

FEATURES

- For Solar PV power generation systems
- Female panel connectors with NEC Interlocks, crimps & sealing caps
- Flame retardant thermoplastic with UV protection
- Watertight IP68
- Suitable for cable sizes from 2.5, 4.0 and 6.0mm²
- TUV certified to EN50618

RS PRO Solar Connectors – Female Panel

RS Stock No.: 2394970



RS 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

- Panel connections used for connecting cables safely in Solar PV power generation systems
- For all solar applications with NEC interlocks and 1500V DC capability
- Panel Solar PV connectors with crimp connection and sealing caps which are part of a range of branch, panel & inline fuse options and unlocking tools for safe, reliable IP rated connections in Solar power generating sets
- Used commonly on enclosures housing circuit and surge protection.

General Specifications

| | |
|-------------------------------------|---|
| Number Of Contacts | 1 per Female and thread and locknut |
| Gender | Female |
| Body Orientation | Panel |
| Mounting Type | Panel connection |
| Connector | NEC Interlock with thread and locknut |
| Part Code options | RS Pro 2394971 (Male Connector only), RS Pro 2394970 (Female Connector only) |
| Locking system | Snap in with NEC interlock |
| Termination Method | Crimped Connection Internally |
| Contact Material | Copper with Tin plating |
| Insulating Material | NORYL 9406P PPE+PS |
| Dimensions | Female 48.1x18.8x17mm |
| Pollution Degree | 3 |
| Operating Cycle | 100 |
| Number of Bendings | 100 |
| Application | All Solar PV System generating sets |
| Stripping Length | 8mm-10mm |
| Insertion Force | ≤50N |
| Withdrawal Force | ≥50N |
| Salt Mist Spray Test | IEC60068-2-52, Severity Level 6 |
| Material Flammability Rating | UL94 V-0 |

Electrical Specifications

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|--------------------------------|--|
| Current Rating | 25A (2.5 mm ²), 45A (4 mm ²), 54A (6 mm ²) TUV |
| Voltage Rating | 1500V DC |
| Rated Impulse Voltage | 16kV |
| Rated Withstand Voltage | 8kV |
| Application Class | A |
| Contact Resistance | <0.25 mΩ |
| Fuse required? | No |
| Built in contacts? | No- provided in pack for crimping |

Mechanical Specifications - Female

| | |
|-------------------------------------|--------------------------|
| Length | 48.1mm |
| Width | 18.8mm |
| Depth | 17.0mm |
| Contact Size | 3.87+/- 0.05mm |
| Maximum Mating Force | ≤50N |
| Minimum Unmating Force | ≥50N |
| Stripping Length | 8mm-10mm |
| Crimp Contact Pin Dimensions | 4.00mm +0.07mm / -0.05mm |

Operation Environment Specifications

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|--------------------------------------|--|
| Maximum Operating Temperature | +110°C Limit Temperature (+85°C Upper Ambient Temperature) |
| Minimum Operating Temperature | -40°C Lower Ambient Temperature |

Protection Category

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|-----------------------------|-----------------------------------|
| Degree Of Protection | IP 68 Mated Condition (10hrs @1m) |
|-----------------------------|-----------------------------------|

Classification

| | |
|---------------------------|-----------------|
| eCI@ss Version | V11.0: 27060313 |
| UNSPSC Version | 39122221 |
| ETIM 8.0 Version | EC002635 |
| Harmonisation Code | 85369090 |

Approvals

| | |
|----------------------------------|---|
| Compliance/Certifications | CE / UKCA / TUV |
| Declarations | IEC 62582:2014 IEC 60269-2:2013 IEC 60269-1:2014 TUV R60118765 |

Dimensional Drawings

Female Connector

