

# SP High Amperage Plug and Receptacle



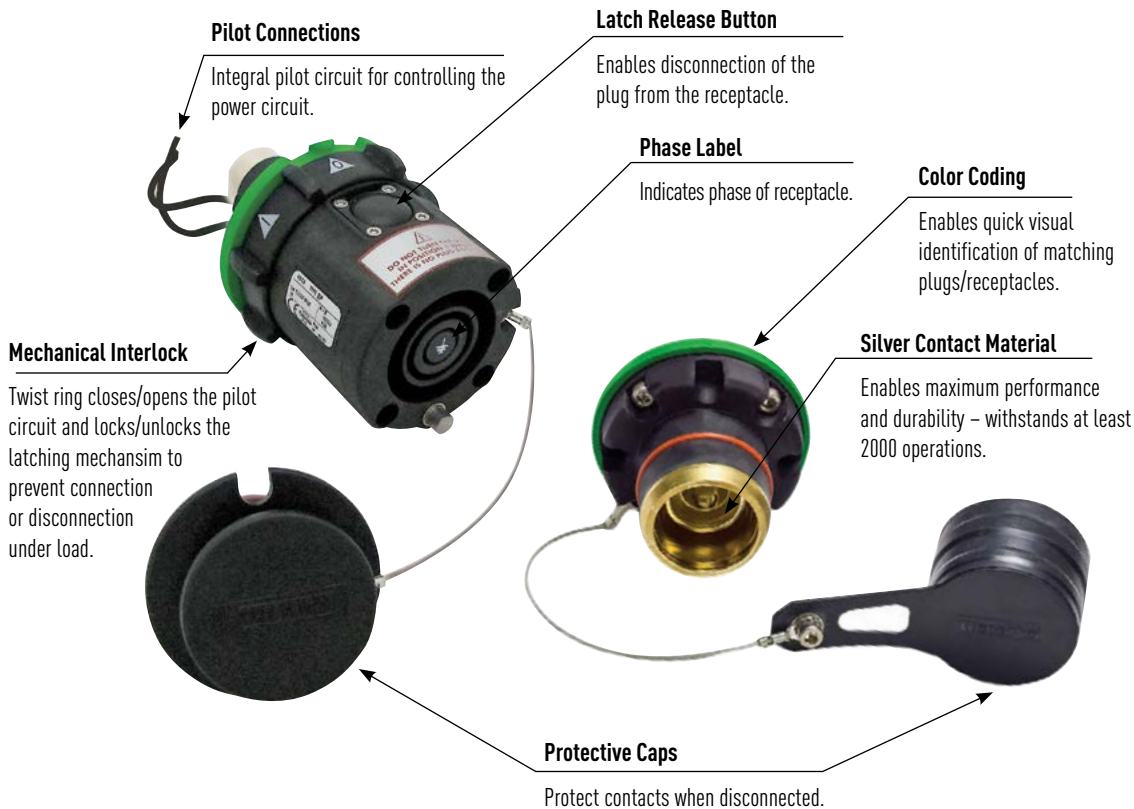
## Main Advantages

- ▶ Safety features provide maximum protection
- ▶ Silver, butt-style contact technology maximizes durability
- ▶ IP66/IP67 environmental protection when mated
- ▶ Mechanical coding prevents intermating of phases



- ▶ **Features and Ratings** p. 134
- ▶ **SP** p. 135
- ▶ **Dimensions** p. 136

# PRODUCT FEATURES



## Operating Instructions



To connect, insert the plug into the receptacle until a click is heard. Rotation of the plug in either direction engages a locking finger, which prevents further rotation.



To close the pilot circuit and mechanically lock the plug into the receptacle, turn the ring on the receptacle until the "1" lines up with the arrow. This turns the power on.



To disconnect, open the pilot circuit and unlock the plug by turning the ring until the "0" is aligned with the arrow. The power is now off.



Press firmly on the latch release button and simultaneously pull on the inlet. A slight rotation of the plug may also be required.

## General Ratings

Listing	CSA	IEC
Amperage	600 A	700 A
Voltage	600 VAC	1000 VAC / 1500 VDC Max
Frequency	50-400 Hz	50-400 Hz
Horsepower	500 hp	-
Environmental	IP66/IP67	IP66/IP67
Temperature	min -15°F/max 140°F	min -15°F/max 140°F

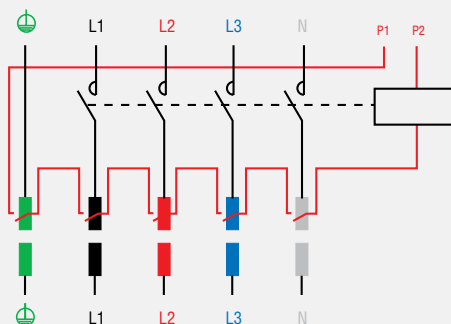
## Highlighted Feature

### Pilot Circuit



SP plugs and connectors are designed with safety and durability in mind. Each device is mechanically interlocked with an integral pilot circuit switch for controlling the power circuit in order to prevent connection and disconnection under load.

### A typical pilot circuit wiring diagram



# SP Single Pole Plugs & Receptacles – 600 A

## CSA Ratings

- Max Amperage & Voltage**  
 600 A, 600 VAC  
 To order devices for international applications and for IEC listings up to 700 A, 1000 VAC/1500 VDC, use part numbers in the IEC/CE section at bottom of page.
- Current Interruption Capability**  
 Not for Current Interrupting
- Horsepower Ratings**  

480V	3Ø	500 hp
600V	3Ø	500 hp

 CSA HP rated when auxiliary pilots are wired to control motor control circuit.
- Environmental Ratings**  
 IP66/IP67
- Temperature Range**  
 Min -15°F / Max 140°F
- Wiring Capacity**  
 Min 2/0 Max 777 MCM
- Applicable Standards**  
 CSA 182.1
- Pilot Wiring**  
 1A, 240 VAC, 14 AWG (prewired)

## Receptacle (female) without lug      Inlet (male) without lug



**!** Don't forget to add installation accessories to your order

## North American Configurations

North American Color Code	Polarity	Part # without lug	Part # without lug
Black	L1	45-44001-P80	45-48001-P80
Red	L2	45-44002-P80	45-48002-P80
Blue	L3	45-44003-P80	45-48003-P80
	NEUTRAL	45-4400N-P80	45-4800N-P80
Green	GROUND	45-4400T-P80	45-4800T-P80

## IEC/CE Ratings

- Amperage**  
 700 A
- Voltage**  
 1000 VAC, 1500 VDC
- Environmental Ratings**  
 IP66/IP67
- Temperature Range**  
 Min -40°C / Max 60°C
- Wiring Capacity**  
 50 - 400 mm<sup>2</sup>
- Applicable Standards**  
 CE

## IEC/CE Configurations

European Color Code	Polarity	Part # without lug	Part # without lug
Brown	L1	45-44001	45-48001
Black	L2	45-44002	45-48002
Grey	L3	45-44003	45-48003
Blue	NEUTRAL	45-4400N	45-4800N
Green	GROUND	45-4400T	45-4800T
Red	POSITIVE	45-4400P	45-4800P
Black	NEGATIVE	45-4400M	45-4800M

**Notes:** • Not CSA listed.

# INSTALLATION ACCESSORIES – SIZE S



(Bolt Included)

WIRE CAPACITY

CRIMPING LUGS

Internal Diameter		Straight w/terminal	Straight Threaded	Flexible Wiring*		Course Wiring	
in	mm	Part #	Part #	mm <sup>2</sup>	AWG	mm <sup>2</sup>	AWG
.43	11	45-4A50C	45-4A50D	50	1/0	70	2/0
.51	13.1	45-4A70C	45-4A70D	70	2/0	95	3/0
.57	14.5	45-4A95C	45-4A95D	95	3/0	120	4/0
.64	16.2	45-4A12C	45-4A12D	120	250	150	300
.71	18	45-4A15C	45-4A15D	150	300	185	400
.81	20.6	45-4A18C	45-4A18D	185	350	240	450
.91	23.1	45-4A24C	45-4A24D	240	450	300	500
1.03	26.1	45-4A30C	45-4A30D	300	600	400	750
1.15	29.2	45-4A40C	45-4A40D	400	750, 777	500	800

Notes: \* Class H & I

HANDLES

HANDLE	Cable Outside Diameter	Part #
	.750 - .875"	45-4A753-A
	.875 - 1.000"	45-4A753-B
	1.000 - 1.125"	45-4A753-C
	1.125 - 1.250"	45-4A753-D
	1.250 - 1.375"	45-4A753-E
	1.250 - 1.375"	45-4A783-A
	1.312 - 1.437"	45-4A783-B
	1.438 - 1.562"	45-4A783-C
	1.562 - 1.688"	45-4A783-D

ANGLES

METAL ANGLE	Part #
 45°	45-4A027

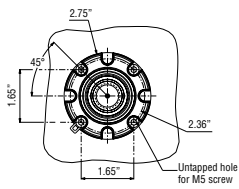
ACCESSORIES

DRAWBAR	Part #
	45-4A376

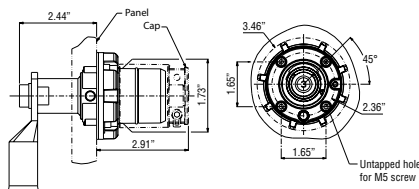
## Dimensions Inlet/Receptacle – Provided in inches

Dimensions are for reference only and may change depending on accessories used. For precise dimensions contact MELTRIC Engineering.

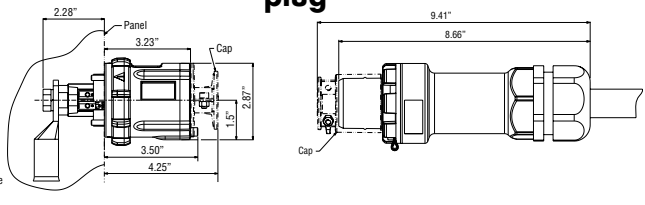
inlet



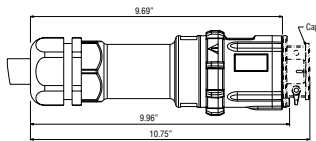
receptacle



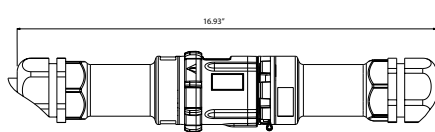
plug



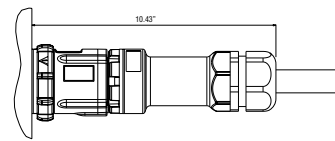
connector



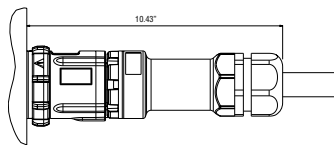
plug/connector



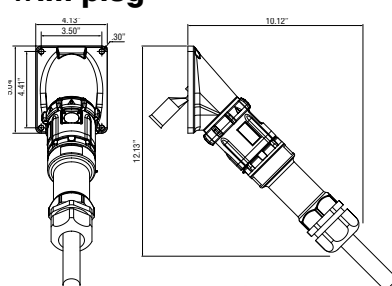
plug with connector on/off



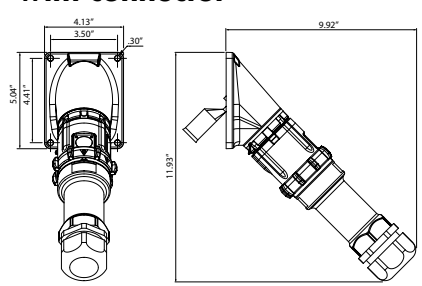
connector with plug on/off



45° inclined receptacle/angle with plug



45° inclined inlet/angle with connector



HIGH AMPACITY