

YL series circular electrical connector



Conform to Chinese military connector standard GJB598A-1996, YL series is designed as bayonet coupling, solder contact, springtac, high contact density, small size, light weight.

Part number

	YL	H	16	R	10	06	J	A	01	W	1
Basic series											
Type between pin and cable											
H = Solder											
B = Solder with PCB											
Type of plug and receptacle											
10 = Square flange receptacle											
20 = Shielded square flange receptacle											
14 = Jam nut receptacle											
24 = Shielded jam nut receptacle											
16 = Plug											
26 = Shielded plug											
19 = Wall thru bulkhead flange receptacle											
29 = Shielded thru bulkhead square flange receptacle											
Finish											
R = Black anodized											
W = Olive drab anodized											
N = Electroless nickel plating											
B = Cadmium plating											
S = Stainless steel passivated											
Y = Grey anodized											
Shell size											
06, 08, 10, 12, 14, 16, 18, 20, 22, 24											
Number of contact											
03 ~ 61											
Type of contact											
J = Pin											
K = Socket											
S = Thru bulkhead contact											
Number of special contact											
A, B, C...											
Sign of back shell											
01 = Straight hermetic cable avoid turn											
02 = Straight cable clamp											
03 = Hermetic back with rubber											
04 = 90° elbow hermetic cable avoid turn											
05 = 90° elbow cable clamp											
21 = Shielded straight hermetic cable avoid turn											
22 = Shielded straight cable clamp											
23 = Shielded hermetic back with rubber											
24 = Shielded 90° elbow hermetic cable avoid turn											
25 = Shielded 90° elbow cable clamp											
Orientation											
N, W, X, Y, Z											
Omit = N											
Sign of special shell											
1, 2, 3, 4, 5 (May omit)											

Performance specification

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

Operating atmospheric pressure: 4.39 kPa ~ 101.33 kPa

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

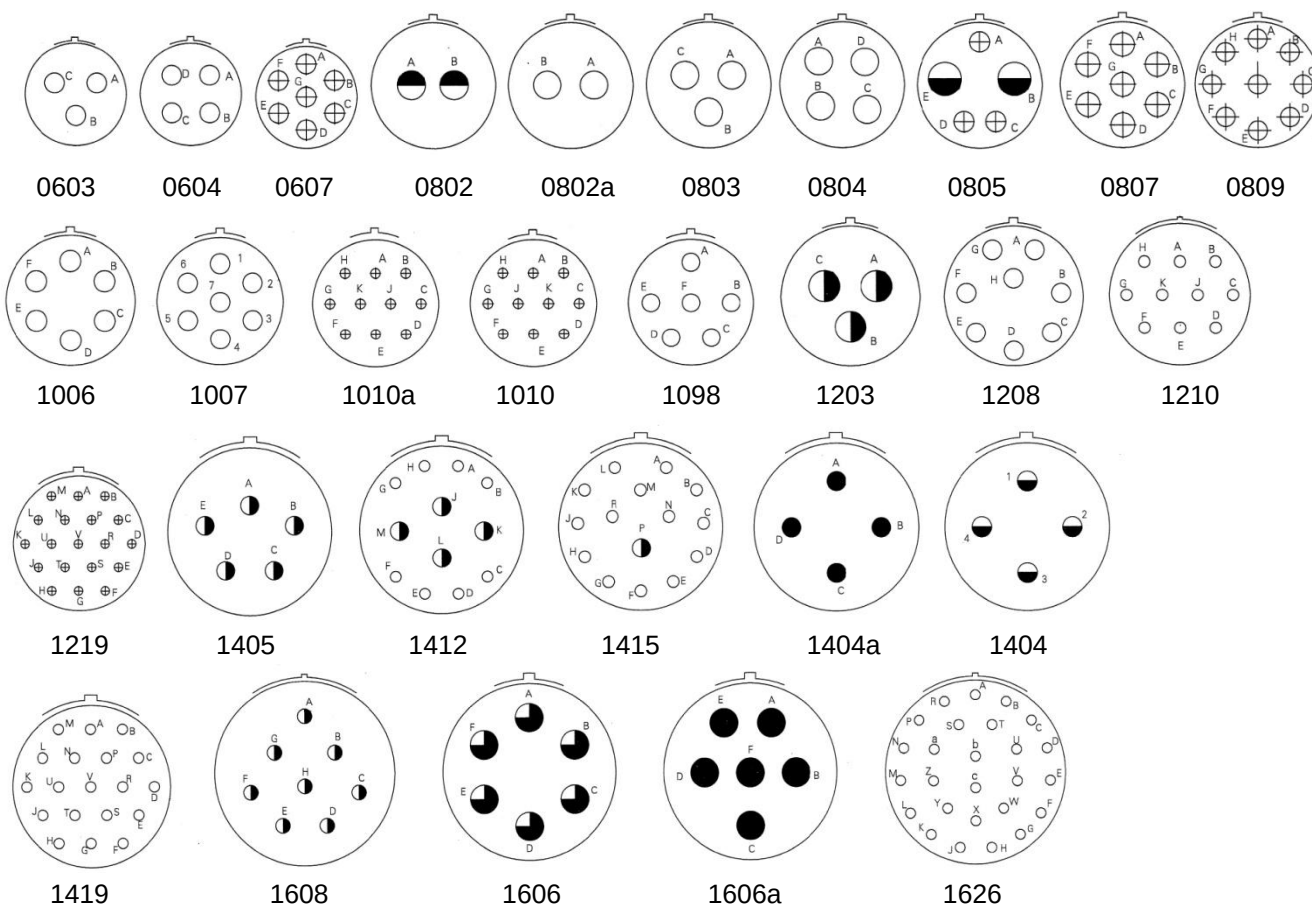
Relative humidity: 40 ± 2 °C, 90% ~ 95%

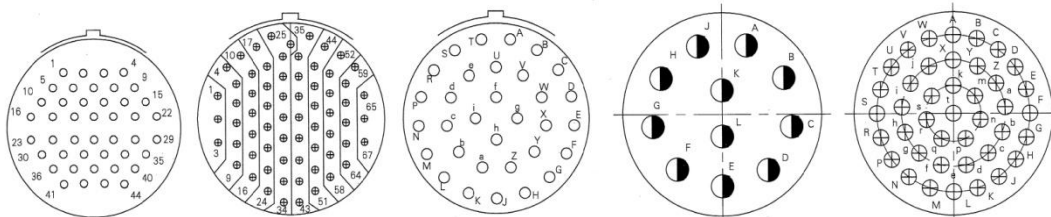
Durability: ≥ 500 cycles

Contact

Contact diameter (mm)	Contact resistance (MΩ)	Current (A)	Cable max diameter (mm)
Φ 0.80	12.50	3.0	Φ 0.65
Φ 1.00	5.00	7.5	Φ 0.8
Φ 1.59	3.00	13.0	Φ 1.3
Φ 1.48	3.00	13.0	Φ 1.3
Φ 2.39	2.00	25.0	Φ 2.0
Φ 3.18	1.00	40.0	Φ 2.6

Contact layout





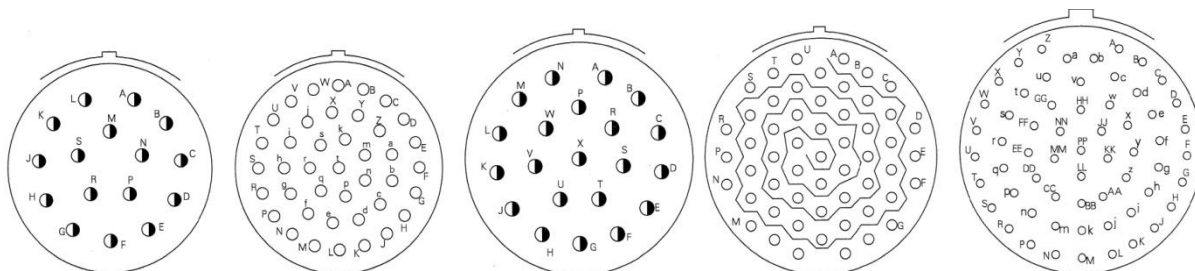
1644

1867

1832

1811

1841



2016

2041

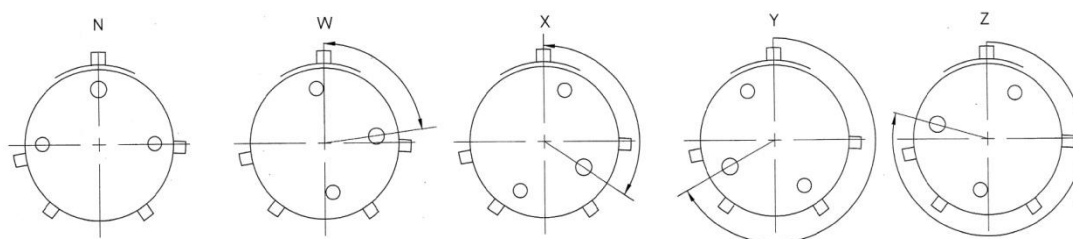
2221

2255

2461

⊕ Φ0.8 ○ Φ1 ● Φ1.5 ◐ Φ1.59 ◑ Φ1.98 ● Φ2.39 ◑ Φ3.18

Polarization

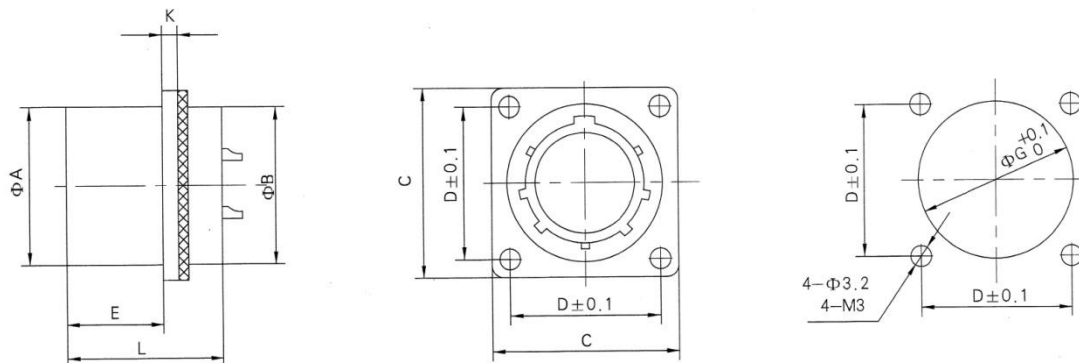


Shell No.	Contact number	Degree (N=0)				Class I	Class II	Class III
		W	X	Y	Z	withstand voltage 1500 V	withstand voltage 2300 V	withstand voltage 1300 V
6	3	—	—	—	—	√	—	—
	4	—	—	—	—	—	—	√
	7	—	—	—	—	—	—	√
8	2	58°	122°	—	—	√	—	—
	02a	58°	122°	—	—	√	—	—
	3	60°	210°	—	—	√	—	—
	4	45°	—	—	—	√	—	—
	5	—	—	—	—	√	—	—
	7	90°	—	—	—	—	—	√
	9	68°	—	—	—	—	—	√

Shell No.	Contact number	Degree (N=0)				Class I	Class II	Class III
		W	X	Y	Z	withstand voltage 1500 V	withstand voltage 2300 V	withstand voltage 1300 V
10	6	90°	—	—	—	√	—	—
	10	60°	155°	270°	295°	—	—	√
	13	—	—	—	—	—	—	√
12	3	—	—	180°	—	—	√	—
	8	90°	112°	203°	292°	√	—	—
	10	60°	155°	270°	295°	√	—	—
	19	—	—	—	—	—	—	√
14	4	45°	—	—	—	—	√	—
	04a	45°	—	—	—	—	√	—
	5	40°	92°	184°	273°	—	√	—
	12	43°	90°	—	—	√	—	—
	15	17°	110°	155°	234°	√	—	—
	19	30°	165°	315°	—	√	—	—
16	6	—	—	—	—	—	√	—
	06a	—	—	—	—	—	√	—
	8	54°	152°	180°	331°	—	√	—
	26	60°	—	275°	338°	√	—	—
18	11	62°	119°	241°	340°	—	√	—
	32	85°	138°	222°	265°	√	—	—
	41	—	—	—	—	√	—	—
20	16	238°	318°	333°	347°	—	√	—
	41	45°	126°	225°	—	√	—	—
22	21	16°	135°	175°	349°	—	√	—
	55	30°	142°	226°	314°	√	—	—
24	61	90°	180°	270°	324°	√	—	—

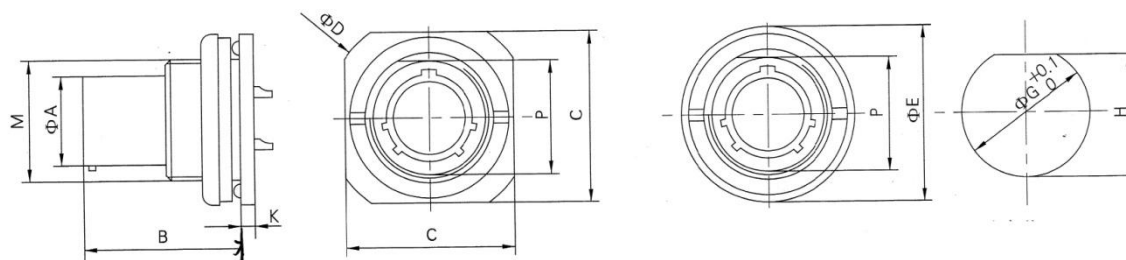
Shell size

Square flange receptacle



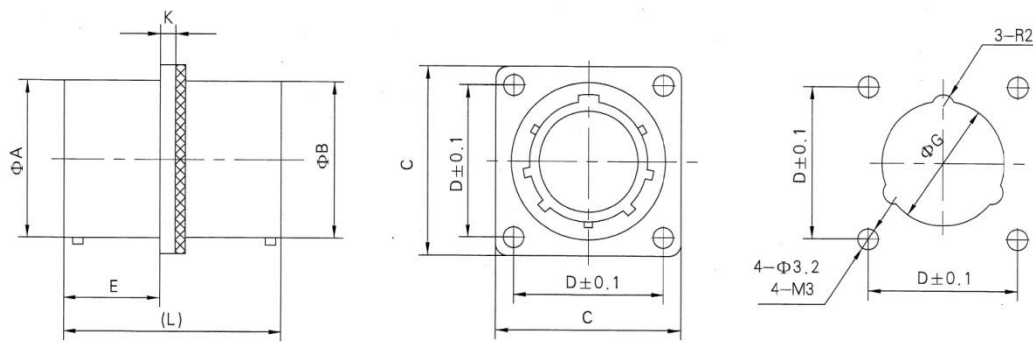
Shell No.	ΦA	ΦB	C	D	E	ΦG	K	L (for reference)
06	10.6	10.6	19.0	13.0	14.5	11.0	1.5	20.0
08	12.0	12.0	21.0	15.0	14.5	12.5	1.5	20.0
10	15.0	15.0	24.0	18.0	14.5	15.5	1.5	21.0
12	19.0	19.0	27.0	21.0	14.5	19.5	1.5	21.0
14	22.2	22.0	28.6	23.0	14.5	23.5	1.9	21.0
16	25.4	25.4	31.3	24.6	14.5	26.0	1.5	21.0
18	28.6	28.6	36.0	27.0	14.5	30.0	1.5	24.0
20	31.75	31.7	36.9	29.36	14.5	32.5	2.5	26.5
22	34.9	35.0	40.0	32.0	14.5	35.5	2.5	26.5
24	38.1	38.1	42.9	34.9	14.5	39.0	2.2	26.5

Jam nut receptacle



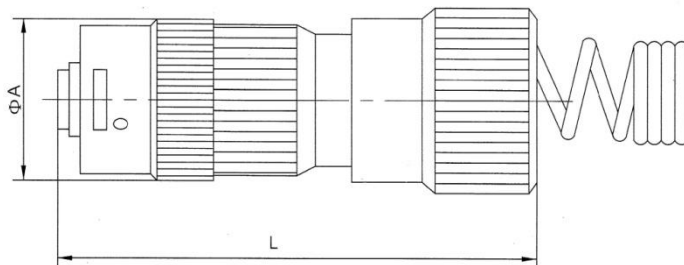
Shell No.	ΦA	B	C	ΦD	ΦE	P	K	ΦG	H	M
06	10.6	17.5	17.0	20.0	17.0	11.3	2.5	12.2	11.4	M12×1.0
08	12.0	17.5	19.0	22.0	19.0	13.0	2.5	14.2	13.2	M14×1.0
10	15.0	18.5	25.0	30.8	23.5	16.9	2.5	18.2	17.2	M18×1.0
12	19.0	18.5	32.0	34.5	30.0	20.7	2.5	22.2	21.0	M22×1.0
14	22.2	18.5	35.0	40.0	34.3	23.8	2.5	25.2	24.0	M25×1.5
16	25.4	18.5	38.1	42.0	38.0	27.1	2.5	28.2	27.3	M28×1.0
18	28.6	18.5	41.5	46.5	41.0	30.3	2.5	32.2	30.5	M32×1.0
20	31.75	22.5	46.0	50.2	46.0	35.0	3.0	36.2	35.2	M36×1.0
22	34.9	22.7	49.0	52.2	49.0	37.0	3.8	38.2	37.2	M38×1.0
24	38.1	22.5	52.0	56.0	52.0	39.8	3.0	42.2	40.0	M42×1.5

Thru bulkhead square flange receptacle



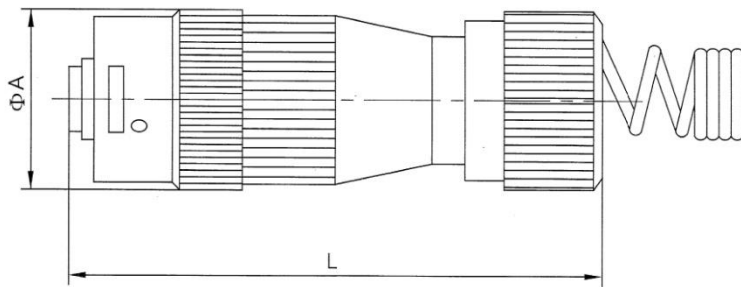
Shell No.	ΦA	ΦB	C	D	E	ΦG	K	L (for reference)
06	10.6	10.6	19.0	13.0	12.5	11.0	2	27.0
08	12.0	12.0	21.0	15.0	13.5	12.5	2	29.0
10	15.0	15.0	24.0	18.0	14.5	15.5	2	31.0
12	19.0	19.0	27.0	21.0	14.5	19.5	2	31.0
14	22.2	22.0	28.6	23.0	14.5	22.5	2	31.0
16	25.4	25.4	31.3	24.6	14.7	26.0	2	31.4
18	28.6	28.6	36.0	27.0	14.7	30.0	2	32.0
20	31.75	31.7	36.9	29.36	14.7	32.5	3	35.5
22	34.9	35.0	40.0	32.0	14.7	35.5	3	35.5
24	38.1	38.1	42.9	34.9	14.7	39.0	3	35.5

Straight hermetic cable avoid turn plug



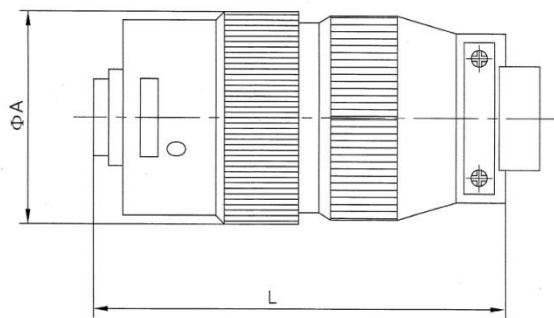
Shell No.	ΦA	Cable diameter	L (for reference)
06	15.5	5	45.0
08	20.0	6	47.0
10	22.4	6	51.5
12	26.5	9	52.5
14	31.0	12	57.5
16	32.0	14	59.0
18	35.0	15	58.0
20	40.0	16	68.0
22	42.2	16	68.0
24	47.6	16	75.0

Shielded straight hermetic cable avoid turn plug



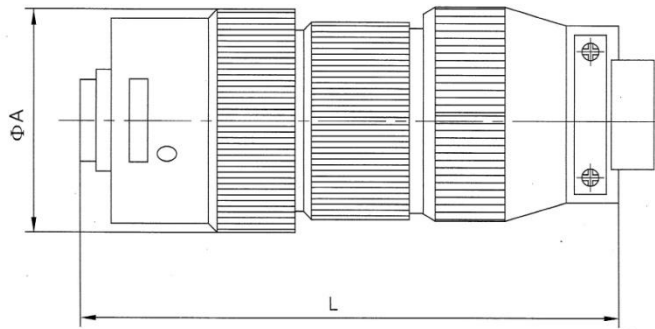
Shell No.	Φ A	Cable diameter	L (for reference)
06	15.5	5	52.0
08	20.0	6	54.5
10	22.4	6	58.0
12	26.5	9	58.0
14	31.0	12	58.0
16	32.0	14	59.0
18	35.0	15	58.0
20	40.0	16	62.0
22	42.2	16	76.0
24	47.6	16	70.0

Straight cable clamp plug



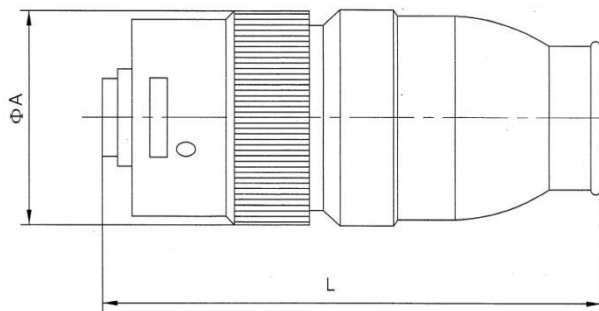
Shell No.	Φ A	Cable diameter	L (for reference)
06	15.5	5	35
08	20.0	6	37
10	22.4	6	40
12	26.5	9	43
14	31.0	12	47
16	32.0	14	48
18	35.0	15	48
20	40.0	16	52
22	42.2	16	62
24	47.6	16	52

Shielded straight cable clamp plug



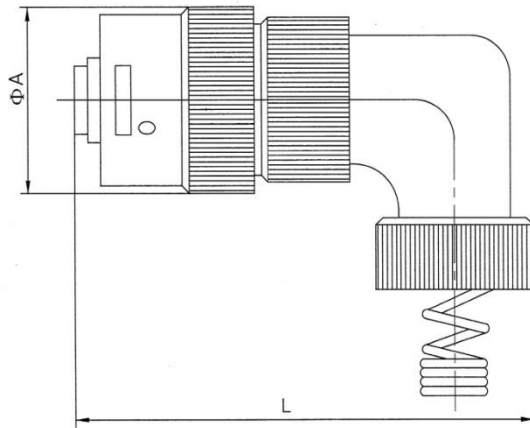
Shell No.	Φ A	Cable diameter	L (for reference)
06	15.5	5	53
08	20.0	6	53
10	22.4	6	53
12	26.5	9	53
14	31.0	12	53
16	32.0	14	64.5
18	35.0	15	63
20	40.0	16	66
22	42.2	16	66
24	47.6	16	65

Shielded hermetic back with rubber



Shell No.	Φ A	Cable diameter	L (for reference)
06	15.5	5	50.9
08	20.0	6	73.5
10	22.4	6	77.0
12	26.5	9	79.0
14	31.0	12	84.5
16	32.0	14	85.0
18	35.0	15	90.0
20	40.0	16	91.0
22	42.2	16	91.0
24	47.6	16	92.1

90° elbow hermetic cable avoid turn



Shell No.	ΦA	Cable diameter	L (for reference)
06	15.5	5	40.0
08	20.0	6	42.0
10	22.4	6	45.0
12	26.5	9	50.7
14	31.0	12	64.7
16	32.0	14	66.0
18	35.0	15	70.0
20	40.0	16	70.0
22	42.2	16	74.0
24	47.6	16	75.1