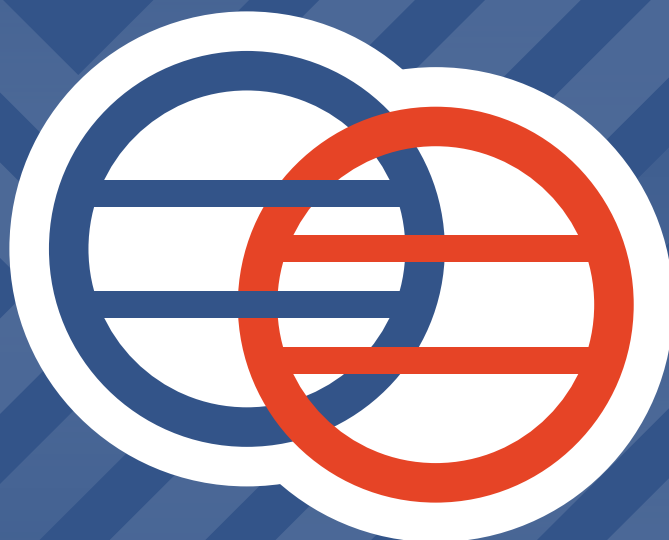




MATENG

MIL-C-38999 I SERIES

CATALOG

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 ~ +175°C
E, F class: -65 ~ +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	M	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



ORDERING INFORMATION

Basic series	JY	27467	T	17	F	35	P	N	-H
Type	27467-Plug (T) 27466- Wall-through square flange receptacle (front mounting) (T) 27656- Wall-through square flange receptacle (rear mounting) (T) 27496- Box square flange receptacle (front mounting) (E) 27505- Box square flange receptacle (rear mounting) (E) 27468- Jam nut receptacle (T)								
Shell type	T - with thread for backshell, (see accessory type on Page14) E-without thread for backshell.								
Shell size	09-11-13-15-17-19-21-23-25								
Shell plating	B-olive green cadmium plating E-stainless steel passive F-electroless nickel plating								
Contact layout	see contact layouts for details								
Contact type	Crimping and soldering contact: P-pin, S-socket PCB contact: PL-long PCB pin SL-long PCB socket PC-short PCB pin SC-short PCB socket								
Polarization	N-normal A, B, C, D-alternative If customer choose crimping contacts, N can be omitted in ordering. For other contacts, N should be stated clearly. (09# shell only has N, A and D polarization)								
Soldering contact type (only for soldering connectors)	H-soldering contact								

NOTES:

- GJB599A series are made according to the same standard with MIL-DTL-38999K series. The difference is that: the basic part number of GJB599A is JY, while MIL-DTL-38999K is MS. GJB599A series is interchangeable with MIL-DTL-38999K series.
- The applicable protective cap, backshell and square flange cushion details can be found in Page XX
- If the operating environment requires oil resistance, the connector sealing components should choose fluorinated silicone rubber. When placing orders, plus C1 at the end of the original part number (for example: JY27467T17F35PNC1).

PART NUMBER EXAMPLE

JY27467T25E35SN-H

JY series plug, threaded shell end, can be mounted with accessory, 25# shell, stainless steel passive plating, 35# layout, filled with sockets, N polarization, soldering contacts.

CRIMPING CONTACTS

	Dia. mm	Pin color	Socket color	Inner dia. of crimp boot. mm	Outer dia. of crimp boot. mm	Section of wire mm ²	AWG	Insulator Outer dia. of wire	Removal tool code	Crimping tool
22D	0.76	Orange, blue, black	Orange, yellow, gray	0.85	1.20	0, 0.08; 0.125; 0.2; 0.3	28; 26 24; 22	0.76~1.37	M81969/ 14-01	YJQ-02
20#	1.00	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#	1.60	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/ 14-0	XCXY-01
12#	2.40	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#	3.15	Green, red, gray	Green, orange, purple	3.40	4.65	3.0 ; 4.8	12; 10	3.42~4.12	M81969/ 14-05	XCXY-01 YTQ
8#	3.6	-	-	4.55	6.4	8.37	8	6.4~6.9	M81969/ 14-12	YTQ

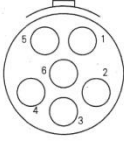
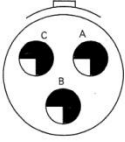
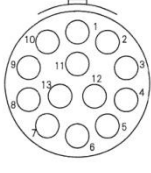
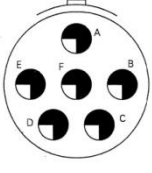
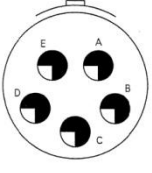
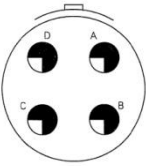
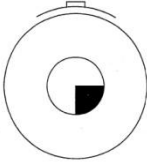
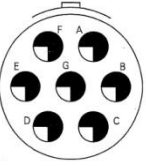
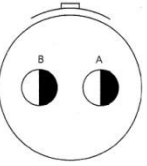
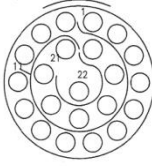
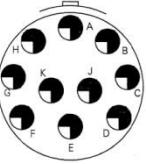
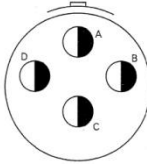
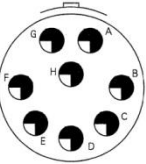
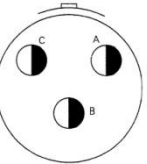
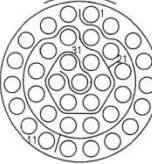
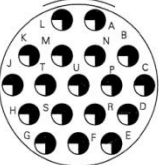
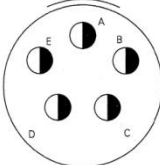
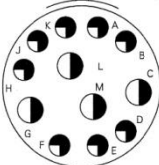
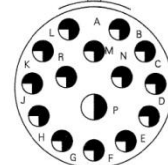
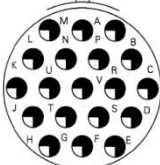
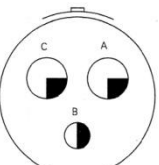
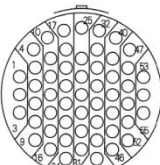
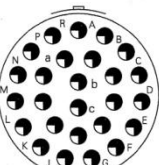
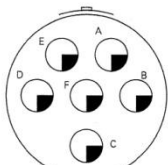
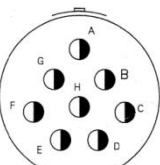
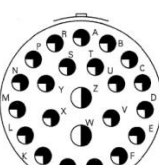
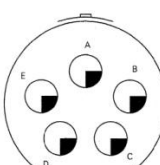
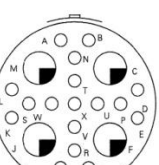
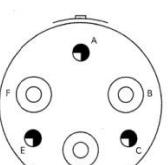
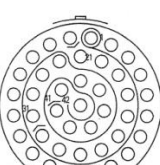
NOTES:

1. For instructions of the applicable crimping tools please find page XX
2. Applicable for GJB599 I , III, IV series

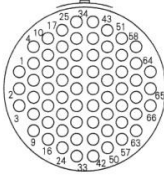
SOLDERING CONTACTS

Contact size	Inner dia. of soldering cup	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

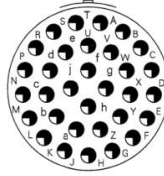
CONTACT LAYOUT

09-35 M	09-98 I	11-35 M	11-98 I	11-05 I
				
11-04 I	11-01 I	11-99 I	11-02 I	13-35 M
				
13-98 I	13-04 I	13-08 I	13-03 II	15-35 M
				
15-18 I	15-05 II	15-97 I	15-15 I	15-19 I
				
15-03 II	17-35 M	17-26 I	17-06 I	17-08 II
				
17-99 I	17-05 II	17-21	17-30 N	17-42 M
				

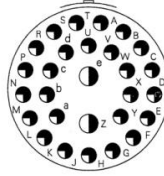
19-35 M



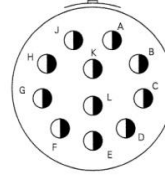
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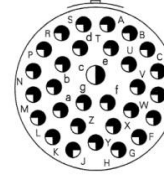
19-28 I



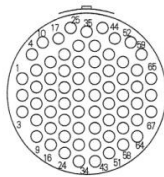
19-11 II



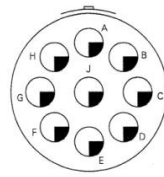
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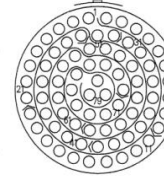
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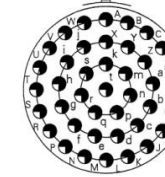
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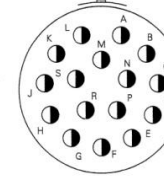
21-35 M



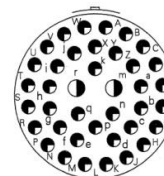
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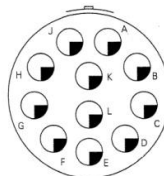
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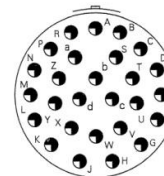
21-39 I



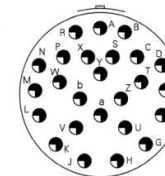
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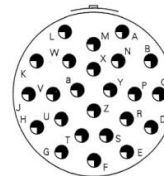
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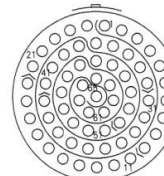
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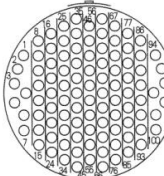
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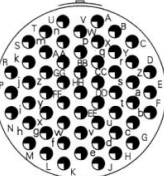
21-02 M



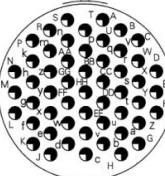
23-35 M



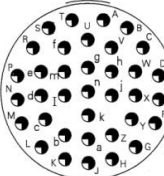
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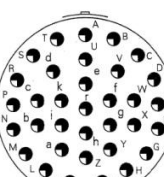
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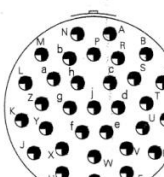
23-36 I



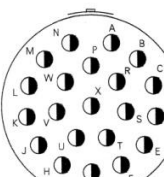
23-34 I



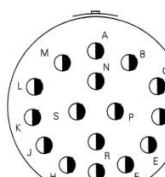
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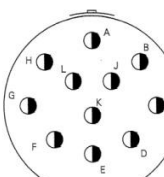
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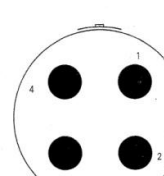
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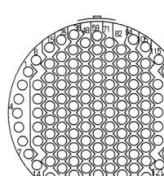
23-99 II



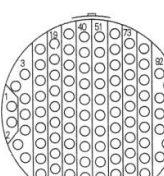
23-04 I



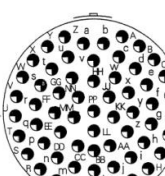
25-35 M



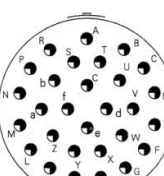
25-02 M

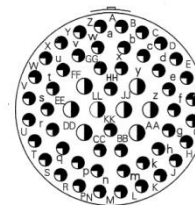
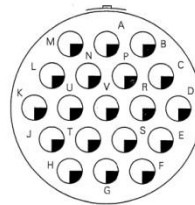
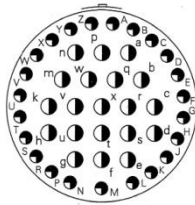
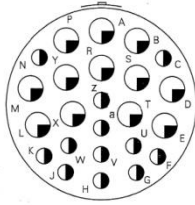


25-61 I



25-29 I

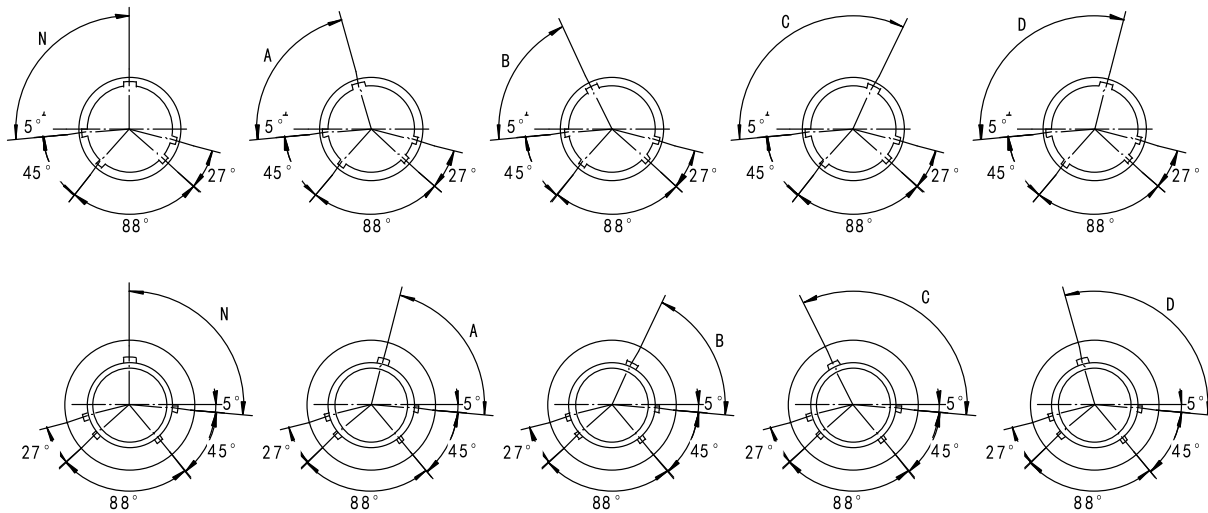


25-24 I
25-43 I
25-19 I
25-04 I


NOTES:

"" stands for derived inserts.

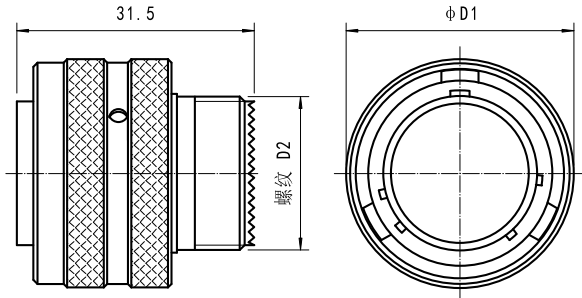
POLARIZATION:



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°

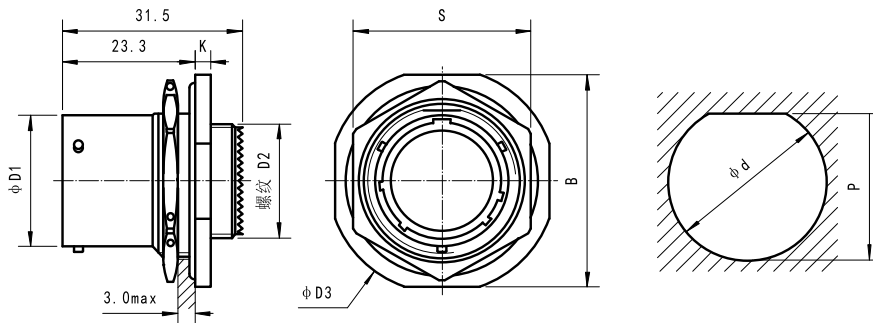
OUTLINE DIMENSIONS

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

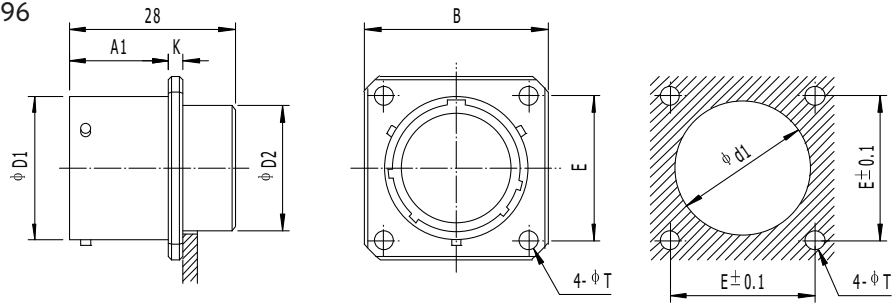
Jam nut receptacle JY27468



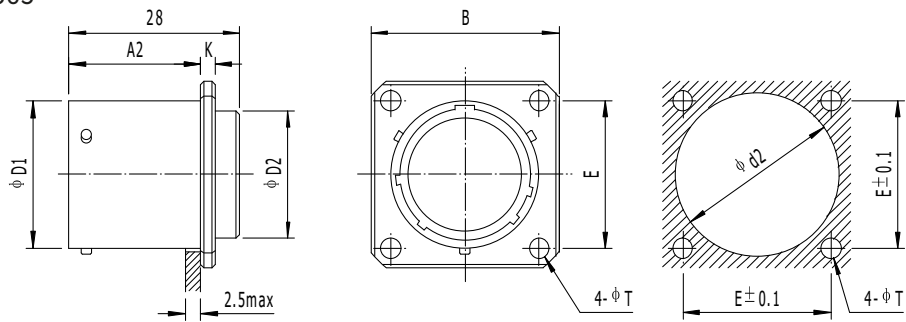
Shell size	D1	Thread D2UNEF-2A	D3	K	B	S	d	P
09	14.6	0.4375-28	30.2	2.8	27.0	22.3	17.7	17.0
11	17.8	0.5625-24	35.0	2.8	31.8	25.5	21.0	19.6
13	21.6	0.6875-24	38.1	2.8	35.0	30.2	25.6	24.3
15	24.8	0.8125-20	41.3	2.8	38.1	33.4	28.8	27.6
17	28.0	0.9375-20	44.5	2.8	41.3	36.6	32.0	30.7
19	30.7	1.0625-18	49.3	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

BOX SQUARE FLANGE RECEPTACLE

JY27496



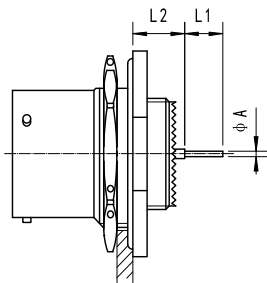
JY27505



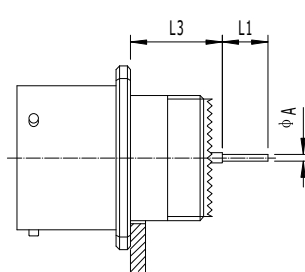
Shell size	D1	D2	A1	A2	K	B	E	T	d1	d2
09	14.6	11.2	16.1	20.9	2.4	23.8	18.26	3.2	12.5	16.7
11	17.8	14.5	16.1	20.9	2.4	26.2	20.62	3.2	15.5	20.2
13	21.6	18.0	16.1	20.9	2.4	28.6	23.02	3.2	19.5	24.5
15	24.8	20.5	16.1	20.9	2.4	31.0	24.62	3.2	21.5	27.7
17	28.0	23.8	16.1	20.9	2.4	33.3	26.98	3.2	25.0	30.9
19	30.7	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

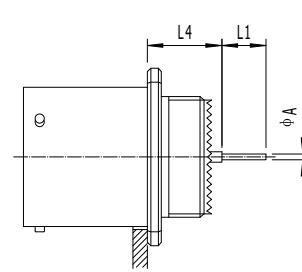
JY27468 receptacle



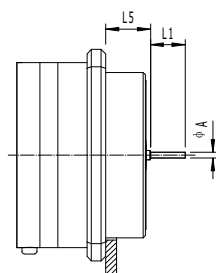
JY27466 receptacle



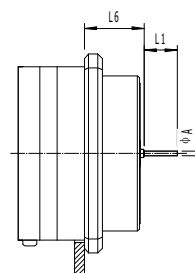
JY27656 receptacle



JY27496 receptacle



JY27505 receptacle

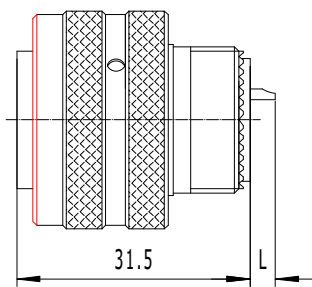


PCB contact type			L1	A
22D	Long PCB contact		8.5	0.7
	Short PCB contact		4.0	
20#	Long PCB contact		8.5	0.7
	Short PCB contact		5.0	
16#	Long PCB contact		8.5	1.15
	Short PCB contact		5.0	
Dimensions with different contacts			Shell size 09-11-13-15-17-19	Shell size 21-23-25
L2	With 22D# pin	MAX	10.06	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

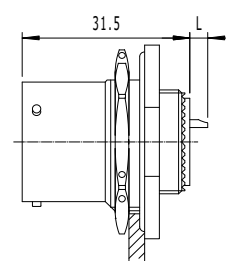
L5	With 22D# pin	MIN	9.91	9.91
	With 22D# socket	MAX	11.08	11.08
	With 20# or 16# pin/socket	MIN	9.58	9.58
		MAX	11.25	11.25
L6	With 22D# pin	MAX	8.47	9.22
		MIN	7.60	8.35
	With 22D# socket	MAX	8.47	9.22
		MIN	7.27	8.02
	With 20# or 16# pin/socket	MAX	8.64	9.39
		MIN	7.77	8.52

GJB599 I SERIES RECEPTACLE WITH PCB CONTACTS

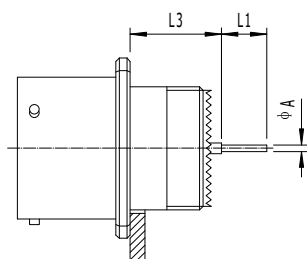
JY27467 plug



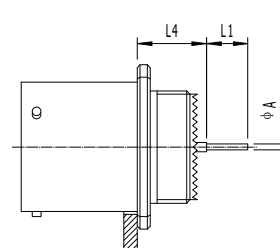
JY27468 receptacle



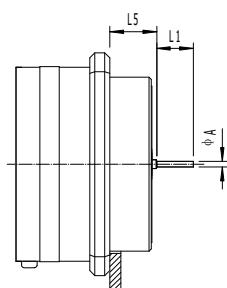
JY27466 receptacle



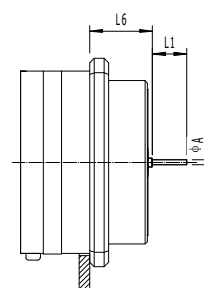
JY27656 receptacle



JY27496 receptacle



JY27505 receptacle



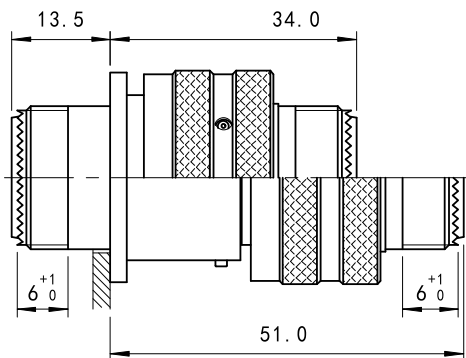
Soldering contact size	L	Inner dia. of soldering cup	AWG
20D	4	φ0.9	22
20#	4	φ1.1	20
16#	4	φ1.9	16
12#	4	φ2.9	12
10#	6	φ3.6	10
8#	6	φ4.8	8

NOTES:

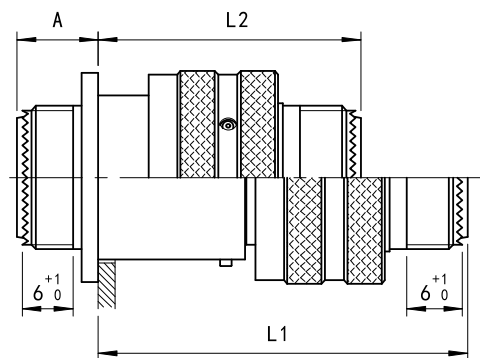
Coaxial contacts don't have soldering types.

DIMENSION AFTER MATING

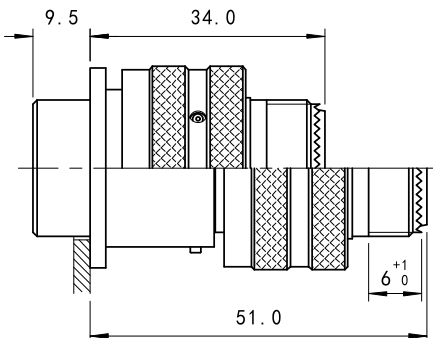
Wall-through square flange receptacle (front mounting)
(MS27466)/plug (MS27467)



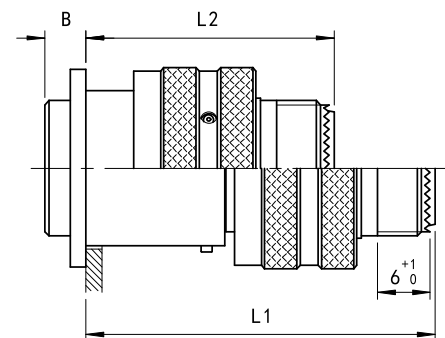
Wall-through square flange receptacle(rear mounting)
(MS27656)/plug (MS27467)



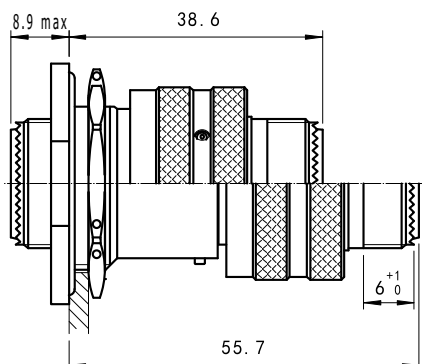
Box square flange front-mounting receptacle
(MS27496)/plug (MS27467)



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

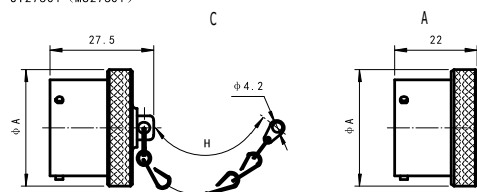
Basic series	JY	27501	F	11	C	L
Type	MS27501-protective cap for plug MS27502-protective cap for receptacle					
Plating	B - olive green cadmium plating F - electroless nickel plating					
Shell size	09-11-13-15-17-19-21-23-25					
Fixing type	A-without chain N-stainless steel chain with ring S-stainless 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:

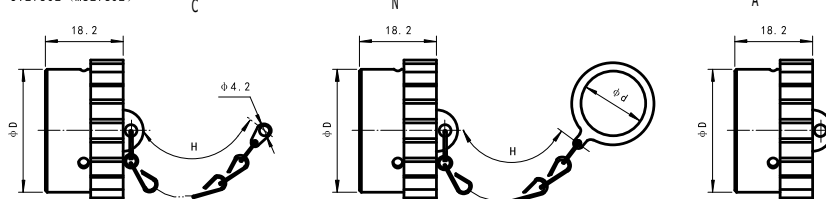
1. JY27502 is composite-material protective cap. When ordering JY27502, “-” means no plating.
2. The protective cap is ordered separately, not supplied with the connectors.
3. Part number JY27502 plus (J) means metal-shell protective cap, E refers to stainless steel plating.
For example: JY27502E17C(J)

OUTLINE DIMENSIONS

JY27501 (MS27501)



JY27502 (MS27502)



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

GJB599 I SERIES

STANDARD REAR ACCESSORIES

(APPLICABLE FOR GJB599 I SERIES AND II SERIES CONNECTORS)

- For the accessories listed below, part number “J1784” is the same with “J1784 A”.
- The below steps can help prevent looseness. When using the accessories, at least one step should be adapted.
 - Put the fuse through the socket to anti looseness;
 - Coat some thread glue at the product termination, and tighten the jam nut;
 - Use heat shrink sleeve against looseness.
- For the accessory which carries a set screw, coat some thread glue on the set screw first and then tighten the screw.
- 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 -FJA00 6, JY599 -FJA90 7, JY599 xxFJC00 8, JY599 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 S – stainless steel passive											

NOTES:

— GJB 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. The above cable accessory shell size should be marked with even number. Odd number is forbidden.

INTRA-INDUSTRY ACCESSORY ORDERING INFORMATION

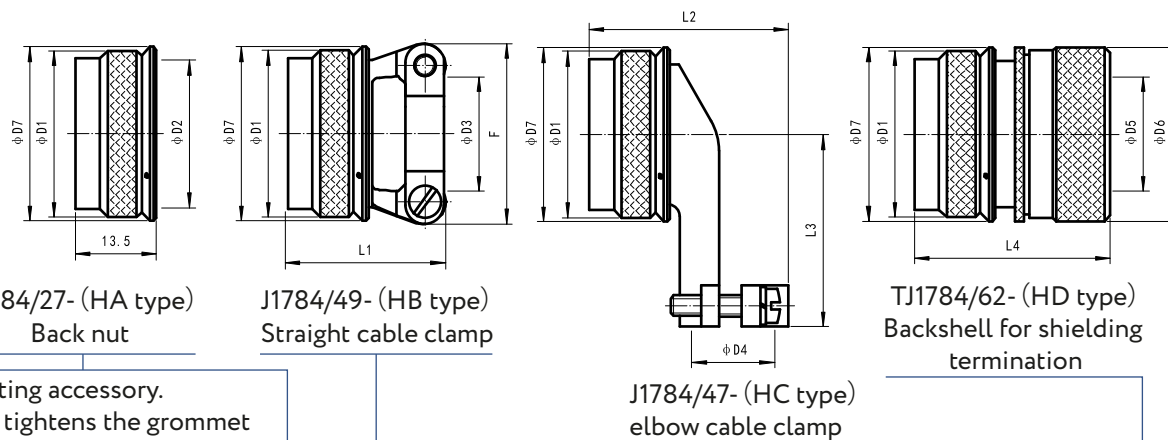
Basic series		HA			F		18			
Type	HA – Boot-shaped backshell									
	HB – Straight cable clamp									
	HC –Right-angle cable clamp									
	HD –Shielding backshell									
	HE –Shielding straight cable clamp									
Plating	B - olive green cadmium plating									
	F - electroless nickel plating 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 J1784/27-×N	HA-B× HA-F×
J1784/49-×W J1784/49-×N	HB-B× HB-F×
J1784/47-×W J1784/47-×N	HC-B× HC-F×
TJ1784/62-×W TJ1784/62-×N	HD-B× HD-F×
TJ1784/62-×WB TJ1784/62-×NB	HE-B× 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



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.

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.

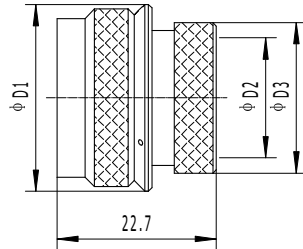
Anti-rotating, 90° cable clamping accessory.
This type tightens the grommet and clamps the cable 90° to insure the connector's environmental characteristics. It is applied in tensile force environment.

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.

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	max	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	max	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- BACKSHELL FOR HEAT SHRINK SLEEVE

(Shielding and non-clamping cable accessory)

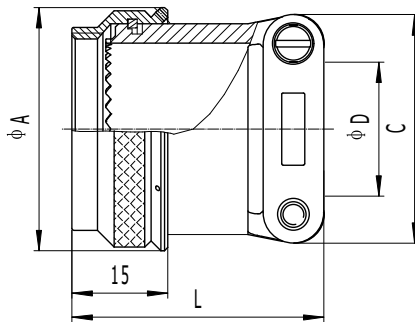


Anti-rotating, crimping shielding net accessory. This type tightens the grommet, connects the shielding net and backshell, and contains a shielding net to insure the connector's environmental and EMI shielding characteristics. This type can not clamp the cable. It is applied in light tensile force environment.

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	35.6	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,)

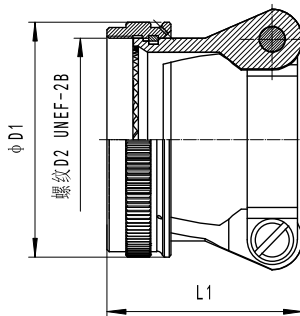


The functions are the same with J1784/49. It can be mated with soldering products.

Part number	A (Max)	C	L (Max)	D
J1784/49-08N	18.8	20.0	26.4	2.49~5.94
J1784/49-10N	22.0	21.0	27.9	3.87~5.94
J1784/49-12N	25.1	23.4	29.4	4.83~8.33
J1784/49-14N	29.0	26.6	30.9	6.6~11.61
J1784/49-16N	32.1	30.6	33.1	7.19~15.6
J1784/49-18N	35.1	34.0	36.2	8.26~16.1
J1784/49-20N	38.1	35.8	39.4	8.71~17.73
J1784/49-22N	41.1	39.0	42.5	9.68~20.9
J1784/49-24N	44.1	40.6	44.6	10.62~21.66

J1784/49-××N(SHORT)

(Clamping and non-shielding cable accessory,)

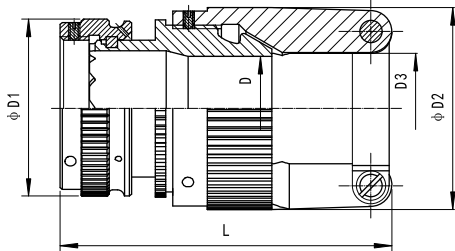


Part number	D1	Thread D2	L1	Lead-out dia.
J1784/49-10N(short)	19.5	0.5625-24	20.8	5.1~10
J1784/49-12N(short)	22.6	0.6875-24	19	6.7~12.9
J1784/49-14N(short)	25.8	0.8125-20	25.2	8.4~16
J1784/49-16N(short)	29	0.9375-20	25.3	9.2~18.5
J1784/49-18N(short)	32.2	1.0625-18	26.7	10~21.5
J1784/49-20N(short)	35.3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

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 18 length is shorter compared with J1784/49 accessory.

TJ1784/62-NB (HE TYPE)

Shielding straight cable clamping backshell (Shielding clamping cable accessory)

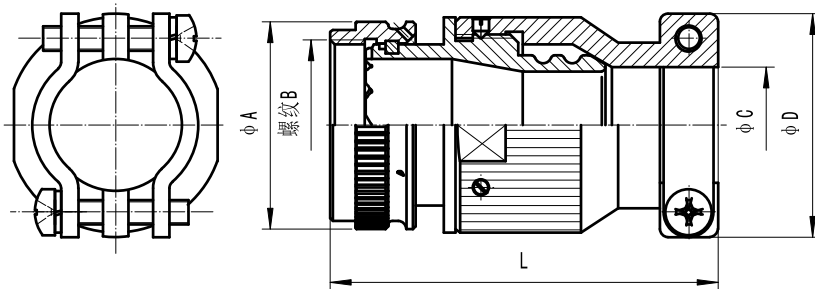


Anti-rotating, crimping shielding net and cable clamp accessory. This type tightens the grommet, connects the shielding net and backshell, clamps the cable and contains a shielding net to insure the connector's EMI shielding characteristics. It is applied in tensile force environment.

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)



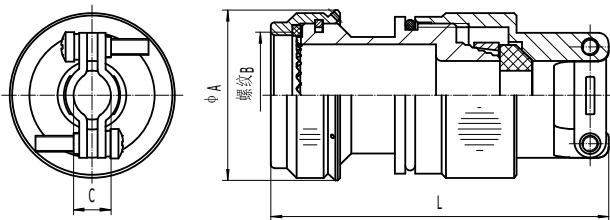
Anti-rotating, crimping shielding net and cable clamp accessory. This type tightens the grommet, connects the shielding net and backshell, clamps the cable and contains a shielding net to insure the connector's EMI shielding characteristics. It is applied in tensile force environment.

Part number	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 clam (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					



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 1

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 1

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

SPECIAL BACKSHELL (FOR MIL-C-38999 SERIES I AND II SERIES)

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											

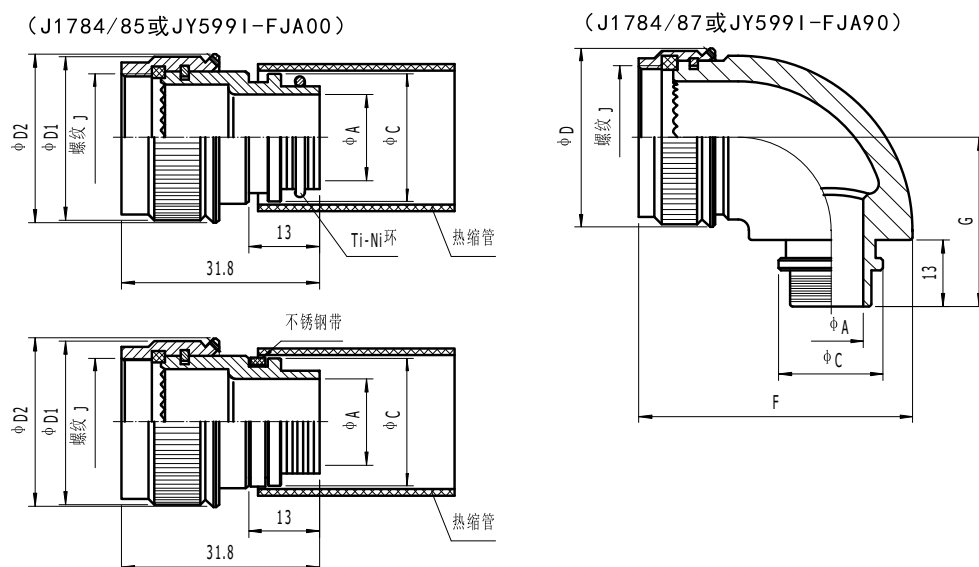
JY599 I - FJA00, JY599 I - FJA90 SHIELDING BACKSHELL

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



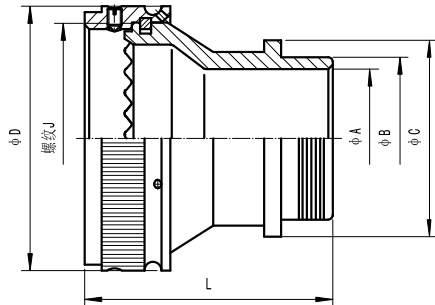
No.	Shell No.	Ti-Ni ring size	Shielding standard (Tin-copper plating mark dia.)	A outlet dia.		C		F	D1	D2	G	Thread J UNEF-2B
				Straight	90°	Straight	90°					
1	09	TR-04	6×10 (0.15~0.20)	6.3	6.3	14	14	36.3	17	18	26	0.4375-28
		TR-05	10×16 (0.15~0.20)	7.9	7.9	15.5	15					
		TR-06	10×16 (0.15~0.20)	9.5	9.5	17.1	15					
2	11	TR-04	6×10 (0.15~0.20)	6.3	6.3	14	14	36.3	17	18	26	0.4375-28
		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					
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	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	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	34	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-8	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	-					
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-17	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	4	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

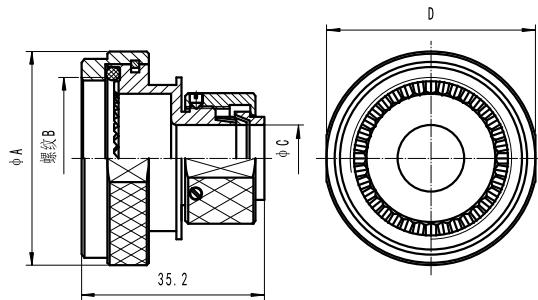
(SHIELDING AND NON-CLAMPING CABLE ACCESSORY)



Shell size	A	B	C	D	Thread J UNEF	L	Ti-Ni ring
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

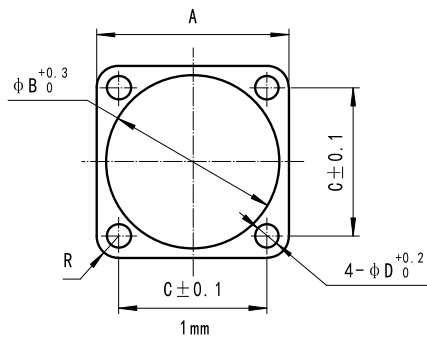
JY599 I XXFJE00

(SHIELDING AND NON-CLAMPING CABLE ACCESSORY)



Shell size	A	Thread J 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



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