

Series Y, IP68

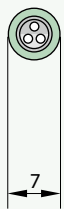

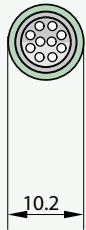


Description of Series Y

SN	Descript	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		T	1	1	Y	A	R	—	P	0	8	X	F	G	0	—	0	0	0	0
1	Type: Straight plug = T1 Floating receptacle = F1 Receptacle = ZK, Z8, ZW																			
2																				
3	Size: 0, 1, A, 2, 3, E																			
4	Series: Y																			
5	Coding: A-D																			
6	Housing material/plating: R																			
8	Insulator materials: P																			
9	Number of pins																			
10																				
11	Pin/SocketType																			
12	Contact/socket diameter																			
13	Termination cross section																			
14	0																			
16	0																			
17	Front nut: 0 (standard)																			
18	0																			
19	Receptacle grounding plate - ZK, GW and Z8 receptacles: L																			

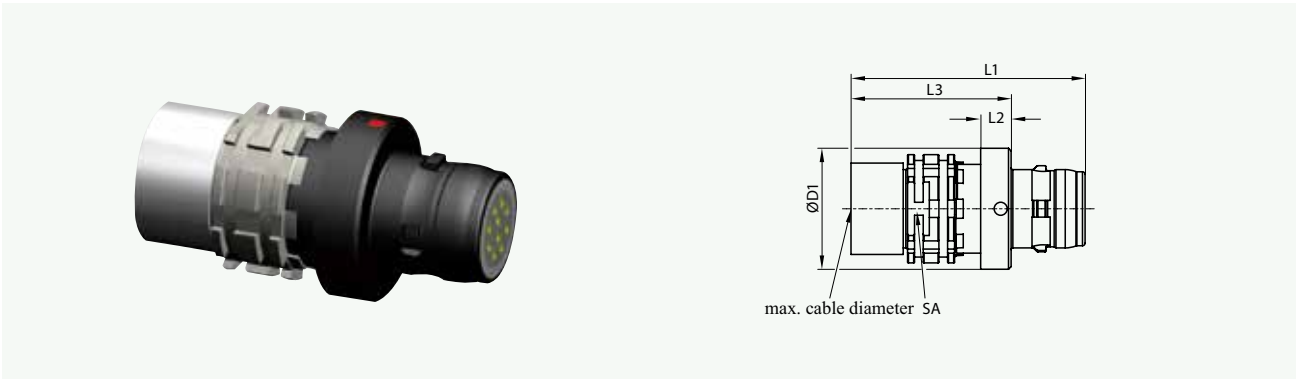
Housing size (scale 1:1)

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

OD			
S	0	1	1.5
No.	0	1	A

Plug (T1)

T 1 IP68, easy-to-clean plug



Unit (mm)						
Size	L1	L2	L3	D1	SA	Maximum cable diameter
0	~23.5	3.0	15.0	11.9	9	5.5
1	~26.9	3.5	18.4	13.9	11	6.5
A	~27.5	3.5	18.5	15.9	12	8.0

Receptacle (F1)

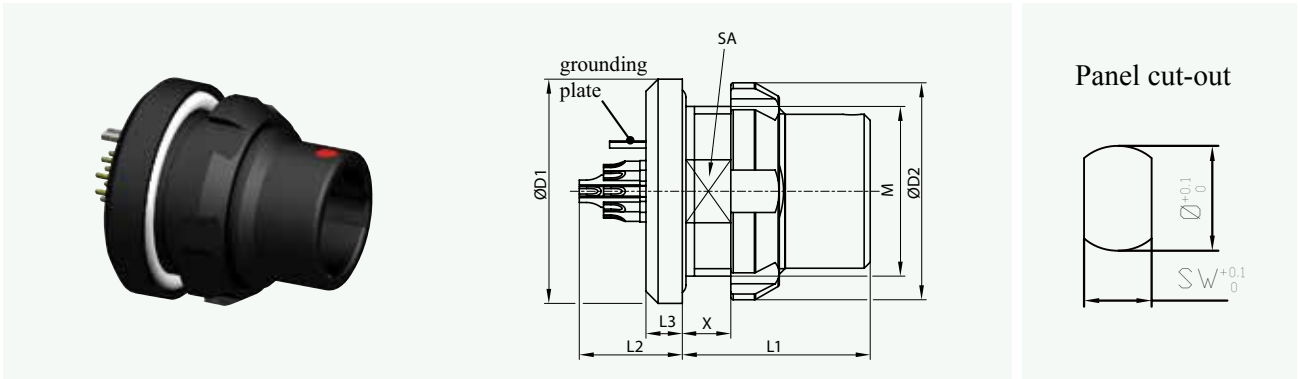
F 1 IP68, floating receptacle



Unit (mm)								
Size	L1	L2	L3	L4	D1	D2	SA	Maximum cable diameter
0	25.0	13.0	1.5	5.8	11.9	10.5	9	5.5
1	27.0	12.1	1.5	5.8	13.9	12.5	11	6.5
A	27.0	12.0	1.5	5.8	15.9	14.5	12	8.0

Receptacle (ZK)

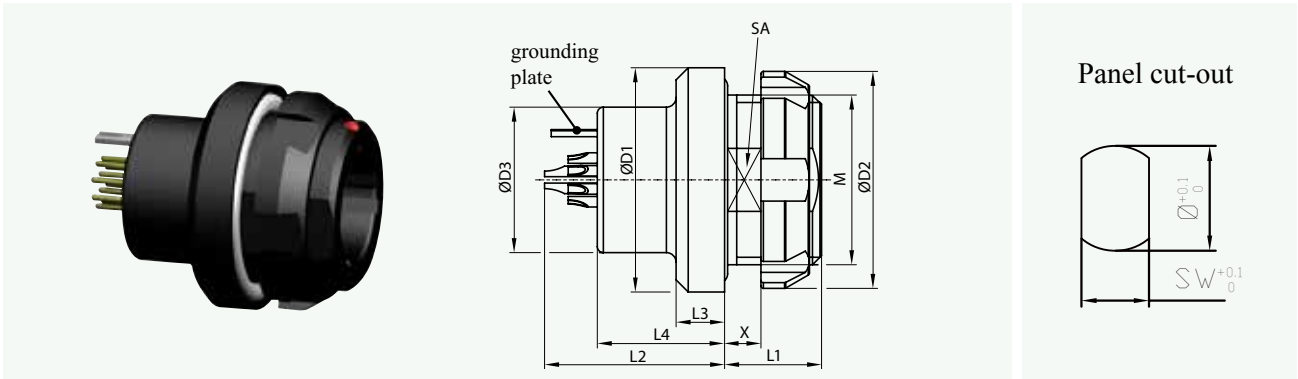
Z **K** IP68, install from rear of panel



Size	Unit (mm)								Panel hole size	
	L1	L2	L3	X (max.)	D1	D2	SA	M	SW	Ø
0	15.5	7.3	2.5	7.0	15.5	10	10	11×0.75	10.1	11.1
1	15.5	7.4	3.0	4.0	18.5	17.9	13	14×1	13.1	14.1
A	16.5	8.2	3.0	5.5	18.9	17.9	13	14×0.75	13.1	14.1

Receptacle (Z8)

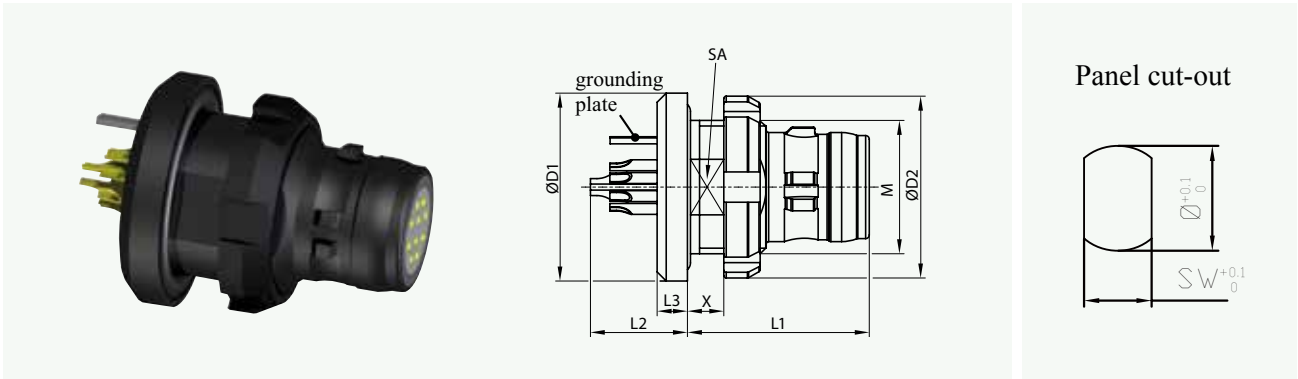
Z 8 IP68, install from rear of panel



Size	Unit (mm)										Panel hole size	
	L1	L2	L3	L4	X (max.)	D1	D2	D3	SA	M	SW	Ø
0	6.5	16.3	3.0	11.5	3.0	15.5	15.0	10.0	10.0	11×0.75	10.1	11.1
1	8.0	14.9	4.0	10.5	3.5	18.5	17.9	12.0	13	14×1	13.1	14.1
A	7.0	17.7	2.5	12.5	3.0	18.9	17.9	14.0	13	14×0.75	13.1	14.1

Receptacle (ZW)

Z W IP68, docking plug



Size	Unit (mm)								Panel hole size	
	L1	L2	L3	X (max.)	D1	D2	SA	M	SW	Ø
0	15.0	6.4	2.5	3.0	13.2	12.8	9.2	10×0.5	9.3	10.1
1	15.0	8.0	2.5	3.5	15.5	15.0	10.0	11×0.75	10.1	11.1
A	16.5	9.7	4.0	3.5	17.5	17.9	13.0	14×0.75	13.1	14.1

Coding, housing materials and surface plating

Coding

	Coding	Front view of the receptacle	Color Coding	
Standard	A			Light brown
	B			Red
	C			Blue
	D			Green

Housing material and surface plating

No.	Housing material and surface plating
R	Aluminum alloy / chrome plating (grey)
K	Copper alloy / chrome plating (grey)



Insulator materials

PEEK material, turned pin

No.	Termination method	PEEK
P	Soldering	●

Spring pin

Environmental parameters

Operating temperature range

Stainless steel: -51°C -+125°C

Materials

Contact Gold-plated copper alloy

Solder cup Tin-plated copper alloy

Spring Stainless steel

Clip Beryllium copper plating

Mechanical parameters

Minimum diameter 0.8mm

Minimum initial length 9mm

Shrinking rate Max 0.15

Stroke 1.5mm

Minimum initial elastic force 0.2N

mating cycles 40,000 cycles

Electrical parameters

Contact resistance Max. 20m Ω

Maximum operating current Continuous operating current 2A/peak current 4A



Number of contacts

Size 0

Size	Insulator materials	Number of pins		Pin diameter mm	current load per pin A	Test voltage between contacts KV	Working voltageKV	Termination method		View on the termination side	
								Soldering	PCB	Pin	Socket
0	P	0	7	0.6	2	0.600	0.200	●	●		

PCB layout Size 0

Number of pins	Layout	Z8 PCBPin X (mm) Figure 1	ZK PCBPin X (mm) Figure 2	ZW PCBPin X (mm) Figure 3
7		4.3	4.3	3.0

Figure 1: Grounding Plate and PCB Pin Length of Z8 Receptacle

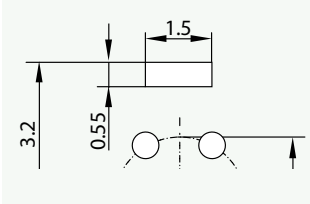


Figure 2: Grounding Plate and PCB Pin Length of ZK Receptacle

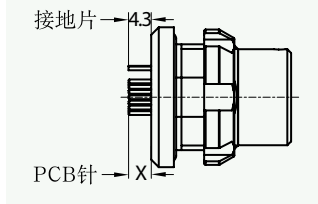
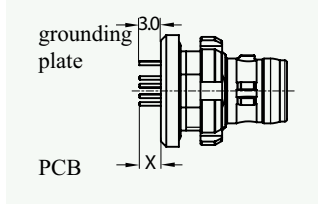


Figure 3: Grounding pin and PCB Pin Length of ZW Receptacle



Number of contacts

Size 1

Size	Insulator materials	Number of pins		Pin diameter mm	current load per pin A	Test voltage between contacts KV	Working voltageKV	Termination method		View on the termination side	
								Soldering	PCB	Pin	Socket
1	P	1	0	0.6	2	0.600	0.200	●	●		
1	P	1	6	0.6	2	0.600	0.200	●	●		

PCBLayout Size 1

Number of pins	Layout	Z8 PCBPin X (mm) Figure 1	ZK PCBPin X (mm) Figure 2	ZW PCBPin X (mm) Figure 3
10		3.8	3.8	3.0
16		3.8	3.8	3.0

Figure 1: Grounding Plate and PCB Pin Length of Z8 Receptacle

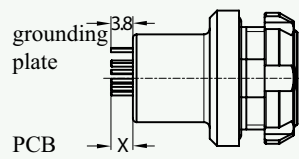


Figure 2: Grounding Plate and PCB Pin Length of ZK Receptacle

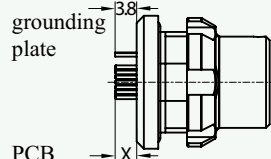
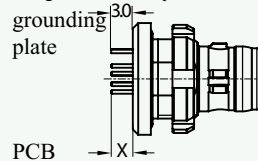
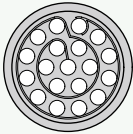
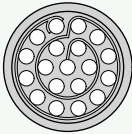


Figure 3: Grounding pin and PCB Pin Length of ZW Receptacle



Number of contacts Size 1.5

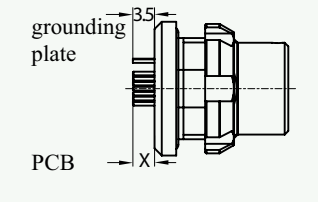
Size	Insulator materials	Number of pins		Pin diameter mm	current load per pin A	Test voltage between contacts KV	Working voltageKV	Termination method		View on the termination side	
								Soldering	PCB	Pin	Socket
A	P	1	9	0.6	2	0.600	0.200	●	●		

PCB layout

Size 1.5

Number of pins	Layout	ZK PCBPin X (mm) Figure 1
19-pin		3.5

Figure 1: Grounding Plate and PCB Pin Length of ZK Receptacle



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

Contact/SocketType、 Surface plating

Type	No.	Surface plating
Socket	W	L-1 $\mu\text{m Au}$ (min.)
Contact	X	L-1 $\mu\text{m Au}$ (min.)
Socket	U	P-1 $\mu\text{m Au}$ (min.)
Contact	V	P-1 $\mu\text{m Au}$ (min.)

L=Soldering

P=PCB

Contact/socket diameter

Contact/socket diameter	No.
0.6	D
0.6	D
0.6	C

Pin/socket diameter and termination cross section

Soldering

Size	Pin/ socket diameter mm	Contact diameter	Termination cross sectionNo.	Termination cross section		Termination diameter
				AWG	mm ²	
0	0.6	D	D	26	0.15	
1	0.6	D	D	26	0.15	
1.5	0.6	C	C	26	0.15	

PCB

Size	Pin/ socket diameter mm	Contact diameter	Termination cross sectionNo.	Termination cross section		Termination diameter
				AWG	mm ²	
0	0.6	D	0			0.5
1	0.6	D	0			0.5
1.5	0.6	C	0			0.5