

FEATURES

- For Solar PV power generation systems
- Male 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 – Male Panel

RS Stock No.: 2394971



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 Male and thread and locknut
Gender	Male
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	Male 50.5x18.8x17mm
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

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 - Male

Length	50.5mm
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

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

Protection Category

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

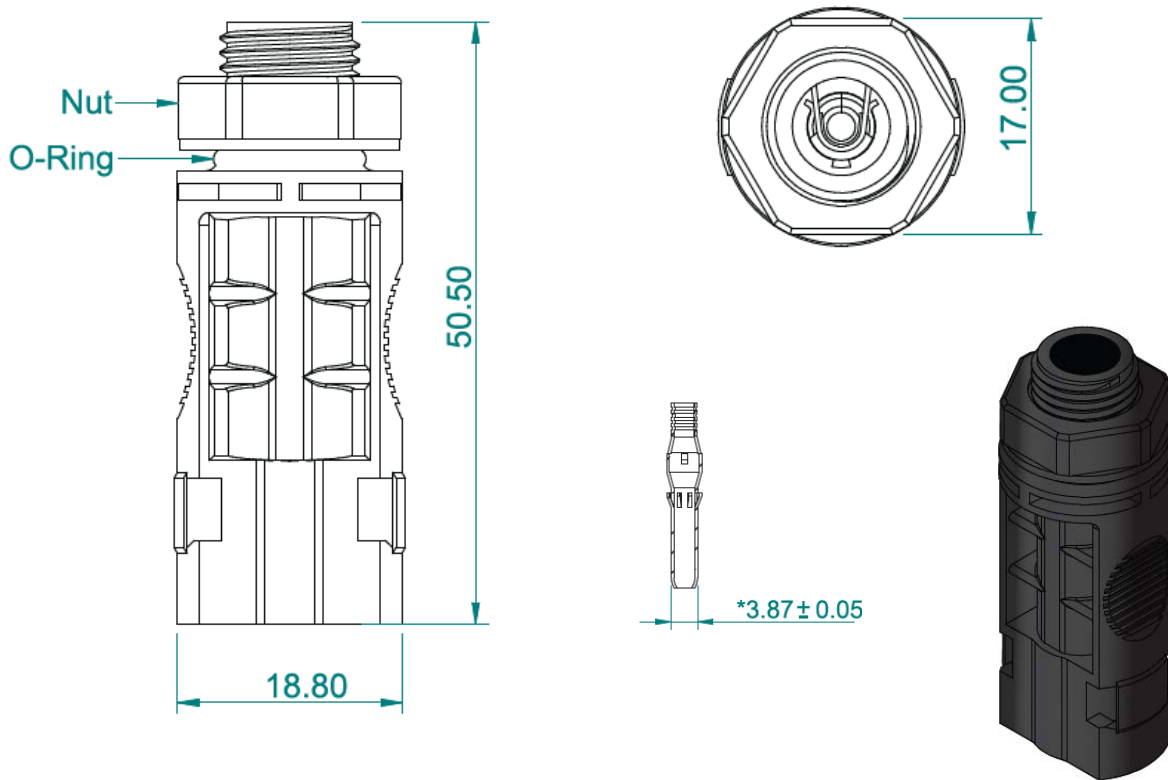
eCI@ss Version	V11.0: 27060313
UNSPSC Version	39122221
ETIM 8.0 Version	EC002635
Harmonisation Code	85369090

Approvals

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

Dimensional Drawings

Male Connector



Solar Connector Assembly Instructions

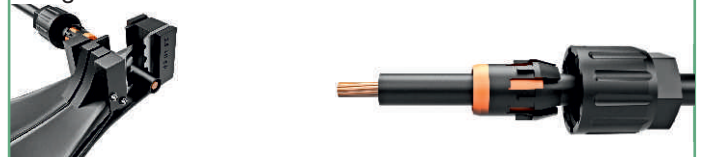
Step 1 Prepare the cable by inserting following components in the sequence as mentioned below:

Sequence Components

- 1) Connector C
- 2) Grommet with Collet



Step 2 Strip the cable as per specified stripping length i.e. 8mm to 10mm



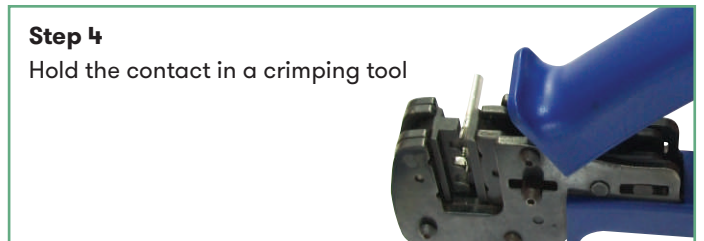
Step 3

- 1) Select the jaw as per cable size
- 2) Place the cable in the appropriate jaw



Step 4

Hold the contact in a crimping tool



Step 5

Insert the cable into the contact



Step 6

Press the crimping tool until it release itself



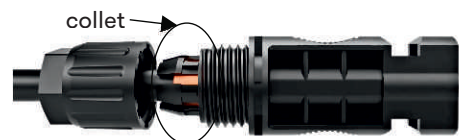
Step 7

Insert the crimped contact into the straight connector until a locking sound (click) is heard



Step 8

Set the Grommet & Collet properly on connector



Step 9

Tighten the cap with Tightening tool



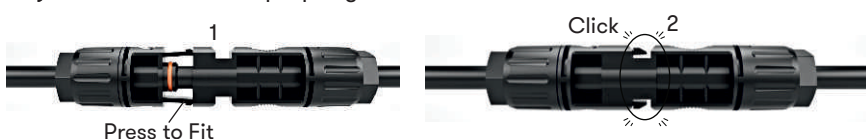
Step 10

The Male & Female connectors are ready for connection



Step 11

- 1) Press to fit for reliable connection
- 2) Ensure that it looks properly for reliable connection



Note: Our Connectors are suitable for PV Solar cable of 2.5/4.0/6.0 mm² diameter as per EN 50618 / IEC 62930.