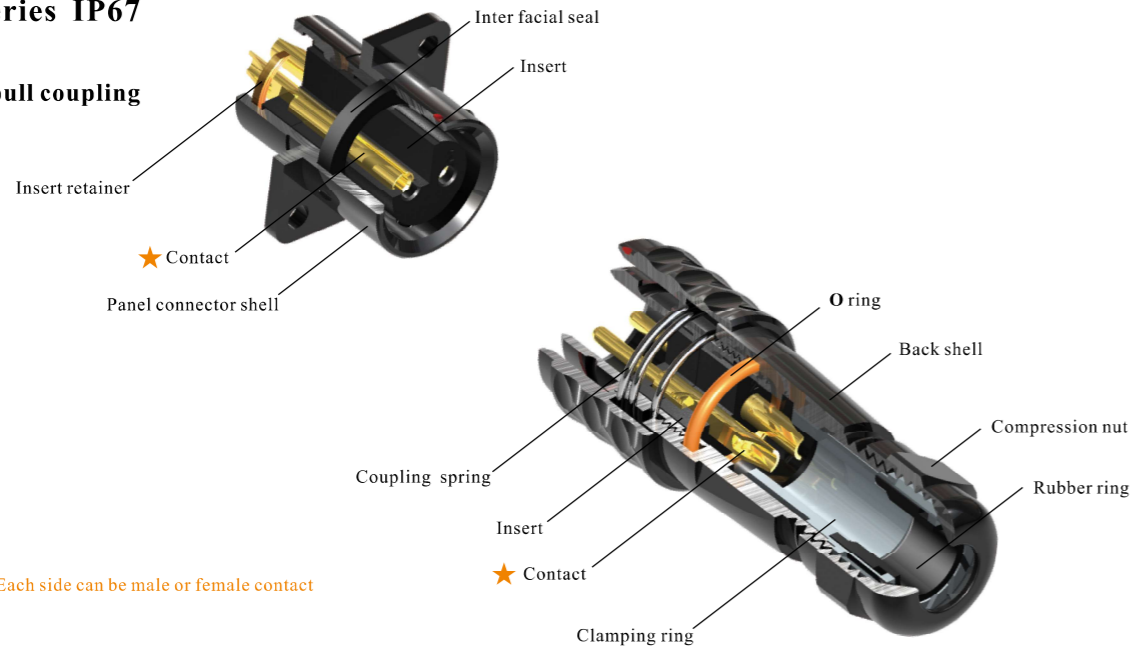


IP67



- SA Series IP67
- Push-pull coupling




★ Each side can be male or female contact

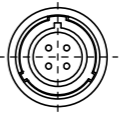
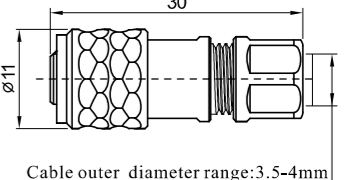
Material and spec

Coupling	Push-pull		
Shell material	Anodized aluminium		
Insert material	PPS, max temperature 260 °C		
Contact material	Brass with gold plating		
Termination	Solder: SA6, SA8, SA10, SA12, SA16, SA20, SA28 Crimp: SA16, SA20, SA28 Screw: SA20, SA28		
Cable outer diameter range	SA6: 3.5-4mm SA8: 4-5mm SA10: 4-6.5mm	SA12: I: 4-6.5mm, II: 5-8mm SA16: I: 5-8mm, II: 8-12mm SA20: 8-12mm	SA28: 13-16mm
IP rating	IP67		
Mating cycle	500		
Temperature range	-40°C ~ +85°C		
Insulation resistance	2000 MΩ		

SA6 Series




Cable connector  
Mate with SA611, SA612, SA615

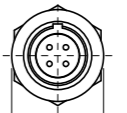
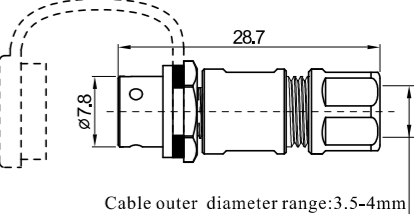
SA610 / P\_\_\_ SA610 / S\_\_\_  
Male contact

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)  
Number of contact  
Female contact

30  
ø11  
Cable outer diameter range: 3.5-4mm




In-line cable connector  
Mate with SA610

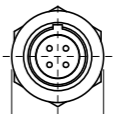
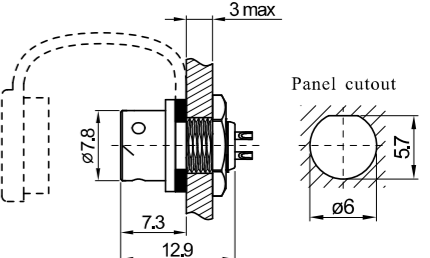



SA611 / P\_\_\_ SA611 / S\_\_\_

ø10.2  
28.7  
ø7.8  
Cable outer diameter range: 3.5-4mm




Rear-nut mount  
Mate with SA610

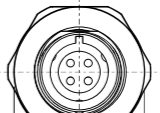
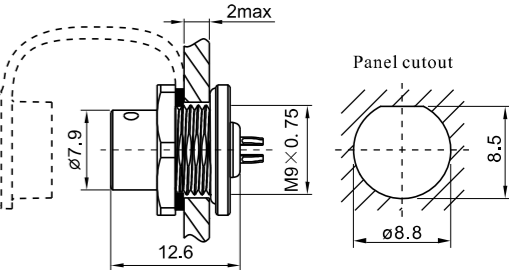



SA612 / P\_\_\_ SA612 / S\_\_\_

3 max  
ø10.2  
7.3  
12.9  
7.8  
5.7  
ø6  
Panel cutout







Front-nut mount  
Mate with SA610

SA615 / P\_\_\_ SA615 / S\_\_\_

2 max  
ø12.8  
7.9  
12.6  
MS × 0.75  
8.5  
ø8.8  
Panel cutout

Solder contact spec

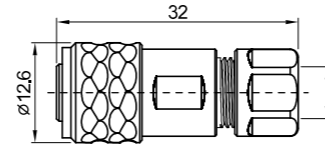
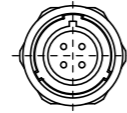
Number of contact	2	3	4	5
Male contact face view				
Rated current (A)	3	3	3	3
Contact diameter(mm)	ø0.6×2	ø0.6×3	ø0.6×4	ø0.6×5
Rated voltage (AC.V)	30	30	30	30
Test voltage(AC.V) 1 min	500	500	500	500
Contact resistance(mΩ)	10	10	10	10
Wire size(mm <sup>2</sup> /AWG)	≤0.5/20	≤0.5/20	≤0.5/20	≤0.5/20

## SA8 Series

SA  
8



Cable connector  
Mate with SA811, SA812,  
SA815



Cable outer diameter range: 4-5mm

SA810 / P \_\_\_ SA810 / S \_\_\_

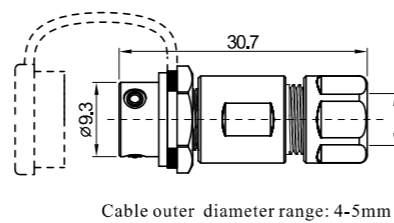
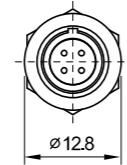
Male contact

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)

Number of contact  
Female contact



In-line cable connector  
Mate with SA810

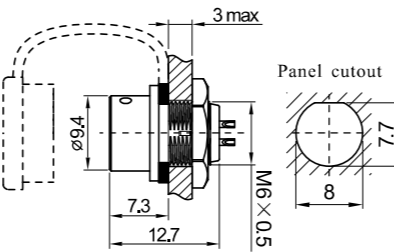
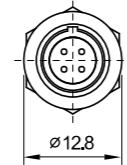


Cable outer diameter range: 4-5mm

SA811 / P \_\_\_ SA811 / S \_\_\_



Rear-nut mount  
Mate with SA810

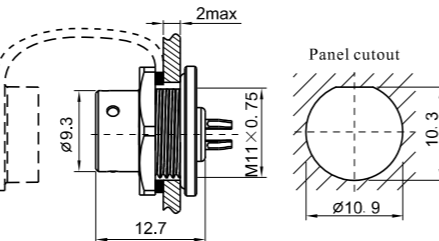
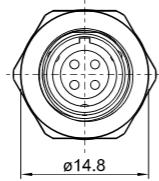


Panel cutout

SA812 / P \_\_\_ SA812 / S \_\_\_



Front-nut mount  
Mate with SA810



Panel cutout

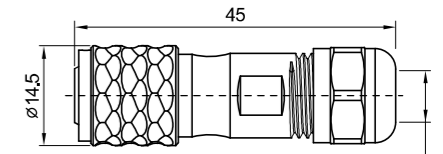
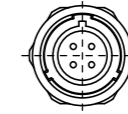
SA815 / P \_\_\_ SA815 / S \_\_\_

## SA10 Series

SA  
10



Cable connector  
Mate with SA1011, SA1012,  
SA1015



Cable outer diameter range: 4-6.5mm

SA1010 / P \_\_\_ SA1010 / S \_\_\_

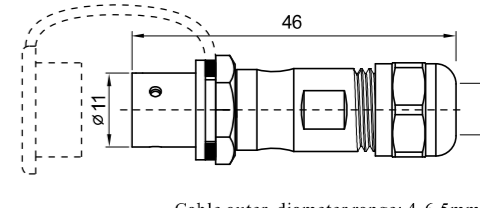
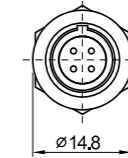
Male contact

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)

Number of contact  
Female contact



In-line cable connector  
Mate with SA1010

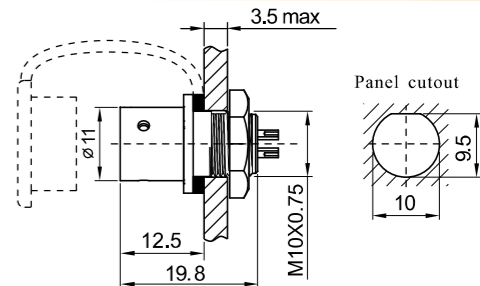
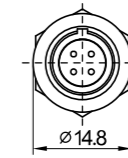


Cable outer diameter range: 4-6.5mm

SA1011 / P \_\_\_ SA1011 / S \_\_\_



Rear-nut mount  
Mate with SA1010

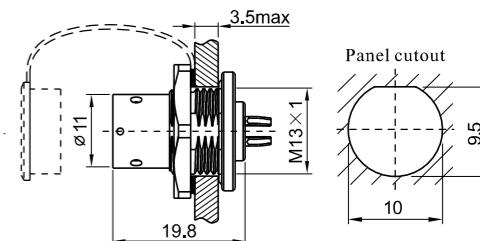
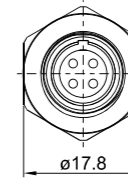


Panel cutout

SA1012 / P \_\_\_ SA1012 / S \_\_\_



Front-nut mount  
Mate with SA1010



Panel cutout

SA1015 / P \_\_\_ SA1015 / S \_\_\_

### Solder contact spec

Number of contact	2	3	4	6	8
Male contact face view					
Rated current (A)	5	5	3	3	3
Contact diameter(mm)	ø1×2	ø1×3	ø0.6×4	ø0.6×6	ø0.6×8
Rated voltage (AC.V)	125	125	30	30	30
Test voltage(AC.V) 1 min	1000	1000	500	500	500
Contact resistance(mΩ)	5	5	10	10	10
Wire size(mm <sup>2</sup> /AWG)	≤0.75/18	≤0.75/18	≤0.5/20	≤0.5/20	≤0.5/20

### Solder contact spec

Number of contact	2	3	4	5
Male contact face view				
Rated current (A)	5	5	3	3
Contact diameter(mm)	ø1×2	ø1×3	ø0.7×4	ø0.7×5
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)	≤0.75/18	≤0.75/18	≤0.5/20	≤0.5/20

### SA12 Series

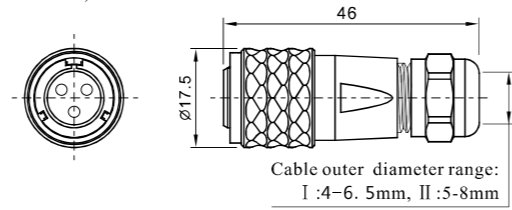
**SA  
12**



Cable connector  
Mate with SA1211, SA1212, SA1213, SA1215

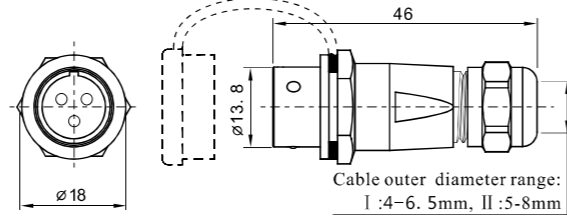
SA1210/P --- SA1210/S  
Male contact  
Number of contact  
Female contact

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)  
Cable outer diameter  
I: 4-6.5mm, II: 5-8mm



In-line cable connector  
Mate with SA1210

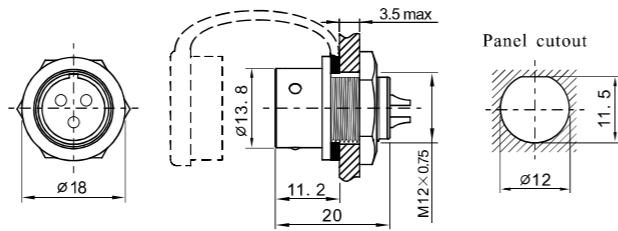
SA1211/P --- SA1211/S



Rear-nut mount  
Mate with SA1210

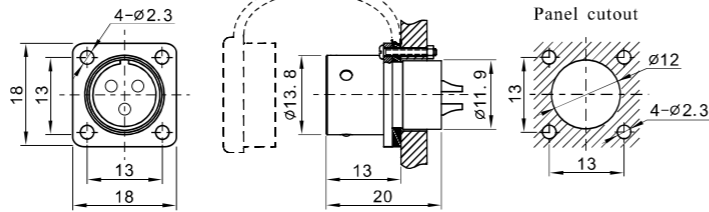
SA1212/P --- SA1212/S  
Number of contact

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)



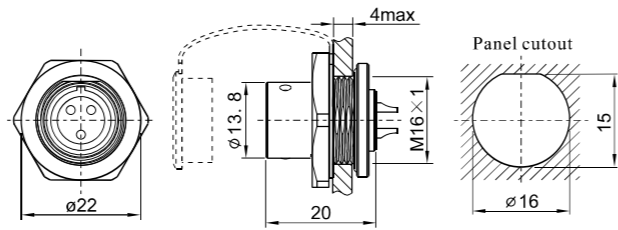
Square flange  
Mate with SA1210

SA1213/P --- SA1213/S



Front-nut mount  
Mate with SA1210

SA1215/P --- SA1215/S



#### 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	Ø1.6X2	Ø1.6X3	Ø1X4	Ø1X5	Ø1X6	Ø1X7	Ø0.7X9
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)	2.5	2.5	5	5	5	5	10
Wire size (mm <sup>2</sup> /AWG)	≤2/14	≤2/14	≤0.75/18	≤0.75/18	≤0.75/18	≤0.75/18	≤0.5/20

### SA16 Series

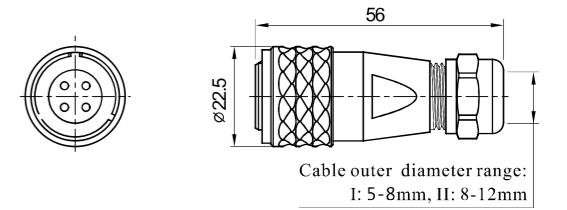
**SA  
16**



Cable connector  
Mate with SA1611, SA1612, SA1613, SA1615

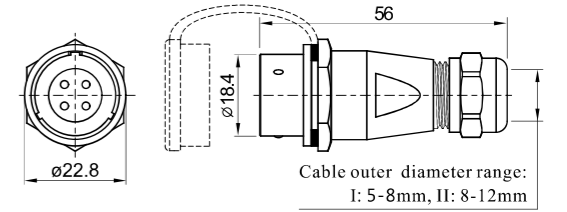
SA1610/P --- SA1610/S  
Male contact  
Female contact  
Number of contact  
Cable outer diameter  
I: 5-8mm, II: 8-12mm

I: solder, 3: crimp  
Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)



In-line cable connector  
Mate with SA1610

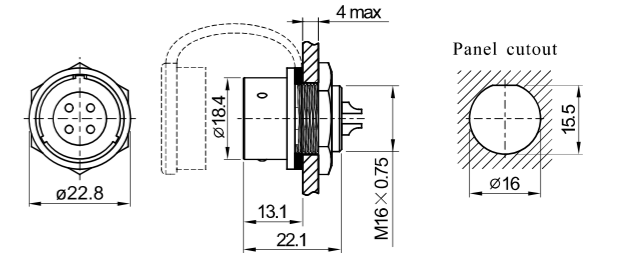
SA1611/P --- SA1611/S



Rear-nut mount  
Mate with SA1610

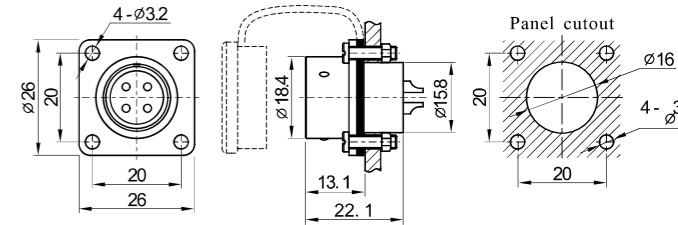
SA1612/P --- SA1612/S  
Number of contact

I: solder, 3: crimp  
Colour



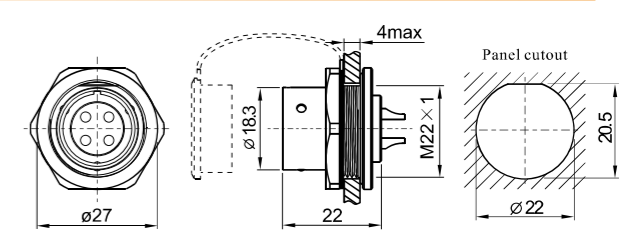
Square flange  
Mate with SA1610

SA1613/P --- SA1613/S



Front-nut mount  
Mate with SA1610

SA1615/P --- SA1615/S



#### Solder contact spec

★ Crimp contact spec see P107-P110

Number of contact	2	3	4	2B	3B	4B	5	7	9	10
Male contact face view										
Rated current (A)	10	10	5	15	15	15	5	5	5	5
Contact diameter(mm)	Ø1.5X2	Ø1.5X3	Ø1X4	Ø2X2	Ø2X3	Ø2X4	Ø1X5	Ø1X7	Ø1X9	Ø1X10
Rated voltage (AC.V)	500	500	500	500	500	500	500	400	400	400
Test voltage(AC.V) 1 min	1500	1500	1500	1500	1500	1500	1500	1200	1200	1200
Contact resistance (mΩ)	2.5	2.5	5	2.5	2.5	2.5	5	5	5	5
Wire size (mm <sup>2</sup> /AWG)	≤2/14	≤2/14	≤0.75/18	≤2/14	≤2/14	≤2/14	≤0.75/18	≤0.75/18	≤0.75/18	≤0.75/18

## SA20 Series

**SA2010/P** --- **SA2010/S**

Cable connector  
Mate with SA2011, SA2012, SA2013, SA2015

1: solder, 2: screw, 3: crimp

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)

Male contact  
Female contact  
Number of contact

SA 20

Cable outer diameter range: 8-12mm

**SA2011/P** --- **SA2011/S**

In-line cable connector  
Mate with SF2010

SA2011/P --- SA2011/S

Cable outer diameter range: 8-12mm

**SA2012/P** --- **SA2012/S**

Rear-nut mount  
Mate with SA2010

SA2012/P --- SA2012/S

Panel cutout  
19.5  
20

**SA2013/P** --- **SA2013/S**

Square flange  
Mate with SA2010

SA2013/P --- SA2013/S

Panel cutout  
22

**SA2015/P** --- **SA2015/S**

Front-nut mount  
Mate with SA2010

SA2015/P --- SA2015/S

Panel cutout  
24.7

## SA28 Series

**SA2810/P** --- **SA2810/S**

Cable connector  
Mate with SA2811, SA2812, SA2813, SA2815

1: solder, 2: screw, 3: crimp

Colour:  
B: Black  
S: Silver  
L: Blue (special order)  
G: Green (special order)  
R: Red (special order)

Male contact  
Female contact  
Number of contact

SA 28

Cable outer diameter range: 13-16mm

**SA2811/P** --- **SA2811/S**

In-line cable connector  
Mate with SA2810

SA2811/P --- SA2811/S

Cable outer diameter range: 13-16mm

**SA2812/P** --- **SA2812/S**

Rear-nut mount  
Mate with SA2810

SA2812/P --- SA2812/S

Panel cutout  
27.5  
28

**SA2813/P** --- **SA2813/S**

Square flange  
Mate with SA2810

SA2813/P --- SA2813/S

Panel cutout  
30

**SA2815/P** --- **SA2815/S**

Front-nut mount  
Mate with SA2810

SA2815/P --- SA2815/S

Panel cutout  
32.6

### Solder contact spec

★ Crimp contact spec see P107-P110 ★ Screw contact spec see P111-P112

Number of contact	2	3	4	5	6	6B	7	8	9	12	15
Male contact face view											
Rated current (A)	25	25	25	10	25	30	10	10	5	5	5
Contact diameter(mm)	2.5X2	2.5X3	2.5X4	1.5X5	2.5X4	3X2	1.5X7	1.5X8	1X9	1X12	1X15
Rated voltage (AC.V)	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	1200	1200	1200
Contact resistance (mΩ)	1	1	1	2.5	1	1	2.5	2.5	5	5	5
Termination	solder / screw	solder / screw	solder / screw	solder	solder	solder	solder	solder	solder	solder	solder
Wire size for solder (mm <sup>2</sup> / AWG)	≤4/11	≤4/11	≤4/11	≤2/14	≤4/11	≤4/11	≤2/14	≤2/14	≤0.75/18	≤0.75/18	≤0.75/18
Wire size for screw termination (mm <sup>2</sup> / AWG)	≤1.5/15	≤1.5/15	≤1.5/15	/	/	/	/	/	/	/	/

### Solder contact spec

★ Crimp contact spec see P107-P110 ★ Screw contact spec see P111-P112

Number of contact	2	3	4	7	8	8B	9	10	10B	12	16	17	20	24	26	35
Male contact face view																
Rated current (A)	50	50	25	25	25	60, 5	25.5	25	10	10	10	10	5	5	5	5
Contact diameter(mm)	3.5X2	3.5X3	2.5X4	2.5X7	2.5X8	5X2	2.5X4	2.5X10	1.5X10	1.5X12	1.5X16	1.5X17	1X20	1X24	1X26	1X35
Rated voltage (AC.V)	500	500	500	500	500	500	500	500	500	500	500	500	400	400	400	400
Test voltage(AC.V) 1 min	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1200	1200	1200	1200
Contact resistance (mΩ)	0.5	0.5	1	1	1	5, 0.5	1, 5	1	2.5	2.5	2.5	2.5	5	5	5	5
Termination	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder	solder	solder / screw	solder	solder	solder	solder	solder	solder	solder
Wire size (mm <sup>2</sup> / AWG)	≤10/7	≤10/7	≤4/11	≤4/11	≤4/11	≤16/5	≤4/11	≤4/11	≤2/14	≤2/14	≤2/14	≤2/14	≤2/14	≤0.75/18	≤0.75/18	≤0.75/18
Wire size for screw termination	≤6/10	≤6/10	≤1.5/15	≤1.5/15	≤1.5/15	/	/	≤1.5/15	/	/	/	/	/	/	/	/



**IP67**

**SA Series**

