

XC series circular electrical connector



Conform to Chinese military connector standard GJB2889, XC series is designed as bayonet coupling, solder or crimp contact and springtac socket.

Part number

	XC	14	F	10	Z	HP	W
Basic series							
Shell size							
14, 18, 22, 24, 27, 30, 33, 36, 39							
Type of plug and receptacle							
T= Plug with crimp contact							
F= Square flange receptacle							
Y= Circular receptacle with crimp contact							
S = Jam nut hermetic receptacle thru bulkhead							
S ₁ or S ₂ = Square flange hermetic receptacle thru bulkhead							
Number of contact							
01 ~ 62							
Type of contact							
Z = Pin with silver plating							
Z ₁ = Pin with gold plating							
K = Socket with silver plating							
K ₁ = Socket with gold plating							
M = Contact of hermetic receptacle with silver plating							
M ₁ = Contact of hermetic receptacle with gold plating							
Finish and back shell							
Omit = Black anodized without thread							
H = Black anodized with straight cable clamp							
D ₁ = Electroless nickel plating without thread							
D ₃ = Olive-drab zinc plating passivated without thread							
HP ₁ = Electroless nickel plating with shielded nut							
HP ₃ = Olive-drab zinc plating passivated with shielded nut							
E = Black anodized with thread							
W = Black anodized with 90° elbow cable clamp							
P ₁ = Electroless nickel plating with thread							
P ₃ = Olive-drab zinc plating passivated with thread							
WP ₁ = Electroless nickel plating with 90° elbow cable clamp							
WP ₃ = Olive-drab zinc plating passivated with 90° elbow cable clamp							
Orientation							
N, W, X, Y, Z							
Omit = N							

Performance specification

Operating temperature: -55 °C ~ +200 °C

Relative humidity: at 40 ± 2 °C, 90% ~ 95%

Working height: ≤ 3000 m

Vibration: at 10 ~ 2000 Hz, acceleration: 196 m/s²

Endurance: ≥ 1000 cycles

Electrical performance

Contact resistance and rated current:

Contact No.	Resistance (mΩ)	Rated current (A)
Φ 1.0	≤ 5.0	5
Φ 1.5	≤ 2.5	10
Φ 2.0	≤ 1.25	20
Φ 3.0	≤ 0.75	40

Rated voltage and withstanding voltage:

Operating environment	Sealed connector		Unsealed connector	
	Rated voltage (v)	Withstanding voltage (v)	Rated voltage (v)	Withstanding voltage (v)
Normal	500	≥ 1500	500	≥ 1500
Hot and humid	500	≥ 750	500	≥ 1125
Low pressure (1 KPa)	150	≥ 300	250	≥ 300

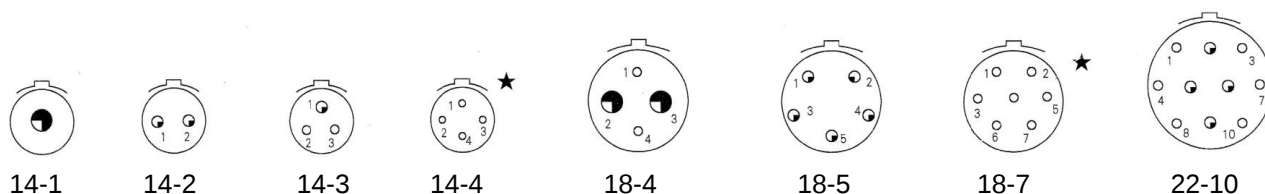
Insulation resistance (MΩ):

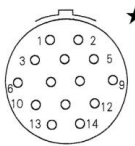
Environment	Normal	Heat	Hot and humid
Insulation resistance	≥ 5000	≥ 1000	≥ 100

Diameter of Contact Solder Hole (mm)

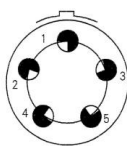
Specification	Φ 1.0	Φ 1.5	Φ 2.0	Φ 3.0
Diameter	1.5	2.0	2.5	3.5

Contact layout

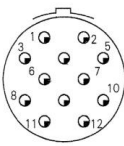




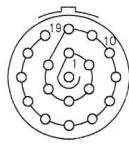
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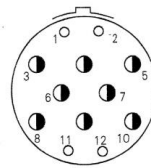
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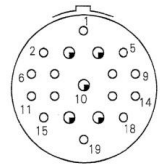
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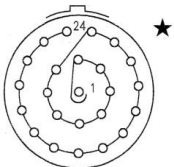
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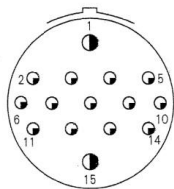
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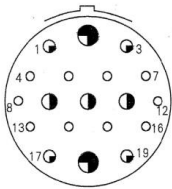
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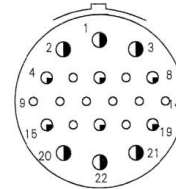
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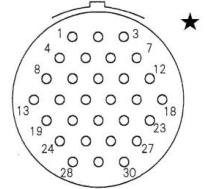
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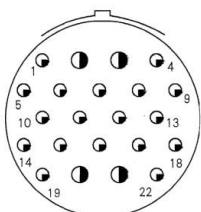
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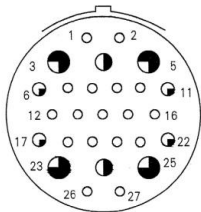
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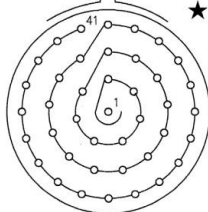
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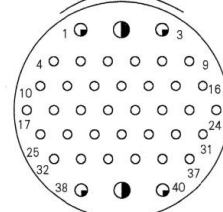
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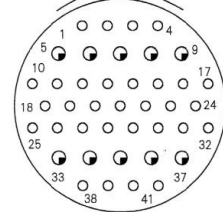
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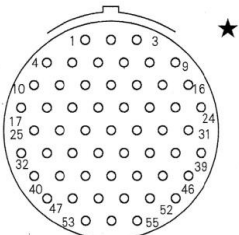
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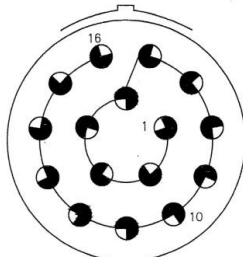
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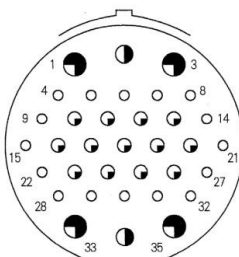
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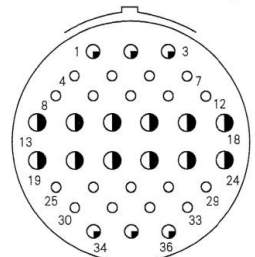
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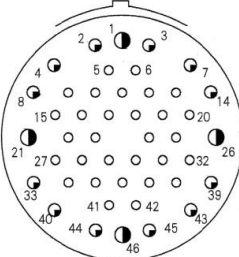
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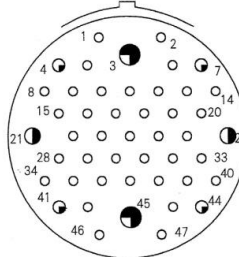
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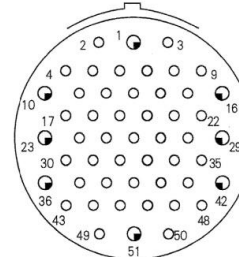
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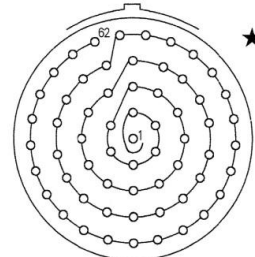
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39-47



39-51

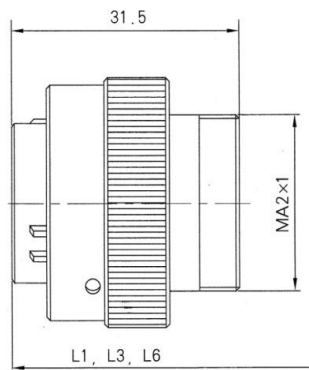


39-62

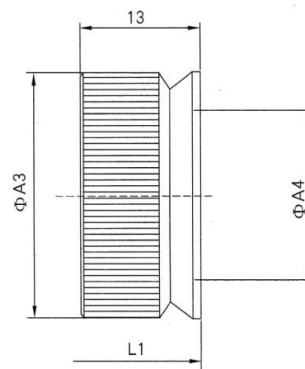
○ Φ1.0 ◐ Φ1.5 ◑ Φ2.0 ◒ Φ3.0

Shell size

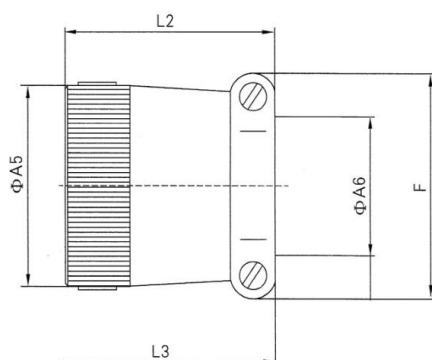
Plug and back shell



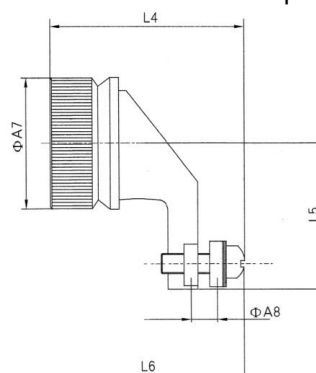
Shielded nut



Straight cable clamp

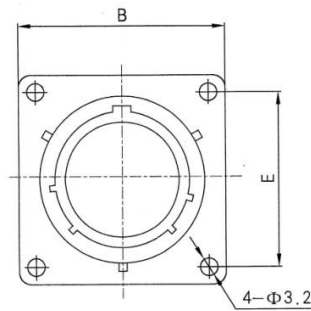
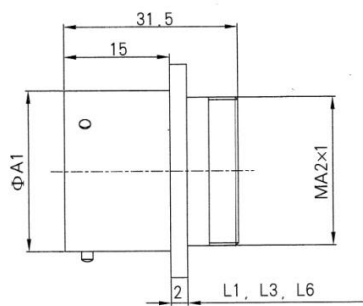


90° elbow cable clamp

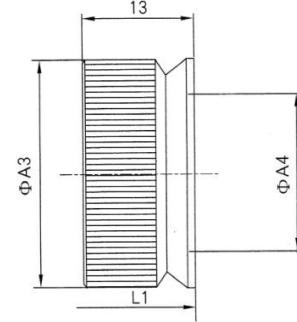


Shell size	14	18	22	24	27	30	33	36	39
A1	24.0	28.0	32.0	34.0	37.0	40.0	43.0	46.0	49.0
A2	14.0	18.0	22.0	24.0	27.0	30.0	33.0	36.0	39.0
A3	18.0	22.0	26.0	28.0	31.0	34.0	37.0	40.0	43.0
A4	10.0	14.0	18.0	20.0	23.0	26.0	29.0	32.0	35.0
L1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
A5	16.0	20.0	24.0	26.0	29.0	33.0	36.0	39.0	42.0
A6 (min)	5.5	8.5	8.5	10.5	10.5	15.0	15.0	21.0	21.0
A6 (max)	8.0	13.0	13.0	18.0	18.0	23.0	23.0	28.0	28.0
F	22.0	27.0	27.0	32.0	32.0	37.0	37.0	42.0	42.0
L2	22.0	22.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0
L3	48.5	48.5	51.5	51.5	51.5	56.5	56.5	56.5	56.5
A7	22.0	26.0	30.0	32.0	35.0	38.0	40.0	44.0	46.0
A8 (min)	5.0	8.0	8.0	10.0	10.0	14.0	14.0	20.0	20.0
A8 (max)	11.0	15.0	19.0	21.0	24.0	26.0	29.0	32.0	35.0
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21.0	23.0	25.0	26.0	27.5	29.5	31.0	32.5	34.0
L6 (max)	63.5	65.5	69.5	71.5	71.5	79.5	79.5	81.5	81.5

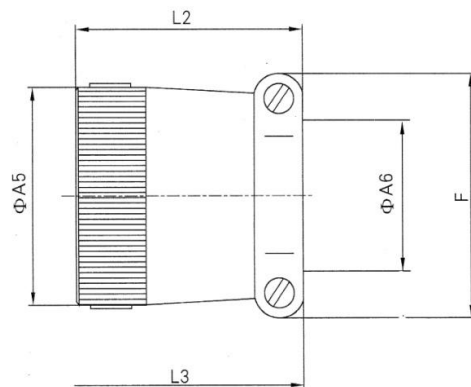
Square crimp receptacle and back shell



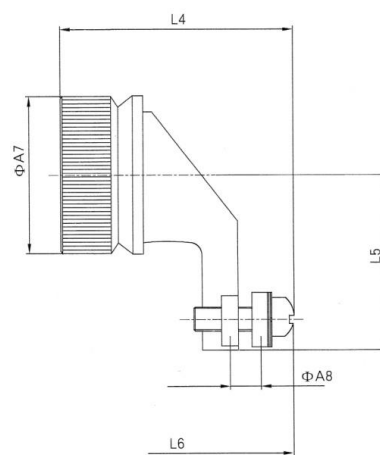
Shielded nut



Straight cable clamp

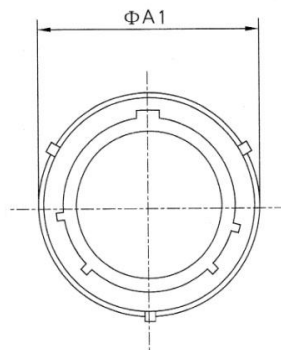
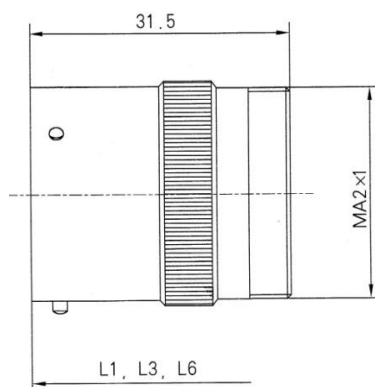


90° elbow cable clamp

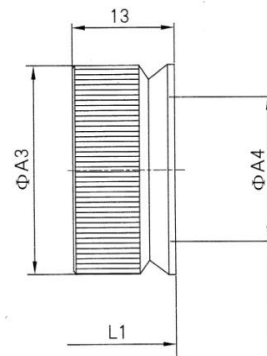


Shell size	14	18	22	24	27	30	33	36	39
A1	15.7	19.7	23.7	25.7	28.7	31.7	34.7	37.7	40.7
A2	14.0	18.0	22.0	24.0	27.0	30.0	33.0	36.0	39.0
B	25.0	27.5	30.0	32.0	34.5	36.5	39.5	41.0	43.0
E	19.0	21.5	24.0	26.0	28.0	30.0	32.5	34.0	36.0
A3	18.0	22.0	26.0	28.0	31.0	34.0	37.0	40.0	43.0
A4	10.0	14.0	18.0	20.0	23.0	26.0	29.0	32.0	35.0
L1	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
A5	16.0	20.0	24.0	26.0	29.0	33.0	36.0	39.0	42.0
A6 (min)	5.5	8.5	8.5	10.5	10.5	15.0	15.0	21.0	21.0
A6 (max)	8.0	13.0	13.0	18.0	18.0	23.0	23.0	28.0	28.0
F	22.0	27.0	27.0	32.0	32.0	37.0	37.0	42.0	42.0
L2	22.0	22.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0
L3	31.5	31.5	34.5	34.5	34.5	39.5	39.5	39.5	39.5
A7	22.0	26.0	30.0	32.0	35.0	38.0	40.0	44.0	46.0
A8 (min)	5.0	8.0	8.0	10.0	10.0	14.0	14.0	20.0	20.0
A8 (max)	11.0	15.0	19.0	21.0	24.0	26.0	29.0	32.0	35.0
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21.0	23.0	25.0	26.0	27.5	29.5	31.0	32.5	34.0
L6 (max)	46.5	48.5	52.5	54.5	54.5	62.5	62.5	64.5	64.5

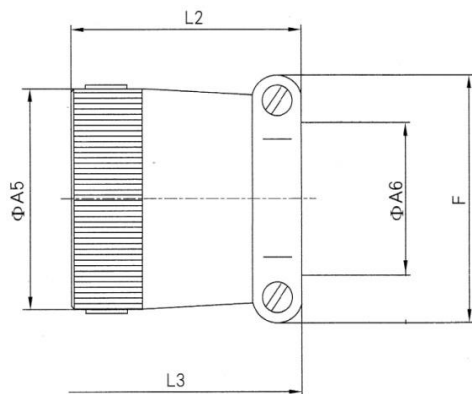
Circular crimp receptacle and back shell



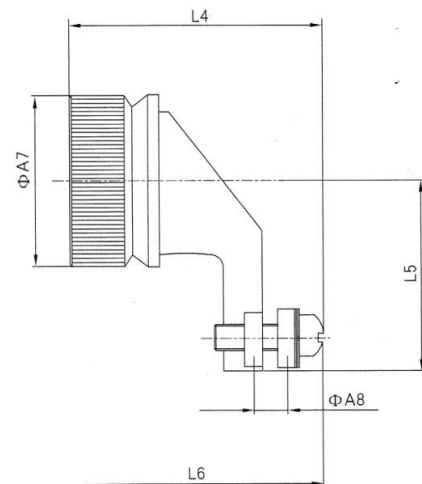
Shielded nut



Straight cable clamp

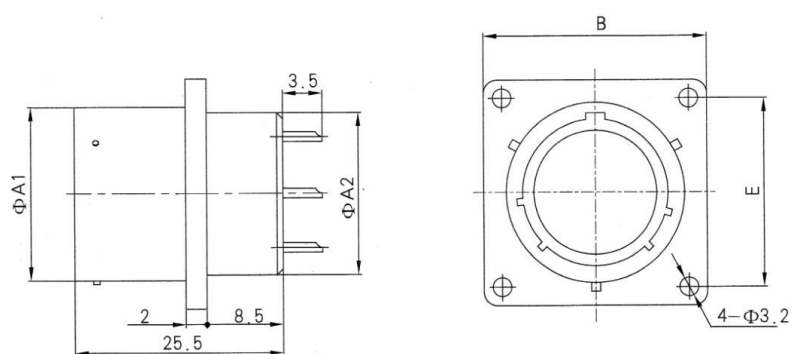


90° elbow cable clamp



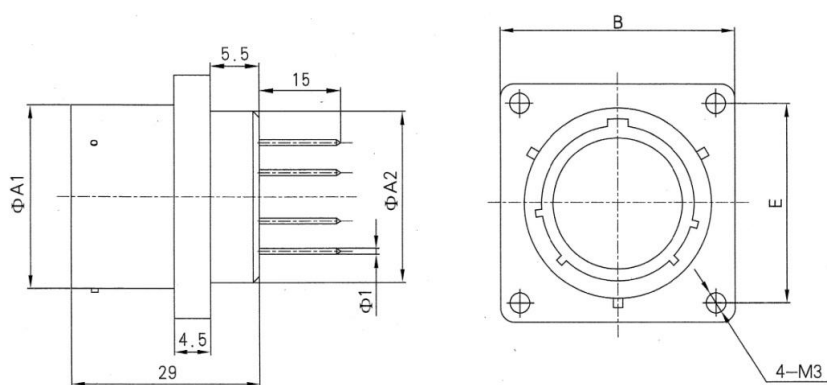
Shell size	14	18	22	24	27	30	33	36	39
A1	17.0	21.0	25.0	27.0	30.0	33.0	36.0	39.0	42.0
A2	14.0	18.0	22.0	24.0	27.0	30.0	33.0	36.0	39.0
A3	18.0	22.0	26.0	28.0	31.0	34.0	37.0	40.0	43.0
A4	10.0	14.0	18.0	20.0	23.0	26.0	29.0	32.0	35.0
L1	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
A5	16.0	20.0	24.0	26.0	29.0	33.0	36.0	39.0	42.0
A6 (min)	5.5	8.5	8.5	10.5	10.5	15.0	15.0	21.0	21.0
A6 (max)	8.0	13.0	13.0	18.0	18.0	23.0	23.0	28.0	28.0
F	22.0	27.0	27.0	32.0	32.0	37.0	37.0	42.0	42.0
L2	22.0	22.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0
L3	48.5	48.5	51.5	51.5	51.5	56.5	56.5	56.5	56.5
A7	22.0	26.0	30.0	32.0	35.0	38.0	40.0	44.0	46.0
A8 (min)	5.0	8.0	8.0	10.0	10.0	14.0	14.0	20.0	20.0
A8 (max)	11.0	15.0	19.0	21.0	24.0	26.0	29.0	32.0	35.0
L4	37.5	39.5	41.5	45.5	45.5	53.5	53.5	55.5	55.5
L5	21.0	23.0	25.0	26.0	27.5	29.5	31.0	32.5	34.0
L6 (max)	63.5	65.5	69.5	71.5	71.5	79.5	79.5	81.5	81.5

Square solder receptacle



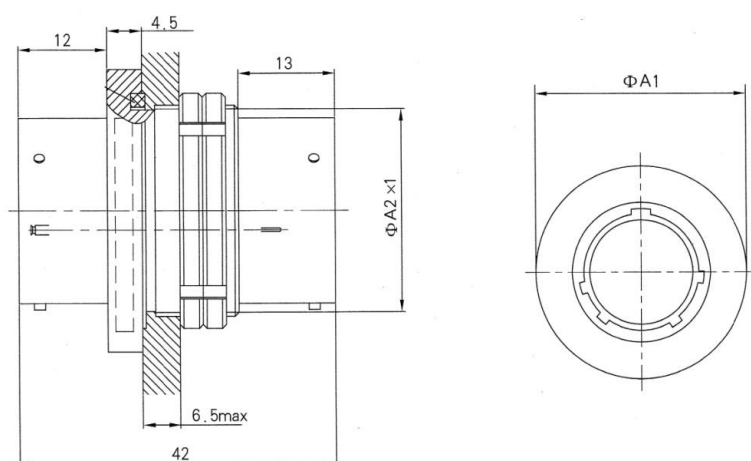
Shell size	A1	A2	B	E
14	15.7	14	25.0	19.0
18	19.7	18	27.5	21.5
22	23.7	22	30.0	24.0
24	25.7	24	32.0	26.0
27	28.7	27	34.5	28.0
30	31.7	30	36.5	30.0
33	34.7	33	39.5	32.5
36	37.7	36	41.0	34.0
39	40.7	39	43.0	36.0

Square PCB solder receptacle



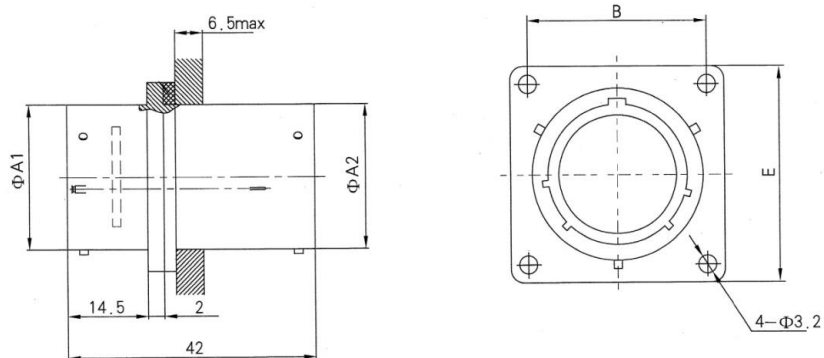
Shell size	A1	A2	B	E
14	15.7	14	25.0	19.0
18	19.7	18	27.5	21.5
22	23.7	22	30.0	24.0
24	25.7	24	32.0	26.0
27	28.7	27	34.5	28.0
30	31.7	30	36.5	30.0
33	34.7	33	39.5	32.5
36	37.7	36	44.0	34.0
39	40.7	39	46.0	36.0

Jam nut hermetic receptacle thru bulkhead



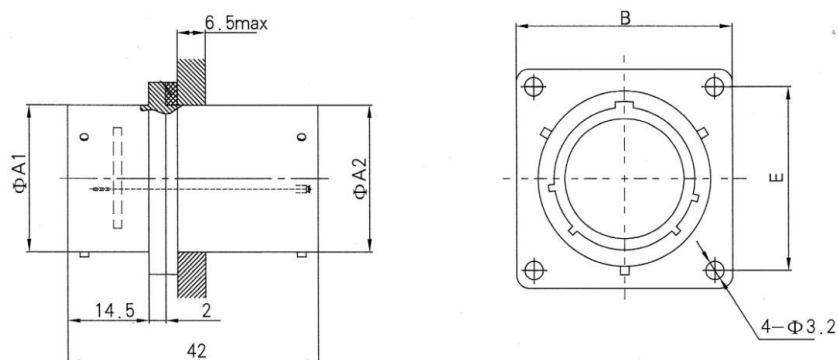
Shell size	A1	A2
14	27	18
18	31	22
22	36	27
24	36	27
27	39	30
30	42	33
33	45	36
36	48	39
39	51	42

Square hermetic receptacle thru bulkhead (S₁)



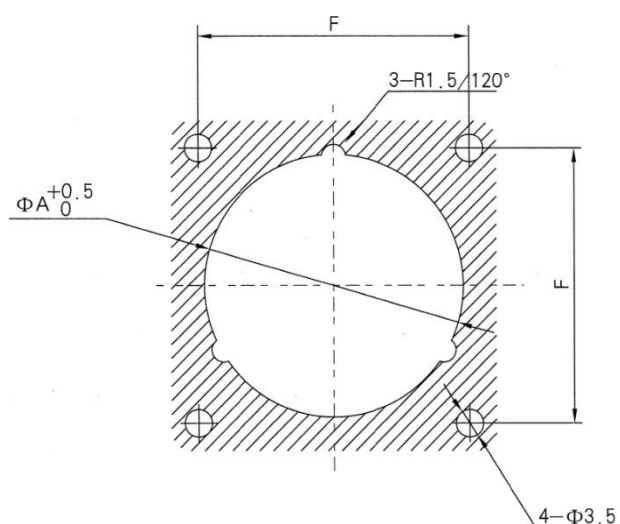
Shell size	A1	A2	B	E
14	15.7	15.7	25.0	19.0
18	19.7	19.7	27.5	21.5
22	23.7	23.7	30.0	24.0
24	25.7	25.7	32.0	26.0
27	28.7	28.7	34.5	28.0
30	31.7	31.7	36.5	30.0
33	34.7	34.7	39.5	32.5
36	37.7	37.7	44.0	34.0
39	40.7	40.7	46.0	36.0

Square hermetic receptacle thru bulkhead (S₂)



Shell size	A1	A2	B	E
14	15.7	15.7	25.0	19.0
18	19.7	19.7	27.5	21.5
22	23.7	23.7	30.0	24.0
24	25.7	25.7	32.0	26.0
27	28.7	28.7	34.5	28.0
30	31.7	31.7	36.5	30.0
33	34.7	34.7	39.5	32.5
36	37.7	37.7	44.0	34.0
39	40.7	40.7	46.0	36.0

Suggestion size



Shell size	A1	F
14	16	19.0
18	20	21.5
22	24	24.0
24	26	26.0
27	29	28.0
30	32	30.0
33	35	32.5
36	38	34.0
39	41	36.0