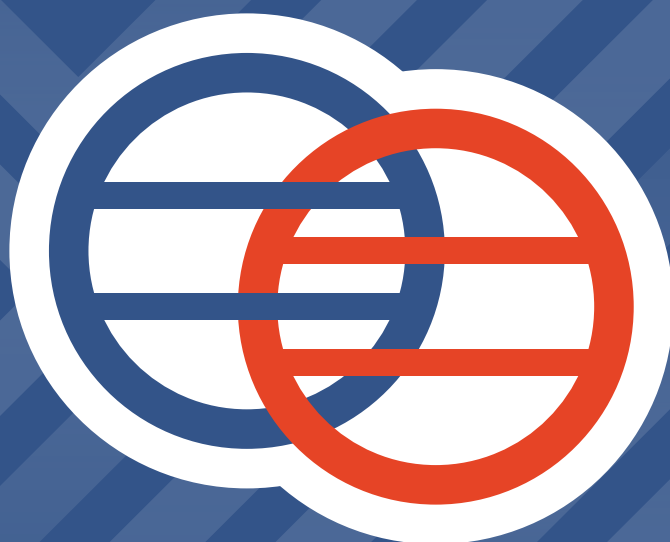




MATENG

Y50X SERIES

CATALOG

Y50X SERIES

CIRCULAR ELECTRICAL CONNECTOR



Conform to Chinese military connector standard GJB101A-1997, Y50X series is designed as bayonet coupling, small volume, high density.

PART NUMBER

Basic series	Y50	X	12	-10	T	J	2	III	H	S	L
Type	X = Solder and hermetic by adhesive P = Solder shielding and hermetic by adhesive A = PCB, solder and hermetic by adhesive C = Hermetic by adhesive without magnetism										
Shell size	08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 32										
Number of contact	2 ~ 61										
Type of connector	T = Plug Z = Receptacle										
Type of contact	J = Pin K = Socket SJ = Thru bulkhead Pin SK = Thru bulkhead Socket										
Type of plug and receptacle (See below datasheet I)	Orientation Omit = N N, W, X, Y, Z (See below)										
Orientation	Omit = N N, W, X, Y, Z (See below)										
Finish	P1 = Electroless nickel plating P2 = Bright nickel plating P3 = Half bright nickel plating H1 = Conductive black L2 = Olive drab cadmium plating H = Black anodized L = Olive drab anodized L1 = Olive drab matte L3 = White anodized										
Material of shell	S = Cooper-alloy B = Stainless steel passivated Omit = Aluminium-alloy										
Length											



DATASHEET I

Sign	Plug
1	Earthing jam
2	Cable connecting
2M	Hermetic cable back shell
2P	Shielded cable back shell
3	Hermetic
4	Avoid-wave and tensile
5	90° elbow and protect cable
6	Thread spring and protect cable
5-6	90° elbow line spring
8	Protect cable back shell
8-2	Hermetic tensile
10	Square flange (front)
20	Square flange (back)
11	Circular flange
14	Jam nut
10-2	Square flange with cable clamp
11-2	Circular flange with cable clamp
24	Circular jam nut

PERFORMANCE SPECIFICATION

- Operating temperature range: -55 oC~ +125 oC.
- Corrosion resistance: Withstand 48 hours salt spray (5% NaCl fog).
- Operating atmospheric pressure: 4.39 KPa ~ 101.33 KPa.
- Vibration: 10 Hz ~ 2000 Hz, acceleration 196 m/s².
- Relative humidity: 40 + 2 oC, 90% ~ 95%.
- Durability: ≥ 1000 cycles.

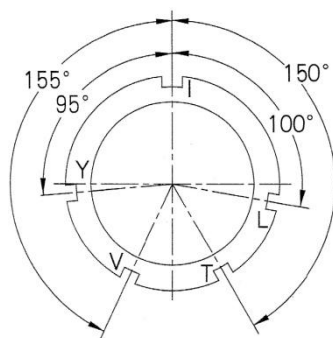
CONTACT SPECIFICATION

Contact No.	Cross section for cable (mm ²)	Resistance (mΩ)	Current (A)
20#	0.20	≤5	5
	0.30		
	0.50		
16#	0.50	≤3	10
	0.80		
	1.25		
12#	2.00	≤2	25
	3.15		

0802	0803	0804	0807	0807 (I)	0810	1007	1010	1013	1203
1204	1207	1208	1208 (I)	1210	1219	1412	1415		
1419	1608	1626	1808	1811	1824				
1832	2016	2041	2221	2255					
2419	2461	2441	2612	3241					

○ $\Phi 0.8$ ● $\Phi 1$ ⊕ $\Phi 1.5$ ⊙ $\Phi 2.5$ ● $\Phi 3$ ⊕ $\Phi 4$

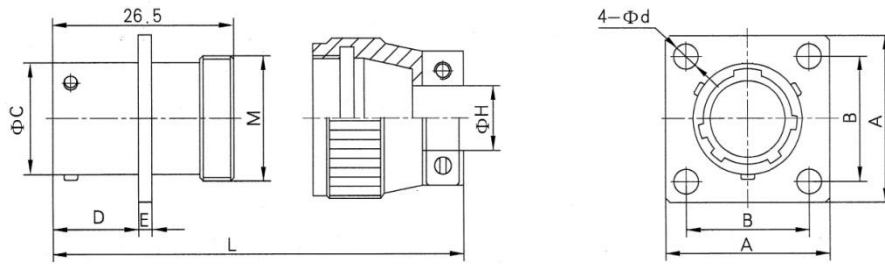
ORIENTATION



No.	I	II	III	IV	V
Letter of sign	V	Y	I	L	T
Degree	155°	95°	0°	100°	150°

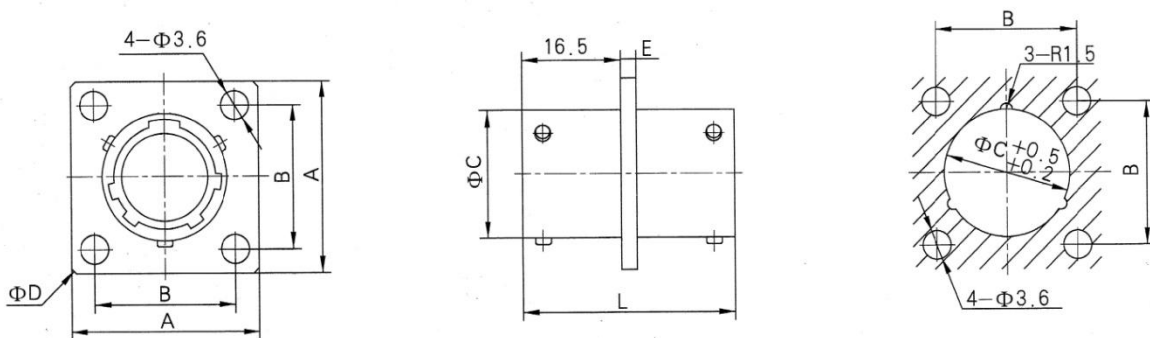
SHELL SIZE

Square flange receptacle



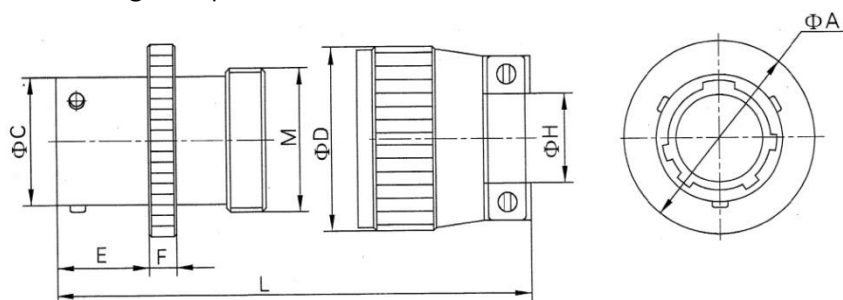
Shell No.	A	B	Φ C	E	Thread M	Φ H	L	D		Φ d
								Front	Back	
0807	21	15±0.15	12	1.5	-	-	-	-	14.5	3.6
08	21	15±0.15	13	2.0	M14*1.0	4-7	41.5	12.5	14.5	3.6
10	24	18±0.15	16	2.0	M18*1.0	4-7	41.5	12.5	14.5	3.6
12	27	21±0.15	20	2.0	M20*1.0	5-10	43.5	12.5	14.5	3.6
14	30	23±0.15	23	2.0	M24*1.0	6-14	49.5	12.5	14.5	3.6
16	33	25±0.15	26	2.0	M27*1.0	6-16	49.5	12.5	14.5	3.6
18	36	27±0.15	29	2.0	M29*1.0	6-17.5	49.5	12.5	14.5	3.6
20	39	29±0.15	32	2.0	M33*1.0	6-20	51.0	12.5	14.5	3.6
22	42	32±0.15	35	2.0	M36*1.0	6-24	51.0	12.5	14.5	3.6
24	45	35±0.15	38	2.0	M38*1.0	6-27	55.0	12.5	14.5	3.6
26	48	38.5±0.15	41	2.0	M42*1.0	6-27	55.0	12.5	14.5	3.6

Thru bulkhead square flange receptacle



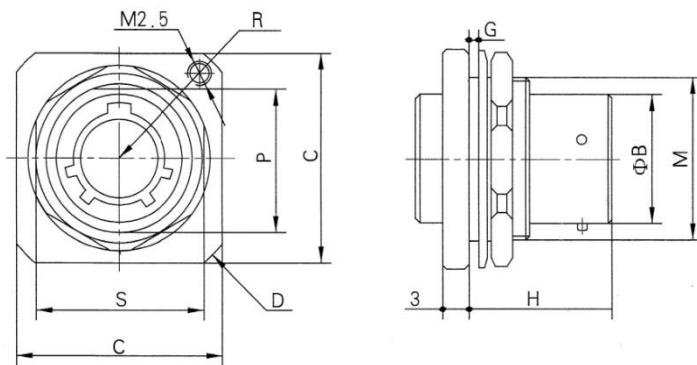
Shell No.	08	10	12	14	16	18	20	22	24
A	21	24	27	30	33	36	39	42	45
B±0.15	15	18	21	23	25	27	29	32	35
Φ C	13	16	20	23	26	29	32	35	38
E	3	3	3	3	3	3	3	3	3
L	36	36	35.6	36	36	36	36	36	36
Φ D	27	33	37	40	44.5	45	50	55	60

Circular flange receptacle



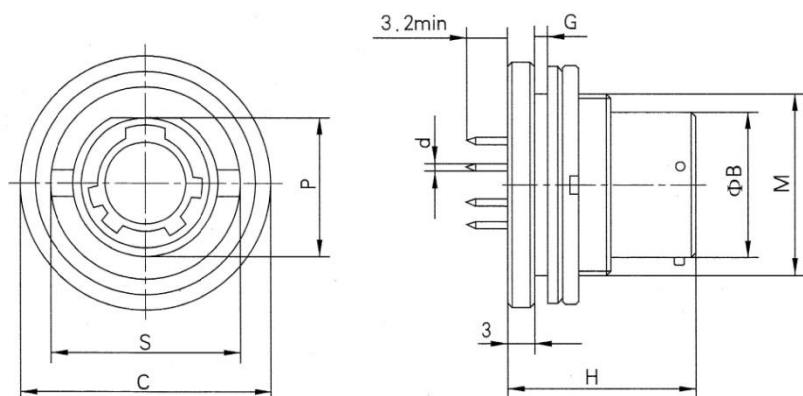
Shell No.	ΦC	E	F	D	ΦH	L	ΦA	Thread M
08	13.00	12.5	4	16.0	4-6	41.5	23.0	14*1
10	16.00	12.5	4	20.0	4-7	41.5	27.0	18*1
12	20.00	12.5	4	22.0	5-10	43.5	31.0	20*1
14	23.00	12.5	4	26.0	6-14	49.5	34.0	24*1
16	26.00	12.5	4	30.0	6-16	49.5	36.0	27*1
18	29.00	12.5	4	31.5	6-17.5	49.5	39.0	29*1
20	32.00	12.5	4	35.5	6-20	51.0	44.0	33*1
22	35.00	12.5	4	38.6	6-24	51.0	47.0	36*1.5
24	38.00	12.5	-	40.5	6-27	55.0	50.0	38*1.5

Jam nut receptacle



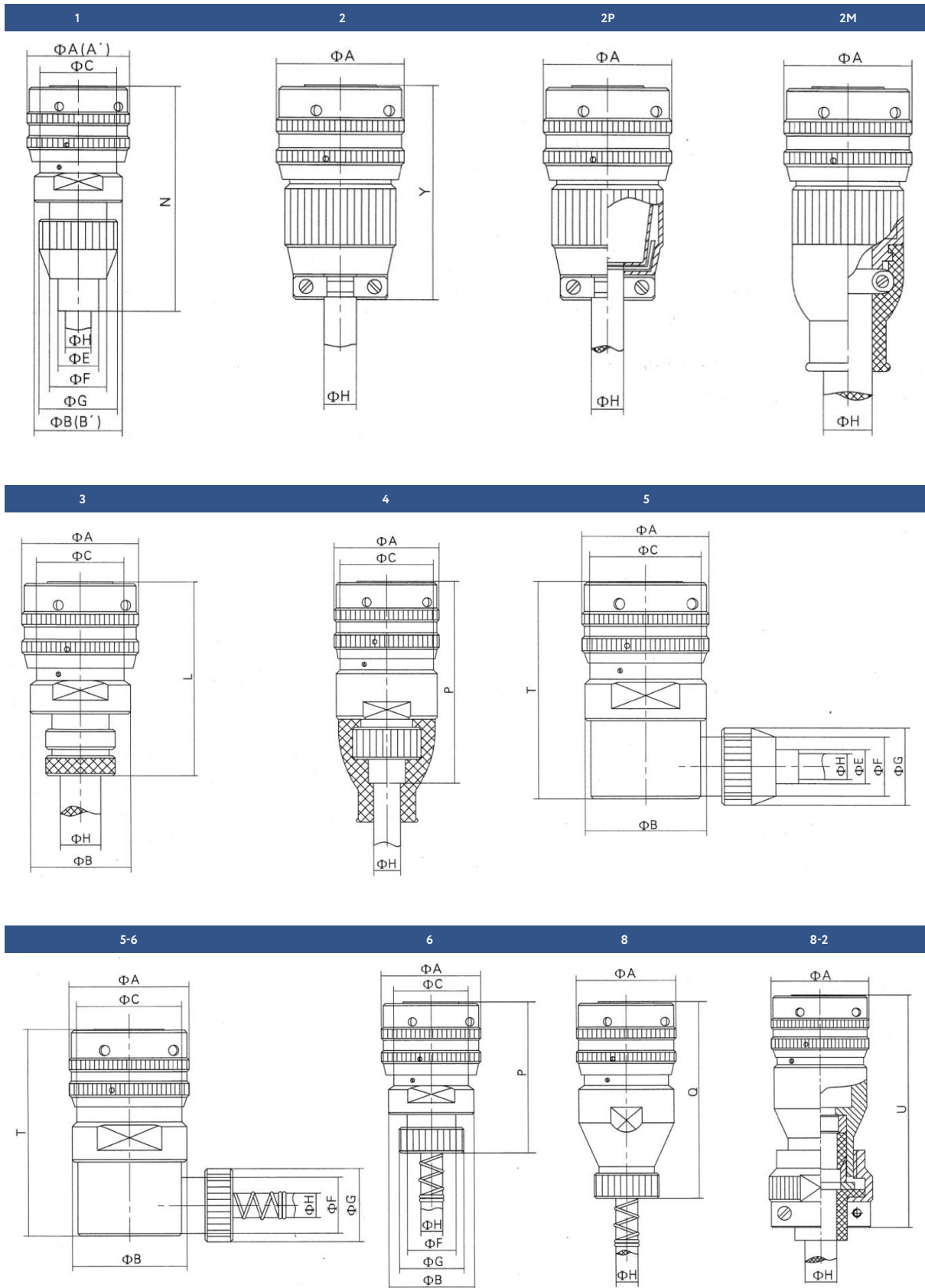
Shell No.	H	B	P ± 0.1	S	Thread M	ΦD	R	G		C ± 0.1
								Min	Max	
0807	19.0	12	13	17	M14*1.0	24.5	10.5	1.6	3.2	19
08	21.0	13	15	22	M16*1.0	31.5	13.4	1.6	3.2	24
10	21.0	16	19	24	M20*1.5	33.2	14.4	1.6	3.2	27
12	21.0	20	23	27	M24*1.5	39.2	17.4	1.6	3.2	32
14	21.0	23	26	30	M27*1.5	42.2	18.9	1.6	3.2	36
16	21.0	26	29	32	M30*1.5	45.2	20.0	1.6	3.2	38
18	21.0	29	32	36	M33*1.5	47.2	21.7	1.6	3.2	41
20	23.5	32	35	41	M36*1.5	50.2	23.2	1.6	6.4	46
22	23.5	35	38	43	M39*1.5	54.2	25.0	1.6	6.4	50
24	23.5	38	41	46	M42*1.5	56.2	26.2	1.6	6.4	53

PCB receptacle



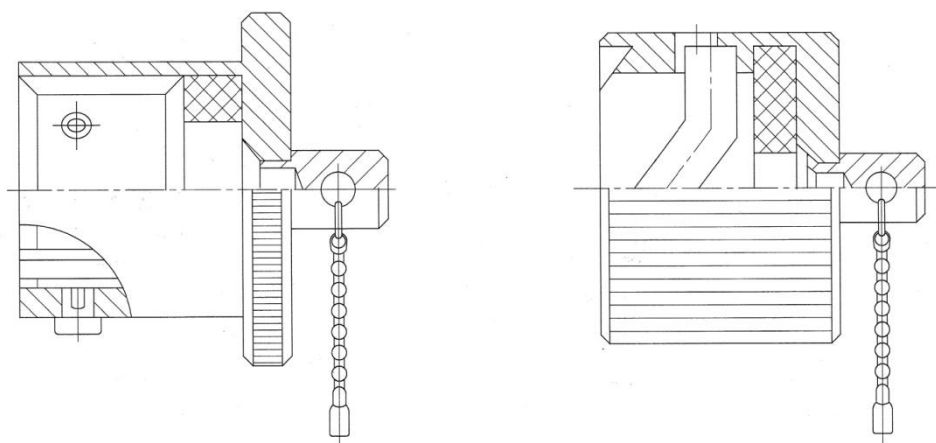
Shell No.	H	B	P ±0.1	S	Thread M	Φ D	R	G		C ±0.1
								Min	Max	
0807	19.0	12	13	17	M14*1.0	24.5	10.5	1.6	3.2	19
08	21.0	13	15	22	M16*1.0	31.5	13.4	1.6	3.2	24
10	21.0	16	19	24	M20*1.5	33.2	14.4	1.6	3.2	27
12	21.0	20	23	27	M24*1.5	39.2	17.4	1.6	3.2	32
14	21.0	23	26	30	M27*1.5	42.2	18.9	1.6	3.2	36
16	21.0	26	29	32	M30*1.5	45.2	20.0	1.6	3.2	38
18	21.0	29	32	36	M33*1.5	47.2	21.7	1.6	3.2	41
20	23.5	32	35	41	M36*1.5	50.2	23.2	1.6	6.4	46
22	23.5	35	38	43	M39*1.5	54.2	25.0	1.6	6.4	50
24	23.5	38	41	46	M42*1.5	56.2	26.2	1.6	6.4	53

PLUG



Shell No.	Φ A	Φ B	Φ C	Φ H	Φ E	Φ F	Φ G	N (max)	L (max)	Y (max)	T (max)	P (max)	Q (max)	U (max)
08	20	18	16	4-7	7.5	12	17.5	55	45	37	45	55	60	65
10	23	22.5	20	4-7	9.2	13	18	60	50	37	45	60	65	70
12	26	25	22.5	5-10	10.0	17	21	60	50	45	54	60	65	70
14	30	29	26	6-14	11.5	16	22	60	50	46	58	60	65	70
16	33.5	33	30	6-16	18	20	30	60	50	47	58	65	70	75
18	35	35	32	6-17.5	20	22	30	60	50	47	60	65	70	75
20	39	39	35.5	6-20	23	28	32	60	50	50	60	70	80	90
22	43	42	37	6-24	24	29	32	60	50	55	65	70	80	90
24	46	46	43	6-27	26	29	32	60	50	56	65	70	80	90

DUST CAP





MATENG

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