

# SP



## SINGLE POLE POWER CONNECTOR



**700 A**

- ▶ Up to 700 A/1 000 V
- ▶ Automatic IP66 water-and dust-tight
- ▶ Electromechanical interlocking system
- ▶ Visual and mechanical coding

## MAIN FEATURES

Rated current	700 A	Ambient temperature	-40 °C to +60 °C
	For higher current, please contact us	Flexible wiring (min-max)	50-400 mm <sup>2</sup>
Maximum voltage AC	1 000 V	Stranded wiring (min-max)	70-400 mm <sup>2</sup>
Maximum voltage DC	1 500 V	Keying positions	5, mechanical and visual
Short-circuit current I <sub>cc</sub>	20 kA pendant 250 ms	Number of operations	2 000
IP protection lid closed	IP66	Pre-wired pilot circuit	10 A/250 V
Shock resistance	IK08		

### The highest possible safety

- Reliable mechanical and electrical interlocking with pilotcontact circuit.
- IP2X socket-outlet when cap removed.
- Automatic IP66 watertightness when plug is connected.

### An easily operable connector

- Straight insertion of the plug into the socket-outlet without any rotation.
- Different mechanical keying of L1, L2, L3, N and E.
- Visual identification by standard colours.
- Screwed crimping lugs facilitate cable replacement.

### Performances

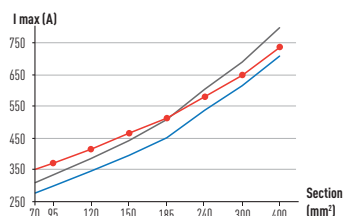
Thanks to the butt-contact principle, the SP withstands continuously up to 700 A/1000 V AC or 1500 V DC (70 mm<sup>2</sup> to 400 mm<sup>2</sup> conductors), withstands at least 2 000 operations.



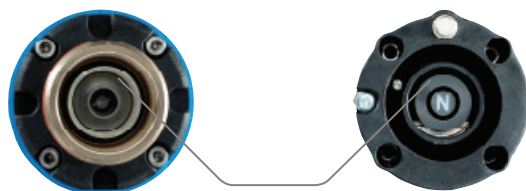
### SP Characterisation

Permissible current according to conductor cross-section at 30 °C ambient temperature

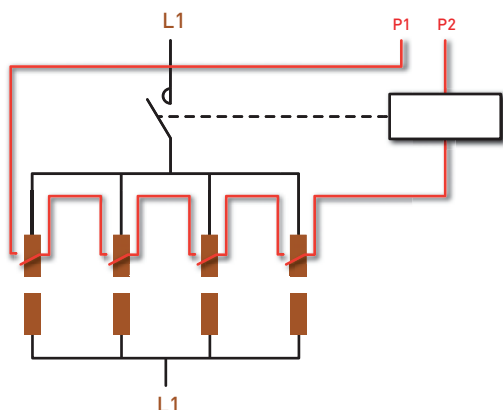
- Maximum permanent permissible current in the SP after 2 000 operations depending on cable cross-section.
- Maximum intensity of permanent current specified by the cable manufacturers to maintain a conductor core temperature < 85 °C.
- Maximum intensity of permanent current specified by the NFC 15-100 or the IEC 60 364-5-52 standards to maintain a conductor core temperature < 70 °C.



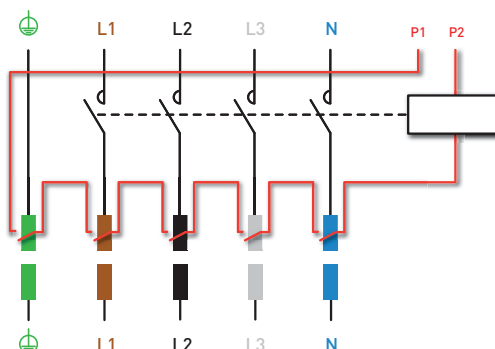
### Mechanical coding between phases



### Interlocking electrical wiring diagram: increased power with parallel connection



### Interlocking electrical wiring diagram: last connection close all the circuit





### INCLINED SOCKET SP



Inclined sleeve 45°  
454A027



Socket-outlet  
454400N



### PLUG SP



Straight handle poly  
454A753



Inlet  
454800N

### SOCKET-OUTLET female SP (700 A) WITHOUT LUG



### INLET male SP (700 A) WITHOUT LUG



### COLOR coding

Type	Europe*	Reference	Reference
L1	Brown	4544001	4548001
L2	Black	4544002	4548002
L3	Grey	4544003	4548003
Neutral	Blue	454400N	454800N
Earth	Green	454400T	454800T
Positive	Red	454400P	454800P
Negative	Black	454400M	454800M

\* The indicated references are valid for Europe and Japan. For other countries: add the suffix P80 for the USA/P67 for Australia and New Zealand/P40 for UK and South-Africa.

Type	Australia and New Zealand	Reference	Reference
L1	Red	4544001-P67	4548001-P67
L2	White	4544002-P67	4548002-P67
L3	Blue	4544003-P67	4548003-P67
Neutral	Black	454400N-P67	454800N-P67
Earth	Green	454400T-P67	454800T-P67
Positive	Red	454400P-P67	454800P-P67
Negative	Black	454400M-P67	454800M-P67

Type	USA	Reference	Reference
L1	Black	4544001-P80	4548001-P80
L2	Red	4544002-P80	4548002-P80
L3	Blue	4544003-P80	4548003-P80
Neutral	White	454400N-P80	454800N-P80
Earth	Green	454400T-P80	454800T-P80
Positive	Red	454400P-P80	454800P-P80
Negative	Black	454400M-P80	454800M-P80



## LUGS

**Lug choice depends on the cable:** the cross-section of the flexible cable mentioned in the table below is for information only. Please check dimensions as these may vary according to cable types and manufacturers.

Wiring (mm <sup>2</sup> )		Straight with hole <sup>(1)</sup>		Straight threaded M12 <sup>(2)</sup>		Internal diameter (mm)	
Flexible	Stranded	Reference	Reference	Reference	Reference		
50	70	454A50C	454A50D			11	
70	95	454A70C	454A70D			13,1	
95	120	454A95C	454A95D			14,5	
120	150	454A12C	454A12D			16,2	
150	185	454A15C	454A15D			18	
185	240	454A18C	454A18D			20,6	
240	300	454A24C	454A24D			23,1	
300	400	454A30C	454A30D			26,1	
400	500	454A40C	454A40D			29,2	

[1] For female socket-outlet.

[2] For male contact, wiring with crimping lugs, according to NF C20-130 standard (for VDE 0220 standard, please contact us). Crimping: Double hexagonal crimping is recommended.

**SLEEVE\***  
Inclined metal 45°



**HANDLE**  
Straight



454A027

M50

454A753

17-38 mm

M63

454A783

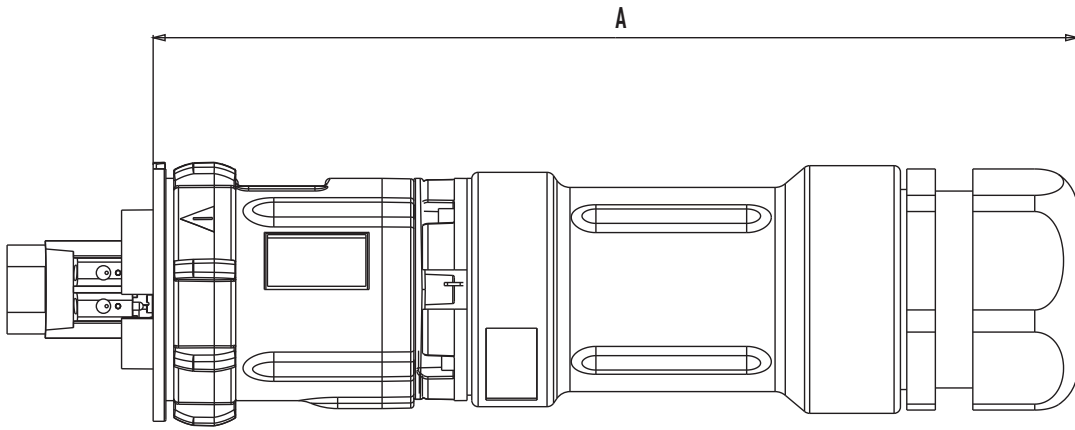
35-48 mm

\* The inclined sleeve is recommended to reduce cable weight effect.

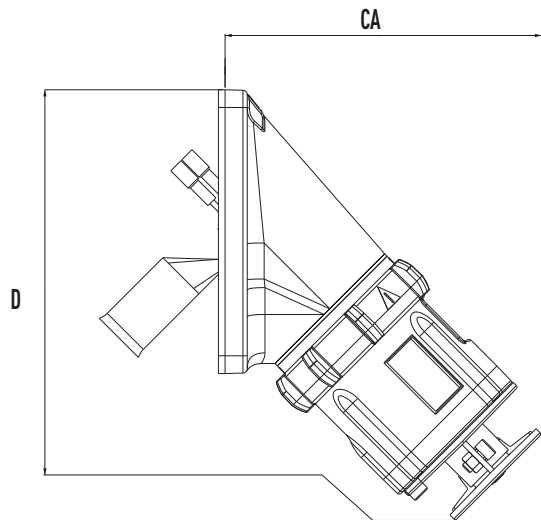
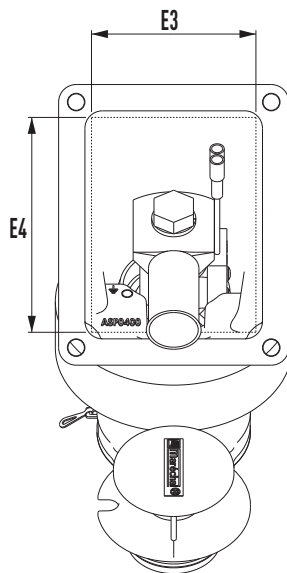
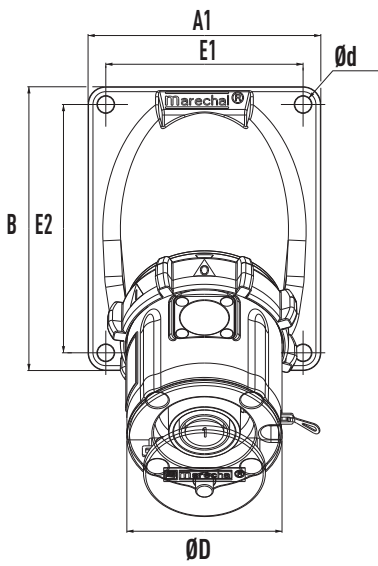


# DIMENSIONS

## SP M50/SP M63

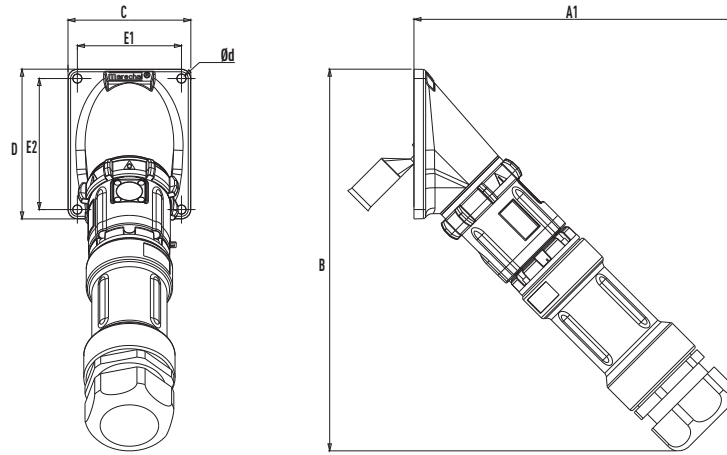


	A1
SP M50	265
SP M63	291

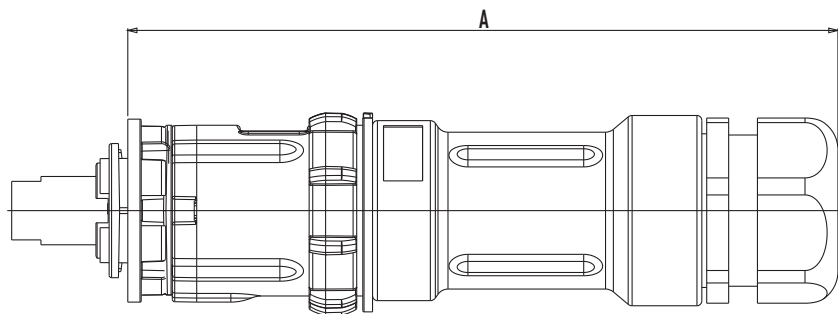


	A1	E1	B	E2	E3	E4	D	CA	Ød*	ØD max.
SP M50/SP M63	105	89	128	112	75	98	194	143	7,5	70

SP M50/SP M63



	A1	B	E1	E2	D	C	Ød*
SP M50	250	302	89	112	128	105	7,5
SP M63	275	326	89	112	128	105	7,5



	A1
SP M50	265
SP M63	291