JT

MIL-DTL-38999 Series II
Subminiature cylindrical connectors



GENERAL CHARACTERISTICS

Main features

- **Shell material**
  - Aluminium alloy
  - Carbon steel (for hermetic versions)
- **Finish**
  - Olive drab cadmium plating
  - Electroless nickel plating
  - Others (please consult us)
- 9 shell sizes from 08 to 24
- **Contacts**
  - More than 50 arrangements of contacts, including high density versions
  - Size 12, 16, 20, 22 D contacts
  - Crimp, PCB, signal and power contacts (cable soldering contacts are not included in this brochure, please consult us)
- **Contact protection**
  - improved interfacial seal ensures sealing around each contact
- **EMI/RFI protection**
  - Optional grounding fingers on the plug shell
- **Very low profile and light weight**

Additional information

- Contacts
  (please refer to data sheet E114)
- Tooling
  (please refer to data sheet E119)
- Rear accessories
  (please refer to data sheet E121)

DESCRIPTION

The JT connectors are in accordance with MIL-DTL-38999 series II standard. These connectors were developed to meet the needs of the aerospace industries. They offer a large variety of contact arrangements and shell styles, with maximum weight/space savings and reliability.

Light weight & space saving designed connectors for aerospace

APPLICATIONS

- **Military and aeronautic applications**
- **Applications requiring very low profile**

Amphenol

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Mechanical characteristics

- Thermoplastic insert
- Fluorinated silicone back insert and interfacial seal
- Durability: 500 cycles
- Contact retention force

Contact size	22D	20	16	12
Maximal load (N)	45	67	110	110

Environmental characteristics

- **Salt spray exposure and working temperature:**

Waterproof shells

Shell material	Shell finish	Salt spray exposure per MIL. STD 1344/1009	Working temperature	
			mini	maxi
Aluminium	Electroless nickel	48 H	-65°C	+200°C
	Olive Drab cadmium	500 H	-65°C	+175°C

Hermetic shells

Shell material	Shell finish	Salt spray exposure per MIL. STD 1344/1009	Working temperature	
			mini	maxi
Carbon	—	500 H	-65°C	+200°C

- **Humidity:** per MIL - DTL - 38999: § 3.29
- **Air leakage:** < 1.10^{-7} cm^3 /s under 1 bar of pressure differential (hermetics only)
- **Fluid resistance (per MIL - DTL - 38999), § 3.33:**
  - MIL-L-7808 (lubricating oil)
  - MIL-L-23699 (lubricating oil)
  - MIL-H-5606 (hydraulic fluid)
  - Hydraulic fluid (Chevron M2V)
  - MIL-A-8243 (defrosting fluid)
  - MIL-C-87936 type I
  - MIL-T-5624 (JP5)
  - MIL-C-47220 or Coolanol 25 or equivalent
  - MIL-G-3056 type I (gasoline)
  - Isopropyl alcohol per TT-I-735 grade A or B mixed with mineral spirit TT-T-291 type 1 or P-D-680 type I

Electrical characteristics

• **Contact rating:** nominal current per contact

Contact size	22D	20	16	12
Crimp (A)	5	7.5	13	23
Hermetic (A)	3	5	10	17

• **Contact resistance**

Contact size	22D	20	16	12
Contact resistance (mΩ)	8	4.7	2	1.1

• **Insulation resistance**

Insulation resistance (500 V)	Crimp	Hermetic
Ambiant temperature	$\geq 10^5$ MΩ	$\geq 5 \times 10^3$ MΩ
Maximal temperature	$\geq 10^3$ MΩ	$\geq 5 \times 10^2$ MΩ

• **Service rating**

Service	Dielectric withstanding voltage (Vrms)								Working voltage	
	At sea level		15000 meters		21000 meters		34000 meters			
	mated	unmated	mated	unmated	mated	unmated	mated	unmated	Vrms	Vdc
M	1300	1300	800	550	800	350	800	200	400	550
N	1000	1000	—	400	—	260	—	200	300	450
I	1800	1800	1000	600	1000	400	1000	200	600	850
II	2300	2300	1000	800	1000	500	1000	200	900	1250

• **Dimensions of acceptable contacts and cables**

Contact Size	Contact Diameter mm	Crimp barrel Diameter mm	Crimp barrel Depth mm	Acceptable cables Gauge AWG / Section mm²				Outside diameter (mm) Min	Average	Max
22D	0.76	0.88+/-0.03	3.58	22	24	26	28	0.76	1.20	1.37
				0.38	0.22	0.15	0.095			
20	1	1.19+/-0.03	5.30	20	22	24		1.02	1.83	2.11
				0.60	0.38	0.22				
16	1.57	1.70+/-0.03	5.30	16	18	20		1.68	2.41	2.77
				1.34	0.93	0.60				
12	2.36	2.54+/-0.06	5.30	12	14			2.46	3.20	3.61
				3.30	1.94					

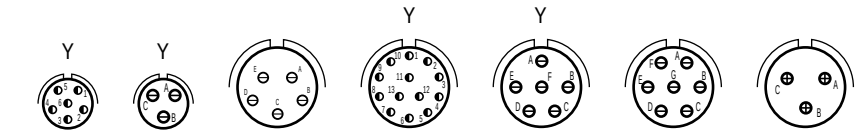
Insert arrangements

Front face view of male insert

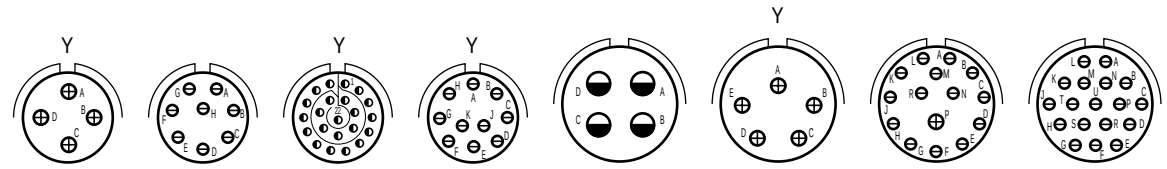
The major keyway is shown in the «normal» position

Contact size	22D	20	16	12
Caption	◐	⊖	⊕	◒

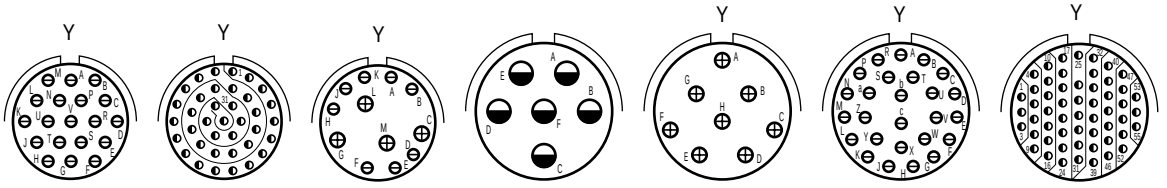
① Insert arrangement reference
② Service class
③ Number of contacts
④ Contact sizes



①	8-35	8-98	10-05	10-35	10-98	10-99	12-03
②	M	I	I	M	I	I	II
③	6	3	5	13	6	7	3
④	22D	20	20	22D	20	20	16



①	12-4	12-8	12-35	12-98	14-04	14-05	14-15	14-18
②	I	I	M	I	I	M	I	I
③	4	8	22	10	4	5	14 1	18
④	16	20	22D	20	12	16	20 16	20



①	14-19	14-35	14-97	16-06	16-08	16-26	16-35
②	I	M	I	I	II	I	M
③	19	37	8 4	6	8	26	55
④	20	22D	20 16	12	16	20	22D

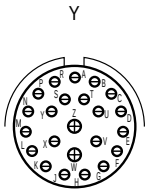
Insert arrangements

Front face view of male insert

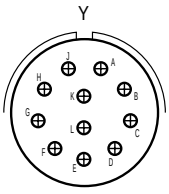
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Contact size	22D	20	16	12
Caption	◐	⊖	⊕	◒

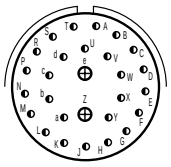
① Insert arrangement reference
② Service class
③ Number of contacts
④ Contact sizes



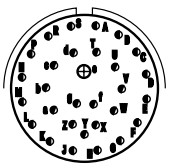
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② I
③ 21 2
④ 20 16



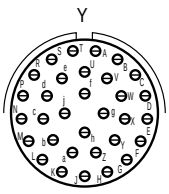
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II
11
16



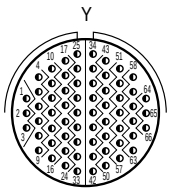
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I
26 2
20 16



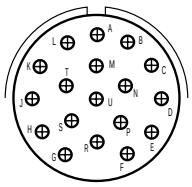
18-30
I
29 1
20 16



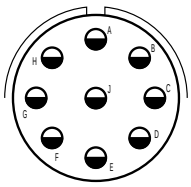
18-32
I
32
20



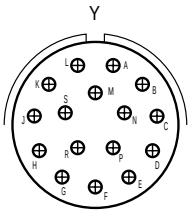
18-35
M
66
22D



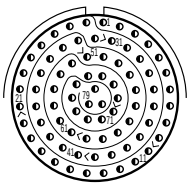
① 18-68
② I
③ 18
④ 16



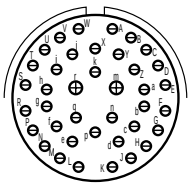
18-96
I
9
12



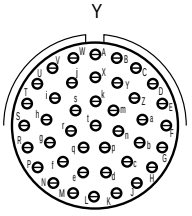
20-16
II
16
16



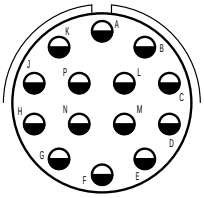
20-35
M
79
22D



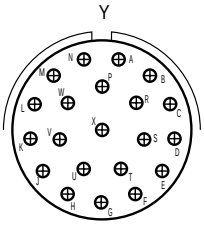
20-39
I
37 2
20 16



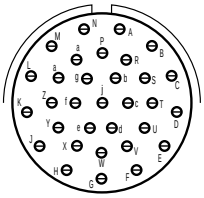
20-41
I
41
20



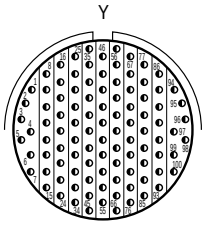
① 22-14
② I
③ 14
④ 12



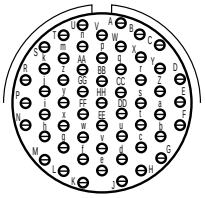
22-21
II
21
16



22-32
I
32
20



22-35
M
100
22D



22-55
I
55
20

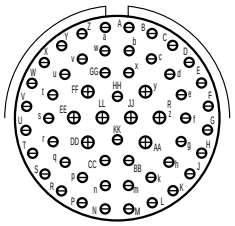
Insert arrangements

Front face view of male insert

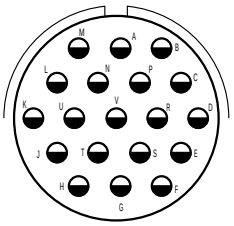
The major keyway is shown in the «normal» position

Contact size	22D	20	16	12
Caption	◐	⊖	⊕	◒

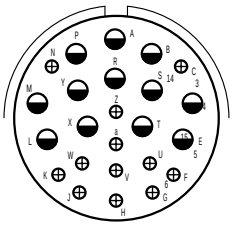
① Insert arrangement reference
② Service class
③ Number of contacts
④ Contact sizes



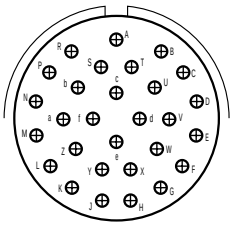
① 24-04
② I
③ 48 8
④ 20 16



24-19
I
19
12

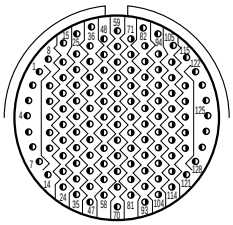


24-24
I
12 12
16 12



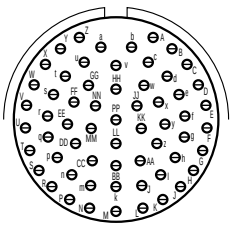
24-29
I
29
16

Y



24-35
M
128
22D

Y



① 24-61
② I
③ 61
④ 20

Y: Available in hermetic version

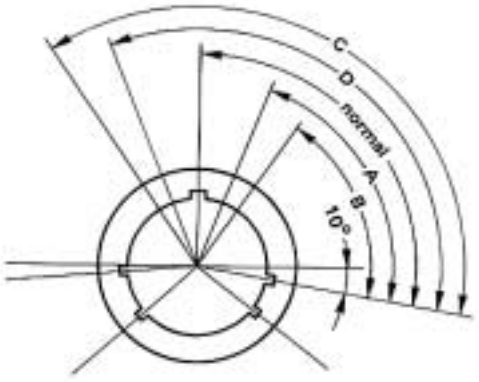
Insert arrangements

Arrangements of contacts	Hermetic (Y)	Service Rating	Total Contacts	Number and Size of Contacts			
				22D	20	16	12
08-35	x	M	6	6			
08-98	x	I	3		3		
10-05		I	5		5		
10-35	x	M	13	13			
10-98	x	I	6		6		
10-99		I	7		7		
12-03	x	II	3			3	
12-04	x	I	4			4	
12-08	x	I	8		8		
12-35	x	M	22	22			
12-98	x	I	10		10		
14-04		I	4				4
14-05	x	II	5			5	
14-15	x	I	15		14	1	
14-18	x	I	18		18		
14-19		I	19		19		
14-35	x	M	37	37			
14-97	x	I	12		8	4	
16-06	x	I	6				6
16-08	x	II	8			8	
16-26	x	I	26		26		
16-35	x	M	55	55			
16-99	x	I	23		21	2	
18-11	x	II	11			11	
18-28	x	I	28		26	2	
18-30		I	30		29	1	
18-32	x	I	32		32		
18-35	x	M	66	66			
18-68		I	18			18	
18-96		I	9				9
20-16	x	II	16			16	
20-35		M	79	79			
20-39	x	I	39		37	2	
20-41	x	I	41		41		
22-14		I	14				14
22-21	x	II	21			21	
22-32		I	32		32		
22-35		M	100	100			
22-55	x	I	55		55		
24-04		I	56		48	8	
24-19		I	19				19
24-24		I	24			12	12
24-29		I	29			29	
24-35		M	128	128			
24-61	x	I	61		61		

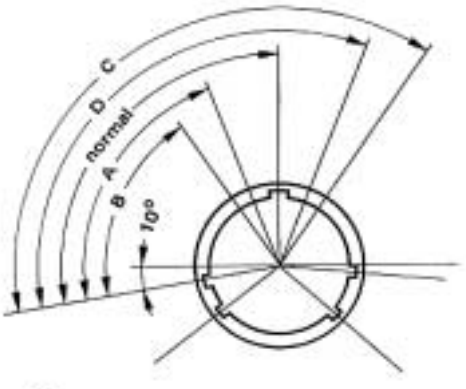
Coding - polarization

To avoid cross-plugging problems in applications requiring the use of more than one MIL-DTL-38999 II connector of the same size, alternate key-rotations are available as indicated in the chart below. As shown in the accompanying diagram, the major key rotates clockwise from the secondary ones.

In the reference system, the polarization is shown by the letters A, B, C or D.



Plug - Front face shown



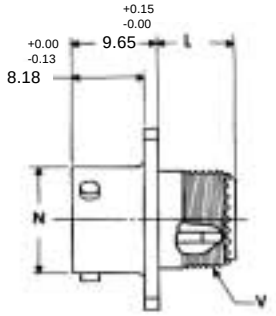
Receptacle - Front face shown

Shell size	Position of the major keyway				
	Normal	References			
		A	B	C	D
8	100°	82°	-	-	118°
10	100°	86°	72°	128°	114°
12	100°	80°	68°	132°	120°
14	100°	79°	66°	134°	121°
16	100°	82°	70°	130°	118°
18	100°	82°	70°	130°	118°
20	100°	82°	70°	130°	118°
22	100°	85°	74°	126°	115°
24	100°	85°	74°	126°	115°

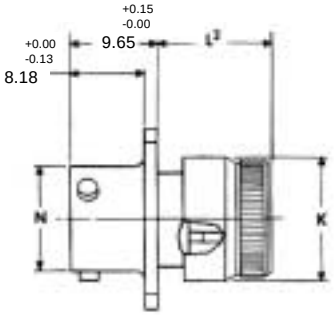
Overall dimensions (All dimensions are in mm)

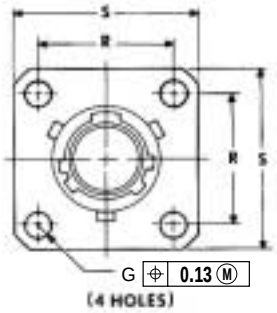
Wall mounting receptacle (front panel mounting)

JT00 RT
JMS 27472 T



JT 00RE
JMS 27472 E

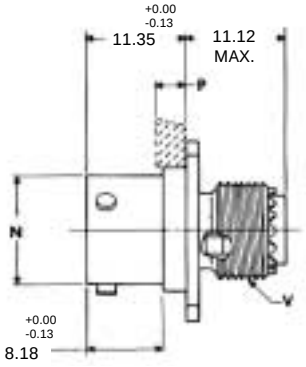




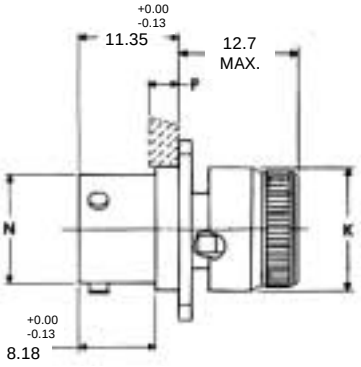
Shell Size	N Dia. +0.025 -0.13	L Max	V Thread UNEF Class 2A (plated)	L² Max	K Dia. Max	R	S ±0.41	G ±0.13
8	12.01	12.70	.4375-28	13.89	14.68	15.09	20.62	3.05
10	14.99	12.70	.5625-24	13.89	17.86	18.26	23.82	3.05
12	19.05	12.70	.6875-24	13.89	21.03	20.62	26.19	3.05
14	22.23	12.70	.8125-20	13.89	24.21	23.01	28.58	3.05
16	25.4	12.70	.9375-20	13.89	27.38	24.61	30.96	3.05
18	28.58	12.70	1.0625-18	13.89	30.56	26.97	33.32	3.05
20	31.75	12.70	1.1875-18	13.89	33.73	29.36	36.53	3.05
22	34.93	12.70	1.3125-18	13.89	36.91	31.75	39.67	3.05
24	38.10	12.70	1.4375-18	13.89	40.08	34.93	42.88	3.73

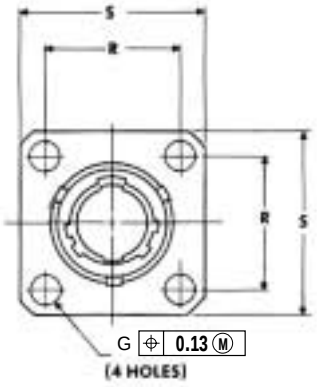
Wall mounting receptacle (back panel mounting)

JTPQ00 RT
JMS 27497 T



JTPQ00 RE
JMS 27497 E

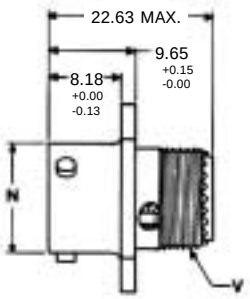




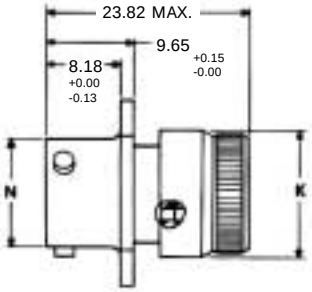
Shell Size	N Dia. +0.025 -0.13	P Max Panel Thickness	V Thread UNEF Class 2A (plated)	K Dia. Max	R	S ±0.41	G ±0.13
8	12.01	3.61	.4375-28	14.68	15.09	20.62	3.05
10	14.99	3.61	.5625-24	17.86	18.26	23.82	3.05
12	19.05	3.61	.6875-24	21.03	20.62	26.19	3.05
14	22.23	3.61	.8125-20	24.21	23.01	28.58	3.05
16	25.4	3.61	.9375-20	27.38	24.61	30.96	3.05
18	28.58	3.61	1.0625-18	30.56	26.97	33.32	3.05
20	31.75	3.61	1.1875-18	33.73	29.36	36.53	3.05
22	34.93	3.61	1.3125-18	36.91	31.75	39.67	3.05
24	38.10	3.61	1.4375-18	40.08	34.93	42.88	3.73

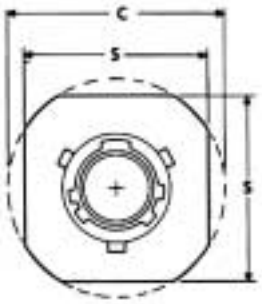
Line receptacle

JT01 RT



JT01 RE

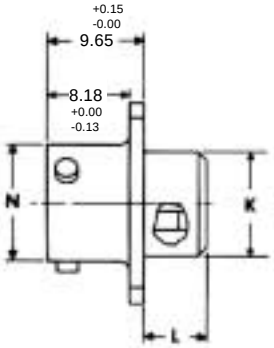


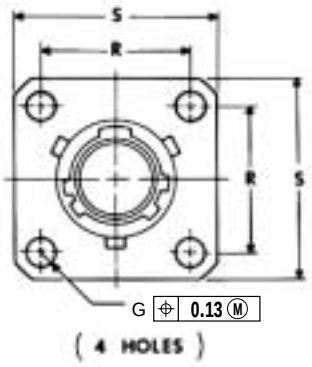


Shell Size	N Dia. +0.025 -0.13	V Thread UNEF Class 2A (plated)	K Dia. Max	C	S +0.43 -0.41
8	12.01	.4375-28	14.68	24.51	16.75
10	14.99	.5625-24	17.86	27.66	23.83
12	19.05	.6875-24	21.03	30.05	26.19
14	22.23	.8125-20	24.21	32.44	28.58
16	25.40	.9375-20	27.38	34.82	30.96
18	28.58	1.0625-18	30.56	37.21	33.32
20	31.75	1.1875-18	33.73	40.36	36.53
22	34.93	1.3125-18	36.91	43.56	39.67
24	38.10	1.4375-18	40.08	46.69	42.88

Box mounting receptacle (front panel mounting)

JT 02 RE
JMS 27499 E

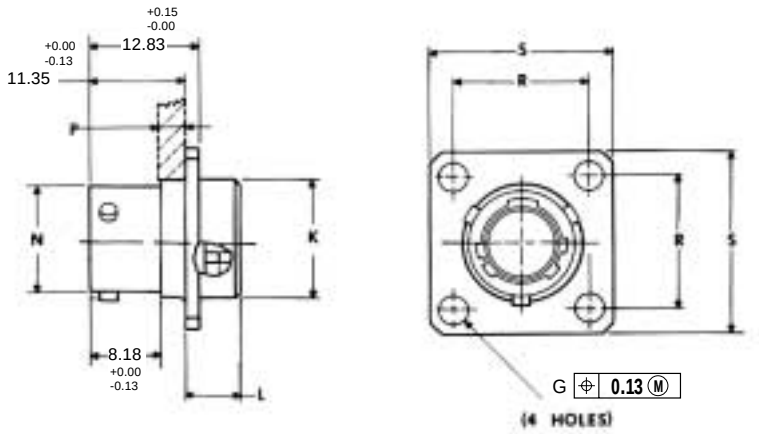




Shell Size	N Dia. +0.025 -0.13	L Max	K Dia. Max	R	S ±0.41	G ±0.13
8	12.01	7.26	11.12	15.09	20.62	3.05
10	14.99	7.26	14.30	18.26	23.82	3.05
12	19.05	7.26	17.47	20.62	26.19	3.05
14	22.23	7.26	20.65	23.01	28.58	3.05
16	25.40	7.26	23.82	24.61	30.96	3.05
18	28.58	7.26	26.59	26.97	33.32	3.05
20	31.75	7.26	29.77	29.36	36.52	3.05
22	34.93	7.26	32.94	31.75	39.67	3.05
24	38.10	7.26	36.12	34.93	42.87	3.73

Box mounting receptacle (back panel mounting)

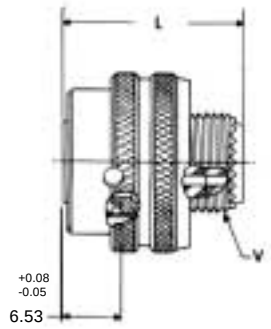
JTP02 RE
JMS 27508 E



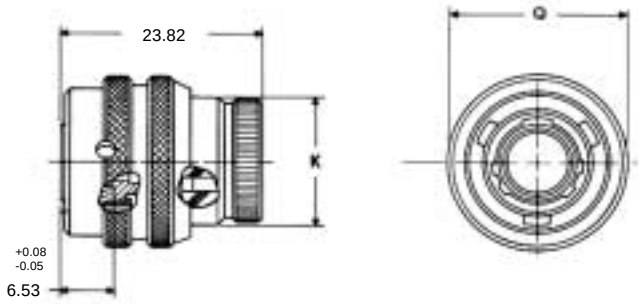
Shell Size	N Dia. +0.025 -0.13	P Max Panel Thickness	L Max	K Dia. Max	R	S ±0.41	G ±0.13
8	12.01	3.73	5.72	13.49	15.09	20.62	3.05
10	14.99	3.86	5.72	16.66	18.26	23.82	3.05
12	19.05	3.86	5.72	21.03	20.62	26.19	3.05
14	22.23	3.86	5.72	24.21	23.01	28.58	3.05
16	25.40	3.86	5.72	27.38	24.61	30.96	3.05
18	28.58	3.86	5.72	30.56	26.97	33.32	3.05
20	31.75	4.55	5.72	33.73	29.36	36.53	3.05
22	34.93	4.55	5.72	36.91	31.75	39.67	3.05
24	38.10	4.29	5.72	40.08	34.93	42.86	3.73

Straight plug

JT06 RT / JTG06 RT
JMS 27473 T / JMS 27484 T



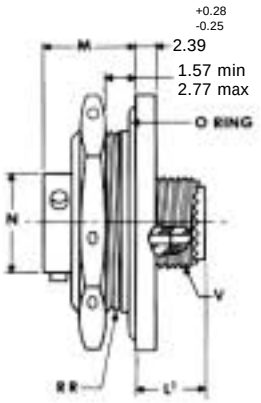
JT06 RE / JTG06 RE
JMS 27473 E / JMS 27484 E



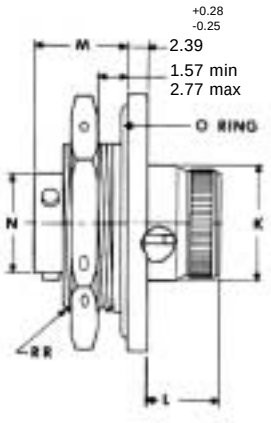
Shell Size	M Max	V Thread UNEF Class 2A Modified	K Dia. Max	Q Dia. Max
8	22.63	.4375-28	14.68	18.64
10	22.63	.5625-24	17.98	21.44
12	22.63	.6875-24	21.03	25.81
14	22.63	.8125-20	24.21	28.98
16	22.63	.9375-20	27.38	32.13
18	22.63	1.0625-18	30.56	35.33
20	22.63	1.1875-18	33.73	38.10
22	22.63	1.3125-18	36.91	41.28
24	22.63	1.4375-18	40.08	44.45

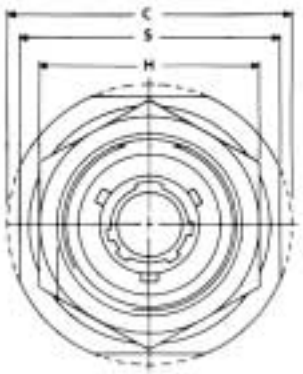
Jam nut receptacle

JT07 RT
JMS 27474 T



JT07 RE
JMS 27474 E

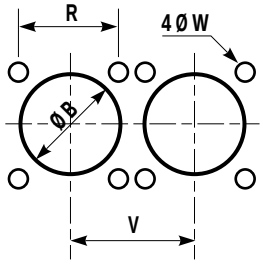




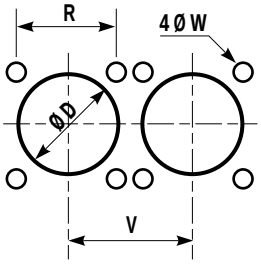
Shell Size	N Dia. +0.025 -0.13	M ±0.13	RR Thread Class 2A (plated)	L¹ Max	V Thread UNEF Class 2A	L Max	K Dia. Max	C Max	H Hex +0.43 -0.41	S ±0.41	Max. torque value m/N
8	12.01	11.12	.8750-20UNEF	11.51	.4375-28	12.29	14.68	35.31	26.97	31.75	5.65
10	14.99	11.12	1.0000-20UNEF	11.51	.5625-24	12.29	17.86	38.48	30.17	34.93	6.78
12	19.05	11.12	1.1250-18UNEF	11.51	.6875-24	12.29	21.03	41.66	33.32	38.10	8.48
14	22.23	11.12	1.2500-18UNEF	11.51	.8125-20	12.29	24.21	44.83	36.53	41.28	9.61
16	25.40	11.12	1.3750-18UNEF	11.51	.9375-20	12.29	27.38	49.61	39.67	45.24	10.74
18	28.58	11.12	1.5000-18UNEF	11.51	1.0625-18	12.29	30.56	51.59	42.87	48.01	12.43
20	31.75	11.79	1.6250-18UNEF	10.72	1.1875-18	11.51	33.73	54.76	46.02	51.21	13.56
22	34.93	11.79	1.7500-18UNS	10.72	1.3125-18	11.51	36.91	57.91	50.80	54.36	14.69
24	38.10	11.79	1.8750-16UN	10.72	1.4375-18	9.53	40.08	61.09	53.98	57.53	16.95

Panel drilling for wall mounting and jam nut receptacles

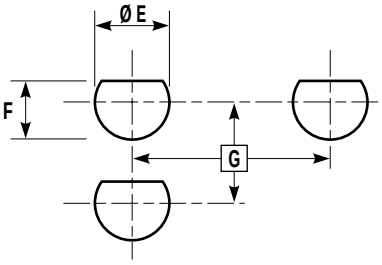
Square flange receptacle back panel mounting



Square flange receptacle front panel mounting



Jam nut receptacle back panel mounting



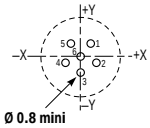
Shell Size	R (mm)	B Min (mm)	V Min (mm)	W ±0.13 (mm)	D Min (mm)	E Min (mm)	F +0 -0.25 (mm)	G Min (mm)
8	15.09	14.30	21.45	3.25	11.63	22.46	21.08	32.90
10	18.26	17.27	24.65	3.25	14.81	25.58	24.26	36.00
12	20.63	21.82	27.00	3.25	17.98	28.80	27.53	39.60
14	23.01	24.99	29.80	3.25	21.16	31.98	30.68	43.30
16	24.61	28.14	32.95	3.25	24.61	35.15	33.86	47.00
18	26.97	31.32	36.15	3.25	27.51	38.28	37.06	50.60
20	29.36	34.49	38.90	3.25	30.68	41.50	40.03	54.20
22	31.75	37.67	42.10	3.25	33.86	44.68	43.21	59.70
24	34.93	40.89	45.25	3.95	37.03	47.85	46.38	63.30

Printed circuit board drilling

Receptacles equipped with size 22D contacts

The marking of contact cavities is shown on the mating side view of the male receptacle.
The marking on the female plug is symmetrical in relation to the +X/-Y axis.

08-35

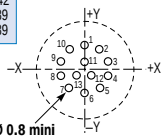


6 contacts
size 22D

Cavity marking	x (mm)	y (mm)
1	+ 1.14	+ 1.98
2	+ 1.98	- 1.14
3	0	- 2.29
4	- 1.98	- 1.14
5	- 1.14	+ 1.98
6	0	0

10-35

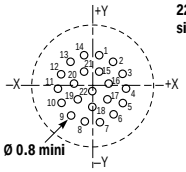
13 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	0	+ 3.71
2	+ 2.16	+ 3.00
3	+ 3.51	+ 1.14
4	+ 3.51	- 1.14
5	+ 2.16	- 3.00
6	0	- 3.71
7	- 2.16	- 3.00
8	- 3.51	- 1.14
9	- 3.51	+ 1.14
10	- 2.16	+ 3.00
11	0	+ 1.42
12	+ 1.24	- 0.89
13	- 1.24	- 0.89

12-35

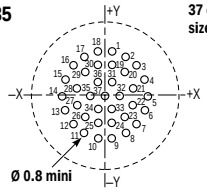
22 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	+ 1.14	+ 5.00
2	+ 3.20	+ 4.01
3	+ 4.62	+ 2.24
4	+ 5.16	0
5	+ 4.62	- 2.24
6	+ 3.20	- 4.01
7	+ 1.14	- 5.00
8	- 1.14	- 5.00
9	- 3.20	- 4.01
10	- 4.62	- 2.24
11	- 5.16	0
12	- 4.62	+ 2.24
13	- 3.20	+ 4.01
14	- 1.14	+ 5.00
15	+ 1.14	+ 2.72
16	+ 2.97	+ 0.66
17	+ 2.36	- 1.91
18	0	- 3.05
19	- 2.36	- 1.91
20	- 2.97	+ 0.66
21	- 1.14	+ 2.72
22	0	- 0.76

14-35

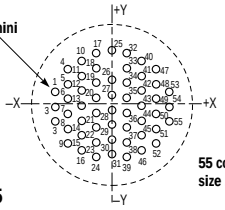
37 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	+ 1.14	+ 6.65
2	+ 3.12	+ 5.51
3	+ 5.36	+ 4.06
4	+ 6.45	+ 2.03
5	+ 6.76	- 0.25
6	+ 6.27	- 2.49
7	+ 5.08	- 4.45
8	+ 3.30	- 5.89
9	+ 1.14	- 6.65
10	- 1.14	- 6.65
11	- 3.30	- 5.89
12	- 5.08	- 4.45
13	- 6.27	- 2.49
14	- 6.76	- 0.25
15	- 6.45	+ 2.03
16	- 5.36	+ 4.06
17	- 3.12	+ 5.51
18	- 1.14	+ 6.65
19	+ 1.14	+ 4.35
20	+ 3.12	+ 3.02
21	+ 4.32	+ 1.02
22	+ 4.32	- 1.27
23	+ 3.12	- 3.23
24	+ 1.14	- 4.37
25	- 1.14	- 4.37
26	- 3.12	- 3.23
27	- 4.32	- 1.27
28	- 4.32	+ 1.02
29	- 3.12	+ 3.02
30	- 1.14	+ 4.37
31	+ 1.14	+ 1.88
32	+ 2.29	- 0.10
33	+ 1.14	- 2.08
34	- 1.14	- 2.08
35	- 2.29	- 0.10
36	- 1.14	+ 1.88
37	0	- 0.10

16-35

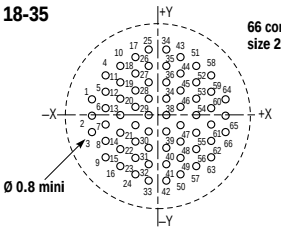
55 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	- 10.87	+ 6.12
2	- 11.86	+ 3.91
3	- 12.40	+ 1.55
4	- 10.54	0
5	- 12.40	- 1.55
6	- 10.87	- 3.61
7	- 10.87	- 6.02
8	- 8.43	+ 8.46
9	- 8.43	+ 6.05
10	- 8.43	+ 3.63
11	- 8.43	+ 1.22
12	- 8.43	- 1.19
13	- 8.43	- 3.61
14	- 8.43	- 6.02
15	- 8.43	- 8.43
16	- 6.32	+ 9.65
17	- 6.32	+ 7.24
18	- 6.32	+ 4.83
19	- 6.32	+ 2.41
20	- 6.32	0
21	- 6.32	- 2.41
22	- 6.32	- 4.83
23	- 6.32	- 7.24
24	- 6.32	- 9.65
25	- 4.22	+ 10.87
26	- 4.22	+ 8.46
27	- 4.22	+ 6.05
28	- 4.22	+ 3.63
29	- 4.22	+ 1.22
30	- 4.22	- 1.19
31	- 4.22	- 3.61
32	- 4.22	- 6.02
33	- 4.22	- 8.43
34	- 4.22	- 10.85
35	- 2.11	+ 12.07
36	- 2.11	+ 9.65
37	- 2.11	+ 7.24
38	- 2.11	+ 4.83
39	- 2.11	+ 2.41
40	- 2.11	0
41	- 2.11	- 2.41
42	- 2.11	- 4.83
43	- 2.11	- 7.24
44	- 2.11	- 9.65
45	- 2.11	- 12.07
46	0	+ 10.87
47	0	+ 8.46
48	0	+ 6.05
49	0	+ 3.63
50	0	+ 1.22
51	0	- 1.19
52	0	- 3.61
53	0	- 6.02
54	0	- 8.43
55	0	- 10.85
56	+ 2.11	+ 12.07
57	+ 2.11	+ 9.65
58	+ 2.11	+ 7.24
59	+ 2.11	+ 4.83
60	+ 2.11	+ 2.41
61	+ 2.11	0
62	+ 2.11	- 2.41
63	+ 2.11	- 4.83
64	+ 2.11	- 7.24
65	+ 2.11	- 9.65
66	+ 2.11	- 12.07
67	+ 4.22	+ 10.87
68	+ 4.22	+ 8.46
69	+ 4.22	+ 6.05
70	+ 4.22	+ 3.63
71	+ 4.22	+ 1.22
72	+ 4.22	- 1.19
73	+ 4.22	- 3.61
74	+ 4.22	- 6.02
75	+ 4.22	- 8.43
76	+ 4.22	- 10.85
77	+ 6.32	+ 9.65
78	+ 6.32	+ 7.24
79	+ 6.32	+ 4.83
80	+ 6.32	+ 2.41
81	+ 6.32	0
82	+ 6.32	- 2.41
83	+ 6.32	- 4.83
84	+ 6.32	- 7.24
85	+ 6.32	- 9.65
86	+ 8.43	- 8.46
87	+ 8.43	+ 6.05
88	+ 8.43	+ 3.63
89	+ 8.43	+ 1.22
90	+ 8.43	- 1.19
91	+ 8.43	- 3.61
92	+ 8.43	- 6.02
93	+ 8.43	- 8.43
94	+ 10.87	+ 6.12
95	+ 11.86	+ 3.91
96	+ 12.40	+ 1.55
97	+ 10.54	0
98	+ 12.40	- 1.55
99	+ 10.87	- 3.61
100	+ 10.87	- 6.02

18-35

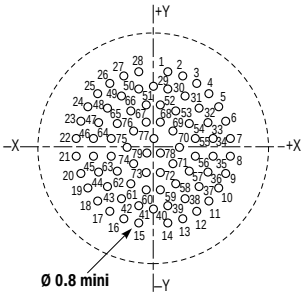
66 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	- 9.07	+ 2.29
2	- 9.07	0
3	- 9.07	- 2.29
4	- 7.09	+ 5.72
5	- 7.09	+ 3.43
6	- 7.09	+ 1.14
7	- 7.09	- 1.14
8	- 7.09	- 3.43
9	- 7.09	- 5.72
10	- 5.11	+ 6.86
11	- 5.11	+ 4.57
12	- 5.11	+ 2.29
13	- 5.11	0
14	- 5.11	- 2.29
15	- 5.11	- 4.57
16	- 5.11	- 6.86
17	- 3.12	+ 8.00
18	- 3.12	+ 5.72
19	- 3.12	+ 3.43
20	- 3.12	+ 1.14
21	- 3.12	- 1.14
22	- 3.12	- 3.43
23	- 3.12	- 5.72
24	- 3.12	- 8.00
25	- 1.14	+ 9.14
26	- 1.14	+ 6.86
27	- 1.14	+ 4.57
28	- 1.14	+ 2.29
29	- 1.14	0
30	- 1.14	- 2.29
31	- 1.14	- 4.57
32	- 1.14	- 6.86
33	- 1.14	- 9.14
34	+ 1.14	+ 9.14
35	+ 1.14	+ 6.86
36	+ 1.14	+ 4.57
37	+ 1.14	+ 2.29
38	+ 1.14	0
39	+ 1.14	- 2.29
40	+ 1.14	- 4.57
41	+ 1.14	- 6.86
42	+ 1.14	- 9.14
43	+ 3.12	+ 8.00
44	+ 3.12	+ 5.72
45	+ 3.12	+ 3.43
46	+ 3.12	+ 1.14
47	+ 3.12	- 1.14
48	+ 3.12	- 3.43
49	+ 3.12	- 5.72
50	+ 3.12	- 8.00
51	+ 5.11	- 6.86
52	+ 5.11	+ 4.57
53	+ 5.11	+ 2.29
54	+ 5.11	0
55	+ 5.11	- 2.29
56	+ 5.11	- 4.57
57	+ 5.11	- 6.86
58	+ 7.09	+ 5.72
59	+ 7.09	+ 3.43
60	+ 7.09	+ 1.14
61	+ 7.09	- 1.14
62	+ 7.09	- 3.43
63	+ 7.09	- 5.72
64	+ 9.07	+ 2.29
65	+ 9.07	0
66	+ 9.07	- 2.29

20-35

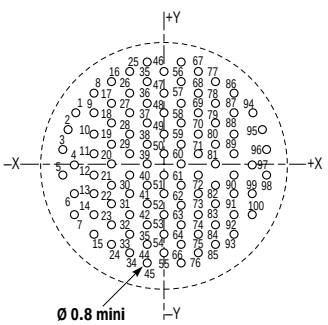
79 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	+ 1.35	+ 10.82
2	+ 3.71	+ 10.26
3	+ 5.89	+ 9.19
4	+ 7.77	+ 7.67
5	+ 9.27	+ 5.77
6	+ 10.31	+ 3.58
7	+ 10.85	+ 1.22
8	+ 10.85	- 1.22
9	+ 10.31	- 3.58
10	+ 9.27	- 5.77
11	+ 7.77	- 7.67
12	+ 5.89	- 9.19
13	+ 3.71	- 10.26
14	+ 1.35	- 10.82
15	- 1.35	- 10.82
16	- 3.71	- 10.26
17	- 5.89	- 9.19
18	- 7.77	- 7.67
19	- 9.27	- 5.77
20	- 10.31	- 3.58
21	- 10.85	- 1.22
22	- 10.85	+ 1.22
23	- 10.31	+ 3.58
24	- 9.27	+ 5.77
25	- 7.77	+ 7.67
26	- 5.89	+ 9.19
27	- 3.71	+ 10.26
28	- 1.35	+ 10.82
29	0	+ 8.20
30	+ 2.49	+ 8.18
31	+ 4.67	+ 7.11
32	+ 6.55	+ 5.59
33	+ 7.90	+ 3.58
34	+ 8.43	+ 1.22
35	+ 8.43	- 1.22
36	+ 7.90	- 3.58
37	+ 6.55	- 5.59
38	+ 4.67	- 7.11
39	+ 2.49	- 8.18
40	0	- 8.84
41	- 2.49	- 8.18
42	- 4.67	- 7.11
43	- 6.55	- 5.59
44	- 7.90	- 3.58
45	- 8.43	- 1.22
46	- 8.43	+ 1.22
47	- 7.90	+ 3.58
48	- 6.55	+ 5.59
49	- 4.67	+ 7.11
50	- 2.49	+ 8.18
51	- 1.22	+ 6.12
52	+ 1.22	+ 6.12
53	+ 3.40	+ 5.05
54	+ 5.28	+ 3.53
55	+ 6.02	+ 1.22
56	+ 6.02	- 1.22
57	+ 5.28	- 3.53
58	+ 3.40	- 5.05
59	+ 1.22	- 6.12
60	- 1.22	- 6.12
61	- 3.40	- 5.05
62	- 5.28	- 3.53
63	- 6.02	- 1.22
64	- 6.02	+ 1.22
65	- 5.28	+ 3.53
66	- 3.40	+ 5.05
67	- 1.22	+ 3.71
68	- 1.22	+ 3.71
69	+ 3.18	+ 2.29
70	+ 3.94	0
71	+ 3.18	- 2.29
72	+ 1.22	- 3.71
73	- 1.22	- 3.71
74	- 3.18	- 2.29
75	- 3.94	0
76	- 3.18	+ 2.29
77	0	+ 1.35
78	+ 1.22	- 0.74
79	- 1.22	- 0.74

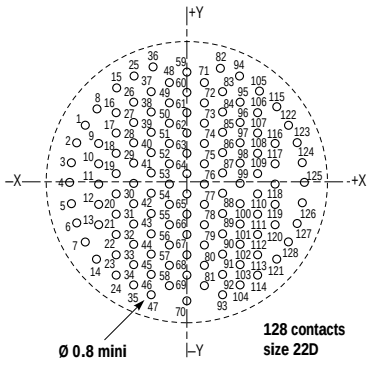
22-35

100 contacts
size 22D



24-35

128 contacts
size 22D



Cavity marking	x (mm)	y (mm)
1	- 2.17	+ 7.09
2	- 13.21	+ 4.83
3	- 13.87	+ 2.41
4	- 14.10	0
5	- 13.87	- 2.41
6	- 13.21	- 4.83
7	- 12.17	- 7.09
8	- 10.77	+ 9.07
9	- 10.54	+ 4.83
10	- 10.54	+ 2.41
11	- 10.54	0
12	- 10.54	- 2.41
13	- 10.54	- 4.83
14	- 10.77	- 9.07
15	- 8.43	+ 11.28
16	- 8.43	+ 8.43
17	- 8.43	+ 6.02
18	- 8.43	+ 3.61
19	- 8.43	+ 1.19
20	- 8.43	- 1.19
21	- 8.43	- 3.61
22	- 8.43	- 6.02

Cavity marking	x (mm)	y (mm)
23	- 8.43	- 8.43
24	- 8.43	- 10.85
25	- 6.32	+ 12.60
26	- 6.32	+ 9.65
27	- 6.32	+ 7.24
28	- 6.32	+ 4.83
29	- 6.32	+ 2.41
30	- 6.32	0
31	- 6.32	- 2.41
32	- 6.32	- 4.83
33	- 6.32	- 7.24
34	- 6.32	- 9.65
35	- 6.32	- 12.07
36	- 4.06	+ 13.49
37	- 4.22	+ 10.85
38	- 4.22	+ 8.43
39	- 4.22	+ 6.02
40	- 4.22	+ 3.61
41	- 4.22	+ 1.19
42	- 4.22	- 1.19
43	- 4.22	- 3.61
44	- 4.22	- 6.02

Cavity marking	x (mm)	y (mm)
45	- 4.22	- 8.43
46	- 4.22	- 10.85
47	- 4.22	- 13.26
48	- 2.11	+12.07
49	- 2.11	+ 9.65
50	- 2.11	+ 7.24
51	- 2.11	+ 4.83
52	- 2.11	+ 2.41
53	- 2.11	0
54	- 2.11	- 2.41
55	- 2.11	- 4.83
56	- 2.11	- 7.24
57	- 2.11	- 9.65
58	- 2.11	- 12.07
59	0	+ 13.26
60	0	+ 10.85
61	0	+ 8.43
62	0	+ 6.02
63	0	+ 3.61
64	0	+ 1.19
65	0	- 1.19
66	0	- 3.61

Cavity marking	x (mm)	y (mm)
67	0	- 6.02
68	0	- 8.43
69	0	- 0.85
70	0	- 14.10
71	+ 2.11	+ 12.70
72	+ 2.11	+ 9.65
73	+ 2.11	+ 7.24
74	+ 2.11	+ 4.83
75	+ 2.11	+ 2.41
76	+ 2.11	0
77	+ 2.11	- 2.41
78	+ 2.11	- 4.83
79	+ 2.11	- 7.24
80	+ 2.11	- 9.65
81	+ 2.11	- 12.07
82	+ 4.06	+ 13.49
83	+ 4.22	+ 10.85
84	+ 4.22	+ 8.43
85	+ 4.22	+ 6.02
86	+ 4.22	+ 3.61
87	+ 4.22	+ 1.19
88	+ 4.22	- 1.19

Cavity marking	x (mm)	y (mm)
89	+ 4.22	- 3.61
90	+ 4.22	- 6.02
91	+ 4.22	- 8.43
92	+ 4.22	- 10.85
93	+ 4.22	- 13.26
94	+ 6.32	+12.60
95	+ 6.32	+ 9.65
96	+ 6.32	+ 7.24
97	+ 6.32	+ 4.83
98	+ 6.32	+ 2.41
99	+ 6.32	0
100	+ 6.32	- 2.41
101	+ 6.32	- 4.83
102	+ 6.32	- 7.24
103	+ 6.32	- 9.65
104	+ 6.32	-12.07
105	+ 8.43	+11.28
106	+ 8.43	+ 8.43
107	+ 8.43	+ 6.02
108	+ 8.43	+ 3.61
109	+ 8.43	+ 1.19
110	+ 8.43	- 1.19

Cavity marking	x (mm)	y (mm)
111	+ 8.43	- 3.61
112	+ 8.43	- 6.02
113	+ 8.43	- 8.43
114	+ 8.43	- 10.85
115	+ 10.77	+ 9.07
116	+ 10.54	+ 4.83
117	+ 10.54	+ 2.41
118	+ 10.54	0
119	+ 10.54	- 2.41
120	+ 10.54	- 4.83
121	+ 10.77	- 9.07
122	+ 12.07	+ 7.09
123	+ 13.21	+ 4.83
124	+ 13.87	+ 2.41
125	+ 14.10	0
126	+ 13.87	- 2.41
127	+ 13.21	- 4.83
128	+ 12.17	- 7.09

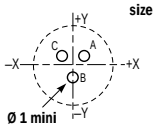
Receptacles equipped with size 20 contacts

The marking of contact cavities is shown on the mating side view of the male receptacle.
The marking on the female plug is symmetrical in relation to the +X/-Y axis.

08-98

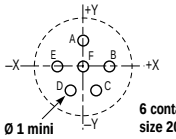
Cavity marking	x (mm)	y (mm)
A	+ 1.65	+ 0.97
B	0	- 1.91
C	- 1.65	+ 0.97

3 contacts
size 20



10-98

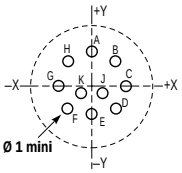
Cavity marking	x (mm)	y (mm)
A	0	+ 3.30
B	+ 3.30	0
C	+ 1.65	- 2.87
D	- 1.65	- 2.87
E	- 3.30	0
F	0	0



6 contacts
size 20

12-98

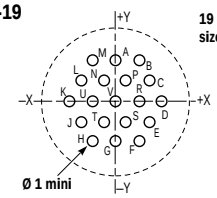
10 contacts
size 20



Cavity marking	x (mm)	y (mm)
A	0	+ 4.95
B	+ 3.18	+ 3.81
C	+ 4.90	+ 0.76
D	+ 4.17	- 2.67
E	0	- 3.43
F	- 4.17	- 2.67
G	- 4.90	+ 0.76
H	- 3.18	+ 3.81
J	+ 1.65	- 0.38
K	- 1.65	- 0.38

14-19

19 contacts
size 20



Cavity marking	x (mm)	y (mm)
A	0	+ 5.72
B	+ 3.30	+ 5.72

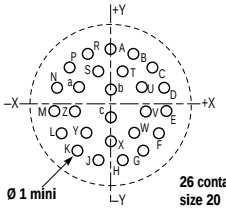
Cavity marking	x (mm)	y (mm)
C	+ 4.95	+ 2.87
D	+ 6.60	0

Cavity marking	x (mm)	y (mm)
E	+ 4.95	- 2.87
F	+ 3.30	- 5.72
G	0	- 5.72
H	- 3.30	- 5.72
J	- 4.95	- 2.87
K	- 6.60	0
L	- 4.95	+ 2.87
M	- 3.30	+ 5.72
N	- 1.65	+ 2.87
P	+ 1.65	+ 2.87
R	+ 3.30	0
S	+ 1.65	- 2.87
T	- 1.65	- 2.87
U	- 3.30	0
V	0	0

16-26

Cavity marking	x (mm)	y (mm)
A	0	+ 8.15
B	+ 3.33	+ 7.44
C	+ 6.07	+ 5.44
D	+ 7.75	+ 2.51

Repère contact	x (mm)	y (mm)
E	+ 8.10	- 0.86
F	+ 7.06	- 4.09
G	+ 4.80	- 6.60
H	+ 1.70	- 7.98

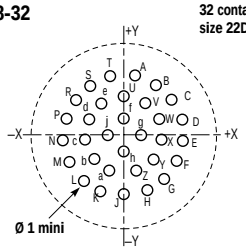


26 contacts
size 20

Cavity marking	x (mm)	y (mm)
J	- 1.70	- 7.98
K	- 4.80	- 6.60
L	- 7.06	- 4.09
M	- 8.10	- 0.86
N	- 7.75	+ 2.51
P	- 6.07	+ 5.44
R	- 3.33	+ 7.44
S	- 1.78	+ 4.50
T	+ 1.78	+ 4.50
U	+ 4.45	+ 2.39
V	+ 4.52	- 0.91
W	+ 3.02	- 3.84
X	0	+ 5.16
Y	- 3.02	- 3.84
Z	- 4.52	- 0.91
a	- 4.45	+ 2.39
b	0	+ 1.65
c	0	- 1.65

18-32

32 contacts
size 22D



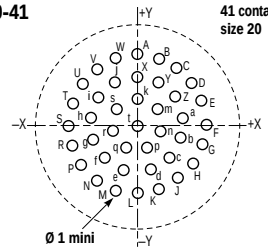
Cavity marking	x (mm)	y (mm)
A	+ 1.68	+ 8.97
B	+ 4.80	+ 7.75
C	+ 7.26	+ 5.51
D	+ 8.76	+ 2.49
E	+ 9.07	- 0.84

Cavity marking	x (mm)	y (mm)
F	+ 8.15	- 4.06
G	+ 6.15	- 6.73
H	+ 3.30	- 8.51
J	0	- 9.12
K	- 3.30	- 8.51

Cavity marking	x (mm)	y (mm)
L	- 6.15	- 6.73
M	- 8.15	- 4.06
N	- 9.07	- 0.84
P	- 8.76	+ 2.49
R	- 7.26	+ 5.51
S	- 4.80	+ 7.75
T	- 1.68	+ 8.97
U	0	+ 5.84
V	+ 3.15	+ 4.90
W	+ 5.31	+ 2.41
X	+ 5.79	- 0.84
Y	+ 4.42	- 3.84
Z	+ 1.65	- 5.61
a	- 1.65	- 5.61
b	- 4.42	- 3.84
c	- 5.79	- 0.84
d	- 5.31	+ 2.41
e	- 3.15	+ 4.90
f	0	+ 2.44
g	+ 2.44	0
h	0	- 2.44
j	- 2.44	0

20-41

41 contacts
size 20



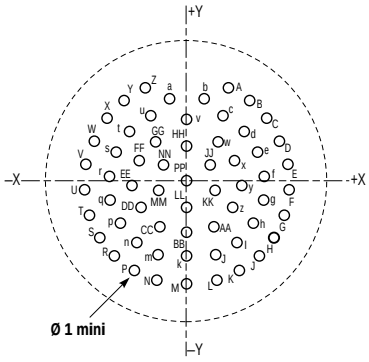
Cavity marking	x (mm)	y (mm)
A	0	+ 10.60
B	+ 3.28	+ 10.09
C	+ 6.23	+ 8.58
D	+ 8.58	+ 6.23
E	+ 10.09	+ 3.28
F	+ 10.60	0
G	+ 10.09	- 3.28
H	+ 8.58	- 6.23

Cavity marking	x (mm)	y (mm)
J	+ 6.23	- 8.58
K	+ 3.28	- 10.09
L	0	- 10.60
M	- 3.28	- 10.09
N	- 6.23	- 8.58
P	- 8.58	- 6.23
R	- 10.09	- 3.28
S	- 10.60	0

Cavity marking	x (mm)	y (mm)
T	- 10.09	+ 3.28
U	- 8.58	+ 6.23
V	- 6.23	+ 8.58
W	- 3.28	+10.09
X	0	+ 7.20
Y	+ 3.35	+ 6.38
Z	+ 5.92	+ 4.09
a	+ 7.15	+ 0.87
b	+ 6.73	- 2.55
c	+ 4.78	- 5.39
d	+ 1.73	- 6.99
e	- 1.73	- 6.99
f	- 4.78	- 5.39
g	- 6.73	- 2.55
h	- 7.15	+ 0.87
i	- 5.92	+ 4.09
j	- 3.35	+ 6.38
k	0	+ 3.81
m	+ 2.98	+ 2.38
n	+ 3.71	- 0.85
p	+ 1.66	- 3.43
q	+ 1.66	- 3.43
r	- 3.71	- 0.85
s	- 2.98	+ 2.38
t	0	0

24-61

61 contacts
size 20

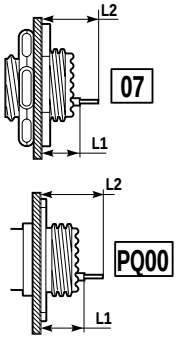


Cavity marking	x (mm)	y (mm)
A	+ 4.98	+ 12.70
B	+ 7.98	+ 11.05
C	+ 10.49	+ 8.71
D	+ 12.32	+ 5.84
E	+ 13.39	+ 2.57
F	+ 13.61	- 0.76
G	+ 12.98	- 4.17
H	+ 11.53	- 7.29
J	+ 9.35	- 9.93
K	+ 6.58	- 11.94
L	+ 3.40	- 13.18
M	0	- 13.64
N	- 3.40	- 13.18
P	- 6.58	- 11.94
R	- 9.35	- 9.93
S	- 11.53	- 7.29
T	- 12.98	- 4.17
U	- 13.61	- 0.76
V	- 13.39	+ 2.57
W	- 12.32	+ 5.84
X	- 10.49	+ 8.71

Cavity marking	x (mm)	y (mm)
Y	- 7.98	+ 11.05
Z	- 4.98	+ 12.70
a	- 1.73	+ 11.53
b	+ 1.73	+ 11.53
c	+ 4.39	+ 9.22
d	+ 7.24	+ 7.19
e	+ 9.19	+ 4.45
f	+ 10.13	+ 1.17
g	+ 9.96	- 2.24
h	+ 8.66	- 5.41
i		- 7.98
j	+ 6.38	- 9.63
k	+ 3.38	- 10.21
m	0	- 9.63
n	- 3.38	- 7.98
p	- 6.38	- 5.41
q	- 8.65	- 2.24
r	- 9.96	+ 1.17
s	- 10.13	+ 4.45
t	- 9.19	+ 7.19
u	- 7.24	+ 9.22

Cavity marking	x (mm)	y (mm)
v	0	+ 8.59
w	+ 3.73	+ 8.66
x	+ 6.02	+ 3.10
y	+ 6.78	- 0.25
z	+ 5.79	- 3.53
AA	+ 3.33	- 5.92
BB	0	- 6.78
CC	- 3.33	- 5.92
DD	- 5.79	- 3.53
EE	- 6.78	- 0.25
FF	- 6.02	+ 3.10
GG	- 3.73	+ 5.66
HH	0	+ 5.08
JJ	+ 2.67	+ 2.39
KK	+ 3.43	- 1.04
LL	0	- 3.35
MM	- 3.43	- 1.04
NN	- 2.67	+ 2.39
PP	0	0

Standard PCB - tail dimensions at the rear of receptacles (in mm)



			JT 07 CI		JTPQ 00 CI
			Shell sizes 08 to 18	Shell sizes 20 to 24	Shell sizes 08 to 24
P	L1	min	12.26	11.60	12.17
		max	13.23	12.57	13.01
	L2	min	17.16	16.50	17.07
		max	18.33	17.67	18.11
S (F423)	L1	min	12.06	11.40	11.97
		max	13.03	12.37	12.81
	L2	min	15.96	15.30	15.87
		max	17.13	16.47	16.91

Note: dimensions given for pin contacts with 5 mm PCB-tails and socket contacts with 4 mm PCB tails.

Please refer to data sheet E114 for other PCB-tail versions.

Hermetic receptacles

Presentation

Hermetic receptacles JT-Y are used when a pressure differential is applied on one or the other side of the panel.

Main characteristics

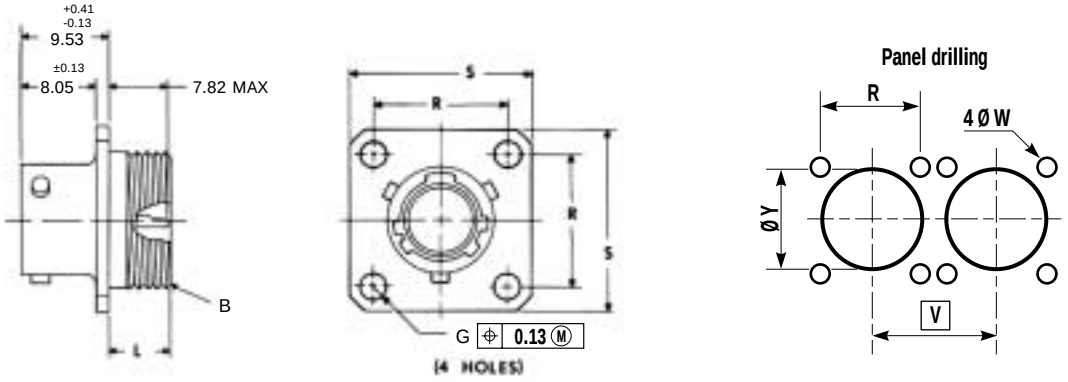
- 9 shell sizes (tin plated carbon steel)
- Tinned solder pin contacts (for PCB contacts, please consult us)
- Contact plating in active zone: gold
- Glass insert
- Interfacial seal
- Air leakage < 1.10^{-7} cm^3/s under 1 bar of pressure differential

Overall dimensions

(All dimensions are in mm)

Wall mounting receptacle (front panel mounting)

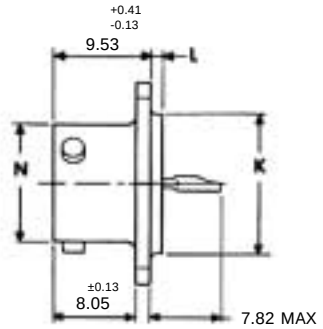
JT00 Y
JMS 27475 Y

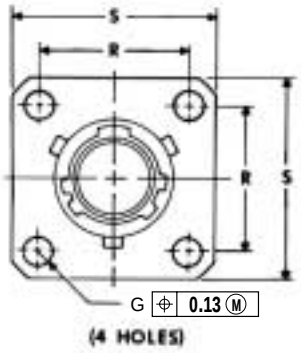


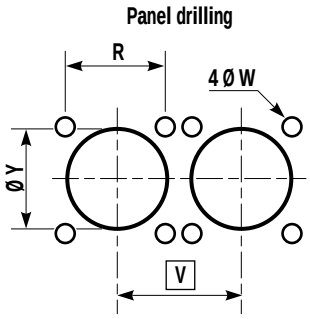
Shell Size	L Max	R	S ±0.41	G ±0.13	Y Min	V Min	W ±0.13	B Thread Class 2A
8	24.51	15.09	20.62	3.05	14.81	21.45	3.25	.5625-24UNEF
10	27.66	18.26	23.83	3.05	17.98	24.65	3.25	.6875-24UNEF
12	30.05	20.62	26.19	3.05	21.16	27.00	3.25	.8125-20UNEF
14	32.44	23.01	28.58	3.05	24.61	29.80	3.25	.9375-20UNEF
16	34.82	24.61	30.96	3.05	27.51	32.95	3.25	1.0625-18UNEF
18	37.21	26.97	33.32	3.05	30.68	36.15	3.25	1.1875-18UNEF
20	40.36	29.36	36.53	3.05	33.86	38.90	3.25	1.3125-18UNEF
22	43.56	31.75	39.67	3.05	37.03	42.10	3.25	1.4375-18UNEF
24	46.69	34.93	42.86	3.73	40.48	45.25	3.95	1.5625-18UNEF

Box mounting receptacle (front panel mounting)

JT02 Y
JMS 27476 Y



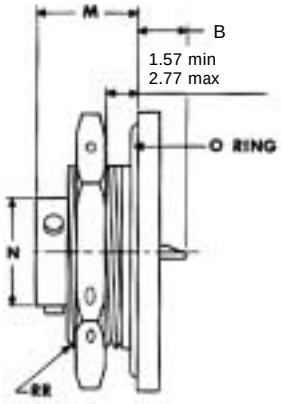


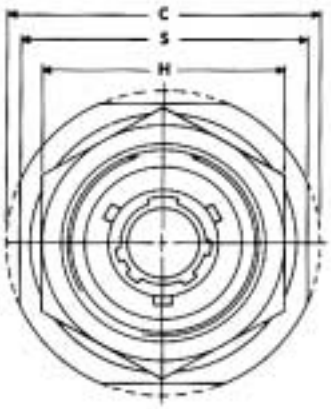


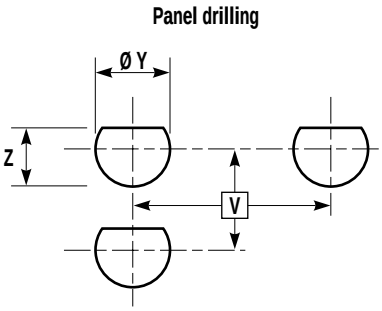
Shell Size	N Dia. +0.025 -0.13	L +0.15 -0.38	K Dia. +0.02 -0.13	R	S ±0.41	G ±0.13	Y Min (plated)	V Min	W
8	12.01	24.51	14.27	15.09	20.62	3.05	14.78	21.45	3.25
10	14.99	27.66	17.07	18.26	23.83	3.05	17.59	24.65	3.25
12	19.05	30.05	19.84	20.62	26.19	3.05	20.34	27.00	3.25
14	22.23	32.44	23.01	23.01	28.58	3.05	23.79	29.80	3.25
16	25.40	34.82	26.19	24.61	30.96	3.05	26.71	32.95	3.25
18	28.58	37.21	29.36	26.97	33.32	3.05	29.95	36.15	3.25
20	31.75	40.36	31.75	29.36	36.53	3.05	32.23	38.90	3.25
22	34.93	43.56	34.93	31.75	39.67	3.05	35.42	42.10	3.25
24	38.10	46.69	38.10	34.93	42.86	3.73	38.86	45.25	3.95

Jam nut receptacle

JT07 Y
JMS 27477 Y



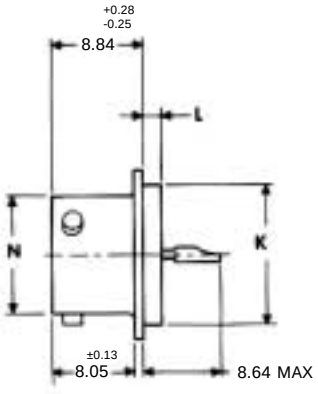


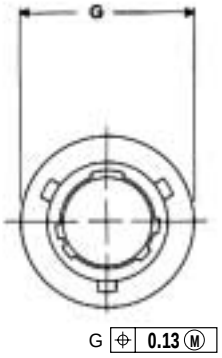


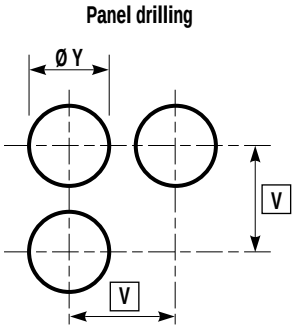
Shell Size	N Dia. +0.025 -0.13	M ±0.13	RR Thread Class 2A	B +0 -0.25	C Max	H +0.43 -0.41	S ±0.41	Y Min	Z +0 -0.25	V Min
8	12.01	11.12	.8750-20UNEF	16.31	35.31	26.97	31.75	22.46	21.08	32.90
10	14.99	11.12	1.0000-20UNEF	19.46	38.48	30.17	34.93	25.58	24.26	36.00
12	19.05	11.12	1.1250-18UNEF	22.66	41.66	33.32	38.10	28.80	27.53	39.60
14	22.23	11.12	1.2500-18UNEF	25.86	44.83	36.53	41.28	31.98	30.68	43.30
16	25.40	11.12	1.3750-18UNEF	29.01	49.61	39.67	45.24	35.15	33.86	47.00
18	28.58	11.12	1.5000-18UNEF	32.21	51.59	42.87	48.01	38.28	37.06	50.60
20	31.75	11.79	1.6250-18UNEF	35.36	54.76	46.02	51.21	41.50	40.03	54.20
22	34.93	11.79	1.7500-18UNS	38.56	57.91	50.80	54.36	44.68	43.21	59.70
24	38.10	11.79	1.8750-16UN	41.71	61.09	53.98	57.53	47.85	46.38	63.30

Solder mounting receptacle (front panel mounting)

JTI Y
JMS 27478 Y

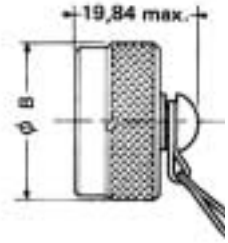




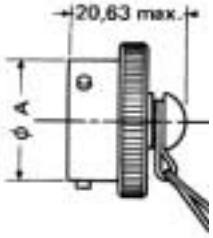


Shell Size	N Dia. +0.025 -0.13	L +0.28 -0.25	K Dia. +0.02 -0.13	G +0.28 -0.25	Y Min ±0.13	V Min
8	12.01	1.98	14.27	17.45	14.80	19.45
10	14.99	1.98	17.07	20.24	17.60	22.25
12	19.05	1.98	19.84	23.01	20.40	26.60
4	22.23	1.98	23.01	26.19	23.50	29.80
16	25.40	1.98	26.19	29.36	26.70	32.95
18	28.58	1.98	29.36	32.54	29.90	36.15
20	31.75	1.98	31.75	34.93	32.30	38.90
22	34.93	2.72	34.93	38.10	35.50	42.10
24	38.10	2.72	38.10	41.28	38.60	45.25

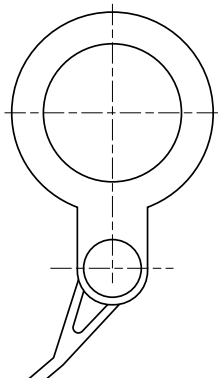
Protection caps



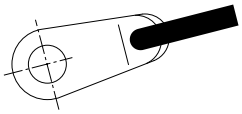
Protection cap for receptacles equipped with metallic chain or nylon cord (for shell types: 00, PQ00, 01, 07)



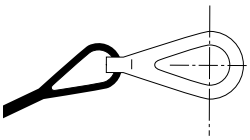
Protection cap for plugs equipped with metallic chain or nylon cord (for shell type: 06)



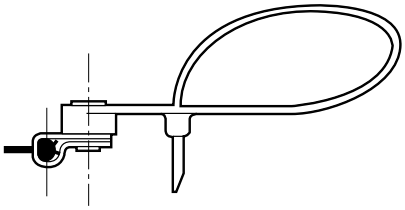
Termination of the chain or cord for jam nut receptacle protection caps (for shell type: 07)



Termination of the cord for square flange receptacle protection caps (for shell types: 00, PQ00)



Termination of the chain for plug, square flange and line receptacle protection caps (for shell types: 06, 00, PQ00,01)



Termination of the cord for plug and line receptacle protection caps (for shell types: 06,01)

Cord length for plugs and line receptacles: 160 mm
Cord length for square flange and jam nut receptacles: 105 mm
Chain length for plugs and receptacles: from min. 77 to max 111mm

Shell size	8	10	12	14	16	18	20	22	24
A Dia Max (mm)	12.01	14.99	19.05	22.23	25.40	28.58	31.75	34.93	38.10
A Dia Max (mm)	15.98	19.08	23.47	26.65	9.75	33.10	36.43	39.60	42.85

Caps series	B	EC	N	JT	12	014

Protection cap type
F: For plug
EC: For square flange receptacle
ER: For jam nut receptacle
P: For line mounting receptacle

Wire type
N: Nylon cord (standard version)
Blank: Metallic chain

Connector series

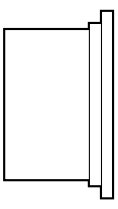
Corresponding connector shell size
08/10/12/14/16/18/20/22/24

Finish
014: Olive drab cadmium plated
023: Electroless nickel plated
For other finishes, please consult us

For MS designation, please refer to page 24

Plastic dust caps

For protection during transport and storage, plastic dust caps are available upon request.



Standard crimp contacts

Contact Size	Pin contacts		Socket contacts	
	Proprietary No	Military No	Proprietary No	Military No
12	900005	M39029/58-365	900015	M39029/57-359
16	900000	M39029/58-364	900010	M39029/57-358
20	900001	M39029/58-363	900011	M39029/57-357
22D	900004	M39029/58-360	900014	M39029/57-354

Above part numbers include standard 500 – cycle finish designation – gold plating over suitable underplate in accordance with MIL-C-39029.

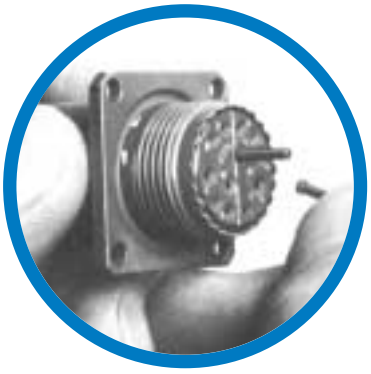
Standard PCB contacts

Contact Size	Pin contacts	Socket contacts (connector ordered with deviation F423)
20	900241	consult us
22D	900245-91	900255-91

For other contacts (PCB, optical termini, thermocouple), please refer to data sheet E114.

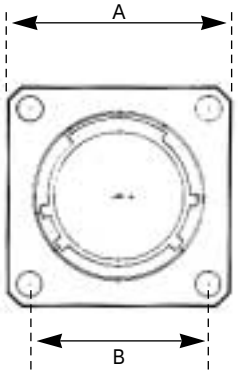
Sealing plugs

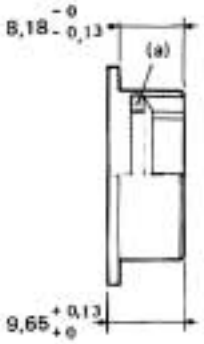
Contact Size	Proprietary No	Military No
12	900023	MS27488-12
16	900020	MS27488-16
20	900021	MS27488-20
22D	900022	MS27488-22



Dummy receptacles

Shell Size	A	B
8	20.63	15.09
10	23.83	18.26
12	26.19	20.63
14	28.58	23.01
16	30.96	24.61
18	33.33	26.97
20	36.53	29.36
22	39.68	31.75
24	48.88	34.93





(a): seal

Dummy receptacle	SE	00	JT	08	014

Shell type
00: derived from the JT wall mounting receptacle

Connector series

Shell size
08/10/12/14/16/18/20/22/24

Finish
014: Olive drab cadmium plated
023: Electroless nickel plated

Holding support equipped with olive cadmium dummy receptacles

Amphenol Socapex reference: **809 893**



Torque value for rear accessories

Shell Size	Max. torque value (m/N)	Shell Size	Max. torque value (m/N)
8	5.65	18	5.65
10	5.65	20	11.30
12	5.65	22	11.30
14	5.65	24	11.30
16	5.65		

Pliers for locking and unlocking of plugs

Amphenol Socapex reference: **809 860**



Crimping tools



Contact size	Contact type	Contact part number		Crimping tool		Positioner	
		Proprietary No	Military No	Proprietary No	Military No	Proprietary No	Military No
12	P	900 005	M39029/58-365	809 857	M22520/1-01	809 858	M22520/1-04
	S	900 015	M39029/57-359	809 857	M22520/1-01	809 858	M22520/1-04
16	P	900 000	M39029/58-364	809 857	M22520/1-01	809 858	M22520/1-04
	S	900 010	M39029/57-358	809 857	M22520/1-01	809 858	M22520/1-04
20	P	900 001	M39029/58-363	809 857 809 801	M22520/1-01 M22520/2-01	809 858 809 826	M22520/1-04 M22520/2-10
	S	900 011	M39029/57-357	809 857 809 801	M22520/1-01 M22520/2-01	809 858 809 826	M22520/1-04 M22520/2-10
22D	P	900 004	M39029/58-360	809 801	M22520/2-01	809 810	M22520/2-09
	S	900 014	M39029/57-354	809 801	M22520/2-01	809 811	M22520/2-06

Insertion and removal tools

Plastic tools



Contact Size	Insertion tools		Removal tools	
	Proprietary No	Military No	Proprietary No	Military No
12	809 859	M81969/14-04	809 859	M81969/14-04
16	809 855	M81969/14-03	809 855	M81969/14-03
20	809 854	M81969/14-10	809 854	M81969/14-10
22D	809 856	M81969/14-01	809 856	M81969/14-01

Metallic tools



Contact size	Straight type		Angle type			
	Insertion tools Proprietary No	Removal tools Proprietary No	Insertion tools Proprietary No	Insertion tools Military No	Removal tools Proprietary No	Removal tools Military No
12	—	—	809 838	M81969/8-09	809 839	M81969/8-10
16	809 816	809 846	809 812	M81969/8-07	809 820	M81969/8-08
20	809 817	809 847	809 813	M81969/8-05	809 821	M81969/8-06
22D	809 819	809 849	809 815	M81969/8-01	809 823	M81969/8-02

Ordering information

Amphenol designation – Aluminium versions

Series	JT	07	RT	14	35	P	–	014	–

Shell type
00: Wall mounting receptacle (front panel)
PQ00: Wall mounting receptacle (back panel)
01: Line receptacle
02: Box mounting receptacle (front panel – RE version only)
P02: Box mouting receptacle (back panel – RE version only)
06: Straight plug
G06: Straight plug with grounding fingers
07: Jam nut receptacle

Service class and contact style
RT: Environmental, with accessory threads, crimp contacts
(Supplied without rear accessories)
RE: Environmental, crimp contacts
(Supplied with grommet and compression nut)
Except for box mounting receptacle (JT02-JTP02): non-environmental
CI: PCB contacts (add deviation F423 at the end of the P/N for socket contacts)

Shell size
8/10/12/14/16/18/20/22/24

Insert arrangement
See on pages 5 to 7

Contact type
P: Pin (connector delivered with contacts)
S: Socket (connector delivered with contacts)
A: Pin (connector delivered without contacts)
B: Socket (connector delivered without contacts)

Polarization
Blank for normal or A, B, C, D. *See coding system on page 9*

Shell finish
014: Olive drab cadmium plated
023: Electroless nickel plated
For other finishes, please consult us

Deviation
F423: PCB socket contacts
F404: Tinned PCB pin contacts
For other deviations (FXXX), please consult us

Amphenol designation – Hermetic receptacles

Series	JT	07	Y	14	35	P	–

Shell type
00: Wall mounting receptacle
02: Box mounting receptacle
07: Jam nut receptacle
I: Solder mounting receptacle

Service class and contact style
Y: Hermetic with interfacial seal, solder contacts

Shell size
8/10/12/14/16/18/20/22/24

Insert arrangement
See on pages 5 to 7 (arrangements marked with "Y")

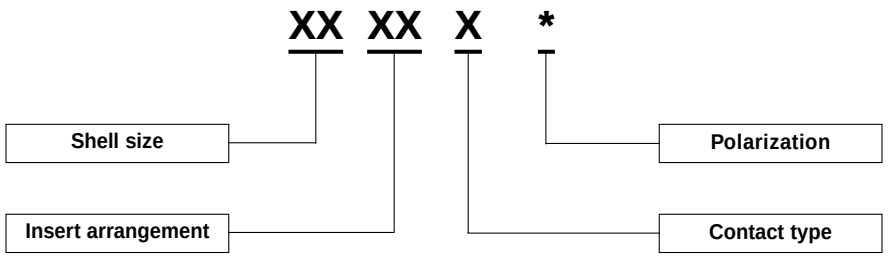
Contact type
P: Pin only

Polarization
Blank for normal or A, B, C, D. *See coding system on page 9*

Cross references

Connectors

Version	Amphenol	MIL-DTL-38999 series II
Standard	JT00 RT XX-XX X * 014	JMS 27472 T XX B XX X *
	JT00 RE XX-XX X * 014	JMS 27472 E XX B XX X *
	JTPQ00 RT XX-XX X * 014	JMS 27497 T XX B XX X *
	JTPQ00 RE XX-XX X * 014	JMS 27497 E XX B XX X *
	JT01 RT XX-XX X * 014	–
	JT01 RE XX-XX X * 014	–
	JT02 RE XX-XX X * 014	JMS 27499 E XX B XX X *
	JTP02 RE XX-XX X * 014	JMS 27508 E XX B XX X *
	JT06 RT XX-XX X * 014	JMS 27473 T XX B XX X *
	JT06 RE XX-XX X * 014	JMS 27473 E XX B XX X *
	JTG06 RT XX-XX X * 014	JMS 27484 T XX B XX X *
	JTG06 RE XX-XX X * 014	JMS 27484 E XX B XX X *
	JT07 RT XX-XX X * 014	JMS 27474 T XX B XX X *
	JT07 RE XX-XX X * 014	JMS 27474 E XX B XX X *
Hermetics	JT00 Y XX-XX P *	JMS 27475 Y XX-XX P *
	JT02 Y XX-XX P *	JMS 27476 Y XX-XX P *
	JT07 Y XX-XX P *	JMS 27477 Y XX-XX P *
	JTI Y XX-XX P *	JMS 27478 Y XX-XX P *



Protection caps

Amphenol designation	MS designation*
BF N JT XX 014	–
BF JT XX 014	JMS 27510 B XX C
BEC N JT XX 014	JMS 27511 B XX R
BEC JT XX 014	JMS 27511 B XX C
BER N JT XX 014	JMS 27511 B XX R
BER JT XX 014	JMS 27511 B XX N
BP N JT XX 014	JMS 27511 B XX R
BP JT XX 014	JMS 27511 B XX C

XX: Shell size

* MS designations given as information only: the length of the chain or rope, as well as the attachment style could vary.

Do not hesitate to contact us for further information

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