

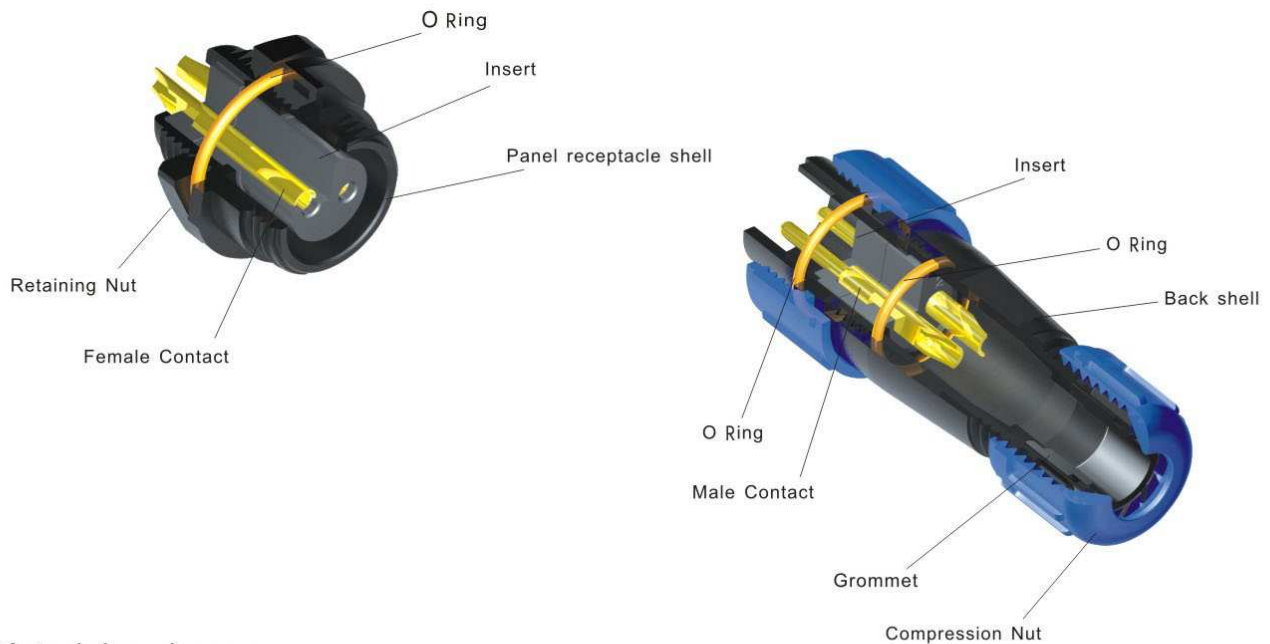
## CIRCULAR CONNECTORS SERIES

**SP**  
13、21



### IP68 Plastic Connectors with threaded coupling

SP series circular connector meets the requirements of IP68, it works reliably indoor, outdoor and under water harsh environment applications. Patent pending



### Material and spec

Back shell	V-0	Fire resistance	V-0
Insert material	Temperature range 260°C		
Contact material	brass		
Contact plating	gold over nickel		
Contact termination style	solder		
Cable OD range	SP13 Type I 3-6.5mm	SP13 Type II 4-8mm	SP21 6-12mm
IP rating	IP68		
Mating cycle	> minimum 500 times		
Temperature range	-40+85°C		
Humidity	+40°C 95±3%		
Vibration	10~500Hz	100m/S	
Shock	40~80/min	250m/S	

## SP21 Series

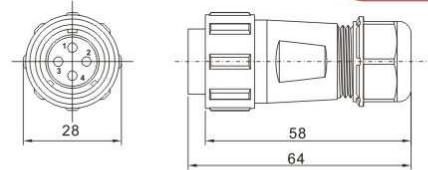
**SP  
21**



SP2110/P ❖

SP2110/S ❖

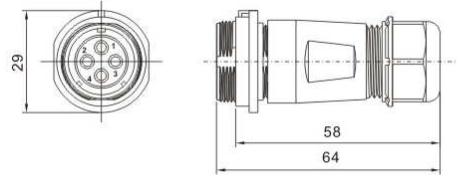
This item mates with  
SP2111, SP2112, SP2113  
Threaded coupling  
Solder termination



SP2111/P ❖

SP2111/S ❖

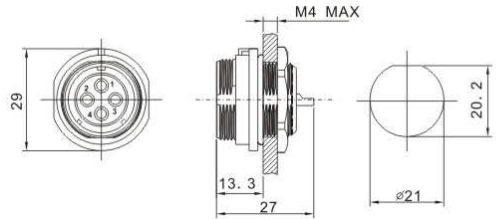
This item mates with  
SP2110  
Threaded coupling  
Solder termination



SP2112/P ❖

SP2112/S ❖

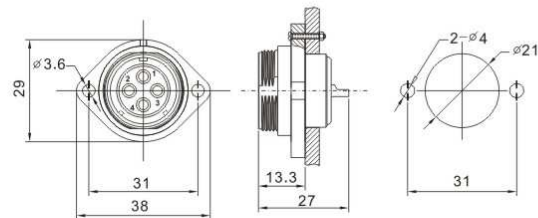
This item mates with  
SP2110,  
"D" hole with a nut on  
the back  
Solder termination



SP2113/P ❖

SP2113/S ❖

This item mates with  
SP2110,  
Install by screws  
Solder termination



### Insert configuration, face view of female

Pin Number	2	3	4	5	7	9	12
Insert configuration							
	2pole	3pole	4pole	5pole	7pole	9pole	12pole
Rated current A	30A	30A	30A	15A	15A	5A	5A
Size and No. of contact	∅ 3X2	∅ 3X3	∅ 3X4	∅ 2X5	∅ 2X7	∅ 1X9	∅ 1X12
Rated voltage (A.C. V. rms)	500V	500V	500V	500V	500V	500V	400V
Test voltage (A.C. V) 1min	1500V	1500V	1500V	1500V	1500V	1500V	1200V
Contact resistance mΩ	1	1	1	2.5	2.5	5	5
Insulation resistance mΩ	2000	2000	2000	2000	2000	2000	2000
Wire size mm <sup>2</sup> /AWG	≤4.17/11	≤4.17/11	≤4.17/11	≤2/14	≤2/14	≤0.785/18	≤0.785/18