

Operating instructions PV plug-in connector WM4 and WM4 box

WARNING!

The electrical connections must not be dis-connected and plugged under load. Depending on the light intensity, voltage, generated by the module, may be present.

The connectors must not be put under any mechanical stress.

For safety reasons, the connector must not be brought into contact with products or media devices that contain alcohol, benzine, oil or plasticisers.



NOTE!

If components, tools or manual tools other than those stated by Weidmüller are used during the assembly, then neither the correctness nor compliance with the technical data can be guaranteed.

To ensure a stable electrical connection, only tinned cables in accordance with 2 PFG1169/08.07 may be used.

Disconnected connectors should be protected from dirt and water during assembly.

Make sure that live parts such as contacts or cables do not produce a ground fault.

The products may only be installed by qualified electricians.







Technical data

Permissible temperature range	-40 °C ... +85 °C
Protection degrees (mated / unmated)	IP 65 / IP 2x
Rated current according to TÜV (German Technical Inspectorate)	30A
Rated voltage	1000 VDC (IEC)
Protection class	II
Connectable cable cross sections	4mm ² , 6mm ² Flexible wires, strand tinned, Cable exterior diameter: 6.0 ...7.0 mm Cable according to standard 2 PFG1169/08.07





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Product overview







WM4 panel plug

Female socket	Type	Packaging unit	Order No.	Male pin housing	Type	Packaging unit	Order No.
	BUGH WM4				SFGH WM4		
	Female socket housing	100 (in bag)	1217960000		Male pin housing	100 (in bag)	1217850000
	BUGH WM4				SFGH WM4		
	Female socket housing	500 (in bag)	1217940000		Female socket housing	500 (in bag)	1217830000
	BUKO WM4				SFKO WM4		
	Female socket contact	100 (in bag)	1217760000		Male pin contact	100 (in bag)	1217670000
	BUKO WM4				SFKO WM4		
	Female socket contact	1500 (on reel)	1217750000	Male pin contact	1500 (on reel)	1217650000	

WM4 housing connector

Female socket housing	Type	Packaging unit	Order No.	Male pin housing	Type	Packaging unit	Order No.
	BUGH BOX WM4				SFGH BOX WM4		
	Female socket housing	100 (in bag)	1453040000		Male pin housing	100 (in bag)	1453050000
	BUGH BOX WM4				SFGH BOX WM4		
	Female socket housing	500 (in bag)	1307280000		Male pin housing	500 (in bag)	1307200000
	BUKO WM4				SFKO WM4		
	Female socket contact	100 (in bag)	1217760000		Male pin contact	100 (in bag)	1217670000
	BUKO WM4				SFKO WM4		
	Female socket contact	1500 (on reel)	1217750000	Male pin contact	1500 (on reel)	1217650000	

Accessories

Type	Packaging unit	Order No.	Type	Packaging unit	Order No.
 multi-stripax® PV Optimised wire stripping pliers	1	1190490000	 SET MULTI-TOOL PV+ Optional mounting tool	1	1217280000
 CTF PV WM4 Crimping tool	1	1222870000	 VSSO WM4 Universal dust cap for female socket housing and male pin housing	100	1254870000
 KT 8 Cutting tool	1	9002650000	 SAFETY CLIP WM4 The safety clip prevents unintentional opening	10	1328150000

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Step 1: Cable assembly

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Strip the cable to a length of 7 ± 0.5 mm.

Required tool: Multi-Stripax PV (1190490000).
The stripping length can be adjusted at the tool.



Take care not to damage individual strands of the cable.

Step 2: Crimping contacts

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Put the metal contact into the manual tool. Use the correct cavity for the cable cross section. The locator helps you to position the contact properly. Use the appropriate cavities for the conductor cross section crimping process.



Required tool: Crimping tool PV (1222870000)

Insert the cable into the crimp area and press the crimping pliers completely.

Make sure that there is no visible damage or sharp edges on the crimp.



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Step 3: Mounting in the housing

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Press the crimped contact evenly into the housing until the contact has reached its end position, and a "click" can be heard.



Pull slightly on the cable to test that the contact has latched correctly in the housing. The correct assembly of the metal contacts can be tested with the PV Multi Tool. Insert the mandrel into the housing as far as it will go. The groove on the test pin will be visible if the metal contact is correctly assembled. Sockets / plugs have different grooves.



Required tool: Multi Tool PV (1217280000)

Step 4a: Assembly of housings

only WM 4



Manually tighten the cable bushing by turning the union nut.



Fix the cable bushing using the mounting tool as shown in the picture. The tightening torque must be adapted to the cable used. A torque ranging between 2.0 and 2.5 Nm is required.

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Step 4b: Assembly of housings

only WM 4 box



Loosen the nut of the pre-assembled connector.

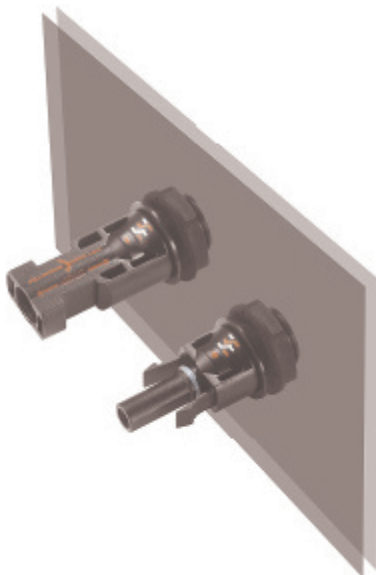
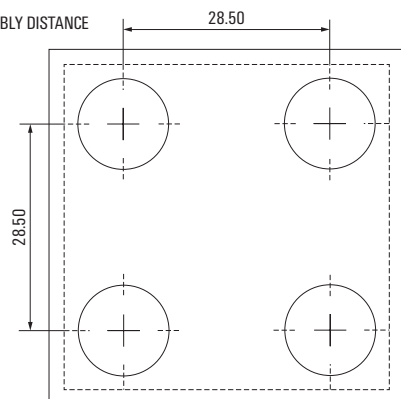
Prepare the wall in question as follows:

Hole diameter: 12 ± 1 mm

Max thickness of wall: 4 mm



SUGGESTED ASSEMBLY DISTANCE



Mount the connectors with the sealing on the outer part of the wall and the nut on the inner part of the wall.

Tighten the nut with a standard tool (SW 17) and a torque ranging between 1.0 and 1.5 Nm.

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Step 5: Plug / disconnect system

Using a WM4 plug-in connector as an example - equivalent to all other types)



Plug the male pin housing into the female socket housing until the latching hooks snap into place. Check that the fastening is correct by gently pulling at the coupling.



The housings of the plug can be separated manually or using the PV Multi Tool.

Manually: Press the latching hooks together and pull the housing components apart.



Using the mounting tool: Use the mounting tool to press the latching hooks of the plug together and pull the housing components apart.