HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Product introduction

* Conforms to the HL-JB599A (MIL-DTL-38999K) I series
* Bayonet fast connection
* Small size, light weight, high contact density
* EMI/RFI screen masking
* Contact parts crimping can be removed, anti-slant insert design
* Socket has box type, wall type, front installation, post installation and nut fastening installation and other forms
* Conforming to HL-JB1784 standard tail attachment Special tail attachment for shielded cable clamping (Ti-Ni alloy memory ring)
* 9 kinds of shell numbers, 70 kinds of hole group arrangement
* The interface and tail of the insert surface have a sealed structure, and the three anti-performance is excellent
* Five-key steering mechanism, there are five anti-error keypositions
* Widely used in aviation, aerospace and military systems

Main technical performance

【Mechanical properties】

—A shell: aluminum alloy, stainless steel
—A coating:
Class B cadmium plating Military green class
F electroless nickel plating
Passivation of Class E stainless steel
—An insulator: thermosetting plastic
—Wire body and seal ring: silicone rubber material
—A contact: copper alloy gold-plated, pressed type, welded type, printed board type.
—A mechanical life: 500 times
—A vibration:
Sinusoidal vibration frequency 10~ 2000Hz acceleration 294m/s²
Random vibration frequency 100~1000Hz Power spectral density 1g² /Hz
—A shock :3ms half sine wave acceleration peak 300g

【Electrical properties】

—Contact resistance and rated current of a contact:

Contact specification	Working diameter mm	Contact resistance mΩ	Rated current A
22D#	Φ0.76	≤12	5
20#	Φ1.00	≤5	7.5
16#	Φ1.60	≤2.5	13
12#	Φ2.40	≤1.5	23
10#	Φ3.15	≤1.0	40
8#	Φ3.6	≤0.57	46

—An electromagnetic interference shield:

When 100 MHZ ~ 1GHz, the minimum attenuation is 85dB

At 1GHz~ 10GHz, the minimum attenuation is 50dB

—A withstand voltage: V

Job level *	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.
—An insulation resistance;
Normal conditions ≥5000 MΩ Moist conditions ≥100 MΩ
—Electrical continuity between enclosures;
Class B ≤2.5mΩ Class F ≤1.0mΩ
Class E ≤5mΩ

【Environmental performance】

—A use temperature:
Class B - 65°C-+175°C
Class E and F -65 °C -+200°C
—Salt spray resistance: test according to HL-JB1217 method 1001
Class B 500h Class E 1000h
Class F 48h
—A relative humidity: 40°C up to 98%
—A working height :≤30480m
—An electric connector also has good anti-moisture, anti-salt spray,anti-mold, anti-rain, anti-dust and other properties

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Model designation

Series principal name	J	27467	T	17	F	35	P	N	–H

Type	27467- Plug (Type T only) 27466- Wall type square front socket (Type T only) 27656- Wall type square tray rear socket (Type T only) 27496- Box Square front socket (Type E only) 27505- Box Tray rear socket (Type E only) 27468- Nut mounting socket (Class T only)
Category	T - The tail of the housing is threaded. The rear attachment can be installed E a shell tail without thread. Rear accessories cannot be installed
Case number	09, 11, 13, 15, 17, 19, 21, 23, 25
Shell coating	B- Cadmium plating E-stainless steel passivation F- electroless nickel plating
Contact arrangement	See the Contact Arrangement diagram for details
Contact type	Crimp type P- Insert the pin S one jack Printed board type Pl-long printed board pin SL- Long printed board jack PC- Short printed board pin SC- Short printed board jack
Key position	N - Normal keys : A, B, C, D- Variable keys

Welding contact identification (for welding connectors only)

H Welding contacts

Note: 1. The national military standard HL-JB599A and the US military standard MIL-DTL-38999K model name, except for the main name code is different, the rest are identical.

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

3. When there are high oil resistance requirements, the connector sealing material is fluorosilicone rubber, plus C1 after the original model (example: 27467T17F35PNC1).

Crimp contacts

Contact specification	Diameter mm	Pin color code	Jack color code	The inner diameter of the cylinder is mm	Outer diameter of wire cylinder mm	Adapter wire section mm²	ADAPTS to American standard cable AWG	Adapter wire insulation outer diameter mm	Remove tool code
22D#	0.76	Orange-blue-black	Orange-yellow-grey	0.85	1.20	0.08 0.125 0.2 0.3	28 26 24 22	0.76–1.37	M81969/14–01
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
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	M81969/14–03
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
10#	3.15	Green-red-grey	Green-orange-purple	3.40	4.65	3.0 4.8	12 10	3.42–4.12	M81969/14–05

Note: The required crimping tools and instructions can be found in "Instructions for crimping Tools for HL-JB599 series products".

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Insulator hole arrangement (Pin insulator insertion surface view)

Shell number							
09 (A)	35 M 6-22D	98 I 3-20#	02 I 2-20#	03 I 3-20#	10 I 1-12#	11 I 1-16#	
11 (B)	35 M 13-22D	98 I 6-20#	05 I 5-20#	04 I 4-20#	01 I 1-12#	99 I 7-20#	02 I 2-16#
	15 N 4-22D 1-12#	43 M 3-16#					
13 (C)	35 M 22-22D	98 I 10-20#	08 I 8-20#	04 I 4-16#	12 N 1-12# 11-22D	50 M 4-20# 1-10#	60 I 4-16# 2-20#
	03 II 3-16#	02 I 2-12#	05 I 1-16# 2-12#	24 II 1-12#	45 I 5-16#	13 N 3-16# 10-22D	26 M 2-12# 6-22D
	99 I 3-16# 4-20#						
15 (D)	35 M 37-22D	19 I 19-20#	18 I 18-20#	05 II 5-16#	97 I 8-20# 4-16#	15 I 14-20# 1-16#	
	02 II 2-12#	14 N 8-22D 6-16#	31 M 30-22D 1-12#	38 I 4-12#	48 I 8-16#	12 M 2-20# 2-12# 8-22D	
	23 M 2-20# 3-16# 18-22D						

Contact specification: 22D, 20#, 16#, 12#, 12# shield, 12# coaxial, 10#, 8# double coaxial, 8#

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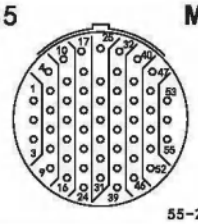
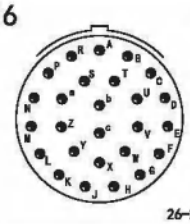
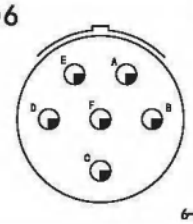
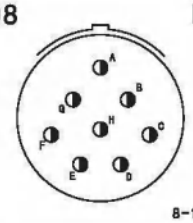
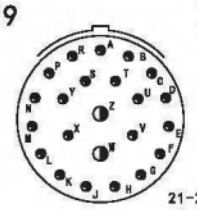
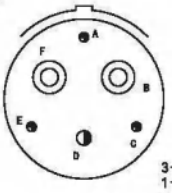
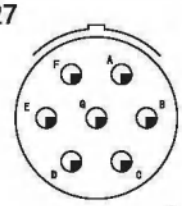
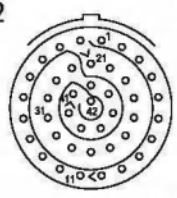
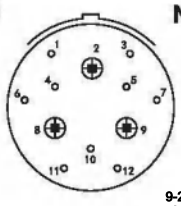
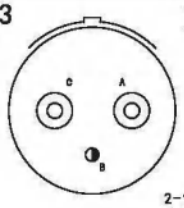
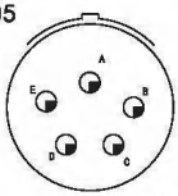
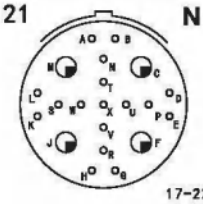
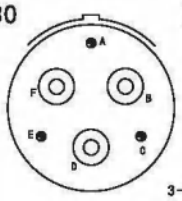
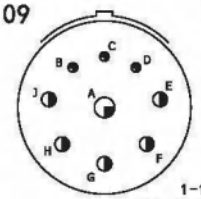
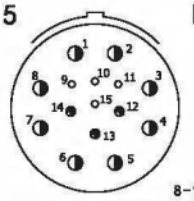
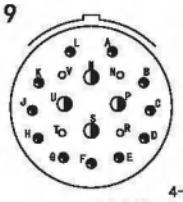
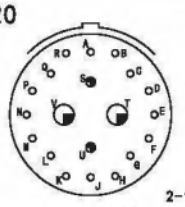
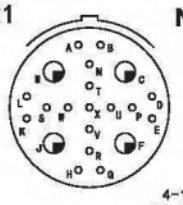
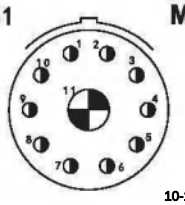
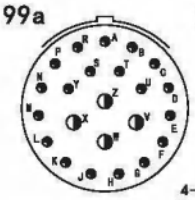
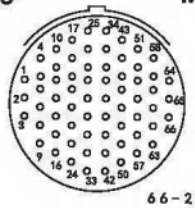
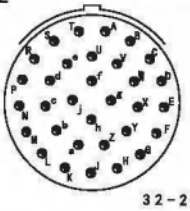
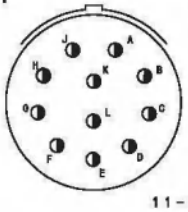
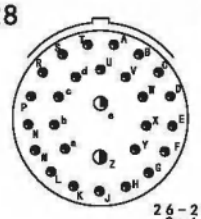
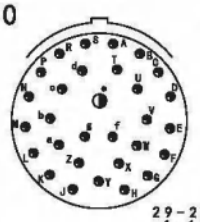
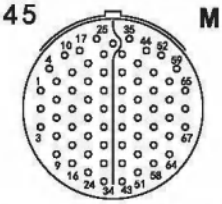
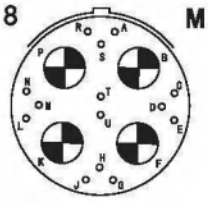
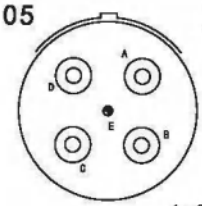
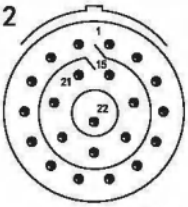
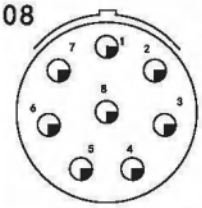
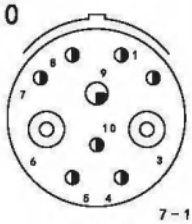
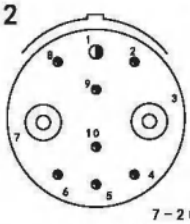
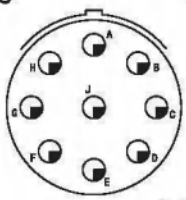
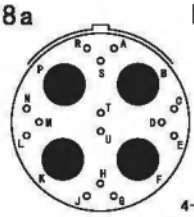
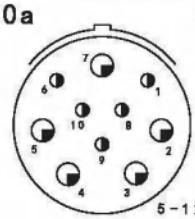
17 (E)	35 M  55-22D	26 I  26-20#	06 I  6-12#	08 II  8-16#	99 I  21-20# 2-16#
	16 I  3-20# 1-16# 2-10#	27 I  7-12#	42 M  42-22D	12 N  9-22D 3-12# Shield	03 N  2-10# 1-16#
	05 I  5-12#	21 N  17-22D 4-12#	30 N  3-10# 3-20#	09 I  1-12# 5-16# 3-20#	15 M  8-16# 3-20# 4-22D
	19 M  4-16# 11-20# 4-22D	20 I  2-12# 2-20# 16-22D	21 N  4-12# 17-22D	51 M  10-16# 1-8# Double coaxial	99a N  4-16# 19-20#
19 (F)	35 M  66-22D	32 I  32-20#	11 II  11-16#	28 I  26-20# 2-16#	30 I  29-20# 1-16#
	45 M  67-22D	18 M  14-22 D 4-B# Double coaxial	05 N  1-20# 4-10#	22 I  22-20#	08 M  8-12#
	10 I  7-16# 1-12#, 2-10#	12 I  7-20# 1-16#, 2-10#	96 I  9-12#	18a M  4-8# 14-22D	10a I  5-12# 5-16#

Contact specification: 22D, 20#, 16#, 12#, 12# shield, 12# coaxial, 10#, 8# double coaxial, 8#

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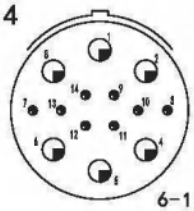
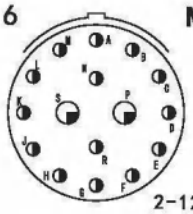
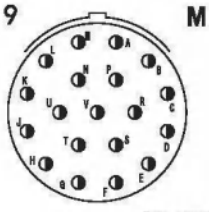
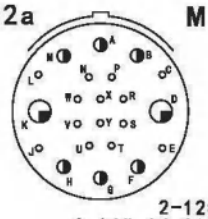
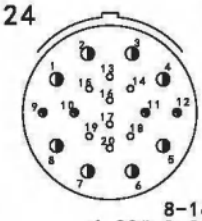
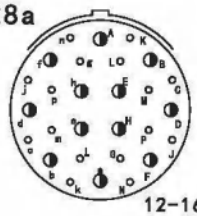
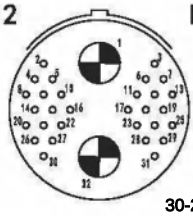
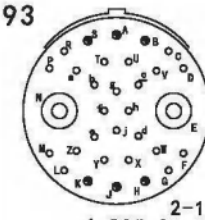
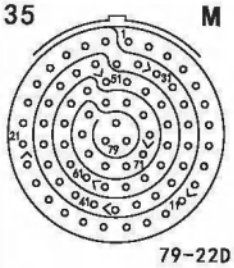
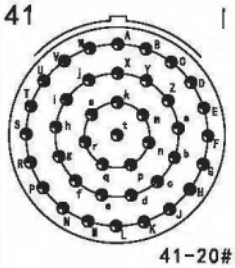
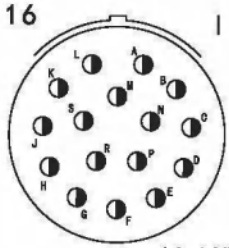
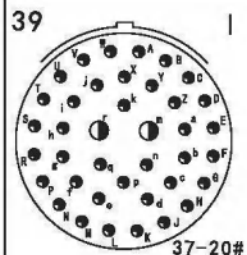
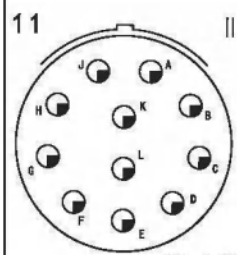
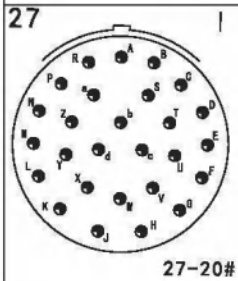
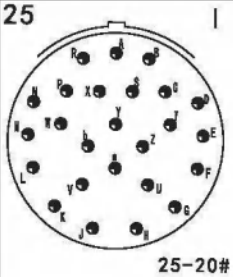
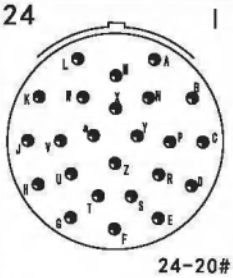
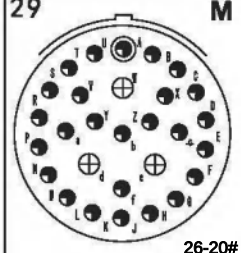
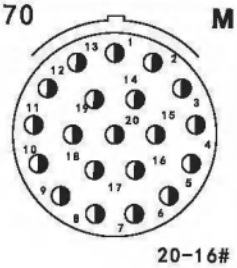
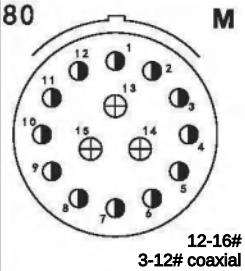
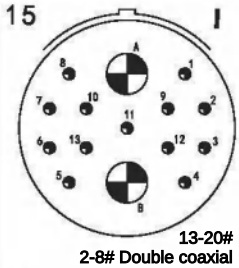
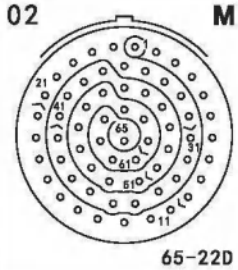
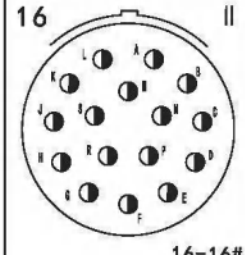
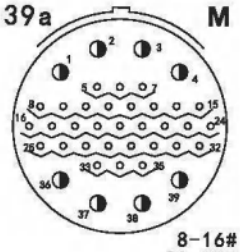
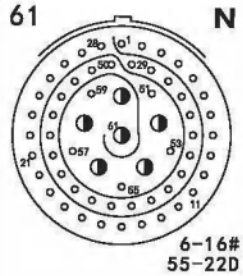
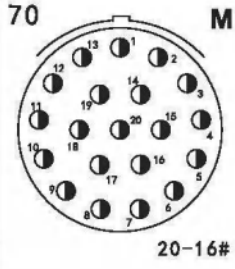
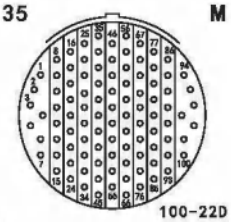
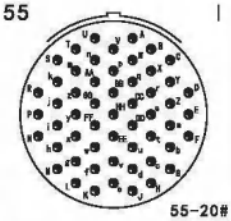
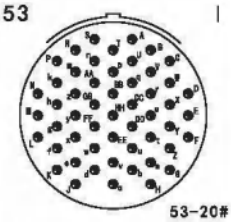
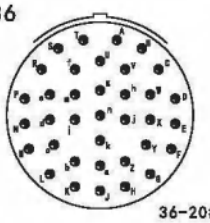
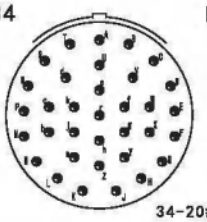
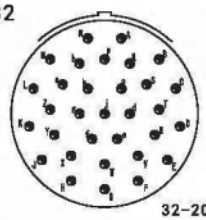
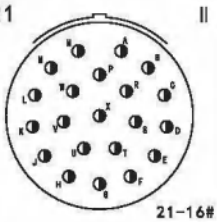
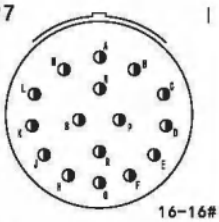
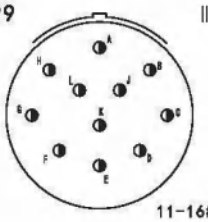
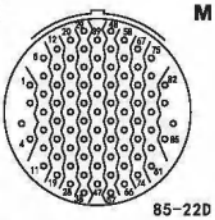
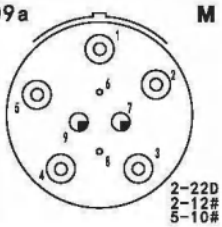
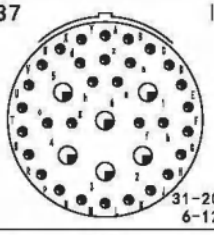
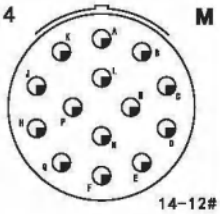
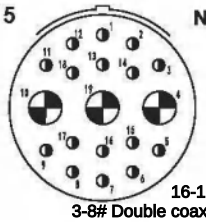
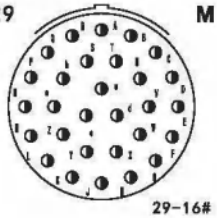
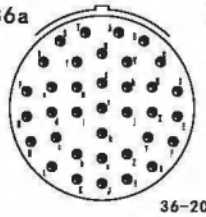
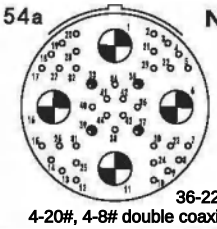
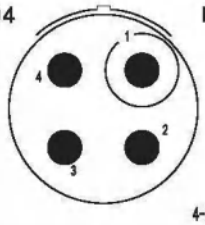
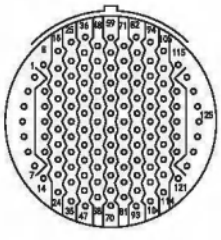
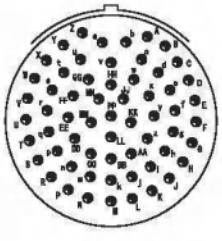
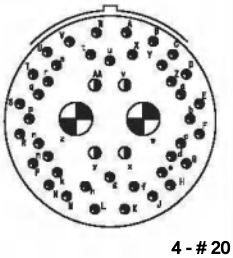
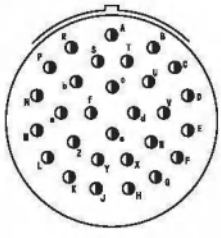
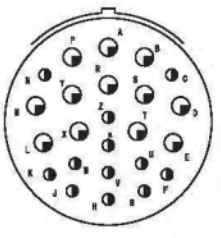
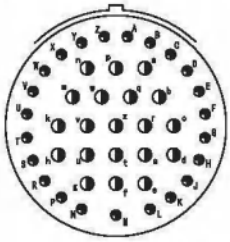
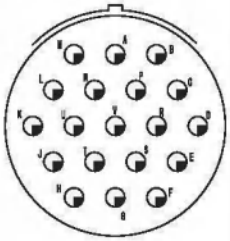
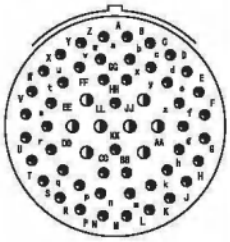
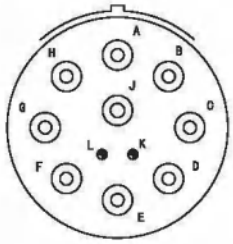
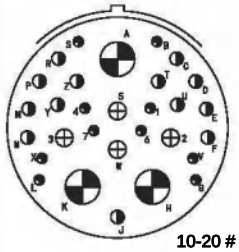
HL-JB599I series (MIL-DTL- -38999I series) electrical connector

19 (F)	14 I  6-12# 8-20#	16 M  2-12# 14-16#	19 M  19-16#	22a M  2-12# 6-16#, 14-22D	24 I  8-16# 4-20#, 8-22D
	28a I  12-16# 16-22D	92 M  30-22D 2-8# Double coaxial	93 I  2-10# 6-20#, 24-22D		
21 (G)	35 M  79-22D	41 I  41-20#	16 I  16-16#	39 I  37-20# 2-16#	11 II  11-12#
	27 I  27-20#	25 I  25-20#	24 I  24-20#	29 M  26-20# 3-12# coaxial	70 M  20-16#
	80 M  12-16# 3-12# coaxial	15 I  13-20# 2-8# Double coaxial	02 M  65-22D	16 II  16-16#	39a M  8-16# 31-22D
	61 N  6-16# 55-22D	70 M  20-16#			

Contact specification: 22D, 20#, 16#, 12#, 12# shield, 12# coaxial, 10#, 8# double coaxial, 8#

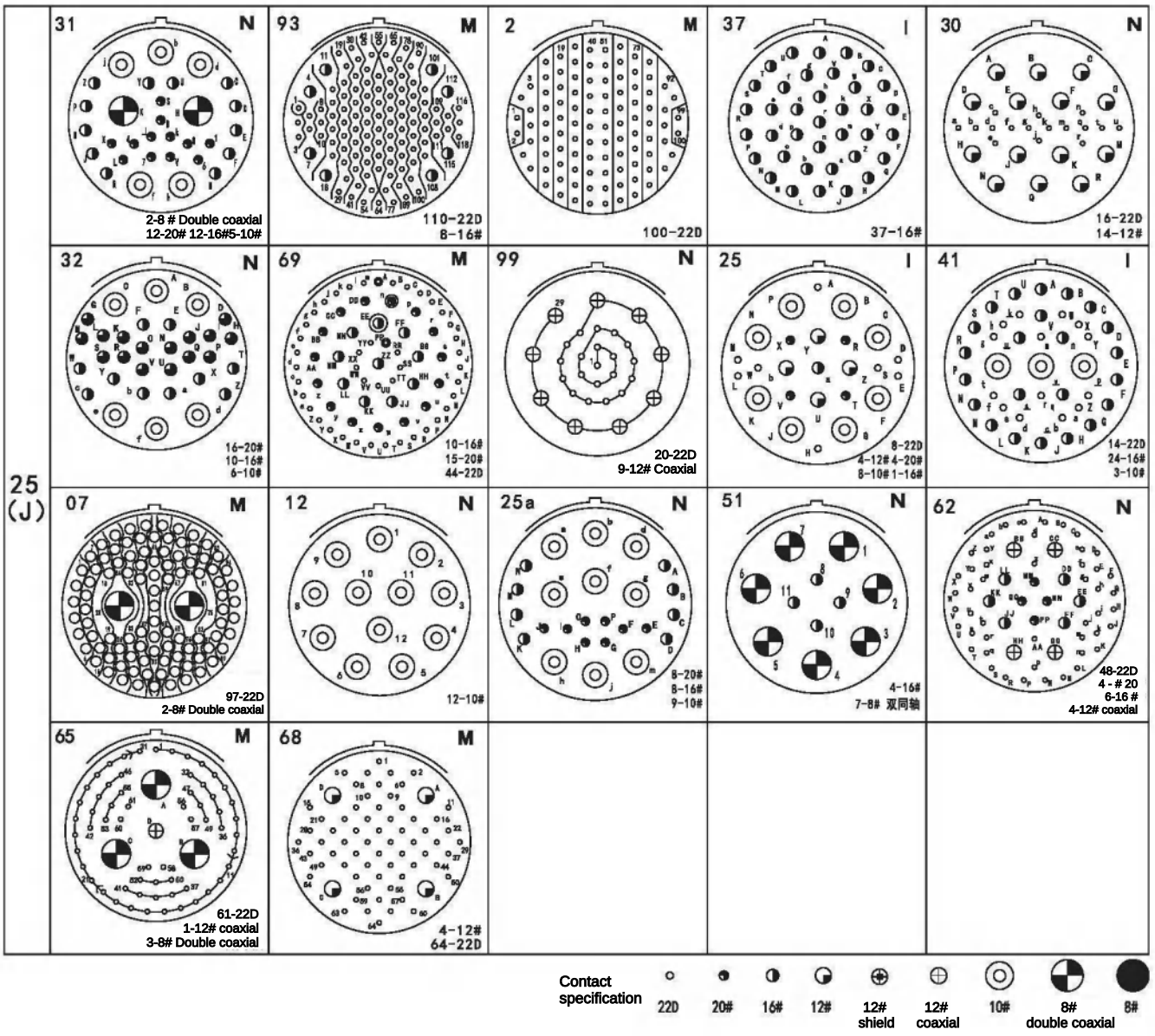
Tel: 86-10-57891098 MP:86-13001179378 or 13146881693
Mail: info@hlkpint.com or lucyliu0807@163.com

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

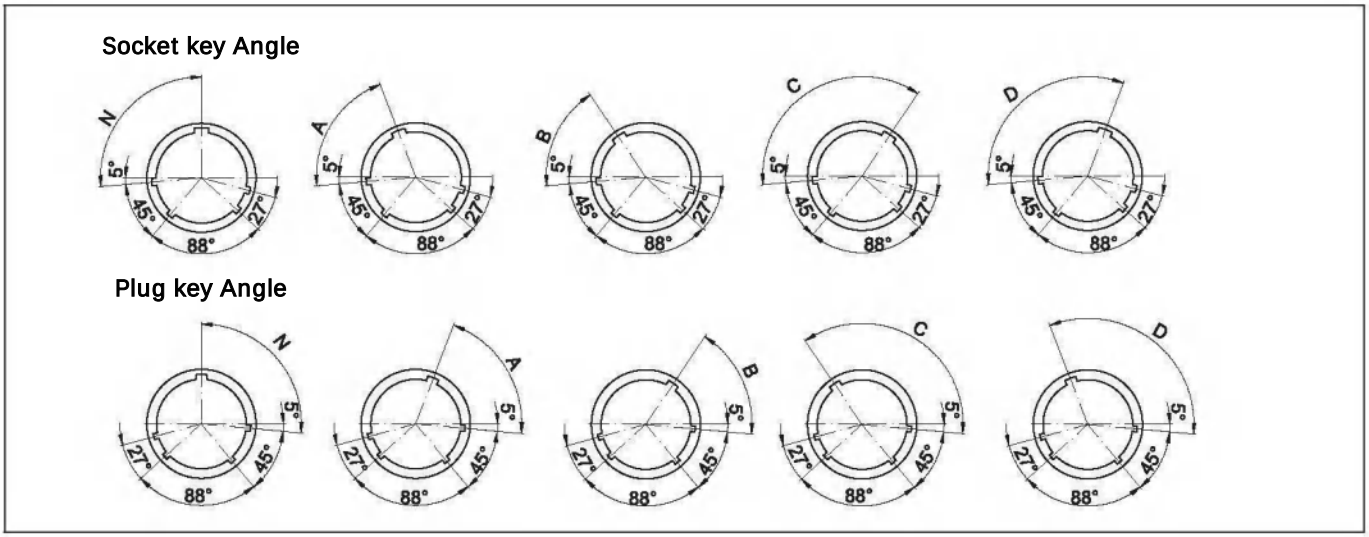
23 (H)	35 M  100-22D	55 I  55-20#	53 I  53-20#	36 I  36-20#	34 I  34-20#
	32 I  32-20#	21 II  21-16#	97 I  16-16#	99 II  11-16#	2 M  85-22D
	09a M  2-22D 2-12# 5-10#	37 I  31-20# 6-12#	14 M  14-12#	15 N  16-16# 3-8# Double coaxial	29 M  29-16#
	36a I  36-20#	54a N  36-22D 4-20#, 4-8# double coaxial	04 I  4-8#		
25 (J)	35 M  128-22D	61 I  61-20#	46 I  4 - # 20 4-16 # 2-8# Double coaxial	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#	11 N  2-20# 9-10#	20 N  10-20 # 13-16 # 1-12# Coaxial, 3-12# shielded 3-8# Double coaxial

Contact specification

HL-JB599I series (MIL-DTL- -38999I series) electrical connector



Housing key

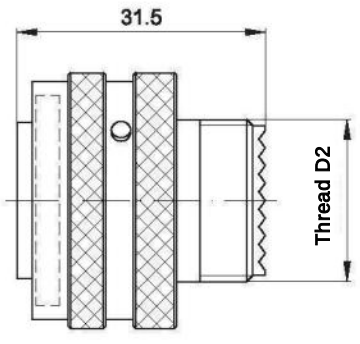


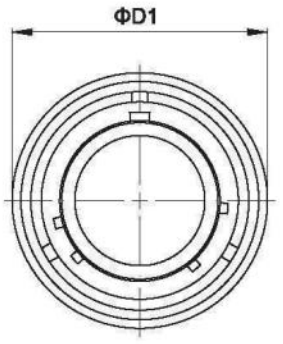
HL-JB599I series (MIL-DTL- -38999I series) electrical connector

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

Overall dimension

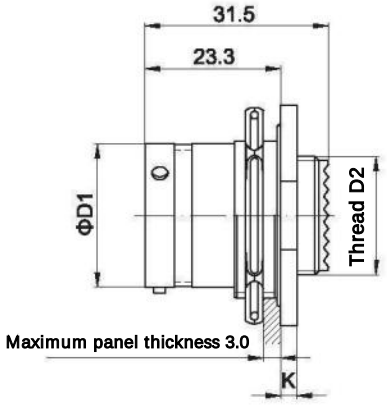
【Plug 27467】

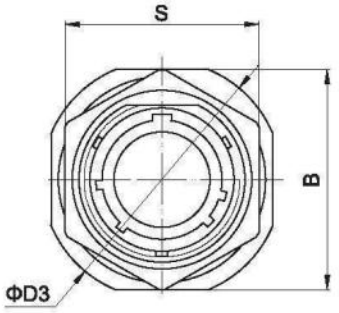


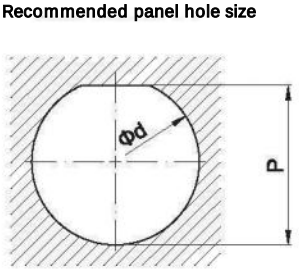


Shell number	D1	Thread D2UNEF-2A
09	21.8	0.4375–28
11	25.0	0.5625–24
13	29	0.6875–24
15	32.4	0.8125–20
17	35.47	0.9375–20
19	38.38	1.0625–18
21	41.05	1.1875–18
23	44.86	1.3125–18
25	47.86	1.4375–18

【Nut mounting socket 27468】





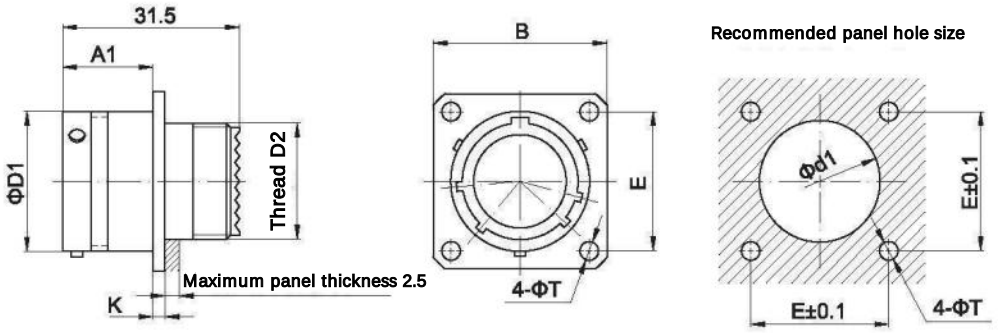


Shell number	D1	Thread D2UNEF-2A	D3	K	B	S	d	P
09	14.53	0.4375–28	30.18	2.77	26.97	22.66	17.7	17.0
11	17.78	0.5625–24	34.93	2.77	31.75	25.5	21.0	19.6
13	21.59	0.6875–24	38.1	2.77	34.93	30.61	25.6	24.3
15	24.77	0.8125–20	41.28	2.77	38.1	33.4	28.8	27.6
17	27.94	0.9375–20	44.45	2.77	41.28	36.96	32.0	30.7
19	30.66	1.0625–18	49.23	3.56	46.02	40.11	35.2	33.9
21	33.83	1.1875–18	52.37	3.56	49.23	43.81	38.3	37.1
23	37.01	1.3125–18	55.58	3.56	52.37	46.46	41.5	40.0
25	40.18	1.4375–18	58.72	3.56	55.58	51.23	44.7	43.4

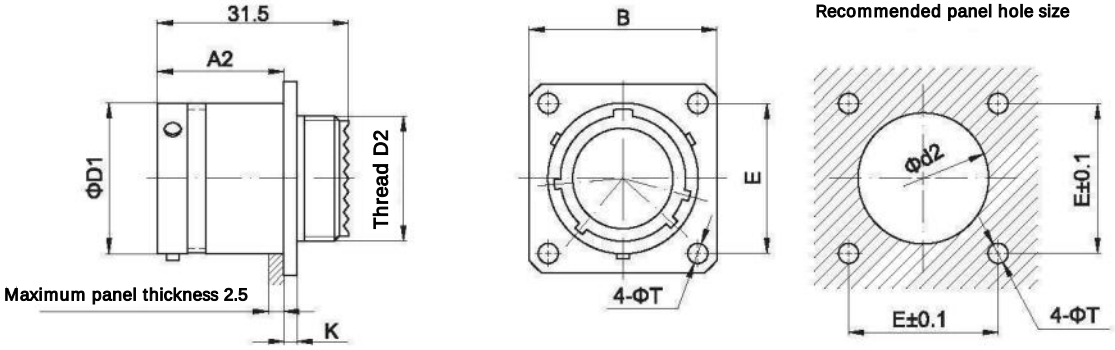
HL-JB599I series (MIL-DTL- -38999I series) electrical connector

【Wall socket 27466 27656】

Wall type square front socket (27466)



Wall type square tray rear socket (27656)

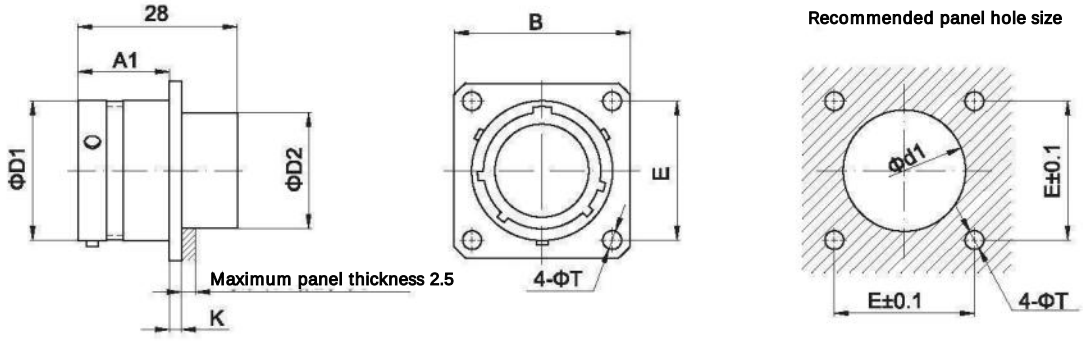


Shell number	D1	Thread D2UNEF-2A	A1	A2	K	B	E	T	d1	d2
09	14.53	0.4375–28	16.05	20.83	2.16	23.83	18.26	3.3	12.5	16.7
11	17.78	0.5625–24	16.05	20.83	2.16	26.19	20.62	3.3	15.5	20.2
13	21.59	0.6875–24	16.05	20.83	2.16	28.58	23.02	3.3	19.5	24.5
15	24.77	0.8125–20	16.05	20.83	2.16	30.96	24.62	3.3	21.5	27.7
17	27.94	0.9375–20	16.05	20.83	2.16	33.32	26.98	3.3	25.0	30.9
19	30.66	1.0625–18	16.05	20.83	2.16	36.5	29.36	3.3	28.0	32.9
21	33.83	1.1875–18	15.29	20.07	2.92	39.67	31.76	3.3	31.5	36.2
23	37.01	1.3125–18	15.29	20.07	2.92	42.88	34.92	3.7	34.5	39.3
25	40.18	1.4375–18	15.29	20.07	2.92	46.02	38.10	3.7	37.5	42.5

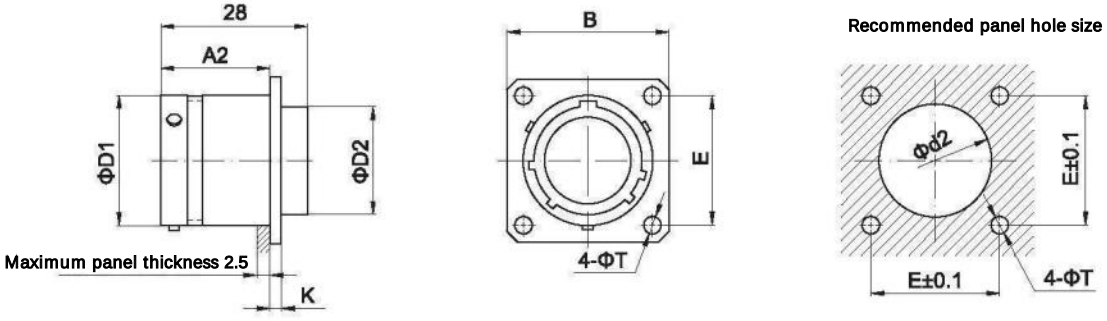
HL-JB599I series (MIL-DTL- -38999I series) electrical connector

【Box socket 27496 27505】

Box front socket (27496)



Box type Square Tray rear socket (27505)

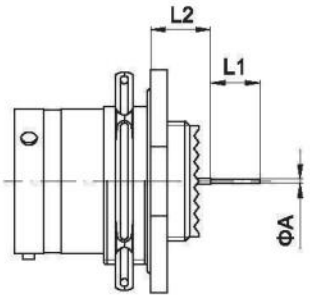


Shell number	D1	D2	A1	A2	K	B	E	T	d1	d2
09	14.53	11.0	16.05	20.83	2.16	23.83	18.26	3.3	12.5	16.7
11	17.78	14.2	16.05	20.83	2.16	26.19	20.62	3.3	15.5	20.2
13	21.59	17.35	16.05	20.83	2.16	28.58	23.02	3.3	19.5	24.5
15	24.77	20.52	16.05	20.83	2.16	30.96	24.62	3.3	21.5	27.7
17	27.94	23.77	16.05	20.83	2.16	33.32	26.98	3.3	25.0	30.9
19	30.66	26.95	16.05	20.83	2.16	36.5	29.36	3.3	28.0	32.9
21	33.83	30.12	15.29	20.07	2.92	39.67	31.76	3.3	31.5	36.2
23	37.01	33.3	15.29	20.07	2.92	42.88	34.92	3.7	34.5	39.3
25	40.18	36.47	15.29	20.07	2.92	46.02	38.10	3.7	37.5	42.5

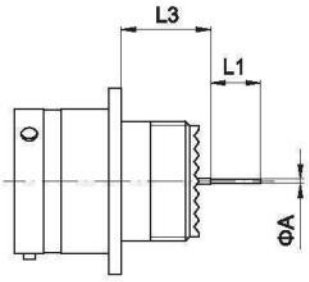
HL-JB599I series (MIL-DTL- -38999I series) electrical connector

【HL-JB599I series socket with printed board type contact】

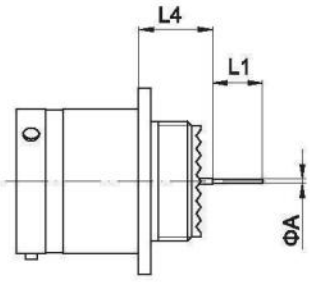
27468 socket



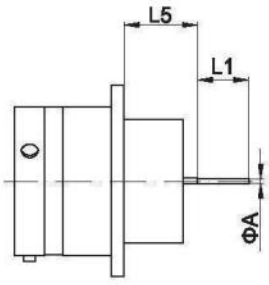
27466 socket



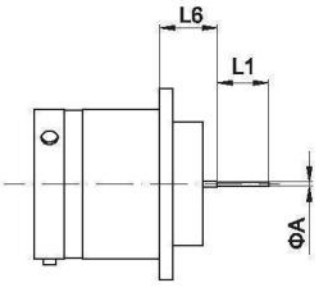
27656 socket



27496 socket



27505 socket



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	5.0	
16#	Long printed board contact	8.5	1.15
	Short printed board contact	5.0	

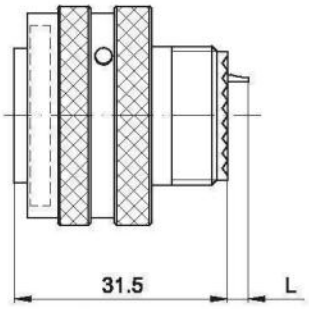
The dimensions of the contact parts with different specifications			Shell number 09–11–13–15–17–19	Shell number 21–23–25
L2	When installing the 22D# pin	Max	10.06	10.06
		minimum	9.06	9.06
	When installing 22D# jack	Max	10.06	10.06
		minimum	8.74	8.74
	When installing 20# or 16# pins and jacks	Max	10.23	10.23
		minimum	9.24	9.24
L3	When installing the 22D# pin	Max	15.08	15.08
		minimum	13.91	13.91
	When installing 22D# jack	Max	15.08	15.08
		minimum	13.58	13.58
	When installing 20# or 16# pins and jacks	Max	15.25	15.25
		minimum	14.08	14.08
L4	When installing the 22D # pin	Max	12.47	13.22
		minimum	11.60	12.35
	When installing 22D# jack	Max	12.47	13.22
		minimum	11.27	12.02
	When installing 20# or 16# pins and jacks	Max	12.64	13.39
		minimum	11.77	12.52

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

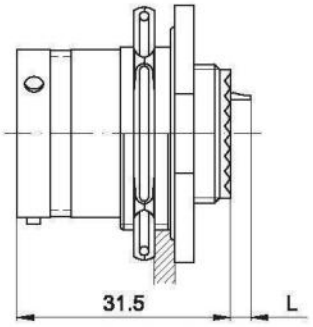
The dimensions of the contact parts with different specifications			Shell number 09–11–13–15–17–19	Shell number 21–23–25
L5	When installing the 22D# pin	Max	11.08	11.08
		minimum	9.91	9.91
	When installing 22D# jack	Max	11.08	11.08
		minimum	9.58	9.58
	When installing 20# or 16# pins and jacks	Max	11.25	11.25
		minimum	10.08	10.08
L6	When installing the 22D# pin	Max	8.47	9.22
		minimum	7.60	8.35
	When installing 22D# jack	Max	8.47	9.22
		minimum	7.27	8.02
	When installing 20# or 16# pins and jacks	Max	8.64	9.39
		minimum	7.77	8.52

【HL-JB599 1 series welding product dimensions】

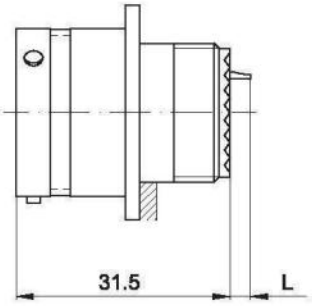
27467 plug



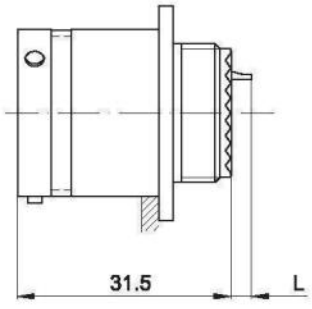
27468 socket



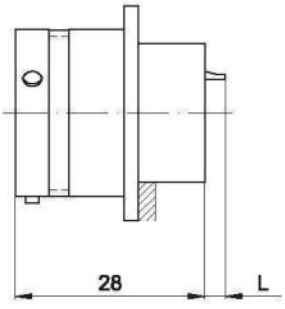
27466 socket



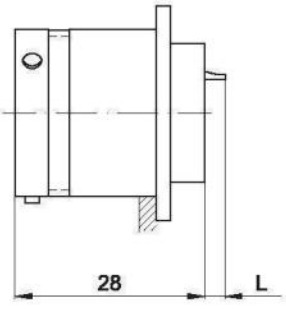
27656 socket



27496 socket



27505 socket



Welded contact specifications	L	Inside diameter of welded wire cup	Maximum Adapter Wire Gauge (AWG)
22D#	3	Φ0.9	22
20#	3	Φ1.1	20
16#	3	Φ1.9	16
12#	3	Φ2.9	12
10#	6	Φ3.6	8
8#	6	Φ4.8	6

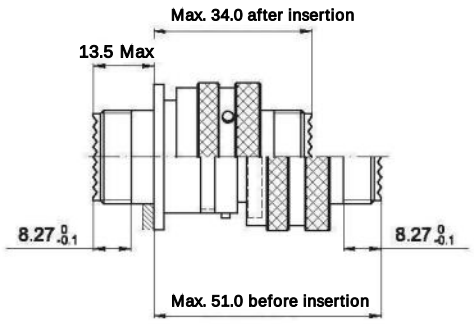
Note: Coaxial contact without welded contact.

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

【Plug socket fitting size】

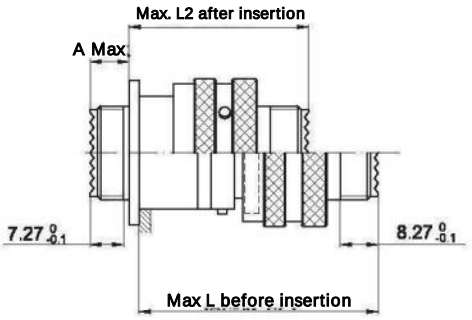
Wall type square plate front mounting

Socket (27466)/Plug (27467)



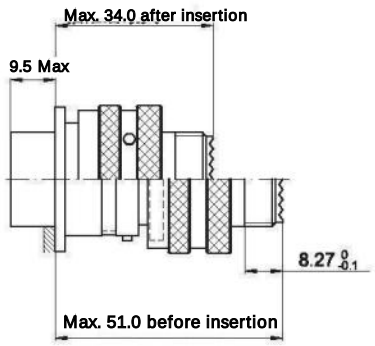
Wall type square plate after installation

Socket (27656} / Plug (27467)



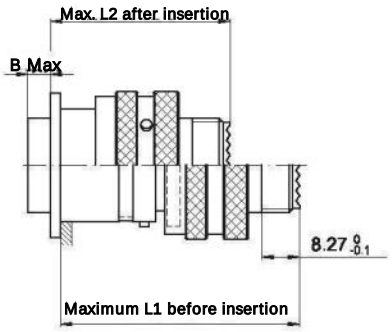
Box square plate front loading

Socket (27496)/Plug (27467)

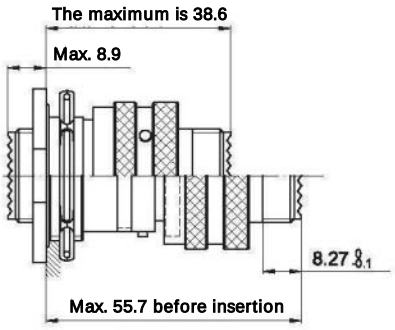


Box type square tray after loading

Socket (27505)/Plug (27467)



Nut mounting socket (27468)/ Plug (27467)



Note: For a head seat that can be attached to a tail attachment, the total dimension of the attached attachment is the sum of the total length of the head seat and the total length of the attachment minus the thread length (i.e., the thread length).

Shell number		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

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Plug socket seal cover

Model designation

	J27501	F	17	C	L

Base element number

27501- Plug seal cover (corresponding to US military component number MS27501)
27502- Socket seal cover (corresponding to US military component number MS27502)

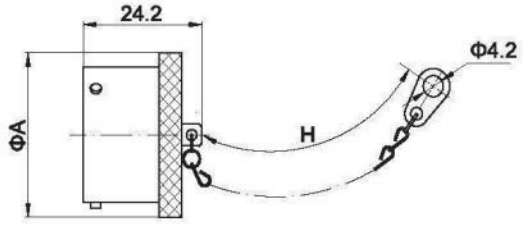
Surface coating	B- Cadmium plated army green F- electroless nickel plating E-stainless steel passivation
Shell number	09, 11, 13, 15, 17, 19, 21, 23, 25
Shell coating	A- No chain N- Stainless steel twisted chain band (suitable for 27468 socket) C-stainless steel twisted belt Connector R-Silk rope Belt connector (black) S-stainless steel wire rope with connecting piece
Length marker	Unmarked a standard length L- Chain length is 127mm M- Chain length 152.4mm (only for 27501) N- Chain length 177.8mm (only for 27501)

Note: The seal cover should be ordered separately, not supplied with the connector.

Overall dimension

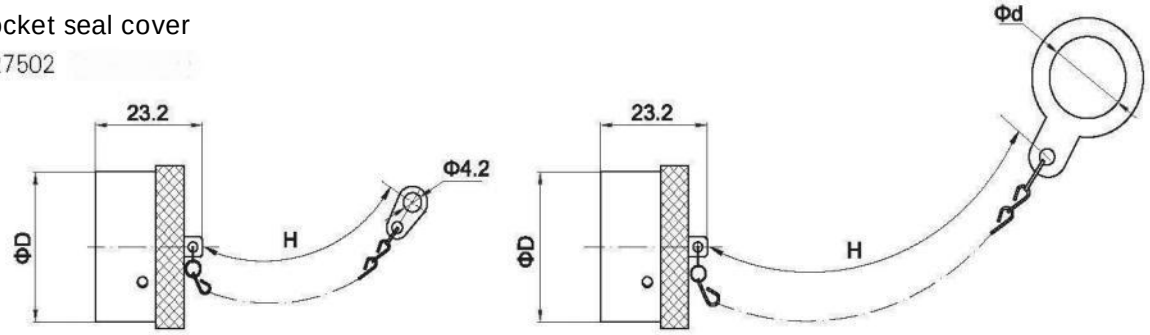
Plug seal cap

J27501



Socket seal cover

J27502



Shell number		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	MAX	18.0	21.1	26.0	29.0	32.4	35.5	38.6	42.0	44.7
H	MAX	76.2	76.2	92.9	92.9	92.9	92.9	101.6	101.6	101.6

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Standard tail accessories (for HL-JB599 I Series and HL-JB599 II 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: The "J1784" mentioned in the following attachment model number is the same as "J1784A".

The model name

	J1784/	27–	14	N

Base element number

Detail specification number: 27-A type tail nuts; 49-B straight cable clamp; 47-C bent cable clamp; Type 62-D shielded end tail attachment (" T "before basic element number); 62- Heat shrink sleeve tail attachment

Accessory housing number	08	10	12	14	16	18	21	22	24
Applicable to HL-JB599 I series housing number	09	11	13	15	17	19	21	23	25
Applicable to HL-JB599 I series housing number	08	10	12	14	16	18	20	22	24

Shell coating: W- cadmium plated army green; N- electroless nickel plating; S-stainless steel passivation

Note : ① The model names of HL-JB 1784 and MIL-C-85049 are identical except that the basic component numbers are different. The basic component number of the HL-JB 1784 is "J1784", and the main designation of the MIL-C-85049 is "M85049", which are interchangeable.

② The shell number of the upper cable attachment should be even. It is forbidden to use odd numbers as shell numbers.

Model comparison

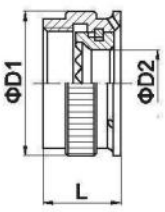
HL-JB 1784 accessory model	Accessory models in the industry
J1784/27–×W J1784/27–×N	HA–B× HA–F×
J1784/49–×W J1784/49–×N	HB–B× HB–F×
J1784/47–×W J1784/47–×N	HC–B× HC–F×
TJ1784/62–×W TJ1784/62–×N	HD–B× HD–F×
TJ1784/62–×WB TJ1784/62–×NB	HE–B× HE–F×

(The "x" in the table indicates the shell number, and it is recommended that users prioritize ordering according to the accessory model of HL-JB1784.)

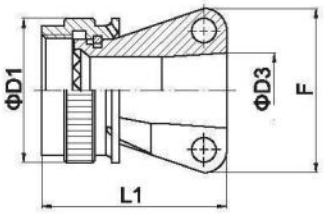
HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Overall dimension

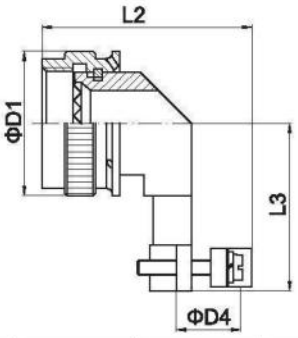
J1784/27-(HA type) tail nut



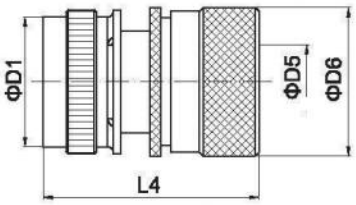
J1784/49-(HB type) Straight cable clamp



J1784/47-(HC type) Bent cable clamp

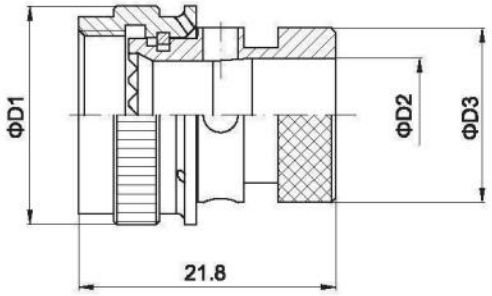


TJ1784/62-(HD type) shielded end to tail attachment



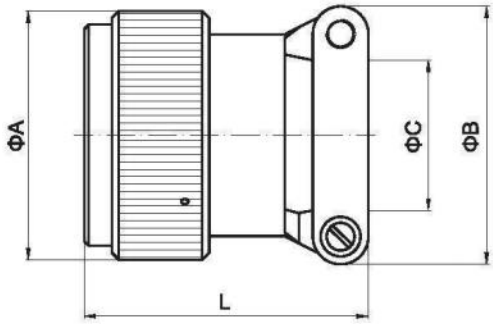
Shell number		08	10	12	14	16	18	20	22	24
D1	MAX	15.6	18.6	21.8	25.0	28.2	31.0	34.2	37.3	40.5
D2	MAX	13.7	14.3	17.5	20.7	23.9	26.7	29.9	33.0	36.2
D3	MIN	3.2	4.8	6.5	7.4	8.1	8.8	9.3	9.8	10.3
	MAX	6.3	8.8	12.6	16.0	19.3	21.8	25.0	28.0	31.5
D4	MIN	3.2	4.8	6.5	7.4	8.1	8.8	9.3	9.8	10.3
	MAX	6.0	9.8	11.0	14.0	17.0	20.0	23.0	26.0	29.0
D5	MAX	7.0	10.0	13.0	16.05	19.05	21.6	24.3	26.3	28.9
D6	MAX	13.3	15.2	19.5	21.09	24.26	26.27	32.5	34.22	36.8
F	MAX	18.6	21.6	24.8	28.0	31.2	34.0	37.2	40.3	43.5
L	MAX	10.2	10.2	10.2	10.2	10.2	12.3	12.3	12.3	14
L1	MAX	22.3	24.3	24.3	24.3	24.3	24.3	24.3	26.3	28.8
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	22.7	22.7	22.7	22.7	22.7	25.4	25.4	25.4	27.2

J1784/62- Heat shrink sleeve tail attachment



Model number	D1	D2	D3
J1784/62—08N	15.6	7	13.5
J1784/62—10N	18.6	10	15.2
J1784/62—12N	21.7	13	19.5
J1784/62—14N	25.0	16.05	21.09
J1784/62—16N	28.2	19.05	24.26
J1784/62—18N	30.9	21.6	26.27
J1784/62—20N	34.2	24.8	30.8
J1784/62—22N	37.7	28	34.2
J1784/62—24N	40.4	31.5	36.8

J1784/49H straight cable clamp



Shell number	A Max	B	C	L Max
09	16.9	20.0	3.2~6.3	26.4
11	20.9	22.0	4.8~8.8	27.9
13	24.0	25.0	6.5~12.6	29.4
15	27.0	28.3	7.4~16.0	30.9
17	31.0	31.5	8.1~19.0	33.1
19	33.0	34.3	8.8~21.8	36.2
21	36.0	37.5	9.3~25.0	39.4
23	39.0	40.5	9.8~28.0	42.5
25	42.0	43.8	10.3~31.0	44.6

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Model designation

Base series number	J1784/	18A—	25	N	09	A	
Detail specification number	18A- Straight Shielded cable clamp (for HL-JB599 I, II series)						
Shell number	See Table 1						
Shell coating	W- cadmium plated army green	N- electroless nickel plating	S-stainless steel passivation				
Emergence number	See Table 2						
Length numbering	See Table 3						

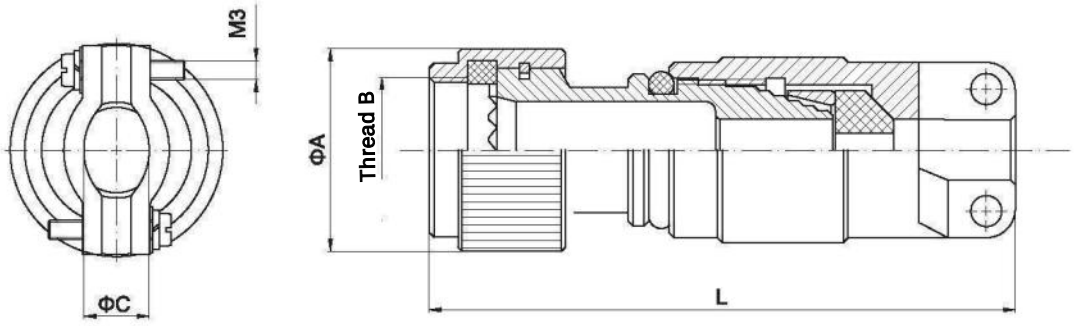


Table 1

Shell number	Line diameter number can be selected	A	Thread B
9	01～02	16.9	0.4375—28UNEF
11	01～03	20.9	0.5265—24UNEF
13	02～04	24.0	0.6875—24UNEF
15	02～05	27.0	0.8125—20UNEF
17	02～06	31.0	0.9375—20UNEF
19	03～07	33.0	1.0625—18UNEF
21	03～08	36.0	1.1875—18UNEF
23	03～09	39.0	1.3125—18UNEF
25	04～10	42.0	1.4375—18UNEF

Table 2

Line diameter number can be selected	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)	62.7
9～25	A	88.1
15～25	B	113.5
21～25	C	138.9

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Special tail accessories (for HL-JB599I series and HL-JB599II series electrical connectors)

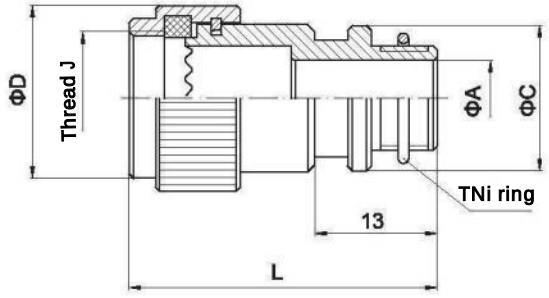
This type of tail attachment is especially suitable for the clamping of shielded cables with shielding nets, and is divided into two categories: straight and curved. The accessory can be optional Ti-Ni alloy memory ring with alloy memory, through heating, make it shrink, the shielding network tight at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

Note: Heat contraction of Ti-Ni alloy memory ring: it can be heated with a heat gun for about 45 seconds to 1 minute. When the temperature color indicator on the memory ring changes from green to black, the memory ring contraction is complete. At this time, the temperature of the ring is 165°C, and the heating is stopped. Pay attention to ensure that the memory ring is heated evenly when heating.

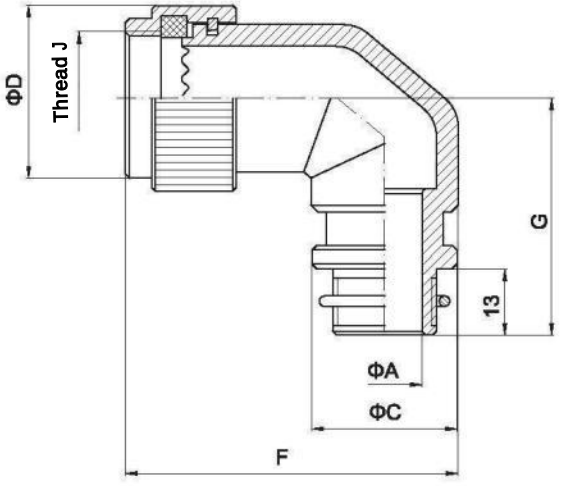
Base series number	J599	I	15	FJA	00	F	A	—05
Serial code	I (HL-JB599 I, II series general)							
Shell number	Applicable to HL-JB599 I series housing No. 09, 11, 13, 15, 17, 19, 21, 23, 25 Applicable to HL-JB599 II series housing No. 08, 10, 12, 14, 16, 18.20, 22, 24							
Attachment type	FJA							
Structural form	00- Straight tail attachment 90-90° bent tail attachment							
Shell coating	B- Cadmium plated army green F- electroless nickel plating E-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]

Straight attachment (5991-FJA00)



Bending accessories (599 | -FJA90}



Serial number	Shell number	Ti-Ni ring specifications	Shielding mesh specifications (tinned copper wire diameter)	A Outlet diameter		C		F	L	D	G	Thread J UNEF—2B
				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	36.3	31.7	17	26	0.4375—28
		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	9.5	17.1	15.0					
2	11	TR—04	6×10 (0.15~0.20)	6.3	6.3	14.0	14.0	37.8	31.7	21	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 (0.15~0.20)	11.1	11.1	18.7	18.0					
		TR—08	16×24 (0.12~0.25)	12.7	12.7	20.3	18.0					

HL-JB599I series (MIL-DTL- -38999I series) electrical connector

Serial number	Shell number	Ti-Ni ring specifications	Shielding mesh specifications (tinned copper wire diameter)	A Outlet diameter		C		F	L	D	G	Thread J UNEF—2B
				Straight type	Bending type	Straight type	Bending type					
3	13	TR—04	6×10 (0.15~0.20)	6.3	6.3	14.0	14.0	43.3	31.7	24	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)	16.0	16.0	23.5	23.0					
4	15	TR—05	10×16 (0.15~0.20)	7.9	—	15.5	—	45.1	33.6	27	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)	16.0	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	—	48.8	33.6	31	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)	16.0	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	28.0					
6	19	TR—08	16×24 (0.12~0.25)	12.7	12.7	20.3	20.3	51.6	33.6	34	33	1.0625—18
		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	53.8	33.6	37	39	1.1875—18
		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	—					
8	23	TR—10	16×24 (0.10~0.30)	16.0	16.0	23.5	23.5	56.3	33.6	40	39	1.3125—18
		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	61.8	31.8	43	44	1.4375—18
		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					