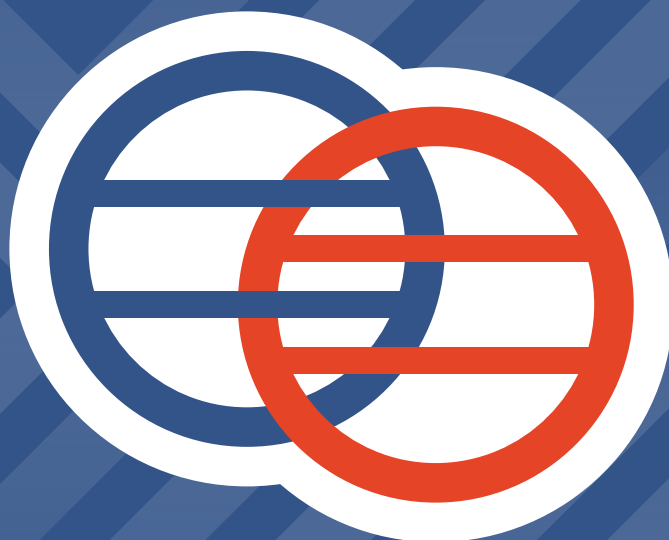




MATENG

Y50EX SERIES

CATALOG

Y50EX SERIES

CIRCULAR ELECTRICAL CONNECTOR



Conform to Chinese military connector standard GJB598A-96, Y50EX is designed as bayonet coupling, small volume, high density.

PART NUMBER

Basic series	Y50E	X	12	-10	T	J	2	W	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	06, 08, 10, 12, 14, 16, 18, 20, 22, 24										
Number of contact	1 ~ 67										
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)										
Finish	P1 = Electroless nickel plating P2 = Bright nickel plating P3 = Half bright nickel plating E = Stainless steel passivated H1 = Conductive black L2 = Olive drab cadmium plating H = Black anodized L = Olive drab anodized L1 = Olive drab matte										
Material of shell	S = Cooper-alloy B = Stainless steel Omit = Aluminium-alloy										
Length											

DATASHEET I

Sign	Plug
1	Earthing jam
2	Cable connecting
2X	Double cable clamp
2M	Cable sealed
2P	Shielded cable
3	Sealed
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
8-2	Sealed 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

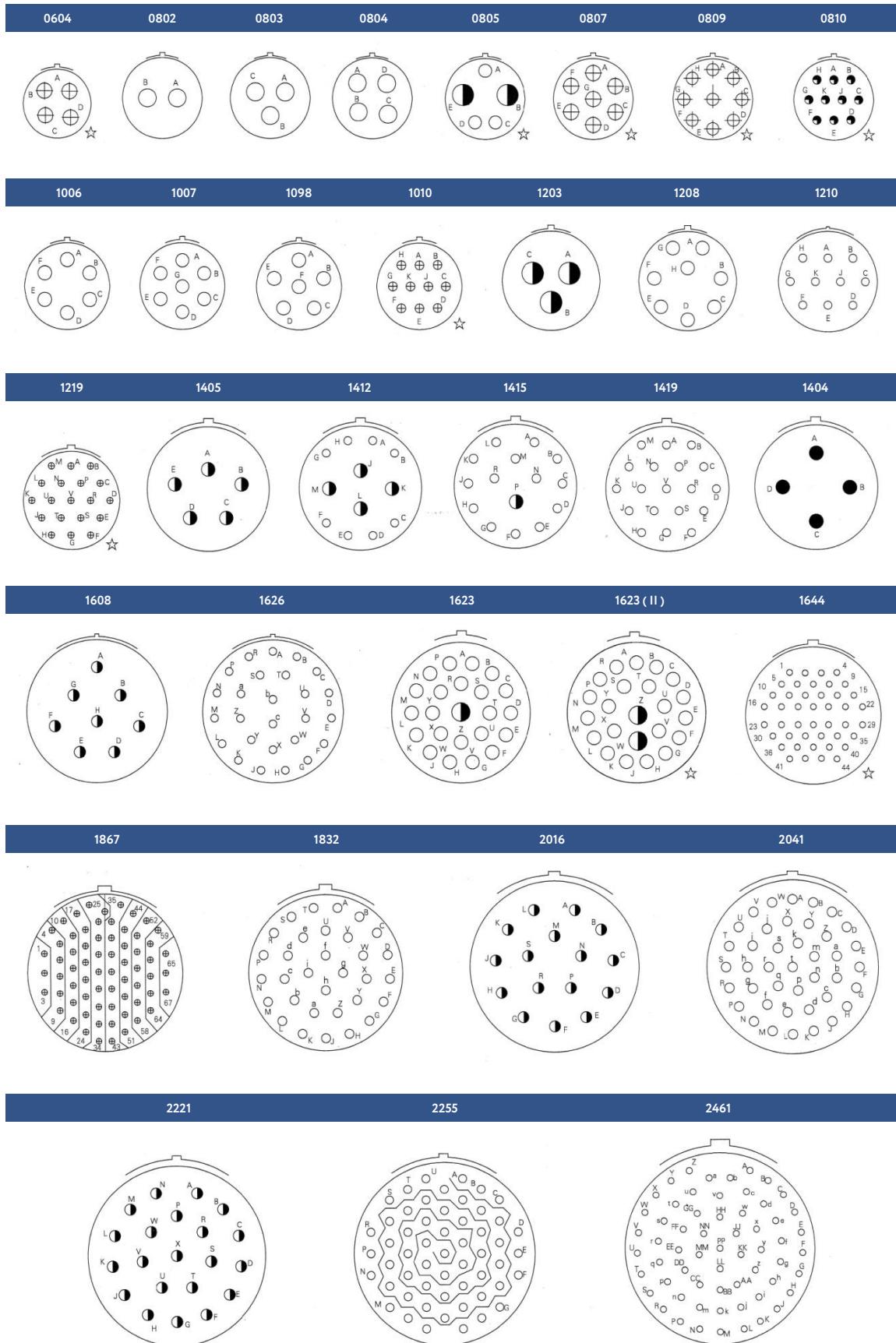
PERFORMANCE SPECIFICATION

- Operating temperature range: -55 °C~ +125 °C
- 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 °C, 90% ~ 95%
- Durability: ≥ 1000 cycles

CONTACT SPECIFICATION

Contact No.	Cross section for cable (mm ²)	Resistance (mΩ)	Current (A)
20#	0.20	≤5	3.0
	0.30		5.0
	0.50		7.5
16#	0.50	≤3	7.5
	0.80		10.0
	1.25		13.0
12#	2.00	≤2	17.0
	3.15		25.0

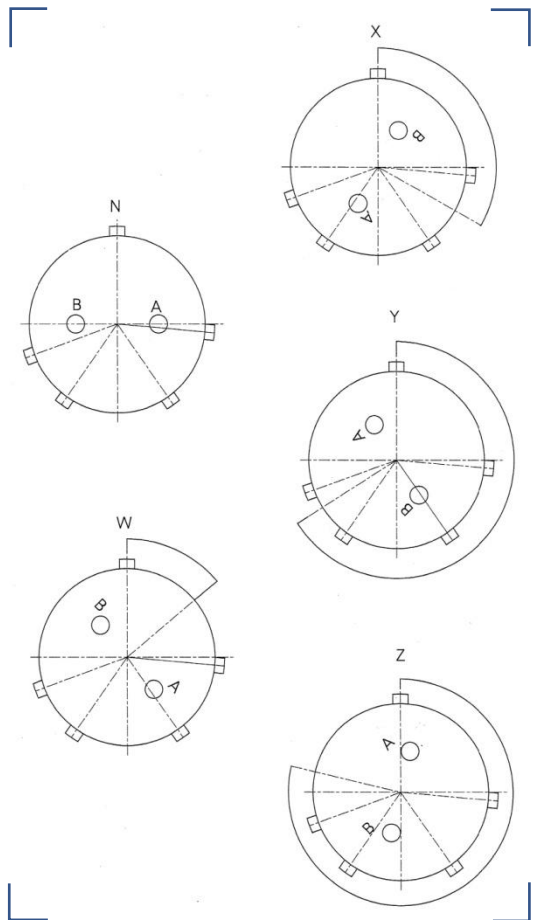
CONTACT LAYOUT



● Φ0.6 ⊕ Φ0.8 ○ Φ1 ● Φ1.59 ● Φ2.39

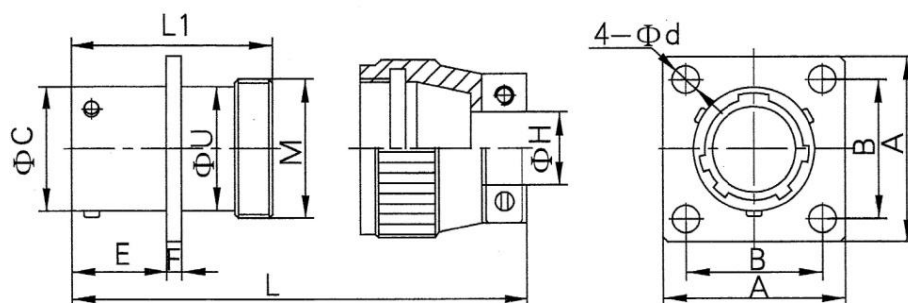
Shell No.	Degree (N=0°)			
	W	X	Y	Z
8	58°	122°	-	-
	60°	210°	-	-
	60°	210°	-	-
	45°	-	-	-
	90°	-	-	-
	60°	155°	1270°	295°
10	90°	-	-	-
	90°	180°	240°	270°
	60°	150°	270°	295°
12	-	-	180°	-
	90°	112°	203°	292°
	60°	155°	270°	295°
14	40°	92°	184°	273°
	43°	90°	-	-
	17°	110°	155°	234°
	15°	90°	180°	270°
	30°	165°	315°	
16	54°	152°	180°	331°
	158°	270°	-	-
	60°	-	275°	338°
	30°	165°	315°	-
18	30°	165°	315°	-
	85°	138°	222°	265°
	180°	193°	285°	350°
20	238°	318°	333°	347°
	63°	144°	252°	333°
	45°	126°	225°	-
	70°	145°	215°	290°
	72°	144°	216°	288°
	72°	144°	216°	288°
22	16°	135°	175°	349°
	72°	144°	216°	288°
	30°	142°	226°	314°
	72°	145°	215°	288°
24	90°	180°	270°	324°

ORIENTATION



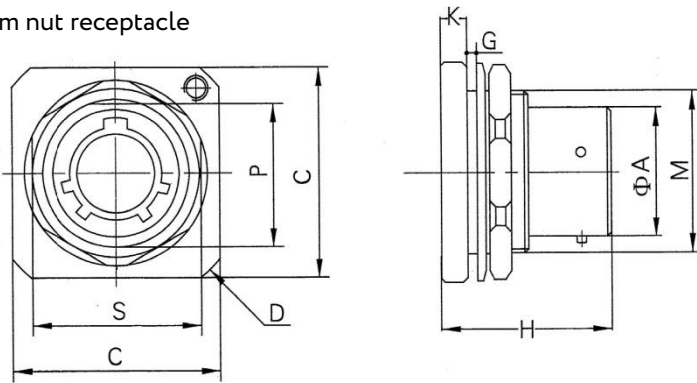
SHELL SIZE

Square flange receptacle



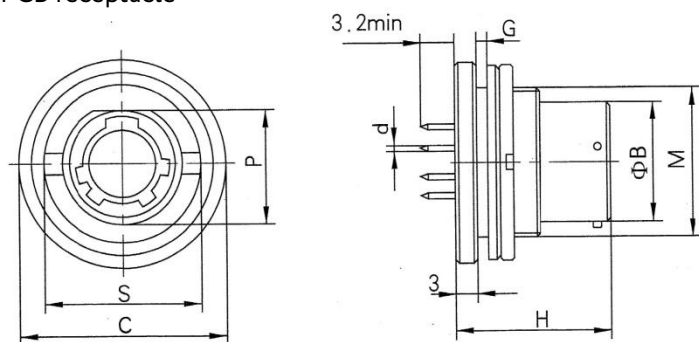
Shell No.	Φ C	Φ H	Φ U	L	L1	F	M	E		A	B	Φ d
								Front	Back			
06	8.8	3-6	10.90	36.5	21.5	2.0	-	10.95	14.5	18.10	12.50	3.2
0807	12.0	4-6	12.00	-	-	1.5	12x1	-	14.5	21.00	15.00	3.6
08	12.0	4-6	12.80	36.5	21.5	1.5	1/2-20	10.95	14.5	20.60	15.90	3.6
10	15.0	4-8	16.01	36.5	21.5	1.5	5/8-24	10.95	14.5	23.80	18.30	3.6
12	19.1	5-10	19.10	38.5	21.5	2.0	3/4-20	10.95	14.5	26.20	20.62	3.6
14	22.2	6-14	22.30	43.0	21.5	2.0	21x1	10.95	14.5	30.00	23.00	3.6
16	25.4	6-16	25.54	43.0	21.5	2.0	1-20	10.95	14.5	31.00	24.60	3.6
18	28.6	6-17.5	28.60	44.5	21.5	2.0	27.4x1	10.95	14.5	33.30	27.00	3.6
20	31.8	6-20	31.50	49.0	26.5	2.6	30x1	12.50	19.5	36.50	29.36	3.6
22	34.9	6-24	35.00	49.0	26.5	2.6	35x1	12.50	19.5	40.00	32.00	3.6
24	38.1	6-27	38.00	53.0	26.5	2.6	37.4-20	12.50	19.5	42.90	43.93	3.6

Jam nut receptacle



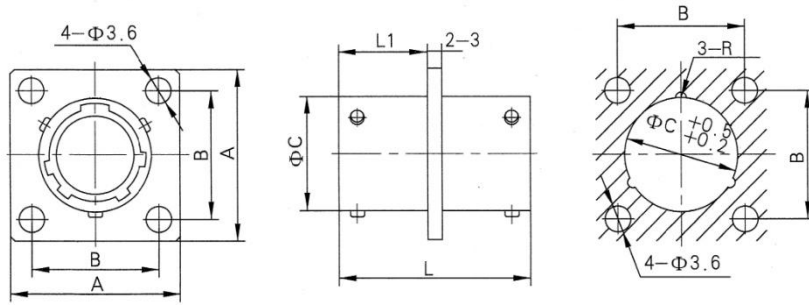
Shell No.	G		K	H ±0.1	A ±0.1	S ±0.1	P ±0.1	C ±0.1	D	M
	Min	Max								
06	1.6	3.2	3.2	21.0	8.80	16.50	10.10	18.00	24.00	1/16-26
0807	1.6	3.2	3.2	19.0	12.00	18.00	13.00	19.00	24.50	14x11
08	1.6	3.2	3.2	21.0	12.00	19.10	13.20	23.80	27.25	9/16-20
10	1.6	3.2	3.2	21.0	15.00	22.20	16.50	27.00	30.40	11/16-24
12	1.6	3.2	3.2	21.0	19.10	27.00	21.20	31.80	35.20	7/8-20
14	1.6	3.2	3.2	21.0	22.20	32.00	24.20	34.90	38.40	1-20
16	1.6	3.2	3.2	21.0	25.40	33.00	27.35	38.10	41.50	1 1/9-20
18	1.6	3.2	3.2	21.0	28.60	36.50	30.35	41.30	44.70	1 1/4-18
20	1.6	6.4	6.4	26.5	31.78	39.70	33.70	46.00	49.40	1 3/8-18
22	1.6	6.4	6.4	26.5	34.95	44.00	36.60	49.20	52.60	1 1/2-18
24	1.6	6.4	6.4	26.5	38.10	46.00	40.05	52.50	55.80	1 5/8-18

PCB receptacle



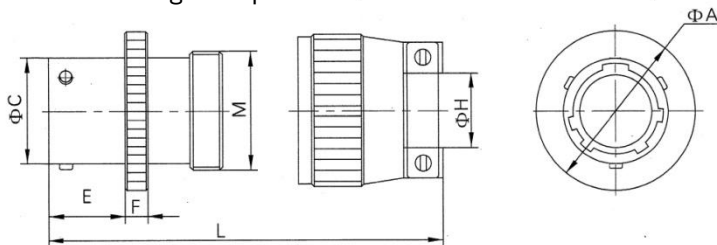
Shell No.	G		K	H	B	M	C ±0.1	Φ d	P ±0.1	S
	Min	Max								
06	1.6	3.2	3.2	19	8.8	7/16-28	18.0	0.8	-	-
0807	1.6	3.2	3.2	19	12.0	14x1	19.0	0.8	13.0	17.0
08	1.6	3.2	3.2	19	12.0	9/16-20	23.8	1.0	13.2	23.0
10	1.6	3.2	3.2	19	15.0	11/16-24	26.0	1/1.5	16.5	26.0
12	1.6	3.2	3.2	19	19.1	7/8-20	31.0	1/1.5	21.2	30.0
14	1.6	3.2	3.2	19	22.2	1-20	34.9	1/1.5	24.2	34.0
16	1.6	3.2	3.2	19	25.4	1 1/9-20	36.5	1/1.5	27.4	35.5
18	1.6	3.2	3.2	19	28.6	1 1/4-18	41.0	1/1.5	30.4	38.5
20	1.6	6.4	6.4	24	31.8	1 3/8-18	43.0	1/1.5	30.7	42.0
22	1.6	6.4	6.4	24	34.9	1 1/2-18	46.5	1/1.5	36.6	45.5
24	1.6	6.4	6.4	24	38.1	1 5/8-18	50.0	1.0	40.1	48.5

Thru bulkhead square flange receptacle



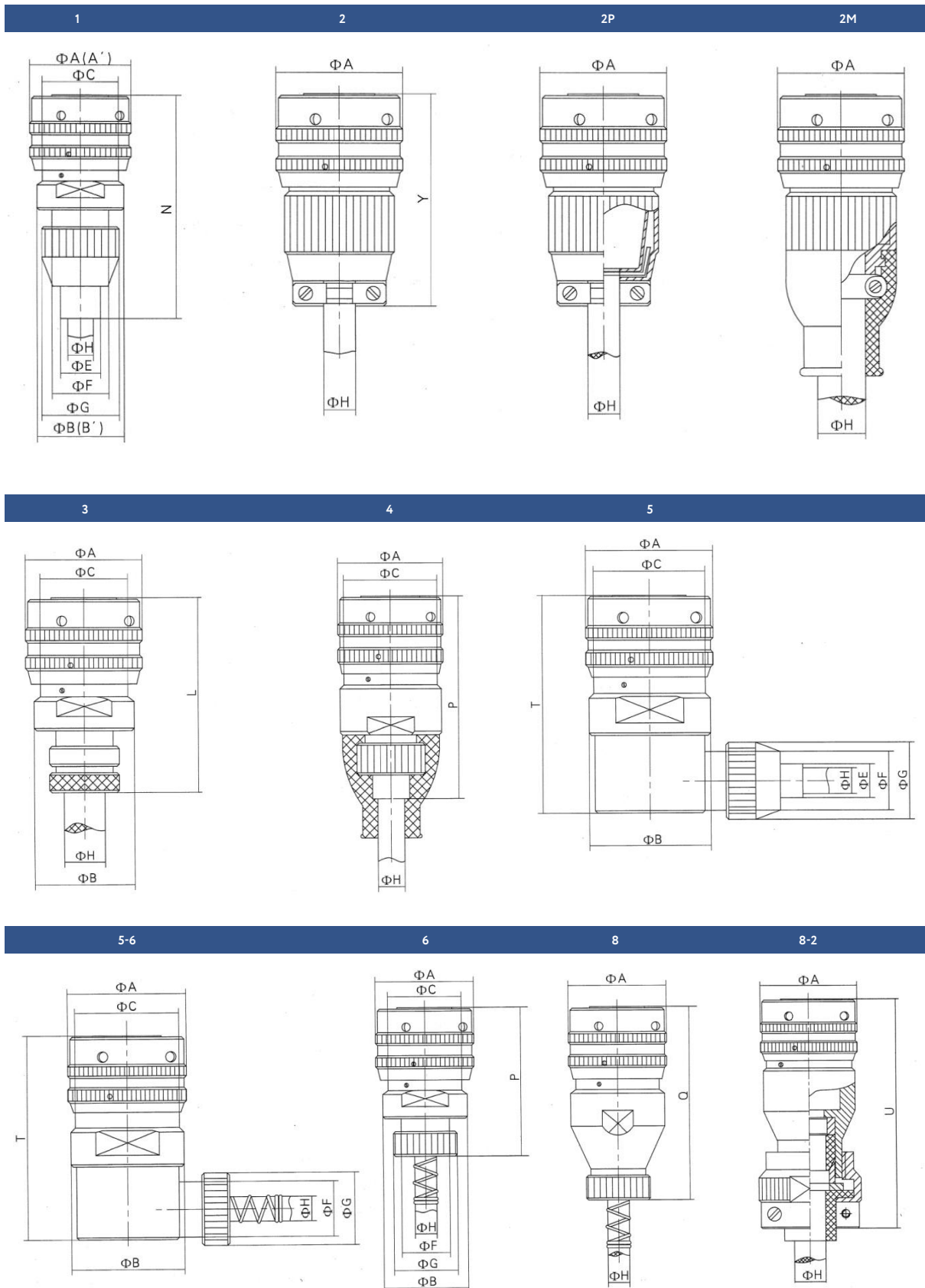
Shell No.	A	B	Φ C	L	L1	R
0807	20.60	15.00	12.00	28.0	13	1.5
08	20.60	15.09	12.00	33.5	14.5	1.5
10	23.80	18.30	15.00	33.5	14.5	1.5
12	26.20	20.60	19.10	33.5	14.5	1.5
14	30.00	23.00	22.20	33.5	14.5	1.5
16	31.00	24.60	25.40	33.5	14.5	1.5
18	33.30	27.00	28.60	33.5	14.5	1.5
20	36.50	29.36	31.78	36.0	16.5	1.5
22	40.00	32.00	34.95	36.0	16.5	1.5
24	42.90	34.93	38.10	36.0	16.5	2.0

Circular flange receptacle



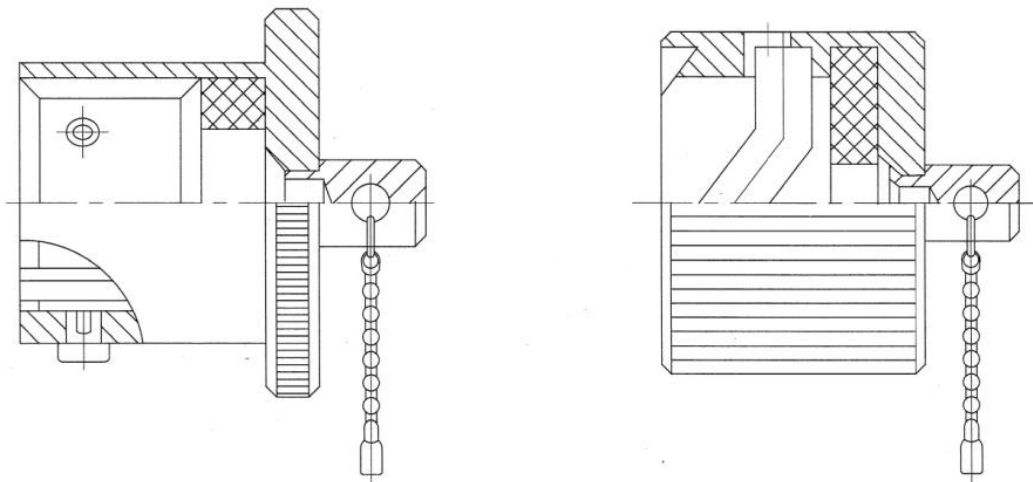
Shell No.	Φ C	E	F	Φ H	L	Φ A	M
08	12.60	10.05	3.5	4-7	36.5	20.0	1/2-20
10	15.00	10.90	3.5	4-7	36.5	23.0	5/8-24
12	19.10	10.95	3.5	5-10	36.5	27.0	3/4-20
14	22.20	10.95	3.5	6-14	43.0	30.0	21x1
16	25.40	10.95	3.5	6-16	43.0	33.5	1-20
18	28.60	10.95	3.5	6-17.5	44.5	36.5	27.4x1
20	31.78	12.50	4.0	6-20	49.0	40.0	30x1
22	34.95	12.50	4.0	6-24	49.0	43.0	35x1
24	38.10	12.50	4.0	6-27	53.0	47.0	37.4-20

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)
06	16.0	-	12.5	3-6	-	-	-	-	-	-	-	-	-	-
08	19.0	18.0	15.5	4-7	7.5	12	17.5	52	45	30	44	50	55	65
10	22.0	21.0	19.0	4-7	9.1	12	18	52	50	31	44	55	60	65
12	26.0	26.0	22.0	5-10	9.5	13	18	57	50	42	44	55	60	65
14	28.5	27.5	24.0	6-14	10.3	15	23.5	57	50	45	44	55	60	65
16	31.0	31.0	27.4	6-16	18	21	26.5	57	50	45	48	60	65	70
18	35.0	35.0	29.4	6-17.5	19.5	20	27	57	50	50	48	60	65	70
20	39.0	39.0	34.0	6-20	22	21	28	60.5	50	52	48	65	75	85
22	43.0	42.0	36.0	6-24	26	21	28	60.5	50	52	52	65	75	85
24	45.0	45.0	40.5	6-27	29	21	28	60.5	50	52	52	65	75	85

DUST CAP





MATENG

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