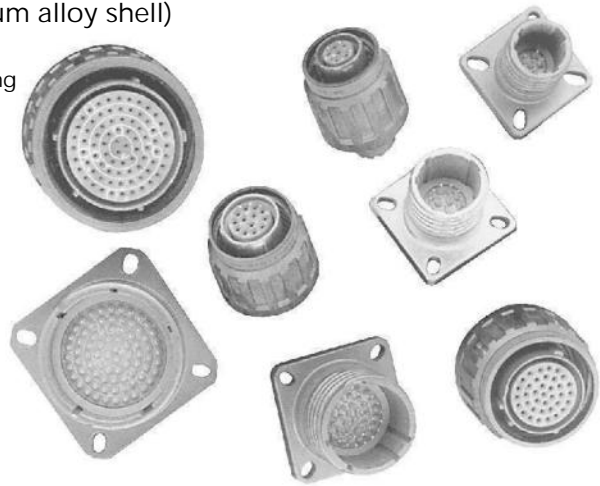


HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Main technical performance

【Mechanical properties】

- A shell: composite material (30% lighter than aluminum alloy shell)
- plating:
 - J Cadmium plated military green M electroless nickel plating
- Insulator: thermosetting material
- Wire body and seal ring: silicone rubber material
- First contact: gold plated copper alloy,
- A mechanical life: 1500 times
- A vibration:
 - Sine: 60g with temperature cycle and analog attachment (36 hours)
 - Random: 44.1grms at high temperature and 49,5 grms at ambient temperature
- Impact: 3ms half sine wave acceleration peak 300g
- Contact holding force: (minimum force in Newtons)
 - 22D#: 45N 20#: 67N
 - 16# : 111N 12#: 111N
 - 10# :111N 8#: 111N



【Environmental performance】

- A temperature range:
 - Class J - 65 °C ~ +175 °C
 - Class M - 65 °C ~ +200 °C
- One salt spray: 2000h
- A seal: The plug-in connector meets the requirements of ML-DTL-38999K low pressure impregnation
- A humid heat: according to MIL-DTL- -38999K: 24 hours 10 cycles
- A liquid resistance: resistance to a variety of fuels, coolants, solvents

【Electrical properties】

- Contact resistance and rated current of a contact:

Contact specification	Working diameter mm	Contact resistance m	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

- Insulation resistance:
 - Normal conditions 5000MO
- Electrical continuity between enclosures:
 - Class J 3mQ Class M 3mQ
- Electromagnetic interference shielding:
 - 100MHz~ 1GHz, minimum attenuation of 85dB (J, M class)
 - At 1GHz~ 10GHz, the minimum attenuation is 65dB (Class M) 50dB (Class J)
- Voltage resistance: V

Job grade	M	N	I	II
Sea level	1300	1000	1800	2300
21000m	800	600	1000	1000

Note: Different contact arrangements have different working levels, see contact arrangements for details.

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Model designation

Series principal name	J599/	20	J	B	35	P	N
Type	20- Square socket 24- Nuts Tighten the socket 26 Shielded plug						
Shell coating	Cadmium plating M- electroless nickel plating						
Shell number	09, 11, 13, 15, 17, 19, 21, 23, 25						
Index numbers	A, B, C, D, E, F, G, H, J						
Contact arrangement	See the Contact Arrangement diagram for details						
Contact type	P- Pin. Crimp type S- jack. Crimp type H pin. Crimp type. 1500 life J jack. Crimp type.1500 lifetime PL- Pin. Long PCB type SL- jack, long PCB type PC- Pin. Short printed board type SC- jack. Short printed board type A special pin contact B- special jack contact						

Key N- Normal key

Note: 1. The model names of the national military standard HL-JB599A and the US military standard ML-DTL-38999K are identical except that the main name is different. The main designation of HL-JB599A is "J599", and the main designation of MIL-DTL-38999K is "D38999", and the two are interchangeable.

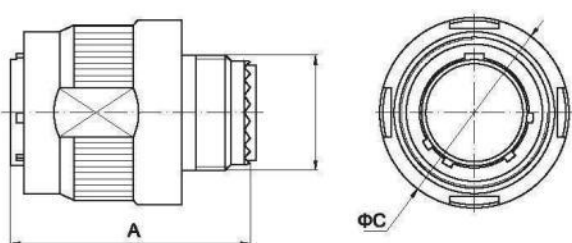
2. Identification number A and B are used to indicate that the electrical connector uses contacts different from the non-standard configuration of HL-JB1611 (such as shielding, coaxial, optical fiber contacts, etc.), such contacts need to be ordered separately, the specific model specifications see "special contacts for HL-JB599II series selection".

3. When the contact type is PC or SC, the normal key N must be marked.

Overall dimension

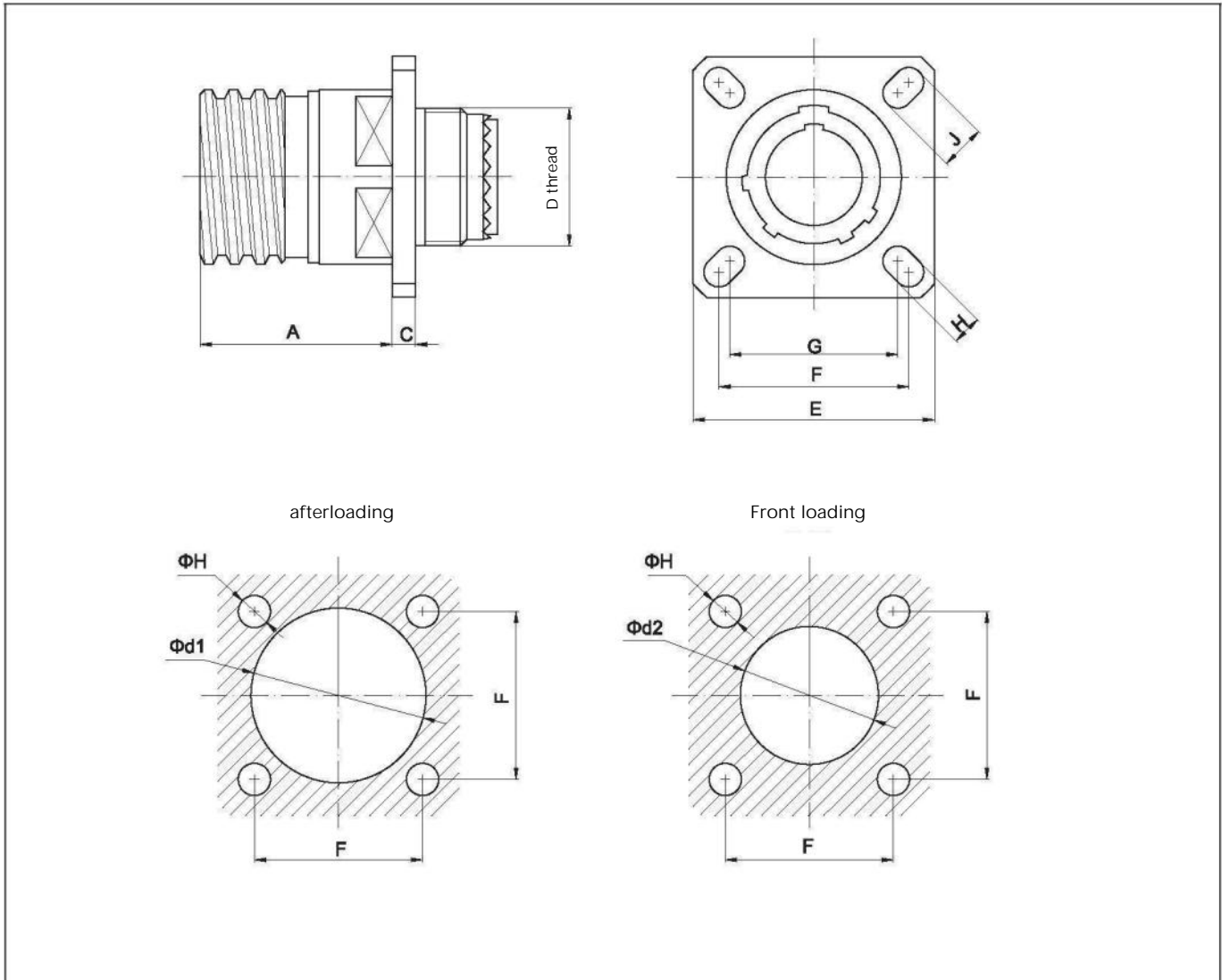
【plug】

Shell number	MS shell number	A Max	B thread	C Max
09	A	31.00	M12×1—6g	21.80
11	B	31.00	M15×1—6g	25.00
13	C	31.00	M18×1—6g	29.40
15	D	31.00	M22×1—6g	32.40
17	E	31.00	M25×1—6g	35.60
19	F	31.00	M28×1—6g	38.50
21	G	31.00	M31×1—6g	41.70
23	H	31.00	M34×1—6g	44.90
25	J	31.00	M37×1—6g	48.00



HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

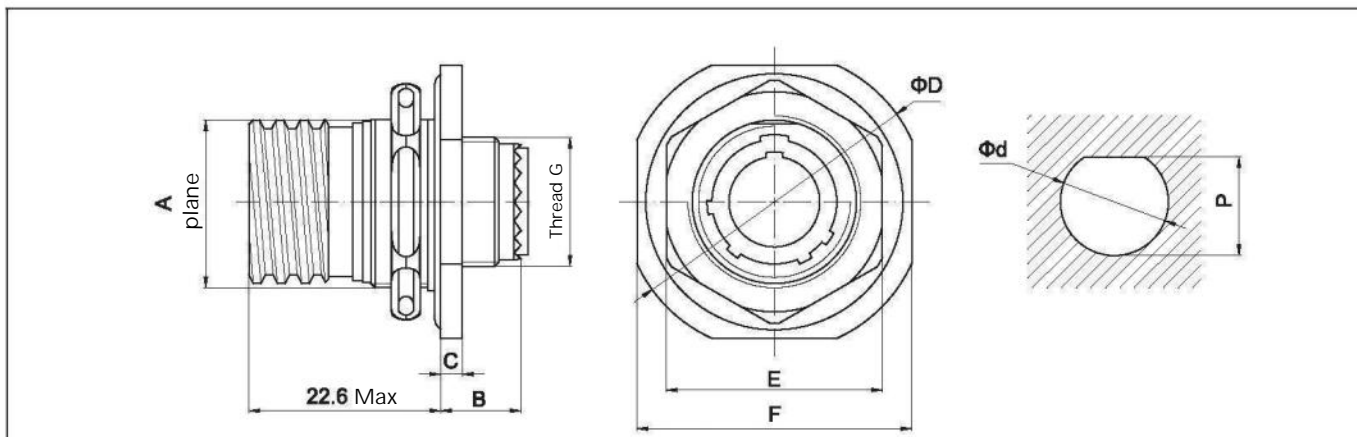
【square socket】



Shell number	MS shell number	A Max	C Max	D thread	E	F	G	H	J	d1 minimum	d2 minimum
09	A	19.50	3.65	M12 × 1—6g	23.80	18.26	15.09	3.25	5.49	16.66	13.11
11	B	19.50	3.65	M15 × 1—6g	26.20	20.62	18.26	3.25	4.93	20.22	15.88
13	C	19.50	3.65	M18 × 1—6g	28.60	23.01	20.62	3.25	4.93	23.42	19.05
15	D	19.50	3.65	M22 × 1—6g	31.00	24.61	23.01	3.25	4.39	26.59	23.01
17	E	19.50	3.65	M25 × 1—6g	33.30	26.97	24.61	3.25	4.93	30.96	25.81
19	F	19.50	3.65	M28 × 1—6g	36.50	29.36	26.97	3.25	4.93	32.94	28.98
21	G	18.70	4.35	M31 × 1—6g	39.70	31.75	29.36	3.25	4.93	36.12	32.16
23	H	18.70	4.35	M34 × 1—6g	42.90	34.93	31.75	3.91	6.15	39.29	34.93
25	J	18.70	4.35	M37 × 1—6g	46.00	38.10	34.93	3.91	6.15	42.47	37.69

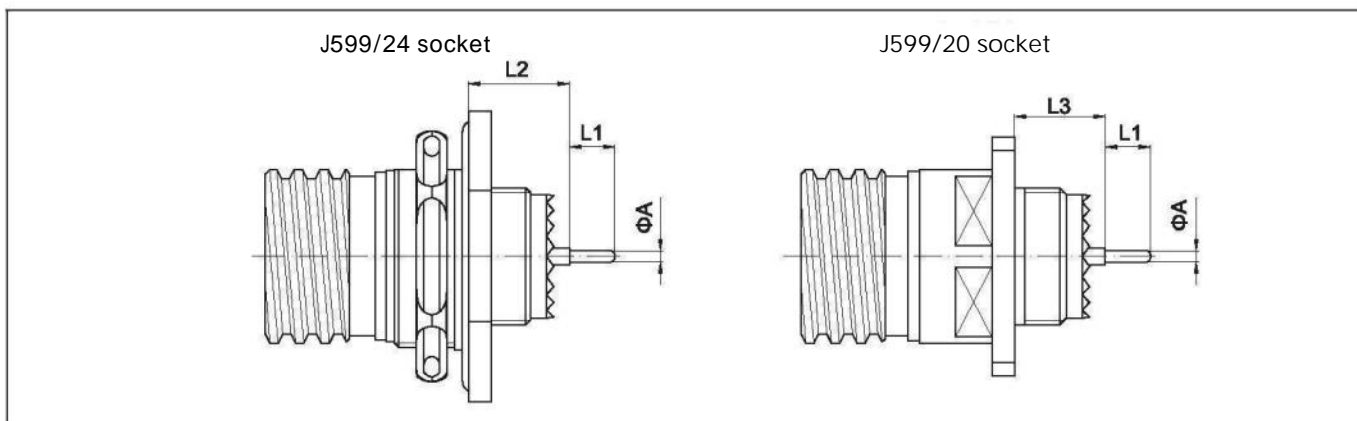
HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

【Nut fastening socket】



Shell number	MS shell number	A	B Max	C Max	D Max	E Max	F	G thread	D	P
09	A	16.50	9.90	3.20	30.20	22.50	27.00	M12×1—6g	17.70	16.99
11	B	19.30	9.90	3.20	34.90	25.00	31.80	M15×1—6g	20.88	19.53
13	C	24.00	9.90	3.20	38.10	30.00	34.90	M18×1—6g	25.58	24.26
15	D	27.20	9.90	3.20	41.30	33.30	38.10	M22×1—6g	28.80	27.53
17	E	30.40	9.90	3.20	44.50	36.50	41.30	M25×1—6g	31.98	30.68
19	F	33.40	9.90	3.20	49.20	39.70	46.00	M28×1—6g	35.15	33.86
21	G	36.50	9.90	3.20	52.40	43.00	49.20	M31×1—6g	38.28	37.06
23	H	39.70	9.90	3.20	55.60	46.00	52.40	M34×1—6g	41.50	40.24
25	J	42.80	9.90	3.20	58.70	50.70	55.60	M37×1—6g	44.68	43.41

【HL-JB599III series Sockets with printed board type contacts】

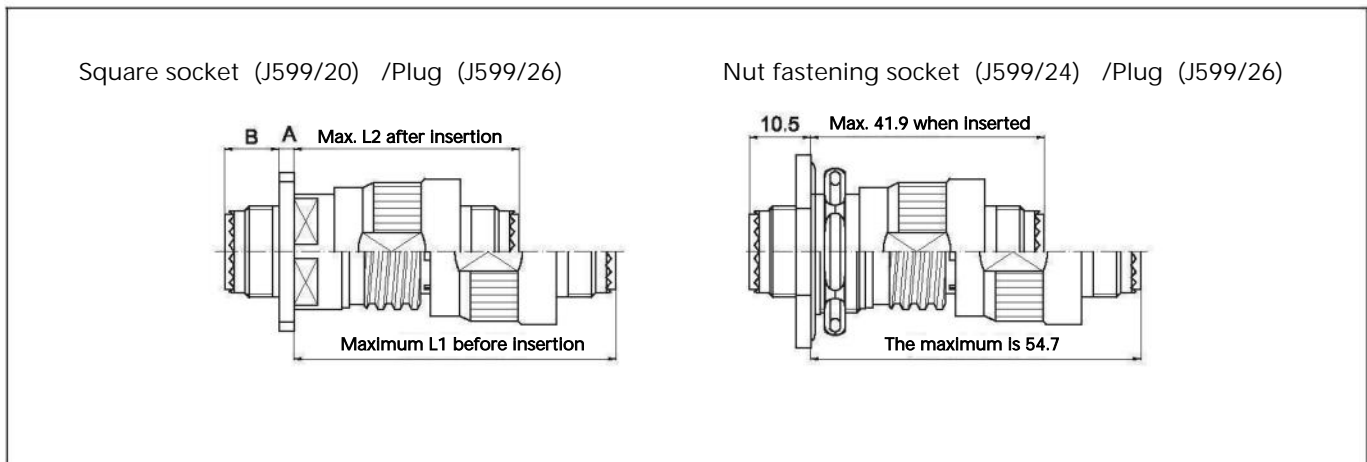


Printed board type contact specifications		L1	A
22D#	Long printed board contact	8.5	0.7
	Short printed board contact	4.0	
20#	Long printed board contact	8.5	0.7
	Short printed board contact	5.1	
16#	Long printed board contact	8.5	1.15
	Short printed board contact	5.1	

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

The dimensions of the contact parts with different specifications			Shell number 09—11	Shell number 13—15—17—19—21—23—25
L2	When installing the 22D# pin	minimum	10.52	10.34
		Max	11.46	11.28
	When installing 22D# jack	minimum	10.19	10.01
		Max	11.46	11.28
	When installing 20# or 16# pins and jacks	minimum	10.69	10.51
		Max	11.63	11.45
L3	When installing the 22D# pin	minimum	9.48	9.48
		Max	10.58	10.58
	When installing 22D# jack	minimum	9.15	9.15
		Max	10.58	10.58
	When installing 20# or 16# pins and jacks	minimum	9.65	9.65
		Max	10.75	10.75

Plug socket size after insertion



Shell number		09	11	13	15	17	19	21	23	25
L1	MAX	53.2	53.2	53.2	53.2	53.2	53.2	52.4	52.4	52.4
L2	MAX	40.3	40.3	40.3	40.3	40.3	40.3	39.6	39.6	39.6
A	MAX	2.5	2.5	2.5	2.5	2.5	2.5	3.2	3.2	3.2
B	MAX	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Plug socket seal cover

Model designation

Base element number

J599/32

F

09

N

J599/32- Plug seal cover (corresponding to US Army component number D38999/32)

J599/33- Socket seal cover (corresponding to US component number D38999/33)

Shell coating

W-aluminum housing cadmium plated army green
K-stainless steel passivation
M composite shell electroless nickel plating

F- aluminum shell electroless nickel plating
J - composite shell plated with cadmium

Shell number

09, 11, 13, 15, 17, 19, 21, 23, 25

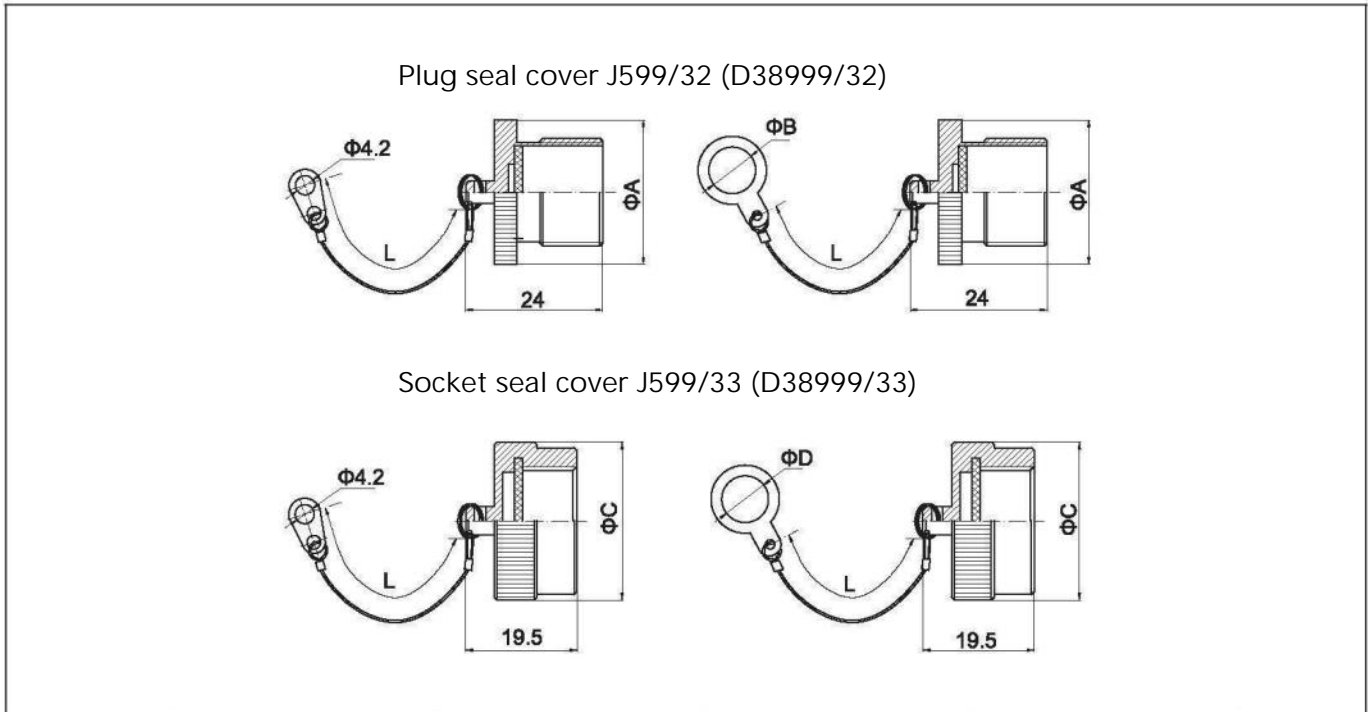
Chain type

N- Stainless steel cable strap ring

R-stainless steel cable strap eye

Note: Sealing caps should be ordered separately. Not supplied with connectors.

Overall dimension



Shell number		09	11	13	15	17	19	21	23	25
A	MAX	22.86	25.40	30.48	33.02	36.83	39.37	43.18	44.45	48.26
B	MIN	12.90	17.80	19.30	22.60	25.60	28.95	32.00	34.00	38.30
C	MAX	22.86	27.86	30.48	31.75	36.83	38.10	41.91	44.45	48.26
D	MIN	17.8	21.30	25.60	28.95	32.00	35.30	38.30	41.65	44.45
L	MAX	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00	127.00

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Standard tail accessories (for HL-JB599II series electrical connectors)

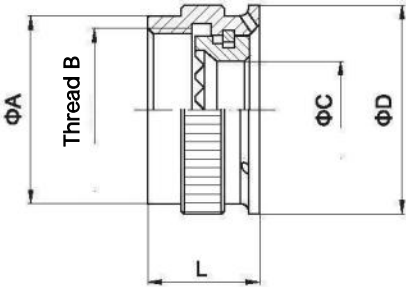
This type of attachment conforms to the national military standard HL-JB 1784 (equivalent to the United States military standard MIL-C-85049).

Note: "J1784" and "J1784A" are referred to in the following accessory models.

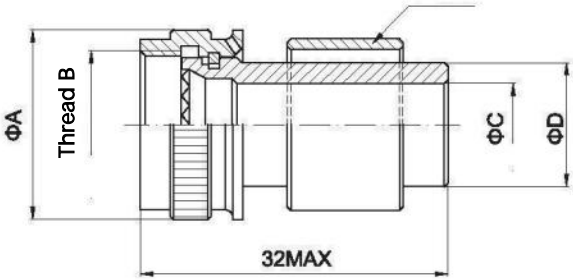
Model designation

Base element number	J1784/			38-	09	N
Detail specification number	14 - Tail nut 20 - Shield tail attachments 69- Heat shrinkable sheathed tail attachment	16- Bent cable clamp 38- Straight cable clamp	18 - Straight shielded cable clamp 39- Bent 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-- Passivation of stainless steel			

【J1784/14- Tail nut】

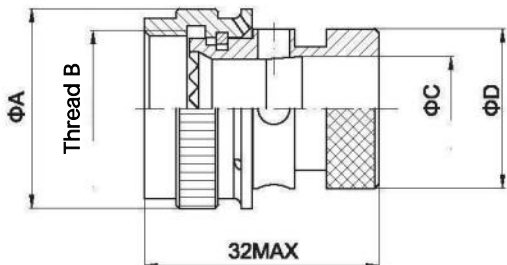
	Shell number	A	Thread B	C	D	L
	09	14.6	M12 × 1	7	16.5	10.2
	11	17.1	M15 × 1	8.8	20.0	10.2
	13	20.9	M18 × 1	12.6	22.8	10.2
	15	24.6	M22 × 1	15.7	25.8	10.2
	17	27.4	M25 × 1	19	29.2	10.2
	19	30.2	M28 × 1	21.8	32.0	12.8
	21	33.6	M31 × 1	24.9	35.1	12.8
	23	36.7	M34 × 1	28	38.2	12.8
	25	40	M37 × 1	31.3	41.5	15

【J1784/20- Shielded tail attachment】

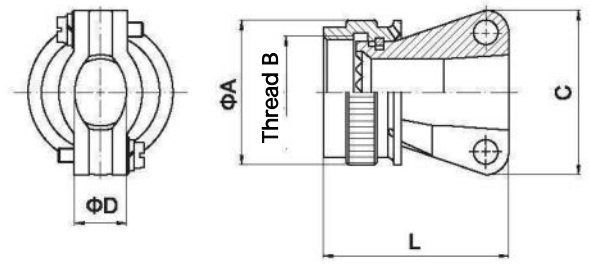
	Shell number	A	Thread B	C	D	Select a block marker
	09	16.5	M12 × 1	6.4	8.9	08
	11	19.0	M15 × 1	8.3	20.0	10
	13	22.8	M18 × 1	11.0	13	12
	15	25.8	M22 × 1	14.0	16	14
	17	29.2	M25 × 1	17.3	19.3	16
	19	32.0	M28 × 1	20.3	22.6	18
	21	35.1	M31 × 1	23.6	25.8	20
	23	38.2	M34 × 1	26.4	28.7	22
	25	41.5	M37 × 1	28.4	30.6	24

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

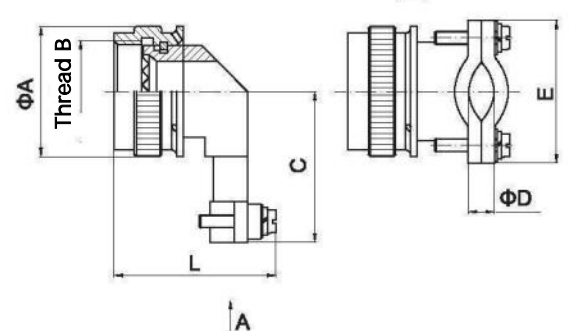
【J1784/69- Heat shrinkable sheathed tail attachment】

	Shell number	A	Thread B	C	D
	09	16.5	M12×1	6.76	13.30
11	20.0	M15×1	9.90	15.17	
13	22.8	M18×1	13.00	19.46	
15	25.8	M22×1	16.05	21.09	
17	29.2	M25×1	19.10	24.30	
19	32.0	M28×1	21.60	27.06	
21	35.1	M31×1	24.80	30.71	
23	38.2	M34×1	28.00	34.20	
25	41.5	M37×1	31.10	36.45	

【J1784/38 Straight cable clamp】

	Shell number	A Max	Thread B	C Max	D minimum	D Max	L Max
	09	16.5	M12X1	18.6	3.2	6.3	29.9
11	20.0	M15×1	21.6	4.8	8.8	30.3	
13	21.8	M18×1	24.8	6.5	12.6	30.7	
15	27	M22×1	28	7.4	16.0	30.5	
17	29.2	M25×1	31.2	8.1	19.0	30.5	
19	32.0	M28×1	34	8.8	21.8	30.5	
21	35.1	M31×1	37.2	9.3	25.0	30.5	
23	38.2	M34×1	40.3	9.8	28.0	30.5	
25	41.5	M37×1	43.5	10.3	31.0	31.4	

【J1784/39 Bent cable clamp】

	Shell number	A Max	Thread B	C Max	D minimum	D Max	E Max	L Max
	09	16.5	M12×1	20.6	3.2	6.3	18.6	27.0
11	20.0	M15×1	22.0	4.8	8.0	21.6	28.0	
13	22.8	M18×1	23.6	6.5	11.1	24.8	31.0	
15	25.8	M22×1	25.2	7.4	14.0	28.0	34.5	
17	29.2	M25×1	26.8	8.1	17.3	31.2	38.9	
19	32.0	M28×1	31.3	8.8	20.3	34.0	41.9	
21	35.1	M31×1	32.9	9.3	23.2	37.2	43.5	
23	38.2	M34×1	34.5	9.8	26.3	40.3	46.0	
25	41.5	M37×1	36.1	10.3	29.5	43.5	50.5	

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

【J1784/16 Bent cable clamp】

Shell number	A Max	Thread B	C Max	D_{minimum}	D Max	E Max	L Max
09	19.0	M12 × 1	20.0	2.85	6.71	21.0	25.9
11	20.0	M15 × 1	21.5	6.00	9.96	26.5	29.2
13	25.1	M18 × 1	23.0	8.45	12.85	31.5	32.0
15	29.0	M22 × 1	25.0	12.00	16.03	36.5	35.2
17	32.1	M25 × 1	27.0	11.10	19.20	31.0	36.4
19	35.1	M28 × 1	28.5	13.75	21.46	37.0	40.7
21	38.1	M31 × 1	29.5	19.30	24.64	35.0	43.8
23	41.1	M34 × 1	31.0	21.40	27.81	35.0	43.0
25	44.1	M37 × 1	33.0	23.50	30.99	37.0	44.2

【J1784/18- XXN】

Base element number	J1784/	18-	25	N	09	A
Detail specification number	18- Straight shielded cable clamp					
Shell number	See Table 1					
Shell coating	W- cadmium plated army green		N electroless nickel plating		S-- Passivation of stainless steel	
Emergence number	See Table 2					
Length numbering	See Table 3					

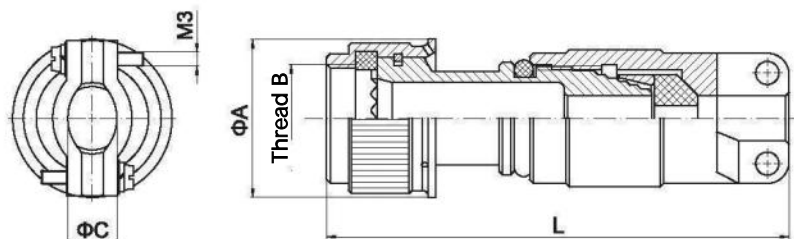


Table 1

表2

Shell number	Line diameter number can be selected	A	Thread B
09	01 ~ 02	19.0	M12 × 1
11	01 ~ 03	22.0	M15 × 1
13	02 ~ 04	25.1	M18 × 1
15	02 ~ 05	29.0	M22 × 1
17	02 ~ 06	32.0	M25 × 1
19	03 ~ 07	35.0	M28 × 1
21	03 ~ 08	38.0	M31 × 1
23	03 ~ 09	41.1	M34 × 1
25	04 ~ 10	44.1	M37 × 1

Outlet caliber number	Outlet size 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 coding	L
9 ~ 25	Standard (omitted not marked)	64.4
9 ~ 25	A	89.8
15 ~ 25	B	115.2
21 ~ 25	C	140.6

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

J1784/38H straight cable clamp	Shell number	A Max	B	C	L Max
	09	19,0	20,0	3,2~6,3	27,0
	11	22,0	22,0	4,8~8,8	28,5
	13	25,1	25,0	6,5~12,6	30,0
	15	29,0	28,3	7,4~16,0	31,5
	17	32,0	31,5	8,1~19,0	33,5
	19	35,0	34,3	8,8~21,8	36,6
	21	38,0	37,5	9,3~25,0	39,8
	23	41,1	40,5	9,8~28,0	42,9
	25	44,1	43,8	10,3~31,0	45,0

Composite tail attachment

Model designation

Base element number	J1784/	91-	11	J
Detail specification number	20 - Shield tail attachments	91- Straight cable clamp	92 - Bent cable clamp	
Shell number	09, 11, 13, 15, 17, 19, 21, 23, 25			
Shell coating	J Cadmium plating	M- electroless nickel plating		

【J1784/20-XXJ (Composite Material)】

J1784/20-XXJ (Composite Material)	Shell number	A	Thread B	C	D
	09	17,51	M12×1	6,73	12,65
	11	20,00	M15×1	8,71	12,95
	13	23,00	M18×1	11,10	16,00
	15	26,70	M22×1	14,27	19,30
	17	29,46	M25×1	17,45	22,61
	19	32,40	M28×1	20,62	25,65
	21	35,30	M31×1	23,80	28,70
	23	38,90	M34×1	26,57	30,53
	25	42,00	M37×1	28,58	34,52

【J1784/91-XXJ(Composite Material)】

J1784/91-XXJ(Composite Material)	Shell number	A Max	Thread B	C Max	D _{minimum}	D Max	L Max
	09	17,51	M12×1	18,80	4,00	5,80	31,50
	11	20,00	M15×1	21,10	4,70	7,30	33,00
	13	23,00	M18×1	24,70	5,40	10,60	34,50
	15	26,70	M22×1	28,10	8,20	15,5	36,00
	17	29,46	M25×1	29,62	9,0	18,4	38,20
	19	32,40	M28×1	33,80	10,2	20,8	39,50
	21	35,30	M31×1	37,20	11,4	24,1	41,00
	23	38,90	M34×1	41,85	12,0	24,8	44,80
	25	42,00	M37×1	42,20	13,8	25,7	47,30

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Shell number	A Max	Thread B	C Max	D		L Max
				minimum	Max	
09	17.51	M12 × 1	20.6	2.94	5.94	29.5
11	20.00	M15 × 1	22.0	3.87	5.94	29.5
13	23.00	M18 × 1	23.6	4.83	8.33	31.9
15	26.70	M22 × 1	25.2	6.60	11.61	35.1
17	29.46	M25 × 1	26.8	7.19	15.60	39.1
19	32.40	M28 × 1	31.3	8.26	16.10	41.5
21	35.30	M31 × 1	32.9	8.71	17.73	43.3
23	38.90	M34 × 1	34.5	9.68	20.90	46.5
25	42.00	M37 × 1	36.1	10.62	21.66	47.1

Special tail attachment

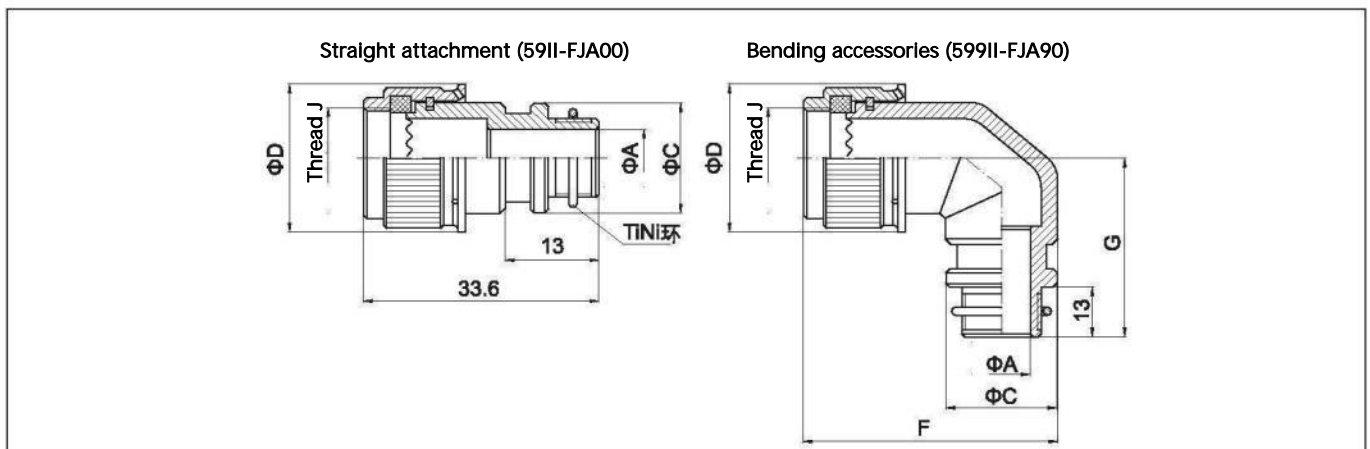
This type of tail attachment is especially suitable for the clamping of shielded cables with shielding nets, and is divided into two categories: straight and curved. The accessory can be optional Ti-Ni alloy memory ring with alloy memory, through heating, make it shrink, the shielding network tight at the tail of the attachment, truly realize 360° electromagnetic shielding.

Note: Heat contraction of Ti-Ni alloy memory ring: Heat can be used to heat, about 45 seconds to 1 minute, when the temperature indicator color on the memory ring from green to black is the memory ring contraction is complete, at this time the temperature of the ring is 165°C, stop heating. Pay attention to ensure that the memory ring is heated evenly when heating.

Model designation

Base element number	J599	III	15	FJA	00	F	A	-05
Detail specification number	III							
Shell number	09, 11, 13, 15, 17, 19, 21, 23, 25							
Attachment type	FJA							
Structural form	00- Straight tail attachment 90- 90° curved tail attachment							
Shell coating	W- cadmium plated army green F- electroless nickel plating K- stainless steel passivation							
Titanium-nickel ring	No marks - no titanium-nickel rings A- Select titanium-nickel rings							
Outlet diameter or titanium-nickel ring specification	Mark the diameter of the outlet when there is no titanium-nickel ring When selecting titanium-nickel rings, mark titanium-nickel ring specifications							

【Overall dimensions】



HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Serial number	Shell number	Ti-Ni ring specifications	Shielding mesh specifications (tinned copper wire diameter)	A Diameter of the outlet		C		F	D	G	Thread J
				Straight type	Bending type	Straight type	Bending type				
1	09	TR-04	6 × 10 (0.15~0.20)	6.3	6.3	14.0	14.0	38.2	19	26	M12 × 1—6H
		TR-05	10 × 16 (0.15~0.20)	7.9	7.9	15.5	15.0				
		TR-06	10 × 16 (0.15~0.20)	9.5	—	17.1	—				
2	11	TR-04	6 × 10 (0.15~0.20)	6.3	6.3	14.0	14.0	39.7	22	26	M15 × 1—6H
		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 (0.15~0.20)	11.1	11.1	18.7	18.0				
		TR-08	16 × 24 (0.12~0.25)	12.7	—	20.3	—				
3	13	TR-04	6 × 10 (0.15~0.20)	6.3	6.3	14.0	14.0	45.2	25.1	29	M18 × 1—6H
		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)	16.0	16.0	23.5	23.0				
4	15	TR-05	10 × 16 (0.15~0.20)	7.9	—	15.5	—	47.0	29	29	M22 × 1—6H
		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)	16.0	16.0	23.5	23.5				
		TR-12	16 × 24 (0.10~0.30)	19.0	19.0	26.7	25.5				
5	17	TR-05	10 × 16 (0.15~0.20)	7.9	—	15.5	—	50.7	32.1	33	M25 × 1—6H
		TR-06	10 × 16 (0.15~0.20)	9.5	—	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)	16.0	16.0	23.5	23.5				
		TR-12	16 × 24 (0.10~0.30)	19.0	19.0	26.7	26.7				
		TR-14	24 × 30 (0.10~0.30)	22.2	—	30.0	—				
6	19	TR-08	16 × 24 (0.12~0.25)	12.7	12.7	20.3	20.3	53.5	35.1	33	M28 × 1—6H
		TR-10	16 × 24 (0.10~0.30)	16.0	16.0	23.5	23.5				
		TR-12	16 × 24 (0.10~0.30)	19.0	19.0	26.7	26.7				
		TR-14	24 × 30 (0.10~0.30)	22.2	22.2	30.0	30.0				
		TR-16	24 × 30 (0.10~0.30)	25.4	25.4	33.0	32.0				
7	21	TR-08	16 × 24 (0.12~0.25)	12.7	12.7	20.3	20.3	55.7	38.1	39	M31 × 1—6H
		TR-10	16 × 24 (0.10~0.30)	16.0	16.0	23.5	23.5				
		TR-12	16 × 24 (0.10~0.30)	19.0	19.0	26.7	26.7				
		TR-14	24 × 30 (0.10~0.30)	22.2	22.2	30.0	30.0				
		TR-16	24 × 30 (0.10~0.30)	25.4	25.4	33.0	33.0				
		TR-18	30 × 40 (0.10~0.30)	28.5	—	36.2	—				

HL-JB599III series (MIL-DTL-38999III series) composite electrical connectors

Serial number	Shell number	Ti-Ni ring specifications	Shielding mesh specifications (tinned copper wire diameter)	A Diameter of the outlet		C		F	D	G	Thread J
				Straight type	Bending type	Straight type	Bending type				
8	23	TR-10	16 × 24 {0.10~0.30}	16.0	16.0	23.5	23.5	58.2	41.1	39	M34 × 1—6H
		TR-12	16 × 24 {0.10~0.30}	19.0	19.0	26.7	26.7				
		TR-14	24 × 30 {0.10~0.30}	22.2	22.2	30.0	30.0				
		TR-16	24 × 30 {0.10~0.30}	25.4	25.4	33.0	33.0				
		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}	—	16.0	—	23.5	63.7	44.1	44	M37 × 1—6H
		TR-12	16 × 24 {0.10~0.30}	19.0	19.0	26.7	26.7				
		TR-14	24 × 30 {0.10~0.30}	22.2	22.2	30.0	30.0				
		TR-16	24 × 30 {0.10~0.30}	25.4	25.4	33.0	33.0				
		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}	35.0	35.0	42.5	42.0				

Special contacts selected for the HL-JB599ml series

Specification type	American standard model	National military standard model	remark
12# Insert pin	M39029/58 - 365	J1216/58 - 365	
12# jack	M39029/56- 353	J1216/56- 353	
12# Insert pin	M39029/107- 623	J1216/107- 623	Life span 1500 times
12# jack	M39029/106- 617	J1216/106- 617	Life span 1500 times
12# shielded pin	M39029/28- 211	J1216/28-211	
12# shielded jack	M39029/ 75-416	J1216/ 75-416	
12 # coaxial pin	M39029/102- 558	J1216/102- 558	
12# coaxial jack	M39029/103- 559	J1216/103- 559	
8# double coaxial pin	M39029/90- 529	J1216/90- 529	
8# double coaxial jack	M39029/91 - 530	J11216/91- 530	
8# analog contacts		J1784A/80- 8	
12# analog contacts		J1784A/80- 12	
8# sealing plug	MS27488 -8(red)	27488 - 8(red)	
10# sealing plug	MS27488-10(white)	27488-10(white)	
12# sealing plug	MS27488- 12(yellow)	27488- 12(yellow)	