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**[www.bce.it](http://www.bce.it)**

 **WEiPU<sup>®</sup> Connector**



**SP Series**  
**13-17-21**



● SP13/SP17/SP21 IP68 Threaded coupling



## 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

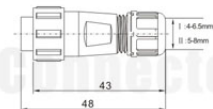
**Cable connector**

Mate with SP1311, SP1312



SP1310/P

SP1310/S



C: with cap, N: without cap  
Cable outer diameter: I: 4-6.5mm, II: 5-8mm  
Number of contact: 2, 3, 4, 5, 6, 7, 9

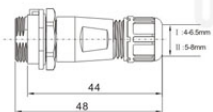
**In-line cable connector**

Mate with SP1310



SP1311/P

SP1311/S



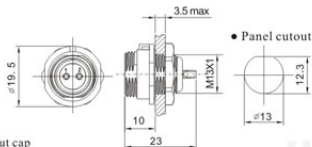
**Front mount**

Mate with SP1310



SP1312/P

SP1312/S



C: with cap, N: without cap  
Number of contact: 2, 3, 4, 5, 6, 7, 9

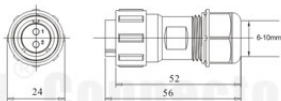
**Contact arrangement and spec for solder termination**

Number of contact	2	3	4	5	6	7	9
Male contact face view							
Rated current (A)	13A	13A	5A	5A	5A	5A	3A
Contact diameter	∅ 1.6X2	∅1.6X3	∅ 1X4	∅1X5	∅ 1X6	∅ 1X7	∅ 0.7X9
Rated voltage (AC.V)	250V	250V	200V	180V	125V	125V	125V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1000V	1000V	1000V	1000V
Contact resistance $\approx \Omega$	2	2	5	5	5	5	10
Wire size <sub>mm<sup>2</sup></sub> /AWG	$\leq 2/14$	$\leq 2/14$	$\leq 0.785/18$	$\leq 0.785/18$	$\leq 0.785/18$	$\leq 0.785/18$	$\leq 0.785/18$



SP1710/P --- SP1710/S

**Cable connector**  
Mate with SP1711, SP1712

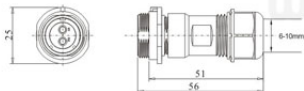


C: with cap, N: without cap  
1:solder, 3:crimp  
Number of contact: 2, 3, 4, 5, 7, 9, 10



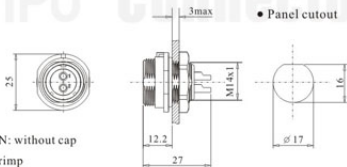
SP1711/P --- SP1711/S

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



SP1712/P --- SP1712/S

**Front mount**  
Mate with SP1710



C: with cap, N: without cap  
1:solder, 3:crimp  
Number of contact: 2, 3, 4, 5, 7, 9, 10

**Contact arrangement and spec for solder**

★ For crimp spec see P49-P52

Number of contact	2	3	4	5	7	9	10
Male contact face view							
Rated current (A)	10A	10A	5A	5A	5A	5A	5A
Contact diameter	∅1.5X2	∅1.5X3	∅1X4	∅1X5	∅1X7	∅1X9	∅1X10
Rated voltage (AC.V)	500V	500V	500V	500V	400V	400V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1200V	1200V	1200V
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

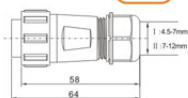
## SP21 Series IP68

**SP  
21**



### Cable connector

Mate with SP2111, SP2112, SP2113



SP2110/P

SP2110/S

C: with cap, N: without cap

1: solder, 2: screw, 3: crimp

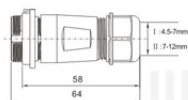
Cable outer diameter I: 4.5-7mm, II: 7-12 mm

Number of contact: 2.3.4.5.5B.5C.7.8.9.12



### In-line cable connector

Mate with SP2110



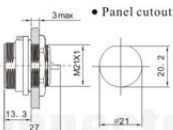
SP2111/P

SP2111/S



### Front mount

Mate with SP2110



• Panel cutout

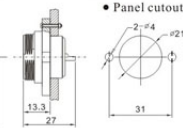
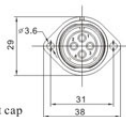
SP2112/P

SP2112/S



### 2-hole flange

Mate with SP2110



• Panel cutout

SP2113/P

SP2113/S

C: with cap, N: without cap

1: solder, 2: screw, 3: crimp

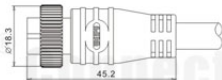
Number of contact: 2.3.4.5.5B.5C.7.8.9.12

## 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 mΩ	1	1	1	1	5, 1	2.5	2.5	5	5
Wire size mm /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

**Overmolded Cable Assemblies: SP13 Series IP66**

**SP1314/P—**    **SP1314/S—**
**Single ended plug assembly**  
 Mate with SP1311,SP1312,SP1315


Number of contact: 2. 3. 4. 5. 6. 7. 9


**SP1315/P—**    **SP1315/S—**
**Single ended in-line receptacle assembly**  
 Mate with SP1310,SP1314

**Double ended extension assembly**  
 -plug & receptacle

**SP1314/— + SP1315/—**
**Double ended plug assembly**  
 -plug & plug

**SP1314/— + SP1314/—**
**Double ended in-line receptacle assembly**  
 -receptacle & receptacle

**SP1315/— + SP1315/—**

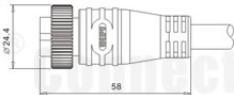
 Number of contact: 2. 3. 4. 5. 6. 7. 9  
 P:male contact S:female contact

The plugs and receptacles are available with male contact or female contact

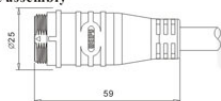
**Contact arrangement and spec**

Number of contact	2	3	4	5	6	7	9
Male contact face view							
Rated current (A)	8A	8A	4A	4A	4A	4A	1.6A
Contact diameter	∅ 1.6X2	∅1.6X3	∅ 1X4	∅1X5	∅ 1X6	∅ 1X7	∅07X9
Rated voltage (AC.V)	250V	250V	200V	180V	125V	125V	125V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1000V	1000V	1000V	1000V
Contact resistance mΩ	2	2	5	5	5	5	10
Wire size mm <sup>2</sup> /AWG	<1/17	<1/17	<0.5/20	<0.5/20	<0.5/20	<0.5/20	<0.2/24
Wire Color	1-black	2-white 3-red	4-yellow	5-green	6-brown 7-blue	8-orange	9-purple

**Overmolded Cable Assemblies: SP17 Series IP66**

**SP1714 / P\_ SP1714 / S\_**
**Single ended plug assembly**  
 Mate with SP1711, SP1712, SP1715


Number of contact: 2. 3. 4. 5. 7. 9. 10


**SP1715 / P\_ SP1715 / S\_**
**Single ended in-line receptacle assembly**  
 Mate with SP1710, SP1714

**Double ended extension assembly**  
 -plug & receptacle

**SP1714 / \_ + SP1715 / \_**
**Double ended plug assembly**  
 -plug & plug

**SP1714 / \_ + SP1714 / \_**
**Double ended in-line receptacle assembly**  
 -receptacle & receptacle

**SP1715 / \_ + SP1715 / \_**

 Number of contact: 2. 3. 4. 5. 7. 9. 10  
 P:male contact S:female contact

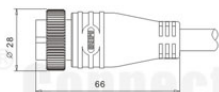
The plugs and receptacles are available with male contact or female contact

**Contact arrangement and spec**

Number of contact	2	3	4	5	7	9	10
Male contact face view							
Rated current (A)	10A	10A	4A	4A	4A	4A	5A
Contact diameter	$\varnothing 1.5 \times 2$	$\varnothing 1.5 \times 3$	$\varnothing 1 \times 4$	$\varnothing 1 \times 5$	$\varnothing 1 \times 7$	$\varnothing 1 \times 9$	$\varnothing 1 \times 10$
Rated voltage (AC.V)	500V	500V	500V	500V	400V	400V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1200V	1200V	1200V
Contact resistance m $\Omega$	2.5	2.5	5	5	5	5	5
Wire size mm <sup>2</sup> /AWG	$\leq 1.5/15$	$\leq 1.5/15$	$\leq 0.5/20$	$\leq 0.5/20$	$\leq 0.5/20$	$\leq 0.5/20$	$\leq 0.785/18$
Wire Color	1-black	2-white 3-red	3-red 4-yellow	5-green	6-brown 7-blue	8-orange	9-purple

**Overmolded Cable Assemblies: SP21 Series IP66**

**Single ended plug assembly**

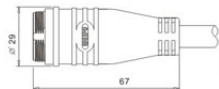
 Mate with SP2111,SP2112,  
SP2113,SP2115


SP2114 / P — SP2114 / S —

Number of contact: 2. 3. 4. 5. 5B.6.7. 9.12


**Single ended in-line receptacle assembly**

Mate with SP2110,SP2114



SP2115 / P — SP2115 / S —

**Double ended extension assembly  
-plug & receptacle**


SP2114 / — + SP2115 / —

**Double ended plug assembly  
-plug & plug**


SP2114 / — + SP2114 / —

**Double ended in-line receptacle assembly  
-receptacle & receptacle**


SP2115 / — + SP2115 / —

Number of contact: 2.3.4.5.5B.5C.7.9.12

P:male contact S:female contact

 The plugs and receptacles are available  
with male contact or female contact

**Contact arrangement and spec**

Number of contact	2	3	4	5	5B	5C	7	9	12	
Male contact face view										
Rated current (A)	20A	20A	20A	20A	4A, 20A	15A	12A	4A	4A	
Contact diameter	∅ 3X2	∅ 3X3	∅ 3X4	∅ 3X5	∅ 1X3 ∅ 3X2	∅ 2X5	∅ 2X7	∅ 1X9	∅ 1X12	
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 mΩ	1	1	1	1	5.1	2.5	2.5	5	5	
Wire size mm <sup>2</sup> /AWG	<2.5	<2.5	<2.5	<2.5	<0.5 <2.5	≤2/14	<1.5	<0.5	<0.5	
Wire Color	1-black 2-white 3-red 4-yellow 5-green 6-brown 7-blue 8-orange 9-purple 10- grey 11- pink 12- light green									





CEE Industrial connectors

Edition: I. 2013

Distributor:

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ELECTRONICS

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