

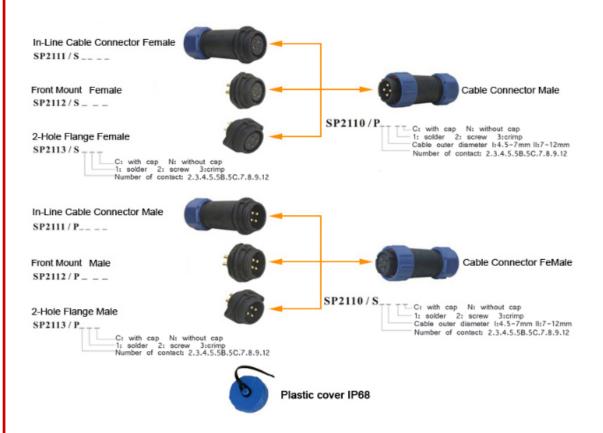
## **Datasheet**

**ENGLISH** 

# **SP21 (Threaded) Front Mount Plug**

Stock No: 144-4203

SP21 Series Mating diagram





## Datasheet

ENGLISH

### Material and spec

| Coupling Type                   | Threaded Coupling                              |
|---------------------------------|--|
| IP Rating                       | IP68   |
| Material                        | Plastic  |
| Shell                           | Nylon66, fire resistance:V-0                   |
| Insert Material                 | PPS max temperature 260°C, fire resistance:V-0 |
| Contact Material                | Brass with gold plating                        |
| Termination                     | Solder/Screw/Crimp                             |
| Cable outer diameter range      | I: 4.5-7mm II: 7-12mm                          |
| Mating cycle                    | >500   |
| Temperature range               | -25°C~+85°C                                    |
| Insulation resistance $M\Omega$ | 2000   |

## Contact arrangement and spec for solder/screw

| Number of contact           | 2                | 3                | 4              | 5                  | 5B                                      | 5C                 | 7                                       | 9                              | 12  |
|-----------------------------|------------------|------------------|----------------|--------------------|---|--------------------|---|--------------------------------|---|
| Male contact face view      | ( )<br>( )       | 2 • • 1          | 3 <b>•</b> • 2 | 2 0 0 1<br>4 0 0 3 | ( • • • • • • • • • • • • • • • • • • • | 2 • • 1<br>• • • 5 | 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 2 • •1<br>4 • 5 • •6<br>9 • •8 | 2° •1<br>5° 4° •3<br>9° 8° 7° •6<br>12° 11° •10 |
| Rated current (A)           | 30A              | 30A              | 30A            | 30A                | 5A, 30A                                 | 15A                | 15A                                     | 5A                             | 5A  |
| Contact diameter            | Ø <sub>3×2</sub> | Ø <sub>3×3</sub> | Ø 3×4          | Ø <sub>3×5</sub>   | Ø <sub>1×3</sub><br>Ø <sub>3×2</sub>    | Ø <sub>2×5</sub>   | Ø <sub>2×7</sub>                        | Ø <sub>1×9</sub>               | Ø <sub>1×12</sub>                               |
| Termination                 | solder<br>screw  | solder<br>screw  | solder         | solder<br>screw    | solder<br>screw                         | solder             | solder                                  | solder                         | solder  |
| Rated voltage(AC.V)         | 500V             | 500V             | 500V           | 500V               | 500V                                    | 500V               | 500V                                    | 500V                           | 400V  |
| Test voltage(AC.V)<br>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 mm² /AWG          | ≤4.17/11         | ≤4.17/11         | ≤4.17/11       | ≤4.17/11           | ≤0.785/18<br>≤4.17/11                   | ≤2/14              | ≤2/14                                   | ≤0.785/18                      | ≤0.785/18                                       |



## Datasheet

**ENGLISH** 

### ★ Crimp contact arrangement and spec

| Number of contact               | 2                  | 3                  | 5                                       | 7                  | 8                    |
|---------------------------------|--------------------|--------------------|---|--------------------|----------------------|
| Male contact face view          | •,                 | 2.0                | 2 • • • • • • • • • • • • • • • • • • • | (1,44.)            | 5° 41 43<br>3° 44 43 |
| Rated current (A)               | 25A                | 25A                | 10A                                     | 10A                | 5A                   |
| Contact diameter                | Ø <sub>2.5×2</sub> | Ø <sub>2.5×3</sub> | Ø <sub>1.5×5</sub>                      | Ø <sub>1.5×7</sub> | Ø <sub>1×8</sub>     |
| Rated voltage(AC.V)             | 500V               | 500V               | 500V                                    | 500V               | 500V                 |
| Test voltage(AC.V)1 min         | 1500V              | 1500V              | 1500V                                   | 1500V              | 1500V                |
| Contact resistance mΩ           | 1                  | 1                  | 2.5                                     | 2.5                | 5                    |
| Insulation resistance $m\Omega$ | 2000               | 2000               | 2000                                    | 2000               | 2000                 |

#### **Features**

The SP21, SP17 and P13 serious are IP68 connectors, threaded coupling.

Compare to SP13/17, SP21 has a larger shell and higher current range, it is a strong and tough connector designed for indoor/outdoor and underwater IP68 environments. It is ideal for any application which needs watertight connection conditions.

The connectors can be used for both cable to cable (in-line) and cable to panel-mount connections. Each side can be male or female contact, (Plug or socket versions), the IP68 Sealing caps are available for both cable connector and panel connector.

- 1) shell diameter (the panel hole cutout diameter): 21mm
- 2) number of contacts : 2 -12 gold plated contacts
- 3) rated current and V: 30A-5A, 500V-400V.
- 4) cable outer diameter acceptance: type I: 4.5-7mm, type II: 7-12mm
- 5) CE, ROHS approval

### **Applications**



#### SP21 (Threaded)

This IP68 connector is used for power connection, lighting industry, outdoor led lighting, outdoor LED panels, stage lighting, medical device, communications, Marine equipment, under water equipment, transformers, solar energy, control boxes, machines and equipments, for data and power. Simple crimp-and-poke technology.