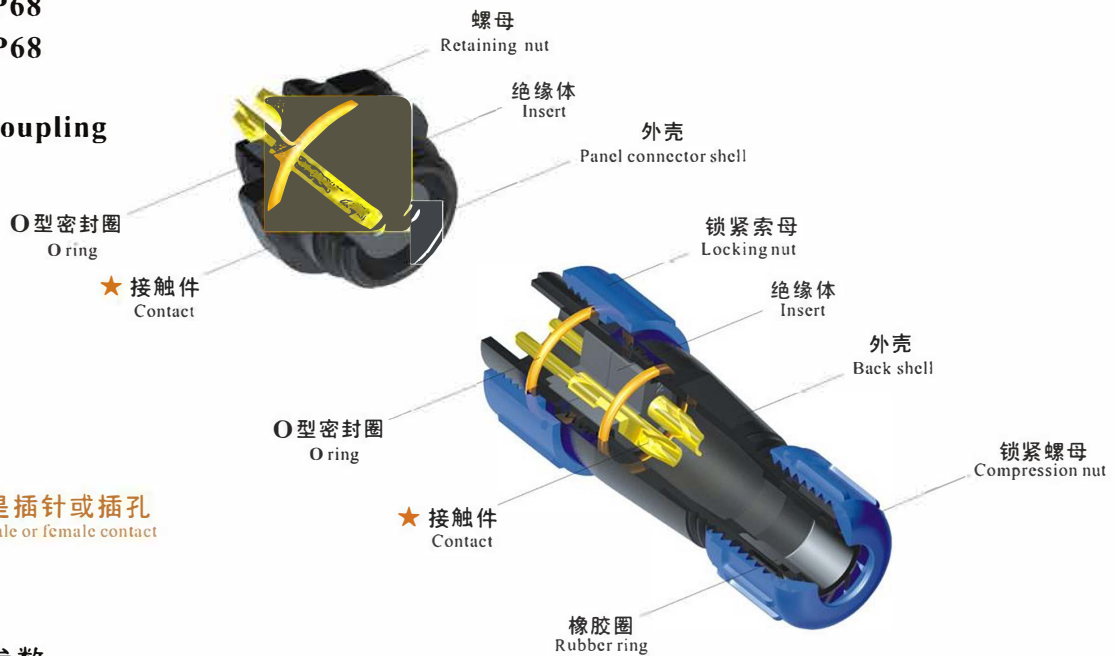




SP Series

IP68

- SP系列 IP68
- SP Series IP68
- 螺纹锁紧
- Threaded coupling



★ 接触件可以是插针或插孔  
Each side can be male or female contact

### 材料和技术参数 Material and spec

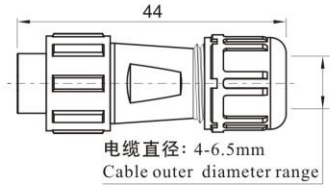
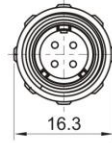
接插方式	Coupling	螺纹锁紧	Threaded
外壳材料	Shell material	热塑性塑料PC, PA66 防火等级: V-0	PC, Nylon66, fire resistance: V-0
绝缘体	Insert material	热塑性塑料PPS, 耐高温260℃	PPS, max temperature 260 °C
接触件材料	Contact material	铜镀金	Brass with gold plating
接线方式	Termination	焊接: SP13, SP17, SP21, SP29 压接: SP17, SP21, SP29 螺丝压接: SP21, SP29(∅2.5, ∅3, ∅3.5mm插针)	Solder: SP13, SP17, SP21, SP29 Crimp: SP17, SP21, SP29 Screw: SP21, SP29 (∅2.5, ∅3, ∅3.5mm contact)
电缆直径	Cable outer diameter range	SP11: 4-6.5 SP13 I: 4-6.5mm(不标), II: 5-8mm SP17: 6-10mm	SP21: I: 4.5-7mm, II: 7-12mm(不标) SP29: 13-16mm
防护等级	IP rating	IP68	
接插次数	Mating cycle	500	
温度范围	Temperature range	-40℃~+85℃	
绝缘电阻	Insulation resistance	2000 MΩ	

SP11 Series



SP1110/P\_      SP1110/S\_

电缆插头  
与SP1111、SP1112  
Cable connector  
Mate with SP1111, SP1112

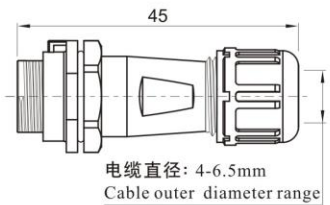
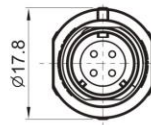


芯数 Number of contact



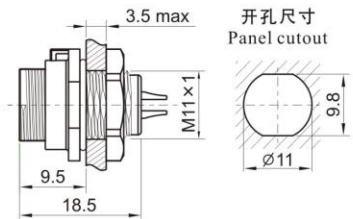
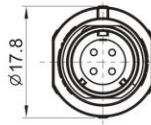
SP1111/P\_      SP1111/S\_

电缆对接插座  
与SP1110相配  
In-line cable connector  
Mate with SP1110



SP1112/P\_      SP1112/S\_

后螺母插座  
与SP1110相配  
Rear-nut mount  
Mate with SP1110



焊接芯件参数  
Solder contact spec

芯数 Number of contact	2	3	4	5
插针绝缘体正面图 Male contact face view				
额定电流 (A) Rated current (A)	5	5	3	3
接触件直径(mm) Contact diameter(mm)	∅1×2	∅1×3	∅0.7×4	∅0.7×5
工作电压 (AC.V) Rated voltage (AC.V)	180	180	125	125
耐压 (AC.V) 1 min Test voltage(AC.V) 1 min	1000	1000	1000	1000
接触电阻 (mΩ) Contact resistance(mΩ)	5	5	10	10
线规 (mm²/AWG) Wire size (mm²/AWG)	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18

## SP13 Series

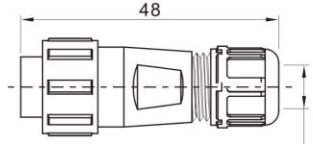
**SP  
13**



SP1310 / P — SP1310 / S

电缆插头  
与SP1311,SP1312 相配

Cable connector  
Mate with SP1311,SP1312



电缆直径: I: 4-6.5mm(不标), II: 5-8mm  
Cable outer diameter range

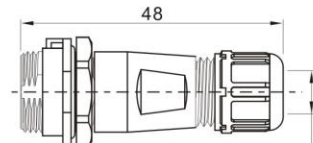
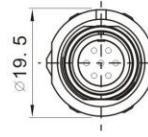
电缆外径 Cable outer diameter  
I: 4-6.5mm(不标), II: 5-8mm  
芯数 Number of contact



SP1311 / P — SP1311 / S

电缆对接插座  
与SP1310 相配

In-line cable connector  
Mate with SP1310



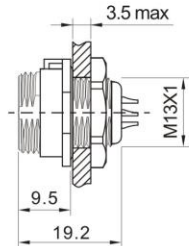
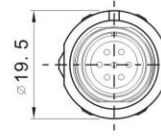
电缆直径: I: 4-6.5mm(不标), II: 5-8mm  
Cable outer diameter range



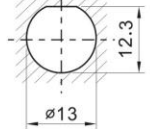
SP1312 / P — SP1312 / S

后螺母插座  
与SP1310 相配

Rear-nut mount  
Mate with SP1310



开孔尺寸  
Panel cutout



芯数 Number of contact

## 焊接芯件参数表

### Solder contact spec

芯数 Number of contact	2	3	4	5	6	7	9
插针绝缘体正面图 Male contact face view							
额定电流 (A) Rated current (A)	13	13	5	5	5	5	3
接触件直径 (mm) Contact diameter (mm)	Ø1.6X2	Ø1.6X3	Ø1X4	Ø1X5	Ø1X6	Ø1X7	Ø0.7X9
工作电压 (AC.V) Rated voltage (AC.V)	250	250	200	180	125	125	125
耐压 (AC.V) 1 min Test voltage (AC.V) 1 min	1500	1500	1500	1000	1000	1000	1000
接触电阻 (mΩ) Contact resistance (mΩ)	2	2	5	5	5	5	10
线规 (mm <sup>2</sup> /AWG) 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

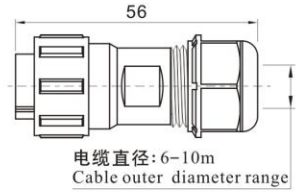
## SP17 Series

**SP  
17**



电缆插头  
与SP1711,SP1712相配

Cable connector  
Mate with SP1711,SP1712



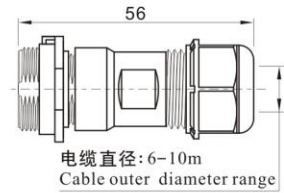
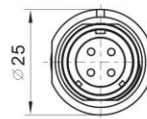
SP1710 / P\_\_ \_\_    SP1710 / S\_\_ \_\_

1: 焊接(不标), 3: 压接  
1: solder, 3: crimp  
芯数 Number of contact



电缆对接插座  
与SP1710相配

In-line cable connector  
Mate with SP1710

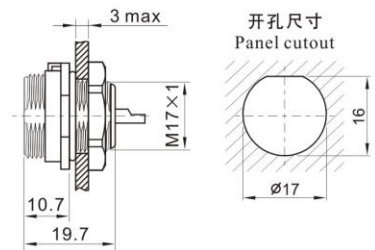
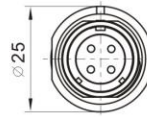


SP1711 / P\_\_ \_\_    SP1711 / S\_\_ \_\_



后螺母插座  
与SP1710相配

Rear-nut mount  
Mate with SP1710



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

## 焊接芯件参数表

### Solder contact spec

★ 压接芯件参数表在99-102页  
Crimp contact spec see P99-P102

芯数 Number of contact	2	3	4	5	7	9	10
插针绝缘体正面图 Male contact face view							
额定电流 (A) Rated current (A)	10	10	5	5	5	5	5
接触件直径 (mm) Contact diameter (mm)	∅1.5X2	∅1.5X3	∅1X4	∅1X5	∅1X7	∅1X9	∅1X10
工作电压 (AC.V) Rated voltage (AC.V)	500	500	500	500	400	400	400
耐压 (AC.V) 1 min Test voltage (AC.V) 1 min	1500	1500	1500	1500	1200	1200	1200
接触电阻 (mΩ) Contact resistance (mΩ)	2.5	2.5	5	5	5	5	5
线规 (mm <sup>2</sup> /AWG) 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

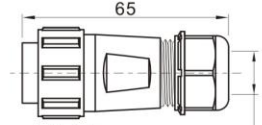
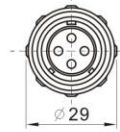
SP21 Series



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

电缆插头  
与SP2111, SP2112, SP2113相配  
Cable connector  
Mate with SP2111, SP2112, SP2113

1: 焊接 (不标), 2: 螺丝压接, 3: 压接  
1: solder, 2: screw, 3: crimp  
电缆外径 Cable outer diameter: I: 4.5-7mm, II: 7-12mm (不标)

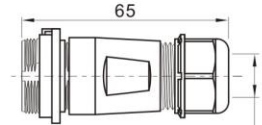
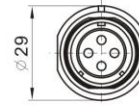


65  
电缆直径: I: 4.5-7mm  
II: 7-12mm (不标)  
Cable outer diameter range



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

电缆对接插座  
与SP2110相配  
In-line cable connector  
Mate with SP2110



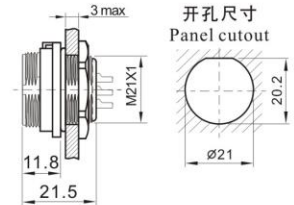
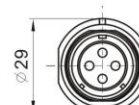
65  
电缆直径: I: 4.5-7mm  
II: 7-12mm (不标)  
Cable outer diameter range



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

后螺母插座  
与SP2110相配  
Rear-nut mount  
Mate with SP2110

1: 焊接 (不标), 2: 螺丝压接, 3: 压接  
1: solder, 2: screw, 3: crimp

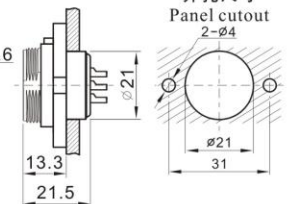
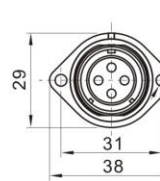


开孔尺寸  
Panel cutout



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

2孔法兰插座  
与SP2110相配  
2-hole flange  
Mate with SP2110



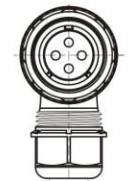
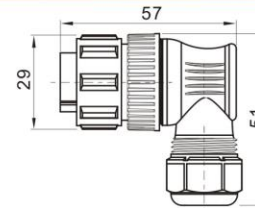
开孔尺寸  
Panel cutout



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

弯式电缆插头  
与SP2111, SP2112, SP2113相配  
Angled cable connector  
Mate with SP2111, SP2112, SP2113

1: 焊接 (不标), 2: 螺丝压接, 3: 压接  
1: solder, 2: screw, 3: crimp  
电缆外径 Cable outer diameter: I: 4.5-7mm, II: 7-12mm (不标)



电缆直径: I: 4.5-7mm, II: 7-12mm (不标)  
Cable outer diameter range

焊接芯件参数表  
Solder contact spec

★ 压接芯件参数表在99-102页  
Crimp contact spec see P99-P102

芯数 Number of contact	2	3	4	5	5B	5C	7	9	12
插针绝缘体正面图 Male contact face view									
额定电流 (A) Rated current (A)	30	30	30	30	30 5	15	15	5	5
接触件直径 (mm) Contact diameter (mm)	ø3X2	ø3X3	ø3X4	ø3X5	ø3X2 ø1X3	ø2X5	ø2X7	ø1X9	ø1X12
工作电压 (AC.V) Rated voltage (AC.V)	500	500	500	500	500	500	500	500	400
耐压 (AC.V) 1 min Test voltage (AC.V) 1 min	1500	1500	1500	1500	1500	1500	1500	1500	1200
接触电阻 (mΩ) Contact resistance (mΩ)	1	1	1	1	1 5	2.5	2.5	5	5
接线方式 Termination	焊接/螺丝压接 solder / screw	焊接/螺丝压接 solder / screw	焊接/螺丝压接 solder / screw	焊接/螺丝压接 solder / screw	焊接 solder	焊接 solder	焊接 solder	焊接 solder	焊接 solder
焊接线规 (mm <sup>2</sup> /AWG) Wire size for solder (mm <sup>2</sup> /AWG)	≤4/11	≤4/11	≤4/11	≤4/11	≤0.785/18 ≤4/11	≤2/14	≤2/14	≤0.785/18	≤0.785/18
螺丝压接线规 (mm <sup>2</sup> /AWG) Wire size for screw termination (mm <sup>2</sup> /AWG)	≤1.5/15	≤1.5/15	≤1.5/15	≤1.5/15	/	/	/	/	/

# SP29

## SP29 Series



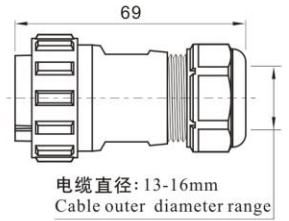
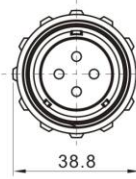
SP2910 / P\_\_



SP2910 / S\_\_

电缆插头  
与SP2911,SP2912,SP2913相配  
Cable connector  
Mate with SP2911,SP2912,SP2913

1:焊接(不标), 2:螺丝压接, 3:压接  
1:solder, 2:screw, 3:crimp  
芯数 Number of contact

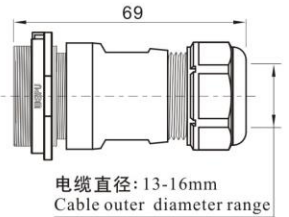
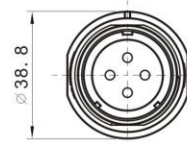


SP2911 / P\_\_



SP2911 / S\_\_

电缆对接插座  
与SP2910相配  
In-line cable connector  
Mate with SP2910



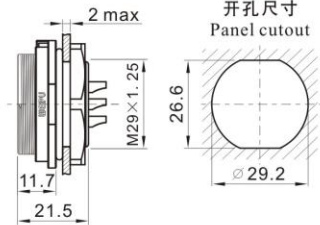
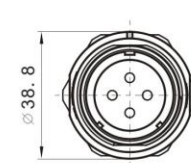
SP2912 / P\_\_



SP2912 / S\_\_

后螺母插座  
与SP2910相配  
Rear-nut mount  
Mate with SP2910

1:焊接(不标), 2:螺丝压接, 3:压接  
1:solder, 2:screw, 3:crimp  
芯数 Number of contact

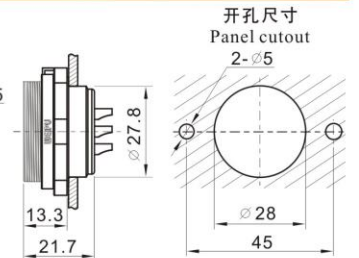
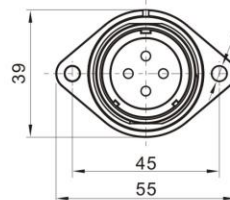


SP2913 / P\_\_



SP2913 / S\_\_

2孔法兰插座  
与SP2910相配  
2-hole flange  
Mate with Sp2910



## 焊接芯件参数 Solder contact spec

★ 压接芯件参数表在99-102页  
Crimp contact spec see P99-P102

芯数 Number of contact	2	3	4	7	8	9	10	10B	12	16	17	20	24	26
插触绝缘体正面图 Male contact face view														
额定电流 (A) Rated current (A)	50	50	25	25	25	25	25	10	10	10	10	5	5	5
接触件直径 (mm) Contact diameter (mm)	∅3.5X2	∅3.5X3	∅2.5X4	∅2.5X7	∅2.5X8	∅2.5X4 ∅1X5	∅2.5X10	∅1.5X10	∅1.5X12	∅1.5X16	∅1.5X17	∅1X20	∅1X24	∅1X26
工作电压 (AC.V) Rated voltage (AC.V)	500	500	500	500	500	500	500	500	500	500	500	400	400	400
耐压 (AC.V) 1 min Test voltage (AC.V) 1 min	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1200	1200	1200
接触电阻 (mΩ) Contact resistance (mΩ)	0.5	0.5	1	1	1	1 5	1	2.5	2.5	2.5	2.5	5	5	5
接线方式 Termination	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接	焊接/螺丝压接
焊接线规 (mm <sup>2</sup> /AWG) 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
螺丝压接线规 (mm <sup>2</sup> /AWG) 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	/	/	/	/	/	/	/