

YGP series circular electrical connector



This family of connector is the upgrade to P series, YGP series is designed as bayonet coupling, solder springtac contact, offered 10 kinds of shell size, 5 kinds of contact.

Part number

	YGP	36	J ₁	4	A	S	W
Basic series							
Shell size	16, 20, 28, 32, 36, 40, 48, 55, 60, 63						
Contact	J = Pin with silver plating J ₁ = Pin with gold plating K = Socket with silver plating K ₁ = Socket with gold plating						
Number of contact							
Type of connector	Omit = Plug A = Square flange receptacle G = Jam nut receptacle						
Finish	P ₁ = Straight cable clamp, electroless nickel plating R ₁ = 90° elbow cable clamp, electroless nickel plating P ₃ = Straight cable clamp, olive-drab passivated with zinc plating R ₃ = 90° elbow cable clamp, olive-drab passivated with zinc plating D ₁ = Without thread and accessory, electroless nickel plating L ₁ = With thread and accessory, electroless nickel plating D ₃ = Without thread and accessory, olive-drab passivated with zinc plating L ₃ = With thread and accessory, olive-drab passivated with zinc plating Q = With straight cable clamp, anodized S = With 90° elbow cable clamp, anodized E = With thread and accessory, anodized Omit = Without thread and accessory, anodized						
Orientation	W, X, Y, Z, N Omit = N						

Performance specification

Shell: aluminum alloy

Insulator:

PBT or neoprene

Operating temperature: -55 °C ~ +125 °C

Relative humidity: at 40 °C, 95%

Air tightness: Thru bulkhead hermetic receptacle, 50.7 kPa

Square flange hermetic receptacle, 152 kPa

Contact

Material: Copper-alloy with silver or gold plating;
 Vibration: 10 Hz ~ 2000 Hz, acceleration 196 m/s²
 Shock: 980 m/s²
 Constant acceleration: 980 m/s²
 Endurance: ≥ 1000 cycles

Electrical performance

Contact resistance and rated current

Specification (mm)	Resistance (mΩ)	Rated current (A)
Φ 1.5	≤ 2.5	10
Φ 2.5	≤ 1.0	25
Φ 3.5	≤ 0.5	50
Φ 5.5	≤ 0.3	100
Φ 9.0	≤ 0.15	200

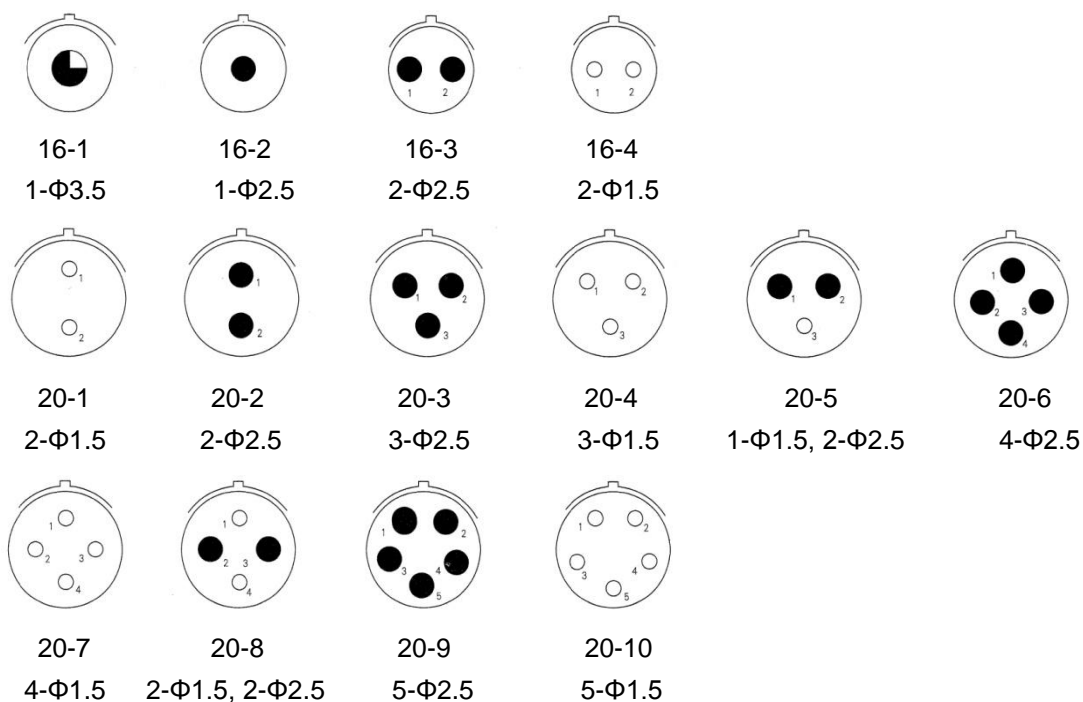
Rated voltage and withstanding voltage

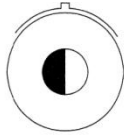
Operating environment	Sealed connector		Unsealed connector	
	Rated Voltage (v)	Withstanding voltage (v)	Rated voltage (v)	Withstanding voltage (v)
Normal	500	1500	500	1500
Hot and humid	500	750	500	1125
Low pressure (1KPa)	150	300	250	300

Insulation resistance

Operating environment	Normal	High temperature	Hot and humid
Insulation resistance (MΩ)	≥ 5000	≥ 500	≥ 100

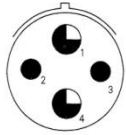
Contact layout





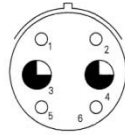
28-1

1-Φ5.5



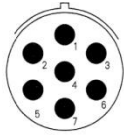
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2-Φ2.5, 2-Φ3.5



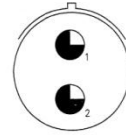
28-3

4-Φ1.5, 2-Φ3.5



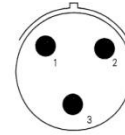
28-4

7-Φ2.5



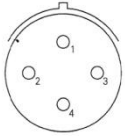
28-5

2-Φ3.5



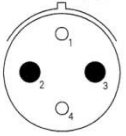
28-6

3-Φ2.5



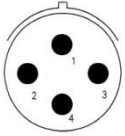
28-7

4-Φ1.5



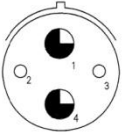
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2-Φ1.5, 2-Φ2.5



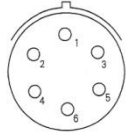
28-9

4-Φ2.5



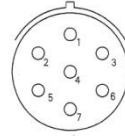
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2-Φ1.5, 2-Φ3.5



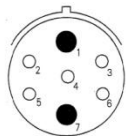
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6-Φ1.5



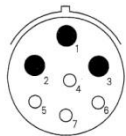
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7-Φ1.5



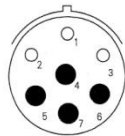
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5-Φ1.5, 2-Φ2.5



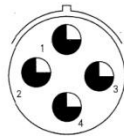
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4-Φ1.5, 3-Φ2.5



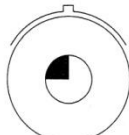
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3-Φ1.5, 4-Φ2.5



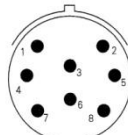
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4-Φ3.5



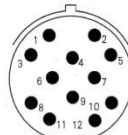
32-1

1-Φ9.0



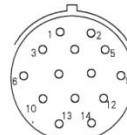
32-2

8-Φ2.5



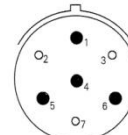
32-3

12-Φ2.5



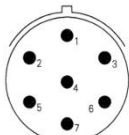
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14-Φ1.5



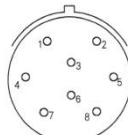
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3-Φ1.5, 4-Φ2.5



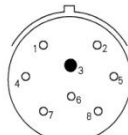
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7-Φ2.5



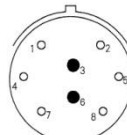
32-7

8-Φ1.5



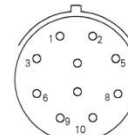
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7-Φ1.5, 1-Φ2.5



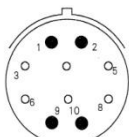
32-9

6-Φ1.5, 2-Φ2.5



32-10

10-Φ1.5



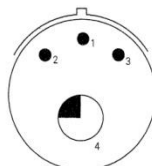
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6-Φ1.5, 4-Φ2.5



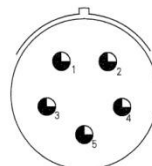
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12-Φ1.5



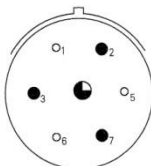
36-1

3-Φ2.5, 1-Φ9.0



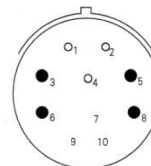
36-2

5-Φ3.5



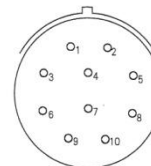
36-3

3-Φ1.5, 3-Φ2.5, 1-Φ3.5



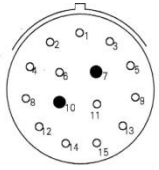
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6-Φ1.5, 4-Φ2.5

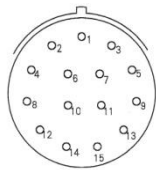


36-5

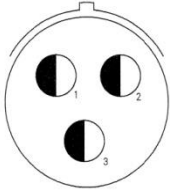
10-Φ1.5



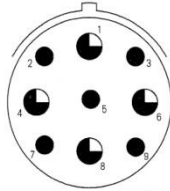
36-6
13- Φ 1.5, 2- Φ 2.5



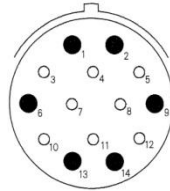
36-7
15- Φ 1.5



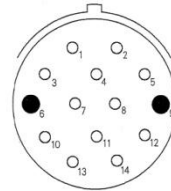
40-1
3- Φ 5.5



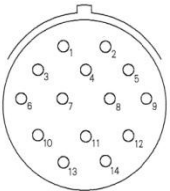
40-2
5- Φ 2.5, 4- Φ 3.5



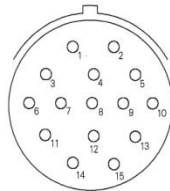
40-3
8- Φ 1.5, 6- Φ 2.5



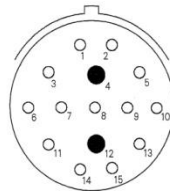
40-4
12- Φ 1.5, 2- Φ 2.5



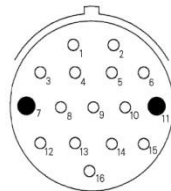
40-5
14- Φ 1.5



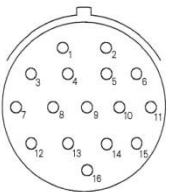
40-6
15- Φ 1.5



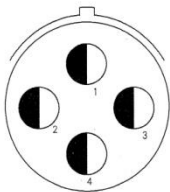
40-6
13- Φ 1.5, 2- Φ 2.5



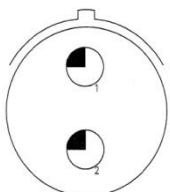
40-8
14- Φ 1.5, 2- Φ 2.5



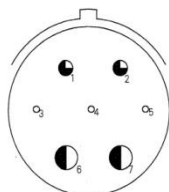
40-9
16- Φ 1.5



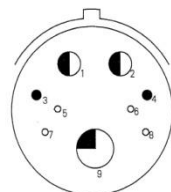
40-11
4- Φ 5.5



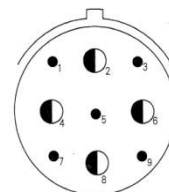
40-1
2- Φ 9.0



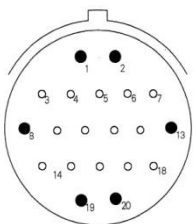
40-2
3- Φ 1.5, 2- Φ 3.5, 2- Φ 5.5



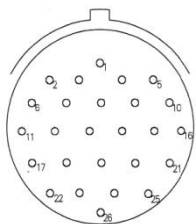
48-3
4- Φ 1.5, 2- Φ 2.5, 2- Φ 5.5, 1- Φ 9.0



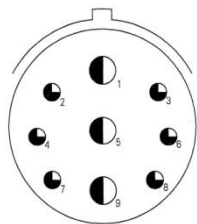
40-4
5- Φ 2.5, 4- Φ 5.5



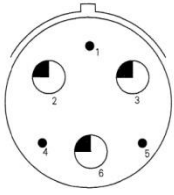
48-5
14- Φ 1.5, 6- Φ 2.5



48-6
26- Φ 1.5

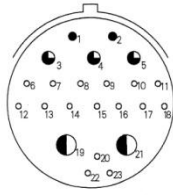


48-9
6- Φ 3.5, 3- Φ 5.5



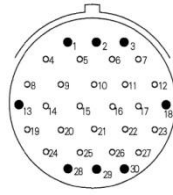
55-1

3-Φ2.5, 3-Φ9.0



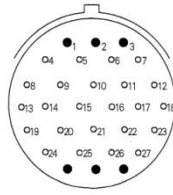
55-2

16-Φ1.5, 2-Φ2.5, 3-Φ3.5, 2-Φ5.5



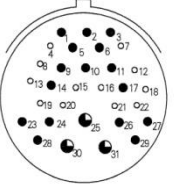
55-3

22-Φ1.5, 8-Φ2.5



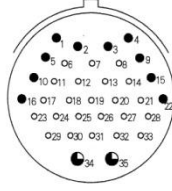
55-5

24-Φ1.5, 6-Φ2.5



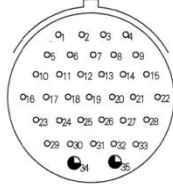
55-6

12-Φ1.5, 16-Φ2.5, 3-Φ3.5



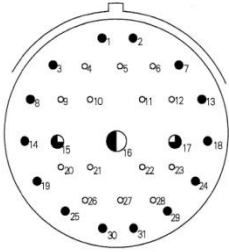
55-7

23-Φ1.5, 10-Φ3.5



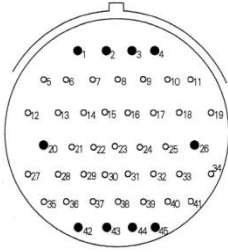
55-8

33-Φ1.5, 2-Φ3.5



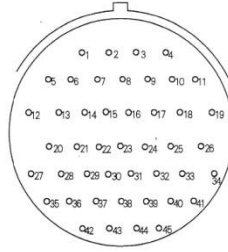
60-1

14-Φ1.5, 14-Φ2.5, 2-Φ3.5, 1-Φ5.5



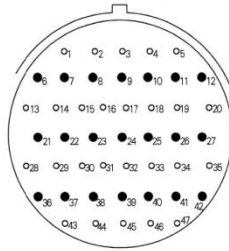
60-2

35-Φ1.5, 10-Φ2.5



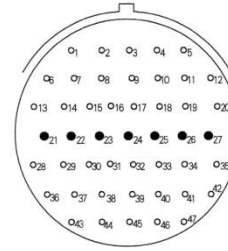
60-3

45-Φ1.5



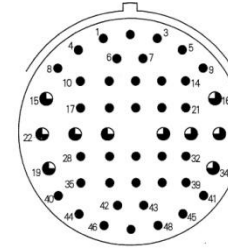
60-4

26-Φ1.5, 21-Φ2.5



60-5

40-Φ1.5, 7-Φ2.5



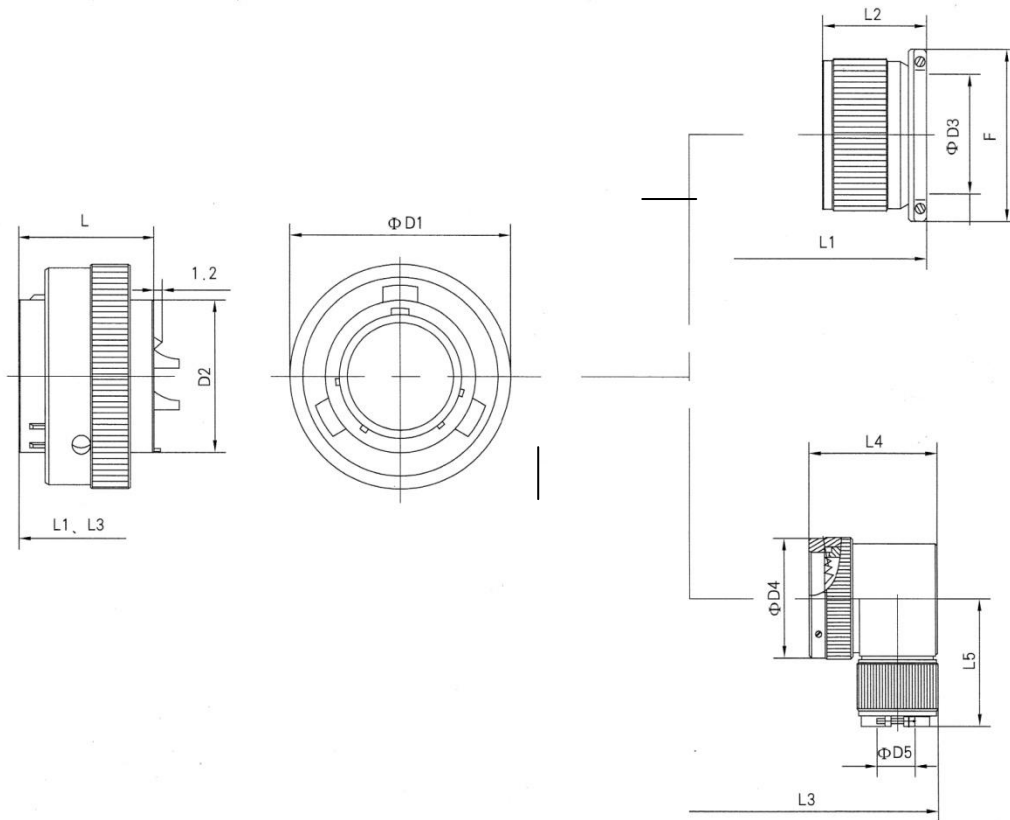
63-1

38-Φ2.5, 10-Φ3.5

○ Φ1.5 ● Φ2.5 ◐ Φ3.5 ◑ Φ5.5 ◒ Φ9

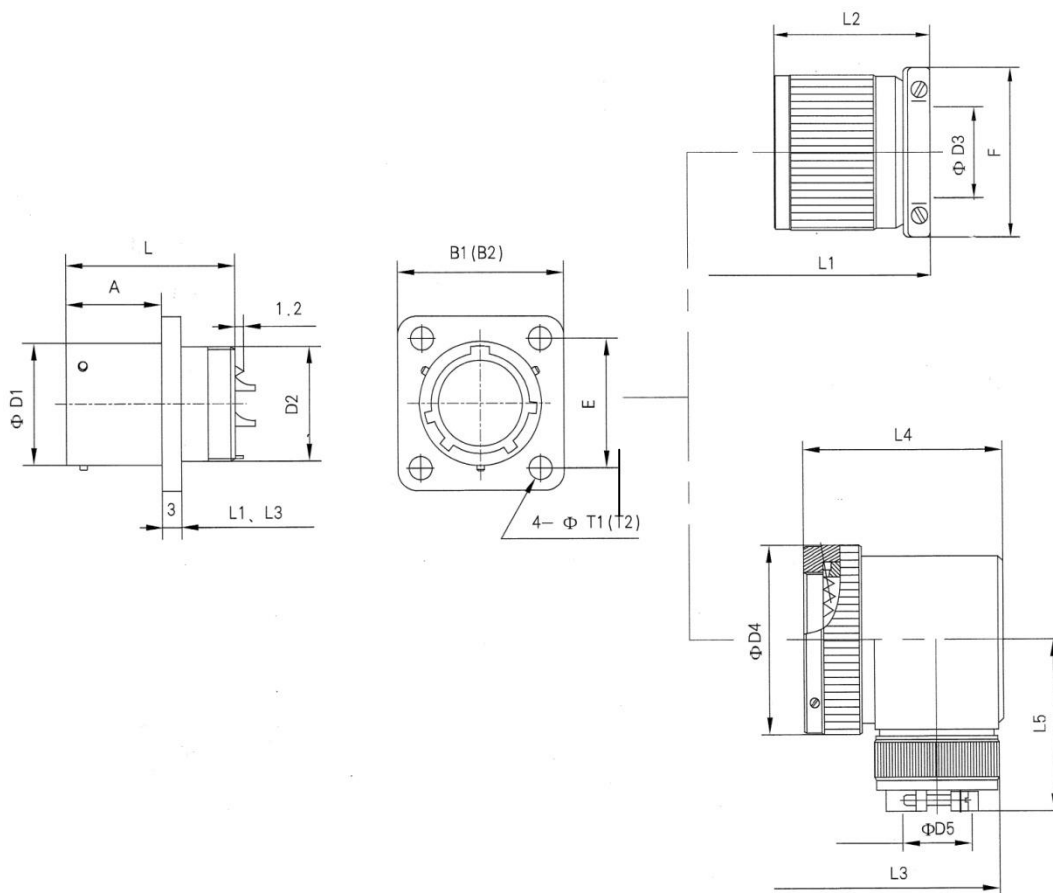
Shell size

Plug



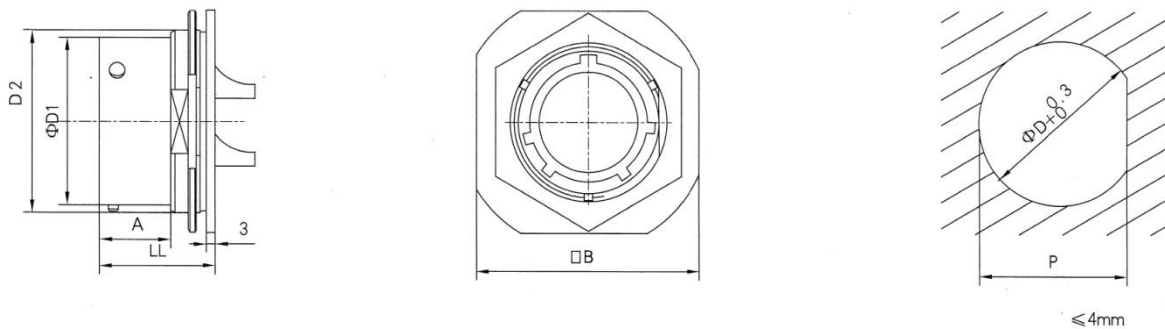
Shell size	L	D1	Thread D2	L1	L2	D3	F	L3	L4	L5	D4	D5
16	25	26	M16×1	50	30	7	22	55	35	30	22	7
20	25	30	M20×1	50	30	14	30	59	39	31	27	14
28	25	38	M28×1	52	32	21	38	65	45	36	35	21
32	25	42	M32×1.5	54	34	21	38	65	45	40	38	21
32-1*	30	42	M32×1.5	59	34	21	38	70	45	40	38	21
36	25	46	M36×1	60	40	24	43	68	48	42	43	24
36-1*	30	46	M36×1	65	40	24	43	73	48	42	43	24
40	30	50	M40×1.5	69	43	24	45	75	50	44	47	24
48	30	58	M48×1.5	71	46	32	51	81	56	47	55	32
55	30	65	M55×1.5	77	52	40	64	96	71	54	63	40
60	30	71	M60×1	82	57	48	69	104	79	57	68	48
63	30	73	M62×1.5	82	57	48	69	104	79	59	71	48

Square flange receptacle

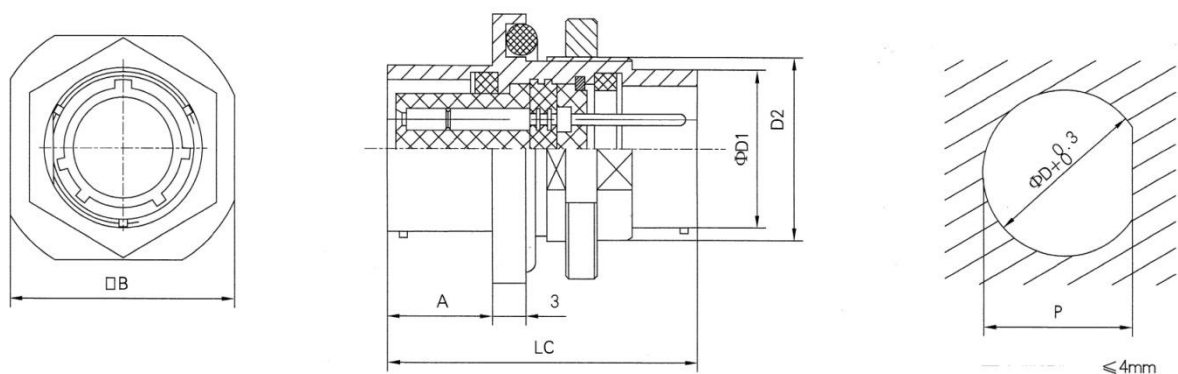


Shell size	L	A	B1	B2	T1	T2	E	D1	Thread D2	L1	L2	D3	F	L3	L4	L5	D4	D5
16	25	13	25	25	3.2	3.2	19	17.4	M16x1	34	30	7	22	39	35	30	22	7
20	25	13	30	32	3.2	4.5	22	21.4	M20x1	34	30	14	30	43	39	31	27	14
28	25	13	38	40	3.5	4.5	30	27.4	M28x1	36	32	21	38	49	45	36	35	21
32	25	13	40	44	3.5	4.5	32	31.8	M32x1.5	38	34	21	38	49	45	40	38	21
32	30	18	40	44	3.5	4.5	32	31.8	M32x1.5	38	34	21	38	49	45	40	38	21
36	25	13	42	46	3.5	4.5	34	35.8	M36x1	44	40	24	43	52	48	42	43	24
36	30	18	42	46	3.5	4.5	34	35.8	M36x1	44	40	24	43	52	48	42	43	24
40	30	18	48	52	3.5	4.5	40	39.8	M40x1.5	48	43	24	45	54	50	44	47	24
48	30	18	58	60	4.5	4.5	48	49.4	M48x1.5	50	46	32	51	60	56	47	55	32
55	30	18	64	68	4.5	4.5	52	56.4	M55x1.5	56	52	40	64	75	71	54	63	40
60	30	18	68	72	4.5	4.5	54	61.4	M60x1	61	57	48	69	85	79	57	68	48
63	30	18	70	70	4.5	4.5	58	64.4	M62x1.5	61	57	48	69	85	79	59	71	48

Jam nut receptacle

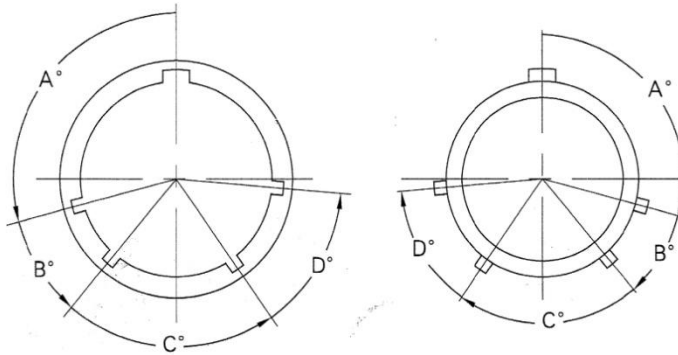


Thru bulkhead hermetic receptacle



Shell size	LL	LC	A	D1	Thread D2	B	D	P
16	25	40	13	17.4	M20×1	27	20.5	19
20	25	40	13	21.4	M24×1	32	24.5	23
28	25	40	13	27.4	M32×1.5	40	32.5	30
32	25	40	13	31.8	M36×1	48	36.5	34.2
32	30	50	18	31.8	M36×1	48	36.5	34.2
36	25	40	13	35.8	M40×1.5	52	40.5	38.2
36	30	50	18	35.8	M40×1.5	52	40.5	38.2
40	30	50	18	39.8	M45×1.5	56	45.5	42.7
48	30	50	18	49.4	M55×1.5	66	55.5	52.5
55	30	50	18	56.4	M60×1.5	71	60.5	58.5
60	30	50	18	61.4	M65×1.5	76	65.5	63.5
63	30	50	18	64.4	M68×1.5	79	68.5	66.5

Orientation



Number of key position	Color	Degree			
		A	B	C	D
N	Blue	105°	140°	215°	265°
M	Green	100°	142°	220°	260°
X	Yellow	110°	145°	208°	250°
Y	Black	95°	135°	210°	255°
Z	White	90°	130°	224°	270°