

MIL-C-38999 I series electrical connector

Brief introduction

- Comply with MIL-C-38999 I series
- Quick bayonet coupling, small size, light weight and high density
- EMI/RFI shielding
- Removable crimp contact with scoop-proof design
- Various receptacle mounting: Box mounting, wall-through mounting, front mounting, rear mounting and jam nut mounting
- Withstand strong vibration
- Standard back accessories, comply with GJB1784; and special backshell (Ti-Ni ring) for shielding cable
- 9 shell sizes, 74 polarizations and various modification types
- 5 key leading structure to avoid mismatching



- Available field: military systems such as aviation, aerospace, weapon, and other electronic equipment systems
- Enterprise standard: 21E0.204.102JT

Application:

The product is used to connect current and signal.

Operating environment:

The products can be used in harsh environments like strong vibration, rain, sand, damp heat and so on.

Main Performance

[Mechanical]

—Shell: Aluminum alloy/stainless steel

—Plating:

B class: olive green cadmium plating

E class: stainless steel passive

F class: electroless nickel plating

—Insulator: Thermoset plastic

—Grommet and seal: Silicon rubber

—Contact: Gold-plated copper alloy, crimping, soldering, PCB

—Endurance: 500 cycles

—Vibration:

Sinusoid vibration: frequency 10-2000Hz, acceleration: 294m/s²

Random vibration: frequency 100-1000Hz, power spectral density: 1g²/Hz

—Shock: At 3 ms half sinusoid, peak value of acceleration: 300g

[Environmental]

—Operating temperature:

B class: -65°C ~ +175°C

E, F class: -65°C ~ +200°C

—Salt spray: According to method 1001 GJB1217

B class 500h, E class 1000h

F class 48h

—Relative humidity: 98% at 40°C

—Operating height: ≤30480m

—Anti-moisture, salt spray, mould, rain, dust,

[Electrical]

—Contact resistance and rating current:

Contact size	Operating dia. (mm)	Contact resistance (mΩ)	Rating 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

—EMI shielding:

100MHz~1GHz: minimum attenuation 85dB

1GHz~10GHz: minimum attenuation 50dB

—Withstanding voltage: V

Service rating	M	N	I	II
Sea level	1300	1000	1800	2300
21000m	800	600	1000	1000

*Different contact layouts have different service rating. Please see the contact layouts table.

—Insulation resistance:

Normal ≥5000MΩ Damp heat ≥100MΩ

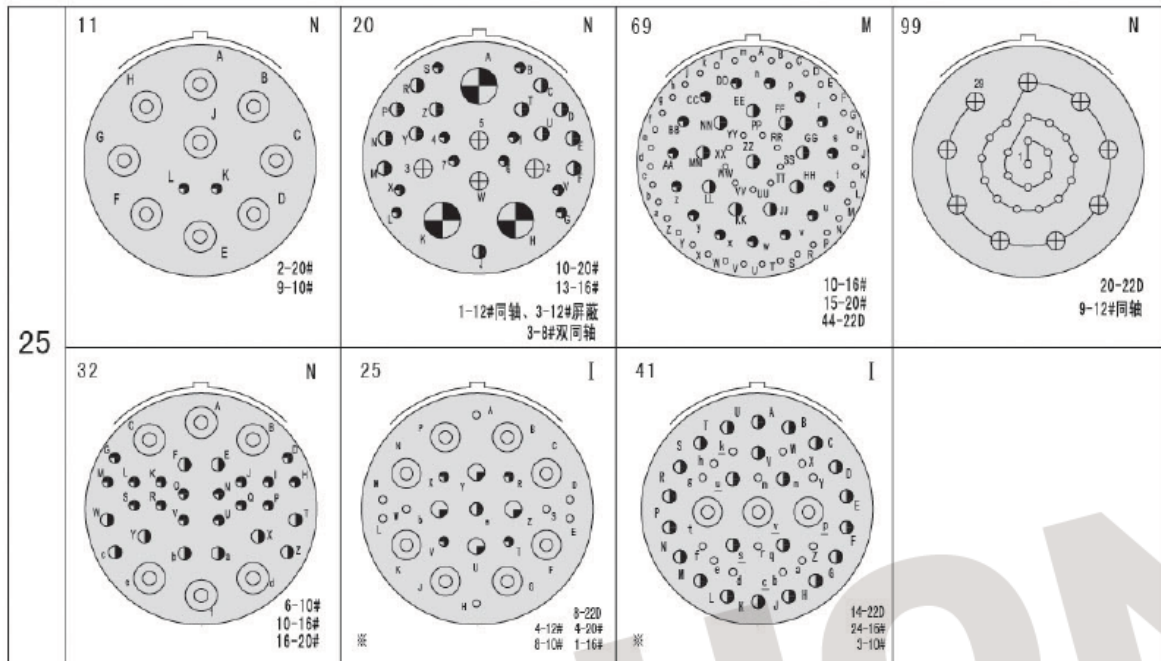
—Electrical continuity between shells:

B class ≤2.5mΩ F class ≤1.0mΩ

E class ≤50mΩ

21	27 I 27-20#	25 I 25-20#	24 I 24-20#	15 I 13-20# 2-8#双同轴	02 M 65-22#
	35 M 100-22#	55 I 55-20#	53 I 53-20#	36 I 36-20#	
	34 I 34-20#	32 I 32-20#	21 II 21-16#	97 I 16-16#	
	99 II 11-16#	04 I 4-8#			
25	35 M 128-22#	61 I 61-20#	46 I 40-20# 4-16# 2-8#双同轴	29 I 29-16#	
	24 I 12-16# 12-12#	43 I 23-20# 20-16#	19 I 19-12#	04 I 48-20# 8-16#	

附件规格



注：“※”代表派生接点。

接触件规格

22D

20#

16#

12#

12#屏蔽

12#同轴

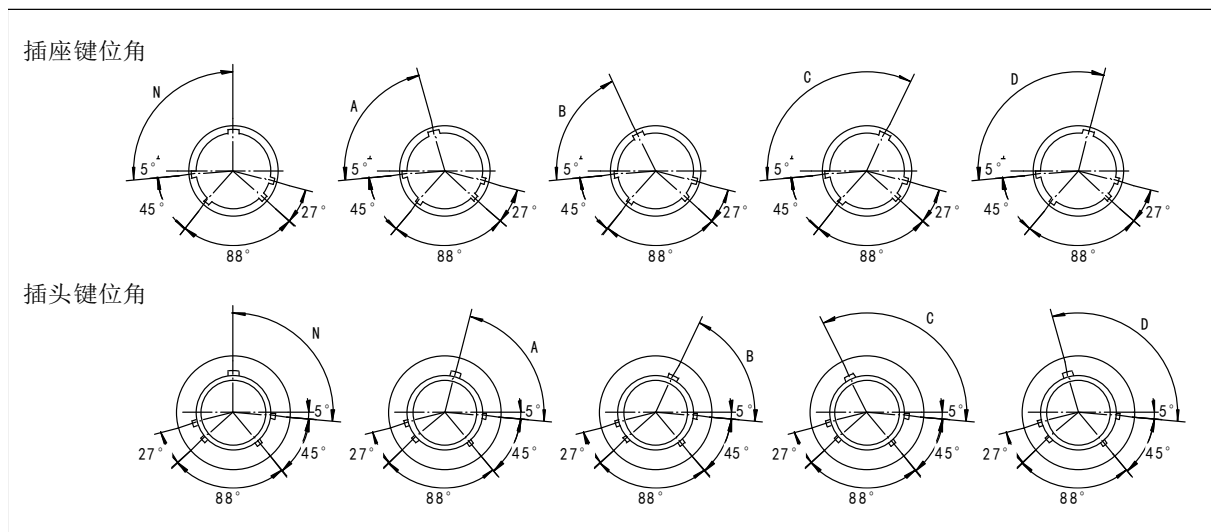
10#

8# 双同轴

8#

Notes: “※” stands for derived inserts.

Polarization:



Polarization 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	non	67°	63°	61°	65°	65°	65°	69°	69°
C	non	123°	127°	129°	125°	125°	125°	121°	121°
D	113°	109°	115°	116°	113°	113°	113°	110°	110°

Outline dimensions

[Plug JY27467]

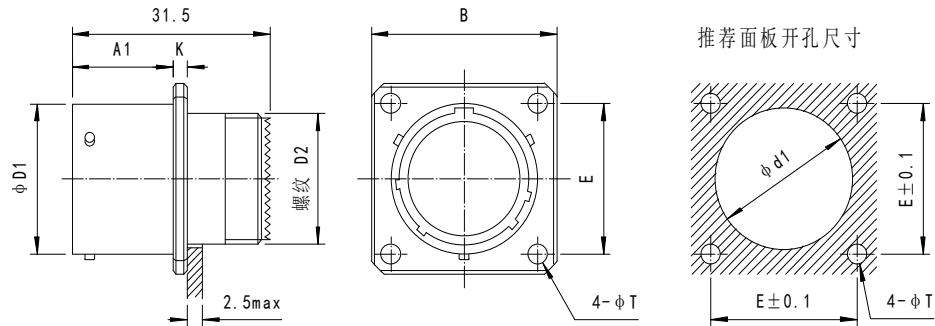
	Shell size	D1	Thread D2UNEF-2A
	09	21.7	0.4375-28
	11	25.0	0.5625-24
	13	28.2	0.6875-24
	15	31.3	0.8125-20
	17	34.4	0.9375-20
	19	37.4	1.0625-18
	21	40.5	1.1875-18
	23	44.0	1.3125-18
25	46.8	1.4375-18	

[Jam nut receptacle JY27468]

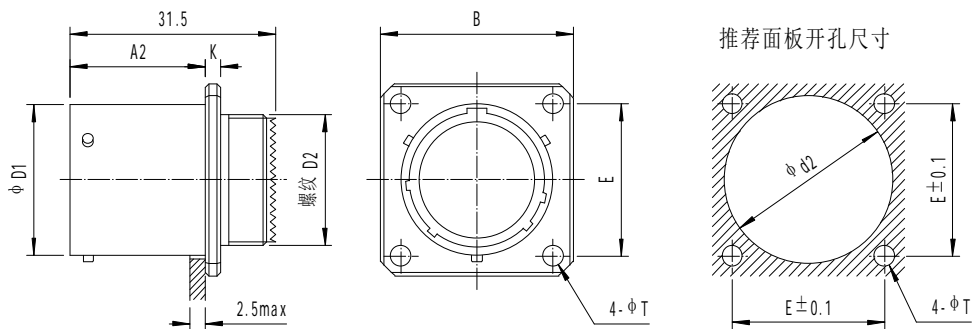
	Shell size	D1	Thread D2UNEF-2A	D3	K	B	S	d	P
	09	14.6	0.4375-28	30.2	2.8	27.0	22.3	17.7	17.0
	11	17.8	0.5625-24	35.0	2.8	31.8	25.5	21.0	19.6
	13	21.6	0.6875-24	38.1	2.8	35.0	30.2	25.6	24.3
	15	24.8	0.8125-20	41.3	2.8	38.1	33.4	28.8	27.6
	17	28.0	0.9375-20	44.5	2.8	41.3	36.6	32.0	30.7
	19	30.7	1.0625-18	49.3	3.6	46.0	39.7	35.2	33.9
	21	33.8	1.1875-18	52.4	3.6	49.2	42.9	38.3	37.1
	23	37.0	1.3125-18	55.6	3.6	52.4	46.1	41.5	40.0
25	40.2	1.4375-18	58.8	3.6	55.6	50.8	44.7	43.4	

[Wall-through square flange receptacle JY27466 JY27656]

墙式方盘前装插座 (JY27466)

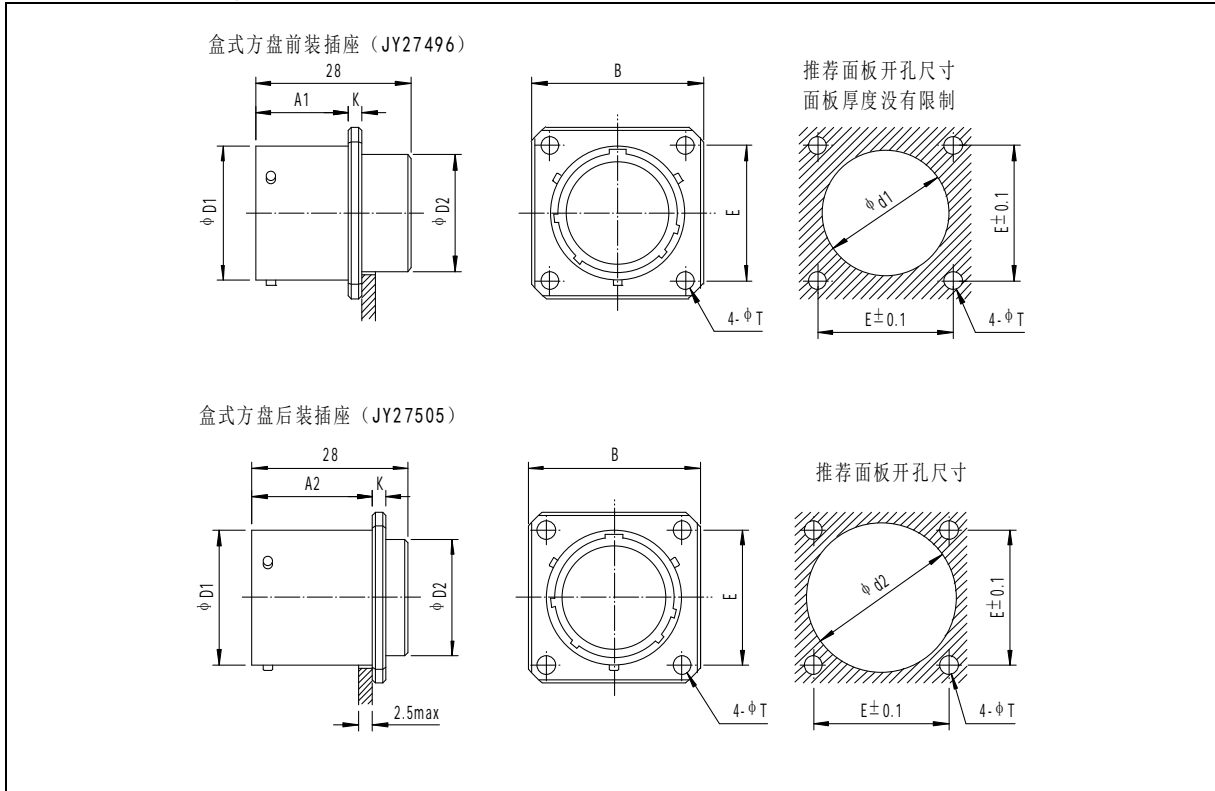


墙式方盘后装插座 (JY27656)



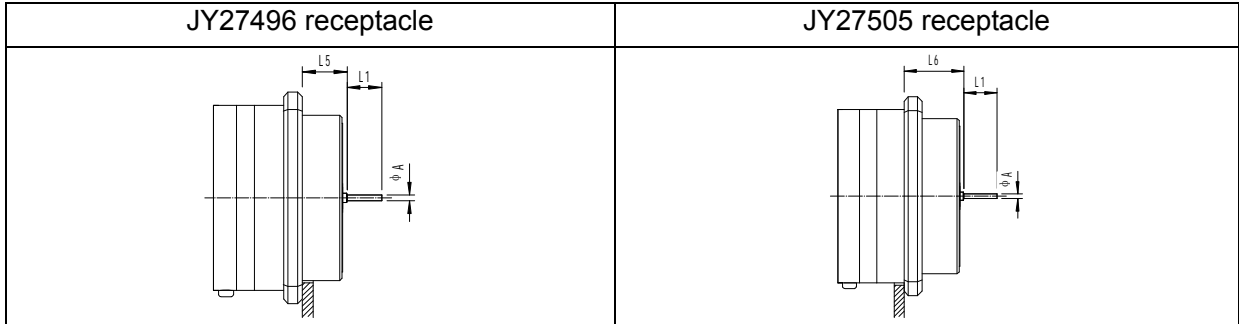
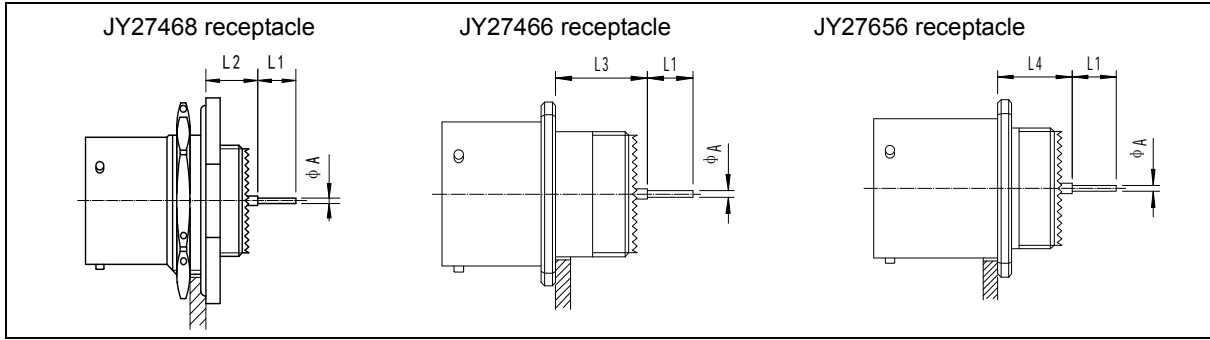
Shell size	D1	Thread D2UNEF-2A	A1	A2	K	B	E	T	d1	d2
09	14.6	0.4375-28	16.1	20.9	2.4	23.8	18.26	3.2	12.5	16.7
11	17.8	0.5625-24	16.1	20.9	2.4	26.2	20.62	3.2	15.5	20.2
13	21.6	0.6875-24	16.1	20.9	2.4	28.6	23.02	3.2	19.5	24.5
15	24.8	0.8125-20	16.1	20.9	2.4	31.0	24.62	3.2	21.5	27.7
17	28.0	0.9375-20	16.1	20.9	2.4	33.3	26.98	3.2	25.0	30.9
19	30.7	1.0625-18	16.1	20.9	2.4	36.5	29.36	3.2	28.0	32.9
21	33.8	1.1875-18	15.3	20.1	3.1	39.7	31.76	3.2	31.5	36.2
23	37.0	1.3125-18	15.3	20.1	3.1	42.9	34.92	3.7	34.5	39.3
25	40.2	1.4375-18	15.3	20.1	3.1	46.0	38.10	3.7	37.5	42.5

[Box square flange receptacle JY27496 JY27505]



Shell size	D1	D2	A1	A2	K	B	E	T	d1	d2
09	14.6	11.2	16.1	20.9	2.4	23.8	18.26	3.2	12.5	16.7
11	17.8	14.5	16.1	20.9	2.4	26.2	20.62	3.2	15.5	20.2
13	21.6	18.0	16.1	20.9	2.4	28.6	23.02	3.2	19.5	24.5
15	24.8	20.5	16.1	20.9	2.4	31.0	24.62	3.2	21.5	27.7
17	28.0	23.8	16.1	20.9	2.4	33.3	26.98	3.2	25.0	30.9
19	30.7	26.5	16.1	20.9	2.4	36.5	29.36	3.2	28.0	32.9
21	33.8	29.7	15.3	20.1	3.1	39.7	31.76	3.2	31.5	36.2
23	37.0	32.8	15.3	20.1	3.1	42.9	34.92	3.7	34.5	39.3
25	40.2	36.0	15.3	20.1	3.1	46.0	38.10	3.7	37.5	42.5

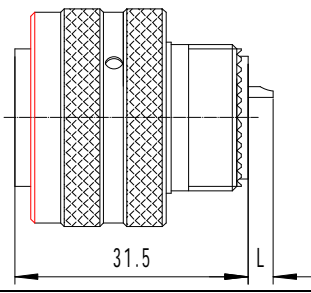
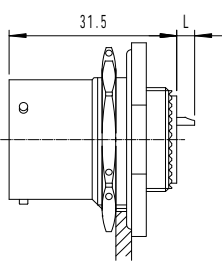
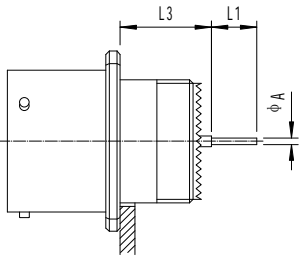
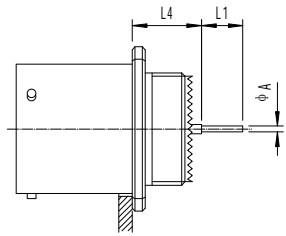
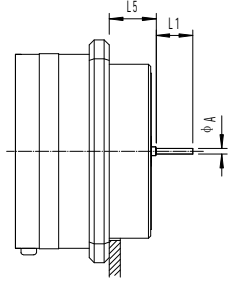
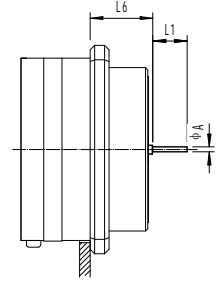
[GJB599 I series receptacle with PCB contacts]



PCB contact type			L1	A
22D	Long PCB contact		8.5	0.7
	Short PCB contact		4.0	
20#	Long PCB contact		8.5	0.7
	Short PCB contact		5.0	
16#	Long PCB contact		8.5	1.15
	Short PCB contact		5.0	
Dimensions with different contacts			Shell size 09-11-13-15-17-19	Shell size 21-23-25
L2	With 22D# pin	MAX	10.06	10.06
		MIN	9.06	9.06
	With 22D# socket	MAX	10.06	10.06
		MIN	8.74	8.74
	With 20# or 16# pin/socket	MAX	10.23	10.23
		MIN	9.24	9.24
L3	With 22D# pin	MAX	15.08	15.08
		MIN	13.91	13.91
	With 22D# socket	MAX	15.08	15.08
		MIN	13.58	13.58
	With 20# or 16# pin/socket	MAX	15.25	15.25
		MIN	14.08	14.08
L4	With 22D# pin	MAX	12.47	13.22
		MIN	11.60	12.35
	With 22D# socket	MAX	12.47	13.22
		MIN	11.27	12.02
	With 20# or 16# pin/socket	MAX	12.64	13.39
		MIN	11.77	12.52
L5	With 22D# pin	MAX	11.08	11.08

	With 22D# socket	MIN	9.91	9.91
		MAX	11.08	11.08
	With 20# or 16# pin/socket	MIN	9.58	9.58
		MAX	11.25	11.25
L6	With 22D# pin	MAX	8.47	9.22
		MIN	7.60	8.35
	With 22D# socket	MAX	8.47	9.22
		MIN	7.27	8.02
	With 20# or 16# pin/socket	MAX	8.64	9.39
		MIN	7.77	8.52

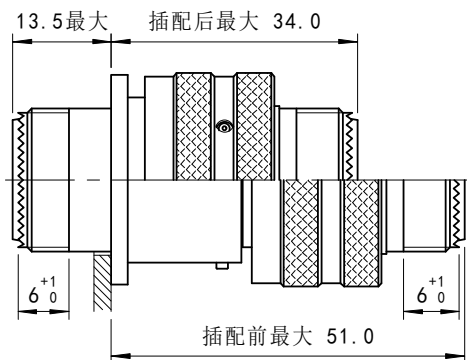
GJB599 I series soldering products outline dimensions

<p style="text-align: center;">JY27467 plug</p> 		<p style="text-align: center;">JY27468 receptacle</p> 	
<p style="text-align: center;">JY27466 receptacle</p> 		<p style="text-align: center;">JY27656 receptacle</p> 	
<p style="text-align: center;">JY27496 receptacle</p> 		<p style="text-align: center;">JY27505 receptacle</p> 	
Soldering contact size	L	Inner dia. of soldering cup	AWG
22D	4	ϕ 0.9	22
20#	4	ϕ 1.1	20
16#	4	ϕ 1.9	16
12#	4	ϕ 2.9	12
10#	6	ϕ 3.6	10
8#	6	ϕ 4.8	8

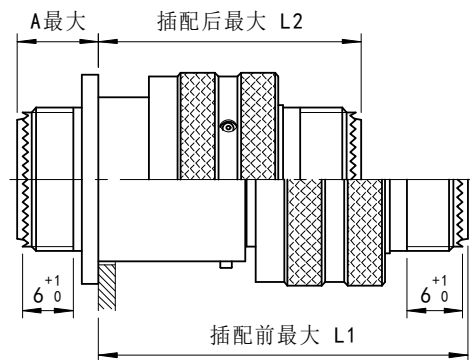
Notes: coaxial contacts don't have soldering types.

[Dimension after mating]

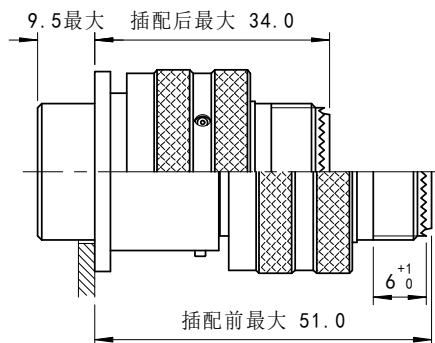
Wall-through square flange receptacle (front mounting) (MS27466)/plug (MS27467)



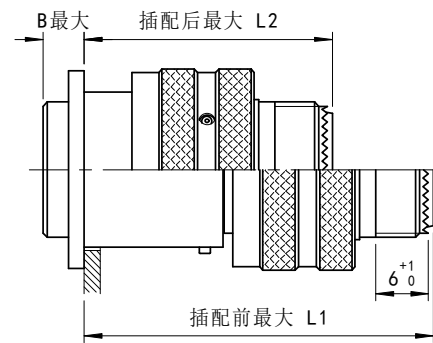
Wall-through square flange receptacle(rear mounting) (MS27656)/plug (MS27467)



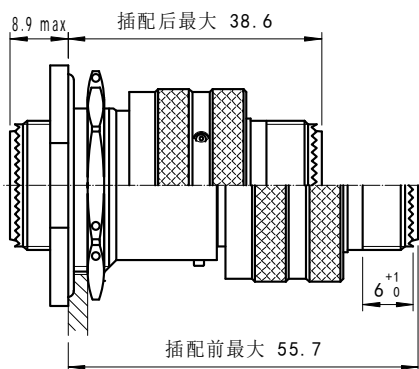
Box square flange front-mounting receptacle (MS27496)/plug (MS27467)



Box square flange rear-mounting receptacle (MS27505)/plug (MS27467)



Jam nut receptacle (MS27468)/plug (MS27467)



Notes: the total length of connectors that can be mounted with accessories refers to the connector length plus accessory length minus thread engagement length.

Shell size		09	11	13	15	17	19	21	23	25
L1	max	53.3	53.3	53.3	53.3	53.3	53.3	52.5	52.5	52.5
L2	max	36.4	36.4	36.4	36.4	36.4	36.4	35.6	35.6	35.6
A	max	11.1	11.1	11.1	11.1	11.1	11.1	11.9	11.9	11.9
B	max	7.1	7.1	7.1	7.1	7.1	7.1	7.9	7.9	7.9

Protective caps for plug and receptacle

[Ordering information]

Basic series	JY	27501	F	11	C	L
Type	MS27501—protective cap for plug MS27502—protective cap for receptacle					
Plating	B—olive green cadmium plating F—electroless nickel plating					
Shell size	09-11-13-15-17-19-21-23-25					
Fixing type	A—without chain N—stainless steel chain with ring S—stainless steel string with connecting lug C—stainless steel chain with connecting lug R—nylon cord with connecting plate E—nylon cord with ring					
Length mark	Omit—standard length L—127mm of chain length M—152.4mm of chain length (MS27501) N—177.8mm of chain length (MS27501)					

Notes:

1. JY27502 is composite-material protective cap. When ordering JY27502, “—” means no plating.
2. The protective cap is ordered separately, not supplied with the connectors.
3. Part number JY27502 plus (J) means metal-shell protective cap, E refers to stainless steel plating. For example: JY27502E17C(J)

Outline dimensions

Shell size		09	11	13	15	17	19	21	23	25
A	max	20.5	23.7	26.9	30.1	33.2	36.4	39.6	42.8	45.9
D	max	21.7	23.5	29.0	31.6	34.8	38.0	41.1	44.2	46.0
d	min	18.0	21.1	26.0	29.0	32.4	35.5	38.6	42.0	44.7
L	max	76.2	76.2	88.9	88.9	88.9	88.9	101.6	101.6	101.6

标准尾部附件（适用于 GJB599 I 系列和 II 系列电连接器）

Standard rear accessories (applicable for GJB599 I series and II series connectors)

Notes:

(1) For the accessories listed below, part number “J1784” is the same with “J1784 A”.

(2) The below steps can help prevent looseness. When using the accessories, at least one step should be adapted.

① Put the fuse through the socket to anti looseness;

② Coat some thread glue at the product termination, and tighten the jam nut;

③ Use heat shrink sleeve against looseness.

(3) For the accessory which carries a set screw, coat some thread glue on the set screw first and then tighten the screw.

(4) The table below is on the GJB599 series soldering products and crimping products with their correspondingly applicable cable accessories. As the modified products and accessories are so many that we can not list them one by one. The form below is only for reference, please consult our engineers for details.

Connector type	Applicable cable accessory type	Applicable cable accessory part number
GJB599I & II series crimping connector	Non-clamping and non-shielding cable accessory,	1、J1784/27、HA type
	Clamping and non-shielding cable accessory,	1、J1784/49、HB type 2、J1784/49-xx (short) 3、J1784/47、HC type
	Shielding and non-clamping cable accessory	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 xxFJC00 8、JY599 I xxFJE00
	Shielding and clamping cable accessory	1、TJ1784/62-xxB、HE type 2、TJ1784/62-xxC-xx 3、J1784/18A series (rain-proof)
GJB599I & II series soldering connector	Non-clamping and non-shielding cable accessory,	1、J1784/27、HA type
	Clamping and non-shielding cable accessory,	1、J1784/49H 2、J1784/47、HC type
	Shielding and non-clamping cable accessory	1、TJ1784/62、HD type 2、J1784/62 3、J1784/85 4、J1784/87 5、JY599 I -FJA00 6、JY599 I -FJA90
	Shielding and clamping cable accessory	1、TJ1784/62-xxB、HE type 2、TJ1784/62-xxC-xx 3、J1784/18A series (rain-proof)

[GJB1784 ordering information]

Basic series	J1784 /	27 -	14	N					
Type									
27 – A type	back nut (Non-clamping and non-shielding cable accessory,)								
49 – B type	straight cable clamp (Clamping and non-shielding cable accessory,)								
47 – C type	elbow cable clamp (Clamping and non-shielding cable accessory,)								
62 – D type	screen-termination accessory (part number plus “T”) (Shielding and non-clamping cable accessory)								
62 –	heatshrink boot accessory (Shielding and non-clamping cable accessory)								
Accessory shell size	08	10	12	14	16	18	20	22	24
For MIL-C-38999 I series	09	11	13	15	17	19	21	23	25
For MIL-C-38999 II series	08	10	12	14	16	18	20	22	24
Plating									
W – olive green cadmium plating		N – electroless nickel plating							
S-- stainless steel passive									

Notes:

- ①GJB 1784 series are made based on the same standard with MIL-C-85049. The difference is that: the basic part number of GJB 1784 series is“**J1784**”, while the basic part number of MIL-C-85049 is “M85049”. GJB1784 series are interchangeable with MIL-C-85049.
- ②The above cable accessory shell size should be marked with even number. Odd number is forbidden.

[Intra-industry accessory ordering information]

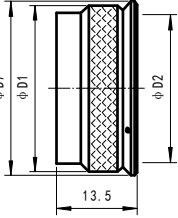
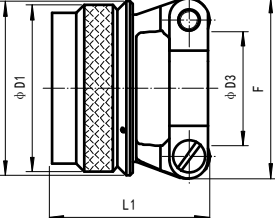
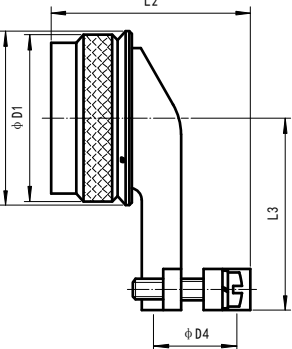
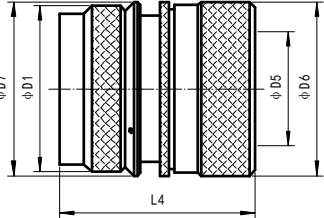
Type	HA -	F	18						
HA –	Boot-shaped backshell								
HB –	Straight cable clamp								
HC –	Right-angle cable clamp								
HD –	Shielding backshell								
HE –	Shielding straight cable clamp								
Plating									
B - olive green cadmium plating									
F - electroless nickel plating		S- stainless steel passive							
Accessory shell size	08	10	12	14	16	18	20	22	24
For MIL-C-38999 I series	09	11	13	15	17	19	21	23	25
For MIL-C-38999 II series	08	10	12	14	16	18	20	22	24

Part number comparison

GJB1784 accessory type	Intra-industry accessory type
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×

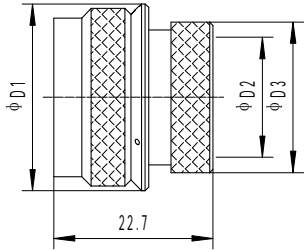
(In the table, “×” stands for shell size. We recommend that customers place orders according to GJB1784 accessory type. Intra-industry types can be used when necessary.)

[Outline dimensions]

J1784/27- (HA type) Back nut	J1784/49- (HB type) Straight cable clamp	J1784/47- (HC type) elbow cable clamp	TJ1784/62- (HD type) Backshell for shielding termination
			
<p>防转附件,紧箍封线体保证连接器的耐环境性能。不能夹持电缆,用于环境状态一般的场合。 Anti-rotating accessory. This type tightens the grommet to ensure the connector's environmental characteristics. This type can not clamp the cable, applied in normal environment.</p>	<p>防转、夹紧线缆附件。可以紧箍封线体、夹紧线缆功能,保证连接器的耐环境性能,用于电缆受拉力场合。 Anti-rotating, cable-clamping accessory. This type tightens the grommet and clamps the cable to insure the connector's environmental characteristics. It is applied in tensile force environment.</p>	<p>防转、电缆90°夹紧线缆附件。可以紧箍封线体、90°夹紧线缆功能,保证连接器的耐环境性能,用于电缆受拉力场合。 Anti-rotating, 90° cable clamping accessory. This type tightens the grommet and clamps the cable 90° to insure the connector's environmental characteristics. It is applied in tensile force environment.</p>	<p>防转、压紧屏蔽网附件。可以紧箍封线体、提供屏蔽网与尾部附件连接功能,保证连接器的电磁屏蔽性能,用于电缆受拉力较小场合。 Anti-rotating, crimping shielding net accessory. This type tightens the grommet and contains a shielding net to insure the connector's EMI shielding characteristics. It is applied in light tensile force environment.</p>

Shell size		08	10	12	14	16	18	20	22	24
D1	max	15.6	18.6	21.8	25.0	28.2	31.0	34.2	37.3	40.5
D2	max	7.9	10.8	13.6	16.9	20.1	22.4	25.6	28.8	31.9
D3	min	2.49	3.87	4.83	6.6	7.19	8.26	8.71	9.68	10.62
	max	5.94	5.94	8.33	11.61	15.6	16.1	17.73	20.9	21.66
D4	min	3.2	4.0	4.8	5.5	6.4	7.9	9.5	10.3	14.3
	max	6.4	9.5	11.1	14.3	15.9	19.1	22.2	23.8	25.4
D5	max	7.0	9.7	12.8	14.9	18.0	20.0	23.2	26.3	28.9
D6	max	17.0	19.9	23.1	26.3	29.5	32.5	35.7	38.9	42.0
D7	max	16.9	19.9	23.1	26.3	29.5	32.3	35.5	38.6	41.8
F	max	20.0	20.0	23.4	26.6	30.6	34.0	35.8	39.0	40.6
L1	max	23.4	23.4	23.4	27.8	27.8	27.8	27.8	29.9	29.9
L2	max	29.0	32.0	33.5	36.5	38.5	41.5	44.5	46.0	48.0
L3	max	25.0	26.0	27.5	31.0	32.5	34.0	34.5	36.5	43.5
L4	max	31.2	31.2	31.2	33.2	33.2	33.2	36.2	36.2	36.2

J1784/62-热缩套尾部附件
 J1784/62- backshell for heat shrink sleeve
 (Shielding and non-clamping cable accessory)

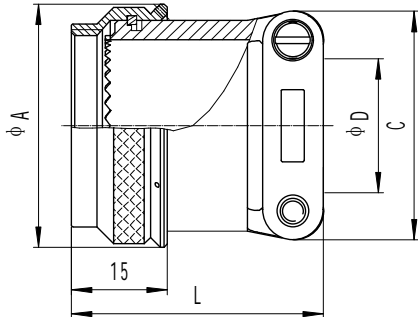


防转、压紧屏蔽网附件。可以紧箍封线体、提供屏蔽网与尾部附件连接功能，保证连接器的耐环境性能和电磁屏蔽性能，不能夹持电缆，用于电缆受拉力较小的场合。

Anti-rotating, crimping shielding net accessory. This type tightens the grommet, connects the shielding net and backshell, and contains a shielding net to insure the connector's environmental and EMI shielding characteristics. This type can not clamp the cable. It is applied in light tensile force environment.

Part number	D1	D2	D3
J1784/62-08N	16.9	7.9	11.6
J1784/62-10N	19.9	10.9	14.7
J1784/62-12N	23.1	13.7	17.6
J1784/62-14N	26.3	16.9	21.2
J1784/62-16N	29.5	20.1	24.4
J1784/62-18N	32.3	22.5	26.4
J1784/62-20N	35.5	25.4	30.9
J1784/62-22N	38.6	28.5	33.8
J1784/62-24N	41.8	31.6	36.9

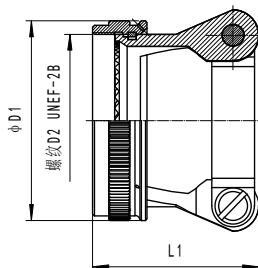
J1784/49H-soldering straight cable clamp
 (Clamping and non-shielding cable accessory,)



功能与 J1784/49 相同，与焊接产品配套。
 The functions are the same with J1784/49.
 It can be mated with soldering products.

Part number	A max	C	L max	D
J1784/49H-08N	18.0	20.0	26.4	2.49~5.94
J1784/49H-10N	22.0	21.0	27.9	3.87~5.94
J1784/49H-12N	25.1	23.4	29.4	4.83~8.33
J1784/49H-14N	29.0	26.6	30.9	6.6~11.61
J1784/49H-16N	32.1	30.6	33.1	7.19~15.6
J1784/49H-18N	35.1	34.0	36.2	8.26~16.1
J1784/49H-20N	38.1	35.8	39.4	8.71~17.73
J1784/49H-22N	41.1	39.0	42.5	9.68~20.9
J1784/49H-24N	44.1	40.6	44.6	10.62~21.66

J1784/49-xxN(short)
 (Clamping and non-shielding cable accessory,)



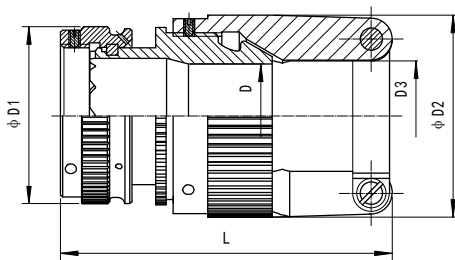
防转、夹紧线缆附件。可以紧箍封线体、夹紧线缆功能，保证连接器的耐环境性能，用于电缆受拉力场合。相对 J1784/49 附件长度较短。

Anti-rotating, cable clamping accessory. This type tightens the grommet, clamps the cable and clamps the cable to insure the connector's environmental characteristics. It is applied in tensile force environment. The

length is shorter compared with J1784/49 accessory.

Accessory part number	D1	Thread D2	L1	Lead-out dia.
J1784/49-10N(short)	19.5	0.5625-24	20.8	5.1~10
J1784/49-12N(short)	22.6	0.6875-24	19	6.7~12.9
J1784/49-14N(short)	25.8	0.8125-20	25.2	8.4~16
J1784/49-16N(short)	29	0.9375-20	25.3	9.2~18.5
J1784/49-18N(short)	32.2	1.0625-18	26.7	10~21.5
J1784/49-20N(short)	35.3	1.1875-18	26.8	11.2~24.75
J1784/49-22N(short)	38.5	1.3125-18	32	11.6~22.6

TJ1784/62-NB (HE type)
直夹线屏蔽式后附件
Shielding straight cable clamping
backshell
(Shielding clamping cable accessory)

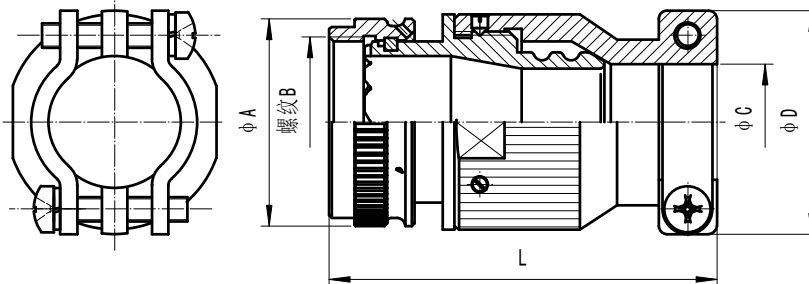


防转、压紧屏蔽网和夹紧线缆附件。
可以紧箍封线体、提供屏蔽网与尾部附件连接
功能、线缆夹紧功能，保证连接器的电磁屏蔽
性能，用于线缆受拉力场合。

Anti-rotating, crimping shielding net and
cable clamp accessory. This type tightens
the grommet, connects the shielding net and
backshell, clamps the cable and contains a
shielding net to insure the connector's EMI
shielding characteristics. It is applied in
tensile force environment.

Part number	D	D1	D2	D3	L
TJ1784/62-08NB	6.5	16.3	19.4	6.8	39.0
TJ1784/62-10NB	9.7	19.5	22.5	9.2	39.0
TJ1784/62-12NB	12.8	22.6	25.7	12.6	39.0
TJ1784/62-14NB	14.9	25.8	28.9	16	45.0
TJ1784/62-16NB	18	29.0	32.1	17.5	45.0
TJ1784/62-18NB	20	32.2	35.3	21.5	46.5
TJ1784/62-20NB	23.2	35.3	38.4	24.8	51.3
TJ1784/62-22NB	26.3	38.5	41.6	22.6	56.6
TJ1784/62-24NB	28.9	41.7	44.8	23.1	57.3

[TJ1784/62-xxNC-xx] (Shielding clamping cable accessory)



防转、压紧屏蔽网和夹紧线缆电缆附件。可以紧箍封线体、提供屏蔽网与尾部附件连接功能、电缆夹紧功能，保证连接器的电磁屏蔽性能，用于电缆受拉力场合。

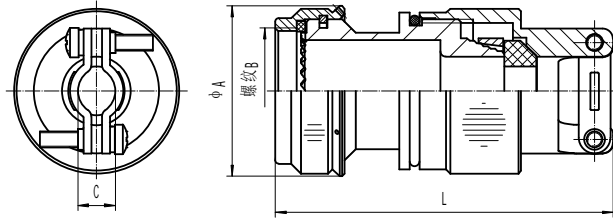
Anti-rotating, crimping shielding net and cable clamp accessory. This type tightens the grommet, connects the shielding net and backshell, clamps the cable and contains a shielding net to insure the connector's EMI shielding characteristics. It is applied in tensile force environment.

Accessory part number	A	Thread B UNEF	C	D	L
TJ1784/62-08NC-08	16.3	0.4375-28	8	20	39.7
TJ1784/62-10NC-08	19.5	0.5625-24	8	20	39.7
TJ1784/62-10NC-10			10	20	40.7
TJ1784/62-12NC-10	22.6	0.6875-24	10	20	40.7
TJ1784/62-12NC-12			12	25	47.4
TJ1784/62-14NC-12	25.8	0.8125-20	12	25	47.4
TJ1784/62-14NC-14			14	27	47.4
TJ1784/62-14NC-16			16	27	47.4
TJ1784/62-16NC-16	29	0.9375-20	16	27	47.4
TJ1784/62-16NC-19			19	32	47.4
TJ1784/62-18NC-19	32.2	1.0625-18	19	32	47.4
TJ1784/62-18NC-22			22	33	47.4
TJ1784/62-20NC-22	35.3	1.1875-18	22	33	47.4
TJ1784/62-20NC-25			25	36.5	47.4
TJ1784/62-22NC-25	38.5	1.3125-18	25	36.5	47.4
TJ1784/62-22NC-28			28	40	47.4
TJ1784/62-24NC-28	41.7	1.4375-18	28	40	47.4
TJ1784/62-24NC-31			31	44	47.4

[Ordering information]

J1784/18A series (Shielding clamping cable accessory)

Basic series	J1784/	18A -	25	N	09	A
Type	18A-straight shielding cable clamp (applied for GJB599 I、II series)					
Shell size	See form 1					
Shell plating	N- electroless nickel plating W- olive green cadmium plating S- stainless steel passive					
Lead-out dia.	See form 1 and form 2 for reference.					
Length	See form 3					



防转、压紧屏蔽网和夹紧线缆电缆附件。可以紧箍封线体、提供屏蔽网与尾部附件连接功能、电缆夹紧和电缆防淋雨功能，保证连接器的高耐环境性能和电磁屏蔽性能，用于环境恶劣场合。该电缆附件有不同长度选择，适用于高低频混装等需要长度较长附件的场合。

Anti-rotating, cable clamp accessory with crimping shielding net. This type tightens the grommet, connects the shielding net and backshell, clamps the cable, proof the rain and contains a shielding net to insure the connector's environmental and EMI shielding characteristics. It is applied in fierce environment. This accessory type of different length is available. It is applied in high & low frequency mixed environment that needs long-length accessory.

Form 1

Shell size	Lead-out dia. No.	A	Thread B
09	01~02	18	0.4375-28UNEF
11	01~03	22	0.5625-24UNEF
13	02~04	25	0.6875-24UNEF
15	02~05	28	0.8125-20UNEF
17	02~06	32	0.9375-20UNEF
19	03~07	35	1.0625-18UNEF
21	03~08	38	1.1875-18UNEF
23	03~09	41	1.3125-18UNEF
25	04~10	44	1.4375-18UNEF

Form 2

Lead-out dia. No.	Applicable cable dia. range C
01	1.57~3.118
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

Form 3

Shell size	Length code	L
09~25	standard (omit)	62.7
09~25	A	88.1
15~25	B	113.5
21~25	C	138.9

专用尾部附件（适用于 GJB599 I 系列和 II 系列电连接器）

Special backshell (for MIL-C-38999 series I and II series)

该类尾部附件特别适用于带有屏蔽网的屏蔽电缆的夹紧，分为直式和弯式两大类。该附件可选配具有合金记忆的 Ti-Ni 合金记忆环，通过加热，使之收缩，把屏蔽网紧箍在附件尾部，真正实现了 360° 的电磁屏蔽。

注：**Ti-Ni 合金记忆环的加热收缩方法**：可采用热风枪加热，约需 45 秒至 1 分钟，当记忆环上的示温色标由绿色转变为黑色即为记忆环收缩完毕，此时环的温度约为 165°C，停止加热。注意加热时要保证记忆环受热均匀。

This type of backshells is designed to clamp tightly the shielding cable with shielding net, which falls into straight and right angle categories. The accessory can be used with Ti-Ni alloy memory ring. After heated, the ring will shrink and clamp shielding layer on the end of the accessory and achieve 360° EMI shielding.

* Ti-Ni alloy memory ring's heating and shrinking: using hot-wind gun to heat. The process takes about 45 seconds to 1 minute. When the temperature color indicator of memory ring change from green to black, it means that memory ring has been shrunk and heating should be stopped. At this time, the temperature of ring is about 165°C. Please note that memory ring should be symmetrically heated.

Ordering information

J1784/85, J1784/87 shielding backshell

Basic series		J1784/								85-	10	N	A	-05
Type	85-straight, 87-right-angle (for MIL-C-38999 series I & II)													
Accessory shell size	08	10	12	14	16	18	20	22	24					
For MIL-C-38999 I series	09	11	13	15	17	19	21	23	25					
For MIL-C-38999 II series	08	10	12	14	16	18	20	22	24					
Shell plating	W - olive green cadmium plating N - electroless nickel plating S - stainless steel passive													
Ti-Ni ring	omit- without Ti-Ni ring A -with Ti-Ni ring													
Leading-out diameter or Ti-Ni ring size	Without Ti-Ni ring, specify leading-out diameter With Ti-Ni ring, specify size of Ti-Ni ring													

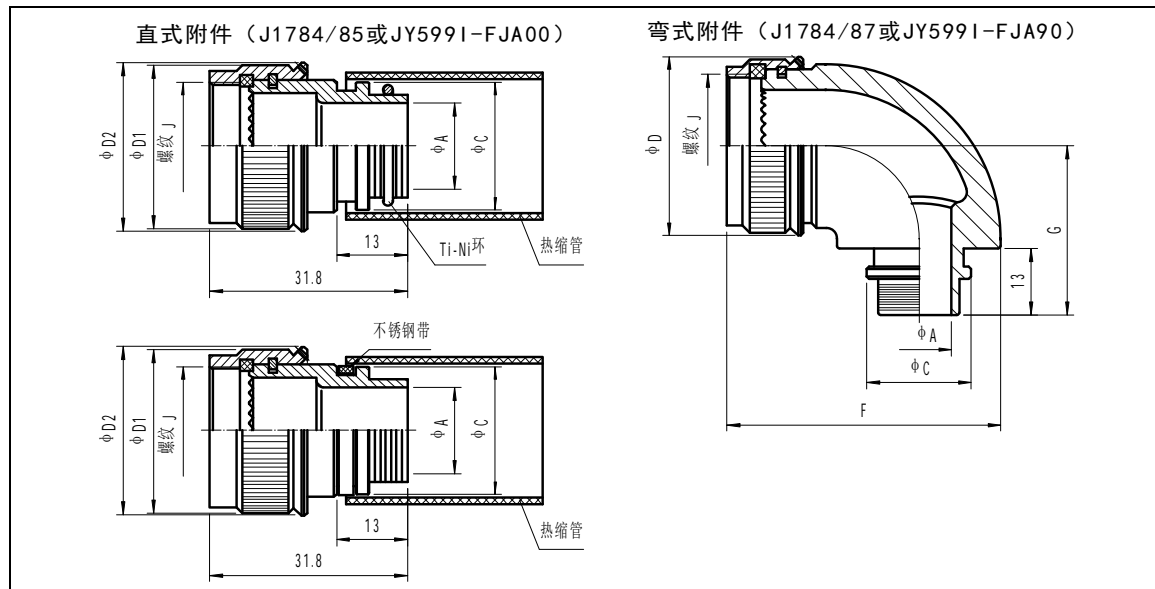
JY599 I -FJA00、JY599 I -FJA90 shielding backshell

Basic series	JY599		I	15	FJA	00	F	A	-05
Series code	I (Applied for GJB599 I、II series)								
Accessory shell size	09	11	13	15	17	19	21	23	25
For MIL-C-38999 I series	09	11	13	15	17	19	21	23	25
For MIL-C-38999 II series	08	10	12	14	16	18	20	22	24
Accessory type	FJA、FJC、FJE								
Structure	00 - straight		90 - 90° right-angle						
Shell plating	B - olive green cadmium plating F - electroless nickel plating E - stainless steel passive								
Ti-Ni ring	omit- without Ti-Ni ring A-with Ti-Ni ring (only for FJA, FJC)								
Outlet diameter or Ti-Ni ring size	Without Ti-Ni ring, specify outlet diameter With Ti-Ni ring, specify size of Ti-Ni ring								

Notes:

1. This type of accessory is applied in harsh environment where disassembling is not frequently needed. It can achieve shielding both inside and outside.
2. the steel ribbon and bundling clamp need to be ordered separately if they are needed. The steel ribbon type is "A31189(07-08-221)", and the bundling clamp type is "A30199 TIE-DEX II (14-04-3216)".
3. J1784/85、J1784/87 is the same with JY599-FJA00 and JY599 I -FJA90. Only the naming is different.

[Outline dimensions]

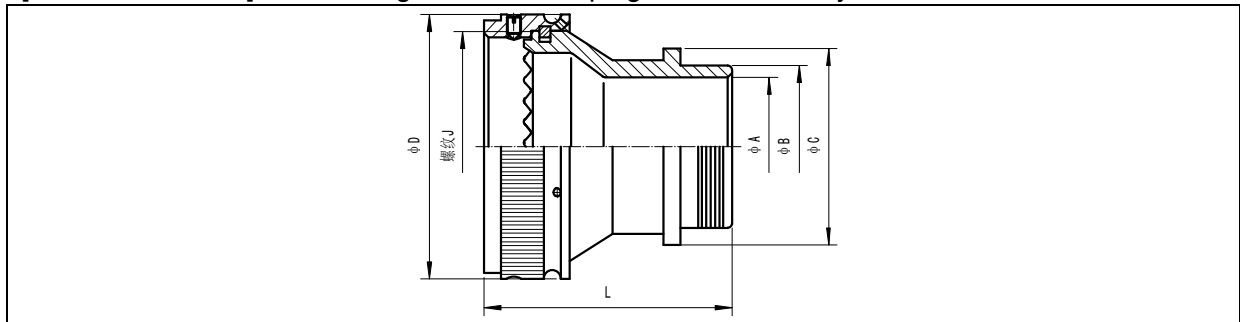


No.	Shell No.	Ti-Ni ring size	Shielding standard (Tin-copper plating mark dia.)	A outlet dia.		C		F	D1	D2	G	Thread J UNEF-2B
				Straight	90°	straight	90°					
1	09	TR-04	6×10 (0.15~0.20)	6.3	6.3	14	14	36.3	17	18	26	0.4375-28
		TR-05	10×16 (0.15~0.20)	7.9	7.9	15.5	15					
		TR-06	10×16 (0.15~0.20)	9.5	9.5	17.1	15					
2	11	TR-04	6×10 (0.15~0.20)	6.3	6.3	14	14	37.8	21	22	26	0.5625-24
		TR-05	10×16 (0.15~0.20)	7.9	7.9	15.5	15.5					
		TR-06	10×16 (0.15~0.20)	9.5	9.5	17.1	17.1					
		TR-07	10×16 (0.12~0.20)	11.1	11.1	18.7	18					
		TR-08	16×24 (0.12~0.25)	12.7	12.7	20.3	18					
3	13	TR-04	6×10 (0.15~0.20)	6.3	6.3	14	14	43.3	24	25	29	0.6875-24
		TR-05	10×16 (0.15~0.20)	7.9	7.9	15.5	15.5					
		TR-06	10×16 (0.15~0.20)	9.5	9.5	17.1	17.1					
		TR-07	10×16 (0.12~0.20)	11.1	11.1	18.7	18.7					
		TR-08	16×24 (0.12~0.25)	12.7	12.7	20.3	20.3					
		TR-10	16×24 (0.10~0.30)	16	16	23.5	23.0					
4	15	TR-05	10×16 (0.15~0.20)	7.9	-	15.5	-	45.1	27	28	29	0.8125-20
		TR-06	10×16 (0.15~0.20)	9.5	9.5	17.1	17.1					
		TR-07	10×16 (0.12~0.20)	11.1	11.1	18.7	18.7					
		TR-08	16×24 (0.12~0.25)	12.7	12.7	20.3	20.3					
		TR-10	16×24 (0.10~0.30)	16	16	23.5	23.5					
		TR-12	16×24 (0.10~0.30)	19	19	26.7	25.5					

No.	Shell No.	Ti-Ni ring size	Shielding standard (Tin-copper plating mark dia.)	A outlet dia.		C		F	D1	D2	G	Thread J UNEF-2B
				Straight	90°	straight	90°					
5	17	TR-05	10×16 (0.15~0.20)	7.9	-	15.5	-	48.8	31	32	33	0.9375-20
		TR-06	10×16 (0.15~0.20)	9.5	10.5	17.1	17.1					
		TR-07	10×16 (0.12~0.20)	11.1	11.1	18.7	18.7					
		TR-08	16×24 (0.12~0.25)	12.7	12.7	20.3	20.3					
		TR-10	16×24 (0.10~0.30)	16	16	23.5	23.5					
		TR-12	16×24 (0.10~0.30)	19	19	26.7	26.7					
		TR-14	24×30 (0.10~0.30)	22.2	22.2	30	28					
6	19	TR-08	16×24 (0.12~0.25)	12.7	12.7	20.3	20.3	51.6	34	35	33	1.0625-18
		TR-10	16×24 (0.10~0.30)	16	16	23.5	23.5					
		TR-12	16×24 (0.10~0.30)	19	19	26.7	26.7					
		TR-14	24×30 (0.10~0.30)	22.2	22.2	30	30					
		TR-16	24×30 (0.10~0.30)	25.4	25.4	33	32					
7	21	TR-08	16×24 (0.12~0.25)	12.7	12.7	20.3	20.3	53.8	37	38	39	1.1875-18
		TR-10	16×24 (0.10~0.30)	16	16	23.5	23.5					
		TR-12	16×24 (0.10~0.30)	19	19	26.7	26.7					
		TR-14	24×30 (0.10~0.30)	22.2	22.2	30	30					
		TR-16	24×30 (0.10~0.30)	25.4	25.4	33	33					
		TR-18	30×40 (0.10~0.30)	28.5	-	36.2	-					

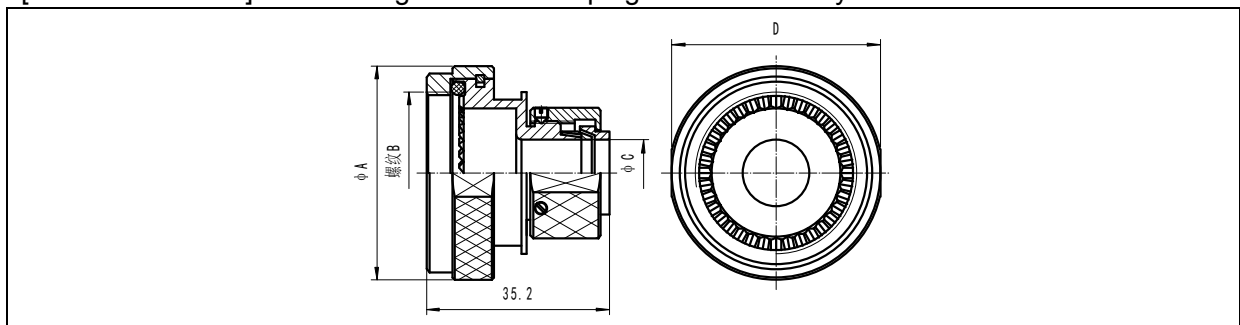
No.	Shell No.	Ti-Ni ring size	Shielding standard (Tin-copper plating mark dia.)	A outlet dia.		C		F	D1	D2	G	Thread J UNEF-2B
				Straight	90°	straight	90°					
8	23	TR-10	16×24 (0.10~0.30)	16	16	23.5	23.5	56.3	40	41	39	1.3125-18
		TR-12	16×24 (0.10~0.30)	19	19	26.7	26.7					
		TR-14	24×30 (0.10~0.30)	22.2	22.2	30	30					
		TR-16	24×30 (0.10~0.30)	25.4	25.4	33	33					
		TR-18	30×40 (0.10~0.30)	28.5	28.5	36.2	36.2					
		TR-20	30×40 (0.10~0.30)	31.8	-	39.4	-					
9	25	TR-10	16×24 (0.10~0.30)	16	16	23.5	-	61.8	43	44	44	1.4375-18
		TR-12	16×24 (0.10~0.30)	19	19	26.7	26.7					
		TR-14	24×30 (0.10~0.30)	22.2	22.2	30	30					
		TR-16	24×30 (0.10~0.30)	25.4	25.4	33	33					
		TR-18	30×40 (0.10~0.30)	28.5	28.5	36.2	36.2					
		TR-20	30×40 (0.10~0.30)	31.8	31.8	39.4	39.4					
		TR-22	30×40 (0.10~0.30)	35	35	42.5	42					

[JY599 I xxFJC00] (Shielding and non-clamping cable accessory)



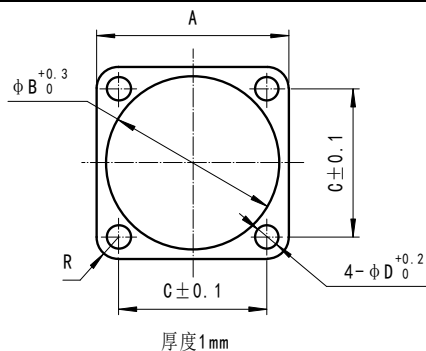
Shell size	A	B	C	D	Thread J UNEF	L	Ti-Ni ring type
11	8.3	11	15	18.6	0.5625-24	29	TR-05
13	10	12.7	16.6	21.8	0.6875-24	29	TR-06
15	11.1	14.3	18.5	25	0.8125-20	29	TR-07
17	13.1	15.9	19.8	28.2	0.9375-20	29	TR-08
19	16.2	19	23	30.9	1.0625-18	29	TR-10
21	16.2	19	23	34.1	1.1875-18	29	TR-10
23	19.5	22.2	26.2	37.5	1.3125-18	29	TR-12
25	19.5	22.2	26.2	40.5	1.4375-18	29	TR-12

[JY599 I xxFJE00] (Shielding and non-clamping cable accessory)



Shell size	A	Thread B UNEF	C Lead-out dia.	D
09	22	0.4375-28	6.3、7.9、9.5	20
11	25	0.5625-24	6.3、7.9、9.5、11.1、12.7	23
13	28	0.6875-24	6.3、7.9、9.5、11.1、12.7、16	27
15	32	0.8125-20	7.9、9.5、11.1、12.7、16、19	30
17	35	0.9375-20	7.9、9.5、11.1、12.7、16、19、22.2	33
23	44	1.3125-18	16、19、22.2、25.4、28.5、31.8	42
25	47	1.4375-18	19、22.2、25.4、28.5、31.8、35	45

[Square flange cushion]



Shell size	Square flange cushion code	Conductive square flange cushion code	A	B	C	D	R
09	21E8-701-849-A1	21E8-701-850-A2	23.9	14.8	18.26	3.3	3.2
11	21E8-701-851-A1	21E8-701-852-A2	26.3	18.0	20.62	3.3	3.2
13	21E8-701-853-A1	21E8-701-854-A2	28.7	21.8	23.01	3.3	3.2
15	21E8-701-855-A1	21E8-701-856-A2	31.1	25.0	24.61	3.3	3.2
17	21E8-701-857-A1	21E8-701-858-A2	33.4	28.2	26.97	3.3	3.2
19	21E8-701-859-A1	21E8-701-860-A2	36.6	30.9	29.36	3.3	3.2
21	21E8-701-861-A1	21E8-701-862-A2	39.8	34.0	31.75	3.3	3.2
23	21E8-701-863-A1	21E8-701-864-A2	43.0	37.2	34.93	3.8	3.7
25	21E8-701-865-A1	21E8-701-866-A2	46.1	40.4	38.10	3.8	3.7