

IP 68


05

- **SP Series IP68**
- **Threaded coupling**


Material and spec

Coupling	Threaded	
Shell material	PC, Nylon66, fire resistance: V-0	
Insert material	PPS, max temperature 260 °C; Insert material: PA66(New Screw)	
Contact material	Brass with gold plating	
Termination	Solder: SP11, SP13, SP17, SP21, SP25, SP29, Crimp: SP17, SP21, SP25, SP29 Screw: SP17, SP21, SP25, SP29(Ø2.0, Ø2.5, Ø3, Ø3.5mm contact)	
Cable outer diameter range	SP11: I: 3-4mm, II: 4-6.5mm SP17: 6-10mm SP25: I:10-14mm , II: 7-12mm	SP13: I: 4-6.5mm , II: 5-8mm SP21: I: 4.5-7mm, II: 7-12mm , III: 5-9mm SP29: I: 9-13mm, II: 13-16mm
IP rating	IP68	
Mating cycle	500	
Temperature range	-40°C~+85°C	
Insulation resistance	2000 MΩ	

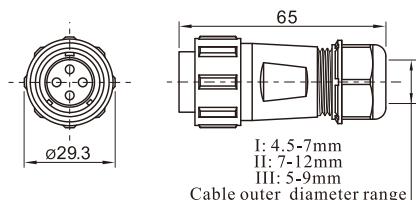
SP21 Series

**SP
21**



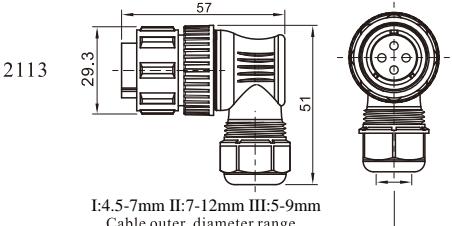
Cable connector
Mate with SP2111, SP2111C,
SP2112, SP 2113

SP2110 / P _____ **SP2110 / S** _____
Male contact Female contact
1: solder, 2: screw, 3: crimp
Cable outer diameter range
I: 4.5~7mm, II: 7~12mm, III: 5~9mm
Number of contact



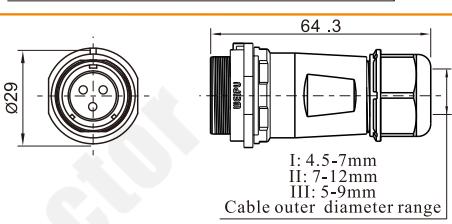
Angled cable connector
Mate with SP2111, SP2111C, SP2112, SP 2113

SP2116 / P _____ **SP2116 / S** _____
Number of contact
1: solder, 2: screw, 3: crimp
Cable outer diameter range
I: 4.5~7mm, II: 7~12mm, III: 5~9mm



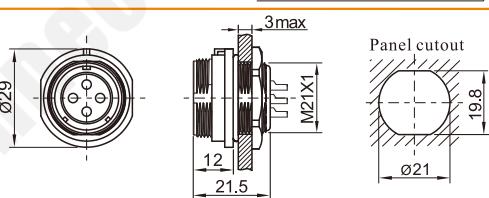
In-line cable connector C
Mate with SP2110, SP2116

SP2111C / P _____ **SP2111C / S** _____



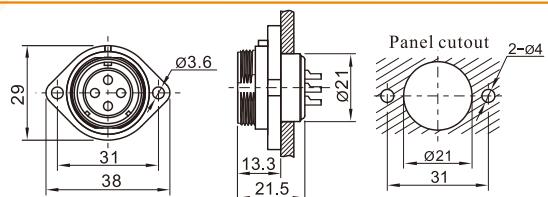
Rear-nut mount
Mate with SP2110, SP2116

SP2112 / P _____ **SP2112 / S** _____
Number of contact
1:solder, 2:screw, 3:crimp



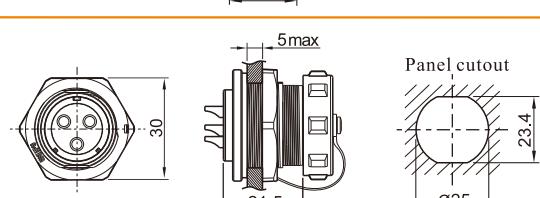
2-hole flange
Mate with SP2110, SP2116

SP2113 / P _____ **SP2113 / S** _____



Front-nut mount
Mate with SP2110, SP2116

SP2115 / P _____ **SP2115 / S** _____



Solder contact spec

★ Crimp contact spec see P20

★ Screw contact spec see P21

Number of contact	2	3	4	5	5B	5C	6	6B	7	8	9	12	15
Male contact face view													
Rated current (A)	30	30	30	30	30 5	15	25 5	30 5	15	10	5	5	5
Contact diameter (mm)	Ø3X2	Ø3X3	Ø3X4	Ø3X5	Ø3X2 Ø1X3	Ø2X5	Ø2.5X4 Ø1X2	Ø3X2 Ø1X4	Ø2X7	Ø1.5X8	Ø1X9	Ø1X12	Ø1X15
Rated voltage (AC.V)	500	500	500	500	500	500	500	500	500	500	400	400	400
Test voltage(AC.V) 1 min	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1200	1200	1200
Contact resistance (mΩ)	1	1	1	1	1 5	2.5	1 5	1 5	2.5	2.5	5	5	5
Termination	solder/screw	solder/screw	solder/screw	solder/screw	solder	solder	solder	solder	solder	solder	solder	solder	solder
Wire size for solder (mm ² / AWG)	≤4/12	≤4/12	≤4/12	≤4/12	≤4/12 ≤0.75/18	≤2/14	≤4/12 ≤0.75/18	≤4/12 ≤0.75/18	≤2/14	≤2/14	≤0.75/18	≤0.75/18	≤0.75/18
Wire size for screw termination (mm ² /AWG)	≤1.5/15	≤1.5/15	≤1.5/15	≤1.5/15	/	/	/	/	/	/	/	/	/