

YGD series circular electrical connector



Conform to Chinese military connector standard GJB5371-2005, YGD series is designed as bayonet coupling, solder springtact contact.

Part number

YGD	16	R	14	05	K	21	A	(Φ6)
Basic series								
Type of connector								
10 = Square flange and fixed								
20 = Shielding square flange and fixed								
14 = Nut mounting and fixed								
24 = Shielding nut mounting and fixed								
16 = Flexible connector								
26 = Shielding flexible connector								
Finish								
R = Black anodized, non-conductive shell								
N = Electroless nickel plating, conductive shell								
B = Cadmium plating, conductive shell								
H = Black chromium plating, conductive shell								
Shell size								
08, 10, 12, 14, 16, 18, 22, 24, 28, 32								
Contact layout (View below)								
Type of contact								
J = Pin								
K = Socket								
Back shell								
May omit								
Orientation								
N, A, B, C, D, E								
Omit = N								
Diameter of cable								

Performance specification

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

Relative humidity: 90% ~ 98%

Operating atmospheric pressure: 4.39 kPa ~ 101.33 kPa

Salt spray: Class N and H: 48 hours, Class R and B: 96 hours

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

Shock: 980 m/s²

Endurance:

Material of connecting ring: Aluminum-alloy ≥ 500 cycles

Copper-alloy ≥ 2000 cycles

Electrical performance

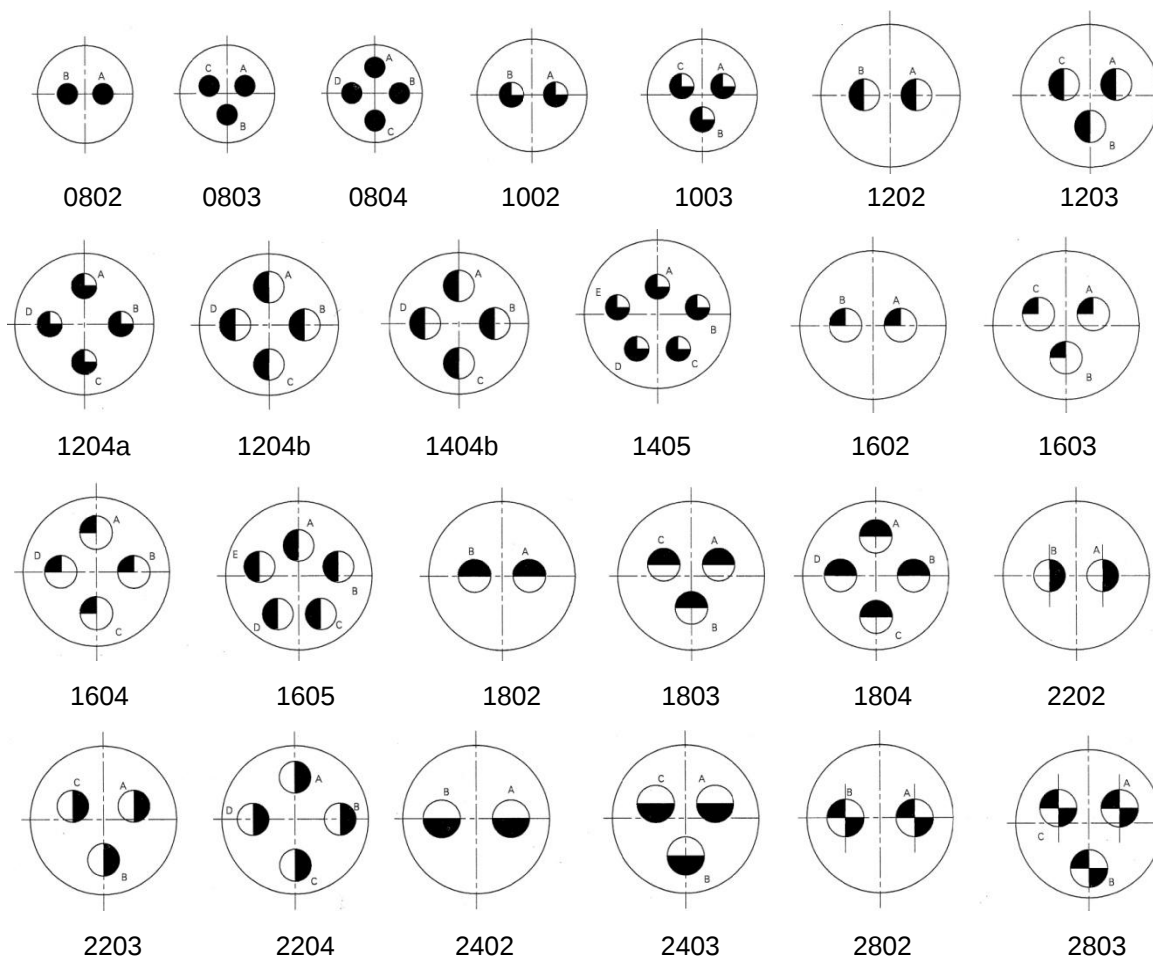
Insulation resistance

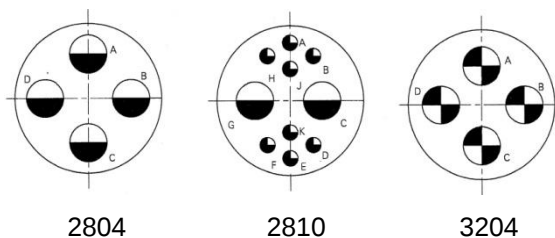
Standard atmosphere	Humid	High temperature
5000 MΩ	100 MΩ	100 MΩ

Operating current and contact resistance

Contact No.	Diameter (mm)	Rated current (A)
20	1.02 ± 0.03	7.5
16	1.588 ± 0.025	13.0
12	2.39 ± 0.03	23.0
10	3.18 ± 0.03	33.0
8	3.61 ± 0.03	46.0
6	4.52 ± 0.03	60.0
4	5.72 ± 0.03	80.0
2	7.19 ± 0.03	100.0

Contact layout

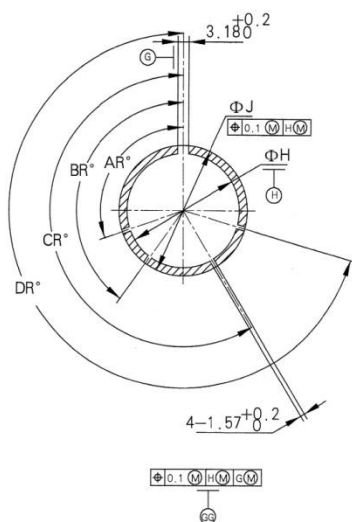




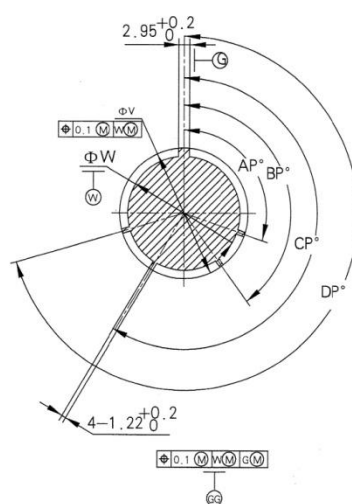
● $\Phi 1$ ● $\Phi 1.59$ ● $\Phi 2.39$ ● $\Phi 3.18$ ● $\Phi 3.61$ ● $\Phi 4.52$ ● $\Phi 5.72$ ● $\Phi 7.19$

Polarization

Fixed connector



Flexible connector

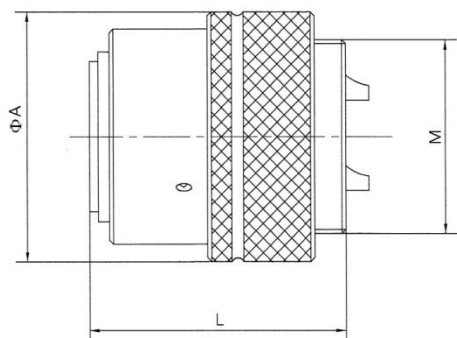


Shell size	Sign of key	AR° or AP°	BR° or BP°	CR° or CP°	DR° or DP°
8	N	95	141	208	236
	A	102	132	248	320
	B	80	118	230	312
	E	91	131	197	240
10、12、14	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
16	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

Shell size	Sign of key	AR° or AP°	BR°or BP°	CR°or CP°	DR°or DP°
18	N	105	140	215	265
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
22、24、 28、32	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

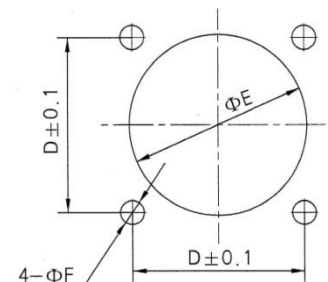
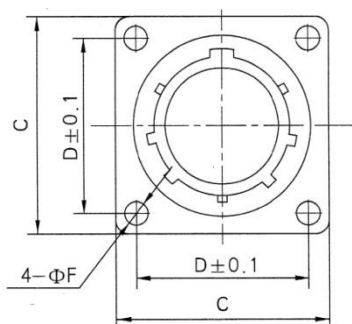
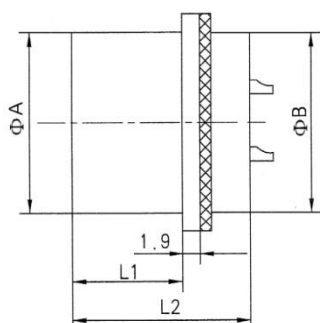
Shell size

Flexible connector



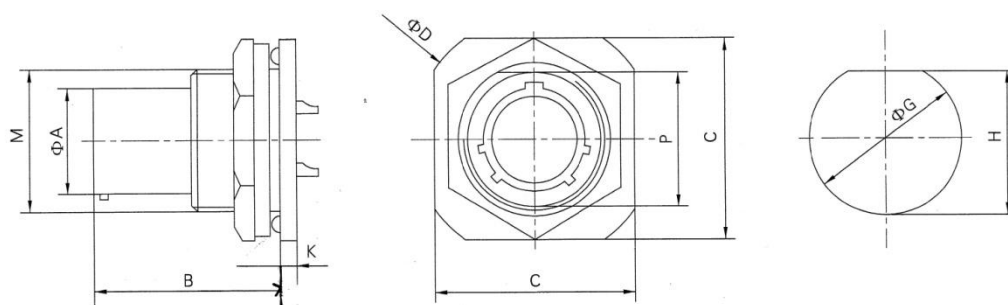
Shell size	A	M	L (for reference)
08	21.00	M14×1.0	25.50
10	24.50	M16×1.0	
12	26.50	M20×1.0	
14	31.00	M22×1.0	
16	32.00	M25×1.0	
18	35.50	M27×1.0	
22	44.50	M35×1.5	28.50
24	49.00	M38×1.5	30.50
28	53.50	M42×1.5	
32	59.50	M48×1.5	

Square flange receptacle



Shell size	A	B	C	D	E	F	L1	L2 (for reference)
08	12.04	12.00	21.00	15.09	12.50	3.2	14.50	25.50
10	15.01	15.00	24.00	18.26	15.50			
12	19.07	19.00	27.00	20.62	19.50			
14	22.25	22.00	28.60	23.00	22.50			
16	25.43	25.40	31.30	24.61	25.90			
18	28.60	28.60	33.69	26.97	29.40			
22	34.95	35.00	40.00	31.75	35.50	3.8	16.50	26.50
24	38.13	38.10	43.15	34.92	39.00			28.50
28	41.81	42.00	50.80	39.70	43.00			
32	48.25	47.90	57.15	44.45	49.00			

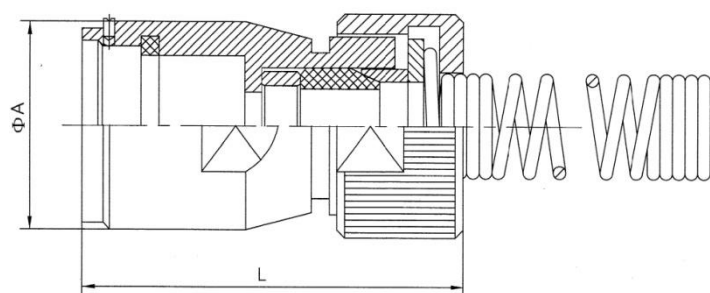
Nut mounting receptacle



Shell size	A	B	C	D	P	K	G	H	M
08	12.04	23	23.94	26.94	13.00	2.5	14.20	13.20	M14×1.0
10	15.01		26.94	30.14	16.90		18.20	17.20	M18×1.0
12	19.07		31.74	34.94	20.70		22.20	20.90	M22×1.0
14	22.25		34.94	38.04	23.80		25.20	24.00	M25×1.5
16	25.43		38.24	41.24	26.80		28.20	27.00	M28×1.5
18	28.60		41.34	44.44	30.50		32.20	30.70	M32×1.5
22	34.95	25	49.24	52.24	36.70	3.5	38.20	36.90	M38×1.5
24	38.13		52.74	55.54	40.50		42.20	40.70	M42×1.5
28	41.81		55.00	58.00	43.50		45.20	43.70	M45×1.5
32	48.25		62.00	65.00	50.00		52.20	50.20	M52×1.5

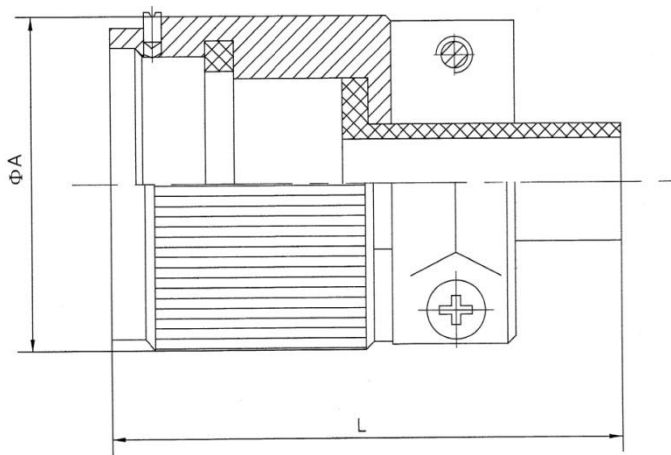
Back shell

Straight shielded cable with hermetic back shell



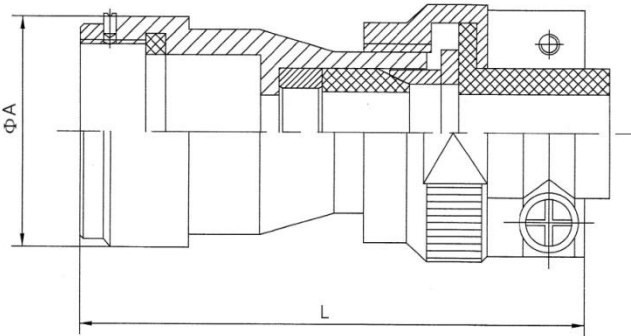
Shell size	A	Cable diameter	L (for reference)
08	18	5	35
		6	
		7	
10	22.5	5	40
		6	
		7	
		8	
12	24.5	7	
		8	
		9	
		10	
14	29	8	
		9	
		10	
		11	
		12	
16	30	8	
		9	
		10	
		11	
		12	
18	33	10	
		12	
		13	
		15	
22	42.5	13	45
		15	
		17	
24	46	13	
		15	
		17	
28	50.5	17	
		20	
32	56.5	17	50
		20	

Straight cable with clamp back shell



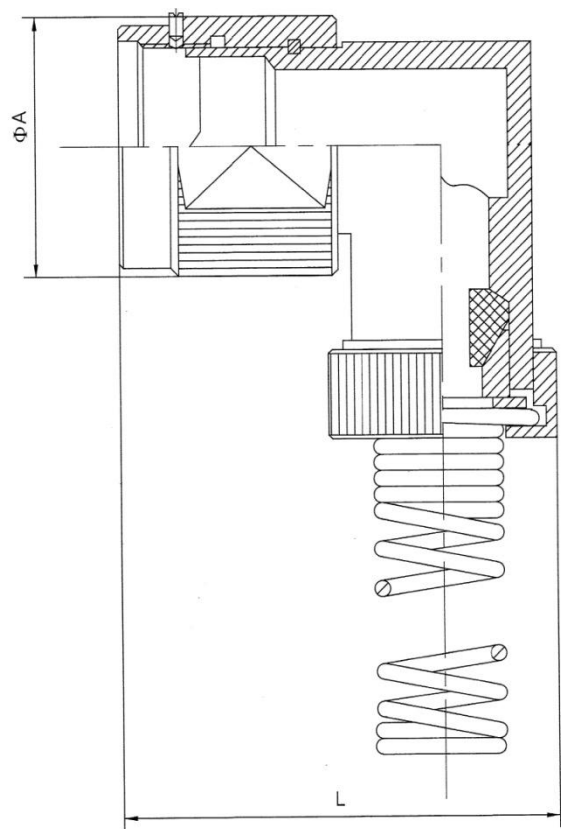
Shell size	A	Cable diameter	L (for reference)
08	18	5	35
		6	
		7	
10	22.5	5	40
		6	
		7	
		8	
12	24.5	7	
		8	
		9	
		10	
14	29	8	
		9	
		10	
		11	
		12	
16	30	8	
		9	
		10	
		11	
		12	
18	33	10	
		12	
		13	
		15	
22	42.5	13	45
		15	
		17	
24	46	13	
		15	
		17	
28	50.5	17	
		20	
32	56.5	17	50
		20	

Straight shielded cable with hermetic clamp back shell



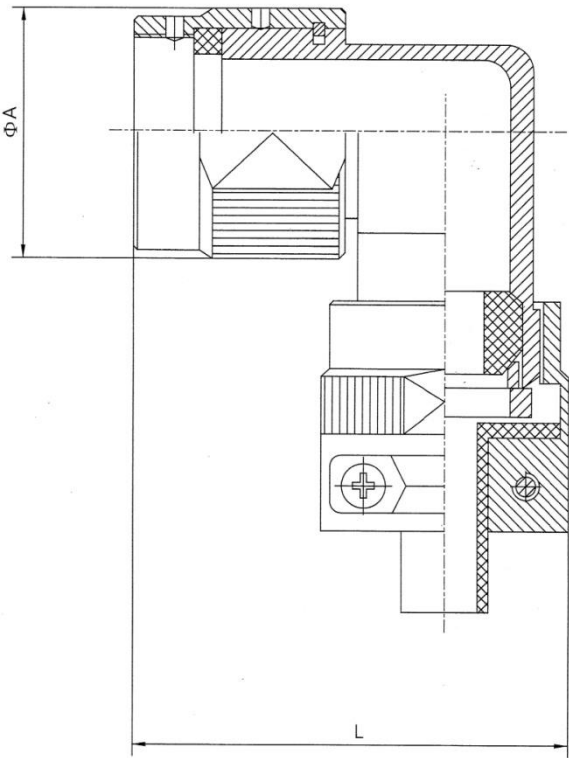
Shell size	A	Cable diameter	L (for reference)
08	18	5	40
		6	
		7	
10	22.5	5	45
		6	
		7	
		8	
12	24.5	7	
		8	
		9	
		10	
14	29	8	
		9	
		10	
		11	
		12	
16	30	8	
		9	
		10	
		11	
		12	
18	33	10	
		12	
		13	
		15	
22	42.5	13	50
		15	
		17	
24	46	13	
		15	
		17	
28	50.5	17	
		20	
32	56.5	17	55
		20	

90° elbow cable connecting back shell



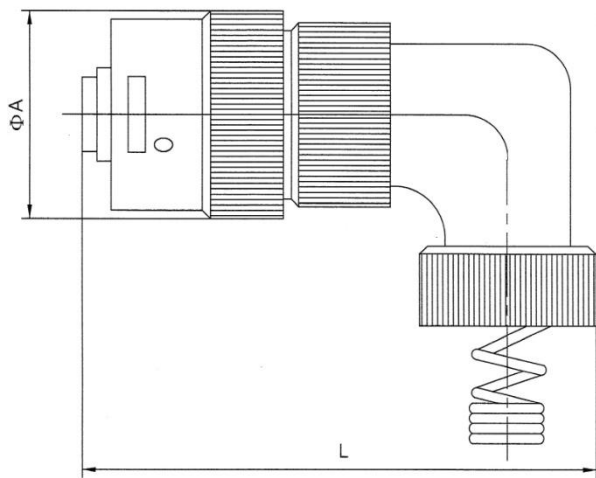
Shell size	A	Cable diameter	L (for reference)
08	18	5	35
		6	
		7	
10	22.5	5	40
		6	
		7	
		8	
12	24.5	7	
		8	
		9	
		10	
14	29	8	
		9	
		10	
		11	
		12	
16	30	8	
		9	
		10	
		11	
		12	
18	33	10	
		12	
		13	
		15	
22	42.5	13	45
		15	
		17	
24	46	13	
		15	
		17	
28	50.5	17	
		20	
32	56.5	17	45
		20	

90° elbow cable clamp back shell



Shell size	A	Cable diameter	L (for reference)
08	18	5	35
		6	
		7	
10	22.5	5	40
		6	
		7	
		8	
12	24.5	7	
		8	
		9	
		10	
14	29	8	
		9	
		10	
		11	
16	30	12	
		8	
		9	
		10	
		11	
18	33	12	
		13	
		15	
		10	
22	42.5	13	45
		15	
		17	
24	46	13	
		15	
		17	
28	50.5	17	
		20	
32	56.5	17	
		20	

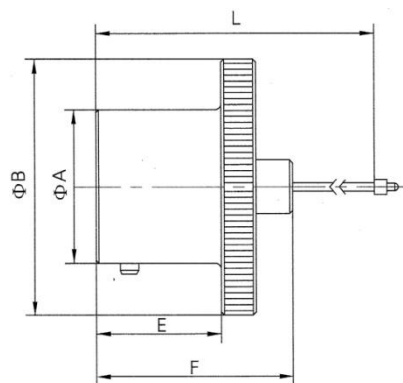
90° elbow cable with shielding clamp back shell



Shell size	A	Cable diameter	L (for reference)
08	18	5	35
		6	
		7	
10	22.5	5	40
		6	
		7	
		8	
12	24.5	7	
		8	
		9	
		10	
14	29	8	
		9	
		10	
		11	
		12	
16	30	8	
		9	
		10	
		11	
		12	
18	33	10	
		12	
		13	
		15	
22	42.5	13	45
		15	
		17	
24	46	13	
		15	
		17	
28	50.5	17	
		20	
32	56.5	17	
		20	

Dust cap

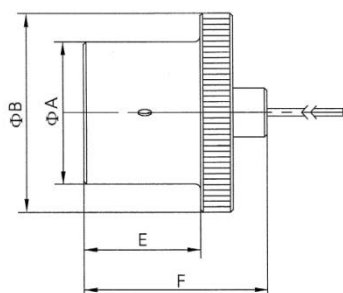
Dust cap of plug



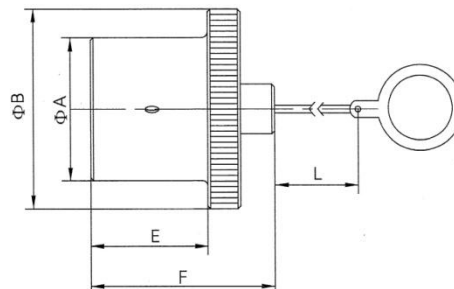
Shell size	A	B	E	F	L (for reference)
08	12	20	10	18.5	100
10	15	22.2			
12	19	26			
14	22.2	29			
16	25.4	32			
18	28.6	34.5			
22	35	41	11	19	140
24	38	44		20	
28	41.7	50		24	
32	48.2	56	12	25	

Dust cap of receptacle

Square flange receptacle



Jam nut receptacle



Shell size	A	B	E	F	L (for reference)
8	16.5	19	10	18.5	100
10	20	22.4			
12	24	25			
14	27	30			
16	30	32			
18	33	35			
22	40	43			
24	43.5	45.5			
28	48	50	11	20	140
32	56.2	58			