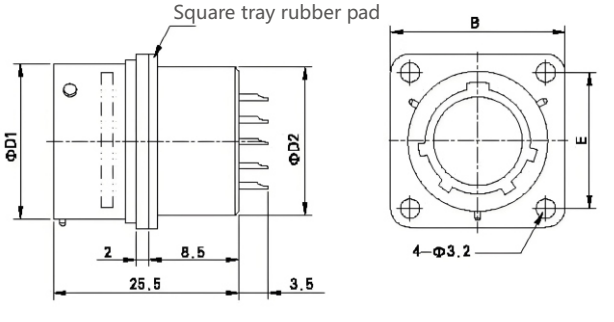
Housing Number	D1	D2
12	21.3	12
14	23.3	14
18	27.3	18
22	31.3	22
24	33.3	24
27	36.3	27
30	39.3	30
33	42.3	33
36	45.3	36

XCE Receptacle (Structure with Threaded Tail)



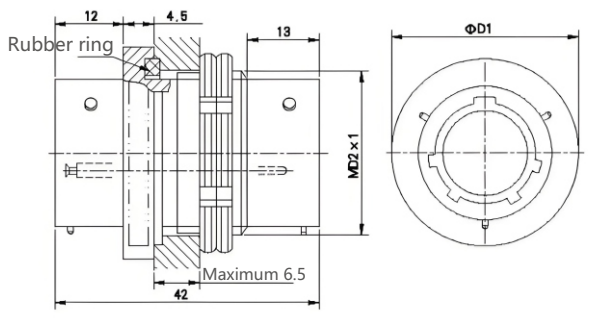
Housing Number	D1	D2	B	E
12	13.7	12	23	17
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34

XCE Receptacle (Structure with Non-Threaded Tail)



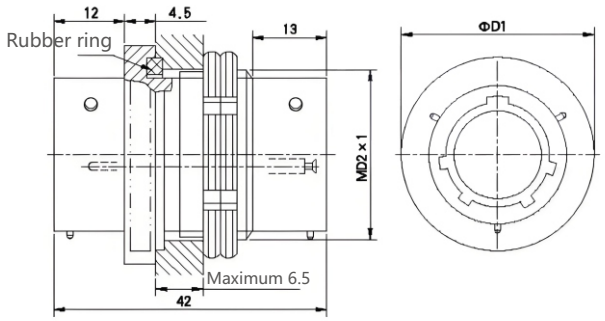
Housing Number	D1	D2	B	E
12	13.7	12	23	17
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34

XCE-S-M Nut Clamp-Type Through-Wall Sealing Adapter
(with a hole outside the panel and a pin inside the panel)



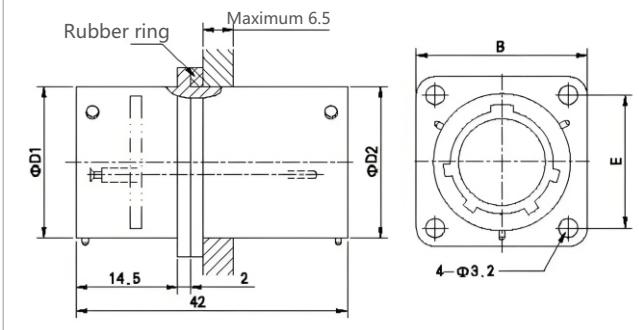
Housing Number	D1	D2
12	27	16
14	27	18
18	31	22
22	36	27
24	36	27
27	39	30
30	42	33
33	45	36
36	48	39

XCE-S_0-M Nut Clamp-Type Through-Wall Sealing Adapter
(with a pin outside the panel and a hole inside the panel)



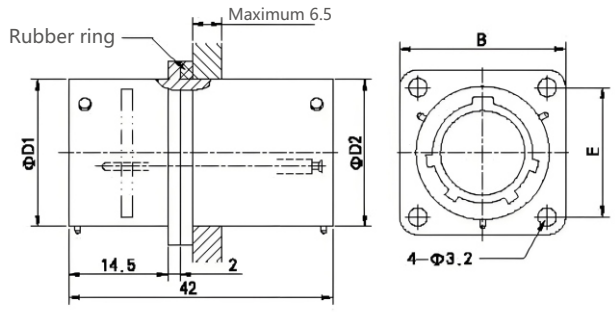
Housing Number	D1	D2
12	27	16
14	27	18
18	31	22
22	36	27
24	36	27
27	39	30
30	42	33
33	45	36
36	48	39

XCE-S_1-M Panel Mount-Type Through-Wall Sealing Adapter
(with a hole outside the panel and a pin inside the panel)



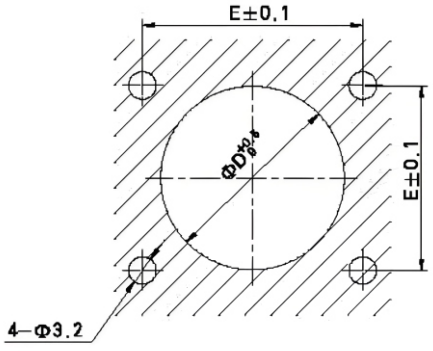
Housing Number	D1	D2	B	E
12	13.7	13.7	23	17
14	15.7	15.7	25	19
18	19.7	19.7	27.5	21.5
22	23.7	23.7	30	24
24	25.7	25.7	32	26
27	28.7	28.7	34.5	28
30	31.7	31.7	36.5	30
33	34.7	34.7	39.5	32.5
36	37.7	37.7	41	34

XCE-S_2-M Panel Mount-Type Through-Wall Sealing Adapter (with a pin outside the panel and a hole inside the panel)



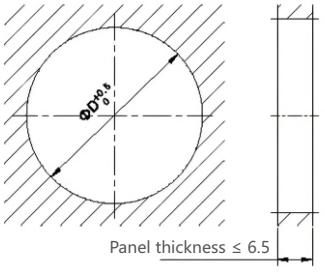
Housing Number	D1	D2	B	E
12	13.7	13.7	23	17
14	15.7	15.7	25	19
18	19.7	19.7	27.5	21.5
22	23.7	23.7	30	24
24	25.7	25.7	32	26
27	28.7	28.7	34.5	28
30	31.7	31.7	36.5	30
33	34.7	34.7	39.5	32.5
36	37.7	37.7	44	34

Recommended Cutting Dimensions for XCE Socket Panel



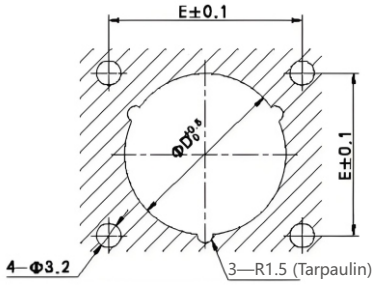
Housing Number	D	E
12	12.5	17
14	14.5	19
18	18.5	21.5
22	22.5	24
24	24.5	26
27	27.5	28
30	30.5	30
33	33.5	32.5
36	36.5	34

Recommended Cutting Dimensions for XCE-S-M and XCE-S_0-M Socket Panels



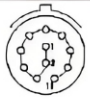
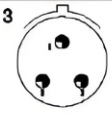
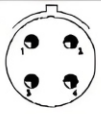
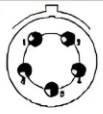
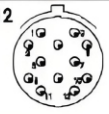
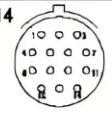
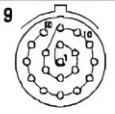
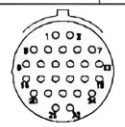
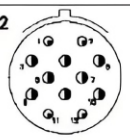
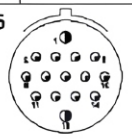
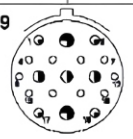
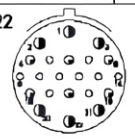
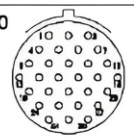
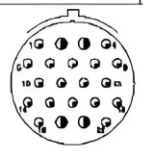
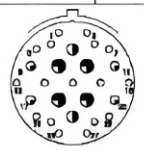
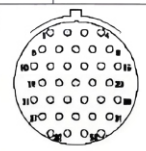
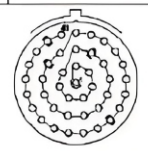
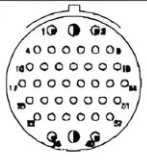
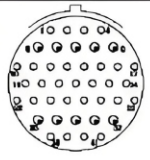
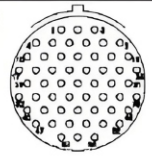
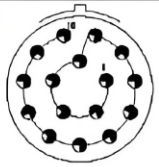
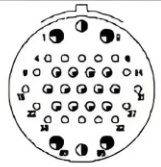
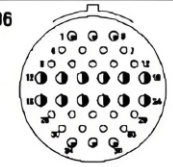
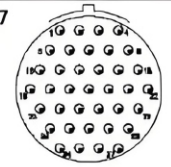
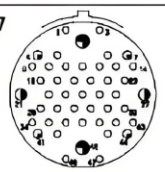
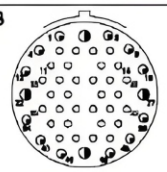
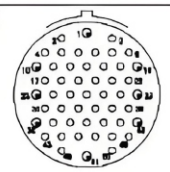
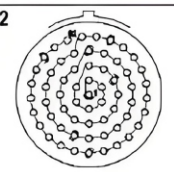
Housing No	D
12	16.5
14	18.5
18	22.5
22	27.5
24	27.5
27	30.5
30	33.5
33	36.5
36	39.5

Recommended Cutting Dimensions for XCE-S -M and XCE-S -M Socket Panels



Housing No	D	E
12	14	17
14	16	19
18	20	21.5
22	24	24
24	26	26
27	29	28
30	32	30
33	35	32.5
36	38	34

XCE Series Contact Arrangement (View of Pin Insulator Mating Surface)

Shell Number				
12	2 	3 		
14	3 	4 	7 	4–01 
18	10 	11 		
22	3 	4 	5 	12 	14 	19 
24	14 	19 	26 	
27	12 	15 	19 	22 	30 
30	22 	27 	35 	41 
33	40 	41 	55 	
36	16 	35 	36 	37 
	47 	48 	51 	62 

Φ1.0 Contact **Φ1.5 Contact** **Φ2.0 Contact** **Φ3.0 Contact**

XCF Series Circular Electrical Connector

The pictures are for reference only

Overview

This product has a contact density equivalent to the MIL-C-38999-1 series. Its key features include high density, small size, and light weight. It offers 7 to 129 cores with 9 hole arrangements; other features are basically the same as the XCE series.

Main Technical Performance

I. Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 98% at 40°C
- Operating altitude: 30000m
- Vibration: Frequency 10~2000Hz, acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²

The electrical connector also has excellent resistance to moisture, salt spray, mold, rain, and sand/dust.

II. Electrical Performance

- Contact resistance and rated current:
- Contact diameter: ∅0.635mm
- Contact resistance: ≤0.025Ω
- Rated current: 1A

Rated voltage, withstand voltage and insulation resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage(V)	Insulation Resistance (MΩ)
Normal Temperature Condition	250	1000	≥500
Humid and Hot Condition	250	750	≥20
Low Air Pressure Condition (1kPa)	115	200	

Shell-to-shell electrical continuity:
Aluminum alloy shell: ≤5mΩ

III. Mechanical Performance

- Shell: High-strength aluminum alloy
- Shielding coating: Electroless nickel plating
- Insulator: Thermosetting material
- Contact: Material: Copper alloy; Coating: Gold plating
- Mechanical life: 1000 cycles

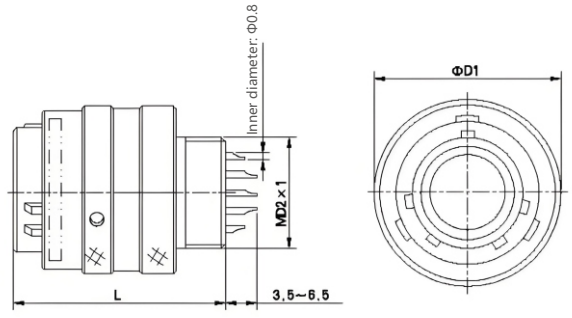
XCF Series Model Naming

Series	XCF—High-Density Wire Spring Soldered Electrical Connector	YH HL XCF	14	S	4	M_1	P_1	....
Shell Number	12–14–18–22–24–27–30–33–36							
Shell Type	T: Plug F: Panel Mount Socket							
Number of Contacts	7 ~ 129							
Contact Type	Z_1: Gold-Plated Pin K_1: Gold-Plated Socket							
Shell Coating & Rear Accessories	D_1: No Thread at Rear, Electroless Nickel Plating P_1: Thread at Rear, Optional Accessories, Electroless Nickel Plating							
Key Position	N: Unmarked; W: -(W); X: -(X); Y: -(Y); Z: -(Z)							

Web: www.anknor.com Email: Info@anknor.com

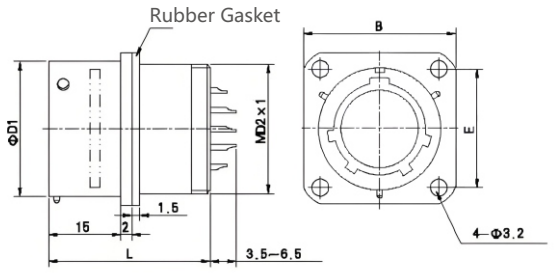
Overall Dimensions

XCF plug



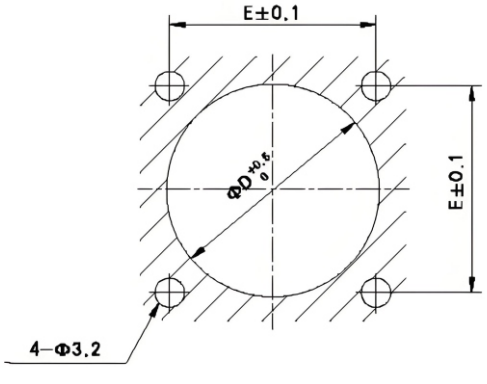
Housing Number	D1	D1	L
12	19.5	12	25.5
14	21.5	14	
18	25.5	18	
22	29.5	22	
24	31.5	24	
27	34.5	27	28.5
30	37.5	30	
33	40.5	33	
36	43.5	36	

XCF socket (XCF sockets come in two structures: with threads at the tail and without threads. They look identical in appearance. The diagram uses the threaded tail socket as an example)



Housing Number	D1	D2	B	E	
12	13.7	12	23	17	25.5
14	15.7	14	25	19	
18	19.7	18	27.5	21.5	
22	23.7	22	30	24	
24	25.7	24	32	26	
27	28.7	27	34.5	28	28.5
30	31.7	30	36.5	30	
33	34.7	33	39.5	32.5	
36	37.7	36	41	34	

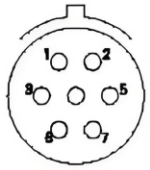
Recommended hole-cutting dimensions for XCF socket panel



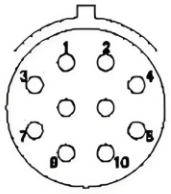
Housing Number	D	E
12	12.5	17
14	14.5	19
18	18.5	21.5
22	22.5	24
24	24.5	26
27	27.5	28
30	30.5	30
33	33.5	32.5
36	36.5	34

XCF Series Contact Arrangement (View of Pin Insulator Mating Surface)

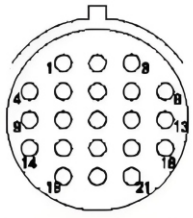
XCF12–7



XCF14–10



XCF18–21



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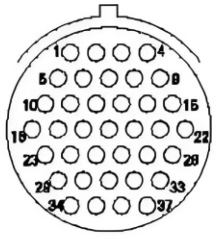

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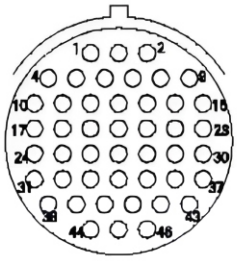

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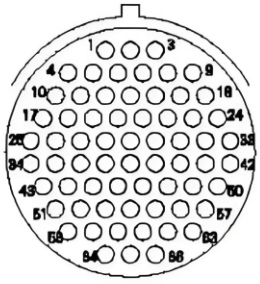

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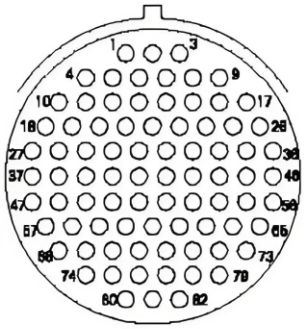

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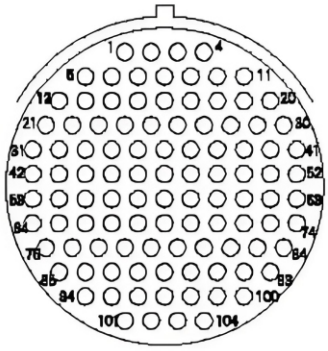

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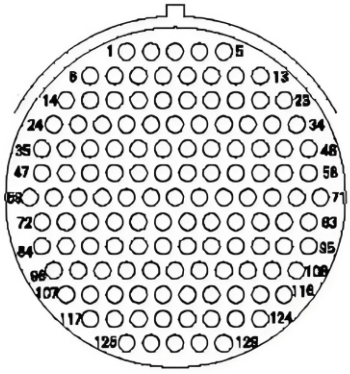

XCG

Series Circular Electrical Connector

The pictures are for reference only

Overview

This product adopts recent new technologies, processes, and materials, and is fully interchangeable with XCE-type electrical connectors. Its outstanding performance is reflected in:

- A high-reliability connection system
- A dependable sealing system

The sealing design between the plug and socket isolates the contact points from the external environment, providing excellent sealing and water resistance. The internal sealing layer design of the plug and socket gives the connection airtightness, enabling it to withstand 0.3 atmospheres of pressure.

Main Technical Performance

- Operating Temperature: -55°C ~ +200°C
- Relative Humidity: Up to 95% at 40°C
- Operating Altitude: 30000m
- Vibration: Frequency 10~2000Hz, Acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant Acceleration: 980m/s²
- Airtightness: 35.5KPa

The electrical connector also has excellent performance in moisture resistance, salt spray resistance, mold resistance, rain resistance, and dust resistance.

II. Electrical Performance

Contact Resistance and Rated Current:

Specification (mm)	Contact Resistance (mΩ)	Rated Current (A)	Wire Solder Barrel Diameter (mm)
Φ1.0	≤5	5	Φ1.4
Φ1.5	≤2.5	10	Φ2.0
Φ2.0	≤1.25	20	Φ2.5
Φ3.0	≤0.75	40	Φ3.0
Φ4.5	≤0.35	65	Φ4.5

Shell Continuity

Aluminum alloy shell: ≤2.5mΩ

II. Electrical Performance

III. Mechanical Performance

- Housing: High-strength aluminum alloy
- Shielding coating: Zinc-plated with iridescent/olive drab passivation, or electroless nickel plating
- Non-shielding coating: Anodized black
- Insulator: Thermosetting material
- Contacts:

  Material: Copper alloy

  Coating: Silver-plated, gold-plated
- Mechanical Life: 1000 cycles

Rated Voltage, Withstand Voltage and Insulation Resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage (V)	Insulation Resistance(MΩ)
Normal Temperature Condition	500	≥1500	≥5000
Humid Heat Condition	500	≥750	≥100
Low Air Pressure Condition (1kPa)	150	≥200	

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XCG Series Model Naming

Series Main Name	YH HL XCE	14	T	4	K	P	(W)
Shell Number	12–14–18–22–24–27–30–33–36						
Shell Type	T = Plug F = Flange Socket						
Number of Contacts	1 ~ 62						
Contact Type	Z = Silver-plated Pin Z_1 = Gold-plated Pin K = Silver-plated Socket K_1 = Gold-plated Socket						
Housing Coating & Rear Accessories	(Unmarked) = Rear without thread, Anodized layer D = Rear without thread, Zinc-plated iridescent passivation D_1 = Rear without thread, Electroless nickel plating D_3 = Rear without thread, Zinc-plated olive drab passivation D_{12} = Rear without thread, Copper alloy material D_{40} = Rear without thread, Stainless steel passivation E = Rear with thread, Optional accessories, Anodized layer P = Rear with thread, Optional accessories, Zinc-plated iridescent passivation P_1 = Rear with thread, Optional accessories, Electroless nickel plating P_3 = Rear with thread, Optional accessories, Zinc-plated olive drab passivation P_{12} = Rear with thread, Copper alloy material P_{40} = Rear without thread, Stainless steel passivation						
Key Position	N Key Position = Unmarked W Key Position = (W) X Key Position = (X) Y Key Position = (Y) Z Key Position = (Z)						

Notes

1.When referring to a connector, the model marking uses a fractional format: the socket marking is written as the numerator, and the plug marking as the denominator (only the plug's housing coating and rear accessory type may be specified), separated by a slash.

2.Plug and socket models are marked directly on the product; the electrical connector model is used for customer ordering, factory production, and operational management.

3.For plugs (sockets) with optional accessories, add a "+" after the model, then list the selected accessory (see Accessory Selection for specific requirements).

Examples

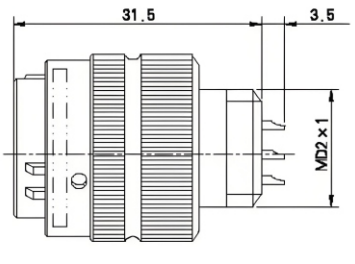
1.For an XCG Series 14-size socket with silver-plated sockets (rear with thread), 4 contacts, shielding, zinc-plated olive drab passivation, and W key position:Model: XCG14F4KP (W)

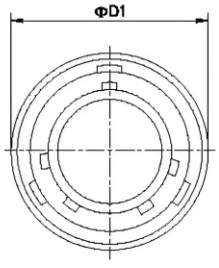
2.For an XCG Series 14-size plug with silver-plated pins, 4 contacts, shielding, zinc-plated olive drab passivation, and W key position:

3.Electrical connector model: XCG14F4KP_3(W)/P_3

Overall Dimensions

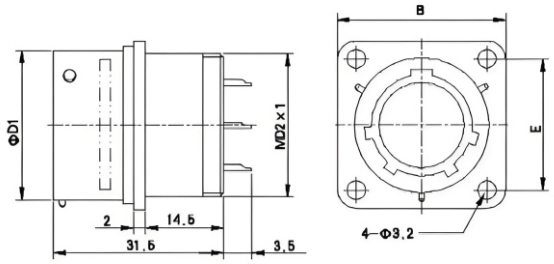
XCG Plug





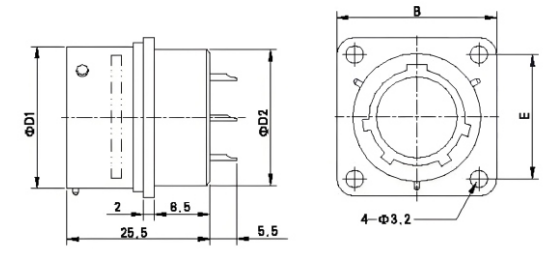
Housing Number	D1	D2
14	23.3	14
18	27.3	18
22	31.3	22
24	33.3	24
27	36.3	27
30	39.3	30
33	42.3	33
36	45.3	36
39	48.3	39

XCG Plug (Structure with Rear Thread)



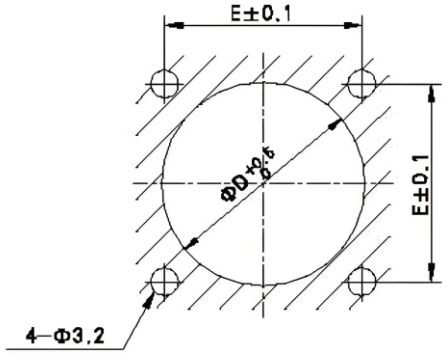
Housing Number	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

XCG Socket (Structure with No Rear Thread)



Housing Number	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

Recommended Panel Cutting Dimensions for XCG Socket



Housing Number	D	E
14	14.5	19
18	18.5	21.5
22	22.5	24
24	24.5	26
27	27.5	28
30	30.5	30
33	33.5	32.5
36	36.5	34
39	39.5	36

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XCG Series Contact Arrangement (View of Pin Insulator Mating Surface)

Housing Number				
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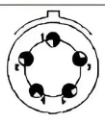
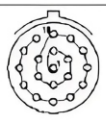
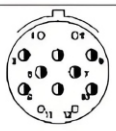
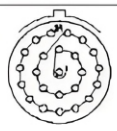
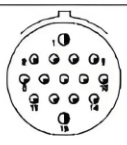
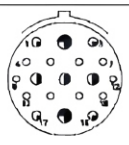
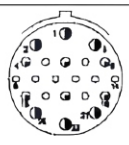
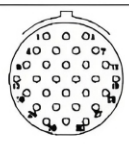
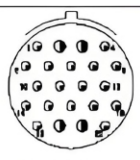
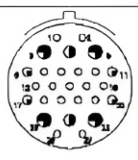
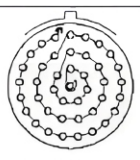
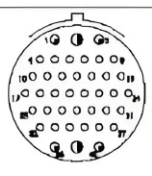
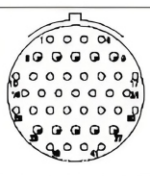
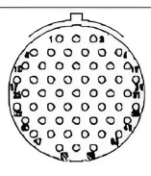
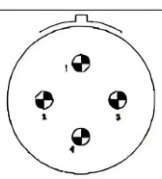
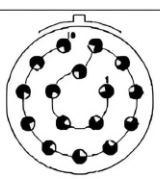
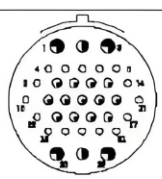
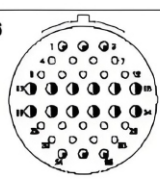
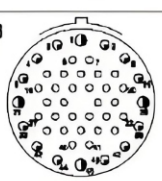
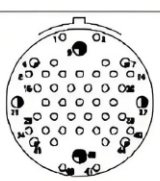
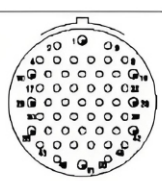
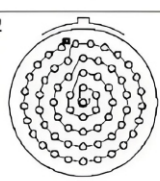
18	4 	5 	7 	4–01 
22	10 	14 		
24	5 	12 	19 	
27	12 	19 	24 	
30	15 	19 	22 	30 
33	22 	27 	41 	
36	40 	41 	55 	
39	4 	16 	35 	36 
	46 	47 	51 	62 

Φ1.0 Contact Φ1.5 Contact Φ2.0 Contact Φ3.0 Contact Φ4.5 Contact

XCM Series Circular Connector

The pictures are for reference only

Overview

- Bayonet-type quick connection
- Double-sided wire spring socket
- Nut flange socket, easy to install
- Welded with wires
- Equipped with dedicated cable accessories
- (also compatible with XC universal accessories)
  Compliant with GJB2889

Application Fields

Widely used in the General Staff and other military fields, as well as postal communications, computers, aviation, aerospace, ordnance, ships, navigation, and various instruments and meters.

Main Technical Performance

I. Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 95% at 40°C
- Operating altitude: 3000m
- Vibration: Frequency 10~2000Hz, acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²

The electrical connection also has excellent performance in moisture resistance, salt spray resistance, mold resistance, rain resistance, and dust resistance.

II. Electrical Performance

Contact Resistance and Rated Current:

Specification (mm)	Contact Resistance (mΩ)	Rated Current (A)	Wire Solder Barrel Diameter (mm)
Φ1.0	≤5	5	Φ1.4
Φ1.5	≤2.5	10	Φ2.0
Φ2.0	≤1.25	20	Φ2.5
Φ3.0	≤0.75	40	Φ3.0
Φ4.5	≤0.35	65	Φ4.5

Rated voltage, withstand voltage and insulation resistance:

Working Environment	Rated Voltage (V)	Withstand Voltage(V)	Insulation Resistance (MΩ)
Normal Temperature Condition	250	1000	≥500
Humid and Hot Condition	250	750	≥20
Low Air Pressure Condition (1kPa)	115	200	

Continuity between enclosures
Aluminum alloy enclosure: ≤2.5mΩ

III. Mechanical Performance

- Housing: High-strength aluminum alloy with chemical nickel plating
- Insulator: Thermosetting material
- Contact piece: Copper alloy with gold plating
- Mechanical life: 1000 cycles

Model Naming

Series	XCM Wire Spring Welded Electrical Connector	XCM	14	Z	4	k	L	N
Housing Number	14—18—22—24—27—30—33—36—39							
Housing	T (Plug); Z (Socket)							
Number of Contact Pieces	1 ~ 62							
Contact Pieces	J (Gold-plated Pin); K (Gold-plated Socket)							
Socket Fixing Method	F (Flange Fixing); L (Nut Fixing)							
Key Position	N Key Position — (N); W Key Position — (W); X Key Position — (X); Y Key Position — (Y); Z Key Position — (Z)							

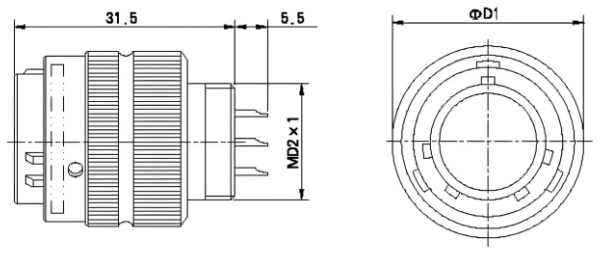
Identification Example

For the XCM series electrical connector (Housing No. 30, nut-fixed type, socket with pins, plug with sockets, 30 contacts, N key position):
Socket identification: XCM30Z30JL(N) Plug identification: XCM30T30K(N) Electrical connector model: XCM30 $^{Z}_{T}$ 30 $^{J}_{K}$ (N)

When an electrical accessory needs to be equipped, mark "+XCM30FJ-X" after the electrical connector model identification, where "X" indicates the cable outlet diameter of the accessory.

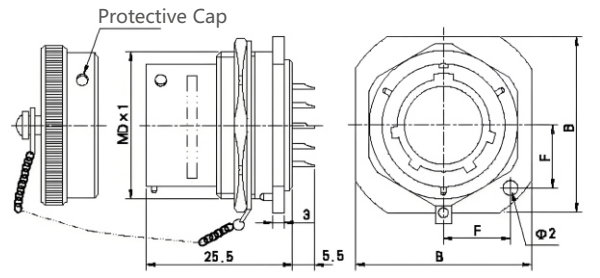
Overall Dimensions

XCM Plug



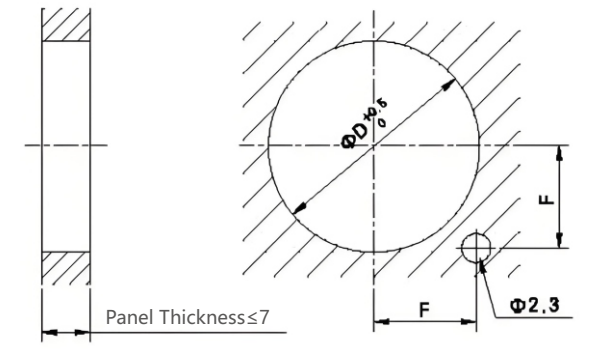
Housing Number	D1	D2
14	24	14
18	28	18
22	32	22
24	34	24
27	37	27
30	40	30
33	43	33
36	46	36
39	49	39

XCM Socket (Nut-Fixed Type)



Housing Number	D	B	F
14	20	27	10
18	24	34	12
22	27	36	13
24	30	36	14
27	30	36	15
30	33	38	16
33	39	49	18
36	42	54	19
39	45	56	20

Recommended Panel Cutout Dimensions



Housing Number	D	F
14	20.5	10
18	24.5	12
22	27.5	13
24	30.5	14
27	30.5	15
30	33.5	16
33	39.5	18
36	42.5	19
39	45.5	20

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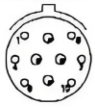
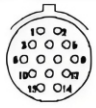
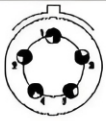
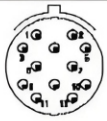
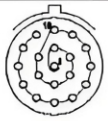
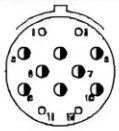
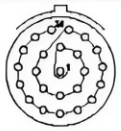
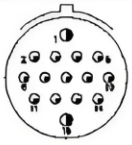
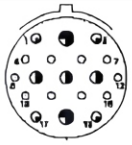
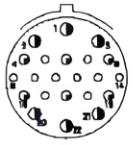
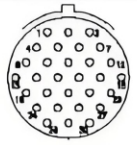
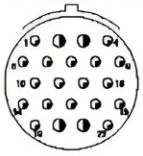
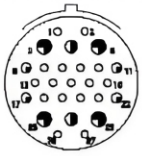
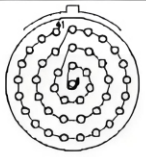
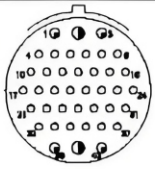
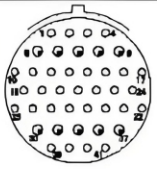
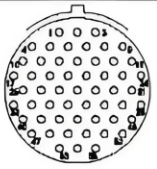
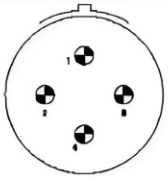
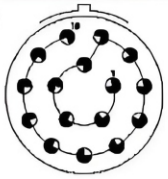
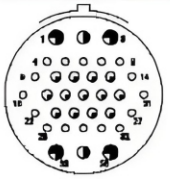
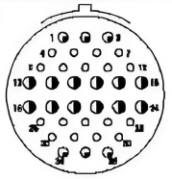
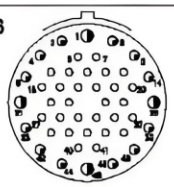
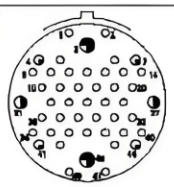
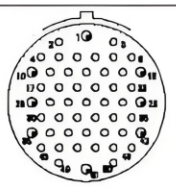
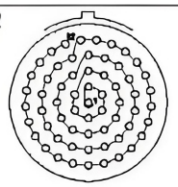
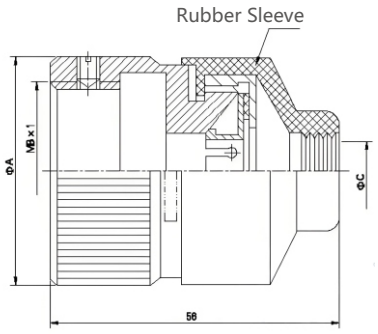
XCM Series Contact Arrangement (View of Pin Insulator Mating Surface)

Housing Number				
14	1 	2 	3 	4 
18	4 	5 	7 	4–01 
22	10 	14 		
24	5 	12 	19 	
27	12 	19 	24 	
30	15 	19 	22 	30 
33	22 	27 	41 	
36	40 	41 	55 	
39	4 	16 	35 	36 
	46 	47 	51 	62 

Φ1.0 Contact Φ1.5 Contact Φ2.0 Contact Φ3.0 Contact Φ4.5 Contact

Cable Accessories



Housing Number	Accessory Model	A	B	C
14		20	14	3.4
	XCM14FJ-5			5
	XCM14FJ-7			7
	XCM14FJ-7.5			7.5
	XCM14FJ-8			8
18	XCM18FJ-8	24	18	8
	XCM18FJ-8.6			8.6
	XCM18FJ-9			9
	XCM18FJ-9.5			9.5
	XCM18FJ-10			10
	XCM18FJ-14			14
22	XCM22FJ-6.8	28	22	6.8
	XCM22FJ-7.5			7.5
	XCM22FJ-8			8
	XCM22FJ-10			10
24	XCM24FJ-10	30	24	10
	XCM24FJ-14			14
27	XCM27FJ-8	33	27	8
	XCM27FJ-11			11
30	XCM30FJ-11	36	30	11
	XCM30FJ-11.5			11.5
33	XCM33FJ-12	39	33	12
36	XCM36FJ-22	42	36	22
39	XCM39FJ-13.1	42	36	13.1
	XCM39FJ-15.9			15.9
	XCM39FJ-18			18

XC Series and Its Derivative Series Accessories

The pictures are for reference only

XC Series and Its Derivative Series Electrical Connector Accessories

In addition to sockets, plugs, straight-shielded knurled nuts, and straight/bent cable clamps, the XC series electrical connectors are also equipped with the following accessories to expand their application range and facilitate user operation:

Serial Number	Accessory Name and Model	Performance	Ordering Method
1	Straight Cable Clamp	Clamps cable, shieldable	Order together with specific product model
2	Bent Cable Clamp		
3	XC-FJA	Clamps cable, shieldable	Order separately
4	XC-FJC		
5	XC-FJD/ FJDP		
6	XC-FJHP		
7	XC-FJB/ FJBP (Socket Protective Cap)	Protects plug or socket	
8	XC-FJE/ FJEP (Plug Protective Cap)		
9	XC-FJGP	Clamps cable, shieldable, waterproof	
10	XC-FJGWP		
11	XC-FJJP, XC-FJJP01		
12	XC-FJLP, XC-FJLP01	Straight shielding, waterproof, compatible with memory ring	
13	XC-FJMP	Straight cable clamp, anti-rotation	
14	FA Accessory	Shielding, anti-rotation, high clamping force	

Notes on Selecting Accessories

1. Multiple plating layers and shell materials are available for accessories. When selecting, ensure the plating layer matches that of the mating connector. For products requiring electromagnetic interference (EMI) protection, be sure to choose a shielding plating layer.
2. Select accessories with an outlet diameter suitable for the cable diameter.
3. Consider the constraints of the installation location when choosing accessories, and select accessories with different structures according to actual requirements.
4. For products with wire-welded termination (e.g., XCH, CXCH, etc.), accessories with diameter-varying structures (where the inner diameter gradually or suddenly decreases) — such as FJDP, FJDP01, FJHP — generally cannot be used.

The table below lists the matching cable accessories for XC and its derivative series welded products. Due to the large variety of modified products and accessories currently available from our company, the content in this table is for reference only. For detailed information, please contact our company for confirmation.

Serial Number	Product Model	Matching Cable Accessory Model
1	XCH Series Plug, Socket (Tail weld cup protrudes from shell by 3.5)	1. Straight Cable Clamp, Bent Cable Clamp (can be ordered with the product) 2. XC-FJA/FJA-01/FJA-02/FJA-03/FJA-04 3. XC-FJC/FJC01/FJC02/FJC03 4. XC-FJDP/FJDP01 5. XC-FJGP/FJGWP 6. XC-FJHP 7. XC-FJJP/FJJP01 8. XC-FJLP/FJLP01 9. XC-FL1A 10. XCH-FJKP/FJKP-01/FJKP-02/XC-FJKP-03 11. FB1A/FB1AW/FB101 12. FA Accessory

Serial Number	Product Model	Matching Cable Accessory Model
2	CXCH Series Plug, Socket (Tail weld cup protrudes from shell by 5.5)	1. Straight Cable Clamp, Bent Cable Clamp (can be ordered with the product) 2. XC-FJA/FJA-01/FJA-02/FJA-03/FJA-04 3. XC-FJC/FJC01/FJC02/FJC03 4. XC-FJGP/FJGWP 5. XC-FJJP/FJJP01 6. XC-FJLP/FJLP01 7. XC-FL1A 8. XCH-FJKP/FJKP-01/FJKP-02/XC-FJKP-03 9. FB1A/FB1AW/FB101 10. FA Accessory
3	CXCH-01 Series Plug, Socket (Tail weld cup protrudes from shell by 5.5)	1. XC-FJA/FJA-01/FJA-02/FJA-03/FJA-04 2. XC-FJC/FJC01/FJC02/FJC03 3. XC-FJGP/FJGWP 4. XC-FJJP/FJJP01 5. XC-FJLP/FJLP01 6. XCH-FJKP/FJKP-03 7. FB1A/FB1AW/FB101 8. FA Accessory
4	(Tail weld cup protrudes from shell by 5.5) XCG Series Plug, Socket	1. XC-FJA/FJA-01/FJA-02/FJA-03/FJA-04 2. XC-FJC/FJC01/FJC02/FJC03 3. XC-FJGP/FJGWP 4. XC-FJJP/FJJP01 5. XC-FJLP/FJLP01 6. XC-FL1A 7. XCH-FJKP/FJKP-01/FJKP-02/XC-FJKP-03 8. FB1A/FB1AW/FB101 9. FA Accessory 10. XCM-FJ
5	XCG Series Plug, Socket (Tail weld cup protrudes from shell by 3.5)	1. XC-FJA/FJA-01/FJA-02/FJA-03/FJA-04 2. XC-FJC/FJC01/FJC02/FJC03 3. XC-FJDP/FJDP01 4. XC-FJGP/FJGWP 5. XC-FJHP 6. XC-FJJP/FJJP01 7. XC-FJLP/FJLP01 8. XC-FL1A 9. XCH-FJKP/FJKP-01/FJKP-02/XC-FJKP-03 10. FB1A/FB1AW/FB101 11. FA Accessory
6	XCE Series Plug, Socket (Tail weld cup protrudes from shell by 4.6)	1. Straight Cable Clamp, Bent Cable Clamp (can be ordered with the product) 2. XC-FJA/FJA-01/FJA-02/FJA-03/FJA-04 3. XC-FJC/FJC01/FJC02/FJC03 4. XC-FJGP/FJGWP 5. XC-FJHP 6. XC-FJJP/FJJP01 7. XC-FJLP/FJLP01 8. XCE-FL1A 9. XCE-FJKP/FJKP-01 10. FB1A/FB1AW/FB101 11. FA Accessory

Serial Number	Product Model	Matching Cable Accessory Model
7	XCF Series Plug, Socket (Tail weld cup protrudes from shell by 3.5~6.5)	1. Straight Cable Clamp, Bent Cable Clamp (can be ordered with the product) 2. XC-FJA-03 / FJA-04 3. XC-FJC / FJC01 / FJC02 / FJC03 4. XC-FJGP / FJGWP 5. XC-FJJP / FJJP01 6. XC-FJLP / FJLP01 7. XCH-FJKP-02 / XC-FJKP-03 8. FB1A / FB1AW / FB101 9. FA Accessory
8	XCD Series Plug, Socket (Tail weld cup protrudes from shell by 3.5~10.5)	1. Straight Cable Clamp, Bent Cable Clamp (can be ordered with the product) 2. XC-FJC / FJC03 3. XC-FJGP / FJGWP 4. XC-FJJP / FJJP01 5. FB1A / FB1AW / FB101 6. FA Accessory

Ordering Instructions

1.When ordering accessories together with the product, write the accessory model after the matching product model, and mark a "+" between them.

2.When ordering accessories separately, simply specify the cable accessory model.Example: Accessory XC30FJDP

3.For accessories with shielding plating layers, the plating can be indicated by adding a subscript number after the last letter of the basic model. Our regulations are as follows:

3.For accessories with shielding plating layers, the plating can be indicated by adding a subscript number after the last letter of the basic model. Our regulations are as follows:

1.Chemical nickel-plated products: add subscript "1" (e.g., XC-FJBP$_1$-01 is a chemical nickel-plated product);

2.Zinc-plated and green passivated products: add subscript "3" (e.g., XC-FJBP -01 is a zinc-plated and green passivated product);

3.Stainless steel passivated products: add subscript "40" (e.g., XC-FJJP$_{40}$ is a stainless steel passivated product).

Socket and Plug Protective Cap Accessories

[Socket Protective Cap Accessory]

This accessory is used for socket protection, and two shell materials are available: metal shell and composite material shell. Among them, the accessory with a composite material shell has stronger environmental resistance, and its tail is available in two structures: nylon cord and metal chain.

[Model Naming]

xc	12	FJBP1	(J)	-01
①	②	③	④	⑤

① Series Main Name: XC

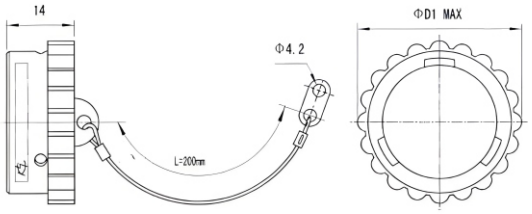
② Housing Number: 12~39

③ Protective Cap Plating Layer:
FJB: Unplated (black, only applicable to composite materials)
FJBP 1: Chemically nickel-plated

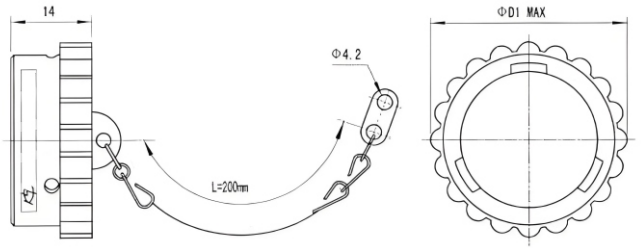
④ Housing Material:
(J): Metal housing (not marked when printing the model)
Unmarked: Composite material housing

⑤ Modification Mark:
For composite material accessories:
-01: With metal chain
Unmarked: With nylon cord
For metal material accessories:
XC-FJBP 1-01(J): With metal chain
XC-FJBP 1-03: With nylon cord

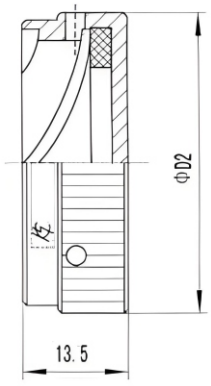
Composite Material Housing with Nylon Cord: XC-FJB



Composite Material Housing with Metal Chain: XC-FJB-01



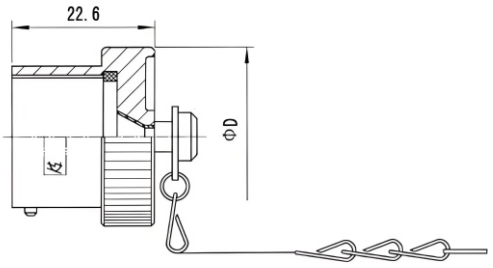
Metal Housing: XC-FJBP(J)



Matching Housing Number	12	14	18	22	24	27	30	33	36	39
D_1	22.1	25.0	29.0	34.0	36.0	39.0	42.0	44.0	47.0	50.0
D_2	20.0	23.0	27.0	31.0	33.0	36.0	39.0	42.0	45.0	48.0

[Plug Protective Cap Accessory: XC-FJEP]

This accessory enables the plug to have resistance against moisture, salt spray, mold, dust and rain.



Matching Housing Number	Parameter D
14	21.7
18	25.7
22	29.7
24	31.7
27	34.7
30	37.7
33	40.7
36	43.7
39	46.7

Notes:

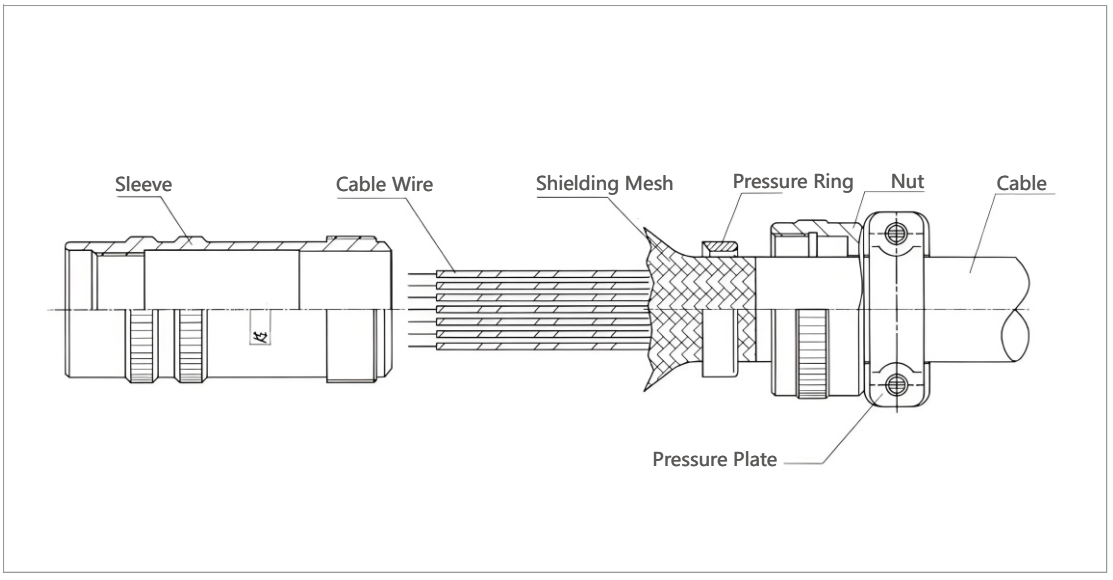
The plug protective cap suitable for the XCF series is XCF-FJEP (same appearance as XC-FJEP);
The plug protective cap suitable for the XCE14 plug is XCE14FJEP;
The plug protective cap suitable for the XCD45-1 plug is XCD45FJEP-01.

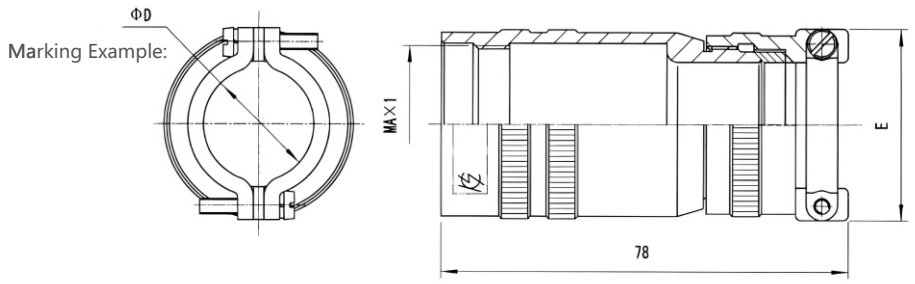
Ordinary Cable Accessory[XC-FJA Shielded Cable Accessory]

[XC-FJA Shielded Cable Accessory]

This accessory is used for clamping shielded cables with a shielding mesh, and is only applicable to shielded electrical connectors, requiring a relatively large space. The shielding mesh of the cable is clamped between the sleeve and the pressure ring; by tightening the nut, the shielding mesh is closely attached to the sleeve to achieve the shielding effect. At the same time, the cable is clamped by the pressure plate, which prevents the connection between the cable and the connector from bearing force.

Assembly diagram:





Compatible Housing No	A	Dmin	Dmax	E
18	18	13	16	29.5
22	22	10	22	33.0
24	24	10	20	33.0
		12	24	36.5
27	27	10	20	33.0
		12	24	36.5
30	30	10	20	33.0
		12	24	36.5
		14	28	40.0
33	33	14	24	36.5
		14	26	40.0
		16	30	44.0

Outlet Diameter	A	Dmin	Dmax	E
36	36	10	20	33.0
		12	24	36.5
		16	30	44.0
		18	32	46.0
39	39	10	20	33.0
		14	26	40.0
		20	34	48.0
42	42	22	38	58.0
45	45	22	38	58.0

Marking Example:

XC30FJA-24 indicates compatibility with Housing No. 30, and the maximum outlet diameter is Φ24.

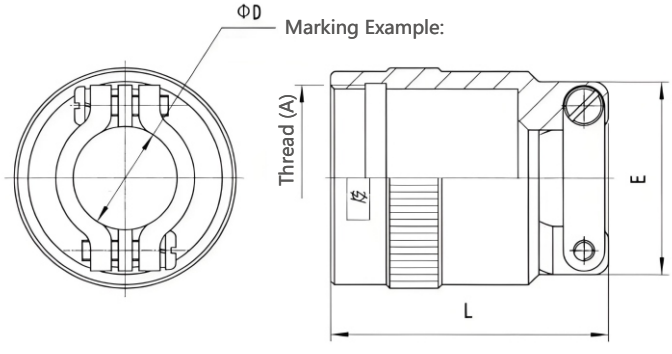
Notes:

1.There are no matching FJA accessories for the XC14 series.

2.The total length of accessory XC-FJA-01 is 71.5mm; the total length of accessory XC-FJA-02 is 118mm; Accessory XC-FJA-03 is shortened based on the XC-FJA accessory, with threads moved to the end; Accessory XC-FJA-04 has the same length as XC-FJA, with threads moved to the end.

[XC-FJC (Galvanized) Shielded Cable Accessory]

This accessory is used for cable clamping, and its installation space is moderate.



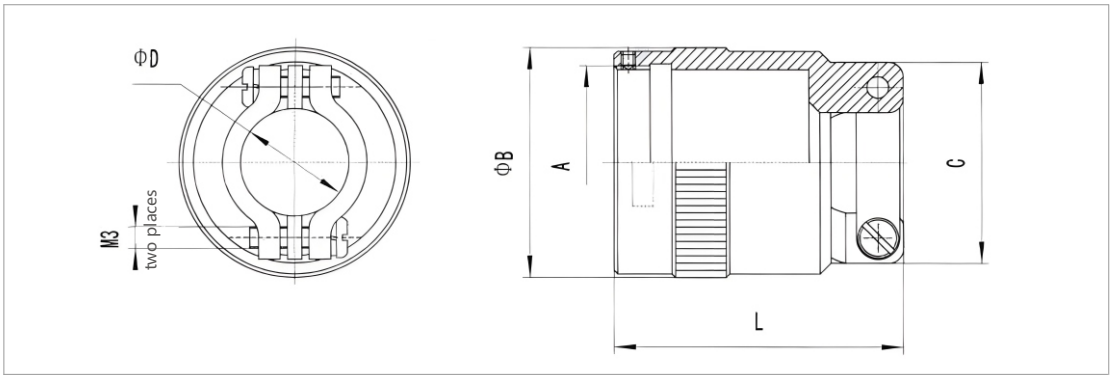
Housing Number	A	Dmin	Dmax	E	L
12	M12×1	5	10	25	30
14	M14×1	4	7	18.5	
		11	14	27	
18	M18×1	8	14	28	
		13	17	31	
22	M22×1	6	10	25	
		9	18	32	
24	M24×1	9	18	32	40
		22	24	38	
27	M27×1	9	18	32	
		11	20	34	
		15	27	40	
30	M30×1	9	19	32	
		17	30	44	

Housing Number	A	Dmin	Dmax	E	L
33	M33×1	15	27	40	50
		17	30	44	
36	M36×1	15	26	40	
		17	30	44	
		19	32	46	
39	M39×1	15	26	40	
		17	30	44	
		21	34	48	
		23	38	58	
42	M42×1	17	30	44	
45	M45×1	17	30	44	50
		23	40	58	65
		32	50	64	60
48	M45×1.5	24	38	58	80
85	M85×2	35	45	70	120
		46	50	77	
		58	70	106	

Marking Example:

XC27FJC-20 indicates compatibility with Housing No. 27, and the maximum outlet diameter is Φ20.

[XC-FJC03 (with Set Screw)]



Housing Number	A	B	C	D	L
12	M12×1	19	25	10	30
14	M14×1	20	18.5	7	30
	M14×1	20	27	14	30
16	M16×1	22	28	14	30
18	M18×1	24	25.2	11	30
	M18×1	24	28	14	30
	M18×1	24	31	17	30
20	M20×1	26	27	15	30
	M20×1	26	32	18	30
22	M22×1	28	25	10	30
	M22×1	28	28	15	30
	M22×1	28	32	18	30
24	M24×1	29	28	14	40
	M24×1	29	32	18	40
	M24×1	29	38	24	40
27	M27×1	32	28	14	40
	M27×1	32	32	18	40
	M27×1	32	34	20	40
	M27×1	32	37	23	40
	M27×1	32	40	27	40

Compatible Housing No	A	B	C	D	L
30	M30×1	19	32	19	40
	M30×1	20	37	23	40
	M30×1	20	44	30	40
33	M33×1	22	40	27	50
	M33×1	24	44	30	50
36	M36×1	24	27	15	50
	M36×1	24	40	26	50
	M36×1	26	44	30	50
	M36×1	26	46	32	50
39	M39×1	28	40	26	50
	M39×1	28	44	30	50
	M39×1	28	48	34	50
	M39×1	29	58	38	50
85	M85×2	29	106	70	120

XC ① 12 ② FJBP1 ③ (J) ④ -01 ⑤

① XC- Series main designation

② 14 Housing number

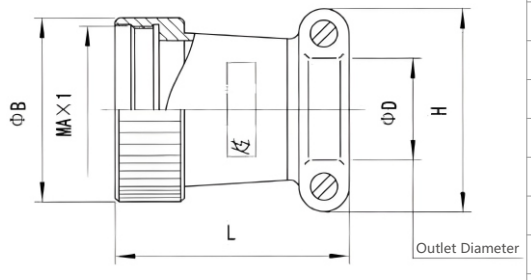
③ FJC- Cable gland—clamps cables and provides shielding

④ 03 Modified type, equipped with a set screw

⑤ -10 Outlet diameter

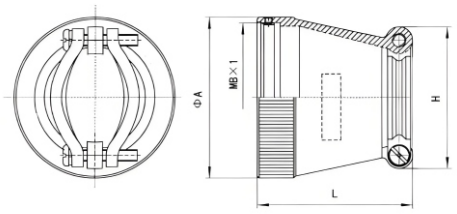
[XC-FJD (Shielded), XC-FJDP (Shielded Cable Accessories) (Not suitable for welded products)]

This accessory is used for cable clamping and requires a small installation space. The inner wall of the sleeve is tapered toward the cable outlet, and the cable is clamped via two pressure plates. Compared with FJC, FJD and FJDP are suitable for thinner signal cables.



Matching Housing Number	A	B	D_{min}	D_{max}	H	L
14	14	16.5	7	8	22	23.5
18	18	20.5	7	8	22	23.5
22	22	24.5	10	13	27	27
24	24	26.5	10	13	27	30
27	27	30	10	13	27	30
30	30	33	12	18	32	35.5
33	33	36	12	18	32	35.5
36	36	39	16	23	37	40.5
39	39	42	16	23	37	40.5

[XC-FJDP05]



Matching Housing Number	A	B	L	H
14	16.5	14	23	21
18	20.5	18	23	21
22	24.5	22	27	26
24	26.5	24	30	26
27	30	27	30	26
30	33	30	35.5	31.5
33	36	33	35.5	31.5
36	39	36	40.5	36.5
39	42	39	40.5	36.5

XC ① 12 ② FJDP ③ 05 ④

① XC- Series main designation

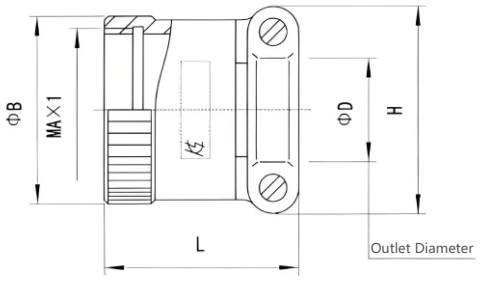
② 12 Housing number

③ FJDP—Cable accessory (clamps cables, shieldable)

④ 05—Modified type (with reinforced fastening screws)

[XC-FJHP Shielded Cable Accessory (Not suitable for soldered products)]

This accessory is currently the cable clamping accessory with the smallest installation space.



Matching Housing Number	A	B	Dmin	Dmax	H	L
14	14	16.5	6	8	22	22
18	18	20.5	9	13	27	22
22	22	24.5	9	13	27	25
24	24	26.5	11	18	32	25
27	27	30	11	18	32	25
30	30	33	15	23	37	30
33	33	36	15	23	37	30
36	36	39	21	28	42	30
39	39	42	21	28	42	30

[Accessory with special functions]

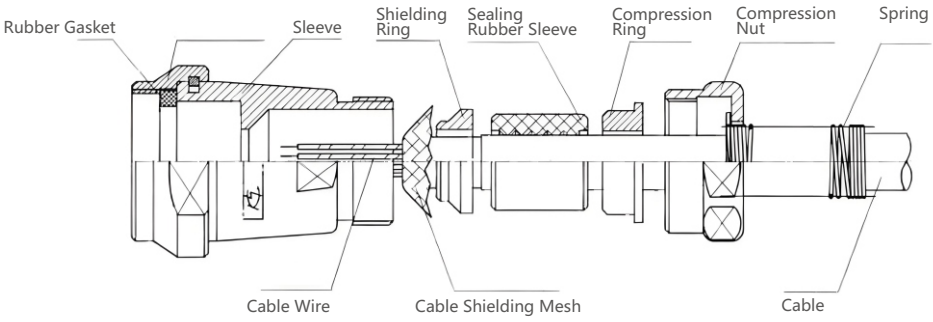
Based on users' special application requirements—especially in the shipbuilding industry, where the operating environment is harsh—electrical connectors are not only required to have salt spray, rain, and mildew resistance, but also a certain level of waterproof performance when used outdoors on ships. To address this, our factory recommends the following accessories for users to choose:

XC-FJJP, XC-FJJP01 Shielded Cable Accessories

XC-FJJP is suitable for softer cables;
XC-FJJP01 is suitable for harder cables.

This type of accessory adopts the advantages of a watertight structure: it uses a stuffing box to clamp the cable, preventing rotation, providing strong clamping force without damaging the cable. It is currently the tail accessory with the largest clamping force, capable of achieving watertightness and 360° electromagnetic shielding. Both outer shielded cables and inner shielded cables can use it. It is particularly suitable for harsh outdoor environments such as oceans, swamps, and culverts.

The assembly diagram is as follows:



[Usage Instructions]

1.Pass the cable through the spring, compression nut, compression ring, sealing rubber sleeve, and shielding ring in sequence. Then turn the cable shielding mesh over and fit it onto the shielding ring.

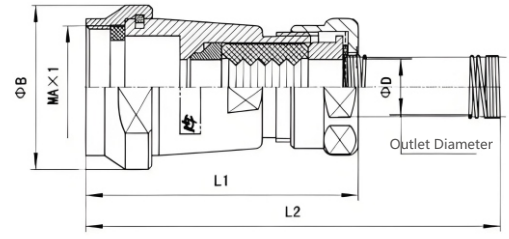
2.Terminate the cable core wires with the plug contacts.

3.Tighten the connecting nut to the thread at the tail end of the plug; the rubber gasket will seal the nut to the plug.

4.Tighten the compression nut: the sealing rubber sleeve will deform under pressure and wrap tightly around the cable, clamping the cable while sealing the accessory to the cable. At the same time, the shielding ring, shielding mesh, and sleeve will be pressed tightly together, ensuring electrical continuity between the shielding mesh and the accessory housing.

5.Fit the spring over the joint between the cable and the accessory to prevent the cable from being damaged by severe bending.

[XC-FJJP]

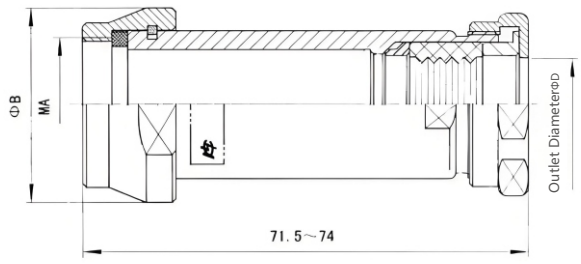


Compatible Housing No	A	B	D	L1	L2
14	14	20	7.5	42	70
18	18	26	7.5	42	70
			10		
			14		
22	22	30	7.5	44	
			10	44	72
			14		
			16		
			18		
24	24	32	10	44	72
			12		87
			16		72
			18		86
			20		86
27	27	36.5	14	44	72
			18		86
			20		86
30	30	39.5	12	44	86
			20		
			22		
33	33	43	12	44	86
			22		
36	36	44	18	49	90
39	39	48	22	54	96

Note: Generally, the cable diameter range is (D−2) to D.

Marking example: XC27FJJP−20 indicates that it is compatible with the No. 27 housing, and the maximum outlet diameter is Φ20.

[XC-FJJP01]



Compatible Housing Number	A	B	D	Compatible Housing Number	A	B	D	Compatible Housing Number	A	B	D
12	12x1	20	10	22	22x1	30	12	30	30x1	39.5	7.5
			12				14				12
			14				16				14
							18				18
							20				20
14	14x1	20	10	24	24x1	32	12	33	33x1	43	20
			12				14				22
			14				16				24
			16				18				
							20				
18	18x1	26	10	27	27x1	36.5	14	36	36x1	44	24
			12				16	39	39x1	48	18
			14				18	42	42x1	50	24
			16				20				30

[XC-FJGP Straight-Type Shielded Cable Accessory, XC-FJGWP Elbow-Type Shielded Cable Accessory]

This accessory is used to clamp shielded cables with a shielding mesh, and is only compatible with shielded electrical connectors. It is divided into two main categories: straight-type and bent-type. Sealing is achieved via a face rubber ring and the addition of a heat shrink tube at the tail. This accessory applies alloy memory technology: using a Ti-Ni alloy memory ring that shrinks when heated, the shielding mesh is tightly clamped to the tail of the accessory, achieving electrical continuity between the shielding mesh and the accessory housing.

[Usage Instructions]

1.Pass the cable through the heat-shrinkable tube, Ti-Ni alloy memory ring, and sleeve in sequence.
2.Terminate the cable core wires with the plug contacts.
3.Tighten the connecting nut to the thread at the tail end of the plug; seal the nut to the plug via the rubber gasket.
4.Wrap the cable shielding mesh around the tail end of the accessory. Heat-shrink the memory ring* to tightly clamp the shielding mesh to the accessory tail, achieving electrical continuity between the shielding mesh and the accessory housing.
5.Tighten the locking screw.
6.Fit the heat-shrinkable tube over the joint between the cable and the accessory. Heat-shrink it to wrap tightly around the accessory and cable, realizing the seal between the accessory and the cable.

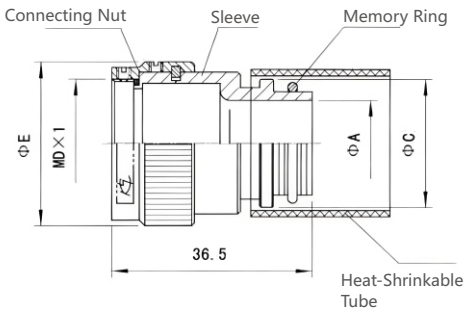
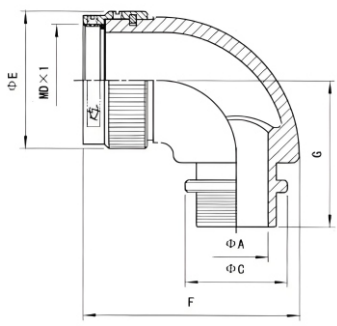
*Heat-shrinking the memory ring: Use a heat gun for heating, which takes about 45 seconds to 1 minute. When the temperature indicator on the memory ring changes from green to black, the memory ring has finished shrinking (the ring temperature is about 165°C at this point). Stop heating. Note: Ensure uniform heating of the memory ring during the process.

Note: The Ti-Ni alloy memory ring is an optional part. If you need the Ti-Ni alloy memory ring when placing an order, add the letter "A" after the model FJGP or FJGWP (i.e., XC-FJGPA or XC-FJGWPA).

Web: www.anknor.com Email: Info@anknor.com

[How to Select FJGP and FJGWP Accessories]

First, choose the appropriate electrical connector and cable according to your application requirements. Based on the housing number of the electrical connector, select the matching Ti-Ni model from the table according to the cable's outer diameter (preferably the outer diameter of the cable after stripping off the outer insulation and shielding layer). Then, select the corresponding accessory model from the table.

XC-FJGP	XC-FJGWP
	

[Optional Tail Outlet Hole Diameter]

Compatible Housing Number	Structure	Tail Outlet Hole Diameter ΦA												
		6.3	7.9	9.5	11.1	12.7	16.0	19.0	22.2	25.4	28.5	31.8	35.0	38.1
14	Straight Type	√	√	√	—	—	—	—	—	—	—	—	—	—
	Elbow Type	√	√	√	—	—	—	—	—	—	—	—	—	—
18	Straight Type	√	√	√	√	√	√	√	—	—	—	—	—	—
	Elbow Type	√	√	√	√	√	—	—	—	—	—	—	—	—
22	Straight Type	—	—	√	√	√	√	√	√	√	—	—	—	—
	Elbow Type	—	—	√	√	√	√	√	—	—	—	—	—	—
24	Straight Type	—	—	—	√	√	√	√	√	√	—	—	—	—
	Elbow Type	—	—	—	√	√	√	√	—	—	—	—	—	—
27	Straight Type	—	—	—	—	√	√	√	√	√	√	√	—	—
	Elbow Type	—	—	—	—	√	√	√	√	√	—	—	—	—
30	Straight Type	—	—	—	—	√	√	√	√	√	√	√	—	—
	Elbow Type	—	—	—	—	√	√	√	√	√	—	—	—	—
33	Straight Type	—	—	—	—	√	√	√	√	√	√	√	√	—
	Elbow Type	—	—	—	—	√	√	√	√	√	√	√	—	—
36	Straight Type	—	—	—	—	√	√	√	√	√	√	√	√	√
	Elbow Type	—	—	—	—	√	√	√	√	√	√	√	—	—
39	Straight Type	—	—	—	—	—	√	√	√	√	√	√	√	√
	Elbow Type	—	—	—	—	—	√	√	√	√	√	√	√	√

"√" indicates an optional value, while "—" indicates that the value is not available.

[Other Relevant Dimensions]

Housing Number	F	D	E	G
14	37.0	14	22.5	26.5
18	41.8	18	26.0	29.5
22	44.7	22	30.5	29.5
24	49.2	24	32.5	33.5
27	50.7	27	35.5	33.5
30	51.1	30	38.5	39.0
33	55.2	33	41.5	39.0
36	61.5	36	46.0	44.0
39	63.7	39	48.0	44.0

[Tail Outlet Hole Diameter ΦA Matching Ti-Ni Ring Specifications and Shielding Mesh Specifications]

A	C	Ti-Ni Ring Specification (Compatible)	Shielding Mesh Specifications (Nominal Diameter of Tinned Copper Wire)
6.3	14.0	TR-04	6×10 (0.15)
7.9	15.5	TR-05	10×16 (0.20)
9.5	17.1	TR-06	10×16 (0.20)
11.1	18.7	TR-07	10×16 (0.20)
12.7	20.3	TR-08	16×24 (0.30)
16.0	23.5	TR-10	16×24 (0.30)
19.0	26.7	TR-12	16×24 (0.30)
22.2	30.0	TR-14	24×30 (0.30)
25.4	33.0	TR-16	24×30 (0.30)
28.5	36.2	TR-18	30×40 (0.30)
31.8	39.4	TR-20	30×40 (0.30)
35.0	42.5	TR-22	30×40 (0.30)
38.1	45.0	TR-24	40×55 (0.30)

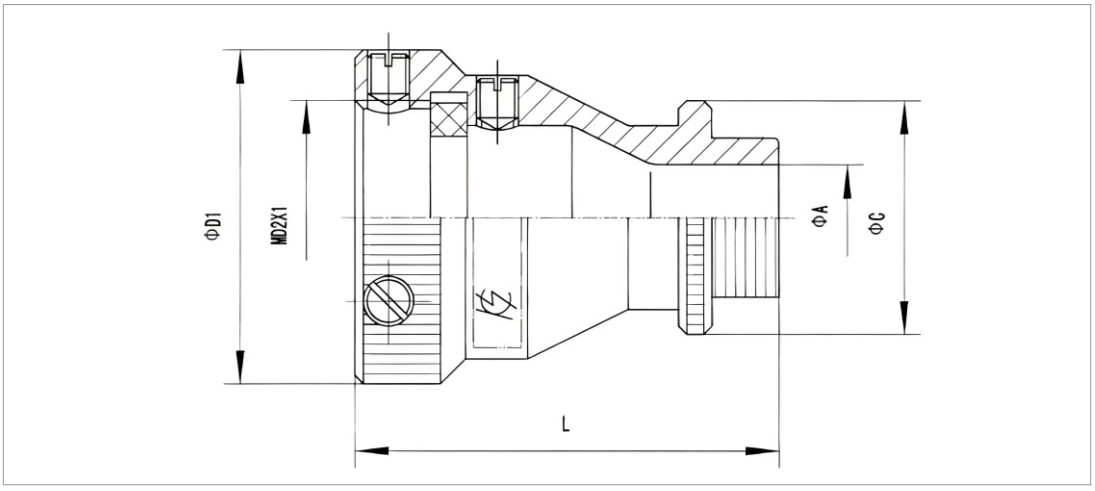
Labeling Example:

1.XC24-FJGP-Φ11.1 refers to a straight-type shielded cable accessory compatible with housing number 24, with a tail outlet hole diameter of Φ11.1, not fitted with a Ti-Ni ring; if a Ti-Ni ring is needed, add the letter "A" after "FJGP", i.e.: XC24-FJGPA-Φ11.1.

2.XC24-FJGPW-Φ11.1 refers to a curved-type shielded cable accessory compatible with housing number 24, with a tail outlet hole diameter of Φ11.1, not fitted with a Ti-Ni ring; if a Ti-Ni ring is needed, add the letter "A" after " FJGPW", i.e.: XC24-FJGPWA-Φ11.1.

[XC-FJLP Accessory]

The XC-FJLP accessory can be matched with different cables based on the outlet diameter. The shielding mesh can be fixed either by bundling or by using a Ti-Ni ring. Among the four screws, three are used for fastening, and the fourth serves a sealing function after potting.



[XC-FJLP Accessory Model Dimensions and Ti-Ni Ring Specification Comparison Table]

Compatible Housing Number	Serial Number	Accessory Model*	Ti-Ni Ring Specification (Compatible)	A	C	D1	D2	L
12	1	XC12FJLP-6.3	TR-04	6.3	14.0	18	12	25.0
14	2	XC14FJLP-6.3	TR-04	6.3	14.0	20	14	25.3
	3	XC14FJLP-7.9	TR-05	7.9	15.5			
	4	XC14FJLP-9.5	TR-06	9.5	17.1			
	5	XC14FJLP-11.1	TR-07	11.1	18.7			
18	6	XC18FJLP-6.3	TR-04	6.3	14.0	24	18	27.3
	7	XC18FJLP-7.9	TR-05	7.9	15.5			
	8	XC18FJLP-9.5	TR-06	9.5	17.1			
	9	XC18FJLP-11.1	TR-07	11.1	18.7			
	10	XC18FJLP-12.7	TR-08	12.7	20.3			
	11	XC18FJLP-16	TR-10	16	23.5			
	12	XC18FJLP-19	TR-12		26.7			
22	13	XC22FJLP-9.5	TR-06	19	17.1	28	22	31.3
	14	XC22FJLP-11.1	TR-07	11.1	18.7			
	15	XC22FJLP-12.7	TR-08	12.7	20.3			
	16	XC22FJLP-16	TR-10	16	23.5			
	17	XC22FJLP-19	TR-12	19	26.7			
	18	XC22FJLP-22.2	TR-14	22.2	30			
	19	XC22FJLP-25.4	TR-16	25.4	33			
24	20	XC24FJLP-9.7	TR-06	9.7	17.1	30	24	32.3
	21	XC24FJLP-11.1	TR-07	11.1	18.7			
	22	XC24FJLP-12.7	TR-08	12.7	20.3			
	23	XC24FJLP-16	TR-10	16	23.5			
	24	XC24FJLP-19	TR-12	19	26.7			
	25	XC24FJLP-22.2	TR-14	22.2	30			
	26	XC24FJLP-25.4	TR-16	25.4	33			

[Other Relevant Dimensions]

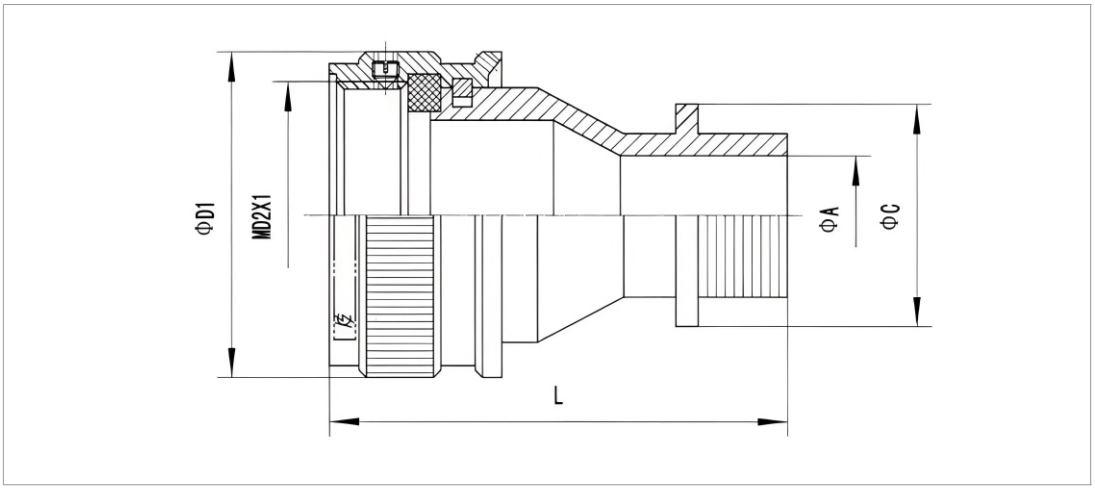
Compatible Housing Number	Serial Number	Accessory Model*	Compatible Ti-Ni Ring Specification	A	C	D1	D2	L
27	27	XC27FJLP-11.3	TR-07	11.3	18.7	33	27	27. 3
	28	XC27FJLP-12.7	TR-08	12.7	20.3			
	29	XC27FJLP-16	TR-10	16	23.5			
	30	XC27FJLP-19	TR-12	19	26.7			
	31	XC27FJLP-22.2	TR-14	22.2	30			
	32	XC27FJLP-25.4	TR-16	25.4	33			
	33	XC27FJLP-28.5	TR-18	28.5	36.2			
	34	XC27FJLP-31.8	TR-20	31.8	39.4			
30	35	XC30FJLP-12.7	TR-08	12.7	20.3	36	30	34.3
	36	XC30FJLP-16	TR-10	16	23.5			
	37	XC30FJLP-19	TR-12	19	26.7			
	38	XC30FJLP-22.2	TR-14	22.2	30			
	39	XC30FJLP-25.4	TR-16	25.4	33			
	40	XC30FJLP-28.5	TR-18	28.5	36.2			
33	41	XC30FJLP-31.8	TR-20	31.8	39.4	39	33	35.3
	42	XC33FJLP-12.7	TR-08	12.7	20.3			
	43	XC33FJLP-16	TR-10	16	23.5			
	44	XC33FJLP-19	TR-12	19	26.7			
	45	XC33FJLP-22.2	TR-14	22.2	30			
	46	XC33FJLP-25.4	TR-16	25.4	33			
	47	XC33FJLP-28.5	TR-18	28.5	36.2			
	48	XC33FJLP-31.8	TR-20	31.8	39.4			
	49	XC33FJLP-35	TR-22	35	42.5			
36	50	XC36FJLP-12.7	TR-08	12.7	20.3	42	36	36. 3
	51	XC36FJLP-16	TR-10	16	23.5			
	52	XC36FJLP-19	TR-12	19	26.7			
	53	XC36FJLP-22.2	TR-14	22.2	30			
	54	XC36FJLP-25.4	TR-16	25.4	33			
	55	XC36FJLP-28.5	TR-18	28.5	36.2			
	56	XC36FJLP-31.8	TR-20	31.8	39.4			
	57	XC36FJLP-35	TR-22	35	42.5			
	58	XC36FJLP-38.1	TR-24	38.1	45.7			
39	59	XC39FJLP-16	TR-10	16	23.5	45	39	37.3
	60	XC39FJLP-19	TR-12	19	26.7			
	61	XC39FJLP-22.2	TR-14	22.2	30			
	62	XC39FJLP-25.4	TR-16	25.4	33			
	63	XC39FJLP-28.5	TR-18	28.5	36.2			
	64	XC39FJLP-31.8	TR-20	31.8	39.4			
	65	XC39FJLP-35	TR-22	35	42.5			
	66	XC39FJLP-38.1	TR-24	38.1	45.7			

Example of Marking:

"XC24FJLP-11.1" refers to a straight-type shielded potting cable accessory compatible with Housing No. 24, with a tail outlet hole diameter of Φ11.1, and no Ti-Ni ring is included; if a Ti-Ni ring is required, add the letter "A" after "FJLP", i.e., XC24FJLPA-11.1.

[XC-FJLP01 Accessory]

Compared with the XC-FJLP accessory, the XC-FJLP01 accessory has its wire-clamping nut changed to a two-piece structure (giving it anti-rotation functionality), and the potting function has been removed.



[XC-FJLP01 Accessory Model Dimensions and Ti-Ni Ring Specification Comparison Table]

Compatible Housing Number	Serial Number	Accessory Model*	Compatible Ti-Ni Ring Specification	A	C	D1	D2	L
12	1	XC12FJLP01-Φ6.3	TR-04	6.3	13.0	16	12	25.0
14	2	XC14FJLP01-Φ6.3	TR-04	6.3	13.0	18	14	25.0
	3	XC14FJLP01-Φ7.9	TR-05	7.9	15.5			
	4	XC14FJLP01-Φ9.5	TR-06	9.5	17.1			
18	5	XC18FJLP01-Φ6.3	TR-04	6.3	13.0	22	18	30.8
	6	XC18FJLP01-Φ7.9	TR-05	7.9	15.5			
	7	XC18FJLP01-Φ9.5	TR-06	9.5	17.1			
	8	XC18FJLP01-Φ11.1	TR-07	11.1	18.7			
	9	XC18FJLP01-Φ12.7	TR-08	12.7	20.3			
	10	XC18FJLP01-Φ16	TR-10	16	23.5			
	11	XC18FJLP01-Φ19	TR-12	19	26.7			
22	12	XC22FJLP01-Φ9.5	TR-06	9.5	17.1	26	22	30.8
	13	XC22FJLP01-Φ11.1	TR-07	11.1	18.7			
	14	XC22FJLP01-Φ12.7	TR-08	12.7	20.3			
	15	XC22FJLP01-Φ16	TR-10	16	23.5			
	16	XC22FJLP01-Φ19	TR-12	19	26.7			
24	17	XC24FJLP01-Φ9.7	TR-06	9.7	18.0	28	24	32.3
	18	XC24FJLP01-Φ11.1	TR-07	11.1	18.7			
	19	XC24FJLP01-Φ12.7	TR-08	12.7	20.3			
	20	XC24FJLP01-Φ16	TR-10	16	23.5			
	21	XC24FJLP01-Φ19	TR-12	19	26.7			
	22	XC24FJLP01-Φ22.2	TR-14	22.2	30			
	23	XC24FJLP01-Φ25.4	TR-16	25.4	33			

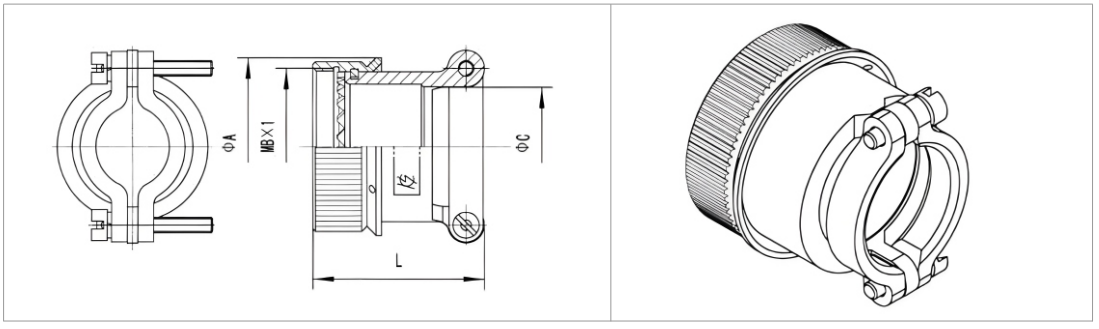
Compatible Housing Number	Serial Number	Accessory Model*	Ti-Ni Ring Specification (Compatible)	A	C	D1	D2	L
27	24	XC27FJLP01-Φ11.3	TR-07	11.3	19.7	31	27	35.0
	25	XC27FJLP01-Φ12.7	TR-08	12.7	20.3			
	26	XC27FJLP01-Φ16	TR-10	16	23.5			
	27	XC27FJLP01-Φ19	TR-12	19	26.7			
	28	XC27FJLP01-Φ22.2	TR-14	22.2	30			
	29	XC27FJLP01-Φ25.4	TR-16	25.4	33			
	30	XC27FJLP01-Φ28.5	TR-18	28.5	36.2			
	31	XC27FJLP01-Φ31.8	TR-20	31.8	39.4			
30	32	XC30FJLP01-Φ12.7	TR-08	12.7	19.7	34	30	36
	33	XC30FJLP01-Φ16	TR-10	16	23.5			
	34	XC30FJLP01-Φ19	TR-12	19	26.7			
	35	XC30FJLP01-Φ22.2	TR-14	22.2	30			
	36	XC30FJLP01-Φ25.4	TR-16	25.4	33			
	37	XC30FJLP01-Φ28.5	TR-18	28.5	36.2			
	38	XC30FJLP01-Φ31.8	TR-20	31.8	39.4			
33	39	XC33FJLP01-Φ12.7	TR-08	12.7	19.7	37	33	36.0
	40	XC33FJLP01-Φ16	TR-10	16	23.5			
	41	XC33FJLP01-Φ19	TR-12	19	26.7			
	42	XC33FJLP01-Φ22.2	TR-14	22.2	30			
	43	XC33FJLP01-Φ25.4	TR-16	25.4	33			
	44	XC33FJLP01-Φ28.5	TR-18	28.5	36.2			
	45	XC33FJLP01-Φ31.8	TR-20	31.8	39.2			
	46	XC33FJLP01-Φ35	TR-22	35	42.5			

Example of Marking:

XC24FJLP01-Φ11.1 refers to a straight-type shielded potting cable accessory compatible with Housing No. 24, with a tail outlet hole diameter of Φ11.1, and no Ti-Ni ring is included; if a Ti-Ni ring is required, add the letter "A" after "FJLP01", i.e., XC24FJLPA01-Φ11.1.

[XC-FJMP Accessory (Only Compatible with XCA Series Products)]

The XC-FJMP accessory is equipped with anti-rotation teeth.



Housing Number	A	B	C	L	Housing Number	A	B	C	L
XC14FJMP	18	14	23	32.7	XC30FJMP	34	30	23	32.7
XC18FJMP	22	18	23	32.7	XC33FJMP	37	33	23	32.7
XC22FJMP	26	22	28	34.7	XC36FJMP	40	36	28	34.7
XC24FJMP	28	24	28	34.7	XC39FJMP	43	39	28	34.7
XC27FJMP	31	27							

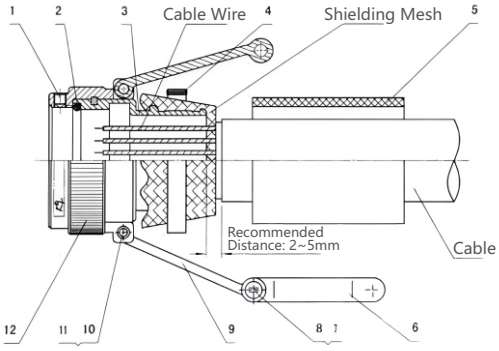
[FA Accessories]

Features

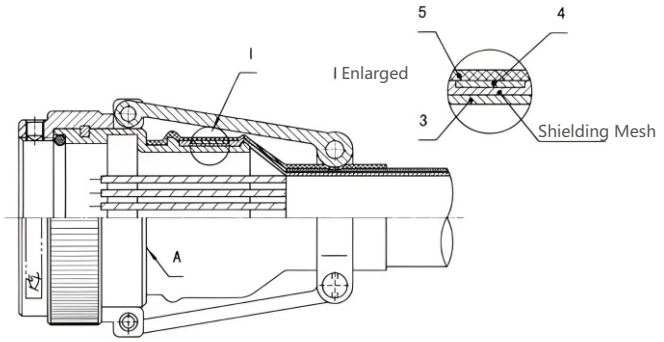
At present, FA accessories have 12 housing numbers, and can be used with our company's XC and its derivative series, as well as YM series electrical connectors (compatible as long as the housing numbers are the same). This type of accessory features a simple structure, complete functions, strong environmental adaptability, and easy operation. It can meet various application requirements such as shielding, sealing, anti-rotation, high clamping force, and no damage to cables.

Operation and Usage Instructions

Assembly Diagram



1.Locking Screw
2. Sealing Rubber Gasket
3. Sleeve
4. Steel Cable Tie
5. Heat Shrink Sleeve
6. Press Plate
7.Screw
8.Spring Washer
9.Pull Rod
10.Dowel Pin
11.Split Retaining Ring
12.Connecting Nut



Usage Method:

1. Cable Stripping: When stripping the outer rubber layer of the cable, keep the end surface as flat as possible. After installing the cable core and accessories, the end surface of the rubber layer should be about 25mm away from the end surface of Sleeve 3.

2.Component Operation: Unscrew the screw at one end of Press Plate 6 to loosen the press plate and one pull rod (to prevent the screw from getting lost, immediately screw it into the threaded hole at the open end of Press Plate 6 after unscrewing). Open the two Pull Rods 9, fold the cable shield backward and stick it to the cable rubber layer. Then pass the cable through Heat Shrink Tube 5 (provided with the accessory), Sleeve 3 and Connecting Nut 12 in sequence.

3.Terminate the cable core wire with the plug contact.

4.Tighten the connecting nut 12 with the screw thread at the tail end of the plug, and seal it with the plug via the sealing rubber gasket 2.

5.Turn the cable shielding mesh over and fit it onto sleeve 3. Use the steel cable tie 4 (provided with the accessory) to bind the shielding mesh tightly to sleeve 3, and tighten the cable tie with the wire tightener LQ-00 (to be ordered separately) to achieve electrical continuity between the shielding mesh and the accessory housing.

6.Trim the bound shielding mesh neatly with scissors.

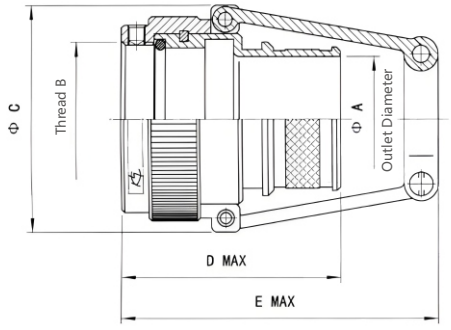
7.Use heat shrink tube 5 to heat-seal the cable tie 4 and shielding mesh onto sleeve 3, and heat-seal the wire-stripped joint between sleeve 3 and the cable. To better ensure the sealing effect of the heat shrink tube, please cover end face A of sleeve 3 with the heat shrink tube during heat-sealing.

8.Connect the two pull rods 9 with press plate 6, tighten the press plate, and clamp the cable sealed by heat shrink tube 5.

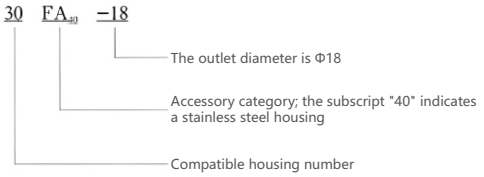
9.Tighten the locking screw 1 to lock the plug and the accessory.

Note: If you do not need the clamping function of press plate 6 during use, you can remove the split retaining ring fixed by dowel pin 10, then disassemble dowel pin 10, pull rods 9 and press plate 6.

Overall Dimensions

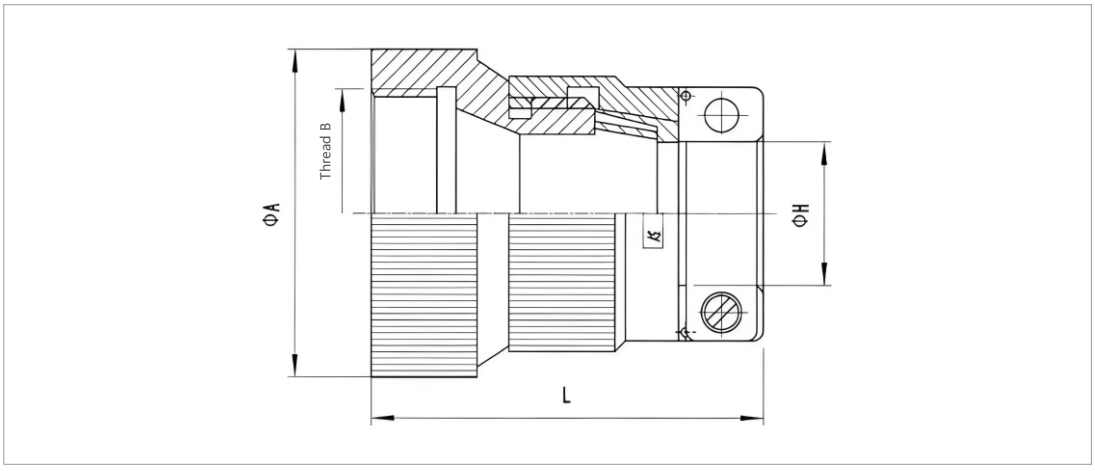


Model Marking



Housing No	Outlet Diameter A	Thread B	C	D	E	Housing No	Outlet Diameter A	Thread B	C	D	E
12	10	M12×1	34.5	38.4	54.4	24	M24×1	M24×1	34.5	38.4	54.4
14	10	M14×1	37.5	38.4	54.4	27	M27×1	M27×1	37.5	38.4	54.4
16	12	M16×1	41.5	41.4	64.4	30	M30×1	M30×1	41.5	41.4	64.4
18	12	M18×1	44.5	41.4	64.4	33	M33×1	M33×1	44.5	41.4	64.4
20	12	M20×1	47.5	41.4	64.4	36	M36×1	M36×1	47.5	41.4	64.4
22	14 20	M22×1	50.5	41.4	64.4	39	M39×1	M39×1	50.5	41.4	64.4

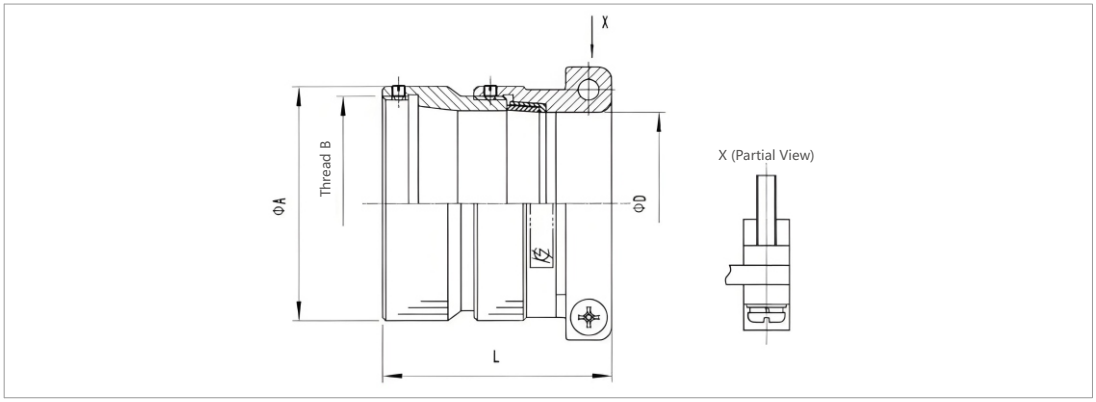
[FB, Attachment]



Serial Number	Model	A	Thread B	H	L	Model for the Y11 series
1	$14FB_1$-8	21	M14×1	8	35	—
2	$14FB_1$-10	20	M14×1	10	37	Y11-0800-86
3	$18FB_1$-10	23	M18×1	10	37	Y11-1000-86
4	$20FB_1$-8	25.5	M20×1	8	37	—
5	$20FB_1$-10	25.5	M20×1	10	37	—
6	$20FB_1$-14.5	25.5	M20×1	14.5	37	Y11-1200-86
7	$24FB_1$-16.5	29	M24×1	16.5	40	Y11-1400-86
8	$27FB_1$-16.5	30	M27×1	16.5	40	Y11-1600-86
9	$30FB_1$-20	33	M30×1	20	50	Y11-1800-86
10	$33FB_1$-22.5	36	M33×1.5	22.5	50	Y11-2000-86
11	$36FB_1$-22.5	39	M36×1.5	22.5	50	Y11-2200-86
12	$39FB_1$-24	42	M39×1.5	24	50	Y11-2400-86

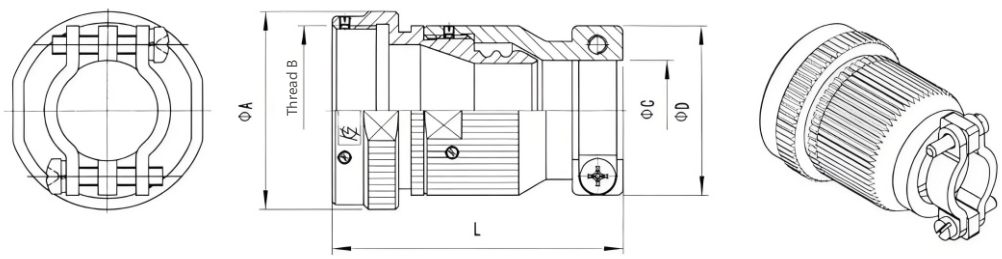
[FB,01 Attachment]

Applicable products: XC, XCA, XCG, XCE series products; the 45FB:01-40 accessory is compatible with the XCD45 product.



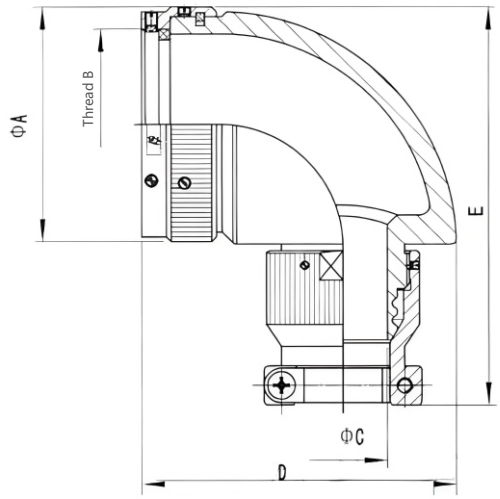
Serial Number	Model	A	Thread B	D	L
1	12FB$_1$01-8	15	M12×1	8	28
2	14FB$_1$01-10	17	M14×1	10	28
3	18FB$_1$01-10	21	M18×1	10	29
4	18FB$_1$01-17	25	M18×1	17	31
5	22FB$_1$01-10	25	M22×1	10	31.5
6	22FB$_1$01-11.1	25	M22×1	11.1	31.5
7	22FB$_1$01-17	25	M22×1	17	32
8	24FB$_1$01-12.7	27	M24×1	12.7	32.5
9	24FB$_1$01-22	30	M24×1	22	32.5
10	27FB$_1$01-12.7	30	M27×1	12.7	32.5
11	27FB$_1$01-22	30	M27×1	22	32.5
12	30FB$_1$01-19	33	M30×1	19	33.5
13	33FB$_1$01-28	36	M33×1	28	33.5
14	36FB$_1$01-31	39	M36×1	31	34
15	39FB$_1$01-33	42	M39×1	33	34
16	45FB$_1$01-40	48	M45×1	40	37

[FB,A Accessory]



Serial Number	Model	A	Thread B	C	D	L
1	14FB$_1$A-8	18.5	M14×1	8	20	38.5
2	16FB$_1$A-12	20.5	M16×1	12	25	39.5
3	18FB$_1$A-10	22.5	M18×1	10	20	46.0
4	18FB$_1$A-12			12	25	
5	18FB$_1$A-16			16	27	
6	20FB$_1$A-14	24.5	M20×1	14	27	46.0
7	22FB$_1$A-12	26.5	M22×1	12	25	46.0
8	22FB$_1$A-16			16	27	
9	24FB$_1$A-14	28.5	M24×1	14	27	46.0
10	24FB$_1$A-19			19	32	
11	24FB$_1$A-22			22	33	
12	27FB$_1$A-16	31.5	M27×1	16	27	46.0
13	27FB$_1$A-22			22	33	
14	27FB$_1$A-25			25	36.5	
15	30FB$_1$A-19	34.5	M30×1	19	32	46.0
16	30FB$_1$A-25			25	36.5	
17	30FB$_1$A-28			28	40	
18	33FB$_1$A-22	37.5	M33×1	22	33	46.0
19	33FB$_1$A-25			25	36.5	
20	33FB$_1$A-31			31	44	
21	36FB$_1$A-25	40.5	M36×1	25	36.5	46.0
22	36FB$_1$A-28			28	40	
23	39FB$_1$A-28	43.5	M39×1	28	40	46.0
24	39FB$_1$A-31			31	44	
25	42FB$_1$A-31	46.5	M42×1	31	44	46.0

[FB$_1$AW Accessory]



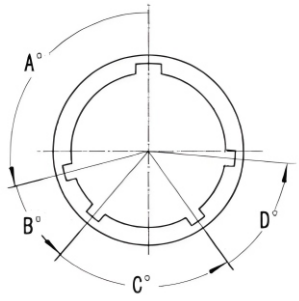
XC Series Derivative Series Universal

The pictures are for reference only

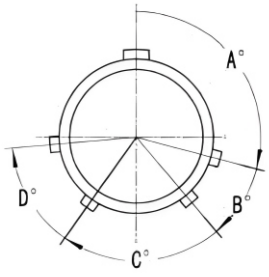
General Data for XC and XC Derived Series

Key Position

Socket Key Position Angle



Plug Key Position Angle



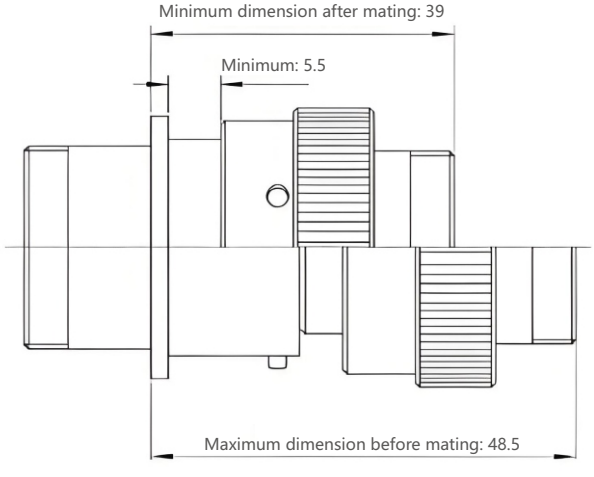
Key Position Code		Key Position Angle				Color Identification
		A	B	C	D	
Normal Key Position	N	105°	140°	215°	265°	Sky Blue
Variable Key Position	W	100°	142°	220°	260°	Green
	X	110°	145°	208°	250°	Yellow
	Y	95°	135°	210°	255°	Black
	Z	90°	130°	224°	270°	Red

Mating Hole Diameter of Soldering Contacts for XC and Its Derived Series (Unit: mm)

Contact Specifications	XCH	XC-F-M	CXCH-01	XCG	XCE
1.0	1.0	1.1	1.4	1.4	1.3
1.5	1.5	1.7	2.0	2.0	1.8
2.0	2.0	2.4	2.5	2.5	2.5
3.0	3.0	3.2	3.0	3.0	3.4
4.5	——	——	——	4.5	——

Note: Only XCG has Φ4.5 contact specifications

Mating Dimensions of XC and Its Derived Series Electrical Connectors



Weight Table of XC Series Electrical Connectors

(The values in the table are the average values of various contacts for this model; all data are for reference only)

[Weight Table of XC Square Panel Electrical Connectors]

Unit: grams

Shell Number	Plug	Socket	Straight Cable Clamp	Angled Cable Clamp	Shielding Nut	Total Weight				
						H/H	H/W W/H	H/P H/P	H/P W/P W/P H/P	W/W WP/WP
14	17	12	6	14	3	41	49	35	46	57
18	23	18	7	16	3.5	55	64	48	60.5	73
22	31	28	8	17	4	75	84	67	80	93
24	37	30	9	21	4.5	85	97	76	92.5	109
27	45	34	10	23	5	99	112	89	107	125
30	53	41	12	26	6	118	132	106	126	146
33	64	51	13	27	8	141	155	131	150	169
36	70	55	14	28	10	153	167	145	163	181
39	82	63	15	30	12	175	190	169	187	205

[Weight Table of XC Circular Panel Electrical Connectors]

Unit: grams

Shell Number	Plug	Socket	Straight Cable Clamp	Angled Cable Clamp	Shielding Nut	Total Weight				
						H/H	H/W W/H	H/P H/P	H/P W/P W/P H/P	W/W WP/WP
14	17	10	6	14	3	39	47	33	44	55
18	23	16	7	16	3.5	53	62	46	58.5	71
22	31	23	8	17	4	70	79	62	75	88
24	37	28	9	21	4.5	83	95	74	90.5	107
27	45	32	10	23	5	97	110	87	105	123
30	53	39	12	26	6	116	130	104	124	144
33	64	49	13	27	8	139	153	129	148	167
36	70	53	14	28	10	151	165	143	161	179
39	82	60	15	30	12	172	187	166	184	202

[Weight Table of XC Double-End Sealed Electrical Connectors]

Unit: grams

Shell Number	Plugs (2 pieces)	Socket	Straight Cable Clamp	Angled Cable Clamp	Shielding Nut	Total Weight				
						H/H	H/W W/H	H/P H/P	H/P W/P W/P H/P	W/W WP/WP
14	34	35	6	14	3	81	89	75	86	97
18	46	42	7	16	3.5	102	111	95	108	120
22	62	50	8	17	4	128	137	120	133	146
24	74	55	9	21	4.5	147	159	138	155	171
27	90	68	10	23	5	178	191	168	186	204
30	106	73	12	26	6	203	217	191	211	230
33	128	94	13	27	8	248	260	238	257	276
36	140	112	14	28	10	280	296	272	290	308
39	164	119	15	30	12	313	328	307	325	343

Web: www.anknor.com Email: Info@anknor.com

The pictures are for reference only

Overview

- Complies with national military standard GJB2889
- Bayonet-type quick connection
- Uses double-curved wire spring contact holes
- Multiple termination methods: crimping, soldering, printed board soldering
- Various plug-and-socket structural forms and plating layers
- Five-key positioning enables blind mating and anti-misplugging functions
- Widely used in various military fields such as aviation, aerospace, and naval vessels

Main Technical Performance

I Environmental Performance

- Operating temperature: -55°C ~ +200°C
- Relative humidity: Up to 95% at 40°C
- Operating altitude: 30000m
- Vibration: Frequency 10~2000Hz, acceleration: 196m/s²
- Shock: Acceleration 980m/s²
- Constant acceleration: 980m/s²
- Air tightness:
  Through-wall sealed adapter: Pressure difference 50.7kPa, leakage rate ≤46Pa·cm³/s
  Circular sealed air-tight type: Pressure difference 152kPa, leakage rate ≤0.1Pa·cm³/s
  The electrical connector also has excellent performance in moisture resistance, salt spray resistance, mildew resistance, rain resistance, dust resistance, etc.

II. Electrical Performance

Contact resistance and rated current:

Specification (mm)	Contact Resistance of Non-Hermetic Type (mΩ)	Contact Resistance of Through-Wall Sealed Type (mΩ)	Contact Resistance of Panel-Sealed Type (mΩ)	Rated C
Φ1.0	<5	≤10	≤15	<5
Φ1.5	<2.5	≤5	≤7.5	<10
Φ2.0	<1.25	≤2.5	≤3.75	<20
Φ3.0	<0.75	≤1.5	≤2.25	<40

Operating Condition	Hermetic Electrical Connector		Hermetic Electrical Connector	
	Rated Voltage (V)	Withstand Voltage (V)	Rated Voltage (V)	Withstand Voltage (V)
Normal Temperature State	500	1500	500	1500
Damp Heat State	500	750	500	1125
Low Pressure Condition (1kPa)	150	300	250	300

Insulation resistance: MΩ

Operating Grade	Standard Condition	High Temperature	Damp Heat
Insulation Resistance	≥5000	≥1000	≥100

Electrical Continuity of the Shell

Aluminum alloy shell: ≤2.5mΩ

Steel shell: ≤5mΩ

III. Mechanical Performance

(1) Ordinary Non-sealed and Wall-penetrating Sealed Adapter Sockets:

- Shell: High-strength aluminum alloy
- Shell coating:
  Shielding coating: Zinc-plated with iridescent passivation, military green passivation, or chemical nickel plating
  Non-shielding coating: Anodized (black)
- Insulator: Thermosetting material
- Sealing body and gasket: Silicone rubber material
- Contacts: Copper alloy with silver or gold plating
- Mechanical life: 1000 cycles

(2) Glass Sintered Square Disk Sealed Sockets:

- Shell: Carbon steel
- Shell coating: Electroplated nickel
- Insulator: Glass body
- Contacts: Kovar alloy with nickel or gold plating
- Mechanical life: 1000 cycles

XC Series Plug and Socket Classification Table

Plug and Socket Types	Basic Marking	Specifications	Remarks
Crimp Plug	XC-T- Z/K	Aluminum alloy housing (shielded or unshielded coating); Copper alloy contacts (silver/gold plated, crimped & removable); Accepts both pins and sockets;No hermeticity	Compatible with any of the following sockets
Square-flange Crimp Socket	XC-F- Z/K	Aluminum alloy housing (shielded or unshielded coating, square mounting flange); Copper alloy contacts (silver/gold plated, crimped & removable); Accepts both pins and sockets; No hermeticity	Two configurations available: with rear thread (for accessory connection) and without rear thread
Circular Crimp Socket	XC-Y- Z/K	Aluminum alloy housing (shielded or unshielded coating, no mounting flange); Copper alloy contacts (silver/gold plated, crimped & removable); Accepts both pins and sockets; No hermeticity	With rear thread
Square-flange Weld Socket	XCH-F-Z ...	Aluminum alloy housing (shielded or unshielded coating, square mounting flange); Copper alloy contacts (silver/gold plated, crimped & removable); Pin-only (contact us for socket option); No hermeticity	Without rear thread
Square-flange Printed Circuit Board Socket	XCB-F-Z ...	Aluminum alloy housing (shielded or unshielded coating, square mounting flange); Copper alloy contacts (silver/gold plated, PCB welded & non-removable); Pin-only;No hermeticity	Without rear thread
Square-flange Hermetic Socket (Glass Sintered)	XC-F-M ...	Steel housing (shielded coating, square mounting flange); Contacts (nickel/gold plated, welded & non-removable); Pin-only; With hermeticity	Without rear thread
Nut-clamped Through-wall Hermetic Adapter Socket (Potting Sealed)	XC-S-M ...	Aluminum alloy housing (shielded or unshielded coating); Copper alloy contacts (silver/gold plated, non-removable); Pin on one end, socket on the other; With hermeticity	Panel exterior: socket; Panel interior: pin
Square-flange Mounted Through -wall Hermetic Adapter Socket (Potting Sealed)	XC-S_1-M ... XC-S_2-M ...	Aluminum alloy housing (shielded or unshielded coating); Copper alloy contacts (silver/gold plated, non-removable); Pin on one end, socket on the other; With hermeticity	XC-S_1-M... Panel exterior: socket; Panel interior: pin XC-S_2-M... Panel exterior: socket; Panel interior: pin

Crimp contacts for XC series

Specification	Type	Color Band	Crimp Barrel Inner Diameter mm	Crimp Barrel Outer Diameter mm	Suitable Conductor Cross-Section mm^2	Crimp Tool/ Locator Model	Removal
Φ1.0	A	Red	Φ1.0	Φ2.1	0.20 0.35 0.50	XCX Y/DWQ-01	XC QZ-Φ1
	B	Blue	Φ1.3		0.75		
Φ1.5	A	Red	Φ1.4	Φ2.8	0.75 1.00	XCX Y/DWQ-01	XC QZ-Φ1.5
	B	Blue	Φ1.8		1.20 1.50		
Φ2.0	A	Red	Φ2.1	Φ3.6	2.00	XCX Y/DWQ-01	XC QZ-Φ2
	B	Blue	Φ2.5		2.50 3.00		
Φ3.0	A	Red	Φ3.2	Φ4.6	4.00	XCX Y/DWQ-01	XC QZ-Φ3
	B	Blue	Φ3.4		5.00		

XC Series Model Naming

1.Model Naming for Crimp Plugs, Square-Flange Crimp Sockets, and Circular Crimp Sockets

Series Designation	YH HL XC	14	T	4	K	HP	W
Housing No	14—18—22—24—27—30—33—36—39						
Product Model	T: Plug Y: Circular Socket F: Square-Flange Socket						
Number of Contacts	1 ~ 62						
Contact Type	Z: Pin (silver-plated); Z_1: Pin (gold-plated) K: Socket (silver-plated); K_1: Socket (gold-plated)						
Housing Coating & Rear Accessories	Shielded Coating: HP: Rear shield nut (zinc-plated iridescent passivation) HP_1: Rear shield nut (electroless nickel plating) HP_3: Rear shield nut (zinc-plated military green passivation) P: Rear threaded (accessory, zinc-plated iridescent passivation) P_1: Rear threaded (accessory, electroless nickel plating) P_3: Rear threaded (accessory, zinc-plated military green passivation) WP: Rear curved cable boot (zinc-plated iridescent passivation) WP_1: Rear curved cable boot (electroless nickel plating) WP_3: Rear curved cable boot (zinc-plated military green passivation) P_{12}: Rear threaded (copper alloy) P_{40}: Rear threaded (accessory, stainless steel passivation) Unshielded Coating: W: Rear curved cable boot (anodized black) E: Rear threaded (accessory, anodized black) (For square-flange sockets only): Shielded Coating: D: Rear non-threaded (zinc-plated iridescent passivation) D_1: Rear non-threaded (electroless nickel plating) D_3: Rear non-threaded (zinc-plated military green passivation) D_{12}: Rear non-threaded (copper alloy) D_{40}: Rear non-threaded (stainless steel passivation) Unshielded Coating: (Unmarked): Rear non-threaded (anodized black)							
Key Position	N Key Position: Unmarked; W Key Position: (W); X Key Position: (X); Y Key Position: (Y); Z Key Position: (Z)						

Notes: 1.To ensure compatibility with various cable specifications, multiple dedicated rear accessories are available. For detailed information, please refer to XC and Its Derived Series Electrical Connector Accessories.

2.For requests to use Type B crimp contacts (pins/sockets), please note "(B)" after the model number. Type A crimp contacts are used by default if not specified.

Examples

1.Square-flange socket, housing No. 14, 4-contact arrangement (per contact diagram), Type A gold-plated sockets (contacts), housing with electroless nickel plating, N key position:
(1) Housing with rear thread (accessory option): Model marking: $XC14F4K_1P_1$
(2) Housing with rear non-thread: Model marking: $XC14F4K_1D_1$

2.Plug, housing No. 39, 62-contact arrangement (per contact diagram), Type B silver-plated pins (contacts), housing with anodized black finish, W key position:

(1) Rear curved cable clamp installed: Model marking: XC39T62ZW (W) (B)
(2) Accessory option: Model marking: XC39T62ZE (W) (B)

Web: www.anknor.com Email: Info@anknor.com

2. Model Naming for Square-Flange Weld Sockets and Square-Flange Printed Circuit Board Sockets

Series Designation	XCH: Square-Flange Weld Socket XCB: Square-Flange Printed Circuit Board Socket	YH HL XCH	14	F	4	Z	D	...
Housing No	14—18—22—24—27—30—33—36—39							
Product Type	F: Square-Flange Socket							
Number of Contacts	1 ~ 62							
Contact Type	Z: Pin (silver-plated); Z_1: Pin (gold-plated)							
Housing Coating & Rear Accessories	Shielded Coating: D: Zinc-plated iridescent passivation D_1: Electroless nickel plating D_3: Zinc-plated military green passivation D_{12}: Rear non-thread (copper alloy) D_{40}: Rear non-thread (stainless steel passivation) Unshielded Coating: (Unmarked): Anodized black finish							
Key Position	N Key Position: Unmarked; W Key Position: (W); X Key Position: (X); Y Key Position: (Y); Z Key Position: (Z)							

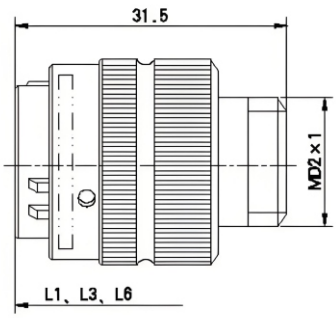
3.Model Naming for Glass-Sintered Square-Flange Hermetic Sockets

Series Designation	YH HL XC	14	F	4	M	...
Housing No	14—18—22—24—27—30—33—36—39					
Product Type	F: Square-Flange Hermetic Socket					
Number of Contacts	1 ~ 62					
Specification Mark	M: Glass-sintered hermetic seal, housing electroplated nickel, contacts nickel-plated M_1: Glass-sintered hermetic seal, housing electroplated nickel, contacts gold-plated					
Key Position	N Key Position: Unmarked; W Key Position: (W); X Key Position: (X); Y Key Position: (Y); Z Key Position: (Z)					

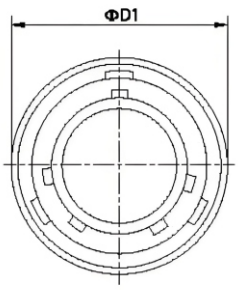
4.Model Naming for Feedthrough Hermetic Sealing Sockets

Series Designation	YH HL XC	14	S	4	M	D	...
Housing No	14—18—22—24—27—30—33—36—39						
Product Type	S: Nut-clamped feedthrough hermetic adapter (panel exterior: socket; panel interior: pin) S_1: Square-flange panel-mounted feedthrough hermetic adapter (panel exterior: socket; panel interior: pin) S_2: Square-flange panel-mounted feedthrough hermetic adapter (panel exterior: pin; panel interior: socket)						
Number of Contacts	1 ~ 62						
Specification Mark	M: Potting seal, contacts silver-plated M_1: Potting seal, contacts gold-plated						
Housing Coating	Shielded Coating: D: Zinc-plated iridescent passivation D_1: Electroless nickel plating D_3: Zinc-plated military green passivation D_{12}: Rear non-thread (copper alloy) D_{40}: Rear non-thread (stainless steel passivation) Unshielded Coating: (Unmarked): Anodized black finish						
Key Position	N Key Position: Unmarked; W Key Position: (W); X Key Position: (X); Y Key Position: (Y); Z Key Position: (Z)						

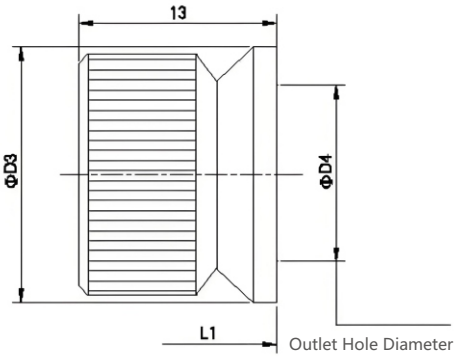
External Dimensions
XC Series Plugs



Total Length of Plug and Rear Accessory Assembly



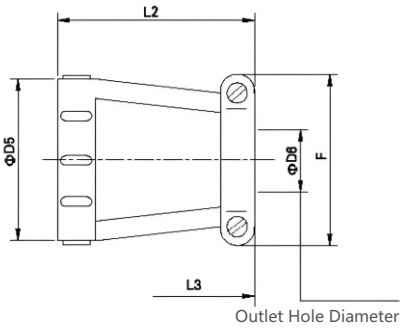
Shielding Nut



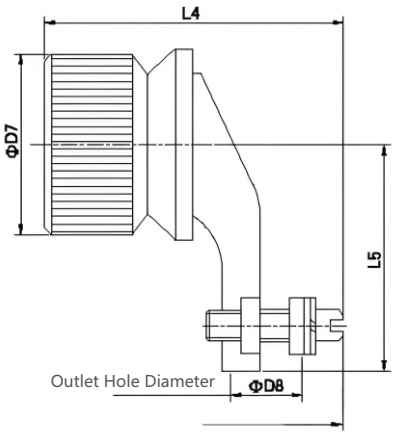
Note: The three accessories listed in the figure on the right are named together with the product model and are not supplied separately. Users can select other accessories as needed.

Housing No	14	18	22	24	27	30	33	36	39
D1	23.3	27.3	31.3	33.3	36.3	39.3	42.3	45.3	48.3
D2	14	18	22	24	27	30	33	36	39
D3	18	22	26	28	31	34	37	40	43
D4	10	14	18	20	23	26	29	32	35
L1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
D5	16	20	24	26	29	33	36	39	42
D6 Minimum	5.5	8.5	8.5	10.5	10.5	15	15	21	21
D6 Maximum	8	13	13	18	18	23	23	28	28
F	22	27	27	32	32	37	37	42	42
L2	22	22	25	25	25	30	30	30	30
L3	48.5	48.5	51.5	51.5	51.5	56.5	56.5	56.5	55.5
D7	22	26	30	32	35	38	40	44	46
D8 Minimum	5	8	8	10	10	14	14	20	20
D8 Maximum	11	15	19	21	24	26	29	32	35
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21	23	25	26	27.5	29.5	31	32.5	34
L6 Maximum	63.5	65.5	69.5	71.5	71.5	79.5	79.5	81.5	81.5

Straight Cable Clamp

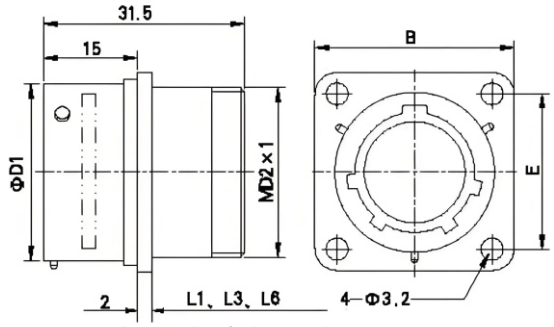


Bent Cable Clamp



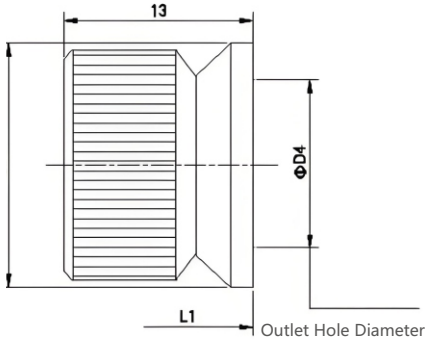
XC Square Flange Crimp Socket

The XC square flange crimp socket is available in two structures: with threads at the tail and without threads. The external dimensions of the two are the same. The diagram takes the socket with threads (accessories can be connected) as an example.



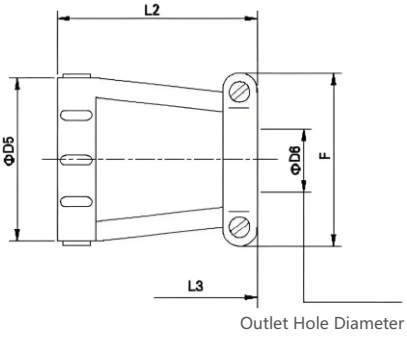
Total Length of Plug and Rear Accessory Assembly

Shielding Nut

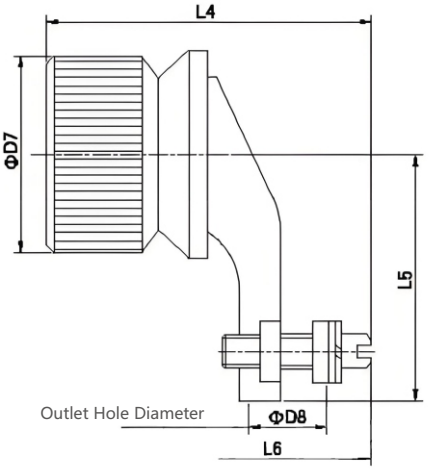


Housing No.	14	18	22	24	27	30	33	36	39
D1	15.7	19.7	23.7	25.7	28.7	31.7	34.7	37.7	40.7
D2	14	18	22	24	27	30	33	36	39
B	25	27.5	30	32	34.5	36.5	39.5	41	43
E	19	21.5	24	26	28	30	32.5	34	36
D3	18	22	26	28	31	34	37	40	43
D4	10	14	18	20	23	26	29	32	35
L1	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
D5	16	20	24	26	29	33	36	39	42
D6 Minimum	5.5	8.5	8.5	10.5	10.5	15	15	21	21
D6 Maximum	8	13	13	18	18	23	23	28	28
F	22	27	27	32	32	37	37	42	42
L2	22	22	25	25	25	30	30	30	30
L3	31.5	31.5	34.5	34.5	34.5	39.5	39.5	39.5	39.5
D7	22	26	30	32	35	38	40	44	46
D8 Minimum	5	8	8	10	10	14	14	20	20
D8 Maximum	11	15	19	21	24	26	29	32	35
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21	23	25	26	27.5	29.5	31	32.5	34
L6 Maximum	46.5	48.5	52.5	54.5	54.5	62.5	62.5	64.5	64.5

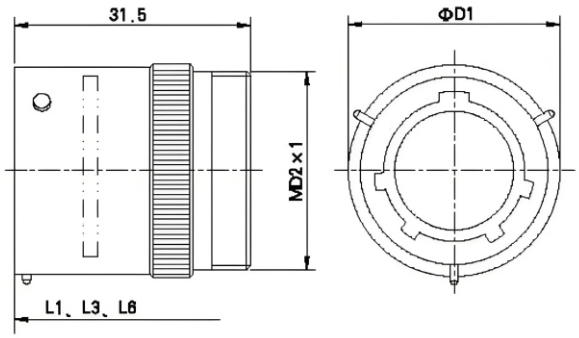
Straight Cable Clamp



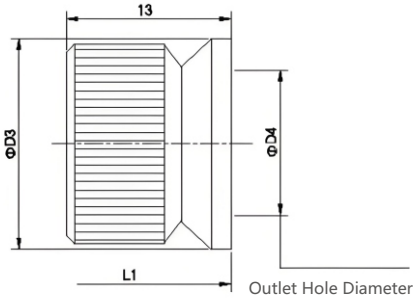
Bent Cable Clamp



XC Circular Crimp Socket



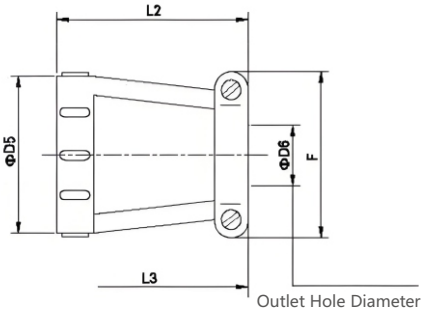
Shielding Nut



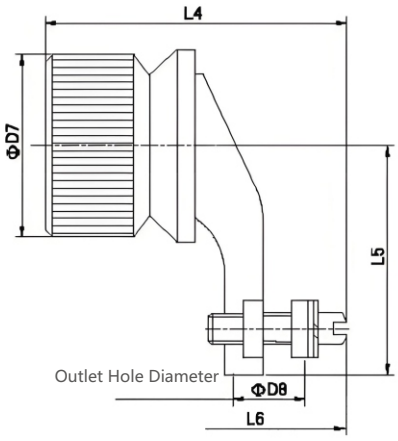
Total Length of Plug and Rear Accessory Assembly

Housing No	14	18	22	24	27	30	33	36	39
D1	17.5	21	25	27	30	33	36	39	42
D2	14	18	22	24	27	30	33	36	39
D3	18	22	26	28	31	34	37	40	43
D4	10	14	18	20	23	26	29	32	35
L1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
D5	16	20	24	26	29	33	36	39	42
D6 Minimum	5.5	8.5	8.5	10.5	10.5	15	15	21	21
D6 Maximum	8	13	13	18	18	23	23	28	28
F	22	27	27	32	32	37	37	42	42
L2	22	22	25	25	25	30	30	30	30
L3	48.5	48.5	51.5	51.5	51.5	56.5	56.5	56.5	56.5
D7	22	26	30	32	35	38	40	44	46
D8 Minimum	5	8	8	10	10	14	14	20	20
D8 Maximum	11	15	19	21	24	26	29	32	35
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21	23	25	26	27.5	29.5	31	32.5	34
L6 Maximum	63.5	65.5	69.5	71.5	71.5	79.5	79.5	81.5	81.5

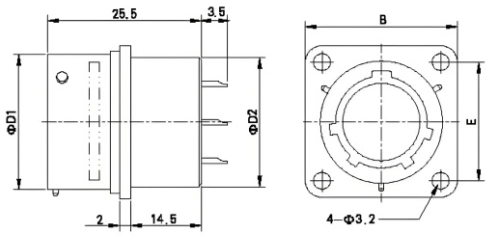
Straight Cable Clamp



Bent Cable Clamp

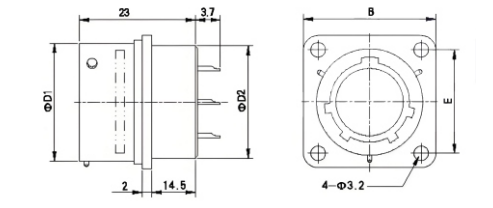


XCH Square Panel Welded Socket



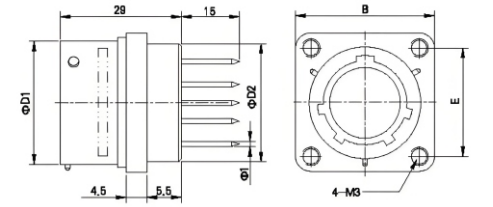
Housing No	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

XC-F-M Glass Sintered Square Panel Sealed Socket



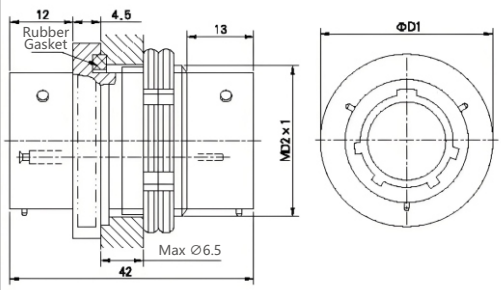
Housing No	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

XCB Square Panel Printed Circuit Board (PCB) Welded Socket



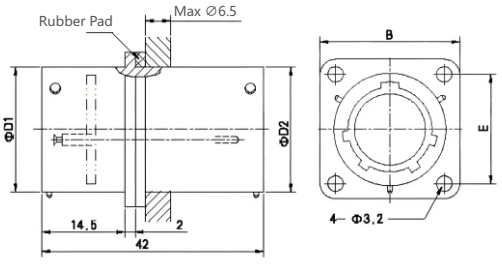
Housing No	D1	D2	B	E
14	15.7	14	25	19
18	19.7	18	27.5	21.5
22	23.7	22	30	24
24	25.7	24	32	26
27	28.7	27	34.5	28
30	31.7	30	36.5	30
33	34.7	33	39.5	32.5
36	37.7	36	41	34
39	40.7	39	43	36

XC-S-M Nut-Fixed Through-Wall Sealed Adapter (Socket Outside the Panel, Pin Inside the Panel)



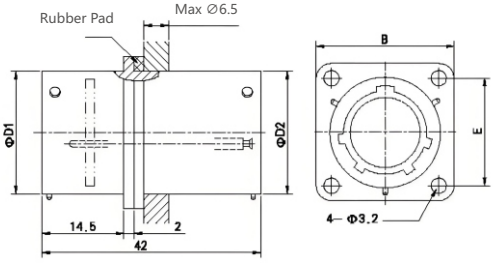
Housing No	D1	D2
14	27	18
18	31	22
22	36	27
24	36	27
27	39	30
30	42	33
33	45	36
36	48	39
39	51	42

XC-S_1-M Square Panel Mount Through-Wall Sealed Adapter (Socket Outside the Panel, Pin Inside the Panel)



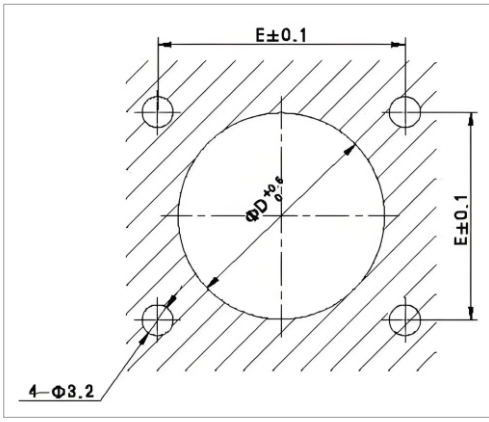
Housing No	D1	D2	B	E
14	15.7	15.7	25	19
18	19.7	19.7	27.5	21.5
22	23.7	23.7	30	24
24	25.7	25.7	32	26
27	28.7	28.7	34.5	28
30	31.7	31.7	36.5	30
33	34.7	34.7	39.5	32.5
36	37.7	37.7	44	34
39	40.7	40.7	46	36

XC-S_2-M Square Panel Mount Through-Wall Sealed Adapter (Pin Outside the Panel, Socket Inside the Panel)



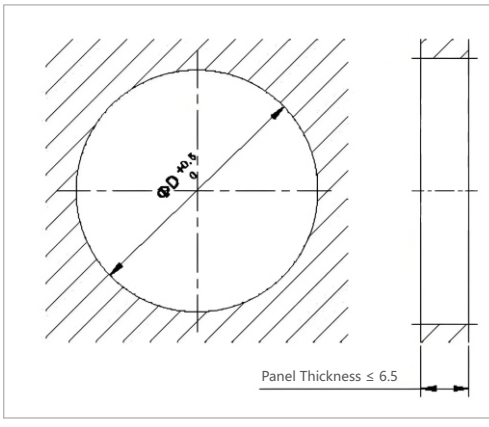
Housing No	D1	D2	B	E
14	15.7	15.7	25	19
18	19.7	19.7	27.5	21.5
22	23.7	23.7	30	24
24	25.7	25.7	32	26
27	28.7	28.7	34.5	28
30	31.7	31.7	36.5	30
33	34.7	34.7	39.5	32.5
36	37.7	37.7	44	34
39	40.7	40.7	46	36

Recommended Panel Cutout Dimensions for XC, XCH, XC-F-M, and XCB Sockets



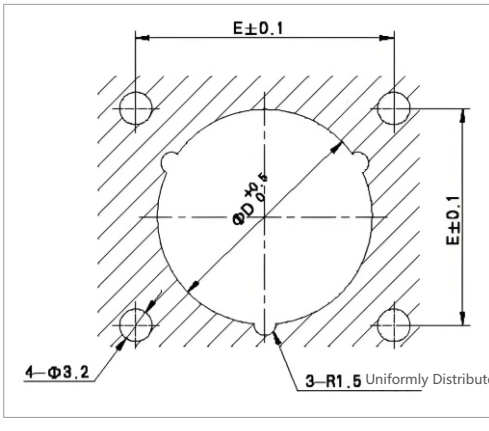
Housing No	D	E
14	14.5	19
18	18.5	21.5
22	22.5	24
24	24.5	26
27	27.5	28
30	30.5	30
33	33.5	32.5
36	36.5	34
39	39.5	36

Recommended Panel Cutout Dimensions for XC-S-M Sockets



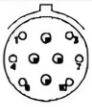
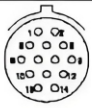
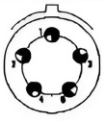
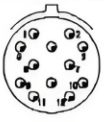
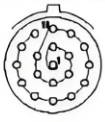
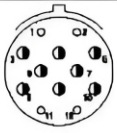
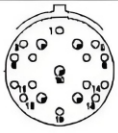
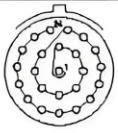
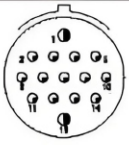
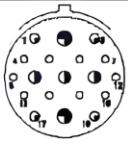
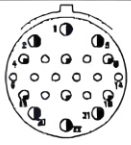
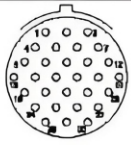
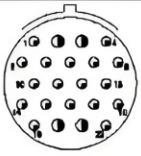
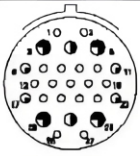
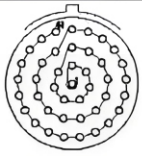
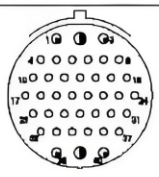
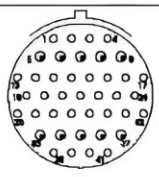
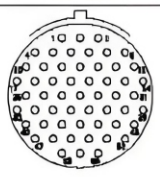
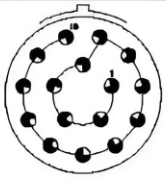
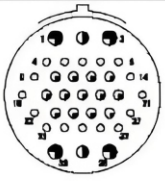
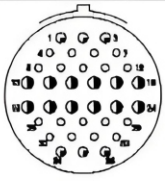
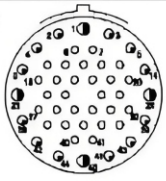
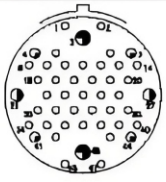
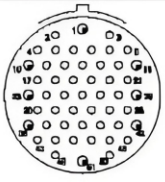
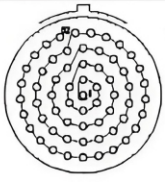
Housing No	D
14	18.5
18	22.5
22	27.5
24	27.5
27	30.5
30	33.5
33	36.5
36	39.5
39	42.5

Recommended Panel Cutout Dimensions for XC-S_1-M and XC-S_2-M Sockets

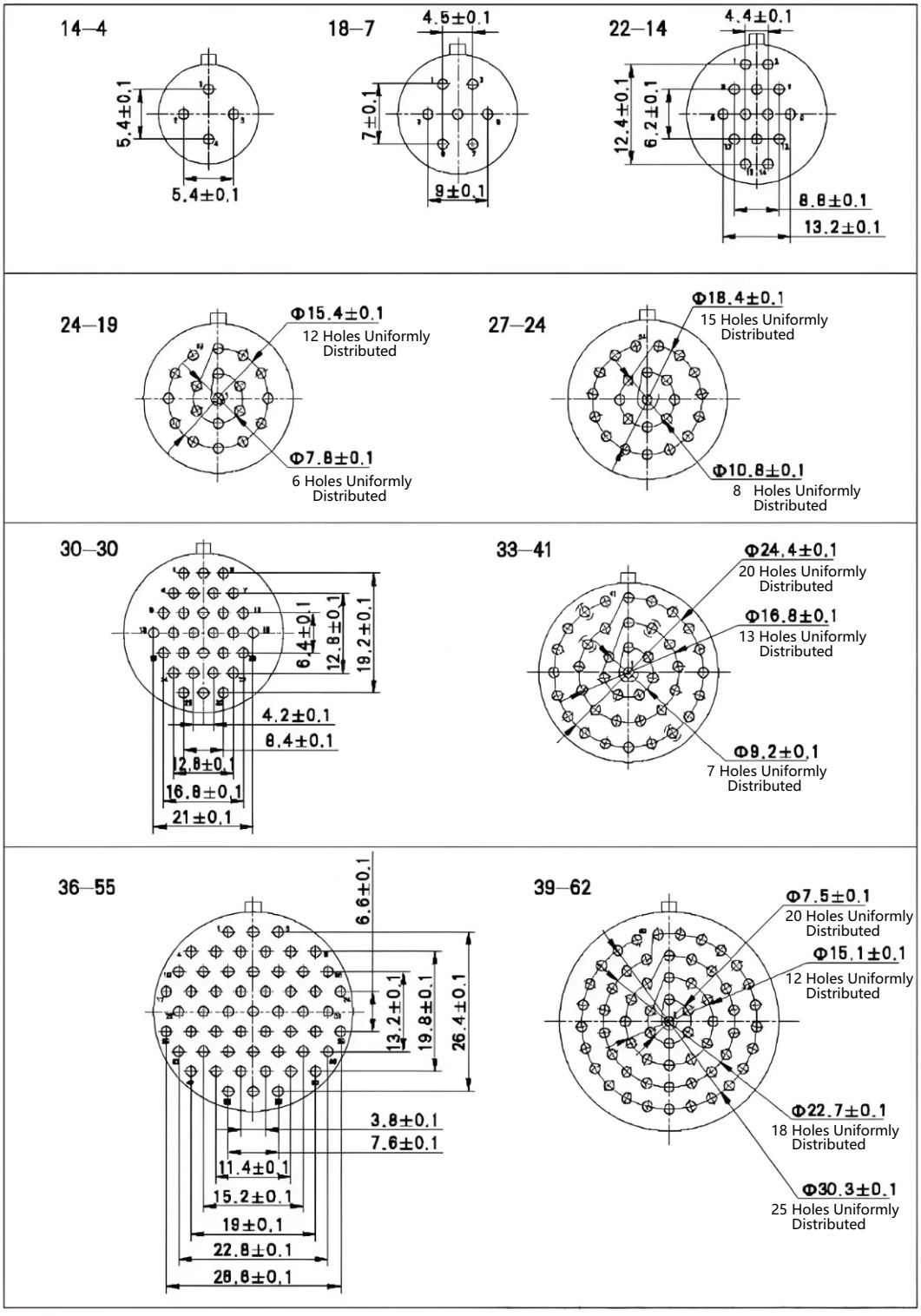


Housing No	D	E
14	16	19
18	20	21.5
22	24	24
24	26	26
27	29	28
30	32	30
33	35	32.5
36	38	34
39	41	36

XC-S-M Nut-Fixed Through-Wall Sealed Adapter (Socket Outside the Panel, Pin Inside the Panel)

Housing No				
14	1 	2 	3 	4 ★ 
18	4 	5 	7 ★ 	
22	10 	14 ★ 		
24	6 	12 	19 ★ 	
27	12 	19 	24 ★ 	
30	15 	19 	22 	30 ★ 
33	22 	27 	41 ★ 	
36	40 	41 	55 ★ 	
39	18 	35 	36 	46 
	47 	51 	62 ★ 	○ Φ1.0 Contact ◔ Φ1.5 Contact ◑ Φ2.0 Contact ◕ Φ3.0 Contact ★ XCB Series Button Arrangement

XCB Printed Circuit Board Wiring Recommended Dimension Diagram
(It is recommended that the minimum diameter of the small holes on the printed circuit board be ∅1.2mm)



GJB598 Series I (MIL-C-26482 Series I) Electrical Connectors

The pictures are for reference only

GJB598 Series I (MIL-C-26482 Series I) Electrical Connectors

Product Overview

- Complies with GJB598 (MIL-C-26482) Series I standards
- Bayonet-type quick connection
- Contact termination is mostly welding
- Small size, high density, and excellent environmental resistance
- Widely used in various military and civilian equipment

Application:The product is used for circuit signal connection.
Operating Environment:
The product is applicable to various military and civilian environments, and is resistant to humidity, salt spray, mold, rain, dust, etc.

Main Technical Performance

Mechanical Performance:

- Housing Material: Aluminum alloy, stainless steel
- Plating:
  Unmarked: Cadmium-plated (olive brown), conductive housing
  Type L: Electroless nickel-plated, conductive housing
  Type A: Black anodized, non-conductive housing
  Type B: Cadmium-plated (military green), conductive housing
  Type S: Stainless steel passivated, conductive housing
  Type BW: Cadmium-plated (brown-green), conductive housing
- Insulator Material: Thermosetting plastic or thermoplastic plastic
- Wire Seal & Gasket Material: Silicone rubber
- Contact Material: Copper alloy with gold-plated surface
- Mechanical Life: ≥ 500 cycles
- Shock: Acceleration 490m/s²
- Random Vibration: Frequency 10 ~ 2000Hz, acceleration 147m/s²

Electrical Performance:

Operating Voltage & Withstand Voltage: V

Working Class	Working Voltage		Withstand Voltage	
	Ⅰ	Ⅱ	Ⅰ	Ⅱ
Sea Level	600	1000	1500	2300
21336m	300	450	375	500

Note: Different contact arrangements correspond to different working classes. For details, refer to the mark in the top-right corner of the contact arrangement.

Contact Resistance and Rated Current of Contacts:

Contact Specification	Working Diameter (mm)	Contact Resistance (mΩ)	Rated Current (A)
20#	Φ1.00	≤5	≤5
16#	Φ1.60	≤2.5	≤2.5
12#	Φ2.40	≤1.5	≤1.5

Insulation Resistance: ≥5000MΩ at 25°C, ≥3MΩ at 125°C

Electrical Performance:

- Operating Temperature: -55°C ~ +125°C
- Relative Humidity: Up to 95±4% at 40°C
- Salt Spray Resistance:
  Cadmium plating: 500h
  Nickel plating types: 48h/96h
- Sealing Performance:
  Wire seal: Pressure difference 2×10^5Pa, leakage rate < 4.6×10^2Pa·cm³/s
  Sintered seal: Pressure difference 1×10^5Pa, leakage rate < 0.1Pa·cm³/s

Model Naming

Ordinary Non-Sealed Plug and Socket

Main Name of Connector Series		JY	3110	E	18-	35	P	N	L
Connector Type	3110 - Wall-mounted panel-mount socket (Types E, F, P, J, R) 3111 - Cable-mount socket (Types E, F, P, J, R) 3112 - Box-type panel-mount socket (Types E, B) 3114 - Nut-clamp mounting socket (Types E, F, P, J, R) 3116 - Straight plug (Types E, F, P, J, R)								
Category	E - Wire seal, conductive housing F - Wire seal (with cable clamp), conductive housing P - Potting seal, conductive housing J - For armored cable sealing, conductive housing B - Printed circuit board type R - Without rear accessories								
Housing No	08-10-12-14-16-18-20-22-24								
Contact Arrangement:	See "Contact Arrangement" diagram								
Contact Type	P - Pin contact S - Socket contact								
Insulator Mounting Position	N, W, X, Y, Z								
Housing Plating	Unmarked - Cadmium-plated (olive brown) L - Electroless nickel plating A - Non-conductive black anodization BW - Cadmium-plated (brown-green) S - Stainless steel passivation B - Cadmium-plated (military green)								

Notes:

1.In the model naming of GJB598 (national military standard), MIL-C-26482 (US military standard), and domestic "YB" series products: except for the main designation, all other parts are identical. The main designation of GJB598 is "JY", that of MIL-C-26482 is "MS", and that of the domestic "YB" series is "YB" — the three are interchangeable and compatible.

2.Models 3210, 3211, 3212, 3214, 3216 correspond to connectors 3110, 3111, 312, 3114, 3116 when crimp contacts are used.

Model Marking Example

JY3110E18-35PNL: JY series 3110 wall-mounted panel socket, wire-seal sealed, conductive housing, 18# housing, 35# contact arrangement, pin contacts, N key position, housing plating: electroless nickel plating.

Through-Wall Sealed Socket

Main Name of Connector Series	JY	3112	R	18-	35	C	N	S
Connector Type	3112 - Box-type panel-mount socket (available in Types R, H)							
Category	R - Indicates potting seal H - Indicates glass sintered seal (only stainless steel passivation is available for housing material and plating)							
Housing No	08-10-12-14-16-18-20-22-24							
Contact Arrangement:	See the "Contact Arrangement" diagram							
Contact Type	C - Through-wall contact							
Insulator Mounting Position	N, W, X, Y, Z							
Housing Plating	Unmarked - Cadmium-plated (olive brown) L - Electroless nickel plating A - Non-conductive black anodization BW - Cadmium-plated (brown-green) S - Stainless steel passivation B - Cadmium-plated (military green)							

Notes:

1.In the model naming of GJB598 (national military standard), MIL-C-26482 (US military standard), and domestic "YB" series products: all elements are identical except for the main designation. The main designation of GJB598 is "JY", that of MIL-C-26482 is "MS", and that of the domestic "YB" series is "YB" — the three are compatible and interchangeable.

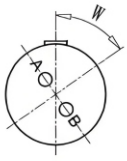
2.The Type H glass-sintered through-wall sealed socket is paired with crimp plugs of the same housing, contact arrangement, and plating. There are two plug types: right plug and left plug. The right plug follows the standard model naming; the left plug adds "-U" to the standard model name. Example: Through-wall socket JY3112H16-26CNS, matching plugs: JY3116E16-26SNS, JY3116E16-26SNS-U.

Model Marking Example

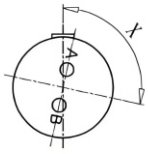
JY3112R18-35CNS: JY series 3112 box-type panel through-wall socket, wire-seal sealed, conductive housing, 18# housing, 35# contact arrangement, N key position, housing material and plating: stainless steel passivation.

Key Position (Insulator Rotates Inside the Housing)

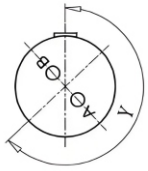
Key Position N



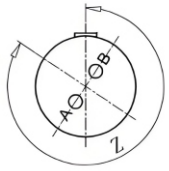
Key Position W



Key Position X



Key Position Y



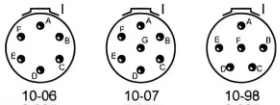
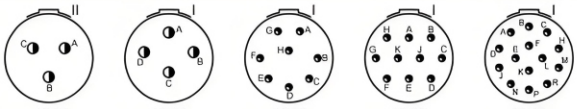
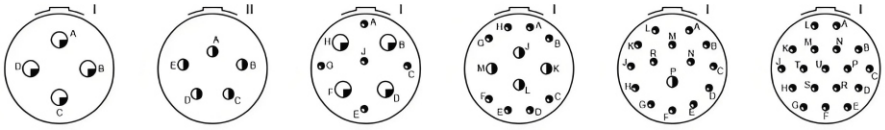
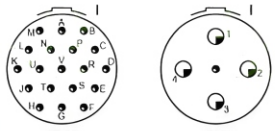
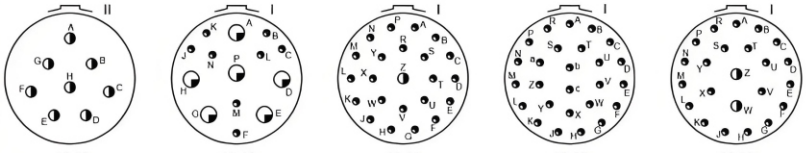
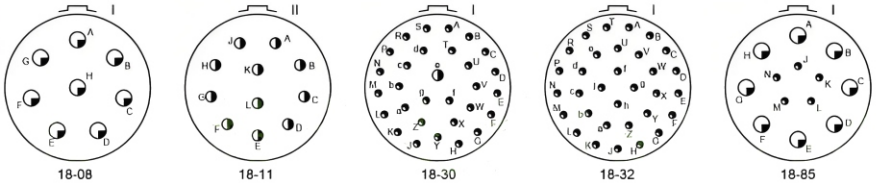
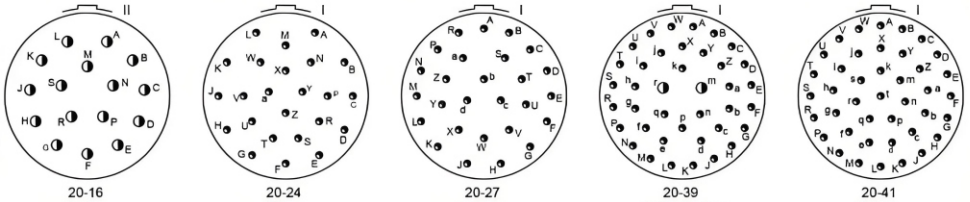
Key Position Z

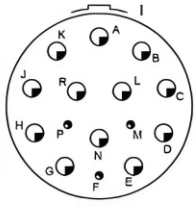
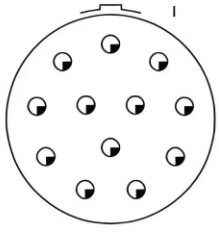
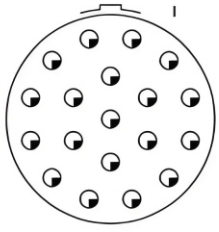
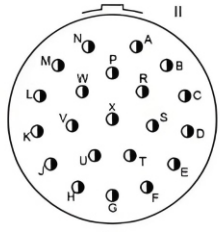
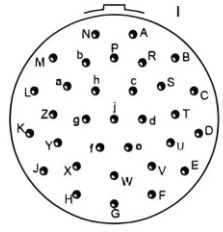
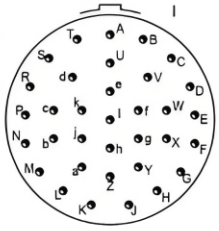
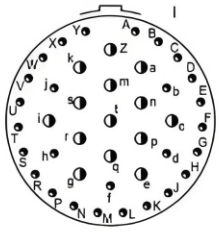
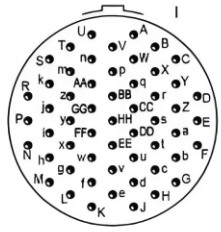
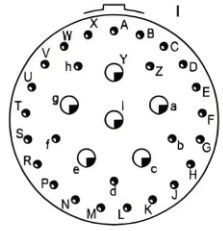
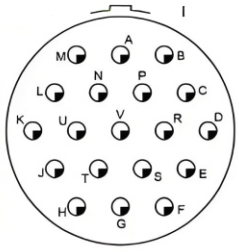
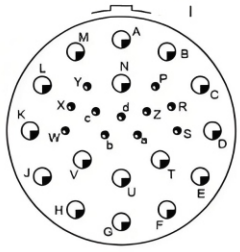
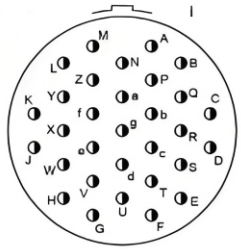
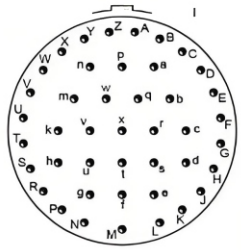
Key Position Angle: Viewed from the front of the pin, the rotation angles are as shown in the diagram above.

Housing No	Arrangement Code	Angle				
		N	W	X	Y	Z
08	08-2	0	58	122	122	–
	08-3	0	60	210	210	-
	08-4	0	45	-	-	-
	08-33	0	90	-	-	-
	08-98	0	-	-	-	-
10	10-6	0	90	-	-	-
	10-7	0	-	-	-	-
	10-98	0	90	180	180	270
12	12-3	0	-	-	-	-
	12-4	0	45	-	-	-
	12-8	0	90	112	112	292
	12-10	0	60	155	155	295
14	14-4	0	45	-	-	-
	14-5	0	40	92	92	273
	14-9	0	15	90	90	240
	14-12	0	43	90	90	-
	14-15	0	17	110	110	234
	14-18	0	15	90	90	270
	14-19	0	30	165	165	-
	14-22	0	45	-	-	-
16	16-8	0	54	152	152	331
	16-14	0	25	78	78	240
	16-23	0	158	270	270	-
	16-26	0	60	-	-	338
	16-99	0	66	156	156	340

Housing No	Arrangement Code	Angle				
		N	W	X	Y	Z
18	18-8	0	180	-	-	-
	18-11	0	62	119	241	340
	18-30	0	180	193	285	350
	18-32	0	85	138	222	265
	18-85	0	45	90	180	240
20	20-16	0	238	318	333	347
	20-24	0	70	145	215	290
	20-27	0	72	144	216	288
	20-39	0	63	144	252	333
	20-41	0	45	126	225	-
	20-90	0	18	60	240	270
22	22-12	0	-	-	-	-
	22-19	0	15	90	225	308
	22-21	0	16	135	175	349
	22-32	0	72	145	215	288
	22-34	0	62	142	218	298
	22-41	0	39	135	264	-
	22-55	0	30	142	226	314
	22-95	0	26	180	266	-
24	24-19	0	30	165	315	-
	24-27	0	45	110	140	225
	24-31	0	90	225	255	-
	24-61	0	90	180	270	324

Contact Arrangement (View of Pin Insulator Mating Surface)

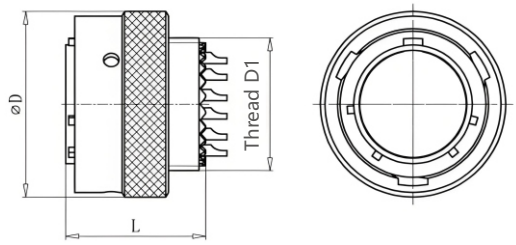
08	 08-02 2-20# 08-03 3-20# 08-04 4-20# 08-33 3-20# 08-98 3-20#
10	 10-06 6-20# 10-07 7-20# 10-98 6-20#
12	 12-03 3-16# 12-04 4-16# 12-08 8-20# 12-10 10-20# 12-14 14-20#
14	 14-04 4-12# 14-05 5-16# 14-09 4-12# 5-20# 14-12 4-16# 8-20# 14-15 1-16# 14-20# 14-18 18-20#
	 14-19 19-20# 14-22 4-12# 1-20#
16	 16-08 8-16# 16-14 8-20# 6-12# 16-23 1-16# 22-20# 16-26 26-20# 16-99 2-16# 21-20#
18	 18-08 8-12# 18-11 11-16# 18-30 1-16# 29-20# 18-32 32-20# 18-85 5-20# 8-12#
20	 20-16 16-16# 20-24 24-20# 20-27 27-20# 20-39 2-16# 37-20# 20-41 41-20#

20	 20-90 3-20# 12-12#
22	 22-12 12-12#
	 22-19 19-12#
	 22-21 21-16#
	 22-32 32-20#
	 22-34 34-20#
	 22-41 14-16# 27-20#
	 22-55 55-20#
	 22-95 6-12# 26-20#
24	 24-19 19-12#
	 24-27 11-20# 16-12#
	 24-31 31-16#
	 24-61 61-20#

Contact Specificatic ● ◑ ◔ 20# 16# 12#

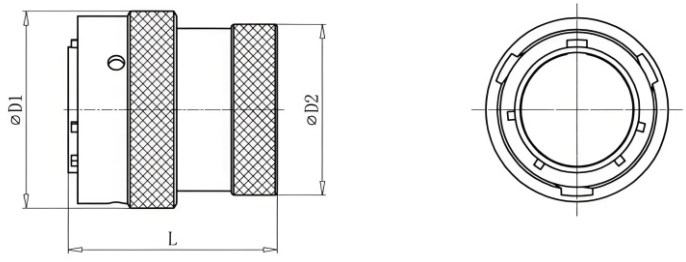
External Dimensions

JY3116R [Straight Plug, Type R]



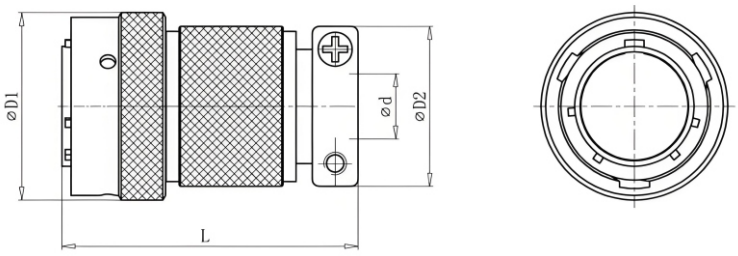
Housing No	L	D	Thread D1 UNEF-2A
08	21.7	18.8	0.4375-28
10	21.7	21.8	0.5625-24
12	21.7	24.8	0.6875-24
14	21.7	28.7	0.8125-20
16	21.7	31.7	0.9375-20
18	21.7	35.6	1.0625-18
20	23.3	38.5	1.1875-18
22	23.3	41.7	1.3125-18
24	23.3	44.7	1.4375-18

JY3116E [Straight Plug, Type E]



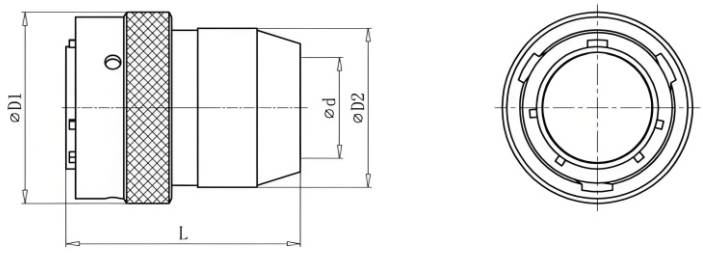
Housing No	L	D1	D2
08	30.7	18.8	15.0
10	30.7	21.8	18.0
12	30.7	24.8	21.7
14	30.7	28.7	24.9
16	30.7	31.7	28.2
18	30.7	35.6	31.2
20	32.3	38.5	34.6
22	32.3	41.7	37.6
24	32.3	44.7	40.9

JY3116F [Straight Plug, Type F]



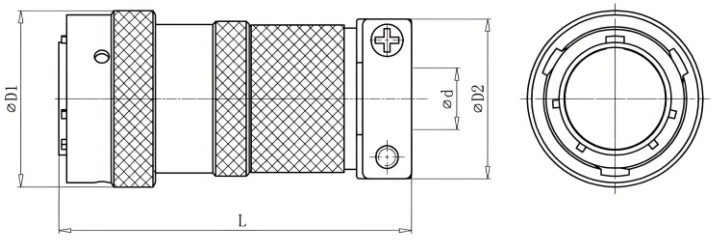
Housing No	L	D1	D2	d max
08	45.5	18.8	20.0	5.5
10	45.5	21.8	22.0	8.15
12	45.5	24.8	24.5	10.0
14	47.0	28.7	26.0	10.0
16	47.0	31.7	30.5	13.0
18	47.0	35.6	35.0	16.0
20	48.0	38.5	35.2	16.0
22	48.0	41.7	41.0	19.3
24	48.0	44.7	44.0	20.6

JY3116P [Straight Plug, Type P]



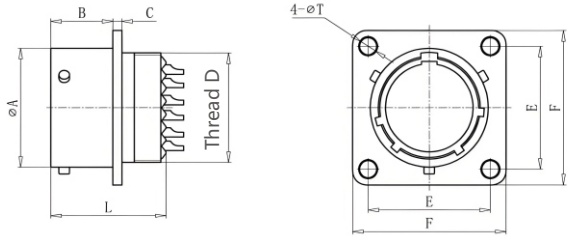
Housing No	L max	D1	D2	d max
08	36.2	18.8	15.3	10.46
10	36.2	21.8	17.7	13.55
12	36.2	24.8	21.7	13.96
14	36.2	28.7	23.9	17.42
16	36.2	31.7	27.0	20.56
18	37.7	35.6	30.5	23.66
20	42.4	38.5	33.6	23.92
22	42.4	41.7	37.1	25.52
24	42.8	44.7	40.0	32.00

JY3116J [Straight Plug, Type J]



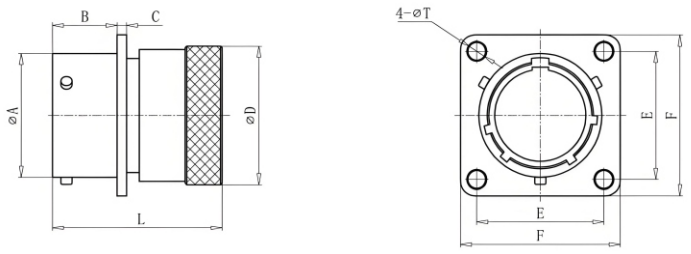
Housing No	L max	D1	D2	d
08	57.6	18.8	20.0	5.4
10	57.6	21.8	20.0	6.4
12	61.2	24.8	24.5	9.8
14	66.0	28.7	26.0	11.7
16	74.7	31.7	30.5	15.1
18	80.5	35.6	35.0	16.4
20	91.6	38.5	35.0	17.3
22	95.6	41.7	35.0	18.2
24	101.2	44.7	38.0	20.0

JY3110R [Wall-Mounted Square Panel Mount Receptacle, Type R]



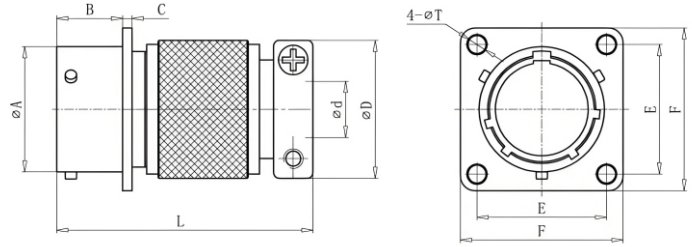
Housing No	L	A	B	C	E	F max	T	Thread D UNEF-2A
08	21.7	12.04	11.7	1.7	15.09	20.99	3.2	0.4375-28
10	21.7	15.00	11.7	1.7	18.26	24.19	3.2	0.5625-24
12	21.7	19.07	11.7	1.7	20.62	26.54	3.2	0.6875-24
14	21.7	22.25	11.7	1.7	23.0	28.89	3.2	0.8125-20
16	21.7	25.43	11.7	1.7	24.61	31.29	3.2	0.9375-20
18	21.7	28.60	11.7	1.7	26.97	33.69	3.2	1.0625-18
20	23.6	31.78	14.3	2.2	29.36	36.89	3.2	1.1875-18
22	23.6	34.95	14.3	2.2	31.75	39.99	3.2	1.3125-18
24	23.6	38.13	15.0	2.2	34.92	43.15	3.8	1.4375-18

JY3110E [Wall-Mounted Square Panel Mount Receptacle, Type E]



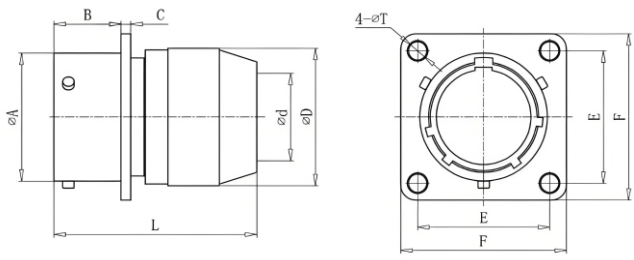
Housing No	L	A	B	C	D	E	F max	T
08	30.7	12.04	11.7	1.7	15.0	15.09	20.99	3.2
10	30.7	15.00	11.7	1.7	18.0	18.26	24.19	3.2
12	30.7	19.07	11.7	1.7	21.7	20.62	26.54	3.2
14	30.7	22.25	11.7	1.7	24.9	23.0	28.89	3.2
16	30.7	25.43	11.7	1.7	28.2	24.61	31.29	3.2
18	30.7	28.60	11.7	1.7	31.2	26.97	33.69	3.2
20	32.6	31.78	14.3	2.2	34.6	29.36	36.89	3.2
22	32.6	34.95	14.3	2.2	37.6	31.75	39.99	3.2
24	32.6	38.13	15.0	2.2	40.9	34.92	43.15	3.8

JY3110F [Wall-Mounted Square Panel Mount Receptacle, Type F]



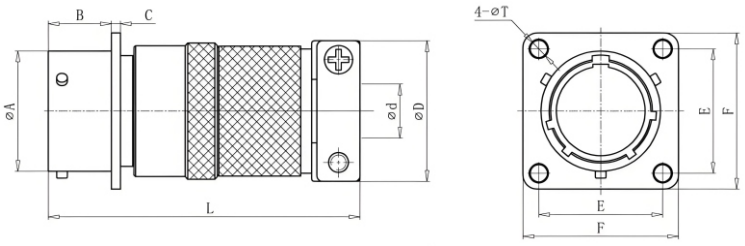
Housing No	L	A	B	C	D	d max	E	F max	T
08	45.5	12.04	11.7	1.7	18.2	5.5	15.09	20.99	3.2
10	45.5	15.00	11.7	1.7	20.2	8.15	18.26	24.19	3.2
12	45.5	19.07	11.7	1.7	23.2	10.0	20.62	26.54	3.2
14	47.0	22.25	11.7	1.7	26.2	10.0	23.0	28.89	3.2
16	47.0	25.43	11.7	1.7	31.2	13.0	24.61	31.29	3.2
18	47.0	28.60	11.7	1.7	34.2	16.0	26.97	33.69	3.2
20	49.9	31.78	14.3	2.2	34.2	16.0	29.36	36.89	3.2
22	49.9	34.95	14.3	2.2	38.2	19.3	31.75	39.99	3.2
24	49.9	38.13	15.0	2.2	41.2	20.6	34.92	43.15	3.8

JY3110P [Wall-Mounted Square Panel Mount Receptacle, Type P]



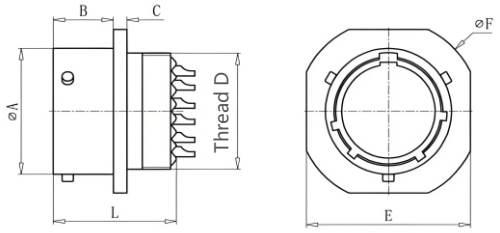
Housing No	L max	A	B	C	D	E	F max	T
08	36.2	12.04	11.7	1.7	15.3	15.09	20.99	3.2
10	36.2	15.00	11.7	1.7	17.7	18.26	24.19	3.2
12	36.2	19.07	11.7	1.7	21.7	20.62	26.54	3.2
14	36.2	22.25	11.7	1.7	23.9	23.0	28.89	3.2
16	36.2	25.43	11.7	1.7	27.0	24.61	31.29	3.2
18	37.7	28.60	11.7	1.7	30.5	26.97	33.69	3.2
20	42.7	31.78	14.3	2.2	33.6	29.36	36.89	3.2
22	42.7	34.95	14.3	2.2	37.1	31.75	39.99	3.2
24	43.1	38.13	15.0	2.2	40.0	34.92	43.15	3.8

JY3110J [Wall-Mounted Square Panel Mount Receptacle, Type J]



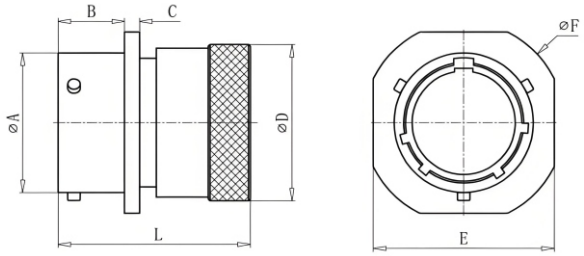
Housing No	L max	A	B	C	D	d max	E	F max	T
08	57.6	12.04	11.7	1.7	20.0	5.5	15.09	20.99	3.2
10	57.6	15.00	11.7	1.7	20.0	8.15	18.26	24.19	3.2
12	61.2	19.07	11.7	1.7	24.5	10.0	20.62	26.54	3.2
14	66.0	22.25	11.7	1.7	26.0	10.0	23.0	28.89	3.2
16	74.7	25.43	11.7	1.7	30.5	13.0	24.61	31.29	3.2
18	80.5	28.60	11.7	1.7	35.0	16.0	26.97	33.69	3.2
20	91.6	31.78	14.3	2.2	35.0	16.0	29.36	36.89	3.2
22	95.6	34.95	14.3	2.2	35.0	19.3	31.75	39.99	3.2
24	101.2	38.13	15.0	2.2	38.0	20.6	34.92	43.15	3.8

JY3111R [Cable Connection Receptacle, Type R]



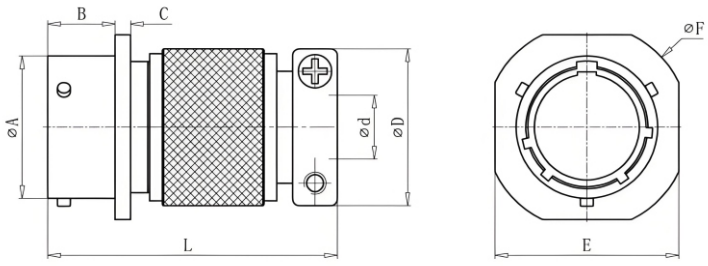
Housing No	L	A	B	C	E	F max	Thread D UNEF-2A
08	21.7	12.04	10.6	2.4	20.99	24.24	0.4375-28
10	21.7	15.00	10.6	2.4	24.19	27.44	0.5625-24
12	21.7	19.07	10.6	2.4	26.54	29.79	0.6875-24
14	21.7	22.25	10.6	2.4	28.89	32.10	0.8125-20
16	21.7	25.43	10.6	2.4	31.29	34.59	0.9375-20
18	21.7	28.60	10.6	2.4	33.69	36.94	1.0625-18
20	23.6	31.78	13.7	2.8	36.89	40.14	1.1875-18
22	23.6	34.95	13.7	2.8	40.00	43.24	1.3125-18
24	23.6	38.13	14.4	2.8	43.29	46.44	1.4375-18

JY3111E [Cable Connection Receptacle, Type E]



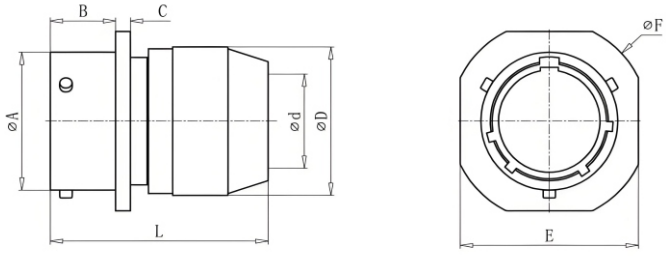
Housing No	L	A	B	C	D	E	F max
08	30.7	12.04	10.6	2.4	15.0	20.99	24.24
10	30.7	15.00	10.6	2.4	18.0	24.19	27.44
12	30.7	19.07	10.6	2.4	21.7	26.54	29.79
14	30.7	22.25	10.6	2.4	24.9	28.89	32.10
16	30.7	25.43	10.6	2.4	28.2	31.29	34.59
18	30.7	28.60	10.6	2.4	31.2	33.69	36.94
20	32.6	31.78	13.7	2.8	34.6	36.89	40.14
22	32.6	34.95	13.7	2.8	37.6	40.00	43.24
24	32.6	38.13	14.4	2.8	40.9	43.29	46.44

JY3111F [Cable Connection Receptacle, Type F]



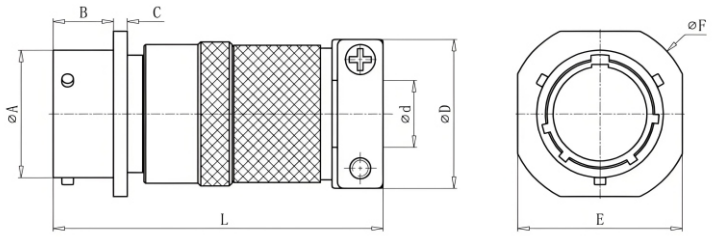
Housing No	L	A	B	C	D	d max	E	F max
08	45.5	12.04	10.6	2.4	18.2	5.5	20.99	24.24
10	45.5	15.00	10.6	2.4	20.2	8.15	24.19	27.44
12	45.5	19.07	10.6	2.4	23.2	10.0	26.54	29.79
14	47.0	22.25	10.6	2.4	26.2	10.0	28.89	32.10
16	47.0	25.43	10.6	2.4	31.2	13.0	31.29	34.59
18	47.0	28.60	10.6	2.4	34.2	16.0	33.69	36.94
20	49.9	31.78	13.7	2.8	34.2	16.0	36.89	40.14
22	49.9	34.95	13.7	2.8	38.2	19.3	40.00	43.24
24	49.9	38.13	14.4	2.8	41.2	20.6	43.29	46.44

JY3111P [Cable Connection Receptacle, Type P]



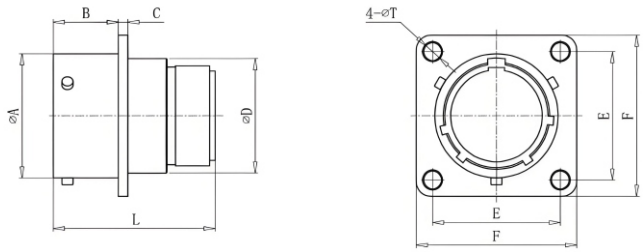
Housing No	L max	A	B	C	D	d max	E	F max
08	36.2	12.04	10.6	2.4	15.3	10.46	20.99	24.24
10	36.2	15.00	10.6	2.4	17.7	13.55	24.19	27.44
12	36.2	19.07	10.6	2.4	21.7	13.96	26.54	29.79
14	36.2	22.25	10.6	2.4	23.9	17.42	28.89	32.10
16	37.7	25.43	10.6	2.4	27.0	20.56	31.29	34.59
18	42.7	28.60	10.6	2.4	30.5	23.66	33.69	36.94
20	42.7	31.78	13.7	2.8	33.6	23.92	36.89	40.14
22	42.7	34.95	13.7	2.8	37.1	25.52	40.00	43.24
24	43.1	38.13	14.4	2.8	40.0	32.00	43.29	46.44

JY3111J [Cable Connection Receptacle, Type J]



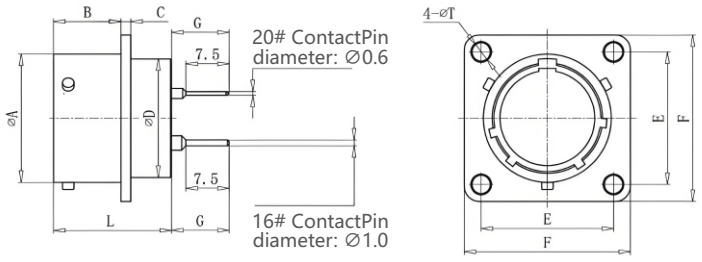
Housing No	L max	A	B	C	D	d max	E	F max
08	57.6	12.04	10.6	2.4	20.0	5.5	20.99	24.24
10	57.6	15.00	10.6	2.4	20.0	8.15	24.19	27.44
12	61.2	19.07	10.6	2.4	24.5	10.0	26.54	29.79
14	66.0	22.25	10.6	2.4	26.0	10.0	28.89	32.10
16	74.7	25.43	10.6	2.4	30.5	13.0	31.29	34.59
18	80.5	28.60	10.6	2.4	35.0	16.0	33.69	36.94
20	91.6	31.78	13.7	2.8	35.0	16.0	36.89	40.14
22	95.6	34.95	13.7	2.8	35.0	19.3	40.00	43.24
24	101.2	38.13	14.4	2.8	38.0	20.6	43.29	46.44

JY3112E [Box-Type Square Panel Mount Receptacle, Type E]



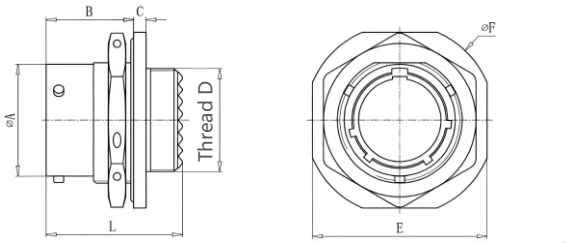
Housing No	L	A	B	C	D max	E	F max	T
08	29.2	12.04	11.7	1.7	10.84	15.09	20.99	3.2
10	29.2	15.00	11.7	1.7	13.99	18.26	24.19	3.2
12	29.2	19.07	11.7	1.7	17.37	20.62	26.54	3.2
14	29.2	22.25	11.7	1.7	20.57	23.0	28.89	3.2
16	29.2	25.43	11.7	1.7	23.72	24.61	31.29	3.2
18	29.2	28.60	11.7	1.7	26.69	26.97	33.69	3.2
20	30.8	31.78	14.3	2.2	29.89	29.36	36.89	3.2
22	30.8	34.95	14.3	2.2	33.04	31.75	39.99	3.2
24	30.8	38.13	15.0	2.2	26.24	34.92	43.15	3.8

JY3112B [Box-Type Square Panel Mount Receptacle, Type B]



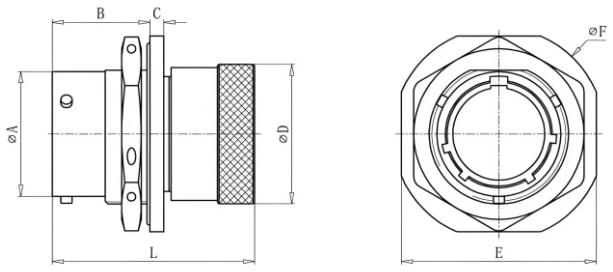
Housing No	L	A	B	C	D max	G max	E	F max	T
08	20.5	12.04	11.7	1.7	10.84	10.5	15.09	20.99	3.2
10	20.5	15.00	11.7	1.7	13.99	10.5	18.26	24.19	3.2
12	20.5	19.07	11.7	1.7	17.37	10.5	20.62	26.54	3.2
14	20.5	22.25	11.7	1.7	20.57	10.5	23.0	28.89	3.2
16	20.5	25.43	11.7	1.7	23.72	10.5	24.61	31.29	3.2
18	20.5	28.60	11.7	1.7	26.69	10.5	26.97	33.69	3.2
20	23.3	31.78	14.3	2.2	29.89	8.6	29.36	36.89	3.2
22	23.3	34.95	14.3	2.2	33.04	8.6	31.75	39.99	3.2
24	23.3	38.13	15.0	2.2	26.24	8.6	34.92	43.15	3.8

JY3114R [Nut-Fastened Mount Receptacle, Type R]



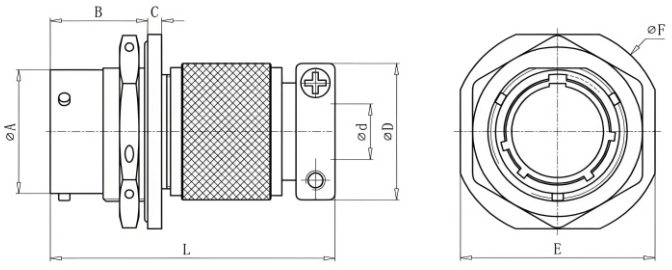
Housing No	L	A	B	C	E	F max	Thread D UNEF-2A
08	27.3	12.04	17.5	2.5	23.94	26.94	0.4375-28
10	27.3	15.00	17.5	2.5	26.94	30.14	0.5625-24
12	27.3	19.07	17.5	2.5	31.74	34.94	0.6875-24
14	27.3	22.25	17.5	2.5	34.94	38.04	0.8125-20
16	27.3	25.43	17.5	2.5	38.24	41.24	0.9375-20
18	27.3	28.60	17.5	2.5	41.34	44.44	1.0625-18
20	32.8	31.78	22.4	3.8	46.04	49.14	1.1875-18
22	32.8	34.95	22.4	3.8	49.24	52.24	1.3125-18
24	32.8	38.13	23.0	3.8	54.74	55.54	1.4375-18

JY3114E [Nut-Fastened Mount Receptacle, Type E]



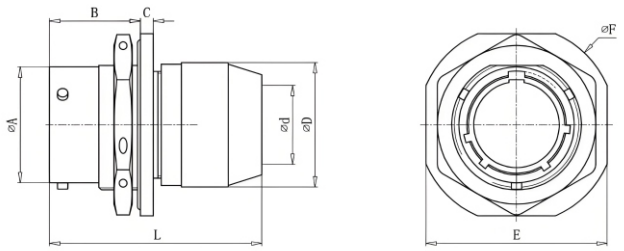
Housing No	L	A	B	C	D	E	F max
08	36.3	12.04	17.5	2.5	15.0	23.94	26.94
10	36.3	15.00	17.5	2.5	18.0	26.94	30.14
12	36.3	19.07	17.5	2.5	21.7	31.74	34.94
14	36.3	22.25	17.5	2.5	24.9	34.94	38.04
16	36.3	25.43	17.5	2.5	28.2	38.24	41.24
18	36.3	28.60	17.5	2.5	31.2	41.34	44.44
20	41.8	31.78	22.4	3.8	34.6	46.04	49.14
22	41.8	34.95	22.4	3.8	37.6	49.24	52.24
24	41.8	38.13	23.0	3. 8	40.9	54.74	55.54

JY3114F [Nut-Fastened Mount Receptacle, Type F]



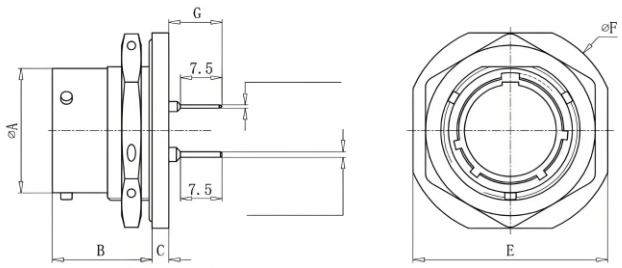
Housing No	L	A	B	C	D	d max	E	F max
08	51.1	12.04	17.5	2.5	18.2	5.5	23.94	26.94
10	51.1	15.00	17.5	2.5	20.2	8.15	26.94	30.14
12	51.1	19.07	17.5	2.5	23.2	10.0	31.74	34.94
14	52.6	22.25	17.5	2.5	26.2	10.0	34.94	38.04
16	52.6	25.43	17.5	2.5	31.2	13.0	38.24	41.24
18	52.6	28.60	17.5	2.5	34.2	16.0	41.34	44.44
20	59.1	31.78	22.4	3.8	34.2	16.0	46.04	49.14
22	59.1	34.95	22.4	3.8	38.2	19.3	49.24	52.24
24	59.1	38.13	23.0	3.8	41. 2	20.6	54.74	55.54

JY3114P [Nut-Fastened Mount Receptacle, Type P]



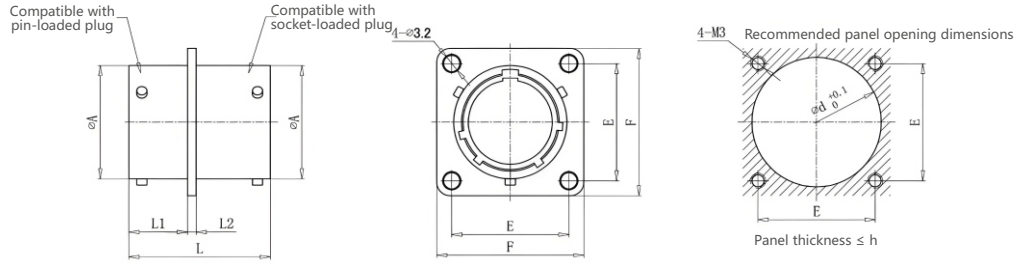
Housing No	L max	A	B	C	D	d max	E	F max
08	41.8	12.04	17.5	2.5	15.3	10.46	23.94	26.94
10	41.8	15.00	17.5	2.5	17.7	13.55	26.94	30.14
12	41.8	19.07	17.5	2.5	21.7	13.96	31.74	34.94
14	41.8	22.25	17.5	2.5	23.9	17.42	34.94	38.04
16	41.8	25.43	17.5	2.5	27.0	20.56	38.24	41.24
18	41.8	28.60	17.5	2.5	30.5	23.66	41.34	44.44
20	51.9	31.78	22.4	3.8	33.6	23.92	46.04	49.14
22	51.9	34.95	22.4	3.8	37.1	25.52	49.24	52.24
24	52.3	38.13	23.0	3.8	40.0	32.00	54.74	55.54

JY3114B [Nut-Fastened Mount Receptacle, Type B]



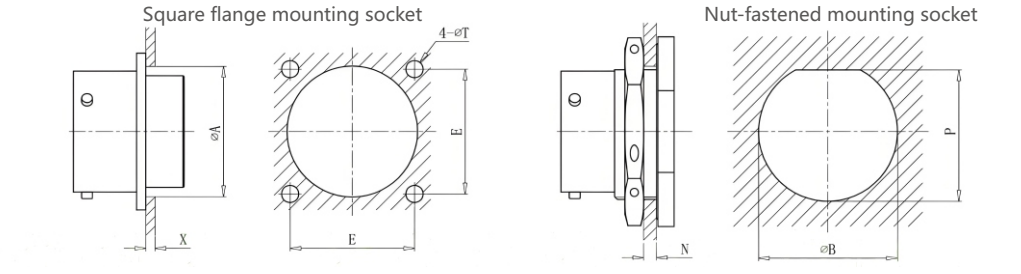
Housing No	A	B	C	G	E	F max
08	12.04	17.9	3.0	9.6	23.94	26.94
10	15.00	17.9	3.0	9.6	26.94	30.14
12	19.07	17.9	3.0	9.6	31.74	34.94
14	22.25	17.9	3.0	9.6	34.94	38.04
16	25.43	17.9	3.0	9.6	38.24	41.24
18	28.60	17.9	3.0	9.6	41.34	44.44
20	31.78	20.4	3.3	8.4	46.04	49.14
22	34.95	20.4	3.3	8.4	49.24	52.24
24	38.13	20.9	3.3	7.9	54.74	55.54

JY3112R



Housing No	A	E	F max	L	L1	L2	d	h
08	12.04	15.09	20.99	27.8	11.5	1.7	14.9	4.0
10	15.00	18.26	24.19	27.8	11.5	1.7	17.7	4.0
12	19.07	20.62	26.54	27.8	11.5	1.7	22.2	4.0
14	22.25	23.00	28.89	27.8	11.5	1.7	25.4	4.0
16	25.43	24.61	31.29	27.8	11.5	1.7	28.5	4.0
18	28.60	26.97	33.69	27.8	11.5	1.7	31.8	4.0
20	31.78	29.36	36.89	31.0	14.1	2.5	34.8	4.7
22	34.95	31.75	39.99	31.0	14.1	2.5	38.1	4.7
24	38.13	34.92	43.15	31.0	14.1	2.5	41.2	2.8

Recommended Panel Opening Dimensions for the Socket



Housing No	E	E	T	X max	B	P	N
08	15.55	15.09	3.2	2.9	14.60	13.75	1.8~5.7
10	18.80	18.26	3.2	2.9	17.75	16.95	1.8~5.7
12	22.15	20.62	3.2	2.9	22.50	21.50	1.8~5.7
14	25.30	23.00	3.2	2.9	25.70	24.20	1.8~5.7
16	28.45	24.61	3.2	2.9	28.85	27.35	1.8~5.7
18	31.65	26.97	3.2	2.9	32.05	30.55	1.8~5.7
20	34.80	29.36	3.2	5.5	35.20	33.70	1.8~8.6
22	38.00	31.75	3.2	5.5	38.40	36.90	1.8~9.6
24	41.20	34.92	3.8	5.5	41.55	40.05	1.8~9.5

GJB598 Series Ⅱ (MIL-C-26482 Series Ⅱ) Electrical Connectors

The pictures are for reference only

GJB598 Series Ⅱ (MIL-C-26482 Series Ⅱ) Electrical Connector

Product Overview

- Complies with GJB598 (MIL-C-26482) Series Ⅱ standards
- Bayonet-type quick connection
- Removable gold-plated crimp contacts
- High contact density
- RFI (Radio Frequency Interference) shielded plug
- Mating interface sealing
- Widely used in various military and civilian equipment

Application: Used for circuit signal connection

Operating Environment: Suitable for various military and civilian environments; resistant to humidity, salt spray, mold, rain, sand and dust, etc.

Main Technical Performance

- Main Technical Performance:
- Housing Material: Aluminum Alloy
- Plating:
  Type W: Cadmium-plated (olive brown), conductive housing
  Type A: Black anodized, non-conductive housing
  Type S: Stainless steel passivated, conductive housing
- Insulator Material: Thermosetting Plastic
- Contact Material: Copper alloy (gold-plated surface), crimp-type removable
- Shock: 3ms half-sine wave, acceleration peak 300g
  Random Vibration: Frequency 10 ~ 2000Hz, power
- spectral density 1.0G²/Hz
  Electrical Performance:

Type L: Chemically nickel-plated, conductive housing
Type B: Cadmium-plated (military green), conductive housing
Type BW: Cadmium-plated (brownish green), conductive housing
Wire sealing and gasket material: Silicone rubber
Mechanical life: 500 cycles (250 cycles for JY3475 shielded plug)

Operating Voltage and Withstand Voltage: V

Working Class	Working Voltage		Withstand Voltage	
	Ⅰ	Ⅱ	Ⅰ	Ⅱ
Sea Level	600	1000	1500	2300
21336m	300	450	375	500

Note: Different contact arrangements correspond to different operating classes; please refer to the mark in the top right corner of the contact arrangement for details.

Contact Resistance and Rated Current of Contacts:

Contact Specification	Working Diameter (mm)	Contact Resistance (mΩ)	Rated Current (A)
20#	Φ1.00	≤5	≤7.5
16#	Φ1.60	≤2.5	≤13
12#	Φ2.40	≤1.5	≤23

Insulation Resistance: ≥5000MΩ at 25°C; ≥500MΩ at 200°C

Environmental Performance:

- Operating Temperature: -55°C ~ +175°C (Type W); -55°C ~ +200°C (Type L, Type A, Type S)
- Relative Humidity: Up to 94±4% at 65°C
- Salt Spray Resistance: 500h (Type W); 96h (Type L); 48h (Type A); 1000h (Type S)
- Radio Frequency Interference (RFI) Resistance: Frequency 100~1000MHz, leakage attenuation 65~45dB (JY3475 plug)
- Fluid Resistance: Resistant to 12 types of fluids including aviation gasoline, refrigeration oil, and lubricating oil (Type L)

Web: www.anknor.com Email: Info@anknor.com

Model Naming

General Non-Sealed Plug and Socket

Main Name of Connector Series	JY	3474	L	18-	35	P	N
Connector Type:	3470 – Narrow Flange Mounting Socket 3474 – Nut-Mounted Socket 3475 – RFI-Shielded Plug 3476 – Plug						
Housing Plating:	W – Cadmium-plated (olive brown) L – Chemical Nickel-plated A – Non-conductive Black Anodized S – Stainless Steel Passivated B – Cadmium-plated (military green) BW – Cadmium-plated (brownish green)						
Housing Number:	08-10-12-14-16-18-20-22-24						
Contact Arrangement:	See the "Contact Arrangement" diagram						
Contact Type:	P – Pin Contact S – Socket Contact						
Key Position:	N – Normal Key Position W, X, Y, Z – Alternate Key Positions						

Note:

1.In the model naming of the national military standard GJB598, U.S. military standard MIL-C-26482, and domestic "YB" series products, all elements are identical except for the main designation. The main designation of GJB598 is "JY", that of MIL-C-26482 is "MS", and that of the domestic "YB" series is "YB" — the three are compatible and interchangeable.

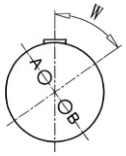
2.The JY3475 RFI-shielded plug cannot use the black anodized plating.

Model Marking Example

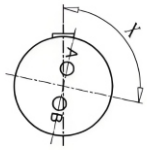
JY3474L18-35PN: JY Series 3474 nut-mounted socket; housing material and plating: aluminum alloy with chemical nickel plating; 18# housing; 35# contact arrangement; pin contact; N key position.

Key Position (Insulator Rotates Inside the Housing)

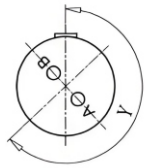
Key Position N



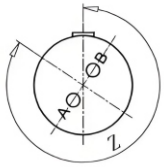
Key Position W



Key Position X



Key Position Y



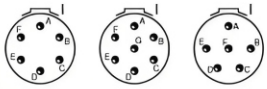
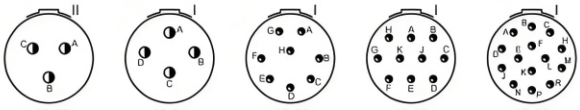
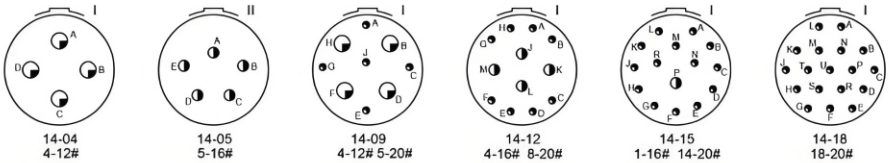
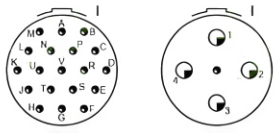
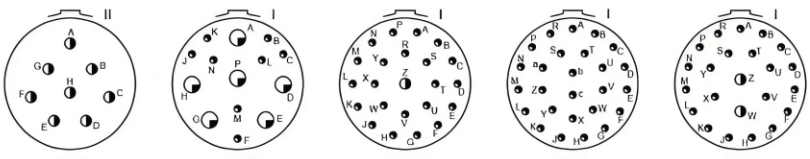
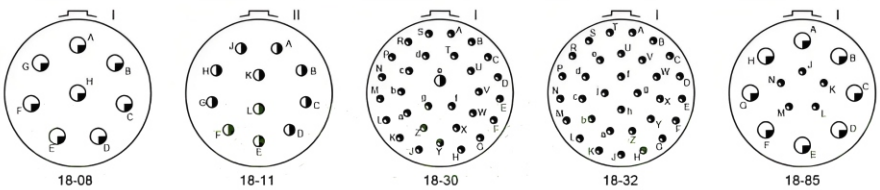
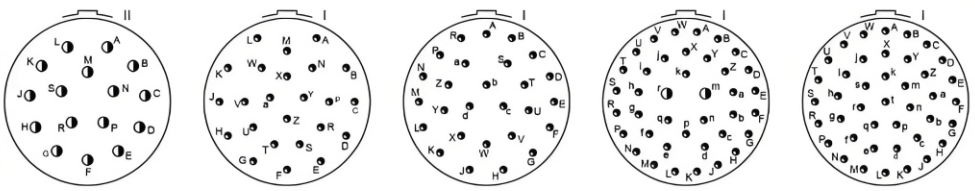
Key Position Z

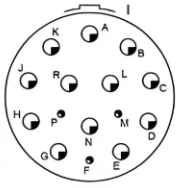
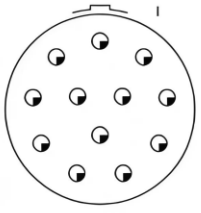
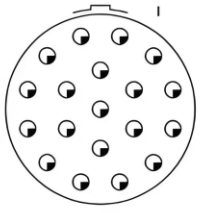
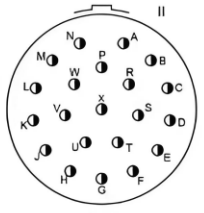
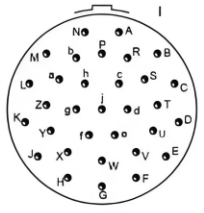
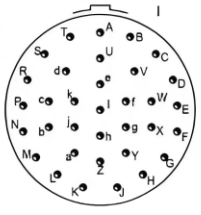
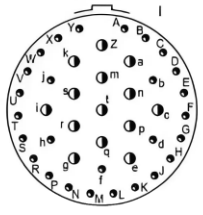
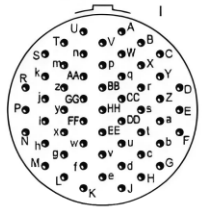
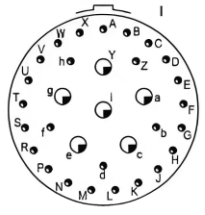
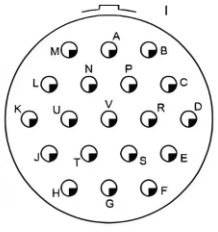
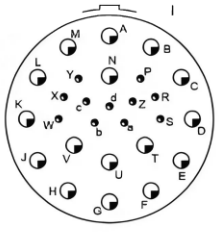
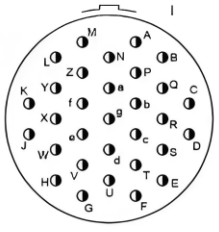
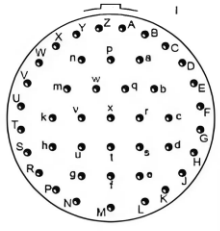
Key Position Angle: Viewed from the front of the pin, the rotation angles are as shown in the diagram above.

Housing No	Arrangement Code	Angle				
		N	W	X	Y	Z
08	08-2	0	58	122	122	–
	08-3	0	60	210	210	-
	08-4	0	45	-	-	-
	08-33	0	90	-	-	-
	08-98	0	-	-	-	-
10	10-6	0	90	-	-	-
	10-7	0	-	-	-	-
	10-98	0	90	180	180	270
12	12-3	0	-	-	-	-
	12-4	0	45	-	-	-
	12-8	0	90	112	112	292
	12-10	0	60	155	155	295
14	14-4	0	45	-	-	-
	14-5	0	40	92	92	273
	14-9	0	15	90	90	240
	14-12	0	43	90	90	-
	14-15	0	17	110	110	234
	14-18	0	15	90	90	270
	14-19	0	30	165	165	-
	14-22	0	45	-	-	-
16	16-8	0	54	152	152	331
	16-14	0	25	78	78	240
	16-23	0	158	270	270	-
	16-26	0	60	-	-	338
	16-99	0	66	156	156	340

Housing No	Arrangement Code	Angle				
		N	W	X	Y	Z
18	18-8	0	180	-	-	-
	18-11	0	62	119	241	340
	18-30	0	180	193	285	350
	18-32	0	85	138	222	265
	18-85	0	45	90	180	240
20	20-16	0	238	318	333	347
	20-24	0	70	145	215	290
	20-27	0	72	144	216	288
	20-39	0	63	144	252	333
	20-41	0	45	126	225	-
	20-90	0	18	60	240	270
22	22-12	0	-	-	-	-
	22-19	0	15	90	225	308
	22-21	0	16	135	175	349
	22-32	0	72	145	215	288
	22-34	0	62	142	218	298
	22-41	0	39	135	264	-
	22-55	0	30	142	226	314
	22-95	0	26	180	266	-
24	24-19	0	30	165	315	-
	24-27	0	45	110	140	225
	24-31	0	90	225	255	-
	24-61	0	90	180	270	324

Contact Arrangement (View of the Mating Surface of the Pin Insulator)

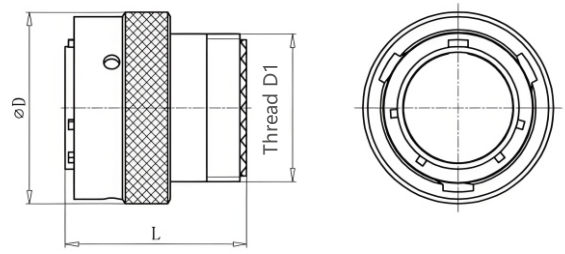
08	 08-03 3-20# 08-02 2-20# 08-04 4-20# 08-33 3-20# 08-98 3-20#
10	 10-06 6-20# 10-07 7-20# 10-98 6-20#
12	 12-03 3-16# 12-04 4-16# 12-08 8-20# 12-10 10-20# 12-14 14-20#
14	 14-04 4-12# 14-05 5-16# 14-09 4-12# 5-20# 14-12 4-16# 8-20# 14-15 1-16# 14-20# 14-18 18-20#
	 14-19 19-20# 14-22 4-12# 1-20#
16	 16-08 8-16# 16-14 8-20# 6-12# 16-23 1-16# 22-20# 16-26 26-20# 16-99 2-16# 21-20#
18	 18-08 8-12# 18-11 11-16# 18-30 1-16# 29-20# 18-32 32-20# 18-85 5-20# 8-12#
20	 20-16 16-16# 20-24 24-20# 20-27 27-20# 20-39 2-16# 37-20# 20-41 41-20#

20	 20-90 3-20# 12-12#
22	 22-12 12-12#  22-19 19-12#  22-21 21-16#  22-32 32-20#
	 22-34 34-20#  22-41 14-16# 27-20#  22-55 55-20#  22-95 6-12# 26-20#
24	 24-19 19-12#  24-27 11-20# 16-12#  24-31 31-16#  24-61 61-20#

Contact Specificatic ● ◑ ◔ 20# 16# 12#

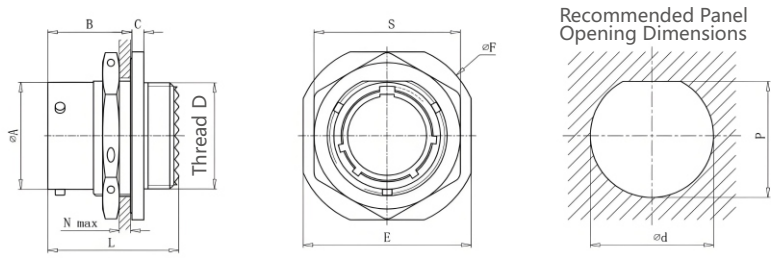
Outline Dimensions

JY3475/JY3476 Plug



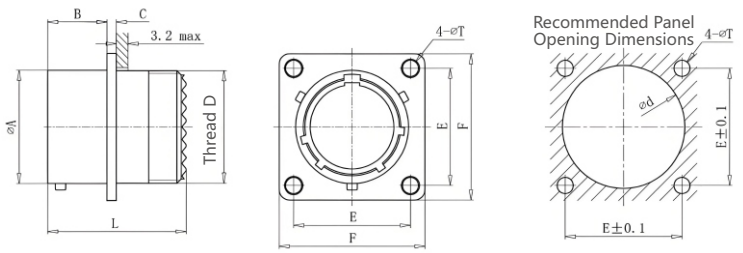
Housing No	L	D	Thread D1 UNEF-2A
08	27.3	18.8	0.5000-20
10	27.3	21.8	0.6250-24
12	27.3	24.8	0.7500-20
14	27.3	28.7	0.8750-20
16	27.3	31.7	1.0000-20
18	27.3	35.6	1.0625-18
20	29.0	38.5	1.1875-18
22	29.0	41.7	1.3125-18
24	29.0	44.7	1.4375-18

JY3474 Nut-Mounted Socket



Housing Number	L	A	B	C	E	F	S	N	d	P	Thread D UNEF-2A
08	27.3	12.04	17.5	2.5	24.0	27.2	19.2	4.8	14.6	13.7	0.5000-20
10	27.3	15.00	17.5	2.5	27.0	30.4	22.5	4.8	17.8	16.9	0.6250-24
12	27.3	19.07	17.5	2.5	32.0	35.2	27.9	4.8	22.8	21.0	0.7500-20
14	27.3	22.25	17.5	2.5	35.0	38.3	30.5	4.8	25.7	24.1	0.8750-20
16	27.3	25.43	17.5	2.5	38.2	41.5	33.6	4.8	28.8	27.3	1.0000-20
18	27.3	28.60	17.5	2.5	41.34	44.44	36.8	4.8	32.1	30.5	1.0625-18
20	29.0	31.78	19.0	3.3	46.04	49.14	40.0	6.4	35.2	33.7	1.1875-18
22	29.0	34.95	19.0	3.3	49.24	52.24	43.2	6.4	38.4	36.8	1.3125-18
24	29.0	38.13	19.0	3.3	52.74	55.54	46.3	5.6	41.6	40.1	1.4375-18

JY3470 Narrow Flange Mounting Socket



Housing Number	L	A	B	C	E	F	T	d	Thread D UNEF-2A
08	27.3	12.04	11.7	1.8	15.1	21.0	3.2	14.4	0.5000-20
10	27.3	15.00	11.7	1.8	18.3	24.2	3.2	17.3	0.6250-24
12	27.3	19.07	11.7	1.8	20.6	26.5	3.2	21.9	0.7500-20
14	27.3	22.25	11.7	1.8	23.0	28.7	3.2	25.1	0.8750-20
16	27.3	25.43	11.7	1.8	24.6	31.2	3.2	28.2	1.0000-20
18	27.3	28.60	11.7	1.8	27.0	33.7	3.2	31.4	1.0625-18
20	29.0	31.78	14.3	2.7	29.4	36.9	3.2	34.6	1.1875-18
22	29.0	34.95	14.3	2.7	31.8	40.0	3.2	37.7	1.3125-18
24	29.0	38.13	15.2	2.7	34.9	43.3	3.8	41.0	1.4375-18

GJB 598 Crimp Contacts for Series Ⅱ

Contact Specifications	Working Diameter	Pin Color Code	Socket Color Code	Crimp Barrel Inner Diameter (mm)	Crimp Barrel Outer Diameter (mm)	Compatible Wire Cross-Section (mm^2)	Compatible American Wire Gauge (AWG)	Compatible Wire Insulation Outer Diameter (mm)	Removal Tool Code	Crimping Tool
20#	Φ1.00	Brown-Brown-Black	Brown-Brown-Green	1.2	1.98	0.2 0.3 0.5	24 22 20	1.02~2.11	M81969/14-11	YJQ-02 XDWQ-01
16#	Φ1.60	Brown-Brown-Brown	Brown-Brown-Blue	1.7	2.6	0.5 0.8 1.0 1.2	20 18 16	1.35~2.62	M81969/14-03	XCXY-01/DWQ-09
12#	Φ2.4	Brown-Brown-Orange	Brown-Brown-Gray	2.5	3.8	2.0 2.0 3.0	14 12	2.46~4.01	M81969/14-04	XCXY-01/DWQ-09

Note: For the 20# specification contact compatible with the 08-04 contact point, the locator code to be selected is: XDWQ-43Z.

Web: www.anknor.com Email: Info@anknor.com

Rear Accessories (Applicable to GJB598 Series Ⅱ Electrical Connectors)

Rear accessories compliant with GJB1784 (equivalent to MIL-C-85049) are only compatible with GJB598 Series Ⅱ

Connector Type	Compatible Cable Accessory Model
JY598 Series Ⅰ R-type plugs and sockets (others come with accessories or cannot be equipped with accessories)	Shielded, tensile, rainproof accessories, e.g.: 08FF8B Ⅰ -6.4
JY598 Series Ⅱ Plugs and Sockets	J1784/52, J1784/31, J1784/51 accessories J1784A/52-***NA, J1784A/52-***NB accessories TJ1784/60, TJ1784/26 accessories Shielded, tensile, rainproof accessories, e.g.: 08FF8B Ⅱ -6.4

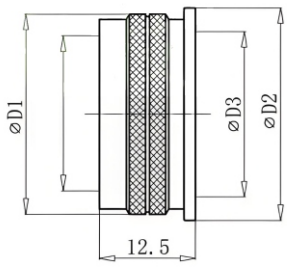
Model Naming

Series Main Name	J1784	31	10	N
Series Code	-31-I: Tail Nut -52-II: Straight Cable Clamp -51-III: Bent Cable Clamp			
Accessory Housing No	08-10-12-14-16-18-20-22-24			
Housing Plating	W: Cadmium-plated (Olive Brown) N: Electroless Nickel Plating A: Black Anodization W2: Cadmium-plated (Military Green) S: Stainless Steel Passivation BW: Cadmium-plated (Brown-Green)			

Notes: 1.For the model naming of national military standard GJB 1784 and U.S. military standard MIL-C-85049, they are identical except for the basic component number. The basic component number of GJB1784 is "J1784", while the main designation of MIL-C-85049 is "M85049" — the two are interchangeable.

2.The matching screws for the accessories are stainless steel cross-recessed pan head screws. If stainless steel aviation standard screws are required, add "(HB)" after the model number.

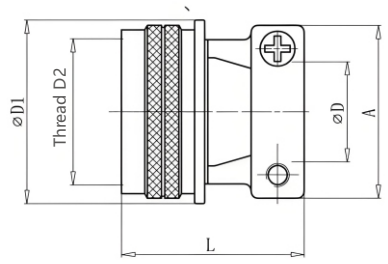
J1784/31-I Type Tail Nut



Housing No	D1	D2	D3	Thread D4 UNEF
08	16.5	17.6	7.9	0.5000-20
10	19.5	20.6	10.8	0.6250-24
12	22.5	23.6	13.6	0.7500-20
14	26.5	27.6	16.9	0.8750-20
16	29.5	30.3	20.1	1.0000-20
18	32.5	33.3	22.1	1.0625-18
20	36.0	36.8	25.2	1.1875-18
22	38.5	39.3	28.3	1.3125-18
24	41.7	42.3	31.6	1.4375-18

This anti-rotation accessory tightens and seals the cable body to ensure the environmental resistance performance of the connector. It cannot clamp cables and is used in general environmental conditions.

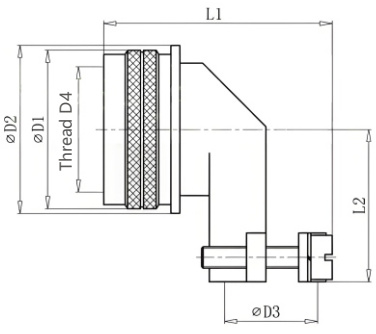
J1784/52-Ⅱ Type Straight Cable Clamp



Housing Number	D1	Thread D2 UNEF	D	A	L
08	17.6	0.5000-20	2.49~5.94	20	23.6
10	20.6	0.6250-24	3.87~5.94	22	24.6
12	23.6	0.7500-20	4.83~8.33	24.5	26.7
14	27.6	0.8750-20	6.60~11.61	26	27.7
16	30.3	1.0000-20	7.19~15.60	30.5	27.7
18	33.3	1.0625-18	8.26~16.10	35	29
20	36.8	1.1875-18	8.71~17.73	38	30.4
22	39.3	1.3125-18	9.68~20.90	41	32.4
24	42.3	1.4375-18	10.62~21.66	44	34.4

This anti-rotation, cable-clamping accessory can tighten and seal the cable body, and has the function of clamping cables.
It ensures the environmental resistance performance of the connector and is used in scenarios where the cable is subjected to tensile force.

J1784/51-Ⅲ Type Bent Cable Clamp



Housing Number	D1	D2	D3	Thread D4 UNEF	L1max	L2max
08	16.5	17.6	3.2~6.4	0.5000-20	29.0	25.0
10	19.5	20.6	4.0~9.5	0.6250-24	32.0	26.0
12	22.5	23.6	4.8~11.1	0.7500-20	33.5	27.5
14	26.5	27.6	5.5~14.3	0.8750-20	36.5	31.0
16	29.5	30.3	6.4~15.9	1.0000-20	38.5	32.5
18	32.5	33.3	7.9~19.1	1.0625-18	41.5	34.0
20	36.0	36.8	9.5~22.2	1.1875-18	44.5	34.5
22	38.5	39.3	10.3~23.8	1.3125-18	46.0	36.5
24	41.7	42.3	14.3~25.4	1.4375-18	48.0	43.5

This anti-rotation, 90° cable-clamping accessory can tighten and seal the cable body, and has the function of clamping cables at a 90° angle.
It ensures the environmental resistance performance of the connector and is used in scenarios where the cable is subjected to tensile force.

Web: www.anknor.com Email: Info@anknor.com

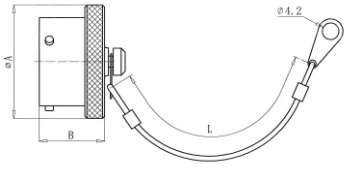
Plug and Receptacle Sealing Cap (Applicable to GJB598 Series I and Series II)

Model Naming:

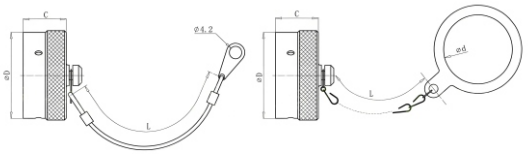
Series Main Name	Jy	3180	-10	C	N	L
Type	JY3180—Plug Sealing Cap (corresponds to U.S. military standard MS3180) JY3181—Receptacle Sealing Cap (corresponds to U.S. military standard MS3181)					
Housing No	08-10-12-14-16-18-20-22-24					
Chain Type	A—Nylon cord with loop (applicable to JY3474 or 3114 receptacles) C—Metal chain; R—Nylon cord N—Metal chain with loop (applicable to JY3474 or 3114 receptacles)					
Housing Plating	W—Cadmium-plated olive brown; N—Electroless nickel plating; A—Black anodization W2—Cadmium-plated military green; S—Stainless steel passivation; BW—Cadmium-plated brown green Unmarked—No plating (only applicable to Jy3181)					
Chain Length	Unmarked—Standard length; L—Chain length 127mm					

External Dimensions

Plug Sealing Cap: JY3180-(MS3180-)



Receptacle Sealing Cap: JY3181-(MS3181-)



Housing No	08	10	12	14	16	18	20	22	24
A max	18.86	21.65	25.92	29.2	32.3	35.4	38.55	41.7	44.7
B max	13.75	13.75	13.75	13.75	13.75	13.75	15.35	15.35	15.35
C max	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	15.5
D max	18.5	21.7	25.3	29.0	31.6	34.8	38.0	41.1	44.2
d min	16.0	18.0	22.8	26.0	29.0	32.5	35.5	38.6	42.0
L max	76.2	76.2	88.9	88.9	88.9	88.9	101.6	101.6	101.6

GJB599 I Series (MIL-DTL-38999 I Series) Electrical Connector

The pictures are for reference only

GJB599 Series I (MIL-DTL-38999 Series I) Electrical Connector

Product Overview

- Complies with GJB599B (MIL-DTL-38999M) Series I standards
- Bayonet quick-connect design, featuring small size, light weight, and high contact density
- EMI/RFI shielding
- 5-keyway orientation mechanism, enabling blind mating and mis-mating prevention
- Receptacles are available in multiple mounting configurations: box mount, wall mount, front mount, rear mount, and nut-clamped mount
- Contacts are removable (crimp-type) with anti-skew design
- 9 housing sizes, with various contact position arrangements
- Resistant to high-intensity vibration
- Outer shells can be configured with different materials and platings to meet diverse environmental requirements
- Mating face and rear end have sealing structures, providing excellent "three-proof" (waterproof, dustproof, corrosion-proof) performance
- Compatible with GJB1784 standard rear accessories

Application: Used for circuit signal connection

Operating Environment: Suitable for complex environments with strong vibration, sand, and humidity

Main Technical Performance

Mechanical Performance:

- Materials:
  Housing: Aluminum alloy, stainless steel, titanium alloy
  Insulator: Thermoset plastic or thermoplastic plastic
  Cable gland and seal ring: Silicone rubber
- Plating:
  Type B: Cadmium-plated military green
  Type E: Stainless steel passivation
  Type F: Electroless nickel plating
  Type FT: Aluminum alloy with gold-plated cadmium surface
  Type TA: Titanium alloy
- Contacts: Copper alloy with gold-plated surface; available in crimp, solder, and printed circuit types
- Mechanical Life: ≥500 mating cycles
- Vibration:
  Sinusoidal vibration: Frequency 10~2000Hz, acceleration 294m/s²
  Random vibration: Frequency 100~1000Hz, power spectral density 1g²/Hz
- Shock: 3ms half-sine wave, peak acceleration 300g

Electrical Performance:
Contact Resistance and Rated Current of Contacts

Contact Specification	Working Diameter (mm)	Contact Resistance (mΩ)	Rated Current (A)
22D	Φ0.76	≤12	5
20#	Φ1.00	≤5	7.5
16#	Φ1.60	≤2.5	13
12#	Φ2.40	≤1.5	23
10#	Φ3.15	≤1.0	40

Electromagnetic Interference Shielding: At 100MHz ~ 1GHz, the minimum attenuation is 85dB
At 1GHz ~ 10GHz, the minimum attenuation is 50dB

Withstand Voltage: V
(Note: Different contact arrangements have different operating ratings; refer to the letter in the top right corner of the contact arrangement diagram for specific operating ratings)

Operating Rating*	M	N	I	II
Sea Level	1300	1300	1800	2300
21000m	800	800	1000	1000

Insulation Resistance:
≥5000MΩ under normal conditions
≥100MΩ under humid conditions

Electrical Continuity Between Shells:
Type B: ≤2.5mV Types F, FT: ≤1.0mV Types E, TA: ≤50mV

Environmental Performance:

Temperature Range:
Type B: -65°C ~ +175°C Types E, F: -65°C ~ +200°C Salt Spray Resistance:Type B: 500h
Types E, TA: 1000h Type F: 48h/96h Type FT: 96h Relative Humidity: Up to 98% at 40°C
Operating Altitude: ≤30480m
Other Performance:The electrical connector also has excellent resistance to moisture, salt spray, mold, and sand/dust.

Model Naming

Connector Series Designation	JY	27467	T	21	F	35	P	N	H	M1

Connector Type	27467: Plug (only T-type shell) 27466: Wall panel front-mount receptacle (only T-type shell) 27656: Wall panel rear-mount receptacle (only T-type shell) 27496: Box panel front-mount receptacle (only E-type shell) 27505: Box panel rear-mount receptacle (only E-type shell) 27468: Nut-mount receptacle (only T-type shell)
Shell Type	T: Threaded rear, accessory-mountable E: Non-threaded rear, non-accessory-mountable
Shell Size	09-11-13-15-17-19-21-23-25
Material & Plating	B: Aluminum alloy, cadmium-plated (military green) E: Stainless steel passivation C: Aluminum alloy, hard anodized F: Aluminum alloy, electroless nickel-plated Z: Aluminum alloy, zinc-nickel plated T: Aluminum alloy, fluorocarbon polymer coated
Contact Arrangement	Refer to the "Contact Arrangement List"
Contact Type	Crimp & Solder Types: P: Pin S: Socket Printed Circuit Types: PL: Long printed circuit pin SL: Long printed circuit socket PC: Short printed circuit pin SC: Short printed circuit socket
Keying:	N: Standard keying; A, B, C, D: Alternate keying When crimp-type contacts are selected, "N" may be omitted; When other contact types are selected, "N" must be indicated (Only N, A, D keying options are available for shell size 09)
Welded Contact Type	(Applicable only to welded connectors)H: Welded contact
Special Contacts:	M1-16# Coaxial contact M2-12# Coaxial contact M3-12# Shielded contact M4-8# Power contact M5-8# Single coaxial contact M6-8# Dual coaxial contact M7-8# Dual differential contact M8-8# Quad differential contact

Notes:1.For the model naming of China’ s GJB599B and U.S. MIL-DTL-38999M standards: Except for the main designation,all other parts are identical. The main designation for GJB599B is "JY", while for MIL-DTL-38999M it is "MS" — the two are interchangeable and compatible.
2.When high oil resistance is required, the connector’ s sealing material is fluorosilicone rubber; add "C1" to the end of the original model.
3.When the product needs a matching conductive panel rubber pad, add "C2" or "(C2)" to the end of the product model.

Model Marking Examples

JY27467T23F35SN-H: JY series plug; shell with threaded rear (accessory-mountable); shell size 23; shell plating: aluminum alloy with electroless nickel plating; contact arrangement 35; contact type: socket; termination method: welding; keying: N.
Note: Welded contacts are only applicable to welded connectors.
JY27466T19B18PPA-M8: JY series wall panel front-mount receptacle; shell with threaded rear (accessory-mountable); shell size 19; shell plating: aluminum alloy with cadmium plating (military green); contact arrangement 18; contact type: pin; keying: A; 8# contact: 8# quad differential contact.

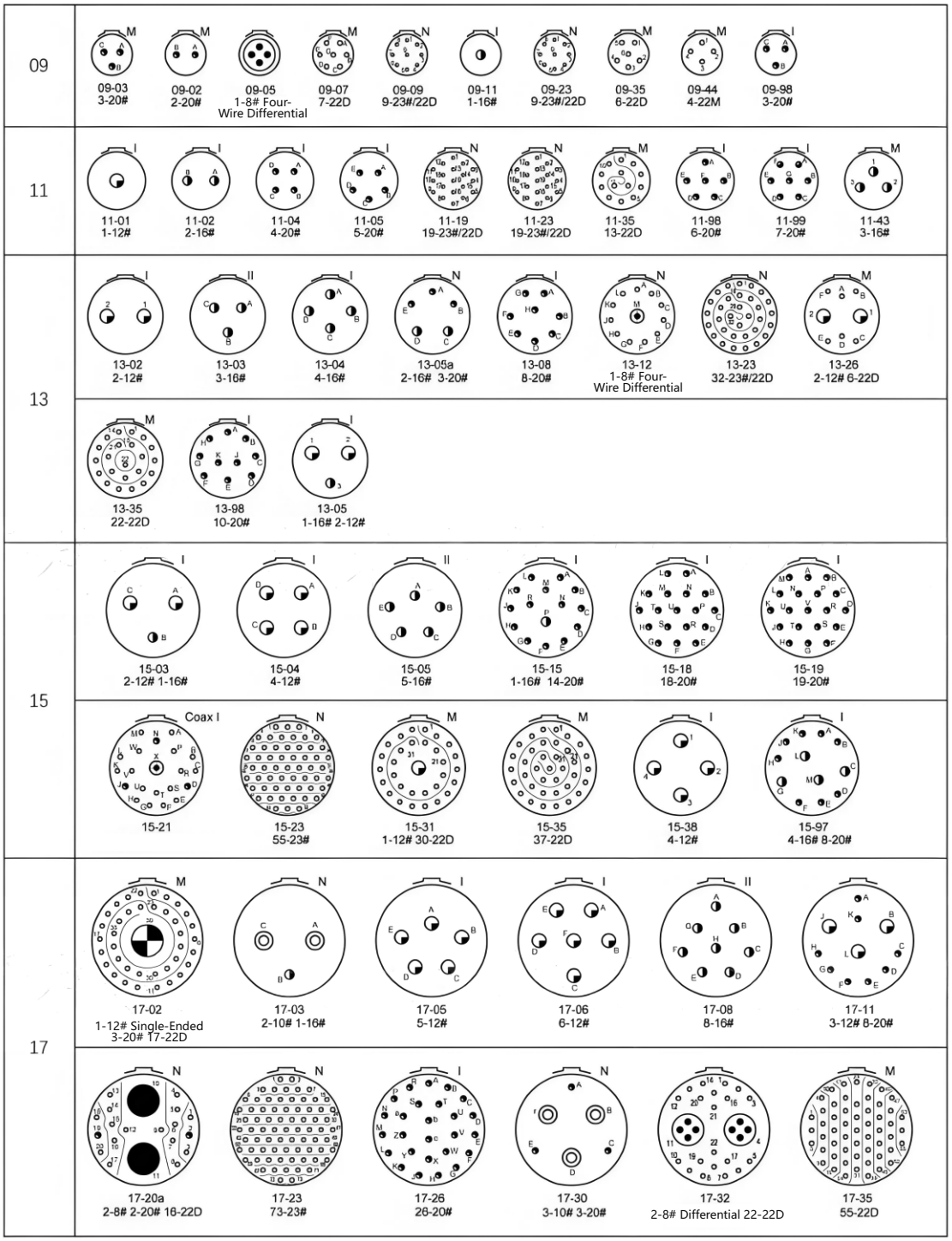
Crimp Contacts:

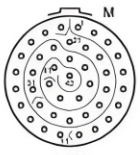
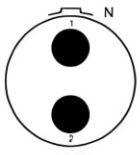
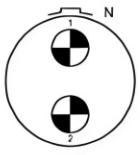
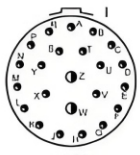
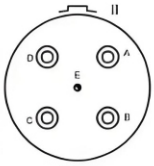
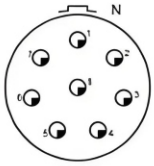
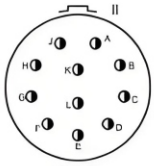
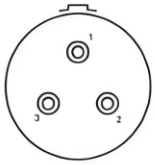
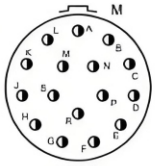
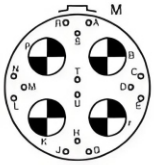
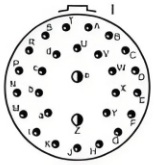
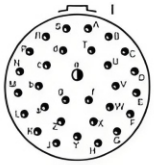
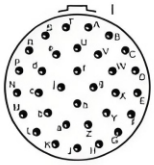
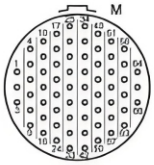
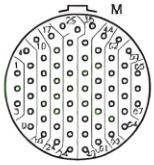
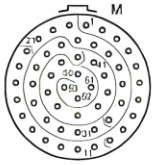
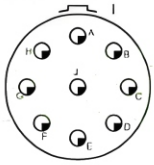
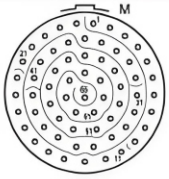
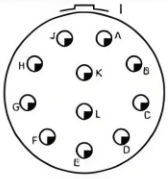
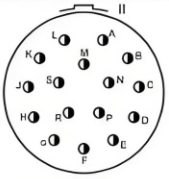
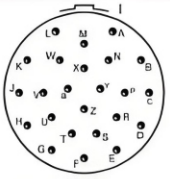
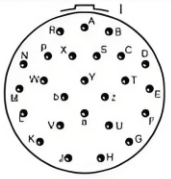
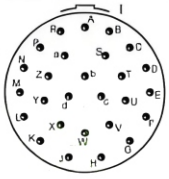
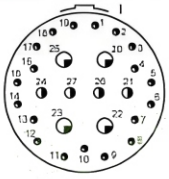
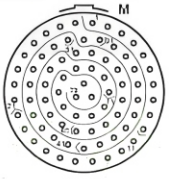
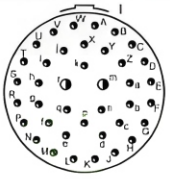
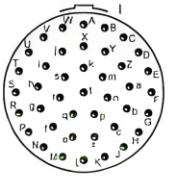
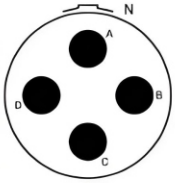
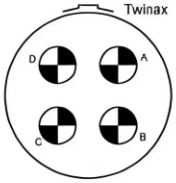
Contact Specifications	Working Diameter	Pin Color Code	Socket Color Code	Crimp Barrel Inner Diameter (mm)	Crimp Barrel Outer Diameter (mm)	Compatible Wire Cross-Section (mm^2)	Compatible US Standard Wire (AWG)	Compatible Wire Insulation Outer Diameter (mm)	Removal Tool Code	Crimping Tool
22D	Φ0.76	Orange-Blue-Black	Orange-Yellow-Gray	0.85	1.20	0.08 0.125 0.2 0.3	28 26 24 22	0.76-1.37	M81969/14-01	YJQ-02
20#	Φ1.00	Orange-Blue-Orange	Orange-Green-Brown	1.17	1.78	0.2 0.3 0.5	24 22 20	1.02-2.11	M81969/14-10	YJQ-02 XCXY-01
16#	Φ1.60	Orange-Blue-Yellow	Orange-Green-Red	1.68	2.62	0.5 0.8 1.0 1.2	20 18 16	1.65-2.77	M81969/14-03	XCXY-01
12#	Φ2.40	Orange-Blue-Green	Orange-Green-Orange	2.49	3.84	2.0 3.0	14 12	2.46-3.61	M81969/14-04	XCXY-01
10#	Φ3.15	Green-Red-Gray	Green-Orange-Purple	3.40	4.65	4.8	10	3.42-4.12	M81969/14-05	XCXY-01 YTQ
8#	Φ3.60	—	—	4.55	6.4	8.37	8	6.4-6.9	M81969/14-12	YTQ

Welded Contacts

Welded Contact Specification	Weld Cup Inner Diameter	Maximum Compatible Wire Gauge (AWG)
22D	∅0.9	22
20#	∅1.1	20
16#	∅1.9	16
12#	∅2.9	12
10#	∅3.6	10
8#	∅4.8	8

Contact Arrangement (Mating Face View of Pin Insulator)



	 17-42 42-22D	 17-62 2-8#	 17-75 2-8# Coaxial	 17-99 2-16# 21-20#	
19	 19-05 1-20# 4-10#	 19-08 8-12#	 19-11 11-16#	 19-13 3-10#	 19-16a 16-16#
	 19-18 4-8# Dual Coaxial 14-22D	 19-28 2-16# 26-20#	 19-30 1-16# 29-20#	 19-32 32-20#	 19-35 66-22D
	 19-45 67-22D	 19-53 53-22D	 19-96 9-12#		
21	 21-02 65-22D	 21-11 11-12#	 21-16 16-16#	 21-24 24-20#	 21-25 25-20#
	 21-27 27-20#	 21-29 4-12# 4-16# 19-20#	 21-35 79-22D	 21-39 2-16# 37-20#	 21-41 41-20#
	 21-48 4-8#	 21-75 4-8# Dual Coaxial			

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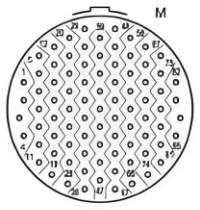

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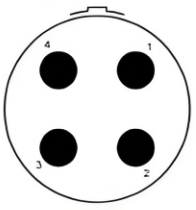

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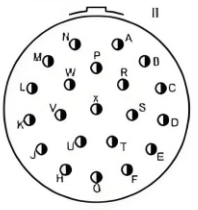

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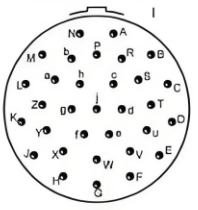

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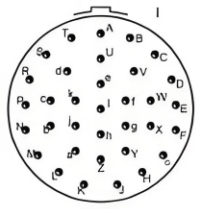

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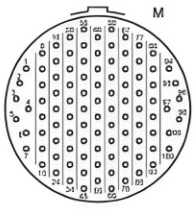

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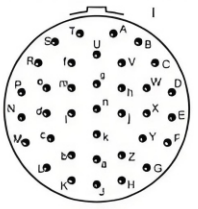

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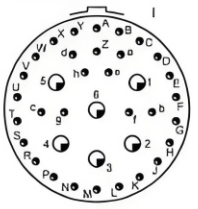

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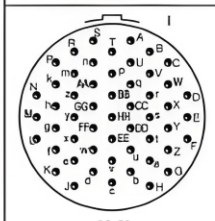

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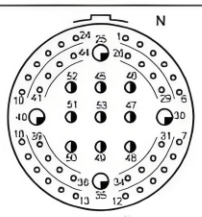

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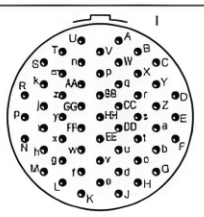

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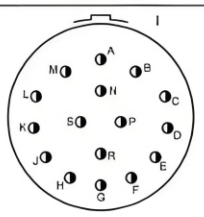

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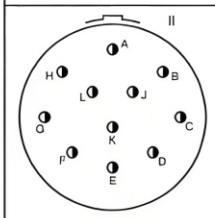

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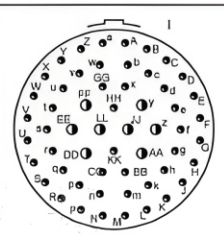
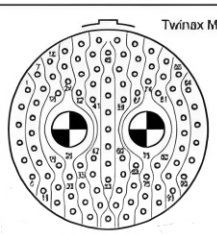
11-16#

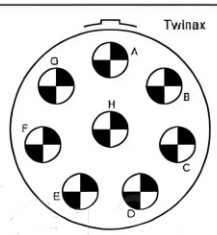
25



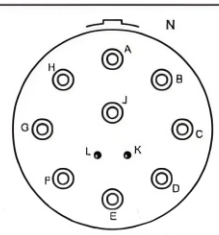
25-04
8-16# 48-20#



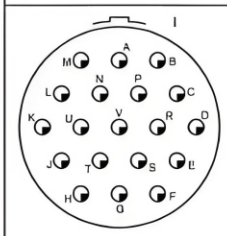
25-07
2-8# Differential 22-22D



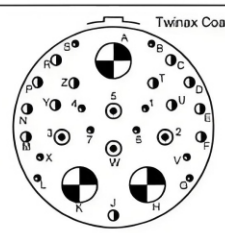
25-08 / 25-10
8-8# Dual Coaxial



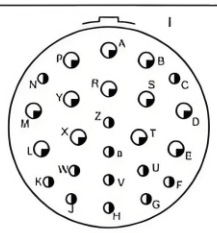
25-11
9-10# 2-20#



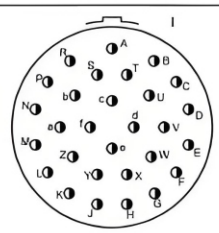
25-19
19-12#



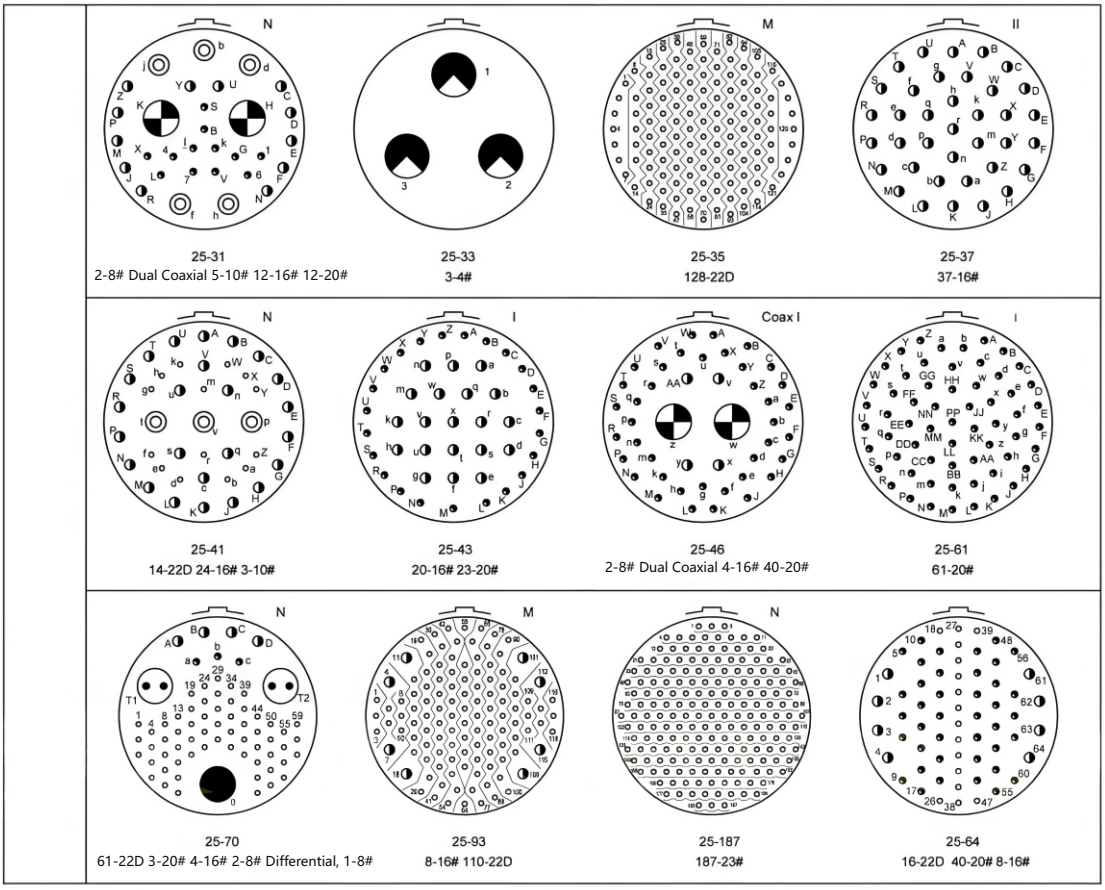
25-20
3-8# Dual Coaxial 4-12# Single-Ended 13-16# 10-20W

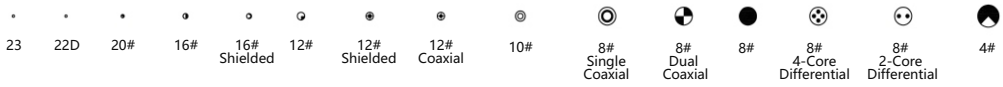


25-24
12-12# 12-16#



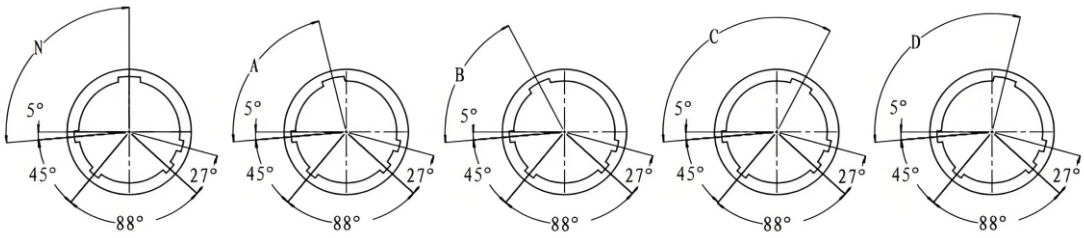
25-29
29-16#


N
25-31
2-8# Dual Coaxial 5-10# 12-16# 12-20#
25-33
3-4#
M
25-35
128-22D
II
25-37
37-16#
N
25-41
14-22D 24-16# 3-10#
I
25-43
20-16# 23-20#
Coax I
25-46
2-8# Dual Coaxial 4-16# 40-20#
I
25-61
61-20#
N
25-70
61-22D 3-20# 4-16# 2-8# Differential, 1-8#
M
25-93
8-16# 110-22D
N
25-187
187-23#
25-64
16-22D 40-20# 8-16#

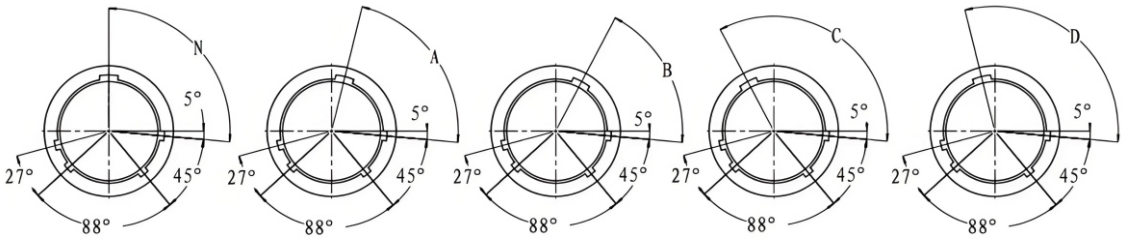

23
22D
20#
16#
16# Shielded
12#
12# Shielded
12# Coaxial
10#
8# Single Coaxial
8# Dual Coaxial
8#
8# 4-Core Differential
8# 2-Core Differential
4#

Plug Key Position Angle

Socket Key Position Angle



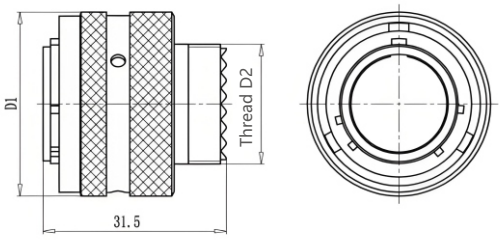
Plug Key Position Angle



Key Position Code	09	11	13	15	17	19	21	23	25
N	95°	95°	95°	95°	95°	95°	95°	95°	95°
A	77°	81°	75°	74°	77°	77°	77°	80°	80°
B	-	67°	63°	61°	65°	65°	65°	69°	69°
C	-	123°	127°	129°	125°	125°	125°	121°	121°
D	113°	109°	115°	116°	113°	113°	113°	110°	110°

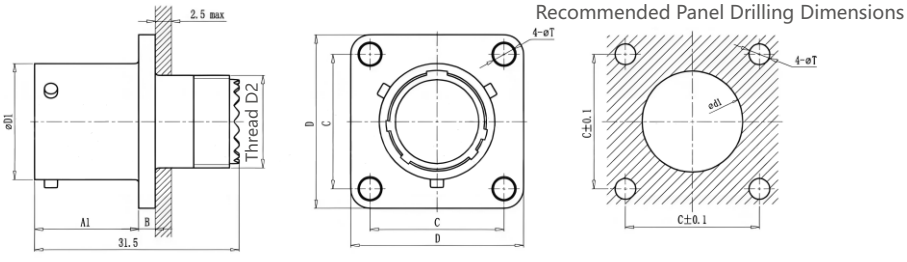
Overall Dimensions

JY27467 Plug

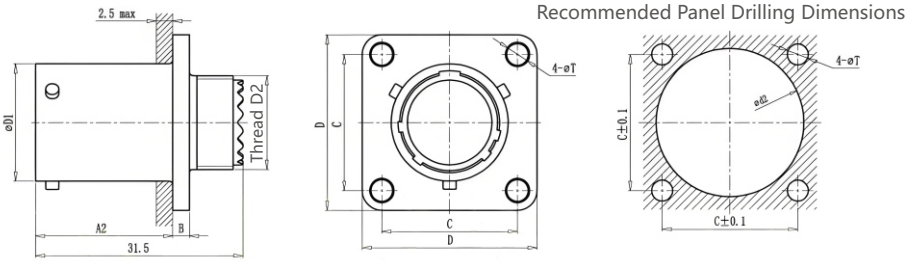


Housing Number	D1	Thread (D2 UNEF-2A)
09	21.6	0.4375-28
11	24.7	0.5625-24
13	28.6	0.6875-24
15	31.5	0.8125-20
17	35.5	0.9375-20
19	38.5	1.0625-18
21	41.6	1.1875-18
23	44.6	1.3125-18
25	47.6	1.4375-18

JY27466 JY27656 Wall-Mounted Square Panel Socket



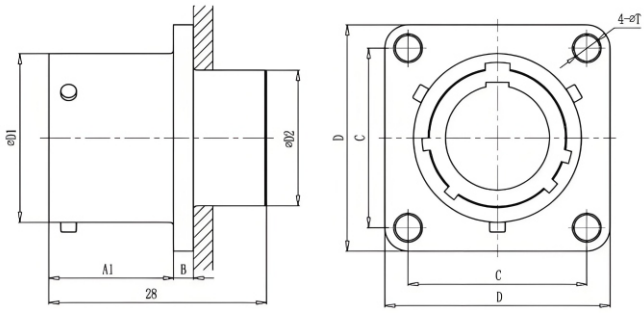
JY27656 Wall-Mounted Square Panel Rear-Mount Socket



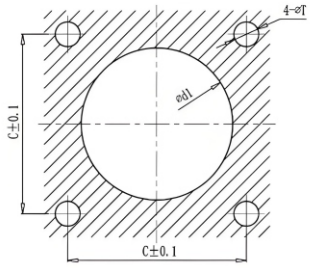
Housing Number	D1	Thread D2 UNEF-2A	A1	A2	B	C	D	T	d1	d2
09	14.6	0.4375-28	16.1	20.8	2.54	18.26	23.8	3.2	12.5	16.7
11	17.8	0.5625-24	16.1	20.8	2.54	20.62	26.2	3.2	15.5	20.2
13	21.6	0.6875-24	16.1	20.8	2.54	23.02	28.6	3.2	19.5	24.5
15	24.8	0.8125-20	16.1	20.8	2.54	24.62	31.0	3.2	21.5	27.7
17	28.0	0.9375-20	16.1	20.8	2.54	26.98	33.3	3.2	25.0	30.9
19	30.7	1.0625-18	16.1	20. 8	2.54	29.36	36.5	3. 2	28.0	32.9
21	33.8	1.1875-18	15.3	20.1	3.3	31.76	39.7	3.7	31.5	36.2
23	37.0	1.3125-18	15.3	20.1	3.3	34.92	42.9	3.7	34.5	39.3
25	40.2	1.4375-18	15.3	20.1	3.3	38.10	46.0	3.7	37.5	42.5

JY27496 JY27505 Box-Type Square Panel Socket

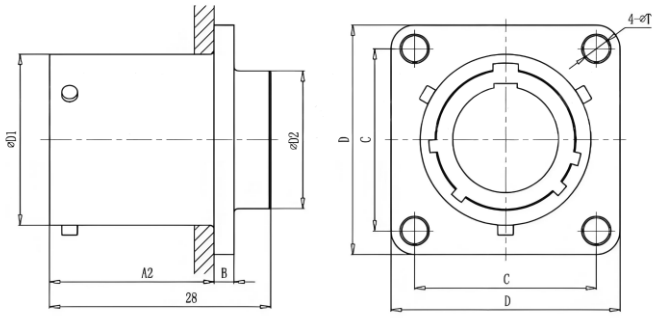
JY27496 Box-Type Square Panel Front-Mount Socket



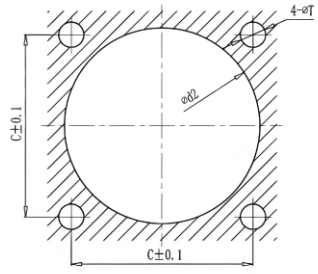
Recommended Panel Drilling Dimensions
No Restriction on Panel Thickness



JY27505 Box-Type Square Panel Rear-Mount Socket

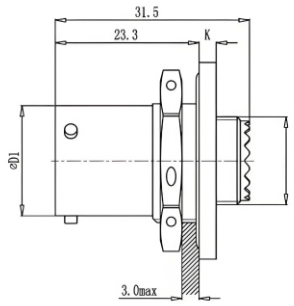


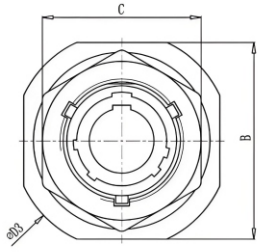
Recommended Panel Drilling Dimensions

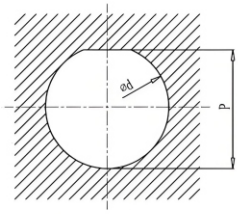


Housing Number	D1	D2	A1	A2	B	C	D	T	d1	d2
09	14.6	11.2	16.1	20.8	2.54	18.26	23.8	3.2	12.5	16.7
11	17.8	14.5	16.1	20.8	2.54	20.62	26.2	3.2	15.5	20.2
13	21.6	18.0	16.1	20.8	2.54	23.02	28.6	3.2	19.5	24.5
15	24.8	20.5	16.1	20.8	2.54	24.62	31.0	3.2	21.5	27.7
17	28.0	23.8	16.1	20.8	2.54	26.98	33.3	3.2	25.0	30.9
19	30.7	26.5	16.1	20.8	2.54	29.36	36.5	3.2	28.0	32.9
21	33.8	29.7	15.3	20.1	3.3	31.76	39.7	3.7	31.5	36.2
23	37.0	32.8	15.3	20.1	3.3	34.92	42.9	3.7	34.5	39.3
25	40.2	36.0	15.3	20.1	3.3	38.10	46.0	3.7	37.5	42.5

JY27468 Nut Fastening Socket





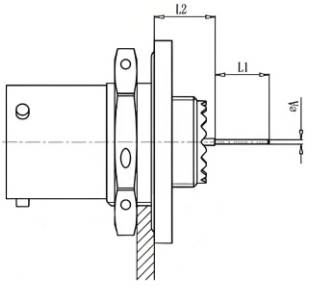


Recommended Panel Drilling Size

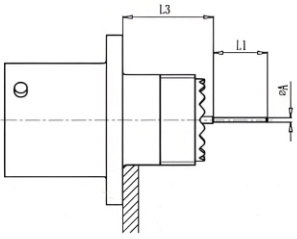
Housing Number	D1	Thread D2 UNEF-2A	D3	B	K	C	d	P
09	14.6	0.4375-28	30.2	27.1	2.8	22.5	17.7	17.0
11	17.8	0.5625-24	35.0	31.8	2.8	25.7	21.0	19.6
13	21.6	0.6875-24	38.1	35.0	2.8	30.5	25.6	24.3
15	24.8	0.8125-20	41.3	38.1	2.8	33.6	28.8	27.6
17	28.0	0.9375-20	44.5	41.3	2.8	36.8	32.0	30.7
19	30.7	1.0625-18	49.3	46.0	3.5	40.0	35.2	33.9
21	33.8	1.1875-18	52.4	49.2	3.5	43.2	38.3	37.1
23	37.0	1.3125-18	55.6	52.4	3.5	46.3	41.5	40.2
25	40.2	1.4375-18	58.8	55.6	3.5	51.0	44.7	43.4

J599-I Series Socket with Printed Circuit Board Type Contacts

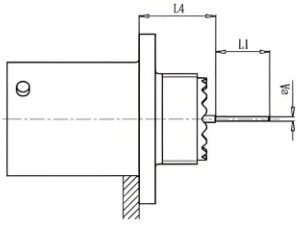
JY27468 Socket

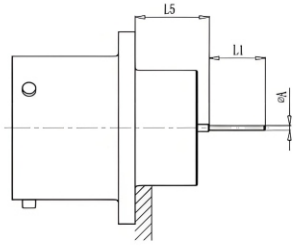


JY27466 Socket

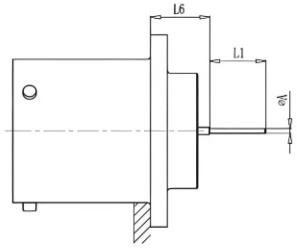


JY27656 Socket





JY27496 Socket



JY27505 Socket

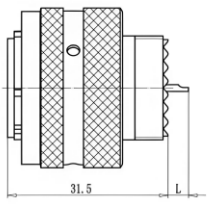
Printed Circuit Board (PCB) Type Contact Specifications		L1	A
22D	Long-Type Printed Circuit Board (PCB) Contact	8.5	0.7
	Short-Type Printed Circuit Board (PCB) Contact	4.0	
20#	Long-Type Printed Circuit Board (PCB) Contact	8.5	0.7
	Short-Type Printed Circuit Board (PCB) Contact	5.0	
16#	Long-Type Printed Circuit Board (PCB) Contact	8.5	1.15
	Short-Type Printed Circuit Board (PCB) Contact	5.0	

Dimensions When Installing Contacts of Different Specifications			Shell Number 09-11-13-15-17-19	Shell Number 21-23-25
L2	When installing 22D pins	max	10.06	10.06
		min	9.06	9.06
	When installing 22D sockets	max	10.06	10.06
		min	8.74	8.74
	When installing 20# or 16# pins/sockets	max	10.23	10.23
		min	9.24	9.24
L3	When installing 22D pins	max	15.08	15.08
		min	13.91	13.91
	When installing 22D sockets	max	15.08	15.08
		min	13.58	13.58
	When installing 20# or 16# pins/sockets	max	15.25	15.25
		min	14.08	14.08
L4	When installing 22D pins	max	12.47	13.22
		min	11.60	12.35
	When installing 22D sockets	max	12.47	13.22
		min	11.27	12.02
	When installing 20# or 16# pins/sockets	max	12.64	13.39
		min	11.77	12.52
L5	When installing 22D pins	max	11.08	11.08
		min	9.91	9.91
	When installing 22D sockets	max	11.08	11.08
		min	9.58	9.58
	When installing 20# or 16# pins/sockets	max	11.25	11.25
		min	10.08	10.08
L6	When installing 22D pins	max	8.47	9.22
		min	7.60	8.35
	When installing 22D sockets	max	8.47	9.22
		min	7.27	8.02
	When installing 20# or 16# pins/sockets	max	8.64	9.39
		min	7.77	8.52

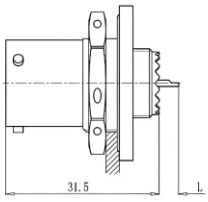
Web: www.anknor.com Email: Info@anknor.com

J599-I Series Welded Product Outline Dimensions

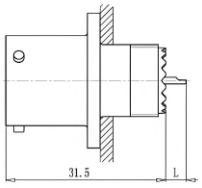
JY27467 Plug

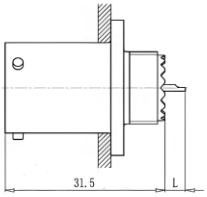


JY27468 Socket

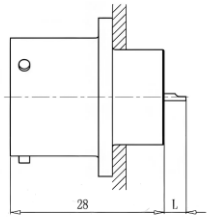


JY27466 Socket

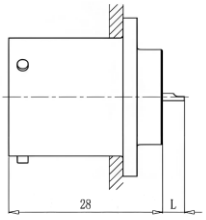




JY27656 Socket



JY27496 Socket



JY27505 Socket

Welded Contact Specifications	L	Wire Crimp Cup Inner Diameter	Maximum Compatible Wire Gauge (AWG)
22D	4	Φ0.9	22
20#	4	Φ1.1	20
16#	4	Φ1.9	16
12#	4	Φ2.9	12
10#	6	Φ3.6	10
8#	6	Φ4.8	8

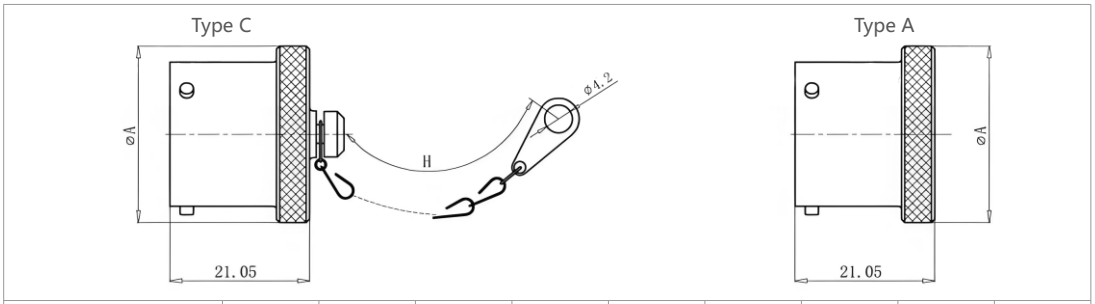
Note: Coaxial contacts are welded to connect contacts.

J599-I Series Welded Product Outline Dimensions

Plug Seal Cover Model Naming:

Series Main Name	Jy	27501	F	11	C	L
Type	JY27501—Plug Seal Cover (corresponds to U.S. military standard Ms27501)					
Shell Plating	B—Tin-plated military green; F—Electroless nickel plating; E—Stainless steel passivation					
Shell Number	09-11-13-15-17-19-21-23-25					
Chain Type	A—Without chain; C—Stainless steel twist chain with tab; N—Stainless steel twist chain with ring; R—Nylon cord with tab; S—Stainless steel wire cord with tab; E—Nylon cord with ring					
Length Marking	Unmarked—Standard length; L—Chain length 127mm					
Operating Temperature of Metal Seal Cove	Type B: -65°C ~ +175°C; Types F, E: -65°C ~ +200°C					

JY27501 (MS27501) Plug Seal Cover Outline Dimensions

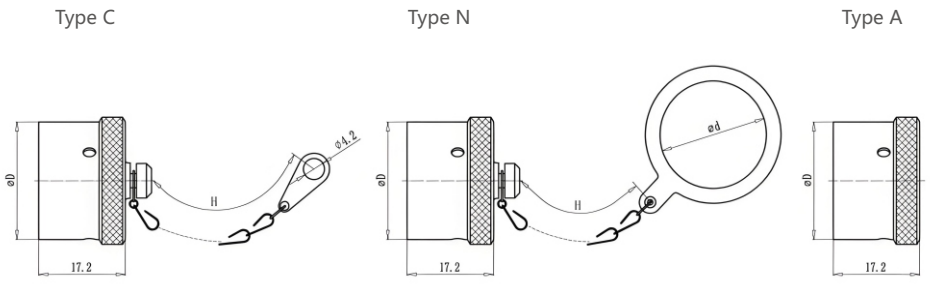


Shell Number	09	11	13	15	17	19	21	23	25
A	18.6	21.6	24.7	28.6	31.7	35.6	38.4	41.7	44.7
H max	76.2	76.2	88.9	88.9	88.9	88.9	101.6	101.6	101.6

Socket Seal Cover Model Naming:

Series Main Name	JY	27502	F	11	C	L
Type	JY27502—Socket Seal Cover (corresponds to U.S. military standard Ms27502)					
Shell Plating	B—Tin-plated military green; F—Electroless nickel plating; E—Stainless steel passivation					
Shell Number	09-11-13-15-17-19-21-23-25					
Chain Type	A—Without chain; C—Stainless steel twist chain with tab; N—Stainless steel twist chain with ring; R—Nylon cord with tab; S—Stainless steel wire cord with tab; E—Nylon cord with ring					
Length Marking	Unmarked—Standard length; L—Chain length 127mm					

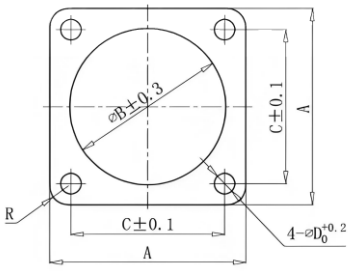
JY27502 (MS27502) Socket Seal Cover Outline Dimensions



Shell Number		09	11	13	15	17	19	21	23	25
D		19.9	23.1	27.1	30.2	33.2	36.2	39.3	42.5	45.7
d	min	18.0	21.5	26.0	29.0	32.5	35.5	38.6	42.0	45.0
H	max	76.2	76.2	88.9	88.9	88.9	88.9	101.6	101.6	101.6

Note: The sealing gasket should be ordered separately and is not supplied with the connector. It can be customized according to customer requirements.

599- I Square Panel Gasket



Thickness: 1mm

Shell Number	A	B	C	D	R
09	23.9	14.8	18.26	3.3	3.2
11	26.3	18.0	20.62	3.3	3.2
13	28.7	21.8	23.01	3.3	3.2
15	31.1	25.0	24.61	3.3	3.2
17	33.4	28.2	26.97	3.3	3.2
19	36.6	30.9	29.36	3.3	3.2
21	39.8	34.0	31.75	3.3	3.2
23	43.0	37.2	34.93	3.8	3.7
25	46.1	40.4	38.10	3.8	3.7

Standard Rear Accessories (Applicable to GJB599 Series I and Series II Electrical Connectors)

This type of component complies with the national military standard GJB1784 (equivalent to the U.S. military standard MIL-C-85049).

Notes:

In the accessory model, "J1784" and "J1784A" are identical and interchangeable.

When using the accessory, at least one of the following anti-loosening measures must be taken:

① Pass a safety wire through the safety hole for anti-loosening;

② Apply thread glue to the thread at the tail of the product, then tighten the connecting nut for anti-loosening;

③ Use a heat shrink tube to heat-shrink the entire accessory for anti-loosening.

For accessories with set screws, apply thread glue to the set screw before tightening it.

If the product matched with the cable accessory is equipped with No. 8 contacts, longer cable accessories (such as J1784/49H or J1784/18A) should be selected to avoid interference between the contact locator and the cable accessory.

The table below lists the correspondence table of cable accessories suitable for GJB599 series welding and crimping products, as well as the functional classification of cable accessories. Since our company currently has a large number of modified products and accessory varieties that cannot be listed one by one, the content of this table is for reference only. For details, please contact our company to confirm.

Connector Type	Non-clamping Cable & Non-shielded Accessory	Compatible Cable Accessory Models
GJB599 Series I & II Crimp Connector	No cable clamping and no shielding accessories	1. J1784/27, HA Type
	Cable clamped, no shielding accessories	1. J1784/49, HB Type
		2. J1784/49-xx (Short)
		3. J1784/47, HC Type
	Shielded, no cable clamping accessories	1. TJ1784/62, HD Type
		2. J1784/62
		3. J1784/85
		4. J1784/87
		5. JY599 Ⅰ-FJA00
		6. JY599 Ⅰ-FJA90
		7. JY599 Ⅰ xx FJ00
		8. JY599 Ⅰ xx FJE00
	Cable clamped and shielded accessories	1. TJ1784/62-xxB, HE Type
		2. TJ1784/62-xxC-xx
		3. J1784/18A Series
GJB599 Series I & II Welded Connector	No cable clamping and no shielding accessories	1. J1784/27, HA Type
	Cable clamped, no shielding accessories	1. J1784/49H
		2. J1784/47, HC Type
	Shielded, no cable clamping accessories	1. TJ1784/62, HD Type
		2. J1784/62
		3. J1784/85
		4. J1784/87
		5. JY599 Ⅰ-FJA00
		6. JY599 Ⅰ-FJA90
	Cable clamped and shielded accessories	1. TJ1784/62-xxB, HE Type
		2. TJ1784/62-xxC-xx
		3. J1784/18A Series

GJB1784 Model Naming

Series Main Name	J1784	49	16	S
Type	27-A Type: Rear Nut (Non-clamping Cable & Non-shielded Accessory) 49-B Type: Straight Cable Clamp (Clamping Cable & Non-shielded Accessory) 47-C Type: Angled Cable Clamp (Clamping Cable & Non-shielded Accessory) 62-D Type: Shielded Termination Rear Accessory (Add "T" before the basic part number) (Shielded & Non-clamping Cable Accessory) 62-Heat Shrink Rear Accessory (Shielded & Non-clamping Cable Accessory)			
Accessory housing numbers: 08 10 12 14 16 18 20 22 24 Compatible with GJB599 Series I Shell Number09 11 13 15 17 19 21 23 25 Compatible with GJB599 Series II Shell Number08 10 12 14 16 18 20 22 24				
Shell Plating: W—Tin-Brass Military GreenN—Electroless Nickel PlatingS—Stainless Steel Passivation				

Notes:
1.In the model naming of the national military standard GJB1784 and the U.S. military standard MIL-C-85049, they are identical except for the basic part number. The basic part number of GJB1784 is "J1784", and the main title code of MIL-C-85049 is "M85049"—the two are interchangeable.
2.The shell numbers of the above cable accessories shall be even numbers. The use of odd numbers as shell numbers is strictly prohibited.

Industry Model Naming

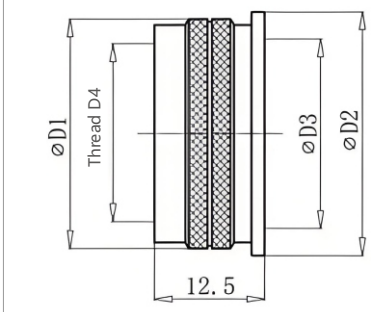
Type	HA - Sleeve Rear Accessory HB - Straight Cable Clamp Rear Accessory HC - 90° Angled Cable Clamp Rear Accessory HD - Shielded Rear Accessory HE - Straight Cable Clamp Shielded Rear Accessory	HA	S	16
Shell Plating	W—Tin-Brass Military Green N—Electroless Nickel Plating S—Stainless Steel Passivation			
Accessory Shell Number: 08 10 12 14 16 18 20 22 24	Compatible with GJB599 Series I Shell Number09 11 13 15 17 19 21 23 25 Compatible with GJB599 Series II Shell Number08 10 12 14 16 18 20 22 24			

GJB1784 Accessory Models	GJB1784 Accessory Models
J1784/27-*W	J1784/27-*W
J1784/27-*N	J1784/27-*N
J1784/49-*W	J1784/49-*W
J1784/49-*N	J1784/49-*N
J1784/47-*W	J1784/47-*W
J1784/47-*N	J1784/47-*N
TJ1784/62-*W	TJ1784/62-*W
TJ1784/62-*N	TJ1784/62-*N
TJ1784/62-*WB	TJ1784/62-*WB
TJ1784/62-*NB	TJ1784/62-*NB

(The "*" in the table represents the shell number. Users are recommended to place orders according to GJB1784 accessory models first; if necessary, orders can be placed according to industry accessory models.)

External Dimensions

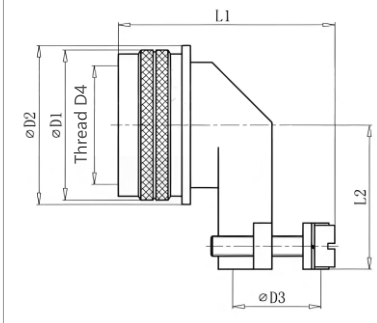
J1784/27-(HA Type) Rear Nut



Shell Number	D1	D2	D3 max	Thread D4
08	16.5	17.6	7.9	0.4375-28
10	19.5	20.6	10.8	0.5625-24
12	22.5	23.6	13.6	0.6875-24
14	26.5	27.6	16.9	0.8125-20
16	29.5	30.3	20.1	0.9375-20
18	32.5	33.3	22.4	1.0625-18
20	36.0	36.8	25.6	1.1875-18
22	38.5	39.3	28.8	1.3125-18
24	41.7	42.3	31.9	1.4375-18

This is an anti-rotation accessory that tightly seals the cable body to ensure the environmental resistance of the connector. It cannot clamp cables and is used in general environmental conditions.

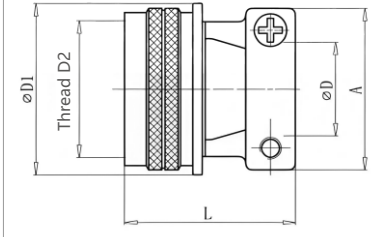
J1784/47-(HC) Angled Cable Clamp



Shell Number	D1	D2	D3	Thread D4	L1 max	L2 max
08	16.5	17.6	3.2–6.4	0.4375-28	29.0	25.0
10	19.5	20.6	4.0–9.5	0.5625-24	32.0	26.0
12	22.5	23.6	4.8–11.1	0.6875-24	35.5	27.5
14	26.5	27.6	5.5–14.3	0.8125-20	36.5	31.0
16	29.5	30.3	6.4–15.9	0.9375-20	38.5	32.5
18	32.5	33.3	7.9–19.1	1.0625-18	41.5	34.0
20	36.0	36.8	9.5–22.2	1.1875-18	44.5	34.5
22	38.5	39.3	10.3–23.8	1.3125-18	46.0	36.5
24	41.7	42.3	14.3–25.4	1.4375-18	48.0	43.5

This is an anti-rotation, 90° cable clamping accessory. It can tightly seal the cable body and has the function of 90° cable clamping, ensuring the environmental resistance of the connector. It is used in scenarios where the cable is under tension.

J1784/49-Straight Cable Clamp (Cable Clamping Non-Shielding Accessory)

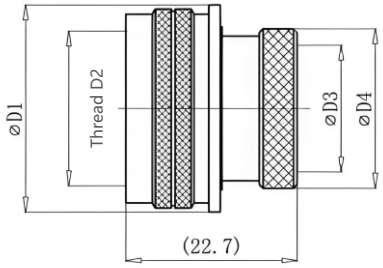


Shell Number	D1	Thread D2	D	A	L
08	17.6	0.4375-28	2.49–5.94	20.0	23.6
10	20.6	0.5625-24	3.87–5.94	22.0	24.6
12	23.6	0.6875-24	4.83–8.33	24.5	26.7
14	27.6	0.8125-20	6.60–11.61	26.0	27.5
16	30.3	0.9375-20	7.19–15.60	30.5	27.5
18	33.3	1.0625-18	8.26–16.10	35.0	29.0
20	36.8	1.1875-18	8.71–17.73	38.0	30.4
22	39.3	1.3125-18	9.68–20.90	41.0	32.4
24	42.3	1.4375-18	10.62–21.66	44.0	34.4

This is an anti-rotation, cable-clamping accessory. It can tightly seal the cable body and clamp the cable, ensuring the environmental resistance of the connector. It is used in scenarios where the cable is under tension.

Web: www.anknor.com Email: Info@anknor.com

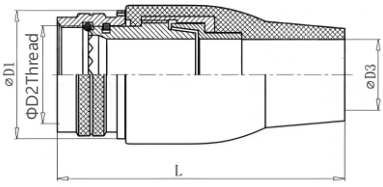
J1784/62-Heat Shrink Tubing Tail Accessory



Model	D1	Thread D2	D3	D4
J1784/62-08N	16.5	0.4375-28	7.9	11.6
J1784/62-10N	19.5	0.5625-24	10.9	14.7
J1784/62-12N	22.5	0.6875-24	13.7	17.6
J1784/62-14N	26.5	0.8125-20	16.9	21.2
J1784/62-16N	29.5	0.9375-20	20.1	24.4
J1784/62-18N	32.5	1.0625-18	22.5	26.4
J1784/62-20N	36.0	1.1875-18	25.4	30.9
J1784/62-22N	38.5	1.3125-18	28.5	33.8
J1784/62-24N	41.7	1.4375-18	31.6	36.9

This is an anti-rotation, shielded mesh compression accessory. It can tightly seal the cable body and enable the connection between the shielded mesh and the tail accessory, ensuring the environmental resistance and electromagnetic shielding performance of the connector. It cannot clamp cables and is used in scenarios where the cable is under low tension.

J1784/01A-Grounding Compression Tail Accessory (Shielding Non-Clamping Cable Accessory)

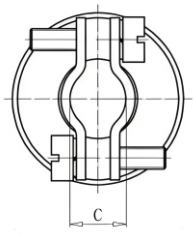


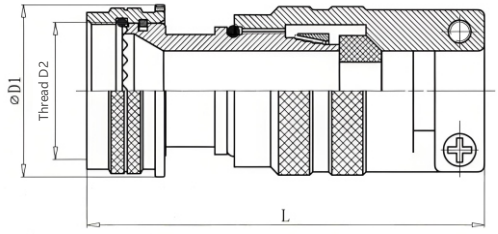
Shell Number	D1	Thread D2	D3	L
08	17.6	0.4375-28	7.0	53.0
10	20.6	0.5625-24	10.0	53.0
12	23.6	0.6875-24	13.0	53.0
14	27.6	0.8125-20	15.0	73.0
16	30.3	0.9375-20	18.0	73.0
18	33.3	1.0625-18	20.0	73.0
20	36.8	1.1875-18	23.5	73.0
22	39.3	1.3125-18	26.5	73.0
24	42.3	1.4375-18	29.0	73.0

This is an anti-rotation, shielded mesh compression accessory. It can tightly seal the cable body and enable the connection between the shielded mesh and the tail accessory, ensuring the environmental resistance and electromagnetic shielding performance of the connector. It cannot clamp cables and is used in scenarios where the cable is under low tension.

J1784/62-Heat Shrink Tubing Tail Accessory

Series Name	J1784	18A	17	N	04	A
Type	18A-Straight Shielded Cable Clamp (Applicable to GJB599 Series I & II)					
Accessory Shell Number:09 11 13 15 17 19 21 23 25 Shell Number for GJB599 Series I:09 11 13 15 17 19 21 23 25 Shell Number for GJB599 Series II:08 10 12 14 16 18 20 22 24						
Shell Plating	W - Tin-plated Military Green N - Chemical Nickel Plating S - Stainless Steel Passivation					
Outlet Diameter Code	Select based on Table 1 & Table 2					
Length Code	See Table 3					





This is an anti-rotation, shielded mesh compression and cable clamping accessory. It can tightly seal the cable body and enable the connection between the shielded mesh and the tail accessory, ensuring the connector's high environmental resistance and electromagnetic shielding performance. It is used in harsh environments. This cable accessory comes in different lengths and is suitable for scenarios (such as mixed high and low frequency installations) that require longer accessories. It is recommended to use finished cables with this accessory.

Table 1

Shell Number	Outlet Diameter Codes Optional for Each Shell Number	D1	Thread D2
08	01-02	16.5	0.4375-28
10	01-03	19.5	0.5625-24
12	02-04	22.5	0.6875-24
14	02-05	26.5	0.8125-20
16	02-06	29.5	0.9375-20
18	03-07	32.5	1.0625-18
20	03-08	36.0	1.1875-18
22	03-09	38.5	1.3125-18
24	04-10	41.7	1.4375-18

Table 2

Outlet Diameter Code	Applicable Cable Diameter Range C
01	1.57-3.18
02	3.18-6.35
03	6.35-9.53
04	9.53-12.7
05	12.7-15.88
06	15.88-19.05
07	19.05-22.23
08	22.23-25.4
09	25.4-28.58
10	28.58-31.75

Table 3

Shell Number	Length Code	L
09-25	Standard (Omitted if not marked)	64.1
09-25	A	88.1
15-25	B	113.5
21-25	C	138.9

319-001A Series Model Naming

Series Name	319	F	S	001A	M	16	06	
Design Number								
Angle Type	A - Bent Type 90° S - Straight Type							
Basic Code								
Shell Plating	B - Tin-plated Military Green M - Chemical Nickel Plating NF - Tin-plated Military Green After Chemical Nickel Plating							
Accessory Shell Number:08 10 12 14 16 18 20 22 24 Shell Number for GJB599 Series I:09 11 13 15 17 19 21 23 25 Shell Number for GJB599 Series II:08 10 12 14 16 18 20 22 24								
Outlet Diameter Code: See Table 1								

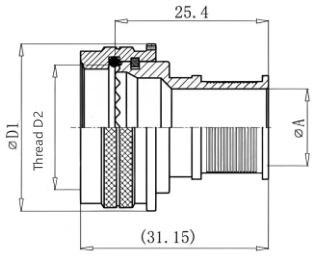


Table 1

Outlet Diameter Code	Outlet Diameter A
1	4.8
2	6.4
3	7.9
4	9.5
5	11.1
6	12.7
7	14.3
8	15.9
9	17.5
10	19.1
11	20.6
12	22.2
13	23.8
14	25.4
15	31.8

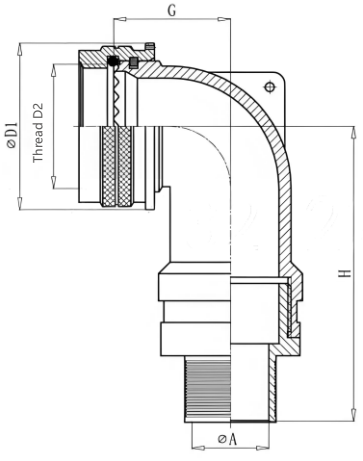


Table 2

Shell Number	D1	Thread D2	G max	H max
08	16.5	0.4375-28	14.7	43.9
10	19.5	0.5625-24	17.1	47.0
12	22.5	0.6875-24	17.5	47.5
14	26.5	0.8125-20	19.8	49.3
16	29.5	0.9375-20	24.5	51.6
18	32.5	1.0625-18	26.8	55.9
20	36.0	1.1875-18	26.8	55.9
22	38.5	1.3125-18	30.6	58.7
24	41.7	1.4375-18	3.6	58.7

Special Tail Accessory (Applicable to GJB599 Series I and Series II Electrical Connectors)

This tail accessory is particularly suitable for clamping shielded cables with a shielding braid, and is divided into two main types: straight and bent. This accessory can be optionally equipped with a Ti-Ni alloy memory ring (with shape memory properties). By heating, the ring shrinks to tightly clamp the shielding braid to the tail of the accessory, achieving true 360° electromagnetic shielding.

Note: Heating shrinkage method for the Ti-Ni alloy memory ring: Use a hot air gun for heating, which takes about 45 seconds to 1 minute. When the indicator color mark on the memory ring changes from green to black, the shrinkage is complete. At this point, the temperature of the ring is approximately 165°C, and heating should be stopped. Note that the memory ring must be heated evenly during the process.

Model Naming

J1784/85, J1784/87 External Shielding Tail Accessory (Shielding Accessory Without Cable Clamping)

Series Name	J1784	85	10	N	A	03
Series Code	85 - Straight Type, 87 - Bent Type (Universal for GJB599 Series I & II)					
Accessory Shell Number: 08 10 12 14 16 18 20 22 24 Shell Number for GJB599 Series I: 09 11 13 15 17 19 21 23 25 Shell Number for GJB599 Series II: 08 10 12 14 16 18 20 22 24						
Shell Plating	W - Tin-plated Military Green N - Chemical Nickel Plating S - Stainless Steel Passivation FT - Aluminum Alloy Gold-Plated Mirror Tin TA - Titanium Alloy (Only applicable to Type 85)					
Titanium Ring	No Marking - No Titanium Ring A - Titanium Ring Included (Optional)					
Outlet Diameter or Titanium Ring Specification	Mark outlet diameter when no titanium ring is usedMark titanium ring specification when titanium ring is included (optional)					

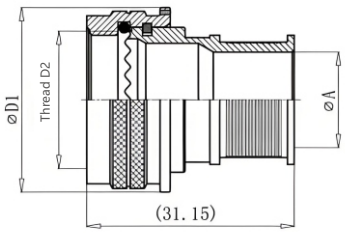
JY599 I-FJA00, JY599 I-FJA90 External Shielding Tail Accessory (Shielding Accessory Without Cable Clamping)

Series Name	Jy599	I	13	FJA	00	F	A	03
Series Code	I (Universal for GJB599 Series I & II)							
Accessory Shell Number: 09 11 13 15 17 19 21 23 25 Shell Number for GJB599 Series I: 09 11 13 15 17 19 21 23 25 Shell Number for GJB599 Series II: 08 10 12 14 16 18 20 22 24								
Accessory Type	FJA, FJC, FJE							
Mechanism Form	00 - Straight Tail Accessory; 90 - 90° Bent Accessory							
Shell Plating	W - Tin-plated Military Green F - Chemical Nickel Plating S - Stainless Steel Passivation FT - Aluminum Alloy Gold-Plated Mirror Tin TA - Titanium Alloy (Only applicable to Type 85)							
Titanium Ring	No Marking - No Titanium Ring A - Titanium Ring Included (Optional)							
Outlet Diameter or Titanium Ring Specification	Mark outlet diameter when no titanium ring is used Mark titanium ring specification when titanium ring is included (optional)							

Notes:
1.This type of accessory is used in harsh environments where frequent disassembly is not required, and can achieve internal and external shielding
2.J1784/85, J1784/87 are identical to JY599 I-FJA00, JY599 I-FJA90; only the model names are different.

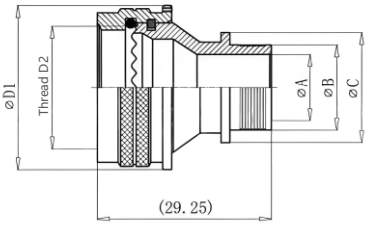
External Dimensions

Straight Accessory (J1784/85 or JY599 I-FJA00)



Shell Number	D1	Thread D2	A (02 Outlet Hole)	A (03 Outlet Hole)
08	17.6	0.4375-28	N/A	6.4
10	20.6	0.5625-24	N/A	7.9
12	23.6	0.6875-24	7.9	11.1
14	27.6	0.8125-20	11.1	14.3
16	30.3	0.9375-20	12.7	15.9
18	33.3	1.0625-18	15.9	19.1
20	36.8	1.1875-18	15.9	20.6
22	39.3	1.3125-18	17.5	23.8
24	42.3	1.4375-18	19.1	25.4

JY599 I ***FJC00 (Shielding Accessory Without Cable Clamping)



Shell Number	D1	Thread D2	A	B	C
09	17.6	0.4375-28	6.6	9.3	13.3
11	20.6	0.5625-24	8.3	11	15
13	23.6	0.6875-24	10	12.7	16.6
15	27.6	0.8125-20	11.1	14.3	18.5
17	30.3	0.9375-20	13.1	15.9	19.8
19	33.3	1.0625-18	16.2	19	23
21	36.8	1.1875-18	16.2	19	23
23	39.3	1.3125-18	19.5	22.2	26.2
25	42.3	1.4375-18	19.5	22.2	26.2

Special Tail Accessory (Applicable to GJB599 Series I and Series II Electrical Connectors)

Special Contacts for GJB599 Series I and III

Specification Type	American Standard Model	GJB Model	Compatible Wires	
			Domestic Wires	Foreign Wires
16# Shielded Pin	M39029/76-424	J1216/76-424	SFF-50-1.5-1 SFF-75-1.5-1	M17/113-RG316
16# Shielded Socket	M39029/77-428	J1216/77-428		
12# Shielded Pin	M39029/28-211	J1216/28-211	SFF-50-1.5-1	M17/113-RG316
	M39029/28-412	J1216/28-412		M17/173-RG316D
12# Shielded Socket	M39029/75-416	J1216/75-416	SFF-50-1.5-1	M17/113-RG316
	M39029/75-422	J1216/75-422		M17/173-RG316D
12# Coaxial Pin (3GHz)	M39029/102-558	J1216/102-558	SFF-50-1.5-1 SFF-75-1.5-1	M17/113-RG316
12# Coaxial Socket (3GHz)	M39029/103-559	J1216/103-559		
12# Coaxial Pin (40GHz)	M39029/102-558C	-	-	UT-085C-AL-TP-LL (MICRO-COAX)
12# Coaxial Socket (40GHz)	M39029/103-559C	-		
8# Dual Coaxial Shielded Pin	M39029/90-529	J1216/90-529	SEFF-78-1-51	M17/113-RG316
8# Dual Coaxial Shielded Socket	M39029/91-530	J1216/91-530		
8# Single Coaxial Pin	M39029/60-367	J1216/60-367	-	-
8# Single Coaxial Socket	M39029/59-366	J1216/59-366	-	-
8# Quad Differential Pin	-	CF81/411-01	-	ET2PC236
8# Quad Differential Socket	-	CF82/411-01	-	
8# Dual Differential Pin	-	CF81/211-01	-	HDP700001070
8# Dual Differential Socket	-	CF82/211-01	-	

Rear Seal Plug

Specification Model	American Standard Model	GJB Model	Notes
4# Rear Seal Plug	MS27488-4 (Blue)	J27488-4 (Blue)	Applicable to Series I and III
8# Rear Seal Plug	MS27488-8 (Red)	J27488-8 (Red)	
12# Rear Seal Plug	MS27488-12 (Yellow)	J27488-12 (Yellow)	Applicable to Series I, II, and III
16# Rear Seal Plug	MS27488-16 (Blue)	J27488-16 (Blue)	
20# Rear Seal Plug	MS27488-20 (Red)	J27488-20 (Red)	
22# Rear Seal Plug	MS27488-22 (Black)	J27488-22 (Black)	

High-Frequency Contact Performance

- 16# Shielded Contact (Part Numbers: Pin J1216/76-424; Socket J1216/77-428)
- 12# Shielded Contact (Part Numbers: Pin J1216/28-211; Socket J1216/75-416)

Test Current and Voltage Drop

Contact	Maximum Contact Resistance (mΩ)	
	Initial Value	Tested Value
16#	170	204
12#	55	66

Test Current and Voltage Drop

Contact		Test Current (A)	Voltage Drop (mV)			
			25°C	175°C	200°C	
			Initial	Tested	Tested	
16#	Internal Contact	1	170	204	290	-
12#					-	290
16#	External Contact	12	150	180	255	-
12#					-	255

Withstand High Voltage (Between Internal and External Contacts): Sea level: 750Vrms; 15240m: 250Vrms

12# Coaxial Contact (Part Numbers: Pin J1216/102-558; Socket J1216/103-559)

- Nominal Impedance: 50Ω
- Operating Frequency: DC-3GHz
- Low-Level Contact Resistance (Applicable only to Internal Contacts): Initial value: 55mΩ; Tested value: 66mΩ
- Withstand Voltage: Sea level: 1000Vrms; 15240m: 250Vrms
- Test Current and Voltage Drop:

Contact	Test Current (A)	Voltage Drop (mV)		
		25°C		200°C
		Initial	Tested	Tested
Internal Contact	1	55	66	94
External Contact	2	75	90	128

- Voltage Standing Wave Ratio:
  Within the frequency range of 500MHz~3GHz, the voltage standing wave ratio shall not exceed 1.20+0.04f (where f is in GHz).
- Insertion Loss: dBmax=0.11√f (where f is in GHz); when measured at 3GHz in accordance with MIL-C-39012,
  the insertion loss shall not exceed 0.20dB

12# Coaxial Contact (40GHz) (Part Numbers: Pin J1216/102-558C; Socket J1216/103-559C)

- Nominal Impedance: 50Ω
- Operating Frequency: DC-40GHz
- Voltage Standing Wave Ratio: 0~18GHz: ≤1.3f; 18~40GHz: ≤1.7f (where f is in GHz)
- Withstand Voltage (Between Center Conductor and Outer Conductor): 500Vrms
- Vibration: 10~2000Hz, power spectral density of $1g^2/Hz$ at ambient temperature

8# Dual Coaxial Contact (40GHz) (Part Numbers: Pin J1216/90-529; Socket J1216/91-530)

Low-Level Contact Resistance (Applicable only to Center Contact and Intermediate Contact): Initial value: 55mΩ; Tested value: 66mΩ

Test Current and Voltage Drop

Contact	Test Current (A)	Voltage Drop (mV)		
		25°C		175°C
		Initial	Tested	Tested
Center Contact	1.0	55	66	94
Intermediate Contact	1.0	55	66	94
External Contact	12	75	90	128

Operating Frequency Range: 0~20MHz

Rated Operating Voltage: Sea level: 500Vrms; 21336m: 125Vrms

Withstand Voltage:

Contact	Altitude	Test Voltage (V rms)
Center to Intermediate	Sea Level	1000
Intermediate to External		500

Differential Contact Performance

- 8# Differential Contact (2-core Part Numbers: Pin CF81/211-01; Socket CF82/211-01)
- 8# Differential Contact (4-core Part Numbers: Pin CF81/411-01; Socket CF82/411-01)
- Withstand Voltage (Vrms):
- Normal conditions: Center conductor to outer conductor: 500V AC; Between center conductors: 1000V AC
- Contact Resistance: ≤15mΩ (center conductor only)
- Insulation Resistance (between center contacts): (at 500Vdc) ≥1000MΩ
- Rated Current of Contact: Center conductor: 1A
- Transmission Rate: Up to 1.65Gbps

Fiber Optic Contact Performance

- Insertion Loss: ≤1.1dB (≤4 cores); ≤1.2dB (≤6 cores); ≤1.4dB (≤8 cores); ≤1.6dB (≤16 cores); ≤2dB (≤61 cores)
- Operating Temperature: -40°C ~ +80°C
- Vibration: 10Hz~500Hz, acceleration: 98m/s²
- Shock: 980m/s²
- Mechanical Life: 500 cycles
- Tensile Strength: ≥800N (main cable)

High-Frequency Contact Accessory Tools

Contact Part Number	Plastic Assembly/ Disassembly Tool	Crimping Tool	
16# Shielded Coaxial	M81969/14-03	Internal Contact	M22520/2-01
		External Contact	M22520/4-01
12# Shielded	M81969/14-04	Internal Contact	M22520/2-01
		External Contact	M22520/31-01
12# Shielded	M81969/14-04	Internal Contact	MH992
		External Contact	M22520/5-01
8# Dual Coaxial Shielded	M81969/14-12	Internal Contact	M22520/2-01
		Intermediate Contact	M22520/5-01
		External Contact	M22520/5-01
8# Dual Differential Pin	M81969/14-12	Internal Contact	M22520/2-01
8# Dual Differential Socket	M81969/14-12	External Contact	M22520/5-01
8# Quad Differential Pin	M81969/14-12	Internal Contact	M22520/2-01
8# Quad Differential Socket	M81969/14-12	External Contact	M22520/5-01

High-Frequency Contact Accessory Tools

Assembly Instructions for 16# Shielded Coaxial Pin and Socket

1.Assembly and Crimping of 16# Shielded Coaxial Pin

①Strip the cable as shown in Figure 1.1. The end face must be cut clean and perpendicular to the cable's axis. The cable must not be deformed during cutting. Thermal stripping is recommended.

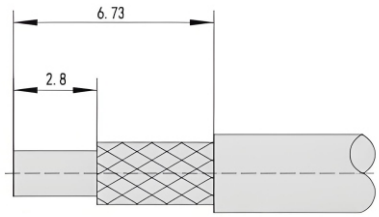


Figure 1.1

②As shown in Figure 1.2, slide the crimp sleeve backward onto the cable jacket, spread the shielding layer, and strip off the cable insulation medium.

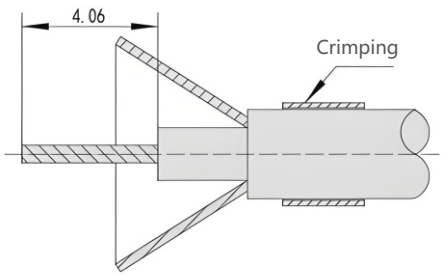


Figure 1.2

③Install the rear insulator onto the central conductor of the cable, and ensure the tail of the rear insulator is tightly pressed against the cable insulation medium (as shown in Figure 1.3).

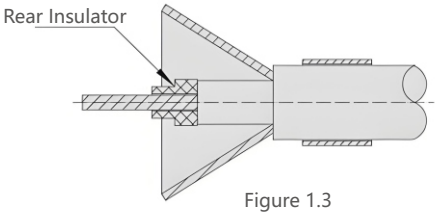


Figure 1.3

④Assemble the central socket onto the central conductor of the cable as shown in Figure 1.4. The central conductor of the cable should be visible through the observation hole at the tail of the central socket. Use crimping tool M22520/2-01 (set to position 5) and locator M22520/2-35 for crimping.

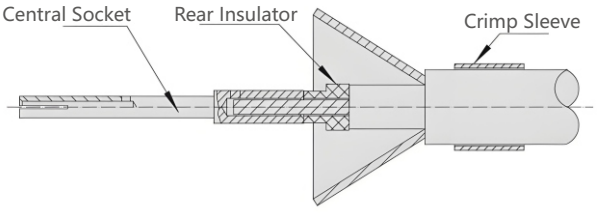


Figure 1.4

⑤Then, install the front insulator onto the central socket as shown in Figure 1.5, and make the tail of the front insulator tightly abut against the step part of the rear insulator.

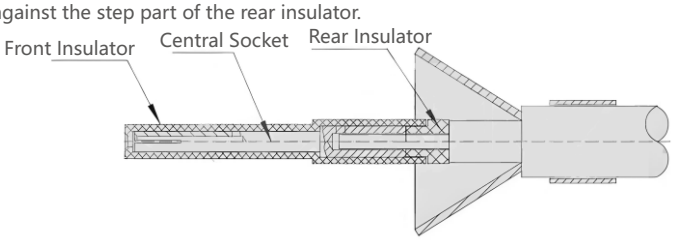


Figure 1.5

⑥As shown in Figure 1.6, install the outer pin onto the insulated central socket (which has been crimped), until the internal contact and insulator are completely tight against each other.

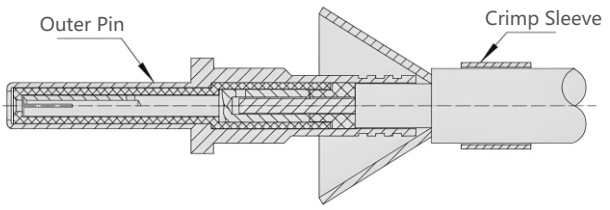


Figure 1.6

⑦As shown in Figure 1.7, move the crimp sleeve forward onto the cable shielding layer, with the position dimension set to 6.1~6.8. Cut off the excess shielding layer that extends beyond the shielding crimp sleeve. Use tool M22520/4-01 and locator M22520/4-02 to crimp the crimp sleeve: crimp once, then rotate the contact 45 degrees and crimp again. After the second crimping, the diameter of the shielding crimp sleeve must not exceed 2.74.

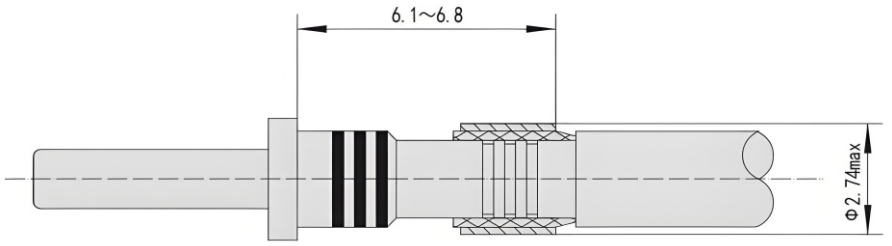


Figure 1.7

2.Assembly and Crimping of 16# Shielded Coaxial Socket

①As shown in Figure 1.8, strip the cable. The end face must be cut clean and perpendicular to the cable's axial direction. The cable must not be deformed during cutting. Thermal stripping is recommended.

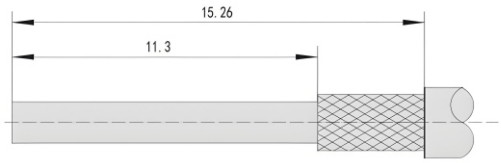


Figure 1.8

②As shown in Figure 1.9, slide the crimp sleeve backward onto the cable jacket, spread the shielding layer, and strip off the cable dielectric

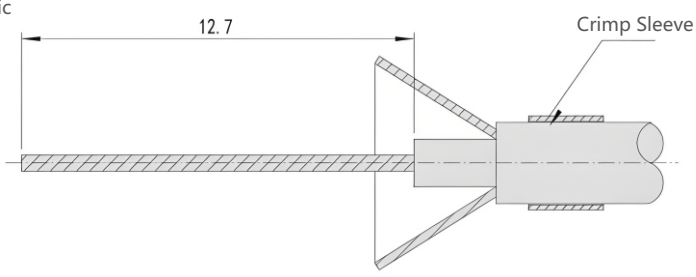


Figure 1.9

③As shown in Figure 1.10, slide the rear insulator onto the central conductor of the cable, and make its tail tightly press against the cable insulation medium.

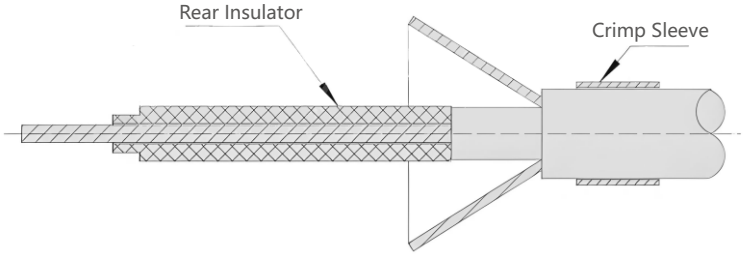


Figure 1.10

④As shown in Figure 1.11, assemble the central pin onto the central conductor of the cable. The central conductor of the cable should be visible through the observation hole at the tail of the central pin. Use crimping tool M22520/2-01 (set to position 5) and locator M22520/2-35 for crimping.

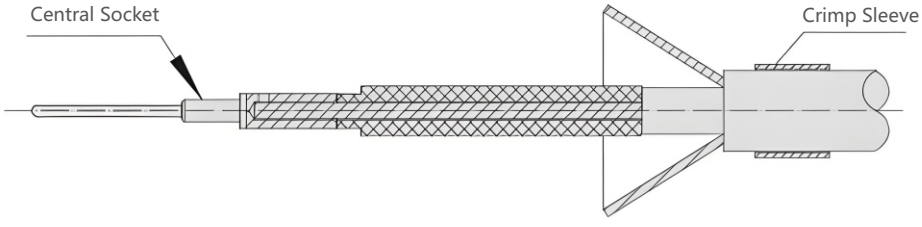


Figure 1.11

⑤As shown in Figure 1.12, install the front insulator onto the central pin, and make sure the contact area of the two insulators is tightly abutted.

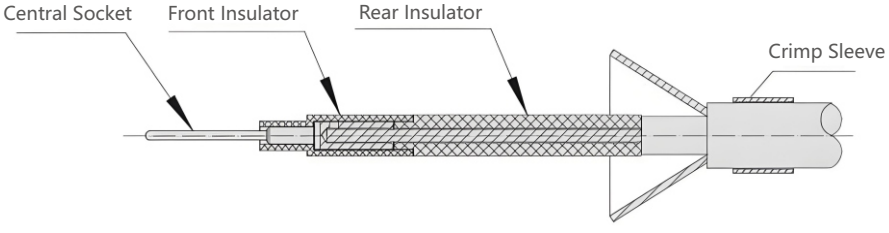


Figure 1.12

⑥As shown in Figure 1.13, install the outer contact onto the central contact, under the cable shielding layer, until the central contact and the insulator are completely tight against each other.

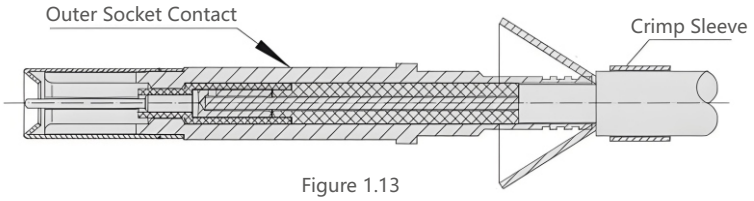


Figure 1.13

⑦As shown in Figure 1.14, place the shielding crimp sleeve forward onto the cable shielding layer, with the position dimension set to 6.1~6.8. Cut off the excess shielding layer that extends beyond the shielding crimp sleeve. Use tool M22520/4-01 and locator M22520/4-02 to crimp the crimp sleeve: crimp once, then rotate the contact 45 degrees and crimp again. After the second crimping, the diameter of the shielding crimp sleeve must not exceed 2.74.

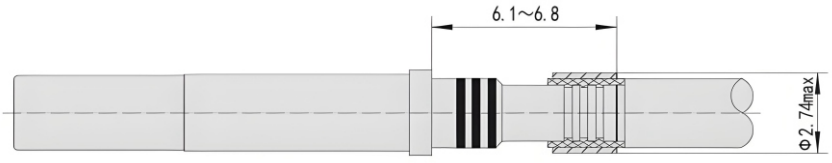


Figure 1.14

Assembly Instructions for 12# Coaxial Pin and Socket

1. Assembly and Crimping of 12# Coaxial Pin

①As shown in Figure 2.1, strip the cable. The end must be cut clean and form a right angle with the cable's axial surface. The cable must not be deformed during cutting.

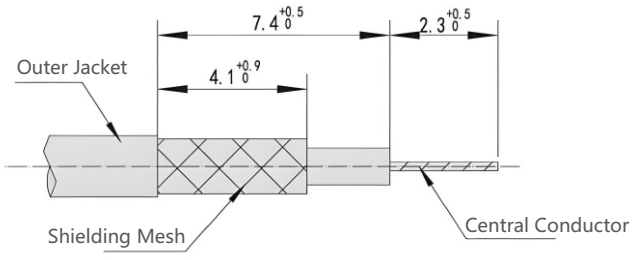


Figure 2.1

②As shown in Figure 2.2, thread the shielding mesh crimp sleeve onto the cable jacket.

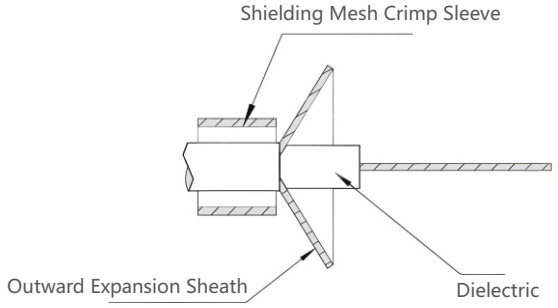


Figure 2.2

③Spread the shielding layer outward, and strip the dielectric part of the cable.

④As shown in Figure 2.3, pass the central conductor through the socket contact. The cable's central conductor must be visible through the observation hole on the socket contact, and the socket must be pressed against the rear insulator.

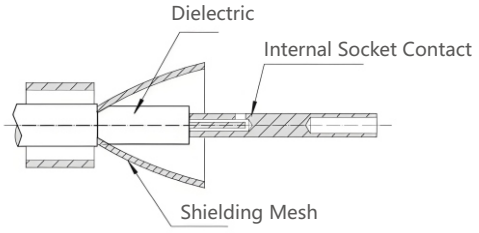


Figure 2.3

⑤Use the crimping tool MH992 and locator K1303 to crimp the internal socket contact.

⑥As shown in Attached Figure 2.4, install the internal assembly into the outer pin contact, down to the cable shielding mesh, until the internal socket contact is fully installed.

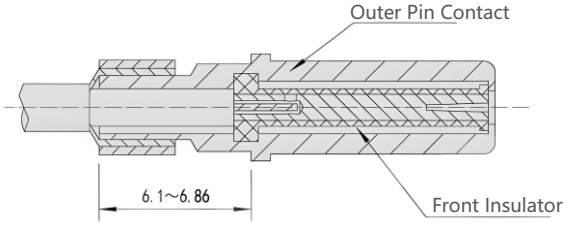


Figure 2.4

⑦Move the shielding mesh crimp sleeve forward, ensuring the dimension is 6.1-6.86mm. Trim the excess shielding mesh at the front end of the shielding mesh crimp sleeve. Use the crimping tool M22520/05-01 and locator M22520/05-03 to crimp the shielding mesh crimp sleeve: crimp once, and the outer diameter of the shielding mesh crimp sleeve must be less than 3.96mm.

⑧Figure 2.5 shows the crimped 12# coaxial pin.

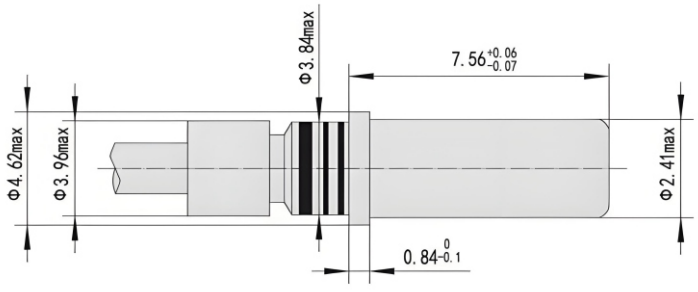


Figure 2.5

Assembly and Crimping of 12# Coaxial Socket

①As shown in Figure 2.6, strip the cable. The end must be cut clean and form a right angle with the cable's axial surface. The cable must not be deformed during cutting.

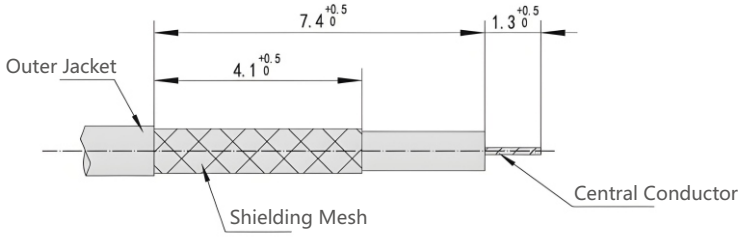


Figure 2.6

②As shown in Figure 2.7, proceed as follows:

a. Slide the shielding mesh crimp sleeve onto the cable jacket.

b. As shown in the figure, gradually spread the shielding layer outward and strip the dielectric layer of the cable.
c. Pass the cable's central conductor through the inner pin contact. The inner conductor must be visible through the observation hole on the inner pin contact, and the contact must be pressed against the front end of the insulator.
d. Use the crimping tool MH992 and locator K1304 to crimp the inner pin contact.

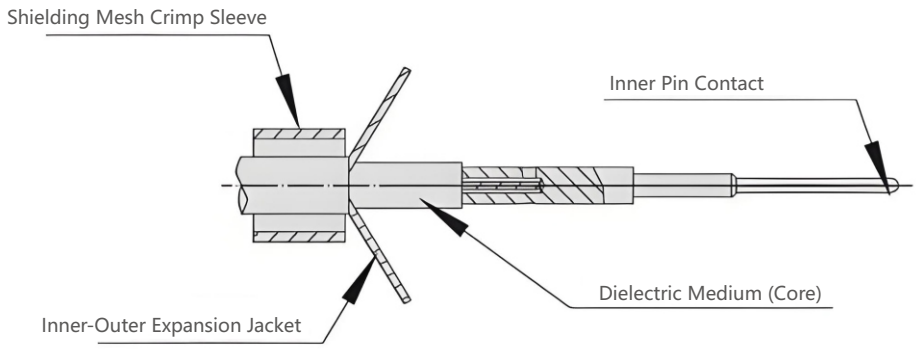


Figure 2.7

③As shown in Figure 2.8, proceed as follows:
a. Install the internal assembly into the outer socket contact assembly until the inner pin contact is fully installed.
b. Move the shielding mesh crimp sleeve forward to ensure the dimension is 6.1-6.8mm. Trim the excess shielding mesh at the front end of the shielding mesh crimp sleeve.
c. Use the crimping tool M22520/05-01 and locator M22520/05-03 to crimp the shielding mesh crimp sleeve; the outer diameter of the shielding mesh crimp sleeve must be less than 3.96mm.

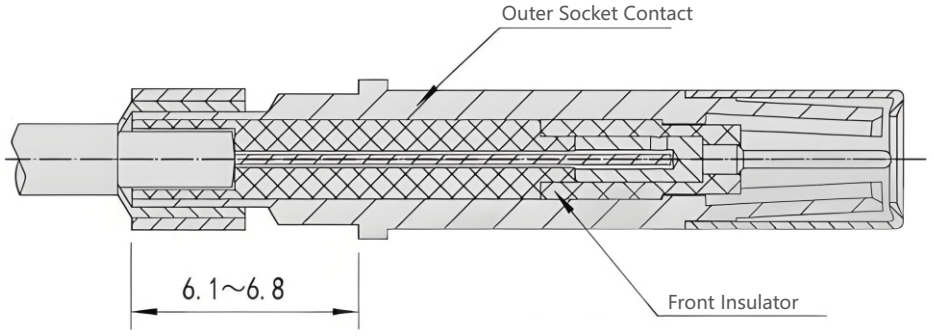


Figure 2.8

④Figure 2.9 shows the crimped 12# coaxial socket.

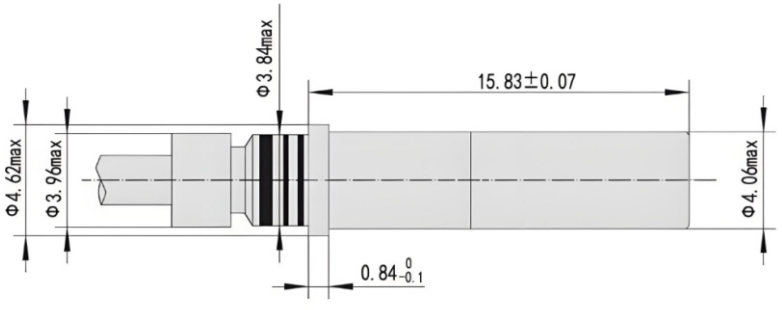


Figure 2.9

Assembly Instructions for 8# Dual Coaxial Shielded Pin and Socket

Assembly and Crimping of 8# Dual Coaxial Shielded Pin

①As shown in Figure 3.1, proceed as follows:

a. Slide the heat shrink sleeve onto the cable as shown in the figure.

b. Strip the cable jacket to the position shown in the figure. The end must be cut clean and form a right angle with the cable's axial surface. The cable must not be deformed or damaged during cutting.

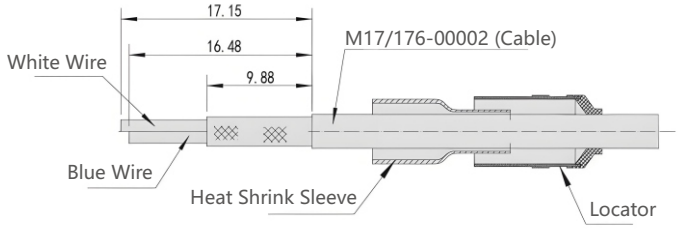


Figure3.1

②As shown in Figure 3.2, slide the shielding crimp sleeve onto the cable jacket, fit the shielding layer over the shielding crimp sleeve, then strip the internal wires as shown in the figure (you can cut off the filler near the shielding layer).

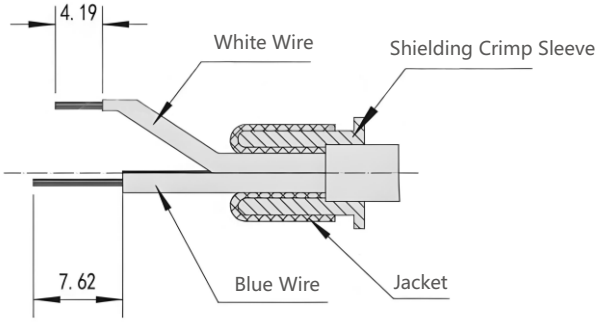


Figure3.2

③As shown in Figure 3.3, bend the white wire outward and place it into the slot of the insulator. Pass the blue wire through the insulator. The tail of the insulator must be pressed against the shielding layer.

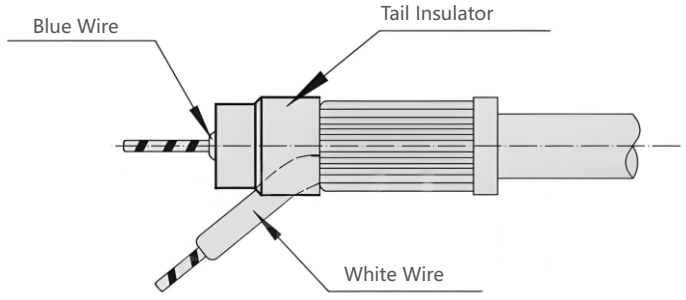


Figure3.3

④As shown in Figure 3.4, proceed as follows:

a. Install the inner conductor of the blue wire into the central pin contact. The conductor must be visible through the observation hole. The contact should be pressed against the tail of theinsulator, and the tail of the insulator should be pressed against the metal ferrule.

b. Use the crimping tool M22520/2-01 and locator K709 to crimp the central pin contact onto the blue wire.

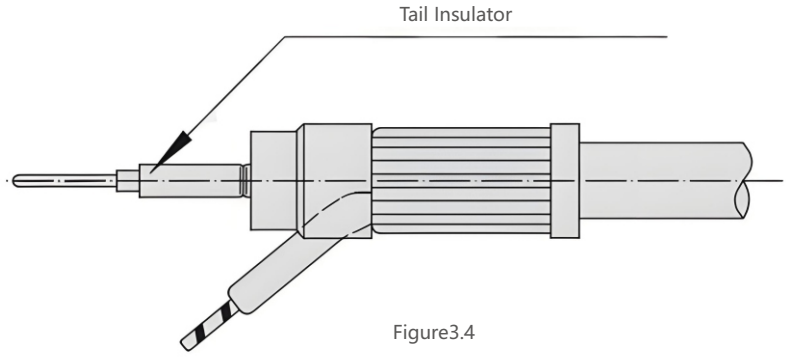


Figure3.4

⑤As shown in Figure 3.5, proceed as follows:

a. Fit the intermediate pin contact and the insulator inside it over the central pin contact.

b. Insert the inner conductor of the white wire into the hole on the tail surface of the intermediate contact. The conductor should be visible through the wire observation hole. The intermediate contact must be pressed against the insulator.

c. Use the crimping tool M22520/5-01 to crimp the intermediate contact onto the white wire.

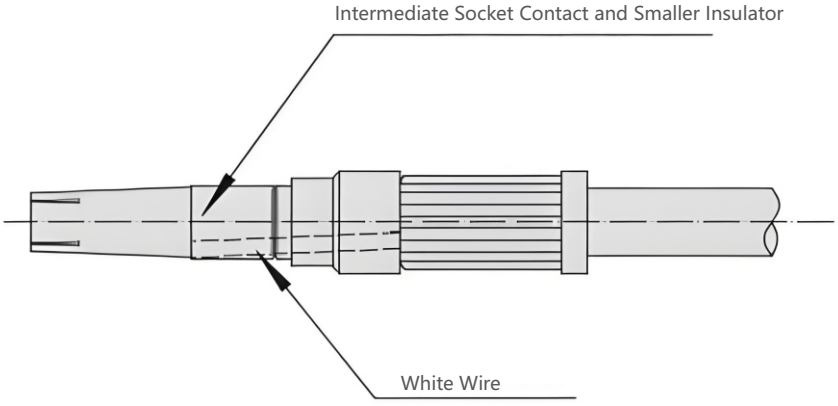


Figure3.5

⑥As shown in Figure 3.6, proceed as follows:

a. Fit the outer pin and insulator over the intermediate socket contact assembly until it is fully seated at the bottom.

b. Once the assembly is fully seated at the bottom, use the crimping tool M22520/5-01 and crimp die Y631A to perform hexagonal crimping on the terminal part of the outer housing.

c. Slide the heat shrink sleeve to the crimped part of the contact, then heat the heat shrink sleeve on the contact and cable.

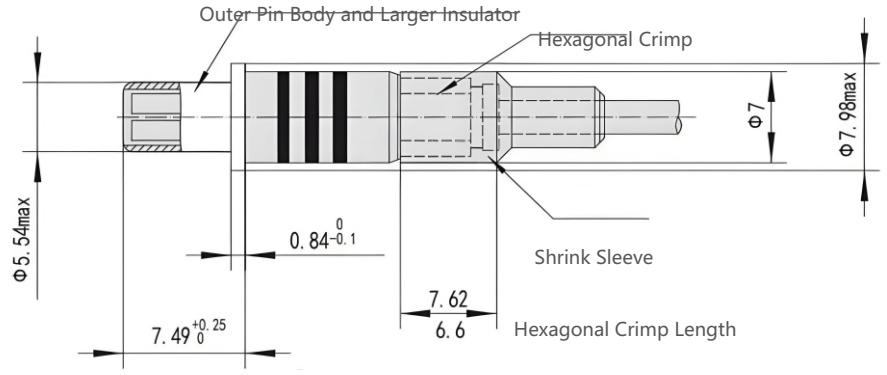


Figure3.6

Assembly and Crimping of 8# Dual Coaxial Shielded Socket

①As shown in Figure 3.7, slide the heat shrink sleeve and locator onto the cable jacket (start from the end with the smaller diameter).

②Strip the cable jacket to the position shown in the figure. The end must be cut clean and form a right angle with the cable's axial surface. The cable must not be deformed or damaged during cutting.

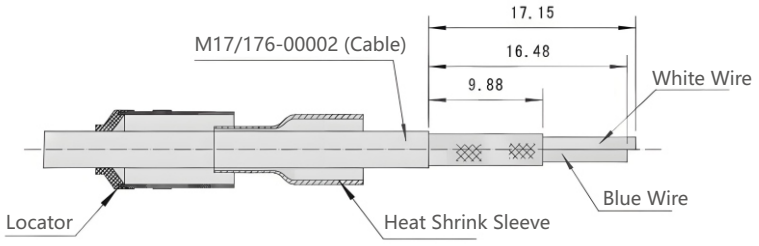


Figure3.7

③Slide the shielding crimp sleeve onto the cable jacket. As shown in Figure 3.8, fit the shielding layer over the shielding crimp sleeve, then strip the internal wires as shown in the figure (you can cut off the filler near the shielding layer).

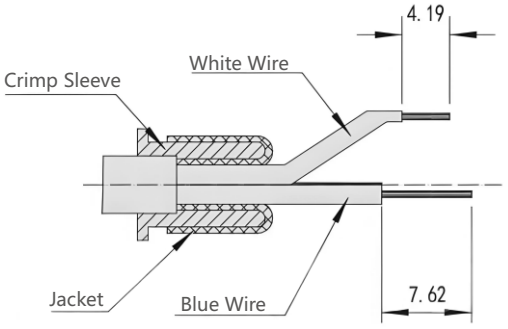


Figure3.8

④As shown in Figure 3.9, bend the white wire outward and place it into the slot of the insulator. Pass the blue wire through the insulator. The tail of the insulator must be pressed against the shielding layer.

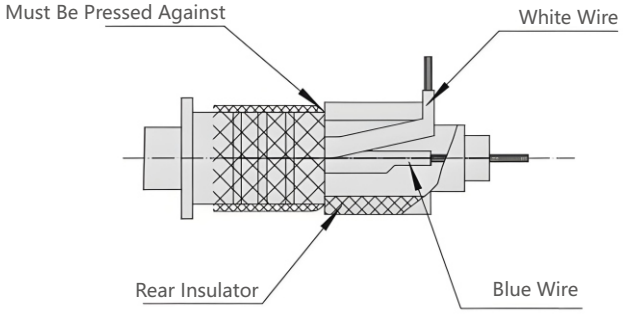


Figure3.9

⑤As shown in Figure 3.10, proceed as follows:a. Slide the socket contact onto the blue wire. The conductor must be visible through the observation hole on the internal socket contact.b. Crimp the contact using tool M22520/2-01 and locator K709.

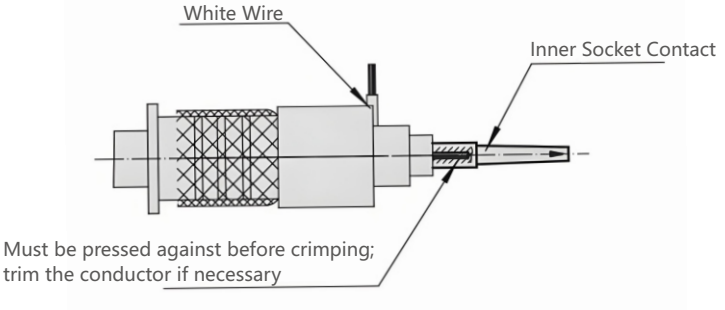


Figure3.10

⑥As shown in Figure 3.11, fit the intermediate pin contact and insulator assembly over the inner socket contact. The conductor must be visible through the observation hole on the contact. The intermediate contact must be pressed against the tail of the insulator.

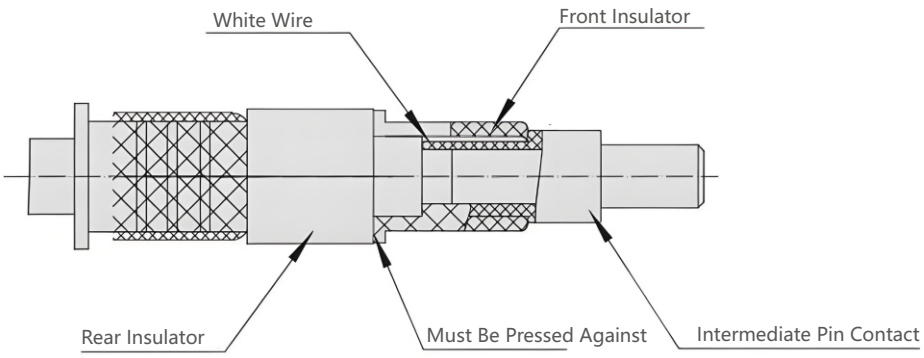


Figure3.11

⑦As shown in Figure 3.12, use tool M22520/5-01 to crimp the intermediate pin contact, and use die Y631B to crimp the intermediate contact onto the white wire.

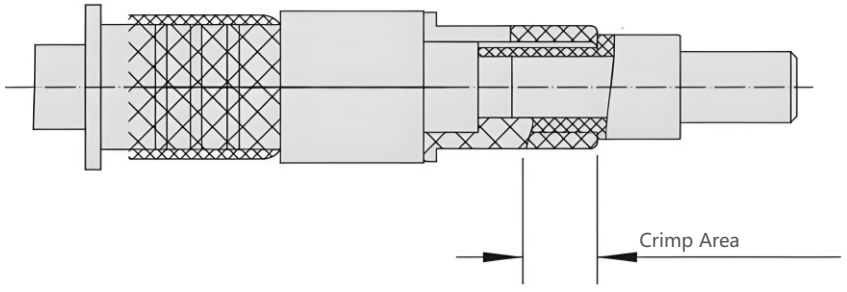


Figure3.12

⑧As shown in Figure 3.13, slide the outer socket contact and front insulator subassembly onto the internal assembly until it is pressed against. A small gap will appear on the sleeve.a. Use tool M22520/5-01 and die Y631A to crimp the outer assembly (sleeve and outer contact).b. Slide the preformed heat shrink sleeve onto the contact, then shrink the heat shrink sleeve using a heating device.

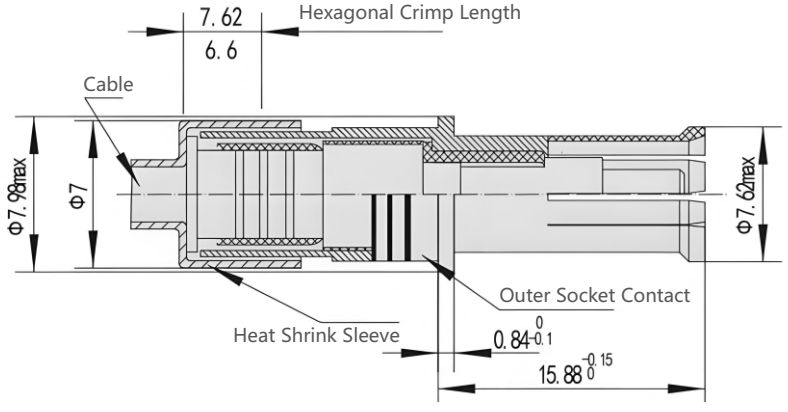
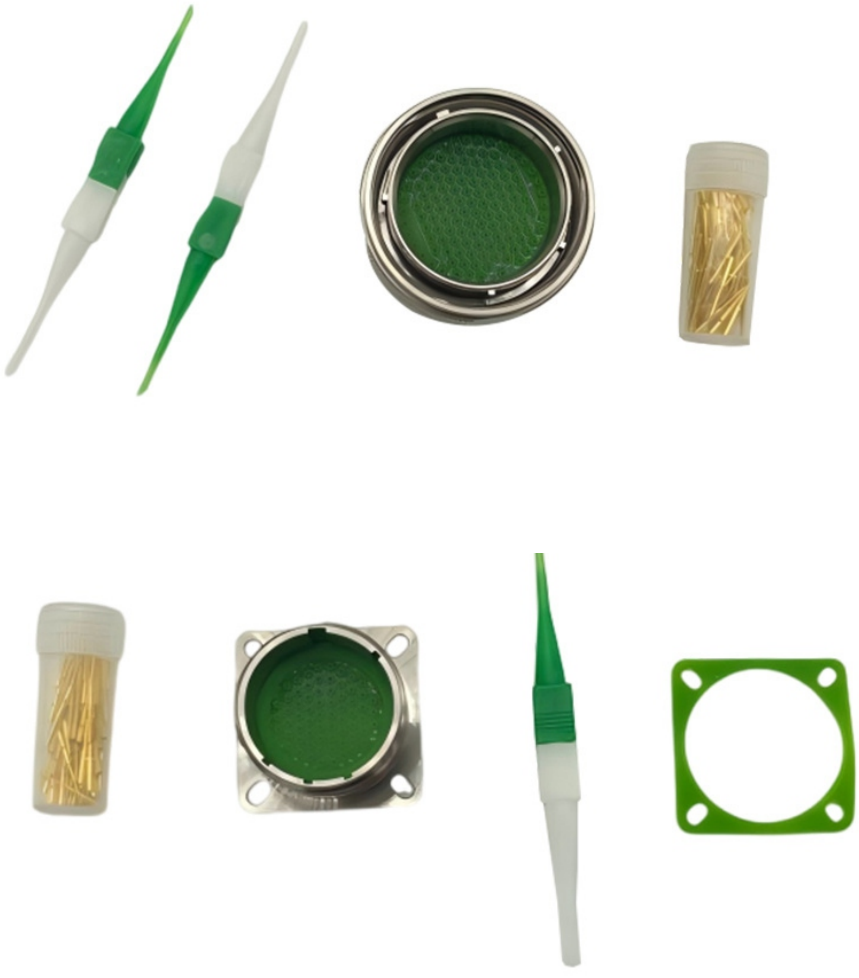


Figure3.13

GJB599 II Series (MIL-DTL-38999 II Series) Electrical Connector



The pictures are for reference only

GJB599 II Series (MIL-DTL-38999 II Series) Electrical Connector

Product Brief

- Complies with GJB599B (MIL-DTL-38999M) Series Ⅱ standards
- Bayonet-type quick connection
- The smallest in size, lightest in weight, and shortest in shell among all 599 serie
- EMI/RFI shielding
- Crimp contacts are removable; not resistant to oblique insertion.
  In environments with narrow spaces where plugging/unplugging is inconvenient, it is recommended to install pins in the socket

Application:

This product is used for circuit signal connection

Operating Environment:

This electrical connector is a lightweight connector, suitable for scenarios that do not involve high-intensity vibration, or exposure to harsh sand/dust and humidity

Main Technical Performance

Mechanical Performance:

- Shell Material: Aluminum alloy, stainless steel
- Plating Layer:
  Type B: Cadmium-plated olive drab
  Type E: Stainless steel passivation
  Type F: Electroless nickel plating
- Contacts: Copper alloy with gold plating on the surface; available in crimp, solder, and printed circuit board types
- Mechanical Life: ≥500 mating cycles
- Vibration: Random vibration, frequency 100-1000Hz, power spectral density $1g^2/Hz$
- Shock: 3ms half-sine wave, peak acceleration 300g

Electrical Performance:

Contact Resistance and Rated Current of Contacts:

Contact Specifications	Working Diameter (mm)	Contact Resistance (mΩ)	Rated Current (A)
22D	Φ0.76	≤12	5
20#	Φ1.00	≤5	7.5
16#	Φ1.60	≤2.5	13
12#	Φ2.40	≤1.5	23

Electromagnetic Interference Shielding:At 100MHz-1GHz, the minimum attenuation is 45dB

Withstand Voltage: V

Operating Altitude*	M	I	Ⅱ
Sea Level	1300	1800	2300
21000m	800	1000	1000

Insulation Resistance:

Under normal conditions: ≥5000MΩ Under humid conditions: ≥100MΩ Shell Electrical Continuity:

Type B: ≤2.5mV Type F: ≤1.0mV Type E: ≤50mV

Environmental Performance:

Operating Temperature:Type B: -65°C ~ +175°C Types E & F: -65°C ~ +200°C

Salt Spray Resistance:Type B: 500h Type E: 1000h Type F: 48h

Relative Humidity: Up to 98% at 40°C

Operating Altitude: ≤3048m

Web: www.anknor.com Email: Info@anknor.com

Model Naming

Main Name of Connector Series	JY	27473	T	16	F	35	S	N	H

Connector Type	27473-Plug (only T-type shell category) 27484-Shielded Plug (only T-type shell category) 27472-Wall Mount Square Flange Front-Mount Receptacle (only T-type shell category) 27497-Box Mount Square Flange Rear-Mount Receptacle (only T-type shell category) 27513-Wall Mount Square Flange Front-Mount Receptacle (only E-type shell category) 27508-Box Mount Square Flange Rear-Mount Receptacle (only E-type shell category) 27474-Nut Mount Receptacle (only T-type shell category)
Shell Type	T: With rear thread, can install accessories (accessories are consistent with J599-I series) E: Without rear thread, cannot install accessories
Shell Size	08-10-12-14-16-18-20-22-24
Material & Plating	B: Aluminum alloy, cadmium-plated olive drab E: Stainless steel, passivated C: Aluminum alloy, hard anodized F: Aluminum alloy, electroless nickel-plated T: Aluminum alloy, fluorocarbon polymer-plated Z: Aluminum alloy, zinc-nickel-plated
Contact Arrangement	See "Contact Arrangement List"
Soldered Contact Type	(Applicable only to soldered connectors) H: Soldered contact
Key Position	N: Normal key position; A, B, C, D: Alternate key positions When crimp-type contacts are selected, "N" may be omitted. When other contacts are selected, "N" must be identified. (09# shell only has three key positions: N, A, D)
Contact Type	Crimp & solder types: P: Pin S: Socket Printed circuit board (PCB) types: PL: Long PCB pin SL: Long PCB socket PC: Short PCB pin SC: Short PCB socket

Note:
In the model naming of GJB599B (national military standard) and MIL-DTL-3899M (US military standard), they are identical except for the main designation. The main designation of GJB599B is "JY", while that of MIL-DTL-3899M is "MS" — the two are interchangeable and compatible.

JY27497T18F35PN-H: JY series rear-mount receptacle; shell has rear threads (can install accessories); shell size 18; shell plating: aluminum alloy electroless nickel plating; contact arrangement 35; contact type: pin; termination method: soldering; key position N.

Soldered contacts are only applicable to soldered connectors

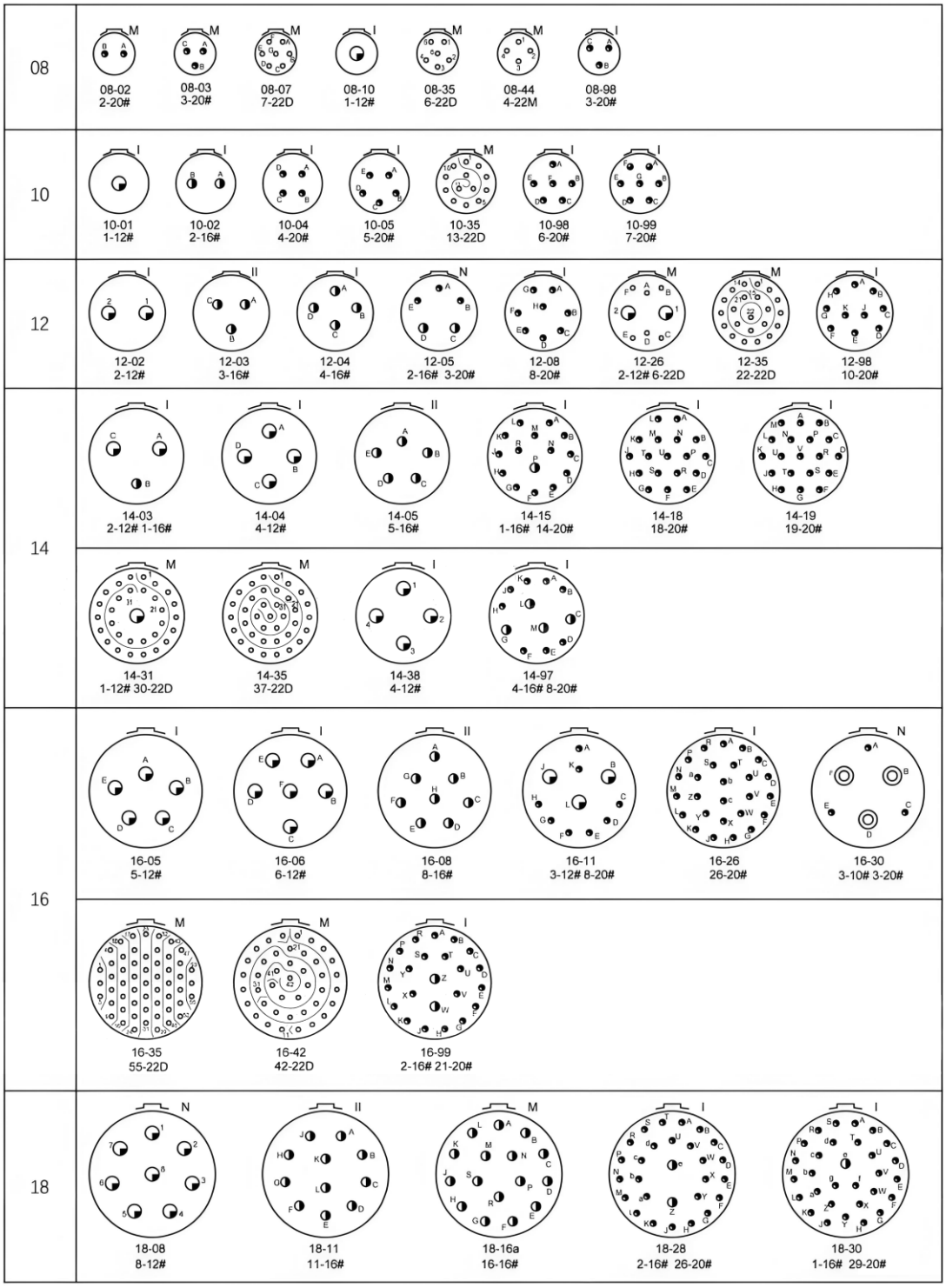
Crimp Contact

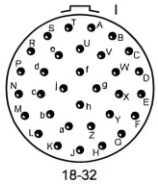
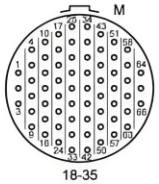
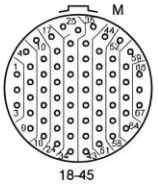
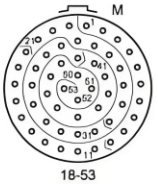
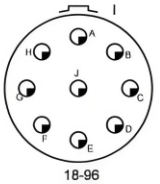
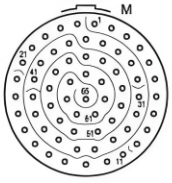
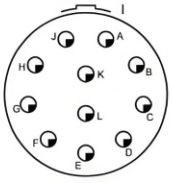
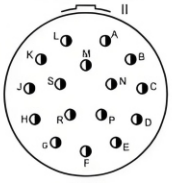
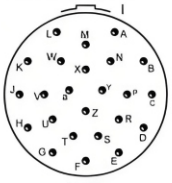
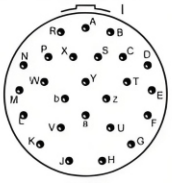
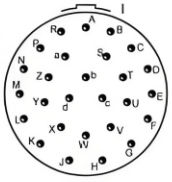
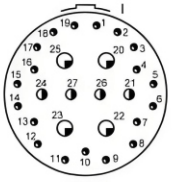
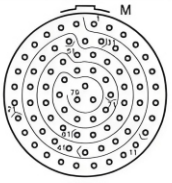
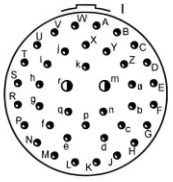
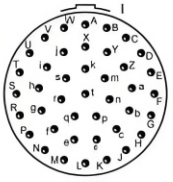
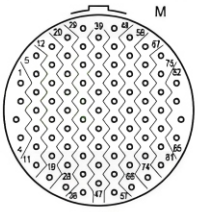
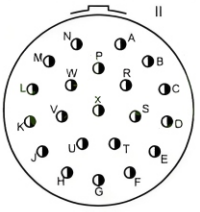
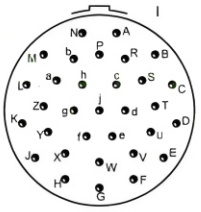
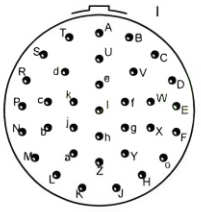
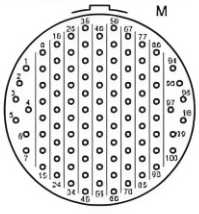
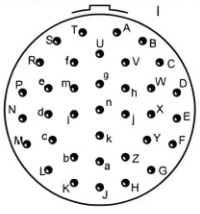
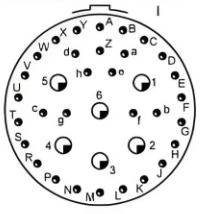
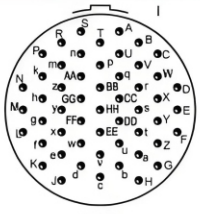
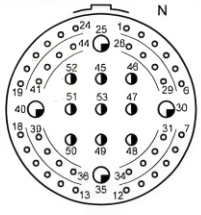
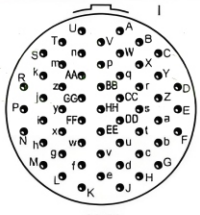
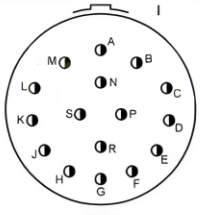
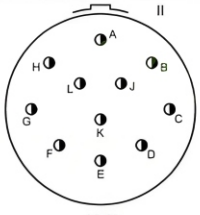
Contact Spec	Working Diameter	Pin Color Code	Socket Color Code	Crimp Barrel Inner Diameter (mm)	Crimp Barrel Outer Diameter (mm)	Compatible Wire Cross-Section (mm^2)	Compatible US Standard Cable (AWG)	Compatible Wire Insulation Outer Diameter (mm)	Removal Tool Code	Crimp Tool
22D	Φ0.76	Orange-Blue-Black	Orange-Green-Yellow	0.85	1.20	0.08 0.125 0.2 0.3	28 26 24 22	0.76-1.37	M81969/14-01	YJQ-02
20#	Φ1.00	Orange-Blue-Orange	Orange-Green-Purple	1.17	1.78	0.2 0.3 0.5	24 22 20	1.02-2.11	M81969/14-10	YJQ-02 XCXY-01
16#	Φ1.60	Orange-Blue-Yellow	Orange-Green-Gray	1.68	2.62	0.5 0.8 1.0 1.2	20 18 16	1.65-2.77	M81969/14-03	XCXY-01
12#	Φ2.4	Orange-Blue-Green	Orange-Green-White	2.49	3.84	2.0 3.0	14 12	2.46-3.61	M81969/14-04	XCXY-01

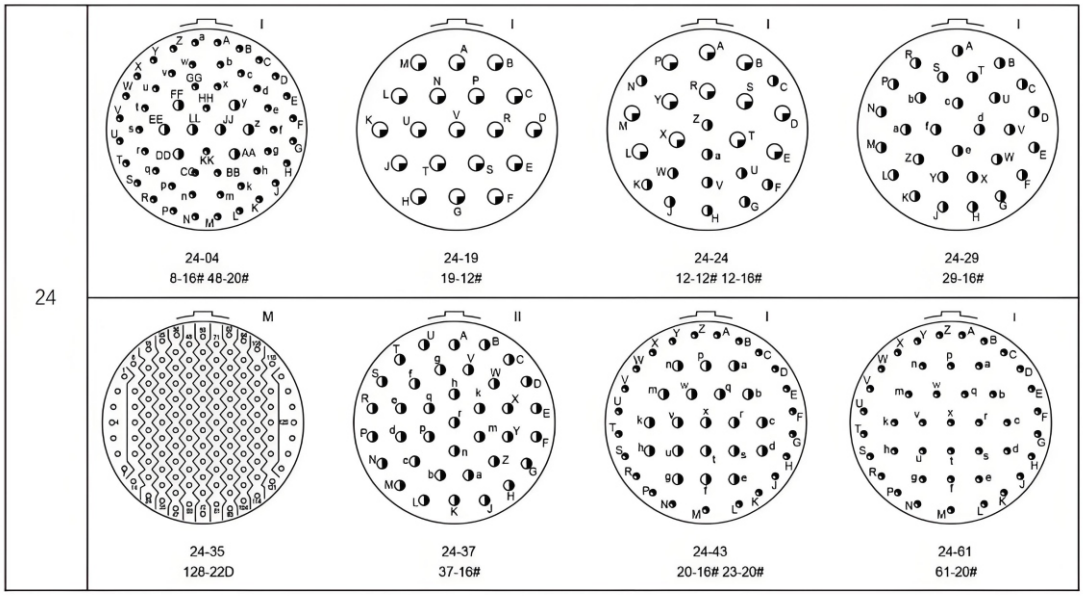
Soldered Contact

Soldered Contact Specification	Solder Cup Inner Diameter	Maximum Compatible Wire Gauge (AWG)
22D	Φ0.9	22
20#	Φ1.1	20
16#	Φ1.9	16
12#	Φ2.9	12

Contact Arrangement (View of the Mating Surface of the Pin Insulator)



18	 18-32 32-20#	 18-35 66-22D	 18-45 67-22D	 18-53 53-22D	 18-96 9-12#
20	 20-02 65-22D	 20-11 11-12#	 20-16 16-16#	 20-24 24-20#	 20-25 25-20#
	 20-27 27-20#	 20-29 4-12# 4-16# 19-20#	 20-35 79-22D	 20-39 2-16# 37-20#	 20-41 41-20#
22	 22-02 85-22D	 22-21 21-16#	 22-32 32-20#	 22-34 34-20#
	 22-35 100-22D	 22-36 36-20#	 22-37 6-12# 31-20#	 22-53 53-20#
	 22-54 4-12# 9-16# 40-22D	 22-55 55-20#	 22-97 16-16#	 22-99 11-16#

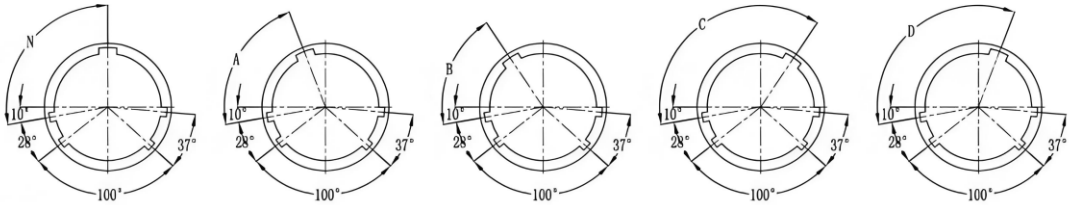


Contact Specification

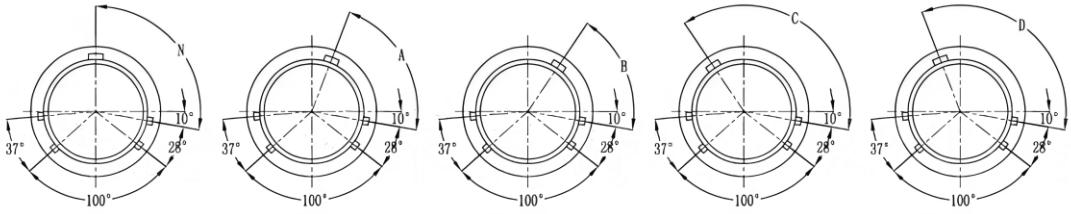
22D 20# 16# 12#

Housing Key Position

Socket Key Angle



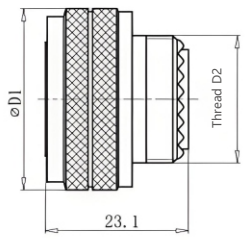
Plug Key Angle

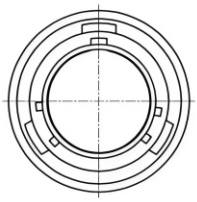


Key Position Code	08	10	12	14	16	18	20	24
N	100°	100°	100°	100°	100°	100°	100°	100°
A	82°	86°	80°	79°	82°	82°	82°	85°
B	None	72°	68°	66°	70°	70°	70°	74°
C	None	128°	132°	134°	130°	130°	130°	126°
D	118°	114°	120°	121°	118°	118°	118°	115°

External Dimensions

JY27473/JY27484 Plug

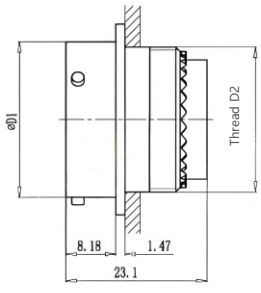


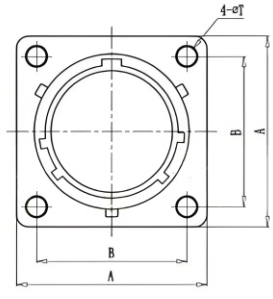


Housing Part Number	D1	Thread D2 UNEF-2A
08	18.8	0.4375-28
10	21.5	0.5625-24
12	25.8	0.6875-24
14	29.2	0.8125-20
16	32.3	0.9375-20
18	35.4	1.0625-18
20	38.5	1.1875-18
22	41.7	1.3125-18
24	44.7	1.4375-18

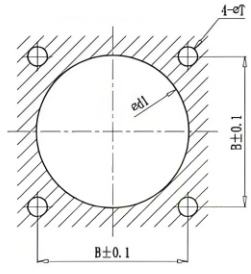
JY27472/JY27497 Wall-Mounted Panel Socket

JY27472 Wall-Mounted Panel Front-Mount Socket

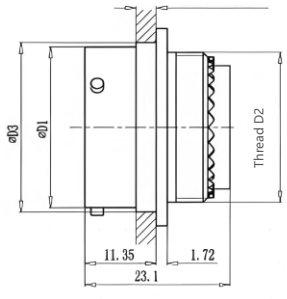


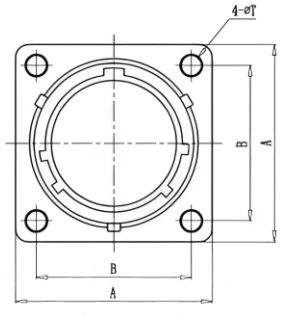


Recommended Panel Opening Dimensions

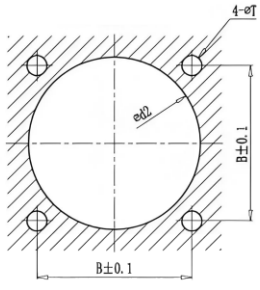


JY27497 Wall-Mounted Panel Rear-Mount Socket





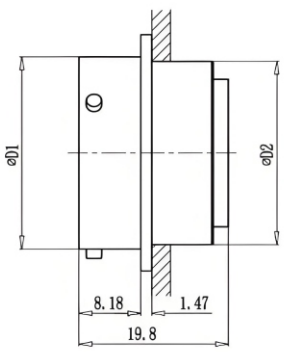
Recommended Panel Opening Dimensions

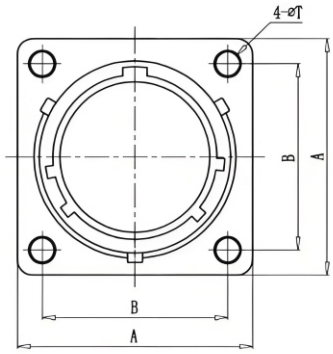


Housing Part Number	D1	Thread D2 UNEF-2A	D3	L max	A	B	T	d1	d2
08	12.00	0.4375-28	13.20	2.0	21.00	15.09	3.2	12.5	14.2
10	15.00	0.5625-24	16.14	2.0	24.10	18.26	3.2	15.5	17.5
12	19.05	0.6875-24	20.50	2.0	26.50	20.62	3.2	19.5	21.3
14	22.23	0.8125-20	23.60	2.0	28.90	23.01	3.2	21.5	25.0
16	25.40	0.9375-20	26.80	2.0	31.21	24.61	3.2	25.0	27.3
18	28.58	1.0625-18	30.00	2.0	33.60	26.97	3.2	28.0	31.3
20	31.75	1.1875-18	33.20	2.5	36.80	29.36	3.2	31.5	34.5
22	34.93	1.3125-18	36.35	2.5	40.00	31.75	3.2	34.5	37.5
24	38.10	1.4375-18	39.50	2.5	43.10	34.93	3.9	37.5	40.6

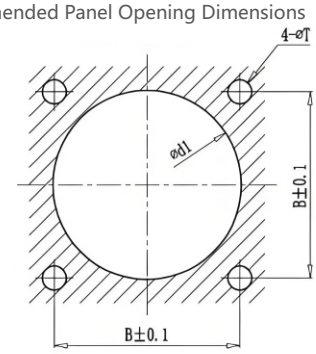
JY27513/JY27508 Box-Type Square Panel Socket

JY27513 Box-Type Square Panel Front-Mount Socket



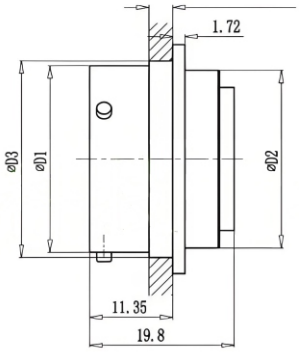


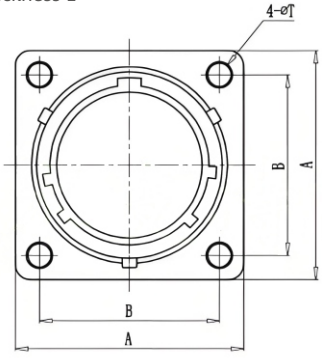
Recommended Panel Opening Dimensions



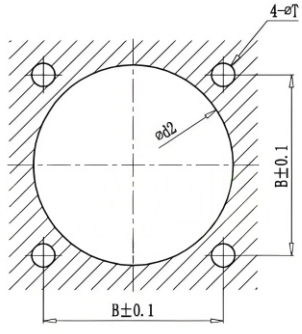
JY27508 Box-Type Square Panel Rear-Mount Socket

Recommended Panel Thickness L





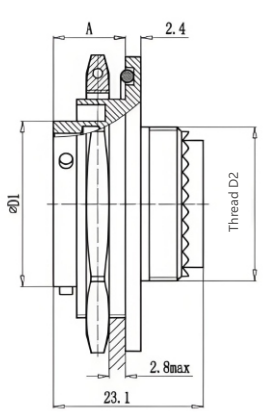
Recommended Panel Opening Dimensions

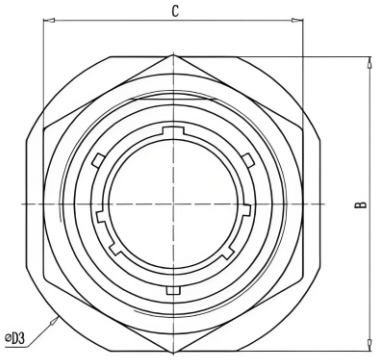


Housing Part Number	D1	D2	D3	L max	A	B	T	d1	d2
08	12.00	11.51	13.20	2.0	21.00	15.09	3.2	12.5	14.2
10	15.00	14.68	16.14	2.0	24.10	18.26	3.2	15.5	17.5
12	19.05	17.86	20.50	2.0	26.50	20.62	3.2	19.5	21.3
14	22.23	21.03	23.60	2.0	28.90	23.01	3.2	21.5	25.0
16	25.40	24.21	26.80	2.0	31.21	24.61	3.2	25.0	27.3
18	28.58	26.97	30.00	2.0	33.60	26.97	3.2	28.0	31.3
20	31.75	30.18	33.20	2.5	36.80	29.36	3.2	31.5	34.5
22	34.93	33.32	36.35	2.5	40.00	31.75	3.2	34.5	37.5
24	38.10	36.53	39.50	2.5	43.10	34.93	3.9	37.5	40.6

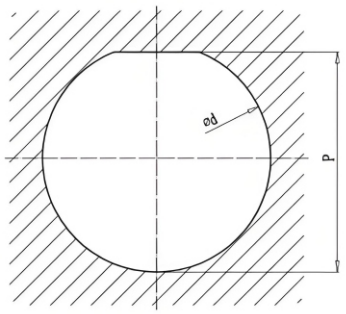
JY27474 Nut-Mounted Socket

JY27474 Nut-Mounted Socket



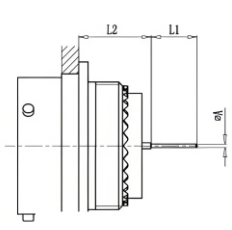


Recommended Panel Opening Dimensions

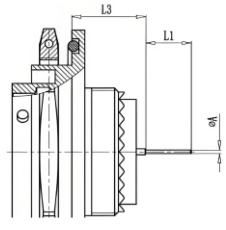


Housing Part Number	D1	Thread D2 UNEF-2A	D3	B	A	C	d	P
08	12.00	0.4375-28	34.95	31.75	11.1	27.9	22.46	21.08
10	15.00	0.5625-24	38.10	34.95	11.1	30.5	25.58	24.26
12	19.05	0.6875-24	41.28	38.10	11.1	33.6	28.80	27.53
14	22.23	0.8125-20	44.45	41.28	11.1	36.8	32.01	30.73
16	25.40	0.9375-20	49.23	45.24	11.1	40.0	35.15	33.86
18	28.58	1.0625-18	51.21	48.00	11.1	43.2	38.28	37.06
20	31.75	1.1875-18	54.38	51.21	11.8	46.3	41.50	40.03
22	34.93	1.3125-18	57.53	54.36	11.8	51.0	44.68	43.21
24	38.10	1.4375-18	60.71	57.53	11.8	54.4	47.85	46.38

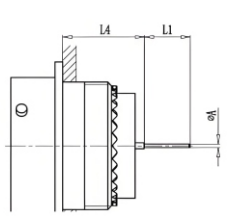
J599-II Series Socket with Printed Circuit Board Type Contacts



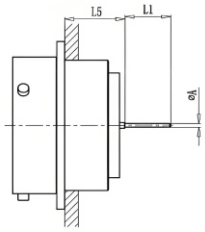
JY27497 Socket



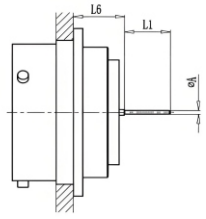
JY27474 Socket



JY27472 Socket



JY27513 Socket



JY27508 Socket

Plug and Socket Sealing Cap

Series Main Designation	JY	27510	F	11	C	L
Type	JY27510—Plug Sealing Cap (compliant with U.S. military standard Ms27510) JY27511—Socket Sealing Cap (compliant with U.S. military standard MS27511)					
Housing Plating	B-Cadmium-plated military green F-Electroless nickel plating E-Stainless steel passivation					
Housing Size	08-10-12-14-16-18-20-22-24					
Chain Type	A-No chain C-Stainless steel twist chain with connecting tab N-Stainless steel twist chain with ring R-Nylon cord with connecting tab S-Stainless steel cable with connecting tab E-Nylon cord with ring					
Length Marking	Unmarked-Standard length L-Chain length 127mm M-Chain length 152.4mm (only for JY27510) N-Chain length 177.8mm (only for Jy27510)					

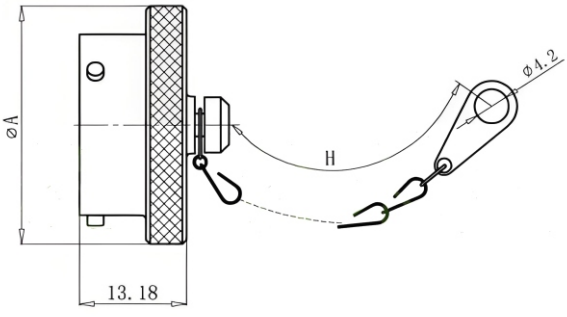
Operating Temperature of Metal Sealing Cap

Type B: -65°C ~ +175°C
Types F & E: -65°C ~ +200°C

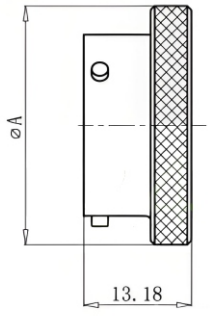
(Note: Sealing caps shall be ordered separately; they are not supplied with connectors. Customization is available upon customer request.)

JY27510 (MS27510) Plug Sealing Cap External Dimensions

Class C

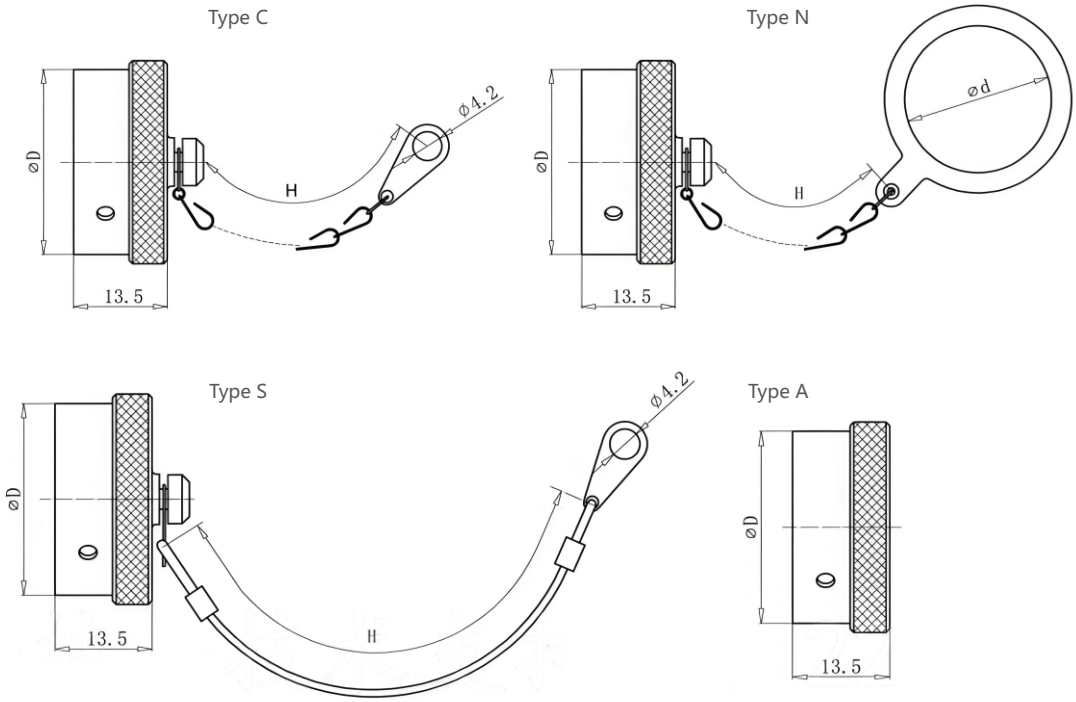


Class A



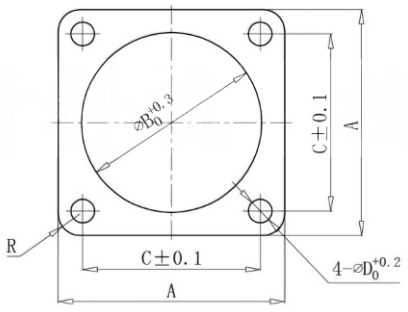
Housing Size	08	10	12	14	16	18	20	22	24
A max	18.2	21.5	25.4	28.7	31.7	35	38.1	41.4	44.4
H max	76.2	76.2	88.9	88.9	88.9	88.9	101.6	101.6	101.6

JY27474 Nut-Mounted Socket



Housing Size		08	10	12	14	16	18	20	22	24
D	max	16.0	19.0	23.5	26.7	29.8	33.1	36.5	39.5	42.9
d	min	22.8	26.0	29.0	32.5	35.5	38.6	42.0	45.0	48.5
H	max	76.2	76.2	88.9	88.9	88.9	88.9	101.6	101.6	101.6

599-II Square Tray Rubber Pad



Thickness: 1mm

Housing Size	A	B		C	D	R
		square tray rubber pad	conductive rubber pad			
08	21.1	13.4	13.4	15.09	3.3	3.2
10	24.2	16.3	16.3	18.26	3.3	3.2
12	26.6	21.5	21.5	20.62	3.3	3.2
14	29.0	23.8	24.7	23.01	3.3	3.2
16	31.3	27.0	27.0	24.61	3.3	3.2
18	33.7	30.2	31.0	26.97	3.3	3.2
20	36.9	33.4	34.2	29.36	3.3	3.2
22	40.1	36.5	37.4	31.75	3.3	3.2
24	43.2	39.7	40.5	34.93	4.1	4.0

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Standard Tail Accessories (Applicable to GJB599 Series I and Series II Electrical Connectors)

This type of accessory complies with the national military standard GJB1784 (equivalent to the U.S. military standard MIL-C-85049).

Notes:

1.The "J1784" and "J1784A" mentioned in accessory models are identical and interchangeable.
2.When using the accessory, at least one of the following anti-loosening measures must be adopted:
① Pass a safety wire through the safety hole for anti-loosening;
② Apply thread locker to the tail threads of the product, then tighten the connecting nut to prevent loosening;
③ Use heat shrink tubing to heat-shrink the entire accessory for anti-loosening.
3.For accessories with set screws, apply thread locker to the set screw before tightening it.
4.If the product matched with the cable accessory is equipped with size 8 contacts, longer cable accessories (such as J1784/49H or J1784/18A) should be selected to avoid interference between the contact locator and the cable accessory.
5.The table below lists the matching table of cable accessories for GJB599 series welding and crimping products, as well as the functional classification of cable accessories. Due to the large variety of our company's modified products and accessories at this stage, they cannot all be listed here. The content of this table is for reference only; please contact our company for confirmation of detailed information.

	Functional Types of Compatible Cable Accessories	Compatible Cable Accessory Models
GJB599 Series Ⅰ and Ⅱ Crimp Connector	Non-clamping Cable & Non-shielding Accessory	1. J1784/27, Type HA
	Clamping Cable & Non-shielding Accessory	1. J1784/49, Type HB
		2. J1784/49-xx (Short)
		3. J1784/47, Type HC
	Shielding & Non-clamping Cable Accessory	1. TJ1784/62, Type HD
		2. J1784/62
		3. J1784/85
		4. J1784/87
		5. JY599 Ⅰ-FJA00
		6. JY599 Ⅰ-FJA90
		7. JY599 ⅠxxFJ00
		8. JY599 ⅠxxFE00
	Clamping Cable & Shielding Accessory	1. TJ1784/62-xxB, Type HE
		2. TJ1784/62-xxC-xx
		3. J1784/18A Series
GJB599 Series Ⅰ and Ⅱ Soldered Connector	Non-clamping Cable & Non-shielding Accessory	1. J1784/27, Type HA
	Clamping Cable & Non-shielding Accessory	1. J1784/49H
		2. J1784/47, Type HC
	Shielding & Non-clamping Cable Accessory	1. TJ1784/62, Type HD
		2. J1784/62
		3. J1784/85
		4. J1784/87
		5. JY599 Ⅰ-FJA00
		6. JY599 Ⅰ-FJA90
	Clamping Cable & Shielding Accessory	1. TJ1784/62-xxB, Type HE
		2. TJ1784/62-xxC-xx
		3. J1784/18A Series

GJB1784 Model Naming

Series Main Name	J1784	49	16	S

Type:
- 27-A Type: Rear Nut (Non-clamping Cable & Non-shielding Accessory)
- 49-B Type: Straight Cable Clamp (Clamping Cable & Non-shielding Accessory)
- 47-C Type: Angled Cable Clamp (Clamping Cable & Non-shielding Accessory)
- 62-D Type: Shielded Termination Rear Accessory
- (Add "T" before the basic part number) (Shielding & Non-clamping Cable Accessory)
- 62-Heat Shrink Rear Accessory (Shielding & Non-clamping Cable Accessory)

Accessory Housing Size:08 10 12 14 16 18 20 22 24
Compatible with GJB599 Series Ⅰ Housing Size: 09 11 13 15 17 19 21 23 25
Compatible with GJB599 Series Ⅱ Housing Size: 08 10 12 14 16 18 20 22 24

Housing Plating
- W — Cadmium-plated Military Green
- N — Electroless Nickel Plating
- S — Stainless Steel Passivation

1.In the model naming of GJB 1784 (Chinese military standard) and MIL-C-85049 (US military standard), except for the different basic part numbers, the rest are identical. The basic part number of GJB1784 is "J1784", and the main designation of MIL-C-85049 is "M85049" — the two are interchangeable.
2.The housing size of the above cable accessories must be even numbers; odd numbers are strictly prohibited for housing sizes.

Industry Model Naming

	HA	S	16

Type
- HA - Cartridge-type Rear Accessory
- HB - Straight Cable-clamping Rear Accessory
- HC - 90° Angled Cable-clamping Rear Accessory
- HD - Shielded Rear Accessory
- HE - Straight Cable-clamping Shielded Rear Accessory

Housing Plating:
- W — Cadmium-plated Military Green
- N — Electroless Nickel Plating
- S — Stainless Steel Passivation

Accessory Housing Size:08 10 12 14 16 18 20 22 24
Compatible with GJB599 Series Ⅰ Housing Size: 09 11 13 15 17 19 21 23 25
Compatible with GJB599 Series Ⅱ Housing Size: 08 10 12 14 16 18 20 22 24

GJB1784 Accessory Models	Industry Accessory Models
J1784/27-*-W	HA-B*
J1784/27-*-N	HA-F*
J1784/49-*-W	HB-B*
J1784/49-*-N	HB-F*
J1784/47-*-W	HC-B*
J1784/47-*-N	HC-F*
TJ1784/62-*-W	HD-B*
TJ1784/62-*-N	HD-F*
TJ1784/62-*-WB	HE-B*
TJ1784/62-*-NB	HE-F*

(In the table, "*" represents the housing size. Users are recommended to place orders using GJB1784 accessory models first; if necessary, orders can be placed using industry accessory models.)

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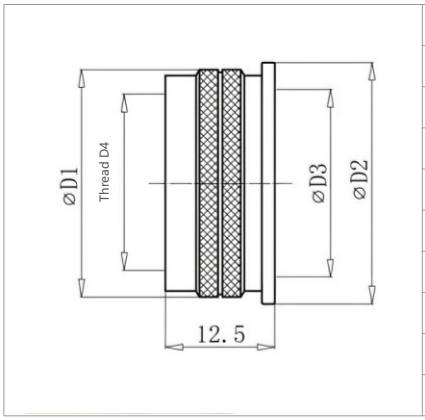
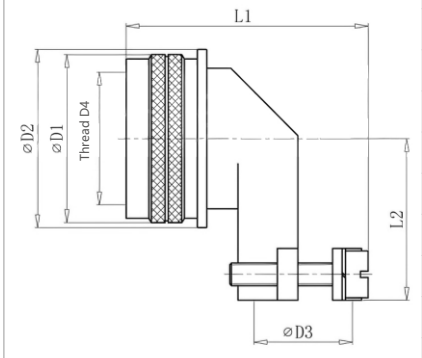
J1784/27-(Type HA) Rear Nut



Housing Size	D1	D2	D3 max	Thread D4
08	16.5	17.6	7.9	0.4375-28
10	19.5	20.6	10.8	0.5625-24
12	22.5	23.6	13.6	0.6875-24
14	26.5	27.6	16.9	0.8125-20
16	29.5	30.3	20.1	0.9375-20
18	32.5	33.3	22.4	1.0625-18
20	36.0	36.8	25.6	1.1875-18
22	38.5	39.3	28.8	1.3125-18
24	41.7	42.3	31.9	1.4375-18

This anti-rotation accessory tightly seals the cable body to ensure the environmental resistance of the connector. It cannot clamp the cable and is used in scenarios with general environmental conditions.

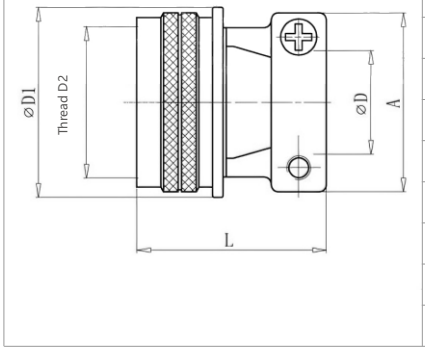
J1784/47-(HC) Angled Cable Clamp



Housing Size	D1	D2	D3	Thread D4	L1 max	L2 max
08	16.5	17.6	3.2~6.4	0.4375-28	29.0	25.0
10	19.5	20.6	4.0~9.5	0.5625-24	32.0	26.0
12	22.5	23.6	4.8~11.1	0.6875-24	35.5	27.5
14	26.5	27.6	5.5~14.3	0.8125-20	36.5	31.0
16	29.5	30.3	6.4~15.9	0.9375-20	38.5	32.5
18	32.5	33.3	7.9~19.1	1.0625-18	41.5	34.0
20	36.0	36.8	9.5~22.2	1.1875-18	44.5	34.5
22	38.5	39.3	10.3~23.8	1.3125-18	46.0	36.5
24	41.7	42.3	14.3~25.4	1.4375-18	48.0	43.5

This is an anti-rotation, 90° cable clamping accessory. It can tightly fasten the cable sealing body and perform 90° cable clamping, ensuring the environmental resistance of the connector. It is suitable for scenarios where the cable is subject to tensile force.

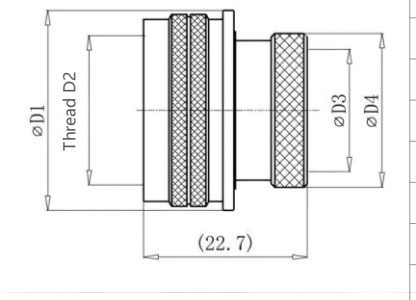
J1784/49-Straight Cable Clamp (Cable-clamping Non-shielded Accessory)



Housing Size	D1	Thread D2	D	A	L
08	17.6	0.4375-28	2.49~5.94	20.0	23.6
10	20.6	0.5625-24	3.87~5.94	22.0	24.6
12	23.6	0.6875-24	4.83~8.33	24.5	26.7
14	27.6	0.8125-20	6.60~11.61	26.0	27.5
16	30.3	0.9375-20	7.19~15.60	30.5	27.5
18	33.3	1.0625-18	8.26~16.10	35.0	29.0
20	36.8	1.1875-18	8.71~17.73	38.0	30.4
22	39.3	1.3125-18	9.68~20.90	41.0	32.4
24	42.3	1.4375-18	10.62~21.66	44.0	34.4

This is an anti-rotation and cable-clamping accessory. It can tightly fasten the cable sealing body and perform cable-clamping functions, ensuring the environmental resistance of the connector. It is suitable for scenarios where the cable is subject to tensile force.

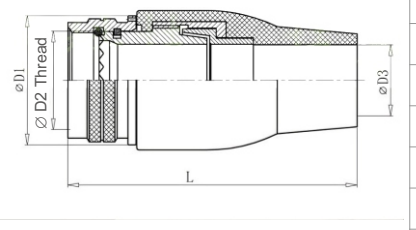
J1784/62 - Heat Shrink Tubing Tail Accessory



Model Number	D1	Thread D2	D3	D4
J1784/62-08N	16.5	0.4375-28	7.9	11.6
J1784/62-10N	19.5	0.5625-24	10.9	14.7
J1784/62-12N	22.5	0.6875-24	13.7	17.6
J1784/62-14N	26.5	0.8125-20	16.9	21.2
J1784/62-16N	29.5	0.9375-20	20.1	24.4
J1784/62-18N	32.5	1.0625-18	22.5	26.4
J1784/62-20N	36.0	1.1875-18	25.4	30.9
J1784/62-22N	38.5	1.3125-18	28.5	33.8
J1784/62-24N	41.7	1.4375-18	31.6	36.9

This is an anti-rotation and compression shielding mesh accessory. It can tightly fasten the cable sealing body, provide a connection function between the shielding mesh and the tail accessory, and ensure the environmental resistance and electromagnetic shielding performance of the connector. However, it cannot clamp the cable and is suitable for scenarios where the cable is subject to low tensile force.

J1784/01A - Grounding Compression Tail Accessory (Shielded Non-Clamping Cable Accessory)



Shell Number	D1	Thread D2	D3	L
08	17.6	0.4375-28	7.0	53.0
10	20.6	0.5625-24	10.0	53.0
12	23.6	0.6875-24	13.0	53.0
14	27.6	0.8125-20	15.0	73.0
16	30.3	0.9375-20	18.0	73.0
18	33.3	1.0625-18	20.0	73.0
20	36.8	1.1875-18	23.5	73.0
22	39.3	1.3125-18	26.5	73.0
24	42.3	1.4375-18	29.0	73.0

This is an anti-rotation and compression shielding mesh accessory. It can tightly fasten the cable sealing body, provide a connection function between the shielding mesh and the tail accessory, and ensure the environmental resistance and electromagnetic shielding performance of the connector. However, it cannot clamp the cable and is suitable for scenarios where the cable is subject to low tensile force.

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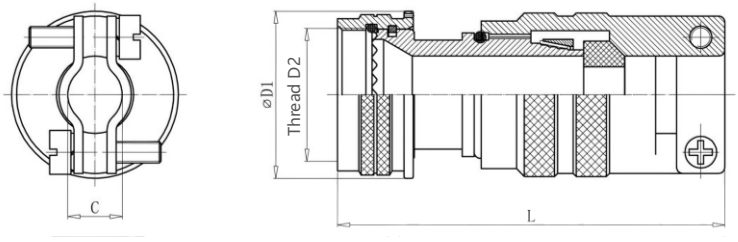
Series Naming for Model J1784/18A

Series Name	J1784	18A	17	N	04	A
Type	18A-Straight Shielded Cable Clamp (Applicable to GJB599 Series I & II)					
Housing Plating	Accessory Housing Size09 11 13 15 17 19 21 23 25 Compatible GJB599 Series I Housing Size09 11 13 15 17 19 21 23 25 Compatible GJB599 Series II Housing Size08 10 12 14 16 18 20 22 24					
Housing Plating	W-Tin-plated Military Green; N-Electroless Nickel Plating; S-Stainless Steel Passivation					
Outlet Diameter Code	Select based on Table 1 & Table 2					
Length Code	See Table 3					



This is an anti-rotation/pressurized shielding mesh and cable clamping accessory. It can tightly fasten the cable sealing body and enable the connection between the shielding mesh and the rear accessory, ensuring the connector's excellent environmental resistance and electromagnetic shielding performance. It is suitable for harsh environments. This cable accessory comes in different lengths, making it applicable to scenarios (such as mixed high and low frequency configurations) that require longer accessories.It is recommended to use pre-fabricated cables with this accessory.

Table 1

Housing Size	Optional Outlet Diameter Codes for Each Housing Size	D1	Thread D2
09	01~02	16.5	0.4375-28
11	01~03	19.5	0.5625-24
13	02~04	22.5	0.6875-24
15	02~05	26.5	0.8125-20
17	02~06	29.5	0.9375-20
19	03~07	32.5	1.0625-18
21	03~08	36.0	1.1875-18
23	03~09	38.5	1.3125-18
25	04~10	41.7	1.4375-18

Table 2

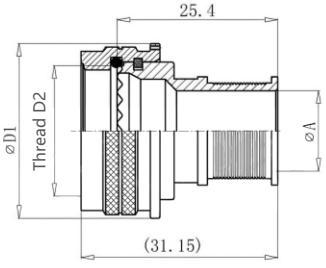
Outlet Diameter Code	Cable Diameter Range C (Compatible)
01	1.57~3.18
02	3.18~6.35
03	6.35~9.53
04	9.53~12.7
05	12.7~15.88
06	15.88~19.05
07	19.05~22.23
08	22.23~25.4
09	25.4~28.58
10	28.58~31.75

Table 3

Housing Size	Length Code	L
09~25	Standard (Omitted if not specified)	64.1
09~25	A	88.1
15~25	B	113.5
21~25	C	138.9

319-001A Series Model Naming

Series Name		319	F	S	001A	M	16	06
Design Number								
Angle Type	A-90° Bent Type; S-Straight Type							
Base Code								
Housing Plating	B-Tin-plated Military Green; M-Electroless Nickel Plating; NF-Tin-plated Military Green After Electroless Nickel Plating							
Accessory Housing Size08 10 12 14 16 18 20 22 24 Compatible GJB599 Series I Housing Size09 11 13 15 17 19 21 23 25 Compatible GJB599 Series II Housing Size08 10 12 14 16 18 20 22 24								
Outlet Diameter Code	See Table 1 for details							



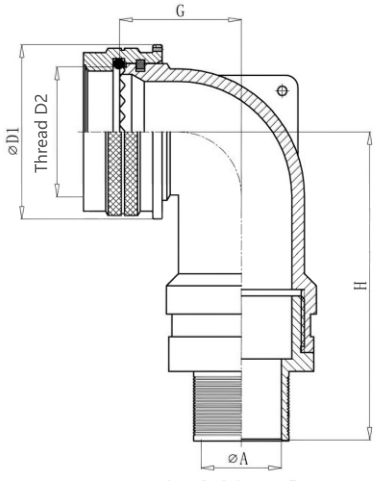


Table 1

Outlet Diameter Code	Outlet Diameter A
1	4.8
2	6.4
3	7.9
4	9.5
5	11.1
6	12.7
7	14.3
8	15.9
9	17.5
10	19.1
11	20.6
12	22.2
13	23.8
14	25.4
15	31.8

Housing Size	D1	Thread D2	G max
08	16.5	0.4375-28	14.7
10	19.5	0.5625-24	17.1
12	22.5	0.6875-24	17.5
14	26.5	0.8125-20	19.8
16	29.5	0.9375-20	24.5
18	32.5	1.0625-18	26.8
20	36.0	1.1875-18	26.8
22	38.5	1.3125-18	30.6
24	41.7	1.4375-18	3.6

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Specialized Rear Accessory
(Applicable to GJB599 Series I and Series II Electrical Connectors)

This type of rear accessory is specifically suitable for clamping shielded cables with a shielding mesh, and it is divided into two main categories: straight type and bent type. This accessory can be optionally equipped with a Ti-Ni alloy memory ring (which has alloy memory properties). When heated, the ring shrinks to tightly fasten the shielding mesh around the tail of the accessory, truly achieving 360° electromagnetic shielding.

Note: Heating shrinkage method for the Ti-Ni alloy memory ring: A heat gun can be used for heating, which takes about 45 seconds to 1 minute. When the temperature indicator color mark on the memory ring changes from green to black, the memory ring has finished shrinking (the temperature of the ring is about 165°C at this time).Stop heating, and note that the memory ring should be heated evenly during the process.

J1784/85, J1784/87 Outer Shield Rear Accessory (Shield Non-Clamping Cable Accessory)

Series Name	J1784	85	10	N	A	03
Series Code	85-Straight Type, 87-Bent Type (Universal for GJB599 Series I & II)					
Accessory Housing Size Compatible GJB599 Series I Housing Size Compatible GJB599 Series II Housing Size	08 10 12 14 16 18 20 22 24 09 11 13 15 17 19 21 23 25 08 10 12 14 16 18 20 22 24					
Housing Plating	W-Tin-plated Military Green; N-Electroless Nickel Plating; S-Stainless Steel Passivation FT-Aluminum Alloy Plated Satin Tin; TA-Titanium Alloy (Only for Type 85)					
Ti-Ni Ring	Unmarked-No Ti-Ni Ring; A-Optional Ti-Ni Ring					
Outlet Diameter or Ti-Ni Ring Specification	Mark outlet diameter when no Ti-Ni ring is used; Mark Ti-Ni ring specification when Ti-Ni ring is optional					

JY599 I-FJA00, JY599 I-FJA90 External Shield Rear Accessory (Shielded Non-Clamping Cable Accessory)

Series Name	Jy599	I	13	FJA	00	F	A	03
Series Code	I (Universal for GJB599 Series I & II)							
Accessory Housing Size Compatible GJB599 Series I Housing Size Compatible GJB599 Series II Housing Size	09 11 13 15 17 19 21 23 25 09 11 13 15 17 19 21 23 25 08 10 12 14 16 18 20 22 24							
Accessory Type	FJA, FJC, FJE							
Mechanism Form	00-Straight Rear Accessory; 90-90° Bent Accessory							
Housing Plating	W-Tin-plated Military Green; F-Electroless Nickel Plating; S-Stainless Steel Passivation FT-Aluminum Alloy Plated Satin Tin; TA-Titanium Alloy (Only for Type 85)							
Ti-Ni Ring	Unmarked-No Ti-Ni Ring; A-Optional Ti-Ni Ring							
Outlet Diameter or Ti-Ni Ring Specification	Mark outlet diameter when no Ti-Ni ring is used; Mark Ti-Ni ring specification when Ti-Ni ring is optional							

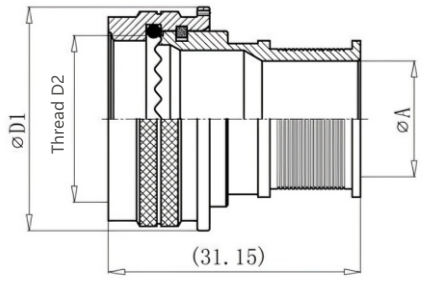
Note:

1.This type of accessory is used in harsh environments where frequent disassembly is not required, and it can achieve internal and external shielding.

2.J1784/85 and J1784/87 are identical to JY599 I-FIA00 and JY599 I-FIA90, differing only in their naming model numbers.

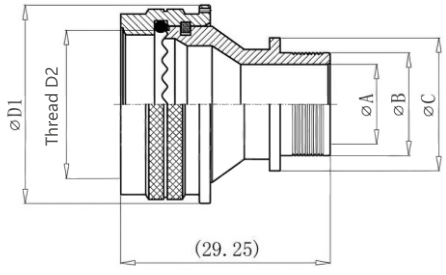
Overall Dimensions

Straight Accessory (J1784/85 or JY599 I-FJA00)



Housing Size	D1	Thread D2	A (02 Outlet Hole)	A (03 Outlet Hole)
08	17.6	0.4375-28	N/A	6.4
10	20.6	0.5625-24	N/A	7.9
12	23.6	0.6875-24	7.9	11.1
14	27.6	0.8125-20	11.1	14.3
16	30.3	0.9375-20	12.7	15.9
18	33.3	1.0625-18	15.9	19.1
20	36.8	1.1875-18	15.9	20.6
22	39.3	1.3125-18	17.5	23.8
24	42.3	1.4375-18	19.1	25.4

JY599 I FJC00 (Shielded Non-Clamping Cable Accessory)



Housing Size	D1	Thread D2	A	B	C
09	17.6	0.4375-28	6.6	9.3	13.3
11	20.6	0.5625-24	8.3	11	15
13	23.6	0.6875-24	10	12.7	16.6
15	27.6	0.8125-20	11.1	14.3	18.5
17	30.3	0.9375-20	13.1	15.9	19.8
19	33.3	1.0625-18	16.2	19	23
21	36.8	1.1875-18	16.2	19	23
23	39.3	1.3125-18	19.5	22.2	26.2
25	42.3	1.4375-18	19.5	22.2	26.2

GJB599 III Series (MIL-DTL-38999 III Series) Electrical Connector

The pictures are for reference only

GJB599 Series III (MIL-DTL-38999 Series III) Electrical Connector

Product Brief

- Complies with GJB599B (MIL-DTL-38999M) Series III standards
- Three-start thread quick connection with anti-loosening mechanism
- Small size, light weight, and high contact density
- Equipped with electromagnetic shielding function
- Crimp contacts are removable; pins prevent misalignment during insertion
- Features high-strength vibration resistance at high temperatures, suitable for harsh environments such as sand/dust and humidity
- Positions for 12#, 16#, 20# contact specifications can be fitted with fiber optic contacts
- Positions for 12#, 10#, 8# contact specifications can be fitted with coaxial and shielded contacts
- Available with stainless steel, titanium alloy, aluminum alloy shells and various plating options
- Features high-strength vibration resistance at high temperatures, suitable for harsh environments such as sand/dust and humidity

Purpose: This product is used for circuit signal connection

Operating Environment:

This product is suitable for complex environments with strong vibration, rain, sand/dust, and humidity

Main Technical Performance

Mechanical Properties:

- Materials:
  Shell: Aluminum alloy, stainless steel, titanium alloy
  Insulator: Thermosetting plastic or thermoplastic plastic
  Sealing wire body and sealing ring: Silicone rubber
- Plating Layer:
  Type W: Cadmium-plated military green
  Type F: Electroless nickel plating
  Type K: Stainless steel passivation
  Type FT: Alloy-plated bright cadmium
  Type TA: Titanium alloy
- Contact Material: Copper alloy with gold plating on the surface; available in crimp, solder, and printed circuit board types
- Mechanical Life: ≥500 mating cycles
- Shock: 3ms half-sine wave, peak acceleration 300g
  Vibration:
- Sinusoidal: 60g, with temperature cycling and simulated accessories (36h)
- Random:
  At high temperature: Frequency 100~1000Hz, power spectral density $1g^2/Hz$, corresponding RMS value 41.7g
  At ambient temperature: Frequency 100~1000Hz, power spectral density $5g^2/Hz$, corresponding RMS value 49.5g

Electrical Properties:

Withstand Voltage: V

Operating Class+	M	N	I	Ⅱ
Sea Level	1300	1000	1800	2300
21000 meters	800	600	1000	1000

Note: Different contact arrangements correspond to different operating classes; please refer to the label in the upper right corner of the contact arrangement for details.

Contact Resistance and Rated Current of Contacts:

Contact Specification	Working Diameter (mm)	Contact Resistance (mΩ)	Rated Current (A)
22D	Φ0.76	≤12	5
20#	Φ1.00	≤5	7.5
16#	Φ1.60	≤2.5	13
12#	Φ2.40	≤1.5	23
10#	Φ3.15	≤1.0	40

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- Insulation Resistance: ≥5000MΩ (500VDC)
- Shell Conductivity:
  Type W: 2.5mV
  Type F, FT: 1.0mV
  Type K, TA: 10mV
- Electromagnetic Interference Shielding:
  At 100MHz ~ 1GHz: minimum attenuation of 85dB (Type F, W)
  At 1GHz ~ 10GHz: minimum attenuation of 65dB (Type F), 50dB (Type W)
- 8# Dual Coaxial Contact:
  Frequency Bandwidth: 0~20MHz
  Rated Voltage: max 500V (AC); 125V (AC) at 21,000 meters
  Voltage Drop: ≤55mV at 1A (inner & middle contacts); ≤75mV at 12A (outer contacts)
  Environmental Performance:
- Temperature Range:
  Type W: -65°C ~ +175°C
  Type F, K, FT, TA: -65°C ~ +200°C
- Salt Spray Resistance:
  Type W: 500h
  Type K, TA: 1000h
- Type F: 48h/96h
  Type FT: 96h
- Sealing: Mating connectors meet the low-pressure immersion requirements of MIL-DTL-38999M
- Humidity & Heat: Per MIL-DTL-38999M: 24-hour cycle, 10 cycles total
- Liquid Resistance: Resistant to various fuels, coolants, and solvents

Model Naming

Connector Series Name	J599	20	W	B	35	P	N	H	M1

Connector Type	20 - Square Flange Receptacle 24 - Nut-Locking Receptacle (Round Receptacle) 26 - Shielded Plug (All three types can be fitted with accessories)
Shell Plating	W - Aluminum Alloy Tin-Plated Military Green FT - Aluminum Alloy Satin Tin-Plated F - Aluminum Alloy Electroless Nickel-Plated TA - Titanium Alloy K - Stainless Steel Passivated C - Aluminum Alloy Hard Anodized T - Aluminum Alloy Fluorocarbon Polymer-Coated Z - Aluminum Alloy Zinc-Nickel-Plated S - Aluminum Alloy Electroless Gold-Plated
Shell Number: A~J	09/A 11/B 13/C 15/D 17/E 19/F 21/G 23/H 25/J
Contact Arrangement	Refer to the "Contact Arrangement List"
Contact Type	P - Pin, Crimp & Solder Type S - Socket, Crimp & Solder Type PL - Pin, Long Printed Circuit Board Type SL - Socket, Long Printed Circuit Board Type PC - Pin, Short Printed Circuit Board Type SC - Socket, Short Printed Circuit Board Type A - Special Pin Contact B - Special Socket Contact
Special Contacts	M1-16# coaxial contact M2-12# coaxial contact M3-12# shielded contact M4-8# power contact M5-8# single coaxial contact M6-8# dual coaxial contact M7-8# dual differential contact M8-8# quad differential contact
Welded Contact Identification (For Welded Connectors Only)	H - welded contact
Keying	N - standard keying A, B, C, D, E - alternate keying

Model Marking Example

J599/20KF18PN-M8: J599 series square flange receptacle, shell is stainless steel passivated, 19# shell, 18# contact arrangement, contact is pin, N keying. The 8# contact is an 8# quad differential contact.

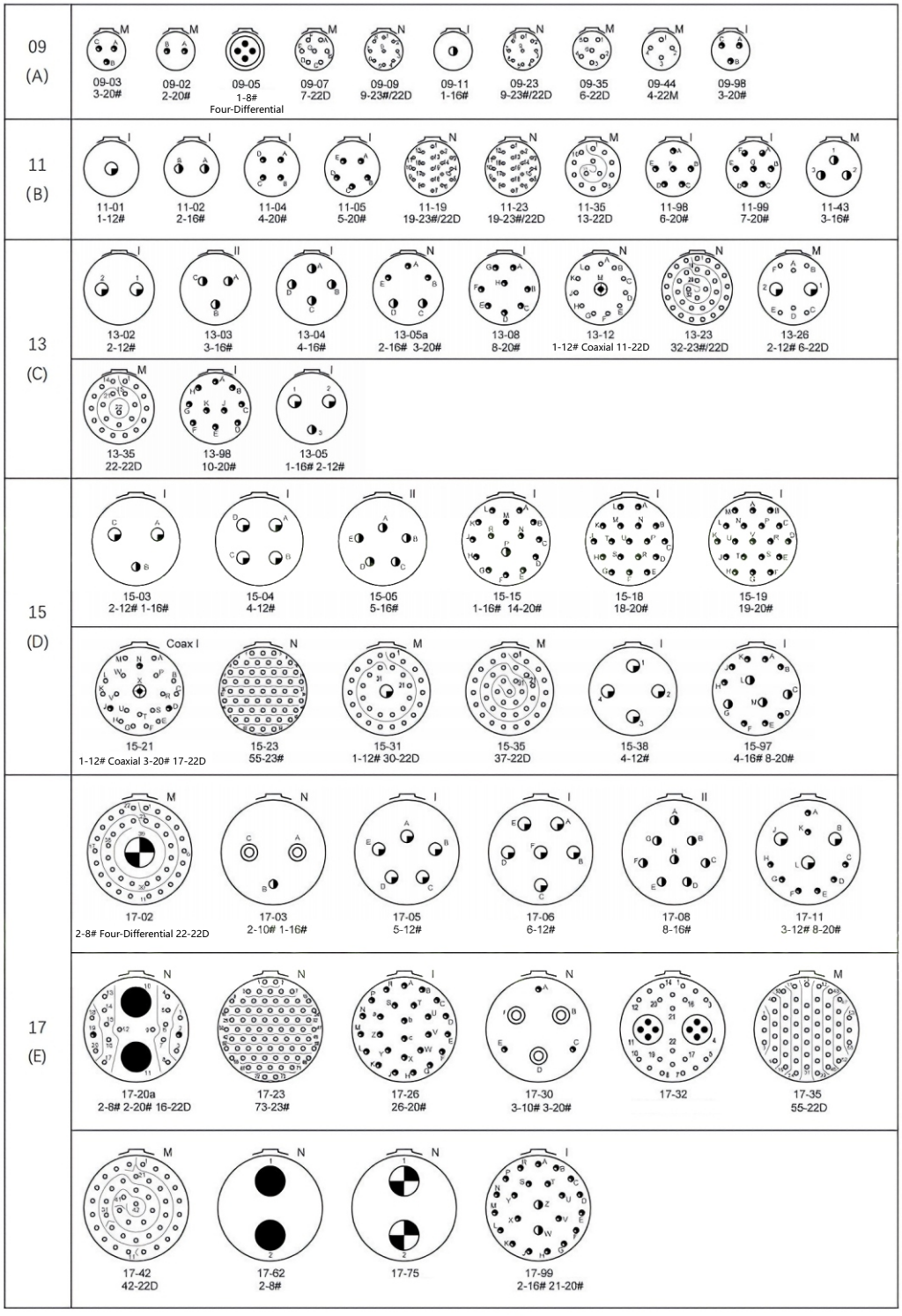
Crimp Contact

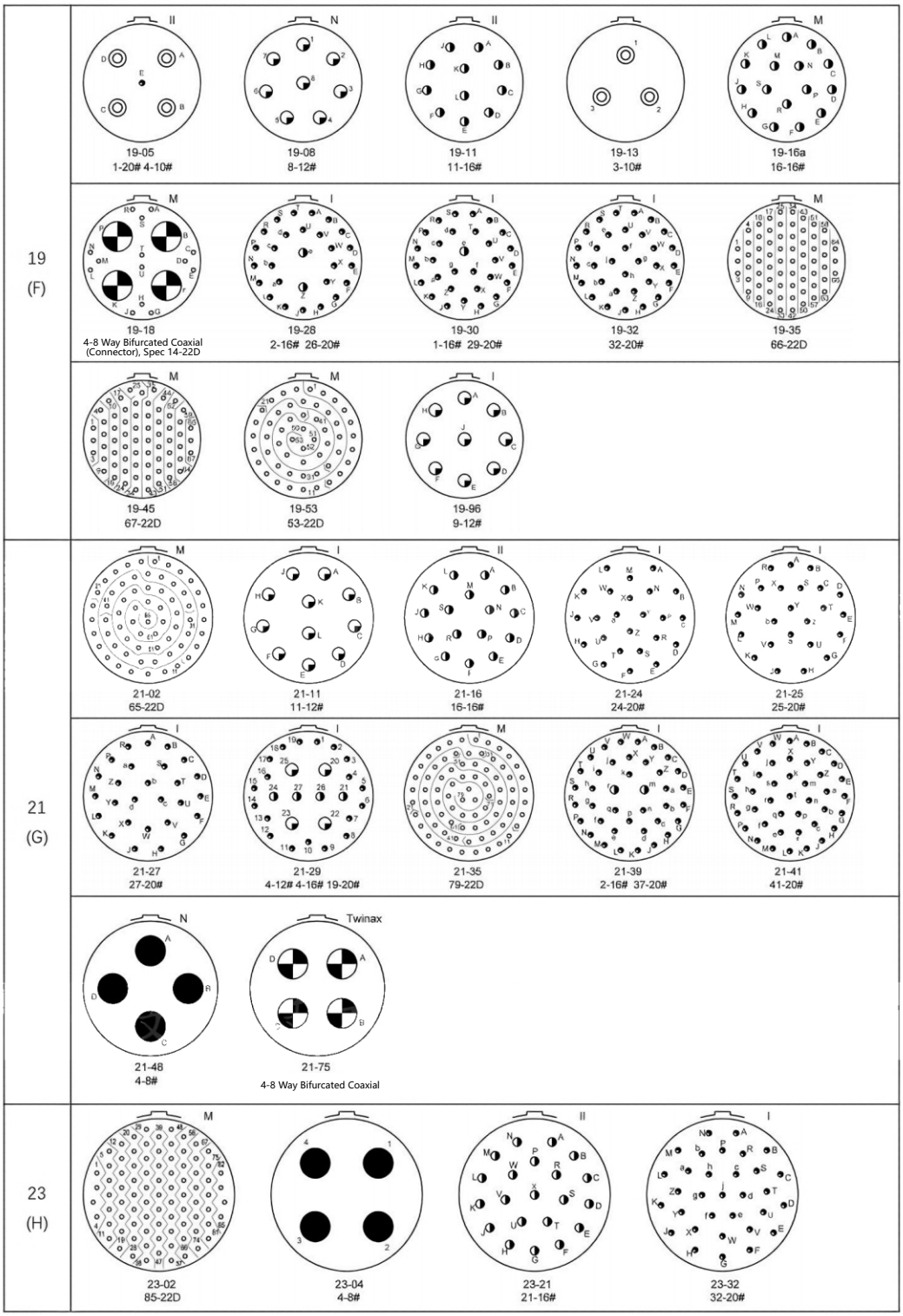
Contact Spec	Working Diameter	Pin Color Code	Socket Color Code	Crimp Barrel Inner Diameter (mm)	Crimp Barrel Outer Diameter (mm)	Compatible Wire Cross-Section (mm^2)	Compatible US Standard Cable (AWG)	Compatible Wire Insulation Outer Diameter (mm)	Removal Tool Code	Crimp Tool
22D	Φ0.76	Orange-Blue-Black	Orange-Yellow-Gray	0.85	1.20	0.08 0.125 0.2 0.3	28 26 24 22	0.76-1.37	M81969/14-01	YJQ-02
20#	Φ1.00	Orange-Blue-Orange	Orange-Green-Brown	1.17	1.78	0.2 0.3 0.5	24 22 20	1.02-2.11	M81969/14-10	YJQ-02 XCXY-01
16#	Φ1.60	Orange-Blue-Yellow	Orange-Green-Red	1.68	2.62	0.5 0.8 1.0 1.2	20 18 16	1.65-2.77	M81969/14-03	XCXY-01
12#	Φ2.40	Orange-Blue-Green	Orange-Green-Orange	2.49	3.84	2.0 3.0	14 12	2.46-3.61	M81969/14-04	XCXY-01
10#	Φ3.15	Green-Red-Gray	Green-Brown-Purple	3.40	4.65	4.8	10	3.42~4.12	M81969/14-05	XCY-01 YTQ
8#	Φ3.60	—	—	4.55	6.4	8.37	8	6.4~6.9	M81969/14-12	YTQ

Welded Contact

Welded Contact Specifications	Wire Solder Cup Inner Diameter	Maximum Compatible Wire Gauge (AWG)
22D	Φ0.9	22
20#	Φ1.1	20
16#	Φ1.9	16
12#	Φ2.9	12
10#	Φ3.6	10
8#	Φ4.8	8

Contact Arrangement (View of Pin Insulator Mating Surface)

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1-20# 4-10#
19-08
8-12#
19-11
11-16#
19-13
3-10#
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16-16#
19-18
4-8 Way Bifurcated Coaxial
(Connector), Spec 14-22D
19-28
2-16# 26-20#
19-30
1-16# 29-20#
19-32
32-20#
19-35
66-22D
19-45
67-22D
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(G)
21-02
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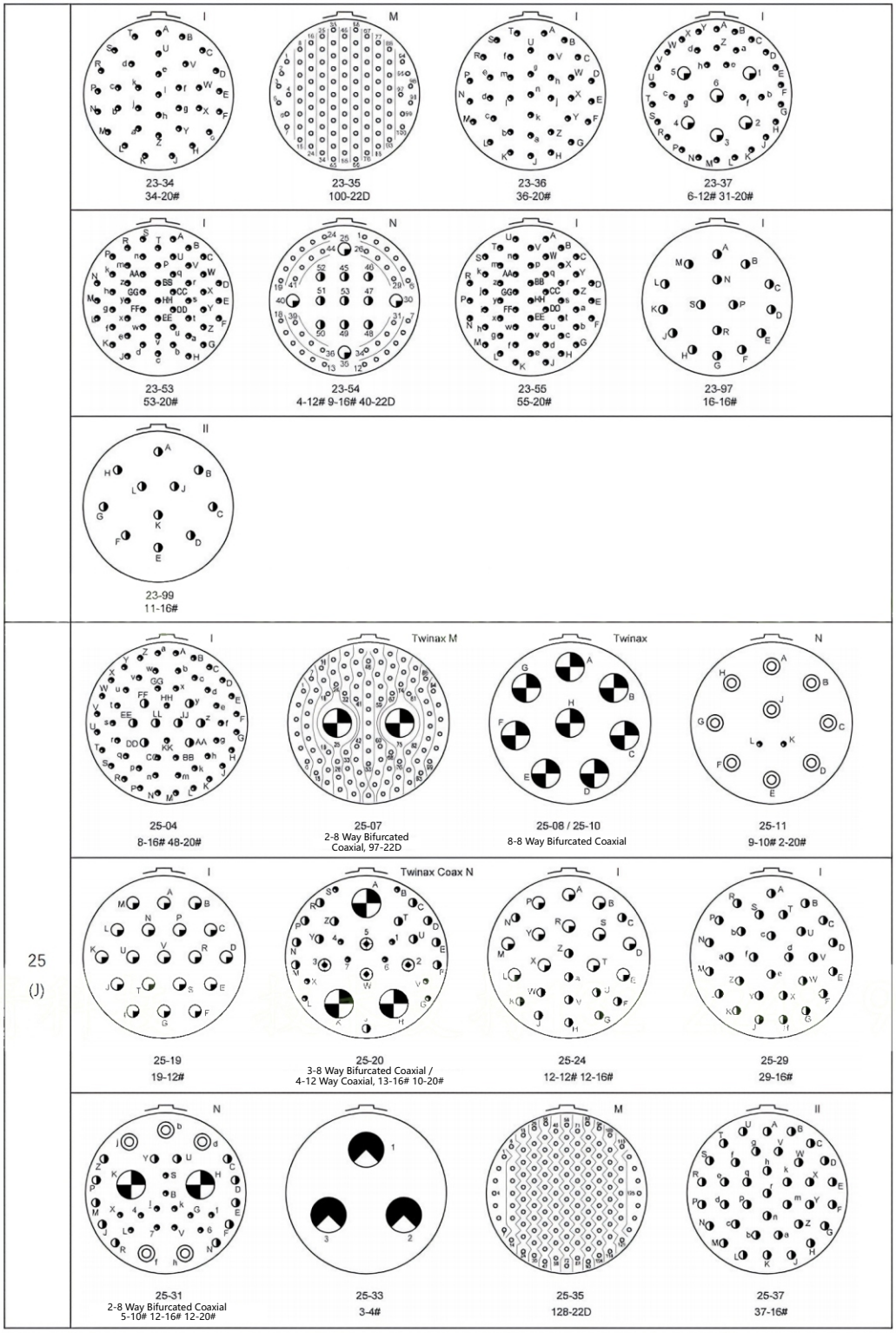
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M
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4-12# 9-16# 40-22D
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23-97
16-16#
II
23-99
11-16#
25
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25-04
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Twinax M
25-07
2-8 Way Bifurcated
Coaxial, 97-22D
Twinax
25-08 / 25-10
8-8 Way Bifurcated Coaxial
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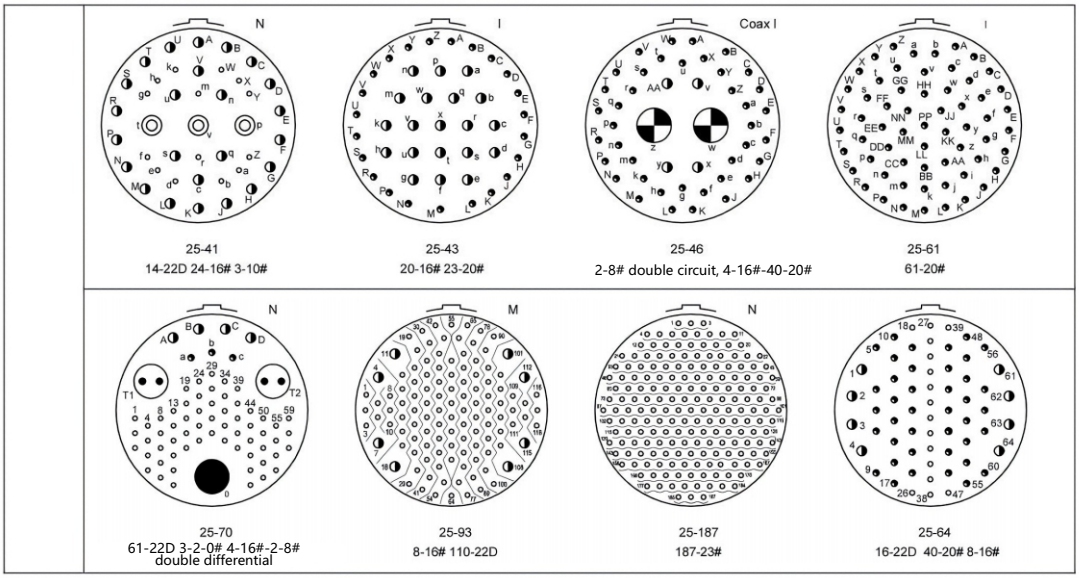
25-19
19-12#
Twinax Coax N
25-20
3-8 Way Bifurcated Coaxial /
4-12 Way Coaxial, 13-16# 10-20#
I
25-24
12-12# 12-16#
I
25-29
29-16#
N
25-31
2-8 Way Bifurcated Coaxial
5-10# 12-16# 12-20#
25-33
3-4#
M
25-35
128-22D
II
25-37
37-16#



Note:

1.The 20# hole position can be replaced with a 20# fiber optic contact.

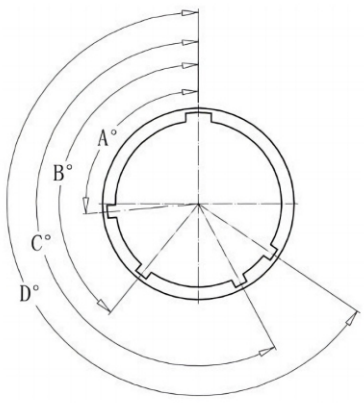
2.The 16# hole position can be replaced with 16# shielded or 16# fiber optic contacts.

3.The 12# hole position can be replaced with 12# shielded, 12# coaxial, or 12# fiber optic contacts.

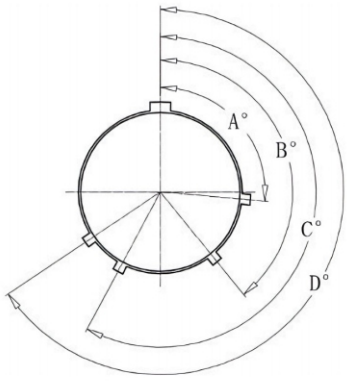
4.The 8# hole position can be replaced with 8# dual coaxial, 8# single coaxial, or 8# differential contacts.

Housing Key Position

Front View of Socket

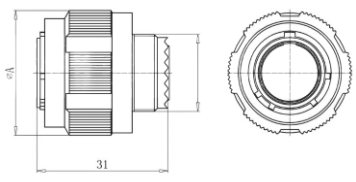


Front View of Plug



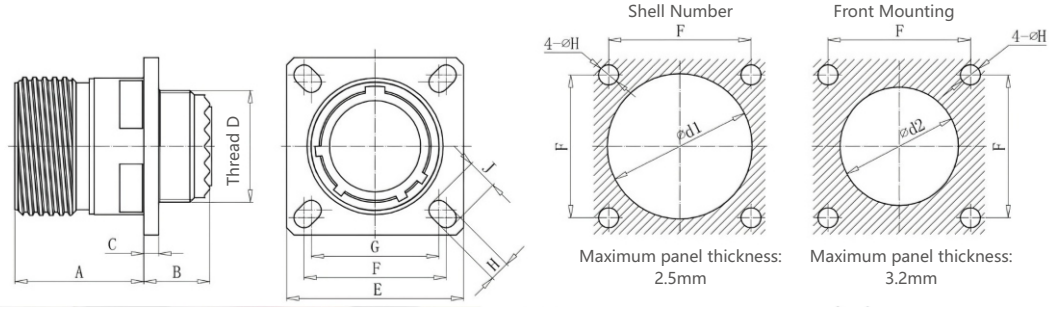
Housing Size	MS Housing Size	Angle	N	A	B	C	D	E
9	A	A° B° C° D°	105 140 215 265	102 132 248 320	80 118 230 312	35 140 205 275	64 155 234 304	91 131 197 240
11 13 15	B C D	A° B° C° D°	95 141 208 236	113 156 182 292	90 145 195 252	53 156 220 255	119 146 176 298	51 141 184 242
17 19 21 23 25	E F G H J	A° B° C° D°	80 142 196 293	135 170 200 310	49 169 200 244	66 140 200 257	62 145 180 280	79 153 197 272

overall dimensions
J599/26 Plug



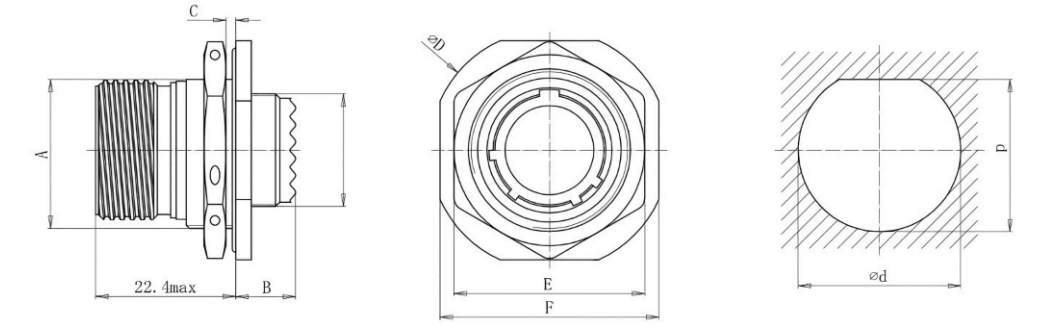
Shell Number	MS Shell Number	A	Thread B
09	A	21.5	M12×1.0-6g
11	B	25.0	M15×1.0-6g
13	C	29.2	M18×1.0-6g
15	D	32.4	M22×1.0-6g
17	E	35.6	M25×1.0-6g
19	F	38.5	M28×1.0-6g
21	G	41.7	M31×1.0-6g
23	H	44.9	M34×1.0-6g
25	J	48.0	M37×1.0-6g

J599/20 Square Panel Connector



Shell Number	MS Shell Size	A (max)	B (max)	C (max)	D Thread	E	F	G	H	J	d1 min	d2 min
09	A	10.8	10.8	2.5	M12×1.0-6g	23.8	18.26	15.09	3.25	3.25	5.49	16.66
11	B	10.8	10.8	2.5	M15×1.0-6g	26.2	20.62	18.26	3.25	3.25	4.93	20.22
13	C	10.8	10.8	2.5	M18×1.0-6g	28.6	23.01	20.62	3.25	3.25	4.93	23.42
15	D	10.8	10.8	2.5	M22×1.0-6g	31.0	24.61	23.01	3.25	3.25	4.39	26.59
17	E	10.8	10.8	2.5	M25×1.0-6g	33.3	26.97	24.61	3.25	3.25	4.93	30.96
19	F	10.8	10.8	2.5	M28×1.0-6g	36.5	29.36	26.97	3.25	3.25	4.93	32.94
21	G	11.5	11.5	3.2	M31×1.0-6g	39.7	31.75	29.36	3.25	3.25	4.93	36.12
23	H	11.5	11.5	3.2	M34×1.0-6g	42.9	34.93	31.75	3.91	3.91	6.15	39.29
25	J	11.5	11.5	3.2	M37×1.0-6g	46.0	38.10	34.93	3.91	3.91	6.15	42.47

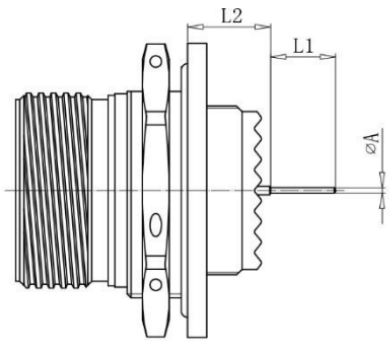
J599/24 Nut-Locking Receptacle



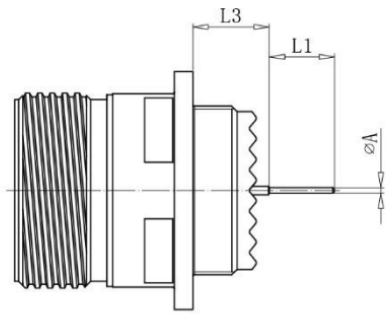
Shell Number	MS Shell Size	A	B (max)	C (max)	D (max)	E	F	G (Thread)	d	p
09	A	16.5	9.9	3.2	30.5	22.5	27.1	M12×1.0-6g	17.70	17.00
11	B	19.2	9.9	3.2	35.2	25.7	32.1	M15×1.0-6g	20.88	19.53
13	C	23.8	9.9	3.2	38.4	30.5	35.0	M18×1.0-6g	25.58	24.26
15	D	26.9	9.9	3.2	41.6	33.6	38.3	M22×1.0-6g	28.80	27.53
17	E	30.3	9.9	3.2	44.8	36.8	41.8	M25×1.0-6g	32.01	30.73
19	F	33.4	9.9	3.2	49.3	40.0	46.4	M28×1.0-6g	35.15	33.86
21	G	36.5	9.9	3.2	52.7	43.2	49.6	M31×1.0-6g	38.28	37.06
23	H	39.7	9.9	3.2	55.9	46.3	52.8	M34×1.0-6g	41.53	40.26
25	J	42.8	9.9	3.2	59.0	51.0	55.8	M37×1.0-6g	44.68	43.41

GJB599III Series Socket with Printed Board Type Contacts

J599/24 Receptacle



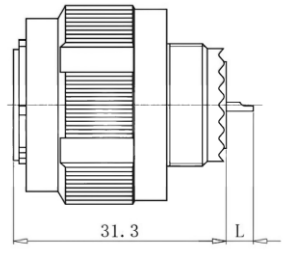
J599/20 Receptacle

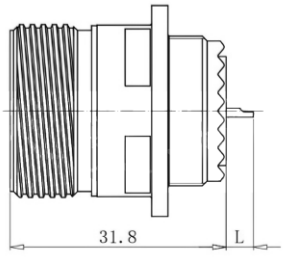


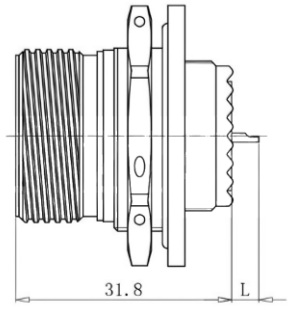
Printed Board Contact Specification		L1	A
22D	Long-type printed board contact	8.5	0.7
	Short-type printed board contact	4.0	
20#	Long-type printed board contact	8.5	0.7
	Short-type printed board contact	5.1	
16#	Long-type printed board contact	8.5	1.15
	Short-type printed board contact	5.1	

Dimensions When Equipped with Contacts of Different Specifications		Shell Number 09-11	Shell Number 13 15 17 19 21 23 25
L2	When installing 22D pins	10.52~11.46	10.34~11.28
	When installing 22D sockets	10.19~11.46	10.01~11.28
	When installing 16# or 20# pins and sockets	10.69~11.63	10.51~11.45
L3	When installing 22D pins	9.48~10.58	9.48~10.58
	When installing 22D sockets	9.15~10.58	9.15~10.58
	When installing 16# or 20# pins and sockets	9.65~10.75	9.65~10.75

GJB599 III Series Welded Connector







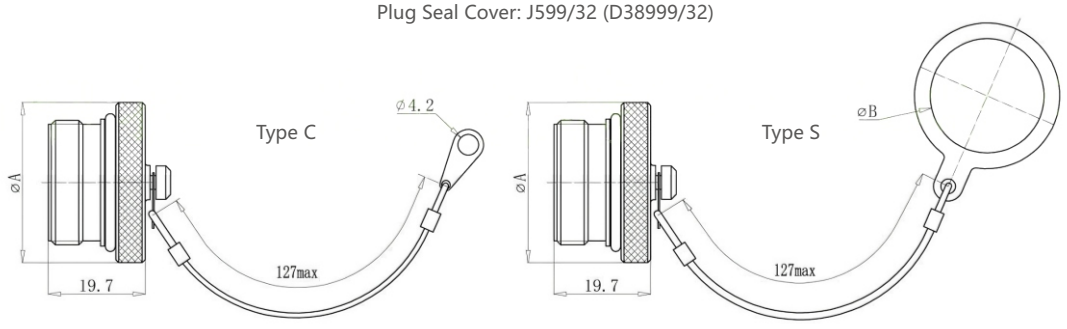
Soldering Contact Specifications	22D	22#	16#	12#	10#	8#
L	4	4	4	4	4	4

Plug and Socket Seal Cover

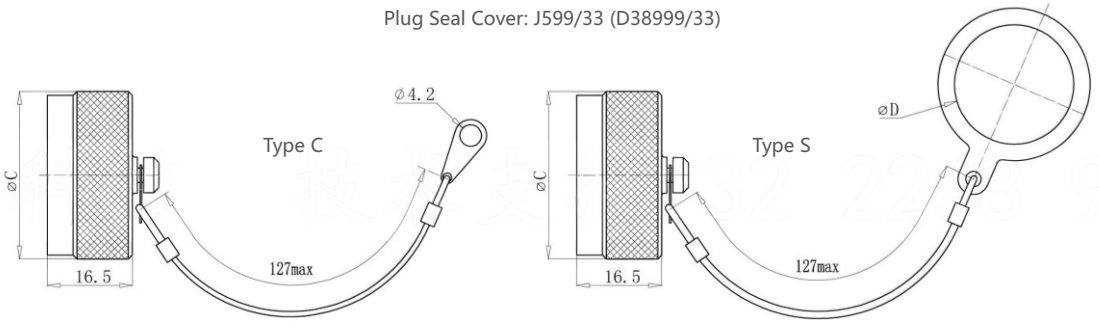
Series Name	J599	32	F	15	N
Type	32—Plug Seal Cover (compliant with U.S. military standard D38999/32) 33—Socket Seal Cover (compliant with U.S. military standard D38999/33)				
Housing Plating	W-Aluminum alloy with cadmium plating (military green) F-Aluminum alloy with electroless nickel plating K-Stainless steel passivation				
Housing Number	09-11-13-15-17-19-21-23-25				
Chain Type	R-Stainless steel wire rope with connecting tab (for square panel sockets) C-Nylon wire rope with connecting tab (for square panel sockets) N-Stainless steel wire rope with loop (for nut-fastened sockets) S-Nylon wire rope with loop (for nut-fastened sockets)				

External Dimensions

Plug Seal Cover: J599/32 (D38999/32)



Plug Seal Cover: J599/33 (D38999/33)



Housing Number	09	11	13	15	17	19	21	23	25
A	22.5	26.5	29.5	32.5	36.0	38.4	41.7	44.4	48.3
B	13.0	16.0	19.5	22.8	26.0	29.0	32.5	35.5	38.6
C	22.5	26.5	29.5	32.5	36.0	38.4	41.7	44.4	48.3
D	18.0	21.5	26.0	29.0	32.5	35.5	38.6	42.0	45.0

Standard Rear Accessories (for GJB599 Series III Electrical Connectors)

This component complies with the national military standard GJB1784 (equivalent to the U.S. military standard MIL-C-85049)

Note:

1.There is no distinction between "J1784" and "J1784A" mentioned in the accessory model

2.When using the accessory, at least one of the following anti-loosening measures shall be taken:

① Pass a safety wire through the safety hole for anti-loosening;

② Apply thread locker to the rear thread of the product, then tighten the connecting nut for anti-loosening;

③ Use heat shrink tubing to shrink the entire accessory for anti-loosening.

3.For accessories with set screws, apply thread locker to the set screw before tightening it.

4.If the product adapted to the cable accessory is equipped with size 8 contacts, longer cable accessories (such as type J1784/49H or J1784/18A) shall be selected to avoid interference between the contact locator and the cable accessory.

5.The table below lists the correspondence between GJB599 series soldered and crimped products and adapted cable accessories, as well as the functional classification of cable accessories. Since our company has a large number of modified products and accessories at this stage, they cannot be listed one by one. The content of this table is for reference only. For details, please contact our company for confirmation.

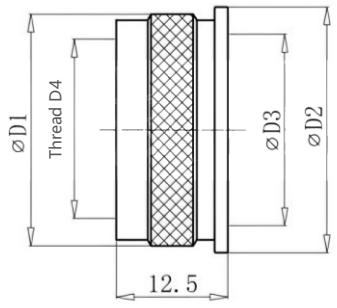
Connector Type	Compatible Cable Accessory Function Type	
J599Ⅲ Series Crimp-Type Connector	Does not clamp the cable and has no shielding accessory	J1784/14
	Clamps the cable without shielding accessory	J1784/38
		J1784/39
		J1784/16
	Shields without clamping the cable accessory	J1784/20
		J1784/69
		J1784/88
		J1784/90
		JY599Ⅲ-FJA00
		JY599Ⅲ-FJA90
		JY599Ⅲ-xxFJB00F
		JY599Ⅲ-xxFJC00
		JY599Ⅲ-xxFJE00
	Clamps the cable and has shielding accessory	J1784/38-***NB
		J1784/18 Series
J599Ⅲ Series Solder-Type Connector	Does not clamp the cable and has no shielding accessory	J1784/14
	Clamps the cable without shielding accessory	J1784/38H
		J1784/16H
	Shields without clamping the cable accessory	J1784/20
		J1784/69
		J1784/88
		J1784/90
		JY599Ⅲ-FJA00
		JY599Ⅲ-FJA90
	Clamps the cable and has shielding accessory	J1784/18 Series

Model Naming

Series Main Name		J1784	38	15	W
Type	14 - Rear Nut 16 - Angled Cable Clamp 20 - Shielded Rear Accessory 38 - Straight Cable Clamp 69 - Heat Shrink Boot Type Rear Accessory				
Accessory Shell Number	09-11-13-15-17-19-21-23-25				
Shell Plating	W - Tin-plated Military Green N - Electroless Nickel Plating S - Stainless Steel Passivation				

External Dimensions

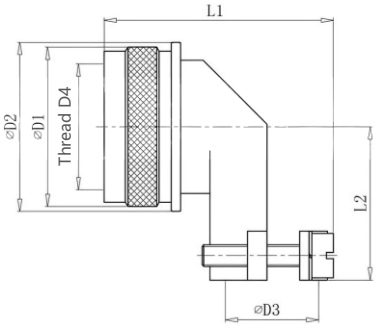
J1784/14 - Rear Nut



Shell Number	D1	D2	D3	Thread D4
09	16.5	17.6	7.9	M12×1.0
11	19.5	20.6	10.8	M15×1.0
13	22.5	23.6	13.6	M18×1.0
15	26.5	27.6	16.9	M22×1.0
17	29.5	30.3	20.1	M25×1.0
19	32.5	33.3	22.1	M28×1.0
21	36.0	36.8	25.2	M31×1.0
23	38.5	39.3	28.3	M34×1.0
25	41.7	42.3	31.6	M37×1.0

Anti-rotation accessory, which tightens the wire-sealing body to ensure the environmental resistance performance of the connector. It cannot clamp cables and is used in general environmental conditions.

J1784/16 - Bent Cable Clamp (Cable Clamping Unshielded Accessory)



Shell Number	D1	D2	D3	Thread D4	L1 max	L2 max
09	16.5	17.6	3.2–6.4	M12×1.0	29.0	25.0
11	19.5	20.6	4.0–9.5	M15×1.0	32.0	26.0
13	22.5	23.6	4.8–11.1	M18×1.0	33.5	27.5
15	26.5	27.6	5.5–14.3	M22×1.0	36.5	31.0
17	29.5	30.3	6.4–15.9	M25×1.0	38.5	32.5
19	32.5	33.3	7.9–19.1	M28×1.0	41.5	34.0
21	36.0	36.8	9.5–22.2	M31×1.0	44.5	34.5
23	38.5	39.3	10.3–23.8	M34×1.0	46.0	36.5
25	41.7	42.3	14.3–25.4	M37×1.0	48.0	43.5

Anti-rotation, 90° cable clamping accessory: it can tighten the wire-sealing body and has the function of 90° cable clamping, which ensures the environmental resistance performance of the connector. It is used in scenarios where the cable is under tensile force.

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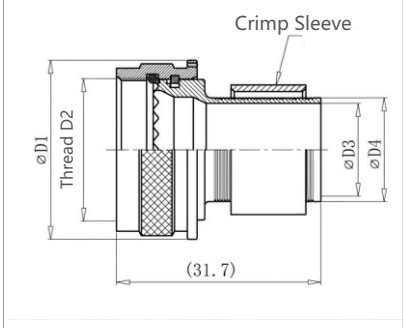
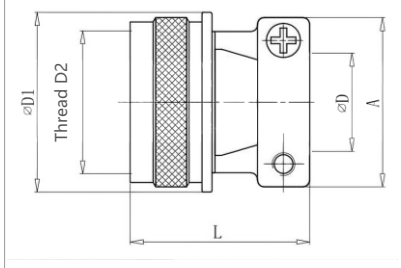
J1784/20 - Shielded Rear Accessory (Shielded Non-Clamping Cable Accessory)



Shell Number	D1	Thread D2	D3	D4
09	17.6	M12×1.0	6.55	8.81
11	20.6	M15×1.0	8.63	12.65
13	23.6	M18×1.0	10.90	12.95
15	27.6	M22×1.0	14.10	16.00
17	30.3	M25×1.0	17.25	19.30
19	33.3	M28×1.0	20.40	22.61
21	36.8	M31×1.0	23.60	25.65
23	39.3	M34×1.0	26.40	28.70
25	42.3	M37×1.0	28.40	30.53

Anti-rotation, cable clamping accessory. It can tightly secure the cable body and clamp the cable, ensuring the environmental resistance performance of the connector. It is used in scenarios where the cable is subjected to tensile force.

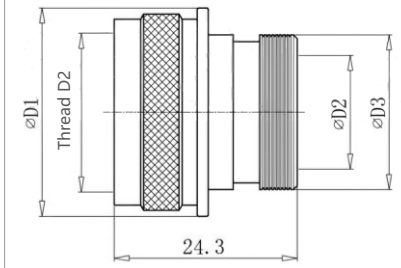
J1784/38 - Straight Cable Clamp(Cable Clamping Unshielded Accessory)



Shell Number	D1	Thread D2	D	A	L
09	17.6	M12×1.0	2.49–5.94	20.0	23.6
11	20.6	M15×1.0	3.87–5.94	22.0	24.6
13	23.6	M18×1.0	4.83–8.33	24.5	26.7
15	27.6	M22×1.0	6.60–11.61	26.0	27.7
17	30.3	M25×1.0	7.19–15.60	30.5	27.7
19	33.3	M28×1.0	8.26–16.10	35.0	29
21	36.8	M31×1.0	8.71–17.73	38.0	30.4
23	39.3	M34×1.0	9.68–20.90	41.0	32.4
25	42.3	M37×1.0	10.62–21.66	44.0	34.4

Anti-rotation, cable clamping accessory. It can tightly secure the cable body and clamp the cable, ensuring the environmental resistance performance of the connector. It is used in scenarios where the cable is subjected to tensile force.

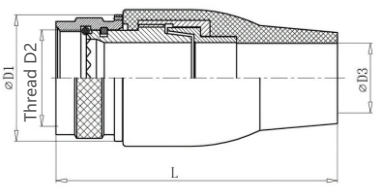
J1784/69 - Heat Shrink Tubing Rear Accessory (Shielded Non-Clamping Cable Accessory)



Shell Number	D1	D2	D3	Thread D4
09	16.5	6.9	11.0	M12×1.0
11	19.5	9.8	14.0	M15×1.0
13	22.5	12.8	17.6	M18×1.0
15	26.5	16.3	20.5	M22×1.0
17	29.5	19.4	24.0	M25×1.0
19	32.5	21.6	26.4	M28×1.0
21	36.0	25.0	30.0	M31×1.0
23	38.5	27.7	33.2	M34×1.0
25	41.7	30.3	36.2	M37×1.0

Anti-rotation, shield braid compaction accessory. It can tightly secure the cable body and provide the function of connecting the shield braid to the rear accessory, ensuring the environmental resistance and electromagnetic shielding performance of the connector. It cannot clamp the cable and is used in scenarios where the cable is subjected to small tensile force.

J1784/01 - Grounding Compression Rear Accessory (Shielded Non-Clamping Cable Accessory)



Shell Number	D1	Thread D2	D3	L
09	17.6	M12×1.0	7.0	53.0
11	20.6	M15×1.0	10.0	53.0
13	23.6	M18×1.0	13.0	53.0
15	27.6	M22×1.0	15.0	73.0
17	30.3	M25×1.0	18.0	73.0
19	33.3	M28×1.0	20.0	73.0
21	36.8	M31×1.0	23.5	73.0
23	39.3	M34×1.0	26.5	73.0
25	42.3	M37×1.0	29.0	73.0

Anti-rotation and shield braid compression accessory: It can tighten the wire-sealing body and enable the connection between the shield braid and the rear accessory. This ensures the environmental resistance and electromagnetic shielding performance of the connector. It cannot clamp cables and is used in scenarios where the cable is under low tensile force.

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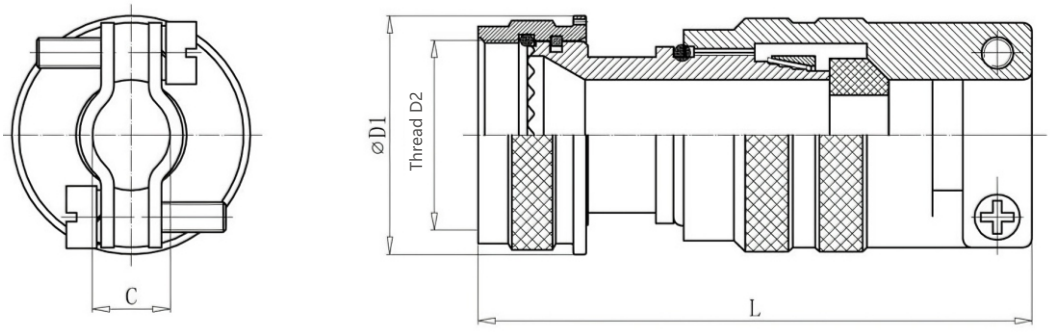
**J1784/18 - N Model Naming

Series Name		J1784	18	17	N	04	A
Type	18-Straight Shielded Cable Clamp						
Shell Number	09-11-13-15-17-19-21-23-25						
Shell Coating	W - Cadmium-plated Army Green; N - Electroless Nickel Plating; S - Stainless Steel Passivation FT - Aluminum Alloy Plated with Satin Cadmium; TA - Titanium Alloy						
Outlet Diameter Code	Select based on Table 1 and Table 2						
Length Code	Length Code: See Table 3						



This anti-rotation, shield braid compaction and cable clamping accessory can tightly seal the cable body, provide a connection between the shield braid and the rear accessory, and ensure the connector's high environmental resistance and electromagnetic shielding performance. It is used in harsh environments.
This cable accessory is available in different lengths, suitable for scenarios requiring longer accessories (such as mixed high and low frequency installations). It is recommended to use finished cables with this accessory.

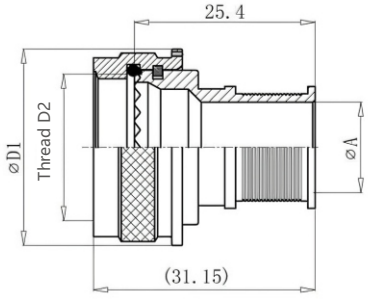
Shell Number	Optional Outlet Diameter Codes for Each Shell Number	D1	Thread D2
09	01–02	16.5	M12×1.0
11	01–03	19.5	M15×1.0
13	02–04	22.5	M18×1.0
15	02–05	26.5	M22×1.0
17	02–06	29.5	M25×1.0
19	03–07	32.5	M28×1.0
21	03–08	36.0	M31×1.0
23	03–09	38.5	M34×1.0
25	04–10	41.7	M37×1.0

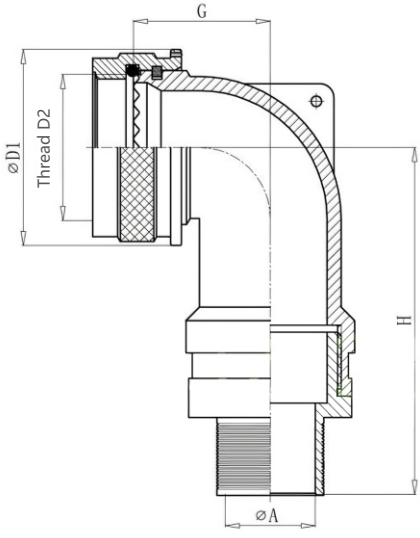
Outlet Diameter Code	Applicable Cable Diameter Range C
01	1.57–3.18
02	3.18–6.35
03	6.35–9.53
04	9.53–12.7
05	12.7–15.88
06	15.88–19.05
07	19.05–22.23
08	22.23–25.4
09	25.4–28.58
10	28.58–31.75

Shell Number	Length Code	L
09–25	Standard (Omitted if Not Marked)	64.1
09–25	A	88.1
15–25	B	113.5
21–25	C	138.9

319-001 Series Model Naming

Series Name	319	F	S	001	M	15	06
Design Number							
Angle Type	A - Bent Type 90°; S - Straight Type						
Base Code							
Shell Coating	B - Cadmium-plated Army Green; M - Electroless Nickel Plating; NF - Electroless Nickel Plating + Cadmium-plated Army Green						
Accessory Shell Number	09-11-13-15-17-19-21-23-25						
Outlet Diameter Code	See Table 1 for Details						





Outlet Diameter Number	Outlet Diameter A
1	4.8
2	6.4
3	7.9
4	9.5
5	11.1
6	12.7
7	14.3
8	15.9
9	17.5
10	19.1
11	20.6
12	22.2
13	23.8
14	25.4
15	31.8

Housing Number	D1	Thread D2	G max	H max
09	16.5	M12×1.0	14.7	43.9
11	19.5	M15×1.0	17.1	47.0
13	22.5	M18×1.0	17.5	47.5
15	26.5	M22×1.0	19.8	49.3
17	29.5	M25×1.0	24.5	51.6
19	32.5	M28×1.0	26.8	55.9
21	36.0	M31×1.0	26.8	55.9
23	38.5	M34×1.0	30.6	58.7
25	41.7	M37×1.0	3.6	58.7

Special Tail Accessory (Applicable to GJB599 III Series Electrical Connectors)

This tail accessory is especially suitable for clamping shielded cables with shielding braids, and it is divided into two main types: straight type and angled type. This accessory can be optionally equipped with a Ti-Ni alloy memory ring (which has shape memory properties). When heated, the ring shrinks to tightly fasten the shielding braid to the tail of the accessory, achieving true 360° electromagnetic shielding.

Note: Heating and shrinking method for the Ti-Ni alloy memory ring: A heat gun can be used for heating, which takes about 45 seconds to 1 minute. When the temperature indicator color on the memory ring changes from green to black, the ring has finished shrinking (the temperature of the ring is about 165°C at this point). Stop heating, and ensure that the memory ring is heated evenly during the process.

Model Naming

J1784/88, J1784/90 Tail Accessories (Shielded Non-Clamping Cable Accessories)

Series Main Name	J1784	88	13	N	A	03

Series Code	88-Straight Type, 90-Angled Type
Accessory Housing Number	09 A, 11 B, 13 C, 15 D, 17 E, 19 F, 21 G, 23 H, 25 J
Housing Plating	W - Cadmium-plated Military Green N - Electroless Nickel Plating S - Stainless Steel Passivation FT - Aluminum Alloy Satin Cadmium Plating TA - Titanium Alloy (Applicable only to Type 88)
Ti-Ni Ring	Unmarked - No Ti-Ni Ring A - Optional Ti-Ni Ring
Outlet Diameter or Ti-Ni Ring Specification	Mark outlet diameter when no Ti-Ni ring is used Mark Ti-Ni ring specification when Ti-Ni ring is optional

JY599 III-FJA00, JY599 III-FJA90 External Shield Tail Accessories (Shielded Non-Clamping Cable Accessories)

Series Main Name	Jy599	III	13	FJA	00	F	A	03

Series Code	III
Accessory Housing Number	09, 11, 13, 15, 17, 19, 21, 23, 25
Accessory Type	FJA, FJB, FJC, FJE
Mechanism Form	00-Straight Tail Accessory 90-90° Angled Accessory
Housing Plating	W - Cadmium-plated Military Green N - Electroless Nickel Plating S - Stainless Steel Passivation FT - Aluminum Alloy Satin Cadmium Plating TA - Titanium Alloy (Applicable only to Type 85)
Ti-Ni Ring	Unmarked - No Ti-Ni Ring A - Optional Ti-Ni Ring
Outlet Diameter or Ti-Ni Ring Specification	Mark outlet diameter when no Ti-Ni ring is used Mark Ti-Ni ring specification when Ti-Ni ring is optional

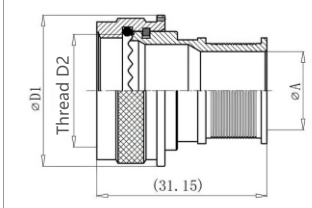
Notes:

1.This type of accessory is used in harsh environments and scenarios that do not require frequent disassembly, and it can achieve internal and external shielding.

2.J1784/88, J1784/90 are identical to JY599 III-FJA00, JY599 III-FJA90; only their naming models are different.

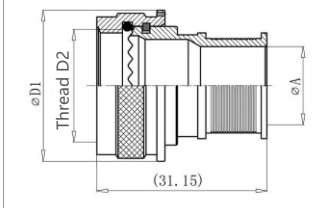
Overall Dimensions

Straight Accessory (J1784/88 or JY599 III-FJA00)



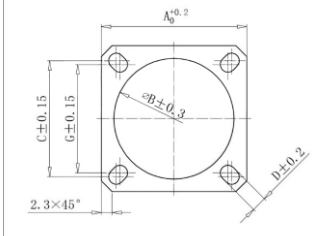
Housing Number	D1	Thread D2	A (02 Outlet Hole)	A (03 Outlet Hole)
09	17.6	M12×1.0	N/A	6.4
11	20.6	M15×1.0	N/A	7.9
13	23.6	M18×1.0	7.9	11.1
15	27.6	M22×1.0	11.1	14.3
17	30.3	M25×1.0	12.7	15.9
19	33.3	M28×1.0	15.9	19.1
21	36.8	M31×1.0	15.9	20.6
23	39.3	M34×1.0	17.5	23.8
25	42.3	M37×1.0	19.1	25.4

**Jy599 III **FJCOO (Shielded Non-Clamping Cable Accessory)



Housing Number	D1	Thread D2	A	B	C
09	17.6	M12×1.0	6.6	9.3	13.3
11	20.6	M15×1.0	8.3	11	15
13	23.6	M18×1.0	10	12.7	16.6
15	27.6	M22×1.0	11.1	14.3	18.5
17	30.3	M25×1.0	13.1	15.9	19.8
19	33.3	M28×1.0	16.2	19	23
21	36.8	M31×1.0	16.2	19	23
23	39.3	M34×1.0	19.5	22.2	26.2
25	42.3	M37×1.0	19.5	22.2	26.2

599-III Square Plate Rubber Pad



Housing Number	A	B	C	G	D
09	23.9	16.1	18.26	15.09	3.3
11	26.3	19.2	20.62	18.26	3.3
13	28.7	22.4	23.01	20.62	3.3
15	31.1	25.6	24.61	23.01	3.3
17	33.4	30.4	26.97	24.61	3.3
19	36.6	32.0	29.36	26.97	3.3
21	39.8	34.9	31.75	29.36	3.3
23	43.0	38.3	34.93	31.75	4.0
25	46.1	41.4	38.10	34.93	4.0

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Special Contacts for GJB599 Series I and III

Specification Type	US Standard Model	GJB (National Military Standard) Model	Compatible Wire	
			Domestic Wire	Foreign Wire
16# Shielded Pin	M39029/76-424	J1216/76-424	SFF-50-1.5-1 SFF-75-1.5-1	M17/113-RG316
16# Shielded Socket	M39029/77-428	J1216/77-428		
12# Shielded Socket	M39029/28-211	J1216/28-211	SFF-50-1.5-1	M17/113-RG316
	M39029/28-412	J1216/28-412		M17/173-RG316D
12# Shielded Socket	M39029/75-416	J1216/75-416	SFF-50-1.5-1	M17/113-RG316
	M39029/75-422	J1216/75-422		M17/173-RG316D
12# Coaxial Pin (3GHz)	M39029/102-558	J1216/102-558	SFF-50-1.5-1 SFF-75-1.5-1	M17/113-RG316
12# Coaxial Socket (3GHz)	M39029/103-559	J1216/103-559		
12# Coaxial Pin (40GHz)	M39029/102-558C	—	—	UT-085C-AL-TP-LL (MICRO-COAX)
12# Coaxial Socket (40GHz)	M39029/103-559C	—		
8# Dual Coaxial Shielded Pin	M39029/90-529	J1216/90-529	SFF-50-1.5-1	M17/176-00002
8# Dual Coaxial Shielded Socket	M39029/91-530	J1216/91-530		
8# Single Coaxial Pin	M39029/60-367	J1216/60-367		
8# Single Coaxial Socket	M39029/59-366	J1216/59-366		
8# Quad Differential Pin	—	CF81/411-01	—	ET2PC236
8# Quad Differential Socket	—	CF82/411-01	—	
8# Dual Differential Pin	—	CF81/211-01	—	HDP700001070
8# Dual Differential Socket	—	CF82/211-01	—	

Rear Seal Plug

Specification Model	US Standard Model	GJB (National Military Standard) Model	Remarks
4# Rear Seal Plug	MS27488-4 (Blue)	J27488-4 (Blue)	Applicable to Series I and III
8# Rear Seal Plug	MS27488-8 (Red)	J27488-8 (Red)	
12# Rear Seal Plug	MS27488-12 (Yellow)	J27488-12 (Yellow)	Applicable to Series I, II and III
16# Rear Seal Plug	MS27488-16 (Blue)	J27488-16 (Blue)	
20# Rear Seal Plug	MS27488-20 (Red)	J27488-20 (Red)	
22# Rear Seal Plug	MS27488-22 (Black)	J27488-22 (Black)	

High-Frequency Contact Performance

•16# Shielded Contact (Model: Pin J1216/76-424; Socket J1216/77-428)
•12# Shielded Contact (Model: Pin J1216/28-211; Socket J1216/75-416)

Low-Level Contact Resistance (Applicable only to inner contacts)

Contact	Maximum Contact Resistance (mΩ)	
	Initial Value	After Test
16#	170	204
12#	55	66

Test Current and Voltage Drop

(Contact)		Test Current (A)	Voltage Drop (mV)			
			25°C	175°C	200°C	
			Initial	After Test	After Test	
16#	Internal Contact	1	170	204	290	—
12#					—	290
16#	External Contact	2	150	180	255	—
12#					—	255

• High Voltage Resistance (between internal and external contacts): Sea level: 750Vrms; 15240m: 250Vrms
• 12# Coaxial Contact (Part numbers: Pin J1216/102-558; Socket J1216/103-559)
• Nominal Impedance: 50Ω—Operating Frequency: DC-3GHz
• Low-Level Contact Resistance (applicable only to internal contacts): Initial value: 55mΩ, After test: 66mΩ
• Withstand Voltage: Sea level: 1000Vrms, 15240m: 250Vrms

•Test Current and Voltage Drop:

(Contact)	Test Current (A)	Voltage Drop (mV)		
		25°C		200°C
		Initial	After Test	After Test
Internal Contact	1	55	66	94
External Contact	2	75	90	128

• Voltage Standing Wave Ratio (VSWR):
• Within the frequency range of 500MHz~3GHz, the voltage standing wave ratio
• shall not exceed 1.20+0.04f (where f is in Ghz).
• Insertion Loss: dBmax=0.11√f (where f is in GHz). When measured at 3GHz in accordance
• with MIL-C-39012, the insertion loss shall not exceed 0.20dB.
• 12# Coaxial Contact (40GHz) (Part numbers: Pin J1216/102-558C; Socket J1216/103-559C)
• Nominal Impedance: 50Ω—Operating Frequency: DC-40GHz
• Voltage Standing Wave Ratio (VSWR): 0~18GHz: ≤1.3f; 18~40GHz: ≤1.7f (where f is in Ghz)
• Withstand Voltage (between center conductor and outer conductor): 500Vrms
• Vibration: 10~2000Hz, power spectral density of $1g^2/Hz$ at ambient temperature

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- 8# Dual Coaxial Contact (40GHz) (Part numbers: Pin J1216/90-529; Socket J1216/91-530)
- Low-Level Contact Resistance (applicable only to center contact and intermediate contact):
  Initial value: 55mΩ, After test: 66mΩ
- Test Current and Voltage Drop

Contact	Test Current (A)	Voltage Drop (mV)		
		25℃		175℃
		Initial	After Test	After Test
Center Contact	1.0	55	66	94
Intermediate Contact	1.0	55	66	94
External Contact	12	75	90	128

Operating Frequency Range: 0~20MHz

Rated Operating Voltage: Sea level: 500Vrms, 21336m: 125Vrms

Withstand Voltage:

Contact	Altitude	Test Voltage (V) rms
Center to Intermediate Layer	Sea Level	1000
Intermediate Layer to Outer Layer		500

Differential Contact Performance

- 8# Differential Contact (2-contact type: Pin CF81/211-01; Socket CF82/211-01)
- 8# Differential Contact (4-core type: Pin CF81/411-01; Socket CF82/411-01)
- Withstand Voltage (Vrms):Normal conditions: Center conductor to outer conductor: 500V AC;
  Between center conductors: 1000V AC
- Contact Resistance: ≤15mΩ (center conductor only)
- Insulation Resistance (between center contacts): (at 500Vdc) ≥1000MΩ
- Rated Contact Current: 1A (center conductor)
- Transmission Rate: Up to 1.65Gbps

Fiber Optic Contact Performance

- Insertion Loss: ≤1.1dB (≤4 cores); ≤1.2dB (≤6 cores); ≤1.4dB (≤8 cores); ≤1.6dB (≤16 cores); ≤2dB (≤61 cores)
- Operating Temperature: -40°C ~ +80°C
- Vibration: 10Hz~500Hz, Acceleration: 98m/s²
- Shock: 980m/s²
- Mechanical Life: 500 cycles
- Tensile Strength: ≥800N (main cable)

Supporting Tools for High-Frequency Contacts

The handling tools meet the requirements of the MIL-C-81969 specification, and the crimping tools meet the requirements of the MIL-C-22520 specification.

Contact Model	Plastic Handling Tool	Crimping Pliers	
16# Shielded Coaxial	M81969/14-03	Inner Contact	M22520/2-01
		Outer Contact	M22520/4-01
12# Shielded	M81969/14-04	Inner Contact	M22520/2-01
		Outer Contact	M22520/31-01
12# Shielded	M81969/14-04	Inner Contact	MH992
		Outer Contact	M22520/5-01
8# Dual Coaxial Shielded	M81969/14-12	Inner Contact	M22520/2-01
		Middle Contact	M22520/5-01
		Outer Contact	M22520/5-01
8# Dual Differential Pin	M81969/14-12	Inner Contact	M22520/2-01
8# Dual Differential Socket	M81969/14-12	Outer Contact	M22520/5-01
8# Quad Differential Pin	M81969/14-12	Inner Contact	M22520/2-01
8# Quad Differential Socket	M81969/14-12	Outer Contact	M22520/5-01

Assembly Instructions for High-Frequency Contacts

Assembly and Crimping of 16# Shielded Coaxial Pin

①Strip the cable as shown in Figure 1.1. The end face must be cut clean and perpendicular to the cable's axial plane. The cable must not be deformed during cutting. Thermal stripping is recommended.

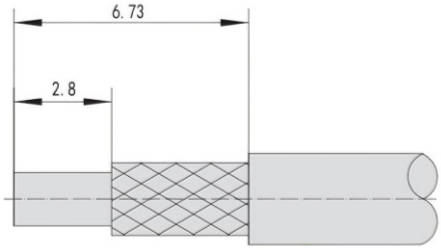


Figure 1.1

②As shown in Figure 1.2, slide the crimp sleeve backward onto the cable jacket, spread the shielding layer, and strip off the cable's insulating dielectric.

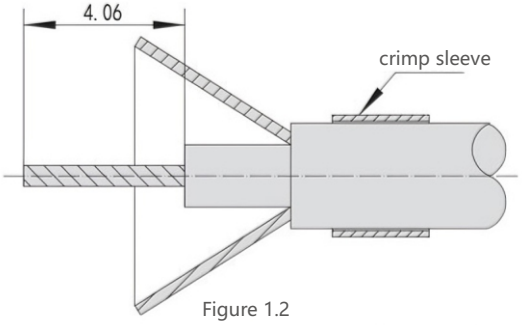


Figure 1.2

③Install the rear insulator on the cable's central conductor, and press the tail of the rear insulator tightly against the cable's insulating medium (as shown in Figure 1.3).

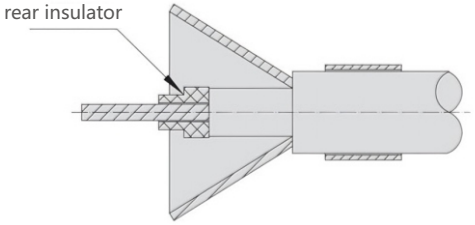


Figure 1.3

④Assemble the center contact onto the cable's central conductor as shown in Figure 1.4. The cable's central conductor should be visible through the observation hole at the tail of the center contact. Use crimping tool M22520/2-01 (set to position 5) and locator M22520/2-35 for crimping.

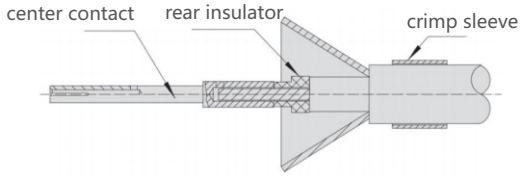


Figure 1.4

⑤Then, install the front insulator onto the center contact as shown in Figure 1.5, with the tail of the front insulator abutted against the stepped part of the rear insulator.

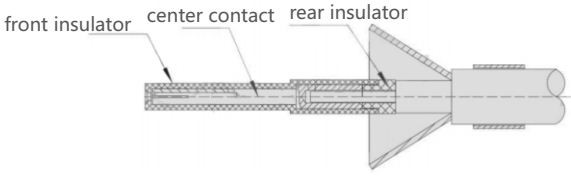


Figure 1.5

⑥As shown in Figure 1.6, install the outer pin onto the crimped center contact (with insulators fitted), until the internal contact and the insulators are fully abutted.

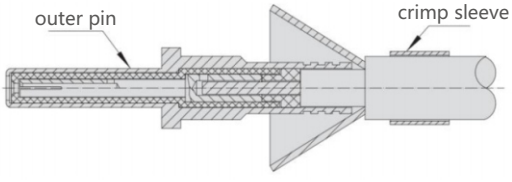


Figure 1.6

⑦As shown in Figure 1.7, place the crimp sleeve forward on the cable shield layer, with the position dimension ranging from 6.1 to 6.8. Cut off the excess shield layer that extends beyond the shield crimp sleeve. Use tool M22520/4-01 and locator M22520/4-02 to crimp the crimp sleeve: crimp once, then rotate the contact by 45 degrees and crimp again. After the second crimping, the diameter of the shield crimp sleeve must not exceed 2.74.

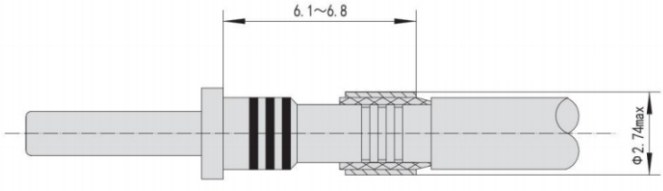


Figure 1.7

2. Assembly and Crimping of 16# Shielded Coaxial Contact

①Strip the cable as shown in Figure 1.8. The end face must be cut clean and perpendicular to the axial plane of the cable. The cable must not be deformed during cutting. Thermal stripping is recommended.

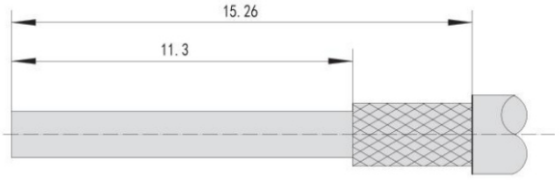


Figure 1.8

②As shown in Figure 1.9, slide the crimp sleeve backward onto the cable jacket, spread open the shield layer, and strip off the cable dielectric.

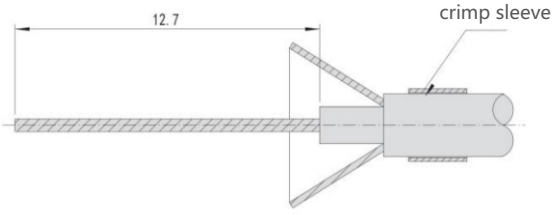


Figure 1.9

③Slide the rear insulator onto the cable's central conductor as shown in Figure 1.10, and press the tail tightly against the cable's insulating dielectric.

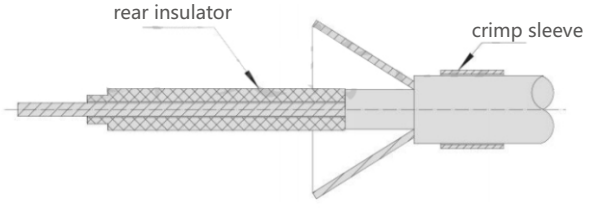


Figure 1.10

④Assemble the center pin onto the cable's central conductor as shown in Figure 1.11. The cable's central conductor should be visible through the observation hole at the tail of the center contact. Use crimping tool M22520/2-01 (set to position 5) and locator M22520/2-35 for crimping.

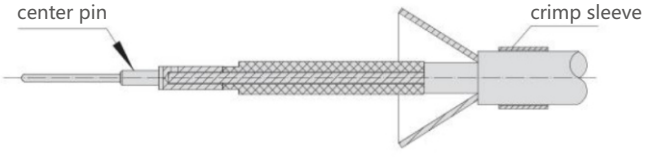


Figure 1.11

⑤Install the front insulator onto the center pin as shown in Figure 1.12, and ensure the contact area between the two insulators is tightly abutted.

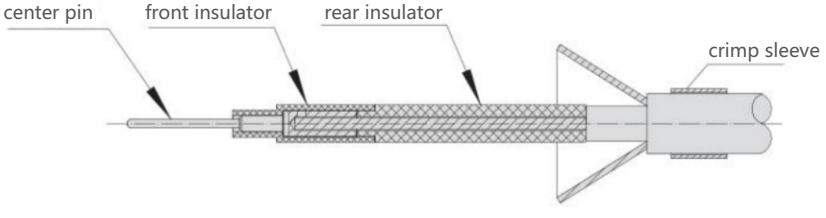


Figure 1.12

⑥As shown in Figure 1.13, install the outer contact onto the center contact (under the cable shield layer) until the center contact and the insulator are fully abutted.

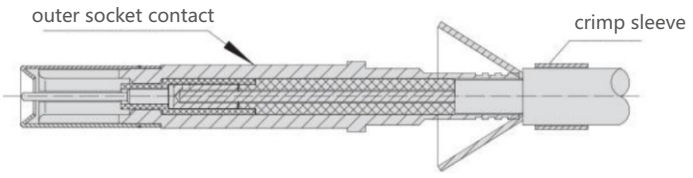


Figure 1.13

⑦As shown in Figure 1.14, place the shield crimp sleeve forward on the cable shield layer, with the position dimension ranging from 6.1 to 6.8. Cut off the excess shield layer that extends beyond the shield crimp sleeve. Use tool M22520/4-01 and locator M22520/4-02 to crimp the crimp sleeve: crimp once, then rotate the contact by 45 degrees and crimp again. After the second crimping, the diameter of the shield crimp sleeve must not exceed 2.74.

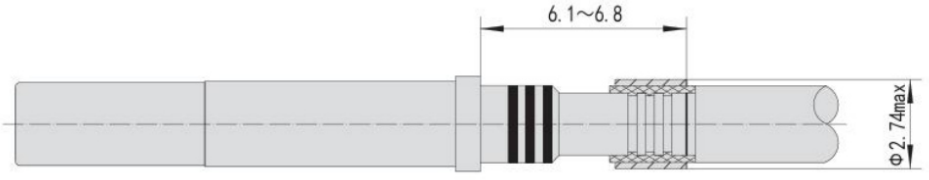


Figure 1.14

Assembly Instructions for 12# Coaxial Pin and Socket

Assembly and Crimping of 12# Coaxial Pin

①Strip the cable as shown in Figure 2.1. The end must be cut clean and perpendicular to the axial plane of the cable. The cable must not be deformed during cutting.

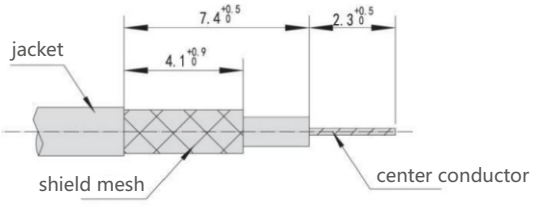


Figure 2.1

②As shown in Figure 2.2, thread the shield crimp sleeve onto the cable jacket.

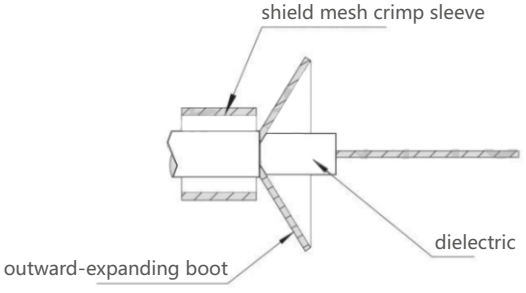


Figure 2.2

③Spread the shield layer outward and strip off the dielectric part of the cable.

④As shown in Figure 2.3, pass the center conductor through the socket contact. The cable's center conductor must be visible through the observation hole on the socket contact, and the socket must be pressed against the rear insulator.

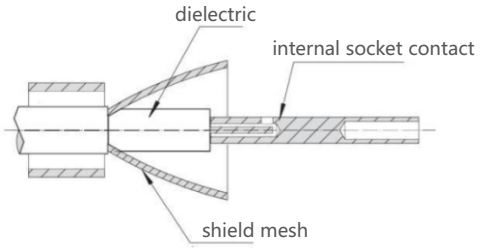


Figure 2.3

⑤Crimp the internal socket contact using the crimping tool MH992 and locator K1303.

⑥As shown in Attached Figure 2.4, assemble the internal component into the outer pin contact (under the cable shield mesh) until the internal socket contact is fully installed.

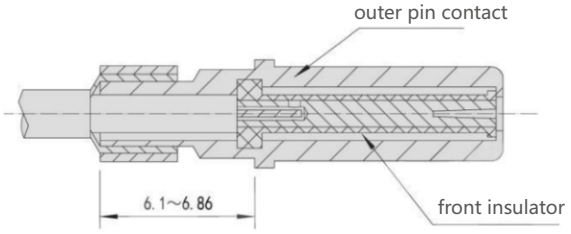


Figure 2.4

⑦Move the shield mesh crimp sleeve forward to ensure the dimension is 6.1-6.86mm. Trim off the excess shield mesh at the front end of the shield mesh crimp sleeve. Crimp the shield mesh crimp sleeve using the crimping tool M22520/05-01 and locator M22520/05-03: crimp once, and the outer diameter of the shield mesh crimp sleeve must be less than 3.96mm.

⑧Figure 2.5 shows the crimped 12# coaxial pin.

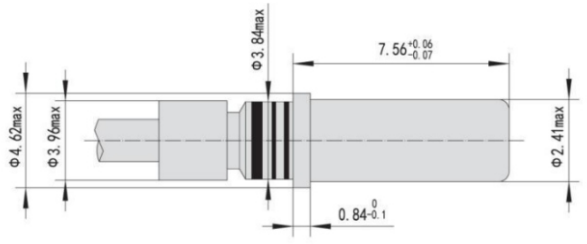


Figure 2.5

2. Assembly and Crimping of 12# Coaxial Socket

①Strip the cable as shown in Figure 2.6. The end must be cut clean and perpendicular to the axial plane of the cable. The cable must not be deformed during cutting.

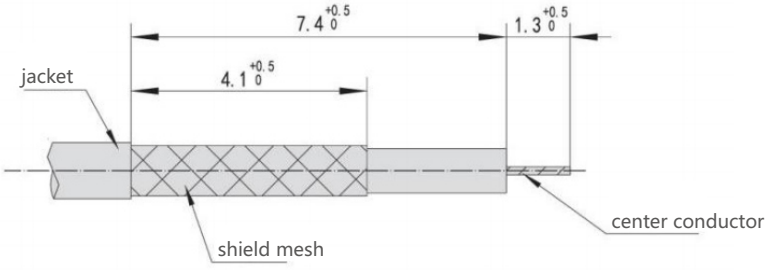


Figure 2.6

②As shown in Figure 2.7, proceed as follows:

a. Fit the shield mesh crimp sleeve onto the cable jacket.

b. As shown in the figure, gradually spread the shield layer outward and strip off the dielectric layer of the cable.

c. Pass the cable's center conductor into the internal pin contact. The inner conductor must be visible through the observation hole on the internal pin contact. The contact must be pressed against the front end of the insulator.

d. Crimp the internal pin contact using the crimping tool MH992 and locator K1303.

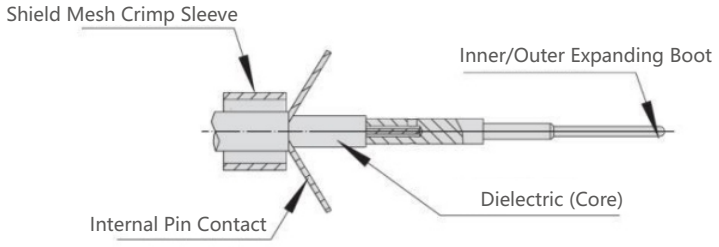


Figure 2.7

③As shown in Figure 2.8, proceed as follows:

a. Assemble the internal component into the outer socket contact component until the internal pin contact is fully installed.

b. Move the shield mesh crimp sleeve forward to ensure the dimension is 6.1-6.8mm. Trim off the excess shield mesh at the front end of the shield mesh crimp sleeve.

c. Crimp the shield mesh crimp sleeve using the crimping tool M22520/05-01 and locator M22520/05-03. The outer diameter of the shield mesh crimp sleeve must be less than 3.96mm.

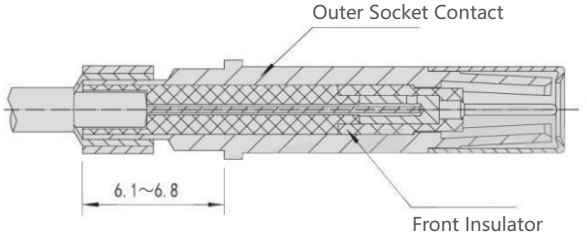


Figure 2.8

④Figure 2.9 shows the crimped 12# coaxial socket

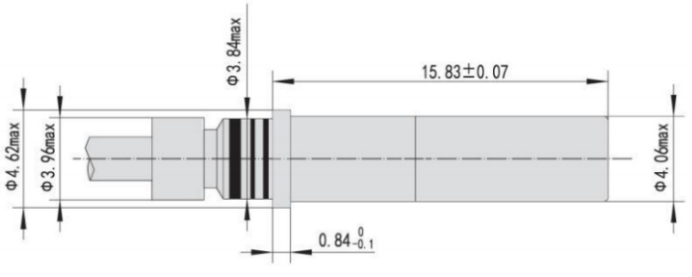


Figure 2.9

Assembly Instructions for 8# Dual Coaxial Shielded Pin and Socket

Assembly and Crimping of 8# Dual Coaxial Shielded Pin

①As shown in Figure 3.1, proceed as follows:

a. Slide the heat shrink sleeve onto the cable as shown in the figure.

b. Strip the cable jacket to the position shown in the figure. The end must be cut clean and perpendicular to the axial plane of the cable. The cable must not be deformed or damaged during cutting.

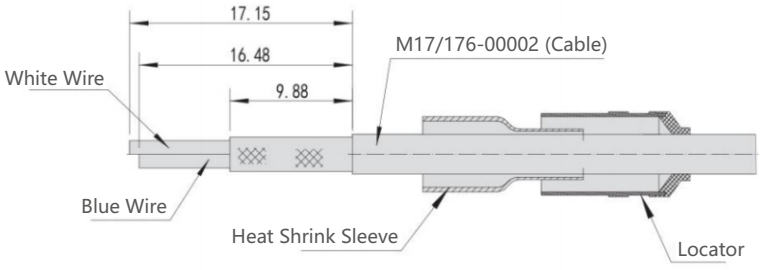


Figure 3.1

②As shown in Figure 3.2, fit the shield crimp sleeve onto the cable jacket, place the shield layer over the shield crimp sleeve, and strip the internal wires as shown (you can cut off the filler near the shield layer).

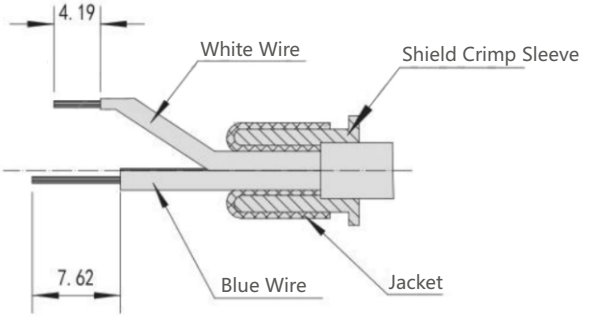


Figure 3.2

③As shown in Figure 3.3, bend the white wire outward and place it into the slot of the insulator. Pass the blue wire through the insulator. The tail of the insulator must be pressed against the shield layer.

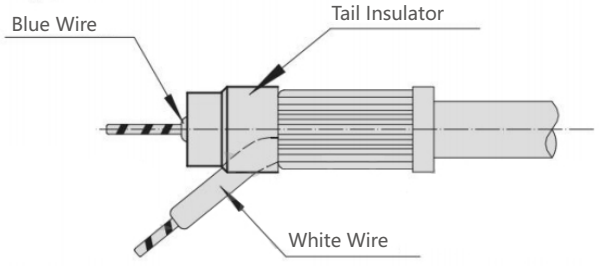


Figure 3.3

④As shown in Figure 3.4, proceed as follows:

a. Insert the inner conductor of the blue wire into the center pin contact. The conductor must be visible through the observation hole. The contact should be pressed against the tail of the insulator, and the tail of the insulator should be pressed against the metal collar.

b. Crimp the center pin contact onto the blue wire using the crimping tool M22520/2-01 and locator K709.

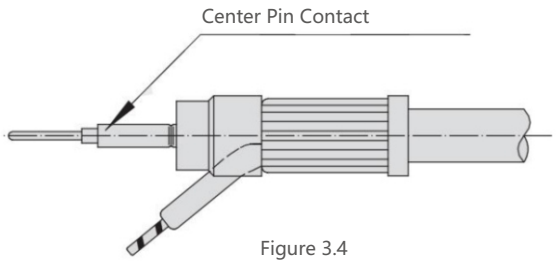


Figure 3.4

⑤As shown in Figure 3.5, proceed as follows:

a. Fit the intermediate pin contact (and the insulator inside it) onto the center pin contact.

b. Insert the inner conductor of the white wire into the hole on the tail surface of the intermediate contact. The conductor should be visible through the wire observation hole. The intermediate contact must be pressed against the insulator.

c. Crimp the intermediate contact onto the white wire using the crimping tool M22520/5-01.

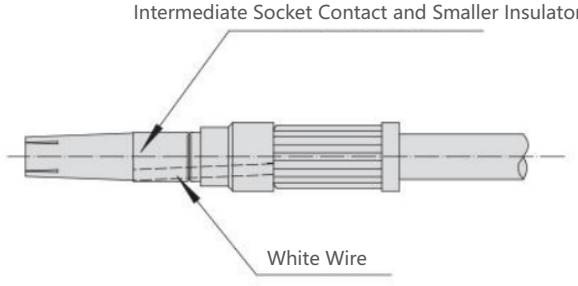


Figure 3.5

⑥As shown in Figure 3.6, proceed as follows:a. Fit the outer pin and insulator onto the intermediate socket contact assembly until they reach the bottom completely.b. When the assembly is fully at the bottom, use the crimping tool M22520/5-01 and crimp punch Y631A to perform hexagonal crimping on the end part of the outer housing.c. Slide the heat shrink sleeve to the crimped part of the contact, and heat the heat shrink sleeve on the contact and cable.

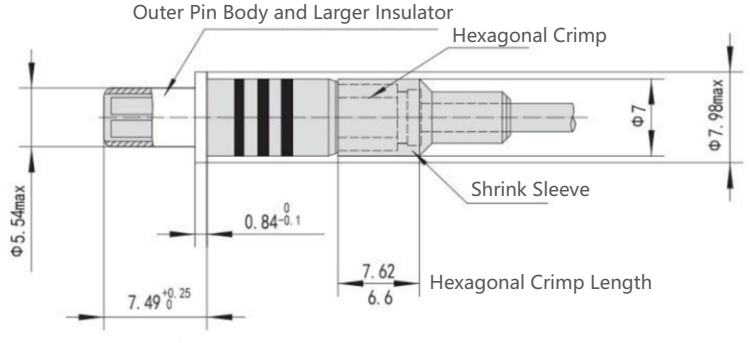


Figure 3.6

2. Assembly and Crimping of 8# Dual Coaxial Shielded Socket

①As shown in Figure 3.7, slide the heat shrink sleeve and locator onto the cable jacket (starting from the end with the smaller diameter).

②Strip the cable jacket to the position shown in the figure. The end must be cut clean and perpendicular to the axial plane of the cable. The cable must not be deformed or damaged during cutting.

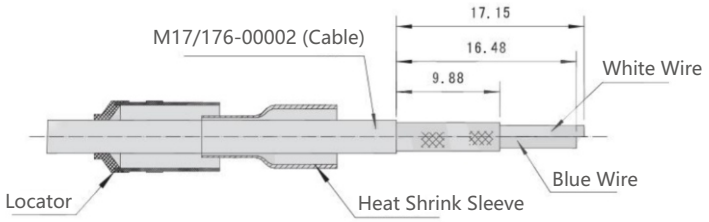


Figure 3.7

③Fit the shield crimp sleeve onto the cable jacket. As shown in Figure 3.8, place the shield layer over the shield crimp sleeve, and strip the internal wires as shown (you can cut off the filler near the shield layer).

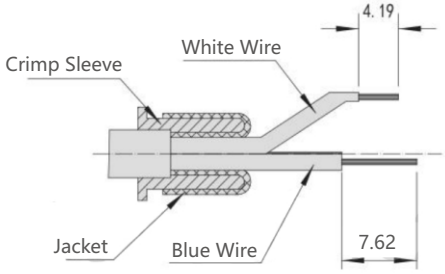


Figure 3.8

④As shown in Figure 3.9, bend the white wire outward and place it into the slot of the insulator. Pass the blue wire through the insulator. The tail of the insulator must be pressed against the shield layer.

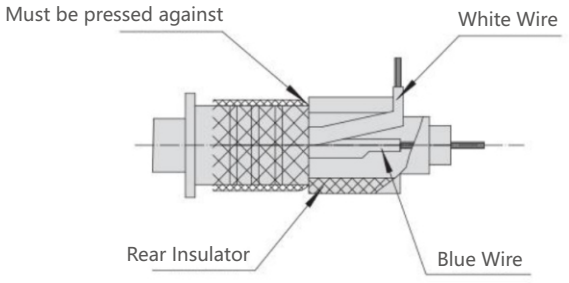


Figure 3.9

⑤As shown in Figure 3.10, proceed as follows:

a. Slide the socket contact onto the blue wire. The conductor must be visible through the observation hole on the internal socket contact.

b. Crimp the contact using tool M22520/2-01 and locator K709.

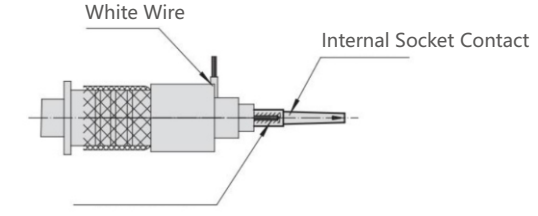


Figure 3.10

⑥ As shown in Figure 3.11, fit the intermediate pin contact and insulator assembly onto the internal socket contact. The conductor must be visible through the observation hole on the contact. The intermediate contact must be pressed against the tail of the insulator.

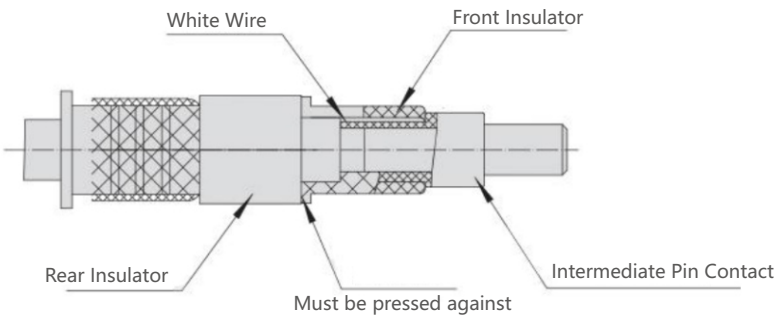


Figure 3.11

⑦As shown in Figure 3.12, use tool M22520/5-01 to crimp the intermediate pin contact, and use punch Y631B (to crimp the intermediate contact onto the white wire).

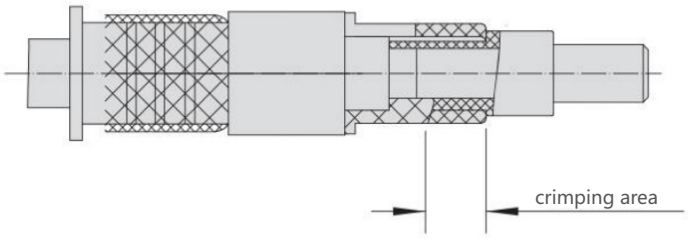


Figure 3.12

⑧As shown in Figure 3.13, slide the outer socket contact and front insulator subassembly onto the internal assembly until it is pressed against. A small gap will appear on the sleeve.

a. Use tool M22520/5-01 and punch Y631A to crimp the outer assembly (sleeve and outer contact).

b. Slide the pre-formed heat shrink sleeve onto the contact, and shrink the heat shrink sleeve using a hot air device.

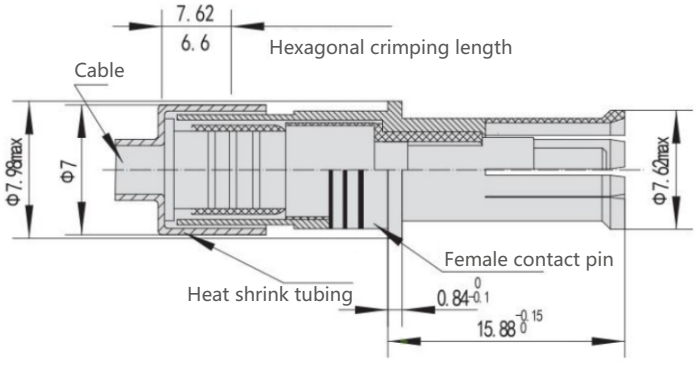


Figure 3.13

J599 Series Filtered Electrical Connector

The pictures are for reference only

Web: www.anknor.com Email: Info@anknor.com

J599 Series RF Cluster Connector

Product Brief

- This series of connectors complies with GJB599A (equivalent to U.S. military standard MIL-DTL-38999, Series III).
- Enables integrated connection of RF signals.
- Features three-start thread quick-mating with a anti-loosening mechanism.
- 100% anti-misinsertion design.
- Excellent EMI/RFI shielding performance.
- Suitable for connections in aviation, aerospace vehicles, and other electronic/electrical equipment.

Main Technical Specifications

[Mechanical Performance]

- Housing: Aluminum alloy, stainless steel, titanium alloy, composite material
- Plating:
  W—Aluminum alloy plated with cadmium and olive drab
  TA—High-performance titanium alloy
  K—Stainless steel passivation
  F—Electroless nickel plating
  FT—Aluminum alloy plated with bright nickel
  M—Composite material with electroless nickel plating
  J—Composite material plated with olive drab
- Insulator: Thermoplastic or thermoset material
- Sealing wire & seal: Rubber
- Contact: Copper alloy with gold plating
- Service life: 500 mating cycles
- Shock: 3ms half-sine wave, peak acceleration 300g
- Vibration:
- Sinusoidal: 20g
  Random: Power spectral density $0.4g^2/Hz$, total RMS value 23.1G

[Electrical Performance]

Housing conductivity:
Type W: 2.5 mΩ
Types TA, K: 10 mΩ
Types F, FT: 1 mΩ
Types J, M: 3 mΩ
Shielding:
Up to 50dB (Type W) at 10GHz
Up to 85dB (Type W) at 1GHz
Withstand voltage:
325V (AC RMS) between coaxial contact housing and center conductor
500V (AC RMS) between connector holes
Insulation resistance: ≥1000MΩ (for coaxial contacts) at 500Vdc

[Environmental Requirements]

- Temperature range: -55°C to +125°C
- Sealing: Mated connectors meet MIL-C-38999 low-pressure immersion requirements
- Humidity-heat: Per MIL-C-38999; 24-hour, 10 cycles
- Fluid resistance: Resistant to multiple fuels, coolants, solvents
- Salt spray: Per GJB121, Method 1001:
  1000h (Types K, TA)
  500h (Type W)
  48h (Type F)
  2000h (Types J, M)

Contact Electrical Performance

- Nominal impedance: 50Ω
- Operating frequency: DC ~ 18GHz
- Voltage Standing Wave Ratio (VSWR): When 0.5 GHz≤F≤18GHz, VSWR < 1.5

Contact Types

Contact Names	(Contact Part Number)	(Marine Environment Resistant Contact)	(Compatible Wire)
12# Coaxial Pin	J1216C-K3506A	J1216C-MK3506A	Gore CN3506
12# Coaxial Socket	J1216C-J3506A	J1216C-MJ3506A	Gore CN3506
12# Coaxial Pin	J1216C-K3507B	J1216C-MK3507B	Gore CN3507
12# Coaxial Socket	J1216C-J3507	J1216C-MJ3507	Gore Cn3507

Model Naming

Series Main Name*	J599	20	M	W	J	19	B	N	-01G
Type	20–Square Flange Receptacle 26–Shielded Plug								
Marine Environment Resistant	M–Marine Environment Resistant								
Housing Plating	W – Aluminum Alloy Olive Drab Coating TA – Titanium Alloy K – Stainless Steel Passivation F – Aluminum Alloy Electroless Nickel Plating FT – Aluminum Alloy Bright Nickel Plating M – Composite Material Electroless Nickel Plating J – Composite Material Cadmium Plating								
Housing Number Index Number	15 17 19 21 23 25 D E F G H J								
Contact Arrangement	See "Contact Arrangement Chart"								
Contact Category	A – Specified Matching Pin B – Specified Matching Socket								
Key Position	N – Normal Key Position A, B, C, D, E – Alternate Key Positions								
Compatible Wire Identification	-01G (For Contacts with 3506 Wire) -01CG (For Contacts with 3507 Wire)								

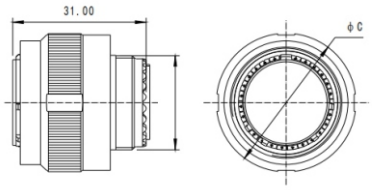
Note: When the connector is installed with pins, it serves as the floating end.When the connector is installed with sockets, to avoid affecting the floating of the contacts, no accessories can be mounted at the tail end of the connector. A certain margin should also be reserved when securing the wire at the tail end of the connector. It is recommended to install pins in the plug and sockets in the receptacle.

[Model Marking Example]

Square flange receptacle, aluminum alloy with cadmium plating, Housing J, Contact Arrangement 19, Pins Installed, Key Position N, Compatible with 3506 Wire, Model: J599/20WJ19BN-01G

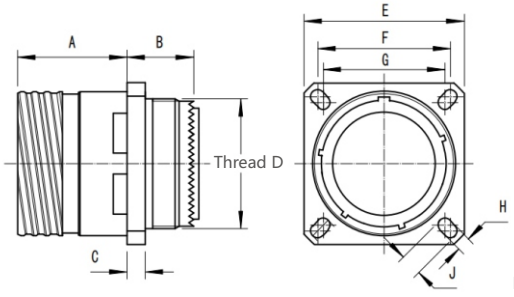
Metal Material Housing External Dimensions (Unit: mm)

[Plug] (Knurling Type for Reference Only)

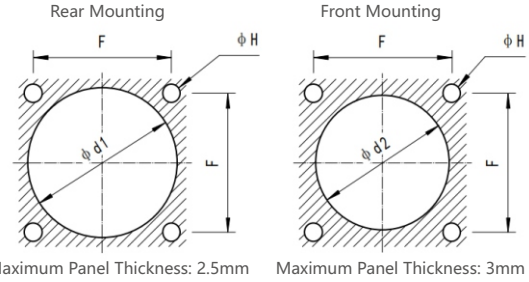


Housing Number	MS Housing Number	Thread B	C Max
15	D	M22×1.6g	32.40
17	E	M25×1.6g	35.60
19	F	M28×1.6g	38.50
21	G	M31×1.6g	41.70
23	H	M34×1.6g	44.90
25	J	M37×1.6g	48.00

[Socket]



Recommended Panel Opening Dimensions



Maximum Panel Thickness: 2.5mm

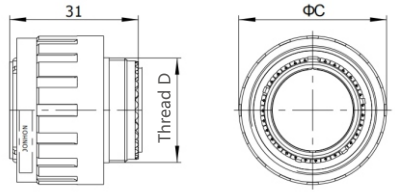
Maximum Panel Thickness: 3mm

When drilling holes according to "d2", the connector is not equipped with accessories

Shell Number	MS Shell Number	A Max	B Max	C Max	(Thread D)	E	F	G	H	J	d1 minimum	d2 minimum
15	D	20.9	10.8	2.5	M22×1-6g	31.00	24.61	23.01	3.25	4.93	26.59	23.01
17	E	20.9	10.8	2.5	M25×1-6g	33.30	26.97	24.61	3.25	4.93	30.96	25.81
19	F	20.9	10.8	2.5	M28×1-6g	36.5	29.36	26.97	3.25	4.93	32.94	28.98
21	G	20.1	11.5	3.2	M31×1-6g	39.7	31.75	29.36	3.25	4.93	36.12	32.16
23	H	20.1	11.5	3.2	M34×1-6g	42.9	34.98	31.75	3.91	6.15	39.29	34.93
25	J	20.1	11.5	3.2	M37×1-6g	46.0	38.10	34.93	3.91	6.15	42.47	37.69

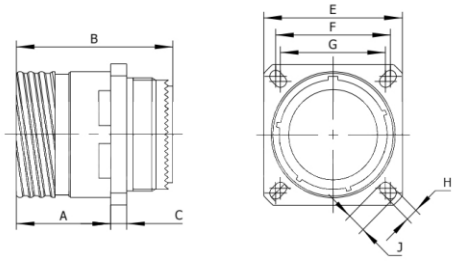
Composite Material Shell External Dimensions (Unit: mm)

[Plug] (Knurling Type for Reference Only)

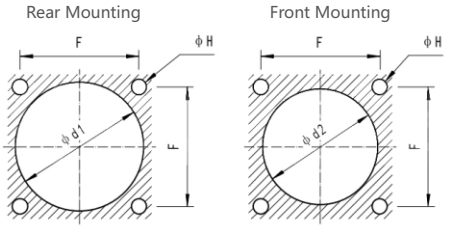


Housing Number	MS Housing Number	Thread B	C Max
15	D	M22×1.6g	32.40
17	E	M25×1.6g	35.60
19	F	M28×1.6g	38.50
21	G	M31×1.6g	41.70
23	H	M34×1.6g	44.90
25	J	M37×1.6g	48.00

[Socket]



Recommended Panel Opening Dimensions



Maximum Panel Thickness: 2.5mm Maximum Panel Thickness: 3mm

When drilling holes according to "d2", the connector is not equipped with accessories

Shell Number	MS Shell Number	A Max	B Max	C Max	(Thread D)	E	F	G	H	J	d1 minimum	d2 minimum
15	D	19.8	32.9	3.65	M22×1-6g	31.00	24.61	23.01	3.25	4.93	26.59	23.01
17	E	19.8	32.9	3.65	M25×1-6g	33.30	26.97	24.61	3.25	4.93	30.96	25.81
19	F	19.8	32.9	3.65	M28×1-6g	36.5	29.36	26.97	3.25	4.93	32.94	28.98
21	G	19.0	32.9	4.35	M31×1-6g	39.7	31.75	29.36	3.25	4.93	36.12	32.16
23	H	19.0	32.9	4.35	M34×1-6g	42.9	34.98	31.75	3.91	6.15	39.29	34.93
25	J	19.0	32.9	4.35	M37×1-6g	46.0	38.10	34.93	3.91	6.15	42.47	37.69

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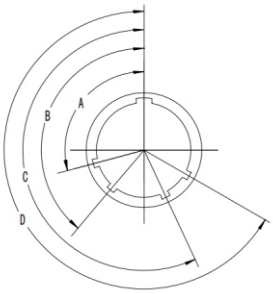
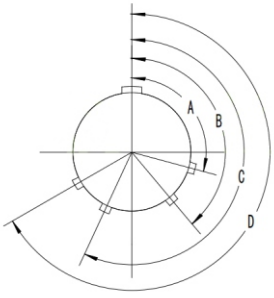
Key Position

[Socket Front View]

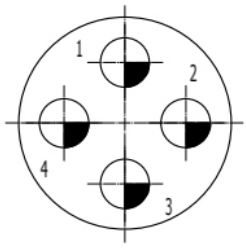
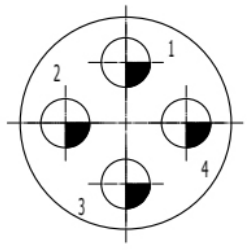
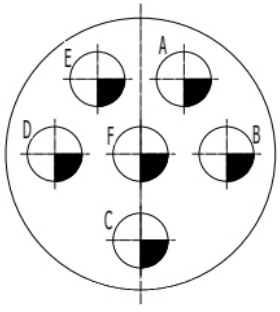
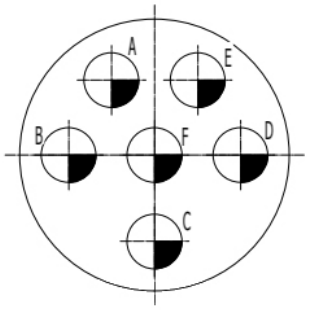
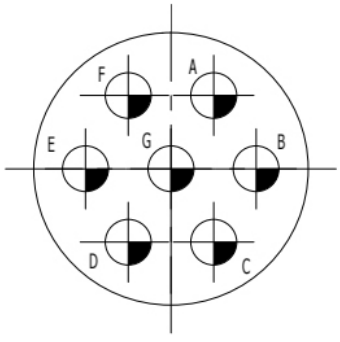
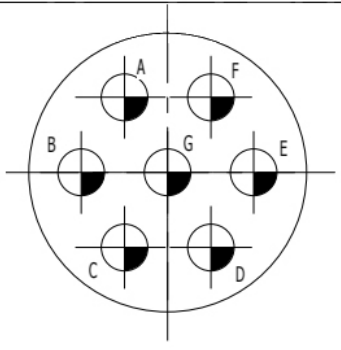
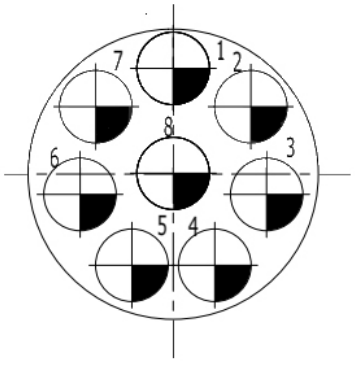
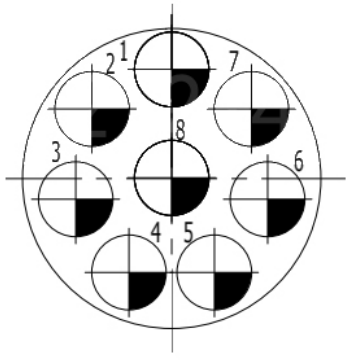


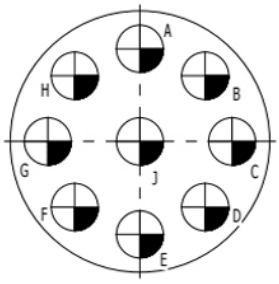
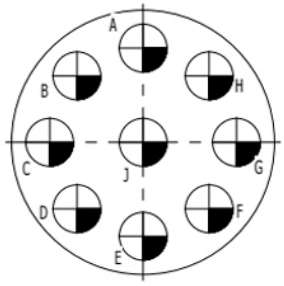
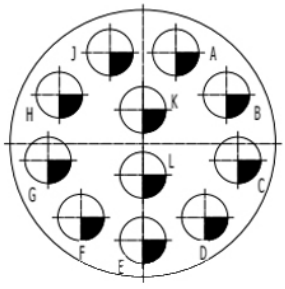
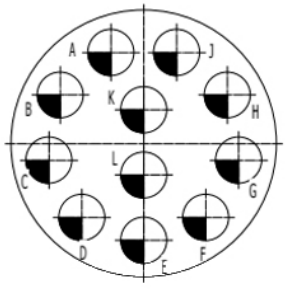
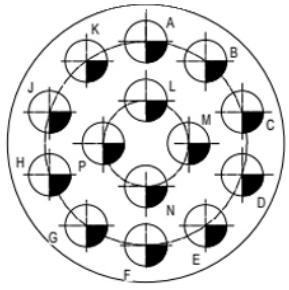
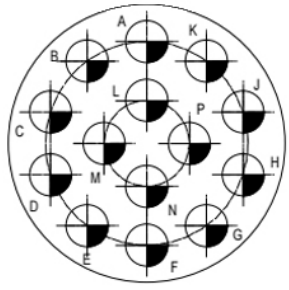
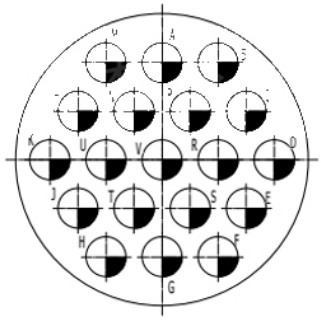
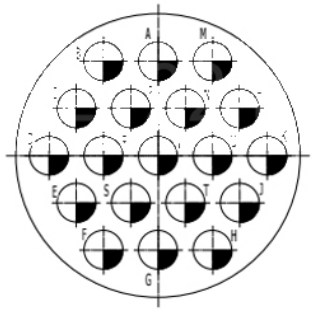
[Plug Front View]



Shell No	MS Shell No	Angle	N	A	B	C	D	E
15	D	A° B° C° D°	95 141 208 236	113 156 182 292	90 145 195 252	53 156 220 255	119 146 176 298	51 141 184 242
17	E	A° B° C° D°	80 142 196 293	135 170 200 310	49 169 200 244	66 140 200 257	62 145 180 280	79 153 197 272
19	F							
21	G							
23	H							
25	J							

Contact Arrangement (Mating Face View)

Node	Needle Assembly	Hole Assembly
15-38 (4 cores total)		
17-06 (6 cores total)		
17-27 (7 cores total)		
19-08 (8 cores total)		

19-96 (9 Contacts Total)		
21-11 (11 Contacts Total)		
23-14 (14 Contacts Total)		
25-19 (19 Contacts Total)		

GJB600 (MIL-DTL-5015) Series

The pictures are for reference only

GJB600 Series Circular Bayonet Electrical Connector

- Product Overview
- Complies with GJB600 (MIL-DTL-5015) standards
- Bayonet-type quick connection method
- Silver-plated contacts
- Termination method: Welding
- Widely used in aviation, aerospace, military and industrial systems

Main Technical Performance

Operating temperature: -55 ~ +125°C
Rated current and contact resistance: See the table below:

Contact Specification	Rated Current (A)	Contact Resistance (mΩ)
16#	13	≤3.77
12#	23	≤1.8
8#	46	≤0.56
4#	80	≤0.28

Insulation resistance: ≥5000MΩ
Salt spray resistance: 48h
Dielectric withstand voltage:

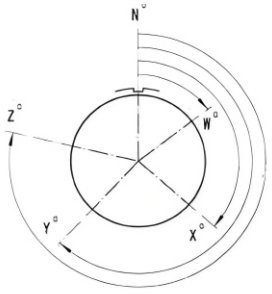
Usage Class	Test Voltage Vrms	
	Sea Level	2136m
Instrument	1000	260
A	2000	360
D	2800	400
E	3500	440
B	4500	480
C	7000	560

Vibration: 10 ~ 2000Hz, 147m/s² Shock: 490m/s² Mechanical life: 500 cycles

Model Marking Meaning (The coating is cadmium-plated military green)

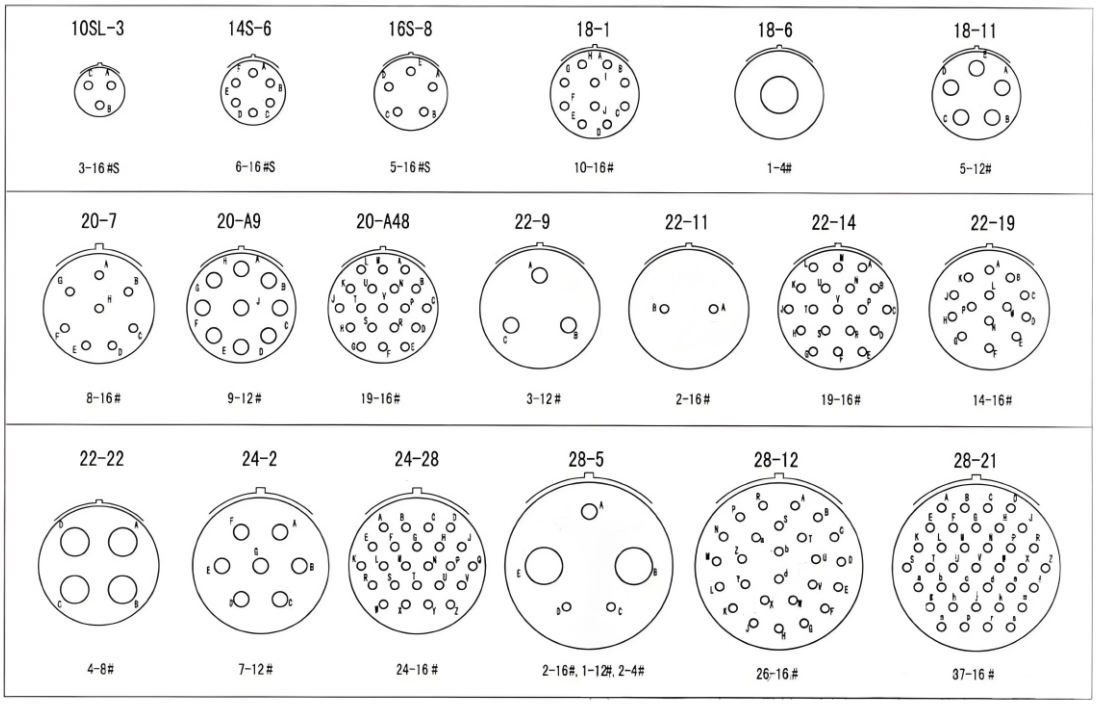
Series Main Name	JYB—Bayonet Connector YH HL JYB	3100	A	-	18	P	16	N
Shell Type	3100—Wall-mounted Socket 3106—Straight Plug							
Type	A—Machined Shell							
Material Code	Blank = Aluminum Alloy							
Shell Number	10SL—14S—16S—18—20—22—24—28							
Contact Category	P—Silver-plated Pin; S—Silver-plated Socket P1—Gold-plated Pin; S1—Gold-plated Socket							
Insulation Mounting Plate Arrangement Code	See "Contact Arrangement"							
Key Position	N—Standard Key Position W, X, Y, Z—Alternate Key Positions							

Key Position Angle



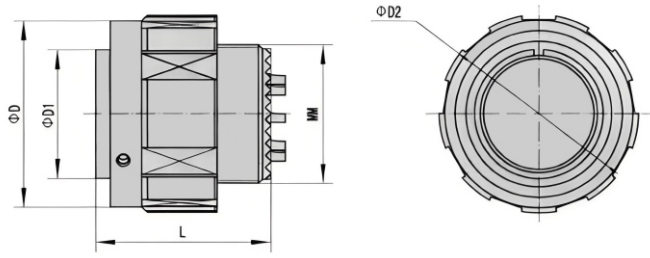
Socket Position Arrangement Code	Key Position Angle			
	W	X	Y	Z
10SL-3	—	—	—	—
14S-6	—	—	—	—
16S-8	—	170°	265°	—
18-1	70°	145°	215°	290°
18-6	—	—	—	—
18-11	—	170°	200°	—
20-7	80°	110°	250°	280°
20-A9	—	—	—	—
20-A48	—	—	—	—
22-9	70°	145°	215°	290°
22-11	35°	110°	250°	325°
22-14	80°	—	—	280°
22-19	80°	110°	250°	280°
22-22	—	110°	250°	—
24-2	80°	—	—	280°
24-28	80°	110°	250°	280°
28-5	35°	110°	250°	325°
28-12	90°	180°	270°	—
28-21	80°	110°	250°	280°
	Among them, N is the standard key position, with an angle of 0°			

Contact Arrangement (Plug-in View of Pin Insulator)



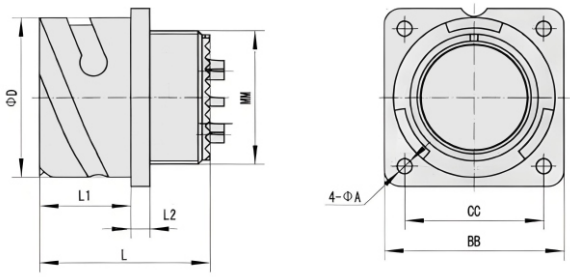
Outline Dimensions

[Straight Plug JYB3106]



Shell Number	ΦD	ΦD1	ΦD2	L	MM
10SL	22	11.5	25	27	0.625–24UNEF
14S	28.2	17	31.4	27	0.750–20UNEF
16S	31.1	20.2	34	27	0.875–20UNEF
18	35.2	23.4	37.5	36	1.000–20UNEF
20	38.4	26.5	41	36	1.125–18UNEF
22	41.8	29.7	44	36	1.250–18UNEF
24	45.3	33	47.5	36	1.375–18UNEF
28	51	38.4	54.5	36	1.625–18UNEF

[Box-mounted Socket JYB3100]

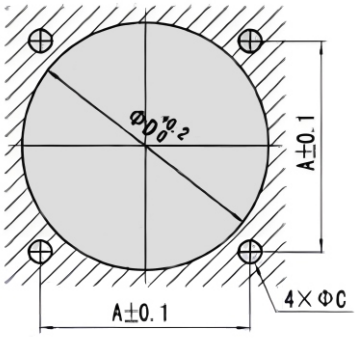


Shell Number	ΦA	BB	CC	ΦD	MM	L	L1	L2
10SL	3.2	25.4	18.2	18.2	0.625–24UNEF	27	14.4	3
14S	3.2	30	23	24.6	0.750–20UNEF	27	14.4	3.4
16S	3.2	32.5	24.6	27.4	0.875–20UNEF	27	14.4	3.4
18	3.2	35	27	30.8	1.000–20UNEF	36	19.2	4.2
20	3.2	38	29.4	34.2	1.125–18UNEF	36	19.2	4.2
22	3.2	41	31.8	37.4	1.250–18UNEF	36	19.2	4.2
24	3.7	44.5	34.9	40.9	1.375–18UNEF	36	20.8	4.2
28	3.7	50.8	39.7	46.7	1.625–18UNEF	36	20.8	4.2

Recommended Tail Accessories (See GJB598 Series Ⅱ Tail Accessories for Details)

Shell Number	Connector Thread	Compatible Accessory (Straight Cable Clamp)	Compatible Accessory (Angled Cable Clamp)
10SL	0.625–24UNEF	J1784A/52–10W2	J1784A/51–10W2
14S	0.750–20UNEF	J1784A/52–12W2	J1784A/51–12W2
16S	0.875–20UNEF	J1784A/52–14W2	J1784A/51–14W2
18	1.000–20UNEF	J1784A/52–16W2	J1784A/51–16W2
20	1.125–18UNEF	Currently, there are no compatible accessories available and new development is required.	Currently, there are no compatible accessories available and new development is required.
22	1.250–18UNEF		
24	1.375–18UNEF		
28	1.625–18UNEF		

Recommended user installation dimensions



Shell Number	A	C	D
10SL	18.2	3.2	18.5
14S	23	3.2	24.9
16S	24.6	3.2	27.7
18	27	3.2	31.1
20	29.4	3.2	34.5
22	31.8	3.2	37.7
24	34.9	3.7	41.2
28	39.7	3.7	47

Operation of Electrical Connectors

1.Cable ConnectionFirst, solder the pins and sockets as required, then assemble the socket onto the panel.
2.When connecting the connector's plug and socket (which has a blind-mating function): First, insert the guide section of the plug into the socket, then rotate the plug. Once the single-key position is properly aligned, rotate the connecting nut clockwise. The three pins will quickly enter the three-curve groove, and after rotating about 120°, a "click" sound will be heard. At this point, the plug and socket are correctly positioned and securely locked.
To disconnect the electrical connector: Gently push the connecting nut forward while rotating it counterclockwise, and the plug and socket will separate smoothly.

Operation of Electrical Connectors

1.When wiring the electrical connector, strictly follow the corresponding contact numbering.
2.Do not energize the electrical connector before it is locked.
3.When the connector's plug and socket are disconnected, cover their ends with sealing caps to prevent dust and other debris from entering the connector.