

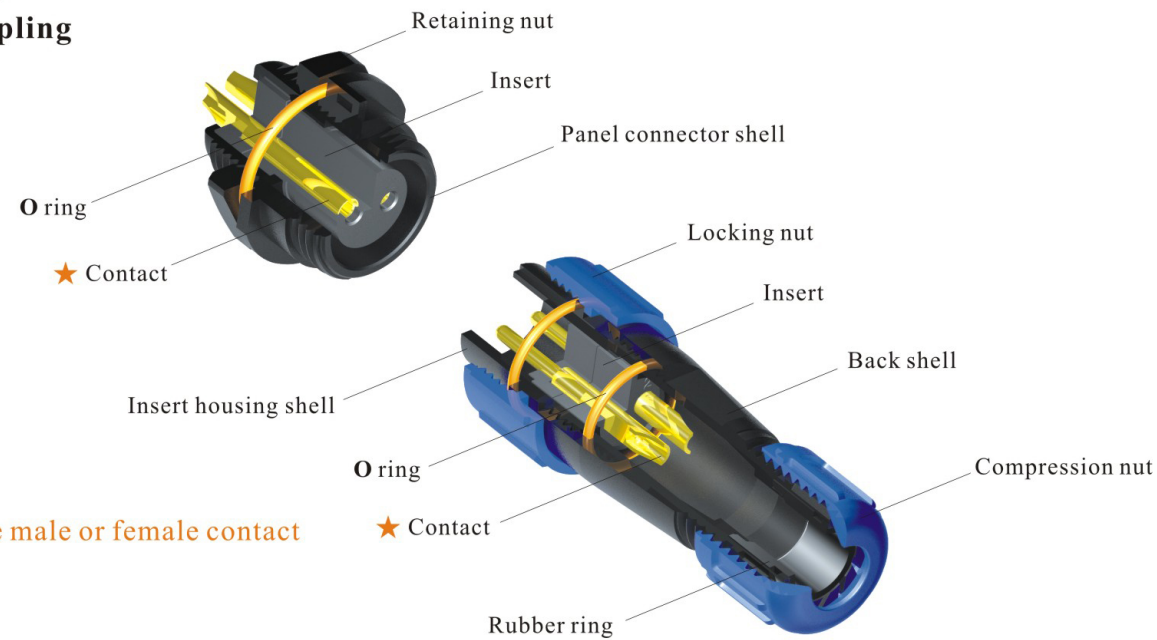




**SP Series**

**IP68**

- SP Series IP68
- Threaded coupling



★ Each side can be male or female contact

**Material and spec**

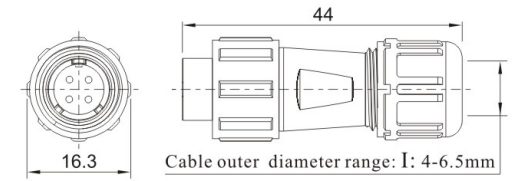
Coupling	Threaded
Shell material	PC: Panel connector shell, Insert housing shell Nylon66: Locking nut, Back shell, Compressing nut, Retaining nut Fire resistance: V-0
Insert material	PPS, max temperature 260 °C
Contact material	Brass with gold plating
Termination	Solder: SP11, SP13, SP17, SP21, SP29 Crimp: SP17, SP21, SP29 Screw: SP21, SP29 (∅2.5, ∅3, ∅3.5mm contact)
IP rating	IP68
Mating cycle	500
Temperature range	-40°C~+85°C
Insulation resistance (MΩ)	2000

**SP 11**

**SP11 Series**



**Cable connector**  
Mate with SP1111, SP1112

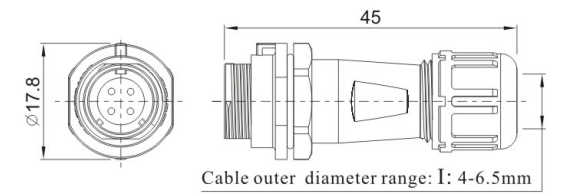


SP1110/P\_ \_ SP1110/S\_ \_

Cable outer diameter: I: 4-6.5mm  
Number of contact



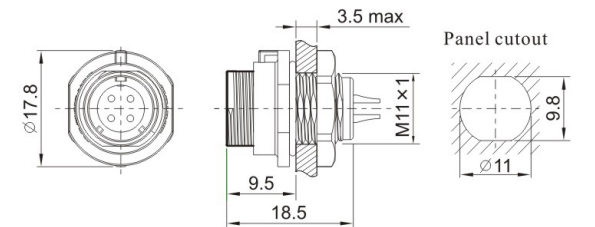
**In-line cable connector**  
Mate with SP1110



SP1111/P\_ \_ SP1111/S\_ \_



**Rear-nut mount**  
Mate with SP1110



SP1112/P\_ \_ SP1112/S\_ \_

Number of contact

**Solder contact spec**

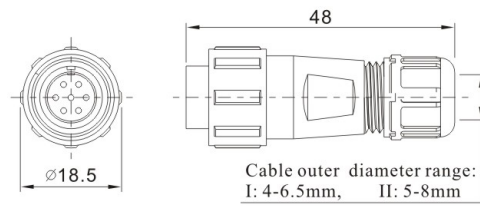
Number of contact	2	3	4	5
Male contact face view				
Rated current (A)	5	5	3	3
Contact diameter(mm)	1	1	0.7	0.7
Rated voltage (AC.V)	180	180	125	125
Test voltage(AC.V) 1 min	1000	1000	1000	1000
Contact resistance (mΩ)	5	5	10	10
Wire size (mm <sup>2</sup> /AWG)	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18

## SP13 Series

SP  
13



**Cable connector**  
Mate with SP1311, SP1312

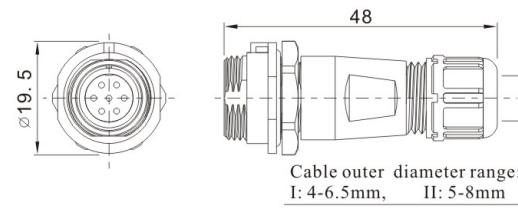


SP1310 / P\_\_ SP1310 / S\_\_

Cable outer diameter  
I: 4-6.5mm, II: 5-8mm  
Number of contact



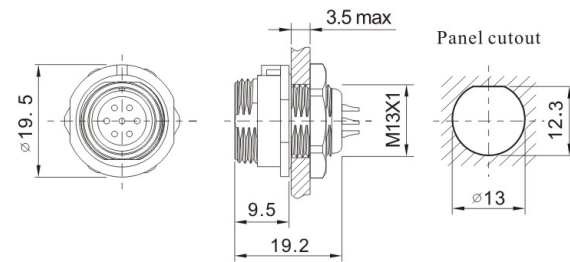
**In-line cable connector**  
Mate with SP1310



SP1311 / P\_\_ SP1311 / S\_\_



**Rear-nut mount**  
Mate with SP1310



SP1312 / P\_\_ SP1312 / S\_\_

Number of contact

### Solder contact spec

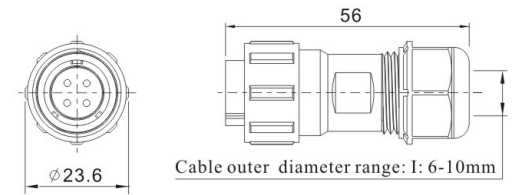
Number of contact	2	3	4	5	6	7	9
Male contact face view							
Rated current (A)	13	13	5	5	5	5	3
Contact diameter(mm)	1.6	1.6	1	1	1	1	0.7
Rated voltage (AC.V)	250	250	200	180	125	125	125
Test voltage(AC.V) 1 min	1500	1500	1500	1000	1000	1000	1000
Contact resistance (mΩ)	2	2	5	5	5	5	10
Wire size (mm <sup>2</sup> /AWG)	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18

## SP17 Series

SP  
17



**Cable connector**  
Mate with SP1711, SP1712

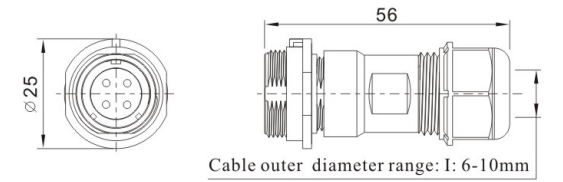


SP1710 / P\_\_ SP1710 / S\_\_

1: solder, 3: crimp  
Cable outer diameter: I: 6-10mm  
Number of contact



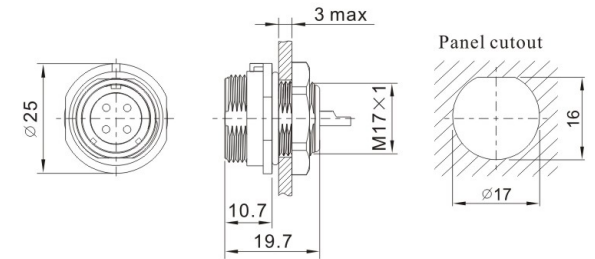
**In-line cable connector**  
Mate with SP1710



SP1711 / P\_\_ SP1711 / S\_\_



**Rear-nut mount**  
Mate with SP1710



SP1712 / P\_\_ SP1712 / S\_\_

1: solder, 3: crimp  
Number of contact

### Solder contact spec

★ Crimp contact spec see page 77-80

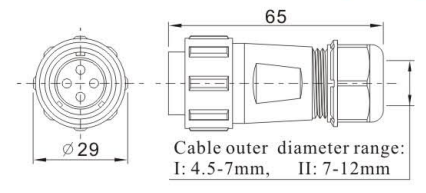
Number of contact	2	3	4	5	7	9	10
Male contact face view							
Rated current (A)	10	10	5	5	5	5	5
Contact diameter(mm)	1.5	1.5	1	1	1	1	1
Rated voltage (AC.V)	500	500	500	500	400	400	400
Test voltage(AC.V) 1 min	1500	1500	1500	1500	1200	1200	1200
Contact resistance (mΩ)	2.5	2.5	5	5	5	5	5
Wire size (mm <sup>2</sup> /AWG)	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18

**SP  
21**

**SP21 Series**



**Cable connector**  
Mate with SP2111, SP2112, SP2113

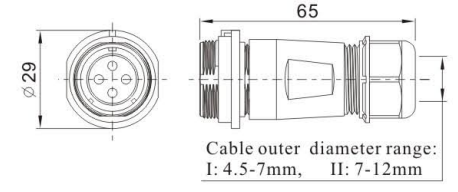


SP2110 / P \_\_\_ SP2110 / S \_\_\_  
Number of contact

1: solder, 2: screw, 3: crimp  
Cable outer diameter: I: 4.5-7mm, II: 7-12mm



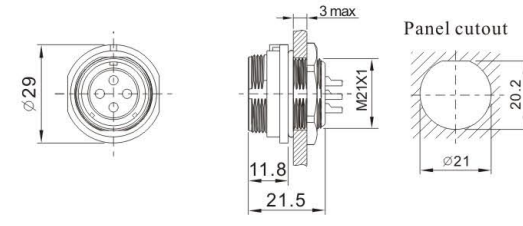
**In-line cable connector**  
Mate with SP2110



SP2111 / P \_\_\_ SP2111 / S \_\_\_



**Rear-nut mount**  
Mate with SP2110

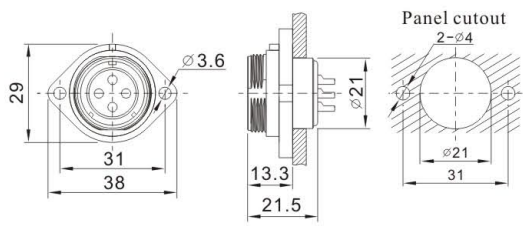


SP2112 / P \_\_\_ SP2112 / S \_\_\_  
Number of contact

1: solder, 2: screw, 3: crimp



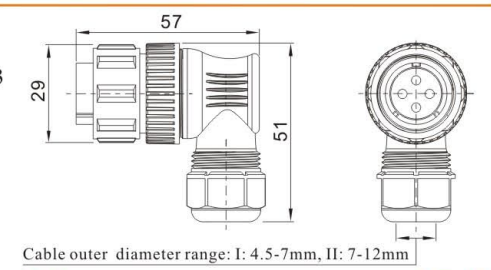
**2-hole flange**  
Mate with SP2110



SP2113 / P \_\_\_ SP2113 / S \_\_\_



**Angled cable connector**  
Mate with SP2111, SP2112, SP2113



SP2116 / P \_\_\_ SP2116 / S \_\_\_  
Number of contact

1: solder, 2: screw, 3: crimp  
Cable outer diameter: I: 4.5-7mm, II: 7-12mm

**Solder contact spec**

Number of contact	2	3	4	5	5B	5C	7	9	12
Male contact face view									
Rated current (A)	30	30	30	30	30 5	15	15	5	5
Contact diameter(mm)	3	3	3	3	∅3X2 ∅1X3	2	2	1	1
Rated voltage (AC.V)	500	500	500	500	500	500	500	500	400
Test voltage(AC.V) 1 min	1500	1500	1500	1500	1500	1500	1500	1500	1200
Contact resistance (mΩ)	1	1	1	1	1 5	2.5	2.5	5	5
Termination	solder / screw	solder / screw	solder / screw	solder / screw	solder	solder	solder	solder	solder
Wire size for solder (mm <sup>2</sup> / AWG)	≤4/11	≤4/11	≤4/11	≤4/11	≤4/11 ≤0.785/18	≤2/14	≤2/14	≤0.785/18	≤0.785/18
Wire size for screw termination (mm <sup>2</sup> / AWG)	≤1.5/15	≤1.5/15	≤1.5/15	≤1.5/15	/	/	/	/	/

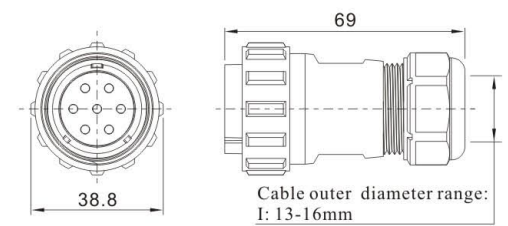
★ Crimp contact spec see page 77-80

**SP  
29**

**SP29 Series**



**Cable connector**  
Mate with SP2911, SP2912, SP2913

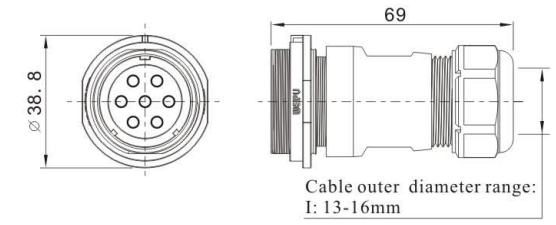


SP2910 / P \_\_\_ SP2910 / S \_\_\_

1: solder, 2: screw, 3: crimp  
Cable outer diameter: I: 13-16mm  
Number of contact



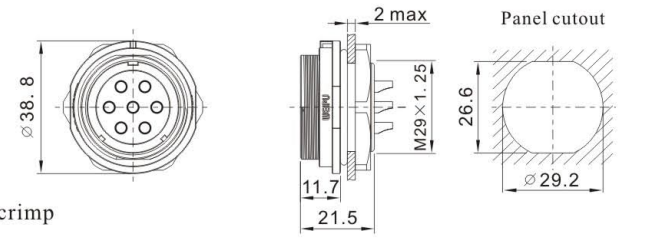
**In-line cable connector**  
Mate with SP2910



SP2911 / P \_\_\_ SP2911 / S \_\_\_



**Rear-nut mount**  
Mate with SP2910

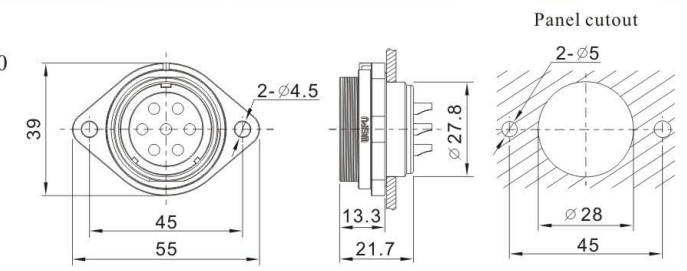


SP2912 / P \_\_\_ SP2912 / S \_\_\_

1: solder, 2: screw, 3: crimp  
Number of contact



**2-hole flange**  
Mate with SP2910



SP2913 / P \_\_\_ SP2913 / S \_\_\_

**Solder contact spec**

Number of contact	2	3	4	7	8	9	10	10B	12	16	17	20	24	26
Male contact face view														
Rated current (A)	50	50	25	25	25	25 5	25	10	10	10	10	5	5	5
Contact diameter(mm)	3.5	3.5	2.5	2.5	2.5	∅2.5X4 ∅1X5	2.5	1.5	1.5	1.5	1.5	1	1	1
Rated voltage (AC.V)	500	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	1500	1200	1200	1200
Contact resistance (mΩ)	0.5	0.5	1	1	1	1 5	1	2.5	2.5	2.5	2.5	5	5	5
Termination	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder	solder	solder	solder	solder	solder
Wire size for solder (mm <sup>2</sup> / AWG)	≤10/7	≤10/7	≤4/11	≤4/11	≤4/11	≤4/11 ≤0.785/18	≤4/11	≤2/14	≤2/14	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18
Wire size for screw termination (mm <sup>2</sup> / AWG)	≤6/10	≤6/10	≤1.5/15	≤1.5/15	≤1.5/15	/	≤1.5/15	/	/	/	/	/	/	/

★ Crimp contact spec see page 77-80





**B.C.E. S.r.l.** - Via Regina Pacis, 54/c - I 41049 Sassuolo (MO), Italy

Tel: (+39) 0536 811616 Fax: (+39) 0536 811500 E-mail: [bce@bce.it](mailto:bce@bce.it) Web: [www.bce.it](http://www.bce.it)

