

# PV2-Connectors

# User Guide



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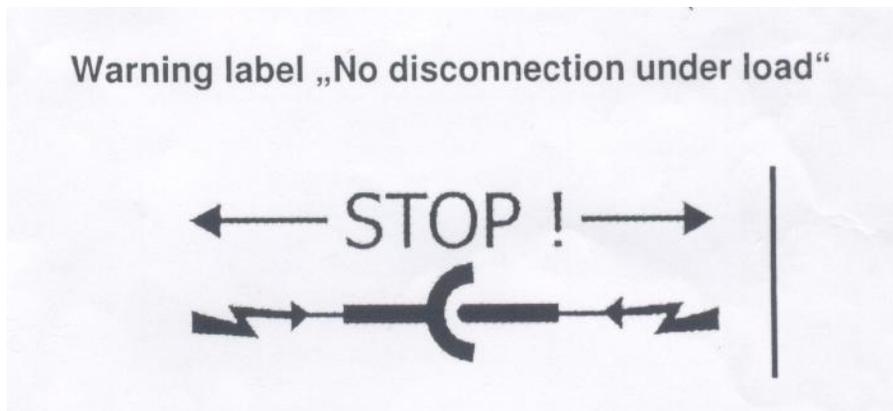
# For your safety



**During self assembly, parts and tools other than those stated by us are used or if the preparation and assembly instructions described here are disregarded then neither safety nor compliance with the technical data can be guaranteed.**



**PV connectors must not be connecting or disconnecting while under load.  
Disconnected connectors should be protected from water and dirt with cover.**



**PV connectors while connected, must be push to the end and no gap may be visible between the interconnected connectors.**



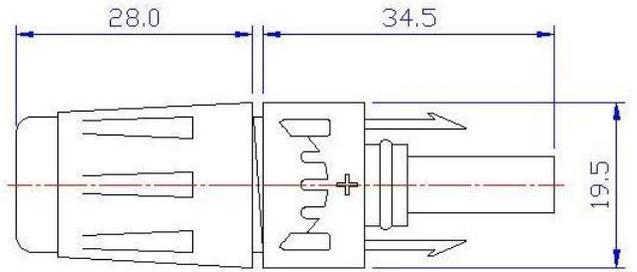
**For protection against electric shock, connectors must be isolated from the power supply while being assembled or disassembled.**



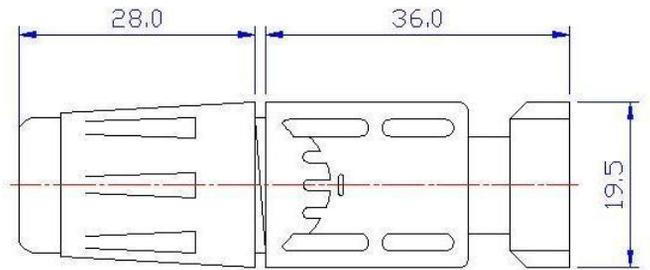
**Plugged parts are watertight IP67. They can not be used permanently under water. Do not lay the connectors on the roof surface.**

# PV2 ( $\psi$ 4) Connector

## PV2-P1



## PV2-J1



Type / module number		PV2-P1 & PV2-J1
Size, mm (L x Ø)	PV2-P1, Positive	62.5 x 19.5
	PV2-J1, Negative	64.0 x 19.5
Conformity standards	UL 1703	Intend to apply
	EN 50521: 2008	R50160587
	Others	IEC61215, IEC 61646, IEC 61730
Rated voltages		DC 1000V (TÜV), DC 600 (UL)
Rated currents		25A
Contact resistance		$\leq 0.2 \text{ m}\Omega$ (Initial)
Wire size range (mm <sup>2</sup> )		2.5 & 4
Protection degree		IP67
Overvoltage category		III, 8kV
Flammability class		UL94-5V/V0
Material	Insulation	PPO/PA 66
	Contact	Tin plated copper alloy
Retaining force of locking	Connect - connect	$\geq 20\text{kgf}$
	Connect - cable	$\geq 20\text{kgf}$
Ambient temperature		-40~+85°C
Limiting temperature		-40~+125°C
Note		Do not disconnect under load

# Assembly Instructions

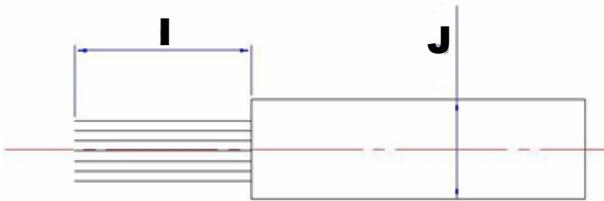
## Cable preparation

Use stripping pliers to strip cable insulation.



\* Take care not to cut individual strands.

Check dimension according to the following table:



I	6.0mm~7.5mm
J	5.5mm~9.0mm
conductor	2.5mm <sup>2</sup> ~4.0mm <sup>2</sup>

## Crimping



Before crimping, please make the prepared cable to through the waterproof ring and nut.

\* Take care the install direction.

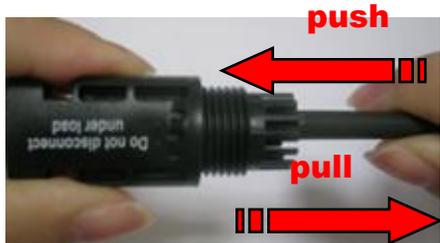


For ensure the conductors and crimping sleeves is sufficiently strong after crimped, please use crimping pliers that is fit for our cable standards.



For ensure the conductor and cable is sufficiently strong after crimped, we recommend to use tin solder to prevent connection break off.

## Cable assembly



**Push the crimped contact into the socket resp. plug insulator until it engages. Pull lightly on the lead to check that the metal part has engaged.**



**After finish upon process, push back the waterproof ring and nut, as the photo show.**



**Push the waterproof ring in to the end position and screw on the nut.**



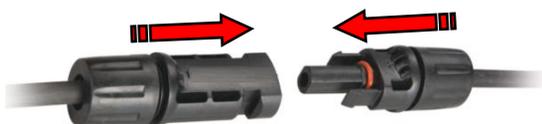
**Make sure the waterproof ring can't be visible outside.**



**Repeat upon process to finish PV2-P1 connector assembly.**

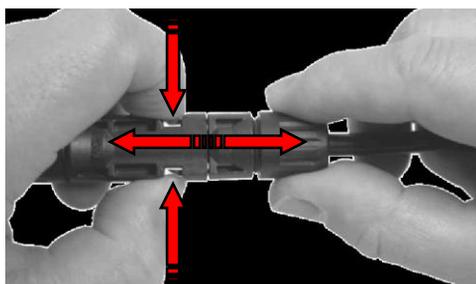
**\*make sure the o-ring is on position.**

## Plugging



**Plug the coupling together until they engage. Check correct engagement by pulling on the coupling.**

## Unplugging



**Compress the two springs and separate the coupling.**