

Original MC4-Evo 2 Connector

Renewable Energy | Solar Photovoltaics

EN



MC4-Evo 2 connector

Insulating part and crimp contact

MC4-Evo 2 socket



PV-KBT4-EVO 2A/...

MC4-Evo 2 plug



PV-KST4-EVO 2A/...

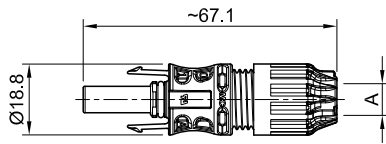
- Internationally certified with IEC, UL, JET. Approved for DC 1500 V (IEC, JET), DC 1500 V (UL) unrestricted access. I
- n accordance with NEC 2023, requires a tool to open.
- MULTILAM Technology, has proven the quality and durability several 100 million times since 2004.
- Suited for all climatic environments due to UV resistance, ammonia and high degree of protection.
- Available as a field and preassembled connector, standard crimping tools can be used.
- Mating compatibility with MC4 connector family.
- MC4 and MC4-Evo are registered trademarks owned by Stäubli.

Technical data	
Connector system	Ø 4 mm
Ambient temperature range	-40 °C ... +85 °C
Transportation/storage temperature range	-30 °C/+60 °C
Transportation/storage relative humidity	< 70 %
Upper limiting temperature	115 °C (IEC)
Degree of protection, mated	IP65/IP68 (1 m, 168 h)
Degree of protection, unmated	IP2X
Overvoltage category	III
Contact resistance of connectors	< 0.2 mΩ
Locking system	Locking type
Class (IEC)	II
Contact system	MULTILAM
Type of termination	Crimping
Warning	Do not disconnect under load
Contact material	Copper, tin plated
Insulation material	PA
Flammability class	UL94-V0
Ammonia resistance (TÜV Rheinland certified acc. to 2 PfG 1911/03.2011)	Q60139020-0001
TÜV-Rheinland certified according to IEC 62852:2014+Amd.1:2020	R 60127169
UL-File number (UL6703 and CSA C22.2 No. 182.5) (cULus Listed and UL Recognized)	E343181
Maximum altitude above sea level for operation	5000 m
Temperature Level according to IEC TS 63126	Level 2

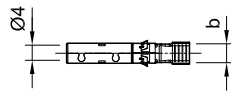
Dimensional drawings

MC4-Evo 2 socket

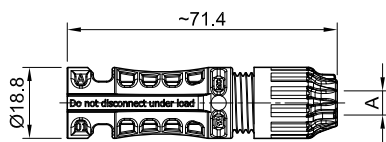
Dimensions in mm



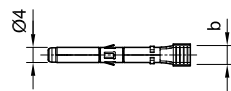
PV-KBT4-EVO 2A/...



MC4-Evo 2 plug



PV-KST4-EVO 2A/...



MC4-Evo 2 connector

Ordering information

Order No. ¹⁾	Type	Socket	Plug	Outer diameter of cable	Width of crimp opening	IEC 62852			UL 6703			Approvals	
						mm ²	DC V	A	AWG	DC V	A	TÜV Rheinland	cULus
32.0310P0001	PV-KBT4-EVO 2A/2.5I	x		4.7-6.4	4	2.5	1500	39				x	x
									14	1500	30		
32.0311P0001	PV-KST4-EVO 2A/2.5I		x	4.7-6.4	4	2.5	1500	39				x	x
									14	1500	30		
32.0312P0001	PV-KBT4-EVO 2A/2.5X	x		5.9-7.3	4	2.5	1500	39				x	x
									14	1500	30		
32.0313P0001	PV-KST4-EVO 2A/2.5X		x	5.9-7.3	4	2.5	1500	39				x	x
									14	1500	30		
32.0314P0001	PV-KBT4-EVO 2A/2.5II	x		6.4-8.4	4	2.5	1500	39				x	x
									14	1500	30		
32.0315P0001	PV-KST4-EVO 2A/2.5II		x	6.4-8.4	4	2.5	1500	39				x	x
									14	1500	30		
32.0316P0001	PV-KBT4-EVO 2A/6I	x		4.7-6.4	5.8	4	1500	45				x	x
						6	1500	53					
									12	1500	39		
									10	1500	50		
32.0317P0001	PV-KST4-EVO 2A/6I		x	4.7-6.4	5.8	4	1500	45				x	x
						6	1500	53					
									12	1500	39		
									10	1500	50		
32.0318P0001	PV-KBT4-EVO 2A/6X	x		5.9-7.3	5.8	4	1500	45				x	x
						6	1500	53					
									12	1500	39		
									10	1500	50		
32.0319P0001	PV-KST4-EVO 2A/6X		x	5.9-7.3	5.8	4	1500	45				x	x
						6	1500	53					
									12	1500	39		
									10	1500	50		

Order No. ¹⁾	Type	Socket	Plug	Outer diameter of cable	Width of crimp opening	IEC 62852			UL 6703			Approvals	
												TÜV Rheinland	cULus
				A (mm)	b (mm)	mm ²	DC V	A	AWG	DC V	A		
32.0320P0001	PV-KBT4-EVO 2A/6II	x		6.4-8.4	5.8	4	1500	45				x	x
						6	1500	53					
									12	1500	39		
									10	1500	50		
32.0321P0001	PV-KST4-EVO 2A/6II		x	6.4-8.4	5.8	4	1500	45				x	x
						6	1500	53					
									12	1500	39		
									10	1500	50		
32.0322P0001	PV-KBT4-EVO 2A/10X	x		5.9-7.3	6.5	10	1500	69				x	x
									8	1500	70		
32.0323P0001	PV-KST4-EVO 2A/10X		x	5.9-7.3	6.5	10	1500	69				x	x
									8	1500	70		
32.0324P0001	PV-KBT4-EVO 2A/10II	x		6.4-8.4	6.5	10	1500	69				x	x
									8	1500	70		
32.0325P0001	PV-KST4-EVO 2A/10II		x	6.4-8.4	6.5	10	1500	69				x	x
									8	1500	70		

Note:

For more detailed information concerning suitable cable glands, please consult the corresponding assembly instructions.

Note:

Unmated connectors must be protected from any contamination using Stäubli protective caps. For ordering information concerning Stäubli protective caps, please consult the catalog "Tools and accessories".

¹⁾ The items listed here are shipped in bulk (code P0001) by default. Special packaging units of 100 pieces (code P0100) or 10 pieces (code P0010) are available upon request. Contact Stäubli Customer Service for more information on packaging options and minimum order quantities.

Further information


Tools and accessories

For related Stäubli tools and accessories please consult:

www.staubli.com/re-downloads.html → English → Catalog → Tools and accessories


Assembly instructions

For assembly instructions for "MC4-Evo 2 connector" please consult:

www.staubli.com/re-downloads.html → English → Assembly info → MA298

MC4-Evo 2 connector

Insulating part and crimp contacts on reel

MC4-Evo 2 socket



PV-KBT4-EVO 2A/...

MC4-Evo 2 plug



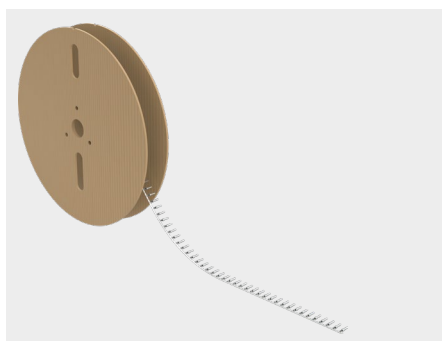
PV-KST4-EVO 2A/...

- Internationally certified with IEC, UL, JET.
- Approved for DC 1500 V (IEC, JET), DC 1500 V (UL) unrestricted access.
- In accordance with NEC 2023, requires a tool to open.
- MULTILAM Technology has proven the quality and durability several 100 million times since 2004.
- Suited for all climatic environments due to UV resistance, ammonia and high degree of protection.
- Available as a field and preassembled

connector; standard crimping tools can be used.

- Mating compatibility with MC4 connector family.
- MC4 and MC4-Evo are registered trademarks owned by Stäubli.

Contacts on reel



Reel with contacts

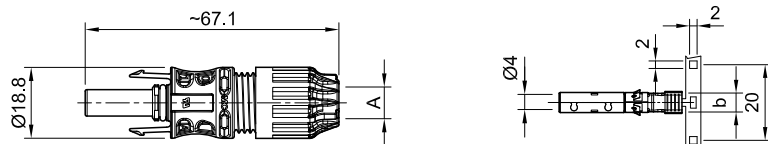
Technical data	
Connector system	Ø 4 mm
Ambient temperature range	-40 °C ... +85 °C
Transportation/storage temperature range	-30 °C/+60 °C
Transportation/storage relative humidity	< 70 %
Upper limiting temperature	115 °C
Degree of protection, mated	IP65/IP68 (1 m, 168 h)
Degree of protection, unmated	IP2X
Overvoltage category	III
Contact resistance of connectors	< 0.2 mΩ
Locking system	Locking type
Class (IEC)	II
Contact system	MULTILAM
Type of termination	Crimping

Warning	Do not disconnect under load
Contact material	Copper, tin plated
Insulation material	PA
Flammability class	UL94-V0
Ammonia resistance (TÜV Rheinland certified acc. to 2 PfG 1911/03.2011)	Q60139020-0001
TÜV-Rheinland certified according to IEC 62852:2014+Amd.1:2020	R 60127169
UL-File number (UL6703 and CSA C22.2 No. 182.5) (cULus Listed and UL Recognized)	E343181
Maximum altitude above sea level for operation	5000 m
Temperature Level according to IEC TS 63126	Level 2

Dimensional drawings

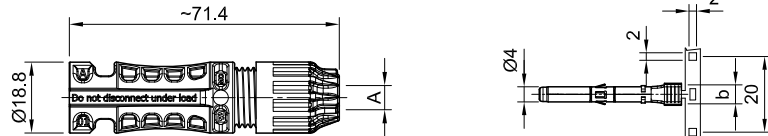
MC4-Evo 2 socket

Dimensions in mm



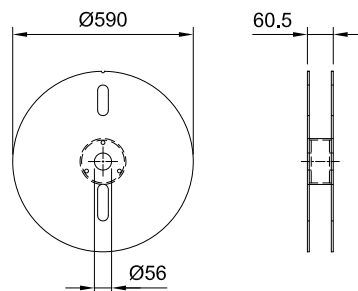
PV-KBT4-EVO 2A/...

MC4-Evo 2 plug



PV-KST4-EVO 2A/...

Contacts on reel



Reel with contacts

MC4-Evo 2 connector

Ordering information

Order No.	Type	Socket	Plug	Outer diameter of cable	Width of crimp opening	IEC 62852			UL 6703			Contacts per reel	Approvals	
						mm ²	DC V	A	AWG	DC V	A		TÜV Rheinland	cULus
32.0310P2000	PV-KBT4-EVO 2A/2.5I	x		4.7-6.4	4.0	2.5	1500	39				2000	x	x
									14	1500	30			
32.0311P2000	PV-KST4-EVO 2A/2.5I		x	4.7-6.4	4.0	2.5	1500	39				2000	x	x
									14	1500	30			
32.0312P2000	PV-KBT4-EVO 2A/2.5X	x		5.9-7.3	4.0	2.5	1500	39				2000	x	x
									14	1500	30			
32.0313P2000	PV-KST4-EVO 2A/2.5X		x	5.9-7.3	4.0	2.5	1500	39				2000	x	x
									14	1500	30			
32.0314P2000	PV-KBT4-EVO 2A/2.5II	x		6.4-8.4	4.0	2.5	1500	39				2000	x	x
									14	1500	30			
32.0315P2000	PV-KST4-EVO 2A/2.5II		x	6.4-8.4	4.0	2.5	1500	39				2000	x	x
									14	1500	30			
32.0316P2000	PV-KBT4-EVO 2A/6I	x		4.7-6.4	5.8	4	1500	45				2000	x	x
						6	1500	53						
									12	1500	39			
									10	1500	50			
32.0317P2000	PV-KST4-EVO 2A/6I		x	4.7-6.4	5.8	4	1500	45				2000	x	x
						6	1500	53						
									12	1500	39			
									10	1500	50			
32.0318P2000	PV-KBT4-EVO 2A/6X	x		5.9-7.3	5.8	4	1500	45				2000	x	x
						6	1500	53						
									12	1500	39			
									10	1500	50			
32.0319P2000	PV-KST4-EVO 2A/6X		x	5.9-7.3	5.8	4	1500	45				2000	x	x
						6	1500	53						
									12	1500	39			
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Order No.	Type	Socket	Plug	Outer diameter of cable	Width of crimp opening	IEC 62852			UL 6703			Contacts per reel	Approvals	
						mm ²	DC V	A	AWG	DC V	A		TÜV Rheinland	cULus
32.0320P2000	PV-KBT4-EVO 2A/6II	x		6.4-8.4	5.8	4	1500	45				2000	x	x
						6	1500	53						
									12	1500	39			
									10	1500	50			
32.0321P2000	PV-KST4-EVO 2A/6II		x	6.4-8.4	5.8	4	1500	45				2000	x	x
						6	1500	53						
									12	1500	39			
									10	1500	50			
32.0322P1500	PV-KBT4-EVO 2A/10X	x		5.9-7.3	6.5	10	1500	69				1500	x	x
									8	1500	70			
32.0323P1500	PV-KST4-EVO 2A/10X		x	5.9-7.3	6.5	10	1500	69				1500	x	x
									8	1500	70			
32.0324P1500	PV-KBT4-EVO 2A/10II	x		6.4-8.4	6.5	10	1500	69				1500	x	x
									8	1500	70			
32.0325P1500	PV-KST4-EVO 2A/10II		x	6.4-8.4	6.5	10	1500	69				1500	x	x
									8	1500	70			

Note:

For more detailed information concerning suitable cable glands, please consult the corresponding assembly instructions.

Note:

Unmated connectors must be protected from any contamination using Stäubli protective caps. For ordering information concerning Stäubli protective caps, please consult the catalog "Tools and accessories".

Further information


Tools and accessories

For related Stäubli tools and accessories please consult:

www.staubli.com/re-downloads.html → English → Catalog → **Tools and accessories**


Assembly instructions

For assembly instructions for "MC4-Evo 2 connector" please consult:

www.staubli.com/re-downloads.html → English → Assembly info → **MA298**

MC4-Evo 2 panel receptacle

Insulating part and crimp contact

MC4-Evo 2 socket panel receptacle



PV-ADB4-EVO 2A/...

MC4-Evo 2 plug panel receptacle



PV-ADS4-EVO 2A/...

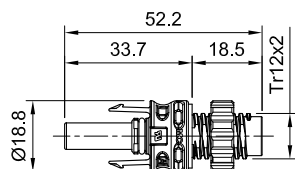
- MC4-Evo 2 panel-receptacle connectors are the interface between the inverter or the distributor housing and PV module string.
- Assembly directly via the threads or in the perforated plate with the plastic nut (contained in scope of delivery).
- Thanks to the D-shape thread the connection is secured against twisting.
- For 1500 DC V (IEC), 1500 DC V (UL) approved without constraints.
- Degree of protection IP65/IP68 (1 m, 1 h) guarantees highest connection safety.
- Fast and clean connection.
- Plug compatible with the original MC4 connector family.
- With preassembled flat seal.
- MC4 and MC4-Evo are registered trademarks owned by Stäubli.

Technical data	
Connector system	Ø 4 mm
Ambient temperature range	-40 °C...+85 °C
Upper limiting temperature	115 °C
Degree of protection, mated	IP65/IP68 (1 m, 1 h)
Degree of protection, unmated	IP2X
Overvoltage category	III
Locking system	Locking type
Contact system	MULTILAM
Type of termination	Crimping
Contact material	Copper, tin plated
Insulation material	PA
Flammability class	UL94-V0
TÜV Rheinland certified according to IEC 62852:2014+Amd.1:2020	R 60127171
UL recognized component in accordance with UL6703	E343181
Maximum altitude above sea level for operation	5000 m
Temperature level according to IEC TS 63126	Level 2

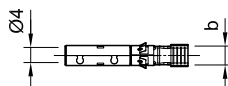
Dimensional drawings

MC4-Evo 2 socket panel receptacle

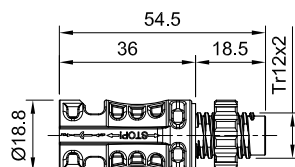
Dimensions in mm



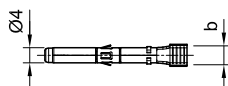
PV-ADB4-EVO 2A/...



MC4-Evo 2 plug panel receptacle

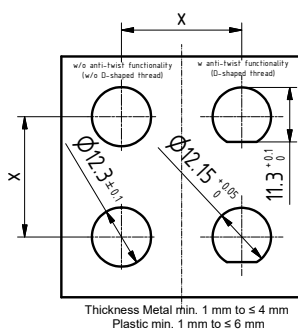


PV-ADS4-EVO 2A/...



Note

When using panel receptacles in housings (e.g. inverter maker) confirm that the minimum plastic wall thickness shall be between 1 mm and 6 mm; on metal housings, wall thickness shall be between 1 mm and 4 mm. In case of wall thickness undercut or exceedance, the panel receptacle usage in the end-application has to be verified by the installer.



Ordering information

Order No. ¹⁾	Type	Socket	Plug	Width of crimp opening	IEC 62852			UL 6703			Approvals	
				b (mm)	mm ²	DC V	A	AWG	DC V	A	TÜV Rheinland	UR
32.0344P0001	PV-ADB4-EVO 2A/2.5	x		4.0	2.5	1500	32				x	x
								14	1500	30		
32.0345P0001	PV-ADS4-EVO 2A/2.5		x	4.0	2.5	1500	32				x	x
								14	1500	30		
32.0346P0001	PV-ADB4-EVO 2A/6	x		5.8	4	1500	42				x	x
					6	1500	47					
								12	1500	39		
								10	1500	50		
32.0347P0001	PV-ADS4-EVO 2A/6		x	5.8	4	1500	42				x	x
					6	1500	47					
								12	1500	39		
								10	1500	50		
32.0352P0001	PV-ADB4-EVO 2A/10	x		6.5	10	1500	62				x	x
								8	1500	70		
32.0353P0001	PV-ADS4-EVO 2A/10		x	6.5	10	1500	62				x	x
								8	1500	70		

Note:

For more detailed information concerning suitable cable glands, please consult the corresponding assembly instructions.

Note:

Unmated connectors must be protected from any contamination using Stäubli protective caps. For ordering information concerning Stäubli protective caps, please consult the catalog "Tools and accessories".

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Further information



Tools and accessories

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www.staubli.com/re-downloads.html → English → Catalog → **Tools and accessories**



Assembly instructions

For assembly instructions for "MC4-Evo 2 panel receptacle" please consult:

www.staubli.com/re-downloads.html → English → Assembly info → **MA713**

MC4-Evo 2 panel receptacle

Insulating part and crimp contacts on reel

MC4-Evo 2 socket panel receptacle



PV-ADB4-EVO 2A/...

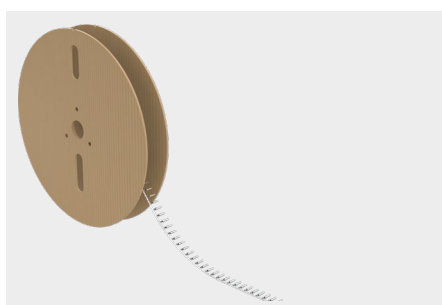
MC4-Evo 2 plug panel receptacle



PV-ADS4-EVO 2A/...

- MC4-Evo 2 panel-receptacle connectors are the interface between the inverter or the distributor housing and PV module string.
 - Assembly directly via the threads or in the perforated plate with the plastic nut (contained in scope of delivery).
 - Thanks to the D-shape thread the connection is secured against twisting.
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- approved without constraints.
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 - Fast and clean connection.
 - Plug compatible with the original MC4 connector family.
 - With preassembled flat seal.
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Contacts on carrier band



Reel with contacts

Technical data	
Connector system	Ø 4 mm
Ambient temperature range	-40 °C...+85 °C
Upper limiting temperature	115 °C
Degree of protection, mated	IP65/IP68 (1 m, 1 h)
Degree of protection, unmated	IP2X
Overvoltage category	III
Locking system	Locking type
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Contact material	Copper, tin plated
Insulation material	PA
Flammability class	UL94-V0
TÜV Rheinland certified according to IEC 62852:2014+Amd.1:2020	R 60127171

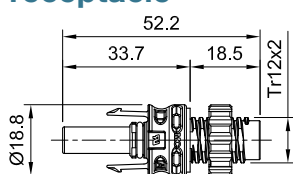
Technical data

UL recognized component in accordance with UL6703	E343181
Maximum altitude above sea level for operation	5000 m
Temperature level according to IEC TS 63126	Level 2

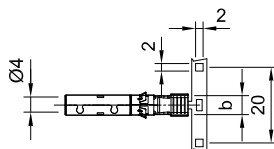
Dimensional drawings

MC4-Evo 2 socket panel receptacle

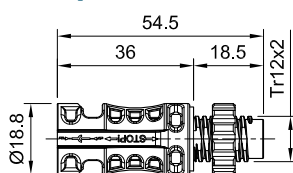
Dimensions in mm



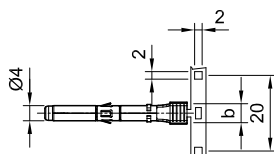
PV-ADB4-EVO 2A/...



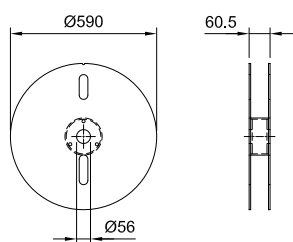
MC4-Evo 2 plug panel receptacle



PV-ADS4-EVO 2A/...



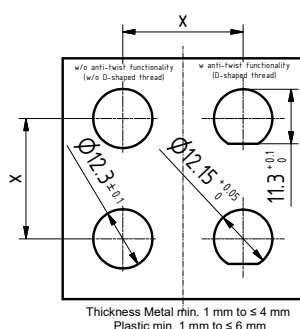
Contacts on carrier band



Reel with contacts

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								14	1500	30			
32.0345P2000	PV-ADS4-EVO 2A/2.5		x	4.0	2.5	1500	32				2000	x	x
								14	1500	30			
32.0346P2000	PV-ADB4-EVO 2A/6	x		5.8	4	1500	42				2000	x	x
					6	1500	47						
								12	1500	39			
								10	1500	50			
32.0347P2000	PV-ADS4-EVO 2A/6		x	5.8	4	1500	42				2000	x	x
					6	1500	47						
								12	1500	39			
								10	1500	50			
32.0352P1500	PV-ADB4-EVO 2A/10	x		6.5	10	1500	62				1500	x	x
								8	1500	70			
32.0353P1500	PV-ADS4-EVO 2A/10		x	6.5	10	1500	62				1500	x	x
								8	1500	70			

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Further information


Tools and accessories

For related Stäubli tools and accessories please consult:

www.staubli.com/re-downloads.html → English → Catalog → **Tools and accessories**


Assembly instructions

For assembly instructions for "MC4-Evo 2 panel receptacle" please consult:

www.staubli.com/re-downloads.html → English → Assembly info → **MA713**



● Stäubli Units ○ Representatives/Agents

Global presence of the Stäubli Group

www.staubli.com