

## Features

- IP68 connectors
- Threaded coupling
- Material: Plastic
- Threaded Coupling Type
- Fire resistance: V-0

## RS PRO SP21 (Threaded) Front Mount Plug

RS Stock No.: 144-4204



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

The RS PRO SP21, SP17 and P13 series are IP68 connectors, threaded coupling. Compared 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.

## General Specifications

|                          |  |
|--------------------------|--|
| Material                 | Plastic  |
| Coupling Type            | Threaded Coupling  |
| Shell                    | Nylon66, fire resistance: V-0  |
| Number of Contacts       | 2-12 gold plated contacts  |
| Insert Material          | PPS max temperature 260°C, fire resistance: V-0  |
| Used for                 | Cable to cable (in-line) and cable to panel-mount connections  |
| Contact Gender           | Each side can be male or female contact  |
| Contact Material         | Brass with gold plating  |
| Termination              | Solder/ Screw/ Crimp   |
| Mating cycle             | >500   |
| Insulation resistance MΩ | 2000   |
| Applications             | SP21 (Threaded)<br>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. |

## Electrical Specifications

|                     |                     |
|---------------------|---------------------|
| Rated Current and V | 30A – 5A, 500V-400V |
|---------------------|---------------------|

## Operation Environment Specifications

|                   |               |
|-------------------|---------------|
| Temperature range | -25°C ~ +85°C |
|-------------------|---------------|

## Mechanical Specifications

|   |  |
|---|--|
| Shell diameter (the panel hole cutout diameter) | 21mm                                   |
| Cable Outer Diameter acceptance                 | Type I: 4.5 - 7mm<br>Type II: 7 - 12mm |

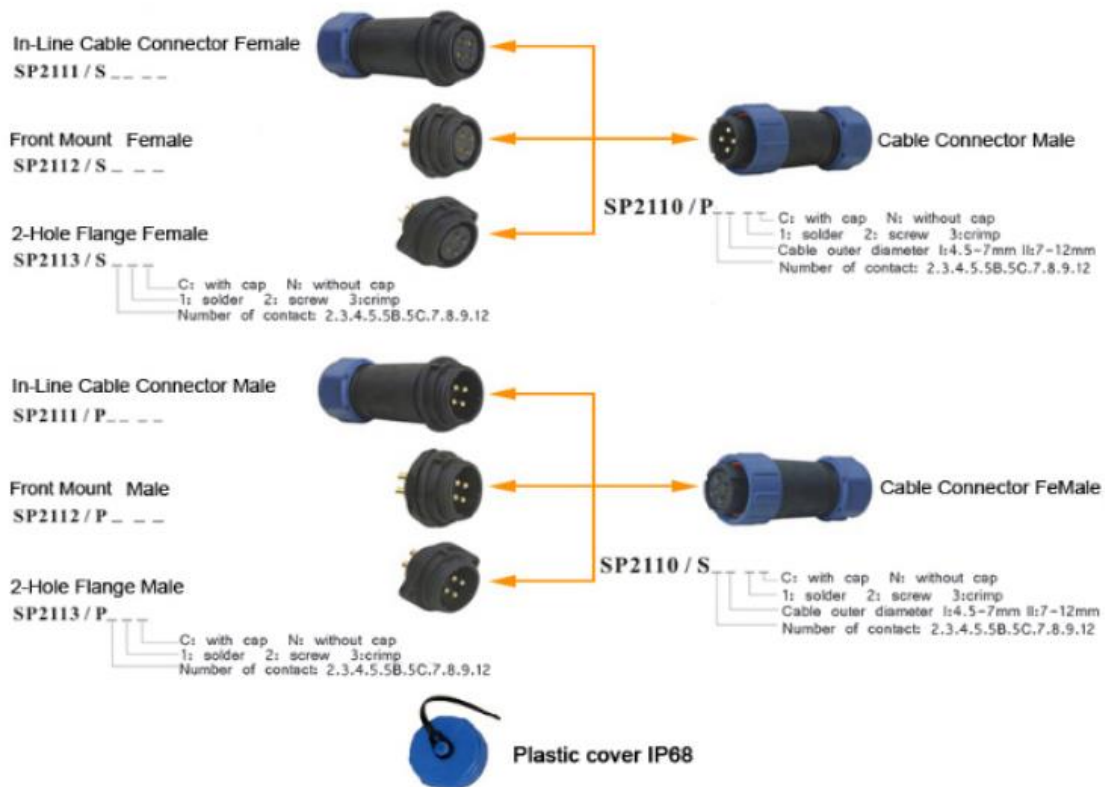
## Protection Category

|                 |      |
|-----------------|------|
| IP Rating       | IP68 |
| Fire resistance | V-0  |

## Approvals

|                |                   |
|----------------|-------------------|
| Certifications | CE, ROHS approval |
|----------------|-------------------|

### ● SP21 Series Mating diagram



## Contact arrangement and spec for solder/ screw

| Number of contact              | 2               | 3               | 4               | 5               | 5B                    | 5C     | 7      | 9         | 12        |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------|--------|-----------|-----------|
| Male contact face view         |                 |                 |                 |                 |                       |        |        |           |           |
| Rated current (A)              | 30A             | 30A             | 30A             | 30A             | 5A, 30A               | 15A    | 15A    | 5A        | 5A        |
| Contact diameter               | ∅ 3×2           | ∅ 3×3           | ∅ 3×4           | ∅ 3×5           | ∅ 1×3<br>∅ 3×2        | ∅ 2×5  | ∅ 2×7  | ∅ 1×9     | ∅ 1×12    |
| Termination                    | solder<br>screw | solder<br>screw | solder<br>screw | 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 mm <sup>2</sup> /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 |

## Crimp contact arrangement and spec

| Number of contact        | 2       | 3       | 5       | 7       | 8     |
|--------------------------|---------|---------|---------|---------|-------|
| Male contact face view   |         |         |         |         |       |
| Rated current (A)        | 25A     | 25A     | 10A     | 10A     | 5A    |
| Contact diameter         | ∅ 2.5×2 | ∅ 2.5×3 | ∅ 1.5×5 | ∅ 1.5×7 | ∅ 1×8 |
| 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 mΩ | 2000    | 2000    | 2000    | 2000    | 2000  |