

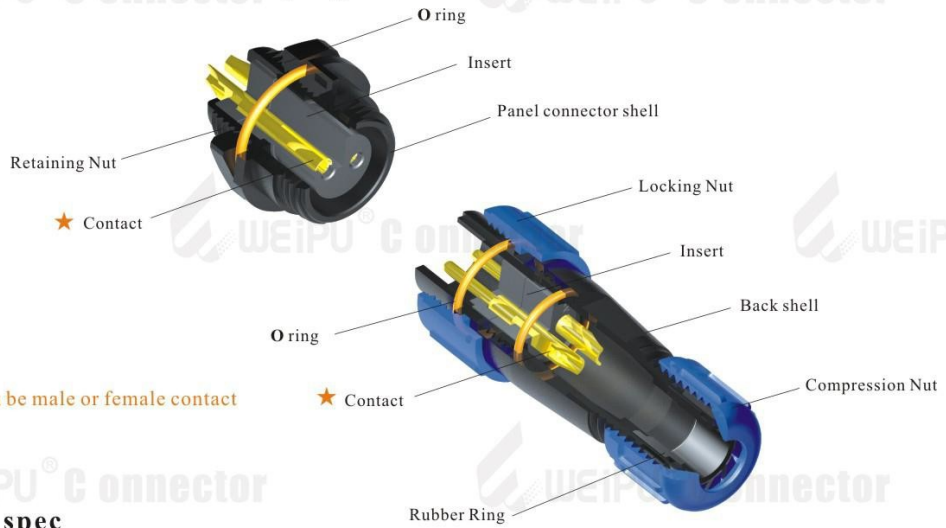


IP68

SP  
13.17.21



● SP13/SP17/SP21 IP68 Threaded coupling



★ Each side can be male or female contact

**Material and spec**

Product type	Connector	Overmolded Cable Assemblies
Coupling	Threaded coupling	Threaded coupling
Shell material	Nylon66, fire resistance: V-0	PC, PVC, fire resistance: V-0; Locking nut material: Anodized aluminum
Insert material	PPS max temperature 260 °C, fire resistance: V-0	PPS max temperature 260 °C, fire resistance: V-0
Contact material	Brass with gold plating	Brass with gold plating
Termination	SP13: solder, SP17: solder/crimp, SP21: solder /screw/crimp	
Cable outer diameter range	SP13 I: 4-6.5mm SP13 II: 5-8mm SP17: 6-10mm SP21 I: 4.5-7mm SP21 II: 7-12mm	
IP rating	IP68	IP66
Mating cycle	>500	>500
Temperature range	-25°C~+85°C	-20°C~+85°C
Insulation resistance MΩ	2000	2000

## SP21 Series IP68

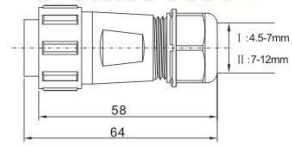
**SP  
21**



SP2110 / P — — — — SP2110 / S

### Cable connector

Mate with SP2111, SP2112, SP2113



C: with cap, N: without cap

1:solder, 2:screw, 3:crimp

Cable outer diameter I: 4.5-7mm, II: 7-12mm

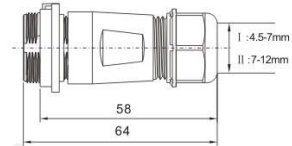
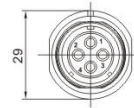
Number of contact: 2.3.4.5.5B.5C.7.8.9.12



SP2111 / P — — — — SP2111 / S

### In-line cable connector

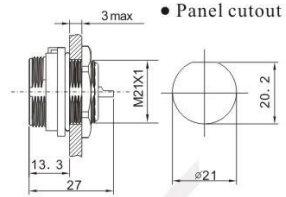
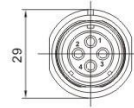
Mate with SP2110



SP2112 / P — — — — SP2112 / S

### Front mount

Mate with SP2110



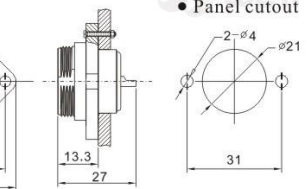
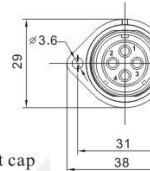
• Panel cutout



SP2113 / P — — — — SP2113 / S

### 2-hole flange

Mate with SP2110



• Panel cutout

C: with cap, N: without cap

1:solder, 2:screw, 3:crimp

Number of contact: 2.3.4.5.5B.5C.7.8.9.12

## Contact arrangement and spec for solder/screw

★ For crimp spec see P49-P52

Number of contact	2	3	4	5	5B	5C	7	9	12
Male contact face view									
Rated current (A)	30A	30A	30A	30A	5A, 30A	15A	15A	5A	5A
Contact diameter	∅ 3X2	∅ 3X3	∅ 3X4	∅ 3X5	∅ 1X3 ∅ 3X2	∅ 2X5	∅ 2X7	∅ 1X9	∅ 1X12
Termination	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder	solder	solder	solder
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	500V	500V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1200V
Contact resistance $\Omega$	1	1	1	1	5, 1	2.5	2.5	5	5
Wire size mm <sup>2</sup> /AWG	≤4.17/11	≤4.17/11	≤4.17/11	≤4.17/11	≤0.785/18 ≤4.17/11	≤2/14	≤2/14	≤0.785/18	≤0.785/18

## ★ Crimp contact arrangement and spec for WS, WF, WY, WP, SP, SY series

WS20、WF20、WY20、WP20 SP21、SY21	2	3	5	7	8
Male contact face view					
Rated current (A)	25A	25A	10A	10A	5A
Contact diameter	∅ 2.5X2	∅ 2.5X3	∅ 1.5X5	∅ 1.5X7	∅ 1X8
Rated voltage (AC.V)	500V	500V	500V	500V	500V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V
Contact resistance mΩ	1	1	2.5	2.5	5
Insulation resistance MΩ	2000	2000	2000	2000	2000

### ● SP21 Series Mating diagram



### Application

#### SP21 (Threaded)



This IP68 connector is used for power connection, lighting industry, outdoor led lighting, outdoor LED panels, stage lighting, medical device, communications, Marine equipment, under water equipment, transformers, solar energy, control boxes, machines and equipments, for data and power. Simple crimp-and-poke technology.