

TY series circular locomotive connector



Conform to Chinese railway connector standard TB/T2761-1996, TY series is designed as bayonet coupling, springtac contact.

Part number

	TY	32	J	14	Z	Y	W	- 01
Basic series								
Shell size								
20, 27, 30, 32, 48								
Type of contact								
J = Pin								
K = Socket								
Number of contact								
04 ~ 37								
Type of plug and receptacle								
T = Plug								
Z = Receptacle								
Type of contact								
Y = Crimp								
H = Solder								
Orientation								
N, W, X, Y, Z.								
Omit = N								
Modified products								
-01, -02 (May omit)								

Performance specification

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

Relative humidity: at 40 °C, 95%

Contact resistance and rated current

Contact diameter (mm)	Current (A)	Resistance (Ω)
Φ 1.0	5	≤ 0.005
Φ 1.5	10	≤ 0.0025
Φ 2.0	20	≤ 1.00125
Φ 3.0	40	≤ 0.00075
Φ 5.5	100	≤ 0.0003

Rated voltage, withstanding voltage and insulation resistance

Operating environment	Voltage (v)	Withstanding voltage (v) (50HzAC)	Insulation resistance
Normal	500	2500	≥ 1000 MΩ
Hot and Humid	500	1250	≥ 20 MΩ

Conductor range of removable crimp contact

Type	cross-sectional area(mm ²)	Longest outside Diameter(mm)
Φ 2C	1.0	Φ 4.0
Φ 2B	1.5	Φ 4.5
Φ 2	2.5	Φ 5.25
Φ 1.5-1.0	1.0	Φ 4.0
Φ 1.5-2.0	1.5	
Φ 1.5-3.0	3.0	

Shell: aluminum-alloy

Insulator: PBT or neoprene

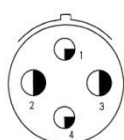
Contact: copper-alloy with gold or silver plating

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

Shock: acceleration 980m/s²

Endurance: ≥ 1000 cycles

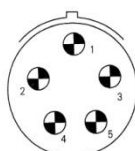
Contact layout



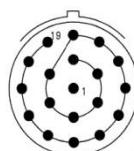
20-4
2-Φ2, 2-Φ2



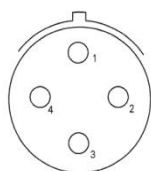
20-5
5-Φ1.5*



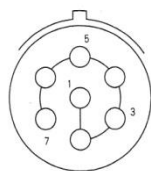
24-5
5-Φ3



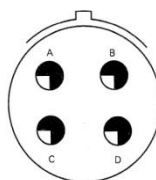
24-19
19-Φ1



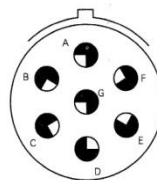
27-4
4-Φ1.5



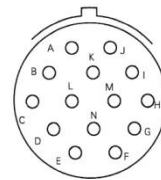
27-7
7-Φ1.5*



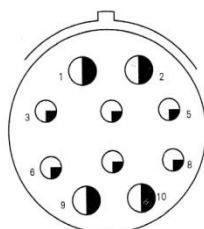
30-4
4-Φ2.5



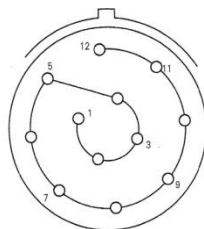
30-7
7-Φ2.5



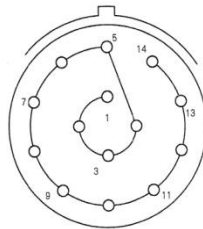
30-14
14-Φ1.6



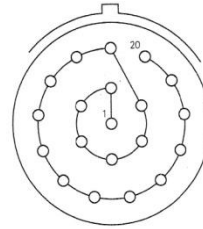
32-10
4-Φ2 6-Φ2



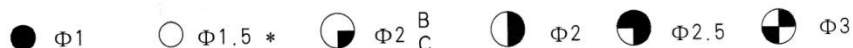
32-12
12-Φ2.5*



32-14
14-Φ1.5*

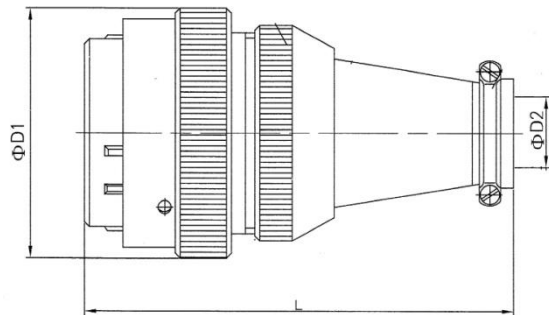


32-20
20-Φ1.5*



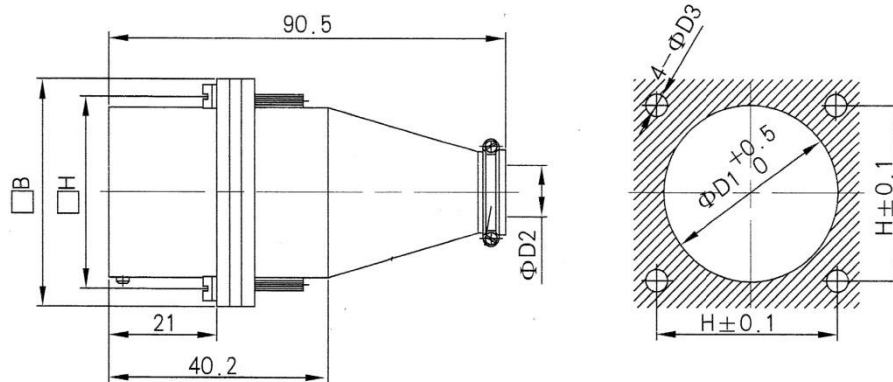
Shell size

Plug type I



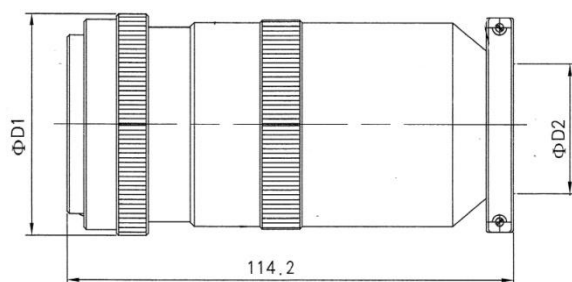
Shell size	D1	D2	L
20	32	15	105.2
27	37	10	86.5
32	42	19	105.2
48	58	27	115.2

Receptacle type I



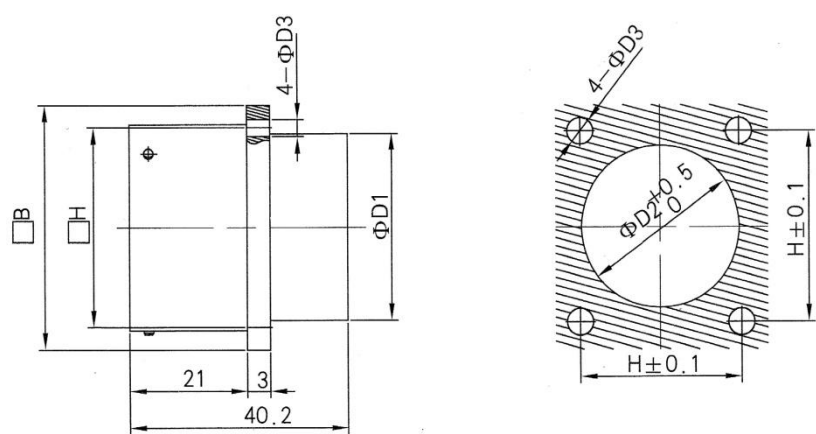
Shell size	D1	D2	D3	B	H
20	23.3	15	3.2	30	22
27	31.3	7	3.2	34.5	28
32	35.5	19	3.5	40	32
48	51.5	27	4.5	58	48

Plug Type II



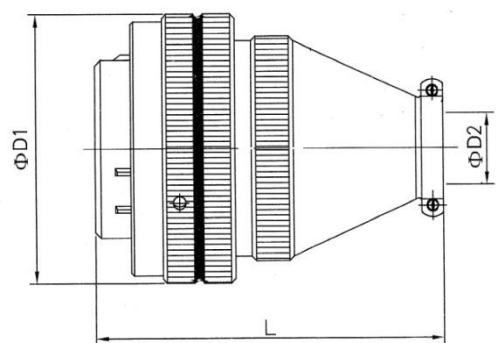
Shell size	D1	D2 (max)	D2 (min)
27	37	21.2	17.2
32	42	27	23
48	58	43	39

Receptacle Type II



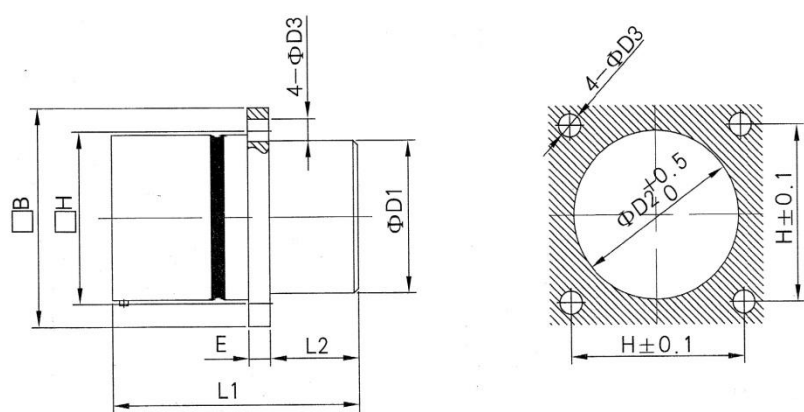
Shell size	D1	D2	D3	B	H
27	27	27.3	3.2	37	28
32	32	32.3	3.2	42	32
48	48	48.3	4.5	58	48

Plug Type III



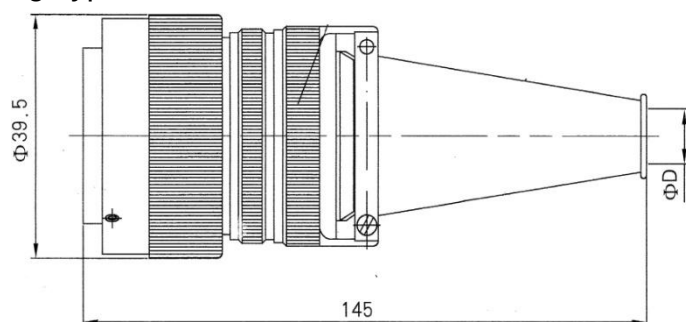
Shell size	24	48
D1	34	60
D2 (min)	7	19
D2 (max)	11	23
L	56	78.3

Receptacle Type III



Shell size	24	48
B	32	58
H	26	48
L1	31.5	33.6
L2	13	10.6
E	2.5	3
D1	24	48
D2	24.3	48.3
D3	3.2	4.5

Plug Type IV



Receptacle Type IV

