

Y17 series circular electrical connector



Conform to Chinese military connector standard Q/Ag1.027A-2006, Y17 series is designed as bayonet coupling, mainly suited for the big power current.

Part number

	Y17	P	20	04	Z	J	2	10
Basic series								
Shell material and finish								
P = Aluminum-alloy shell by electroless nickel plating								
S = Copper-alloy shell by electroless nickel plating								
B = Passivated stainless steel								
Omit = Aluminum-alloy shell with white anodized								
Shell No.								
10, 12, 16, 20, 28								
Number of contact								
01, 03, 04, 07, 12, 19, 24								
Type of connector								
T = Plug								
Z = Receptacle								
Type of contact								
J = Pin								
K = Socket								
Back shell								
2 = Cable clamp								
2a = Big cable clamp (only for shell No.20)								
2b = Small cable clamp								
2d = Cable clamp by reperfusion of sealant								
2c = Separable big cable clamp								
3 = Reperfusion of sealant								
3b = Short back shell reperfusion of sealant								
4 = 90° elbow back shell								
4d = 90° elbow by reperfusion of sealant								
5 = Heat shrinkable sleeve I								
5a = Heat shrinkable sleeve II								
6 = Shielding								
Type of receptacle								
10 = Square flange								
11 = Circular flange								

Performance specification

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

Shock: Max acceleration 490 m/s²

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

Endurance: ≥ 500 cycles

Contact resistance and current rating:

Diameter (mm)	Φ 1.5	Φ 2.5	Φ 3.5		Φ 5.0	Φ 7.0	Φ 10.0
Current (A)	10	25	50	30*	75	100	200
Resistance (mΩ)	≤ 3	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1

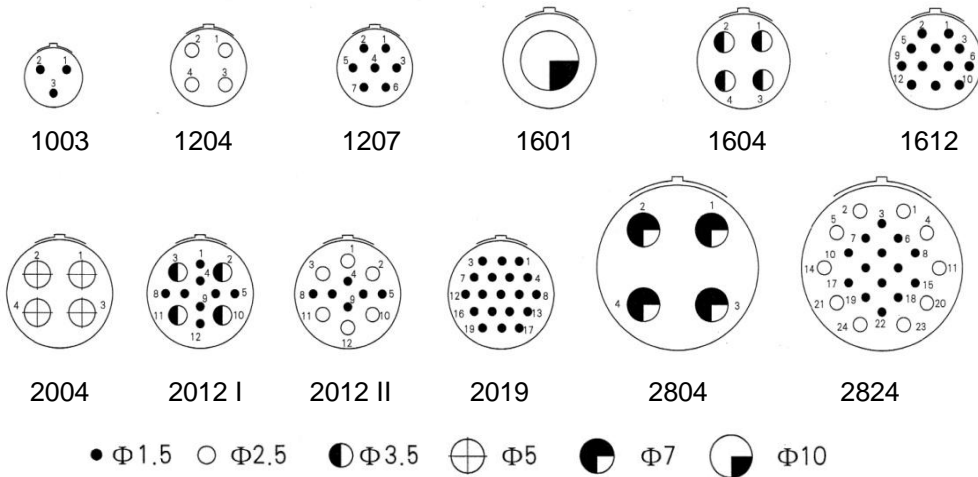
Insulation resistance:

Sea level	High humidity	High temperature
≥ 1000MΩ	≥ 20MΩ	≥ 500MΩ

Withstanding voltage:

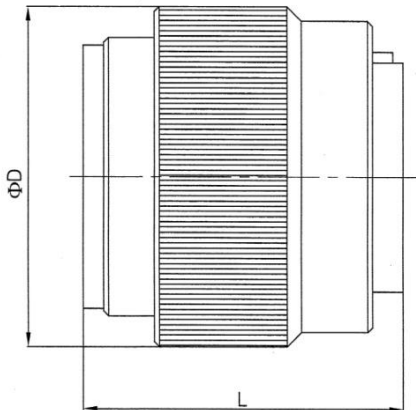
Sea level	21000 m
1000 V	250 V

Contact layout



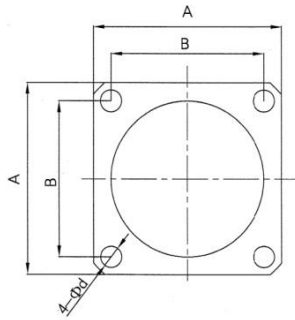
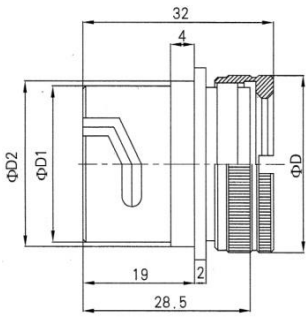
Shell size

Plug



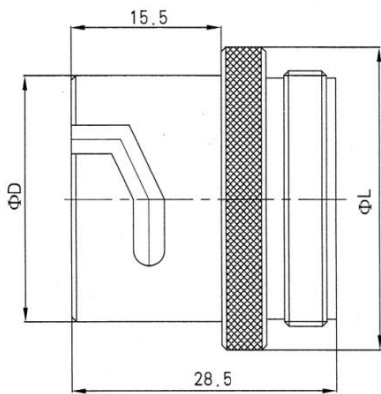
Shell No.	D	L
10	22.5	31.5
12	26.5	31.5
16	33.0	31.5
20	39.0	31.5
28	2804	34.0
	2824	31.5

Square flange receptacle



Shell No.	ΦD	$\Phi D2$	$\Phi D1$	Φd	A	B
10	18.5	17.5	16	3.5	24	18 \pm 0.2
12	22.5	21.5	20	3.5	27	21 \pm 0.2
16	29.5	27.5	26	3.5	32	26 \pm 0.2
20	35.5	33.4	32	5.5	42	33 \pm 0.2
28	50.0	45.5	44	5.5	53	42 \pm 0.2

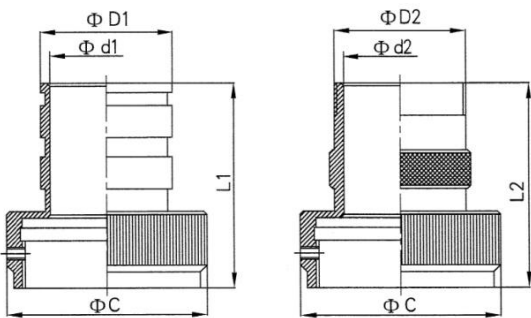
Circular flange receptacle



Shell No.	ΦL	ΦD
10	22.5	16
12	26.5	20
16	31.0	26
20	36.0	32
28	52.0	44

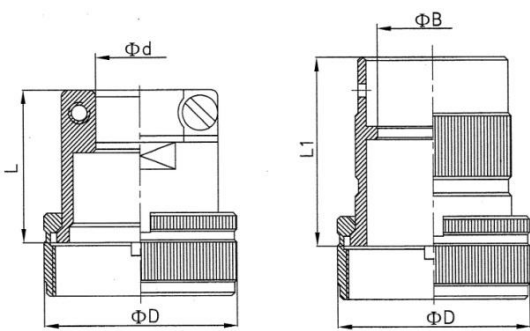
Back shell

Heat shrink sleeve



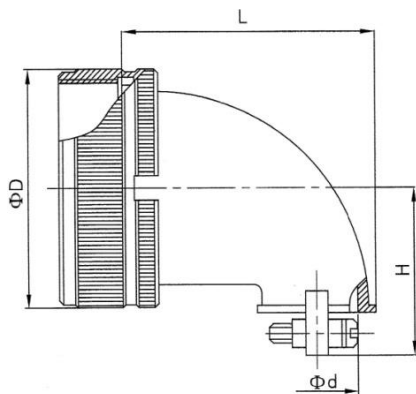
Shell No.	$\Phi D1$	$\Phi d1$	ΦC	L1	$\Phi D2$	$\Phi d2$	L2
10	14	10	23	27	14 \times 1	10.0	33
12	18	13	26	30	19 \times 1	15.0	33
16	21	18	32	32	22 \times 1	18.0	33
20	28	24	38	35	32 \times 1	27.7	33

Cable clamp



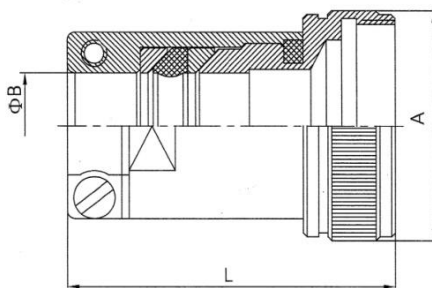
Shell No.	Φ D	Φ d	L	Φ B	L1	
10	18.5	7.0	17.0	9	18.0	
12	22.5	10.0	17.0	13	18.0	
16	29.5	13.5	25.0	17	28.5	
20	35.5	Big cable clamp	20.0	26.5	23	28.5
		Small cable clamp	15.5	23.0		
28	50.0	29.0	36.5	35	38.5	

90° elbow back shell



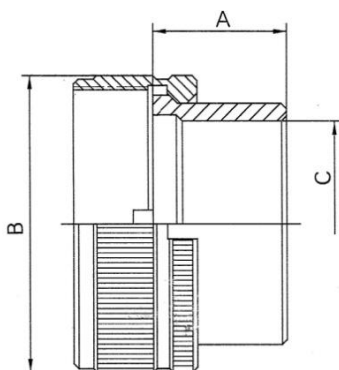
Shell No.	Φ D	Φ d	L	Φ H
12	22.5	10	32	19.5
16	29.5	13	34	24.5
20	35.5	16	37	27.5

Shielding cable clamp



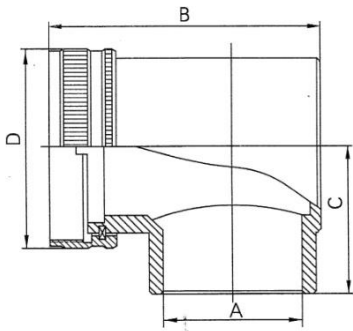
Shell No.	Φ A	Φ B	L
16	29.5	13.5	42.5
20	35.5	2a-small	50.0
		2d-small	47.0
28	50.0	25.0	56.0

Short back shell by reperfusion of sealant



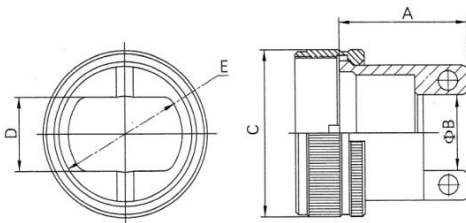
Shell No.	A	B	C
12	13.5	22.5	15.5
16	13.5	29.5	20.5
20	15.0	35.5	25.0

90° elbow cable clamp by reperfusion of sealant



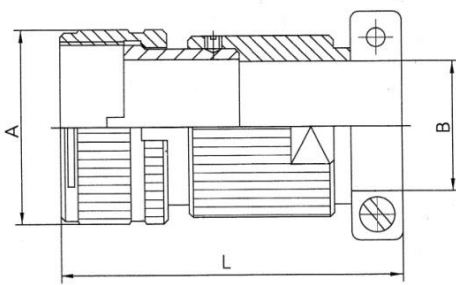
Shell No.	ΦA	B	C	ΦD
20	25	48.8	26.4	35.5

Cable clamp by reperfusion of sealant



Shell No.	A	B	C	D	E
12	17.0	10.0	22.5	10.0	15.5
16	23.0	13.5	29.5	13.5	20.5
20	27.5	17.0	35.5	17.0	25.0

Separable big cable clamp



Shell No.	ΦA	ΦB	L
12	22.5	15	40