

Series C, IP50/IP68 Pin and groove coding



Description of Series C products

SN	Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		T	1	0	C	A	C	—	P	0	4	M	F	G	0	—	2	2	0	0
1	Type: Straight plug T1, T2																			
2	Receptacles Z1, Z8																			
3	Size: 00, 0, 1, 2																			
4	Series: C																			
5	Coding																			
6	Housing material and plating																			
8	Insulator material																			
9	Number of pins																			
10	Number of pins																			
11	Terminal and surface processing																			
12	Pin/socket diameter (M: mixed)																			
13	Terminal cross-section area																			
14	Special terminals are represented as 9																			
16	Cable clamp size (PCB right angled number:A0)																			
17	Cable clamp size (PCB right angled number:A0)																			
18	0																			
19	Back nut																			

Note:

The 18th and 19th bits are 00, representing the standard back nut; 0P can be installed with PUR bend relief back nuts

When the second style is X as other figures, it indicates the version number. For different version numbers, it indicates that certain accessories adopted vary

Example: Plug

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	1	0	C	A	C	—	P	0	4	M	F	G	0	—	2	2	0	0

Plug - Style 1- Housing size 0 - Series C -Coding A - Copper alloy housing, surface black chrome plating - PEEK insulator - 4-pin - Gold-plated Soldering pin - Pin diameter Φ0.7 - For 26AWG, gauge cross-section area - Applicable to the cable of 1.4~2.2mm - Back nut for cable PUR bend relief or over moulding


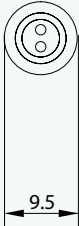
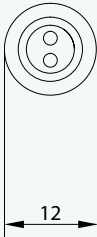
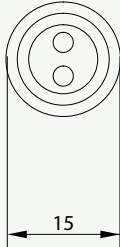
Example: Receptacle

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Z	1	0	C	A	C	—	P	0	4	Q	F	0	0	—	0	0	0	0

Receptacle - Style 1- Housing size 0 - Series C - Coding A - Copper alloy housing, surface black chrome plating - PEEK insulator - 4-pin - Gold-plated PCB socket - Socket diameter Φ0.7

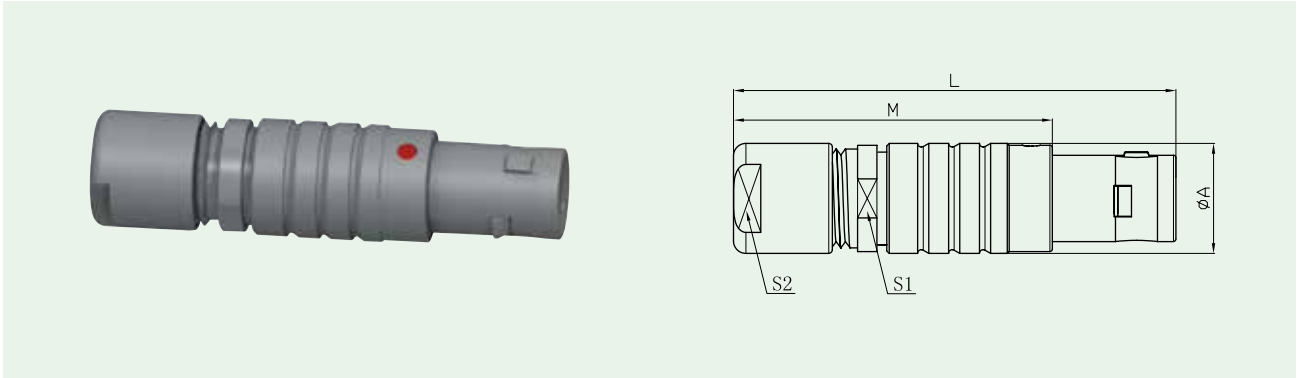
Housing size (scale 1:1)

OD = Outer diameter of the plug (unit: mm)
S = Size

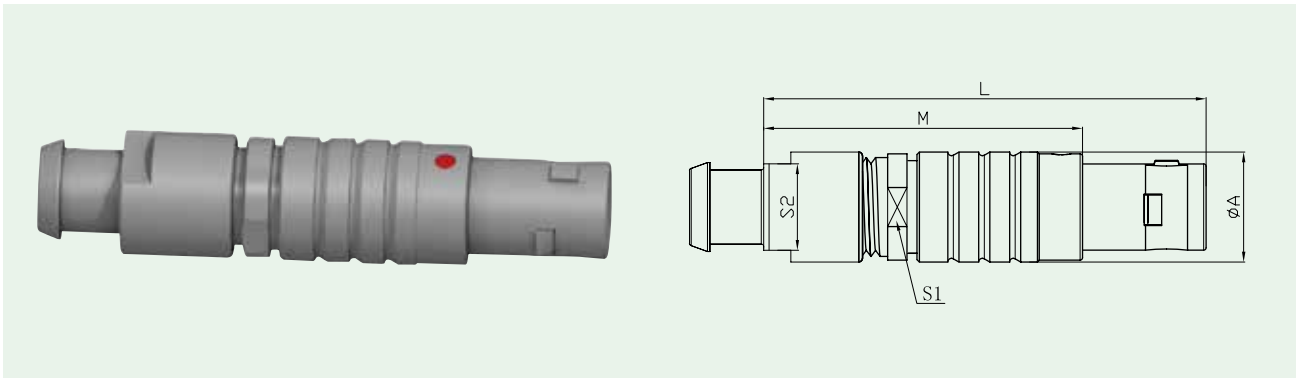
OD				
S	00	0	1	2
Corresponding number	C	0	1	2

Straight plug (T1, T2)

T 1 IP50, standard back nut



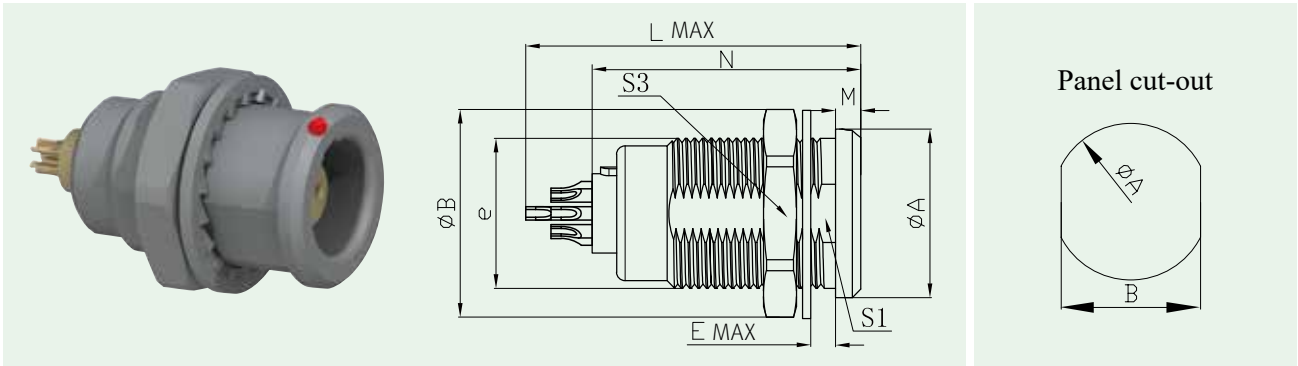
T 2 IP50, for cable bend relief or over moulding



Size	Unit: mm				
	A	L	M	S1	S2
00	6.4	28.5	20.5	5.5	5
0	9.5	36.0	26.0	8.0	7
1	12	43.0	32.0	10	9
2	15	50.0	38.0	13	12

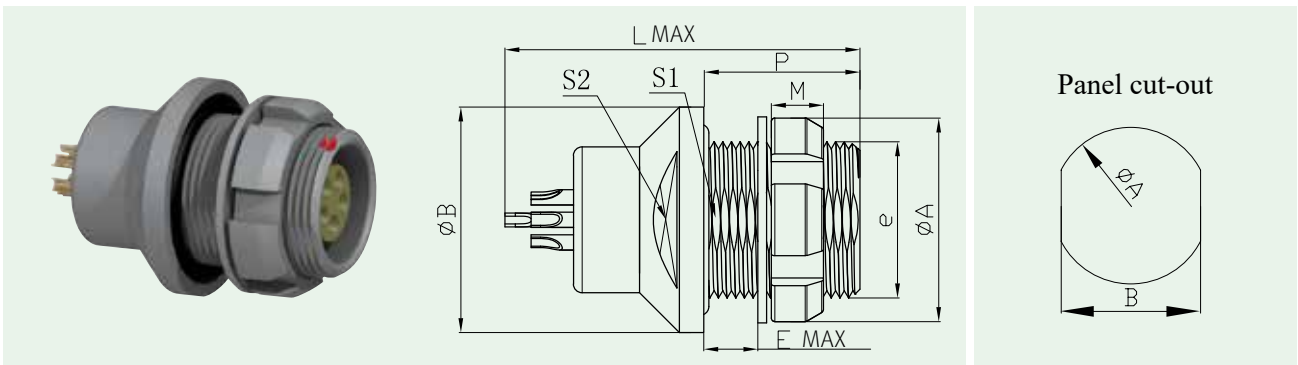
Receptacle (Z1, Z8)

Z 1 IP50, install from rear of panel



Size	Unit: mm									Panel hole	
	A	B	e	E	L	M	N ₁₎	S1	S3	B	ØA
00	8	10.2	M7x0.5	6	15.5	1.0	13.7	6.3	9	6.4	7.1
0	10.0	12.4	M9x0.6	7	20.7	1.2	19.1	8.2	11	8.3	9.1
1	14.0	15.8	M12x1.0	7.5	23	1.5	21.1	10.5	14	10.6	12.1
2	18.0	19.2	M15x1.0	8.5	26.7	1.8	24.6	13.5	17	13.6	15.1

Z 8 IP68, slotted nut, install from front of panel

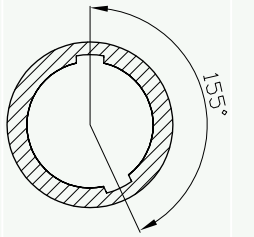
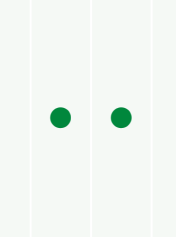




Size	Unit: mm									Panel hole	
	A	B	e	E	L	M	P	S1	S2	B	ØA
00	10	11	M7x0.5	2.5	18.2	2.5	6	6.3	-	6.4	7.1
0	12	13	M9x0.6	5.5	20.2	2.5	9	8.2	-	8.3	9.1
1	16	18	M12x1.0	5.5	26.6	3.5	11	10.5	-	10.6	12.1
2	20	20	M15x1.0	5.5	31.6	3.5	9.6	13.5	15	13.6	15.1

Coding

Angle	Coding	Front view of the receptacle	Size				Angle	Coding	Front view of the receptacle	Size			
			00	0	1	2				00	0	1	2
0°	0		●	●	●	●	70°	G			●	●	●
30°	A		●	●	●	●	80°	I			●	●	
37.5°	B						90°	J			●	●	
45°	C		●	●	●	●	95°	K					●
52.5°	E						110°	M			●		
60°	F		●	●	●	●	120°	Q					●

Coding

Angle	Coding	Front view of the receptacle	Size			
			00	0	1	2
135°	V			●	●	
145°	W			●	●	●
155°	Y			●	●	
100	S					
112.5°						●

● Available Type

Housing material

Housing material and surface plating

No.	Housing material and surface plating
C	Copper alloy/surface chrome plating
S	Copper alloy/surface black chrome plating

Insulator material

PEEK material, turned pin

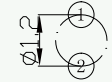
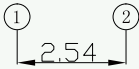
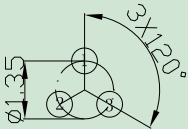
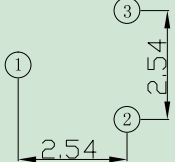
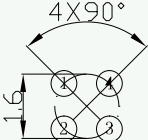
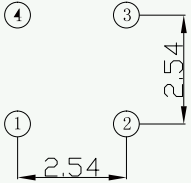
No.	Termination	PEEK
P	Soldering	●
	PCB	●

Number of contacts Size 00

Size	Insulator material	Number of pins	Pin diameter mm	Single-pin load current	Creepage distance		Test voltage KV	Operating voltage KV	Termination method		View on the termination side	
					Pin and pin mm	Pin and housing mm			Soldering	PCB	Pin	Socket
00	P	02	0.5	5	0.6	0.8	1.1	0.366	●	●		
00	P	03	0.5	5	0.5	0.7	1.1	0.366	●	●		
00	P	04	0.5	5	0.4	0.6	0.9	0.300	●	●		

PCB layout

Size 00

Number of pins	PCB straight	PCB right angle
2-pin	<p>Hole diameter: 0.6</p> 	<p>Hole diameter: 0.6</p> 
3-pin	<p>Hole diameter: 0.6</p> 	<p>Hole diameter: 0.6</p> 
4-pin	<p>Hole diameter: 0.6</p> 	<p>Hole diameter: 0.6</p> 

Number of contacts Size 0

Size	Insulator material	Number of pins	Pin diameter mm	Single-pin load current	Creepage distance		Test voltage KV	Operating voltage KV	Termination method		View on the termination side	
					Pin and pin mm	Pin and housing mm			Soldering	PCB	Pin	Socket
0	P	02	0.9	10	1	1	1.5	0.5	●	●		
0	P	03	0.9	10	0.8	1	1.2	0.4	●	●		
0	P	04	0.7	7	0.8	1	0.9	0.3	●	●		
0	P	05	0.7	7	0.7	0.8	1.1	0.366	●	●		
0	P	06	0.5	5	0.9	0.8	0.9	0.3	●	●		
0	P	07	0.5	5	0.7	0.8	0.9	0.3	●	●		
0	P	09	0.5	5	0.4	0.8	0.6	0.2	●	●		
0	P	10	0.5	5	0.3	0.7	0.6	0.2	●	●		

PCB layout Size 0

	PCB straight	PCB right angle		PCB straight	PCB right angle
Number of pins			Number of pins		
2-pin	Hole diameter: 0.8 	Hole diameter: 0.7 	6-pin	Hole diameter: 0.6 	Hole diameter: 0.7
3-pin	Hole diameter: 0.8 	Hole diameter: 0.7 	7-pin	Hole diameter: 0.6 	Hole diameter: 0.7
4-pin	Hole diameter: 0.6 	Hole diameter: 0.7 	9-pin	Hole diameter: 0.6 	Hole diameter: 0.7
5-pin	Hole diameter: 0.6 	Hole diameter: 0.7 			

Number of contacts Size 1

Size	Insulator material	Number of pins	Pin diameter mm	Single-pin load current	Creepage distance		Test voltage KV	Operating voltage KV	Termination method		View on the termination side	
					Pin and pin mm	Pin and housing mm			Soldering	PCB	Pin	Socket
1	P	02	1.3	14	1.3	1.4	1.65	0.55	●	●		
1	P	03	1.3	14	1.1	1.3	1.5	0.5	●	●		
1	P	04	0.9	10	1.0	1.4	1.5	0.5	●	●		
1	P	05	0.9	10	0.9	1.2	1.35	0.45	●	●		
1	P	06	0.7	7	0.9	1.2	1.2	0.4	●	●		
1	P	07	0.7	7	0.9	1.2	1.2	0.4	●	●		
1	P	08	0.7	7	0.6	1.1	1.0	0.33	●	●		
1	P	10	0.5	5	0.5	1.2	1	0.33	●	●		
1	P	14	0.5	5	0.5	0.9	0.9	0.3	●	●		
1	P	16	0.5	5	0.4	0.9	0.9	0.3	●	●		

PCB layout Size 1

Number of pins	PCB straight	PCB right angle	Number of pins	PCB straight	PCB right angle
2-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.9</p>	7-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.7</p>
3-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.9</p>	8-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.7</p>
4-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.7</p>	10-pin	<p>Hole diameter: 0.6</p>	<p>Hole diameter: 0.7</p>
5-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.7</p>	14-pin	<p>Hole diameter: 0.6</p>	<p>Hole diameter: 0.7</p>
6-pin	<p>Hole diameter: 0.8</p>	<p>Hole diameter: 0.7</p>	16-pin	<p>Hole diameter: 0.6</p>	

Number of contacts Size 2

Size	Insulator material	Number of pins	Pin diameter mm	Single-pin load current	Creepage distance		Test voltage KV	Operating voltage KV	Termination method		View on the termination side	
					Pin and pin housing mm	Pin and pin housing mm			Soldering	PCB	Pin	Socket
2	P	02	2	22	2	1.6	2.1	0.7	●	●		
2	P	03	1.6	17	1.9	1.7	2.1	0.7	●	●		
2	P	04	1.3	14	2	1.8	1.95	0.65	●	●		
2	P	05	1.3	14	1.6	1.7	1.8	0.6	●	●		
2	P	06	1.3	14	1.3	1.5	1.5	0.5	●	●		
2	P	07	1.3	14	1.3	1.4	1.8	0.6	●	●		
2	P	08	0.9	10	1.3	1.2	1.5	0.5	●	●		
2	P	10	0.9	10	1	1.2	1.5	0.5	●	●		
2	P	12	0.7	7	1	1.3	1.35	0.45	●	●		
2	P	14	0.7	7	0.9	1.2	1.2	0.4	●	●		
2	P	16	0.7	7	0.8	1.2	1.1	0.366	●	●		
2	P	18	0.7	7	0.7	1.2	0.9	0.3	●	●		
2	P	19	0.7	7	0.7	1.2	1	0.33	●	●		
2	P	26	0.5	5	0.6	1.1	0.9	0.3	●	●		



PCB layout Size 2

	PCB straight	PCB right angle		PCB straight	PCB right angle
Number of pins			Number of pins		
2-pin	Hole diameter:0.8 	Hole diameter:0.9 	7-pin	Hole diameter:0.8 	Hole diameter:0.9
3-pin	Hole diameter:0.8 	Hole diameter:0.9 	8-pin	Hole diameter:0.8 	Hole diameter:0.7
4-pin	Hole diameter:0.8 	Hole diameter:0.9 	10-pin	Hole diameter:0.8 	Hole diameter:0.7
5-pin	Hole diameter:0.8 	Hole diameter:0.9 	12-pin	Hole diameter:0.8 	Hole diameter:0.7
6-pin	Hole diameter:0.8 	Hole diameter:0.9 	14-pin	Hole diameter:0.8 	Hole diameter:0.7



PCB layout Size 2

Number of pins	PCB straight	PCB right angle
16-pin	<p>Hole diameter:0.8</p>	<p>Hole diameter:0.7</p>
18-pin	<p>Hole diameter:0.8</p>	<p>Hole diameter:0.7</p>
19-pin	<p>Hole diameter:0.8</p>	<p>Hole diameter:0.7</p>
26-pin	<p>Hole diameter:0.6</p>	
32-pin	<p>Hole diameter:0.6</p>	

Pin/socket type, surface plating and pin/socket diameter

Pin/socket type, surface plating

Type	No.	Termination method	Surface plating
Socket	L	Soldering	Au
Pin	M	Soldering	Au
Socket	Q	PCB	Au
Pin	R	PCB	Au

L=Soldering

P=PCB

Pin/socket diameter

Pin/socket diameter	No.
0.50	C
0.70	F
0.90	J
Mixed	M
1.30	P

Pin/socket diameter and termination cross section

Soldering

No.	Pin/socket diameter	Termination diameter	Termination cross section	
			AWG	mm ²
C 0	0.5	0.4	28	0.08
G 0	0.7	0.85	22	0.38
G 0	0.9	0.85	22	0.38
H 0	1.3	1.1	20	0.50

PCB

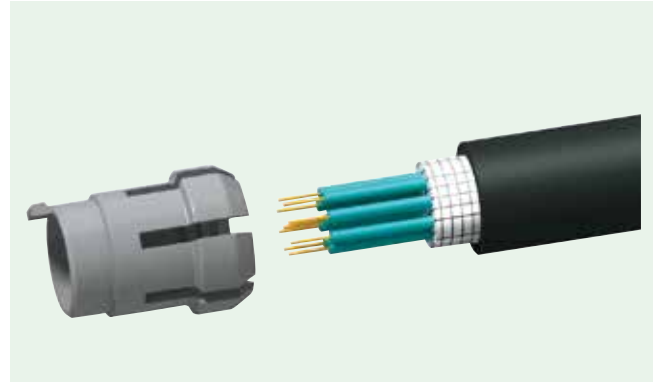
No.	Pin/socket diameter	Termination diameter
0 0	0.5	0.5
0 0	0.7	0.5
0 0	0.9	0.7
0 0	1.3	0.7

Cable clamp

No.		Cable outer diameter mm	Housing size			
			00	0	1	2
2	2	1.4-2.2	●	●		
2	7	2.2-2.7	●			
3	1	2.2-3.2		●		
3	5	2.7-3.5	●			
4	2	3.2-4.2		●	●	●
5	2	4.2-5.2		●	●	●
5	6	5.2-5.6		●		
6	2	5.2-6.2			●	●
7	2	6.2-7.2			●	●
7	6	7.1-7.5			●	
8	2	7.2-8.2				●
9	2	8.2-9.2				●
9	9	9.1-9.7				●
0	0	Without a cable clamp				

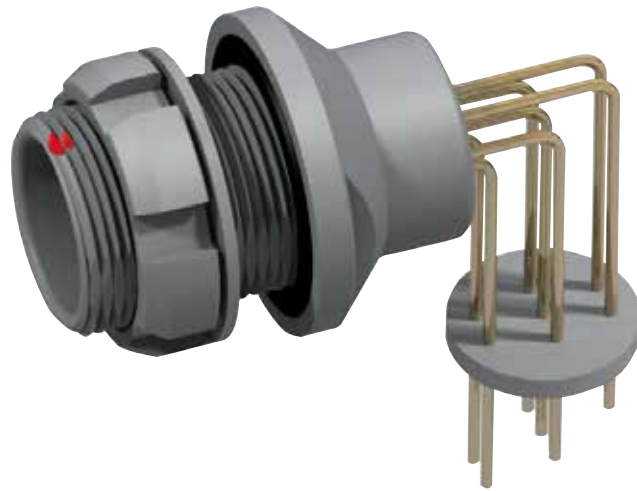
Applicable to all plugs and floating receptacles

Schematic diagram of cable clamp



PCB right-angled receptacle

PCB right angled



Back Nut

Standard back nut



PUR back nut

