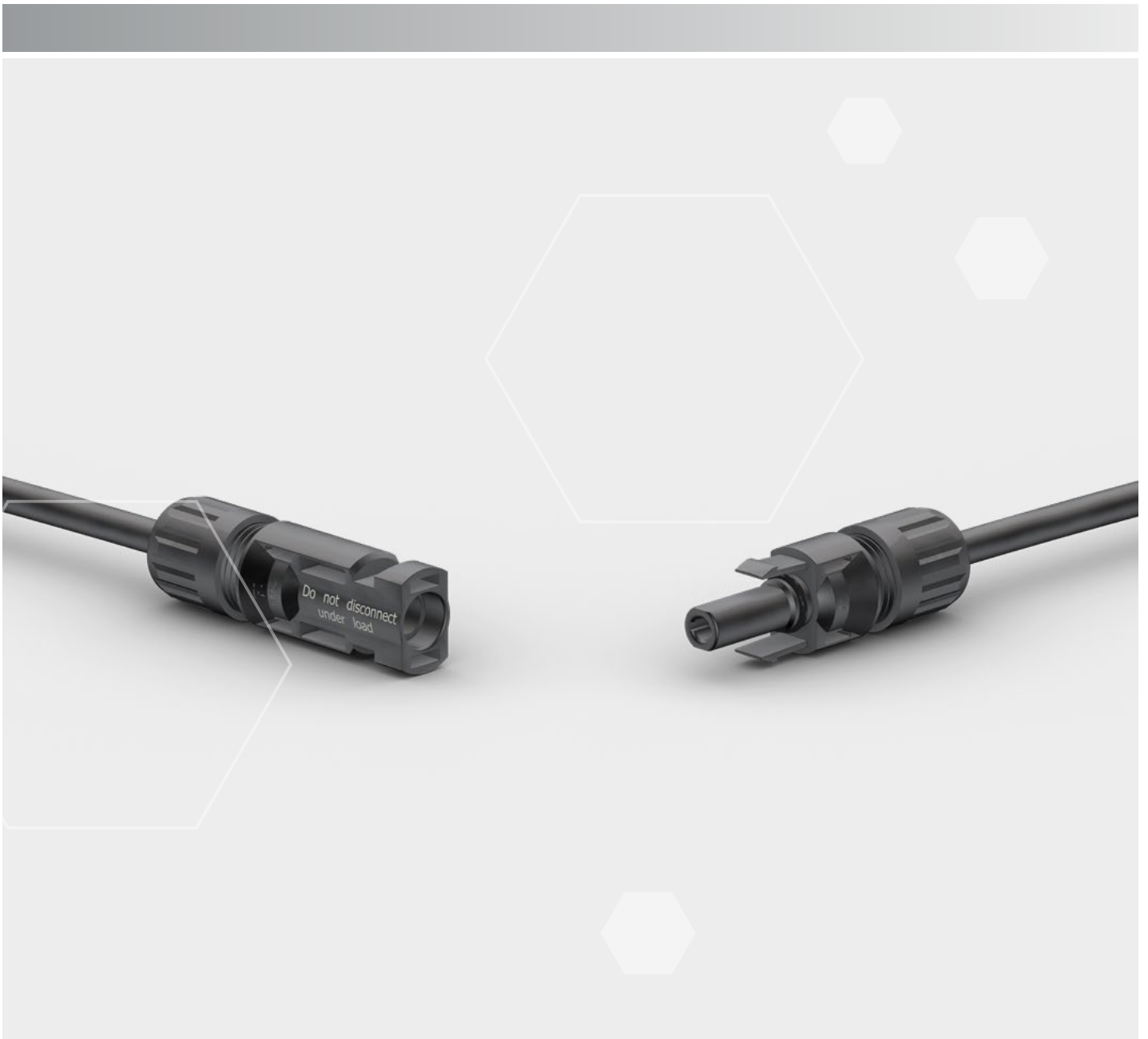


Photovoltaic main catalog

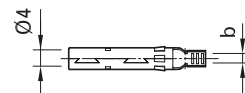
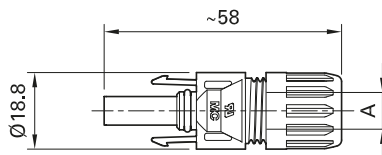
Solarline | Connectors for renewable energy



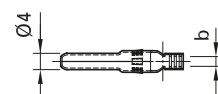
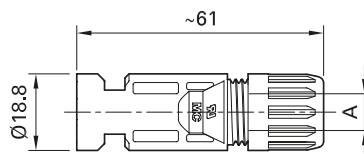
Female and male cable coupler MC4

Female and male cable coupler as individual part (including insulating part)

PV-KBT4...



PV-KST4...



Order No.	Type	Female cable coupler	Male cable coupler	Ø range of cable gland	Conductor cross section			Approvals			
					A (mm)	mm ²	AWG	b (mm)	TÜV	UL	SA
32.0010P0001-UR	PV-KBT4/2,5I-UR	x		5-6	2.5	14	3				
32.0011P0001-UR	PV-KST4/2,5I-UR		x	5-6	2.5	14	3				
32.0140P0001-UR	PV-KBT4/2,5X-UR	x		5.5-7.4	2.5	14	3				
32.0141P0001-UR	PV-KST4/2,5X-UR		x	5.5-7.4	2.5	14	3				
32.0012P0001-UR	PV-KBT4/2,5II-UR	x		5.9-8.8	2.5	14	3				
32.0013P0001-UR	PV-KST4/2,5II-UR		x	5.9-8.8	2.5	14	3	x	x	x	x
32.0014P0001-UR	PV-KBT4/6I-UR	x		5-6	4; 6	12; 10	5				
32.0015P0001-UR	PV-KST4/6I-UR		x	5-6	4; 6	12; 10	5				
32.0142P0001-UR	PV-KBT4/6X-UR	x		5.5-7.4	4; 6	12; 10	5				
32.0143P0001-UR	PV-KST4/6X-UR		x	5.5-7.4	4; 6	12; 10	5				
32.0016P0001-UR	PV-KBT4/6II-UR	x		5.9-8.8	4; 6	12; 10	5				
32.0017P0001-UR	PV-KST4/6II-UR		x	5.9-8.8	4; 6	12; 10	5				
32.0080-UR	PV-KBT4/8II-UR	x		6.05-8.56	-	8	4.4		x	x	
32.0081-UR	PV-KST4/8II-UR		x	6.05-8.56	-	8	4.4				
32.0034P0001	PV-KBT4/10II	x		5.9-8.8	10	-	7.2				x
32.0035P0001	PV-KST4/10II		x	5.9-8.8	10	-	7.2	x			

Note:

For more detailed information concerning the suitable cable gland range, please consult MA231



Assembly Instructions MA231

www.staubli.com/electrical



Sealing caps page 53

Assembly tools page 58

- Snap-in lock
- In accordance with NEC 2014, requires a tool to open
- Proven MULTILAM technology with high long-term stability, which ensures consistently low performance loss throughout the entire service life of the plug connector
- Tried and tested plug connectors, over 15 years of experience in the field
- Available for assembly with cross-sections of 10 mm²
- Also available as ready made leads
- Leads made to customer's specifications, see page 60

Technical data	
Connector system	Ø 4 mm
Rated voltage	1000 V DC (IEC 62852) 1500 V DC (2Pfg2330) ¹⁾ 600 V DC / 1000 V DC / 1500 V DC (UL) ²⁾
Rated current TÜV (85°C)	22.5 A (2.5 mm ²) 39 A (4 mm ² /6 mm ²) 45 A (10 mm ²)
Rated current UL	22.5 A (14 AWG) 30 A (12 AWG/10 AWG) 50 A (8 AWG)
Rated impulse voltage	12 kV (1000 V DC (TÜV)) 16 kV (1500 V DC (TÜV))
Ambient temperature range	-40°C...+85°C (TÜV) -40°C...+75°C (UL)
Upper limiting temperature	105°C (TÜV)
Degree of protection, mated unmated	IP65, IP68 (1 h/1 m) IP2X
Overvoltage category/Pollution degree	CATIII/3
Contact resistance of plug connectors	≤0.25 mΩ
Safety class	1000 V DC: II 1500 V DC: 0
Contact system	MULTILAM
Type of termination	Crimping
Contact material	Copper, tin plated
Insulation material	PC/PA
Locking system (UL)	Locking type
Flame class	UL94-V0
Ammonia resistance (acc. to DLG)	1500 h, 70°C/70% RH, 750 ppm
Salt mist spray test, degree of severity 6	IEC 60068-2-52
TÜV-Rheinland certified, in accordance with IEC 62852	R60111354 ³⁾
TÜV-Rheinland certified, in accordance with 2Pfg2330	R60087448
UL recognized component, in accordance with UL 6703	E343181
CSA certified, in accordance with UL 6703	250725
CQC certified according CNCA/CTS0002-2012	CQC16024138286

¹⁾ 2Pfg2330: only approved for locations with restricted access

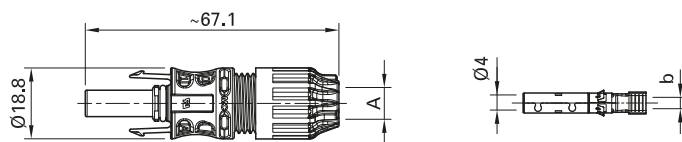
²⁾ for selected configurations; see assembly instructions MA231 for details

³⁾ For PV junction boxes in accordance with IEC62790, lines in accordance with EN50618 must be used

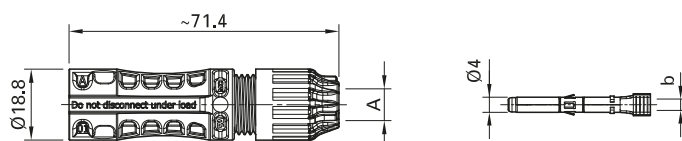
Female and male cable coupler MC4-Evo2

Female and male cable coupler as individual part (including insulating part)

PV-KBT4-EVO 2/...-UR



PV-KST4-EVO 2/...-UR



Order No.	Type	Female cable coupler	Male cable coupler	Ø range of cable gland		Conductor cross section		Approvals
				A (mm)	b (mm)	mm ²	AWG	
32.0082P0001-UR	PV-KBT4-EVO 2/2,5I-UR	x		4.7-6.4	3	2.5	14	
32.0083P0001-UR	PV-KST4-EVO 2/2,5I-UR		x	4.7-6.4				
32.0084P0001-UR	PV-KBT4-EVO 2/2,5II-UR	x		6.4-8.4	5	4; 6	12; 10	
32.0085P0001-UR	PV-KST4-EVO 2/2,5II-UR		x	6.4-8.4				
32.0086P0001-UR	PV-KBT4-EVO 2/6I-UR	x		4.7-6.4	7.2	10	8	
32.0087P0001-UR	PV-KST4-EVO 2/6I-UR		x	4.7-6.4				
32.0088P0001-UR	PV-KBT4-EVO 2/6II-UR	x		6.4-8.4	7.2	10	8	
32.0089P0001-UR	PV-KST4-EVO 2/6II-UR		x	6.4-8.4				
32.0092P0001-UR	PV-KBT4-EVO 2/10II-UR	x		6.4-8.4	7.2	10	8	
32.0093P0001-UR	PV-KST4-EVO 2/10II-UR		x	6.4-8.4				

Note:

For more detailed information concerning the suitable cable gland range, please consult MA273.



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Assembly tools page 58



Assembly Instructions MA273

www.staubli.com/electrical

- Internationally certified with IEC, UL, JET, cTÜVus.
- Approved for 1500 V DC (IEC, JET), 1500 V DC (UL) unrestricted access
- MULTILAM Technology, has proven the quality and durability several 100 million times since 2004
- Suited for all climatic environments thanks to resistance to UV, ammonia, and high IP class (IP68).
- Available as a field and preassembled connector, standard crimping tools can be used.

Technical data	
Connector system	Ø 4 mm
Rated voltage	1000 V DC / 1500 V DC (TÜV) ¹⁾ 600 V DC / 1000 V DC / 1500 V DC (UL) ²⁾ 1500 V DC (JET) ³⁾
Rated current TÜV (85°C)	39 A (2.5 mm ² / 14 AWG) 45 A (4.0 mm ² / 12 AWG) 53 A (6.0 mm ² / 10 AWG) 69 A (10.0 mm ² / 8 AWG)
Rated impulse voltage	12 kV (1000 V) 16 kV (1500 V)
Ambient temperature range	-40°C ... +85°C (TÜV/UL)
Upper limiting temperature	115°C (TÜV)
Degree of protection, mated unmated	IP65 / IP68 (1h / 1m) IP2X
Overvoltage category / Pollution degree	CAT III / 3
Contact resistance of plug connectors	≤ 0.2 mΩ
Safety class	II
Contact system	MULTILAM
Type of termination	Crimping
Contact material	Copper, tin plated
Insulation material	PA
Locking system (UL)	Locking type
Flame class	UL94-V0
Ammonia resistance (acc. to TÜV)	Q60095359
TÜV-Rheinland certified, in accordance with IEC 62852:2014	R60098495
UL recognized component, in accordance with UL 6703	E343181
cTÜVus certified according UL 6703	CU 72141256 01
JET certified according IEC 61730-1:2004	B13T0062

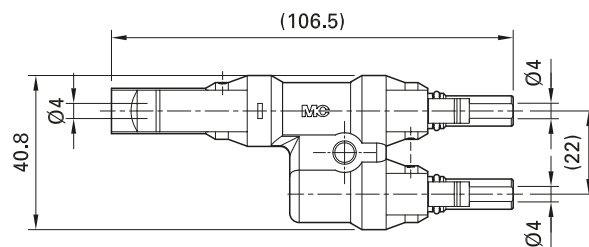
¹⁾ Please take the cable to be used from MA273

²⁾ The connectors are to be used with USE2 or PV-Wire cables.

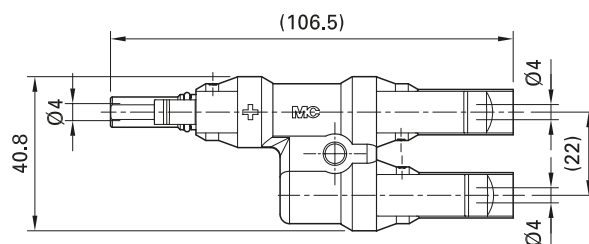
³⁾ The connectors are to be used with cables with the "S-JET mark" label.


Branch socket, branch plug MC4

PV-AZB4



PV-AZS4



Order No.	Type	Description	Approvals
32.0018	PV-AZB4	Branch socket	
32.0019	PV-AZS4	Branch plug	



Sealing caps page 53

Unlocking tool page 58

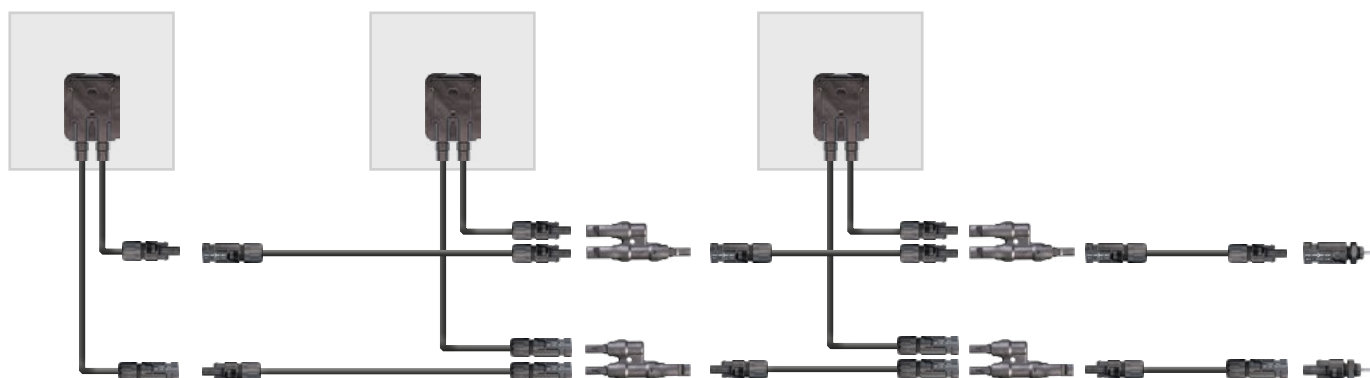


Assembly Instructions MA250

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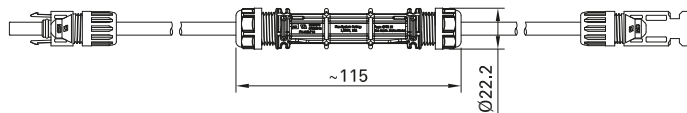
- For a safe and simple parallel or serial-parallel connection of PV-modules.
- Pluggable with single-pole Stäubli PV-cable coupler MC4. Unmated connections must be protected by sealing caps.


Technical data	
Connector system	Ø 4 mm
Rated voltage	1500 V DC (UL)
Rated current	50 A
Rated impulse voltage	12 kV
Ambient temperature range	-40°C...+85°C (UL)
Upper limiting temperature	105°C (Stäubli)
Degree of protection, mated unmated	IP67 IP2X
Overvoltage category/Pollution degree	CATIII/2
Contact resistance of plug connectors	≤0.5 mΩ
Safety class	II
Contact system	MULTILAM
Contact material	Copper, tin plated
Insulation material	PC
Locking system (UL)	Locking type
Flame class	UL94-V0
UL recognized component, in accordance with UL 6703	E343181



In-line-Fuse PV-K/ILF

PV-K/ILF...UL



Order No.	Type	Safety	Type of connector/socket	Length	Approvals
		A/V	mm	cm	
55000140-0050UL	PV-K/ILF4/6N0050UL	4/1000	MC4	50	
55000127-0050UL	PV-K/ILF10/6N0050UL	10/1000			
55000128-0050UL	PV-K/ILF15/6N0050UL	15/1000			
55000129-0050UL	PV-K/ILF20/6N0050UL	20/1000			
55000130-0050UL	PV-K/ILF30/6N0050UL	30/1000	MC4	55	
55000189-0055UL	PV-K/1500ILF4/6N0055UL	4/1500			
55000190-0055UL	PV-K/1500ILF10/6N0055UL	10/1500			
55000191-0055UL	PV-K/1500ILF15/6N0055UL	15/1500			
55000192-0055UL	PV-K/1500ILF20/6N0055UL	20/1500			


Crimping pliers for private use PV-CZM-BS

Suitable for the assembly of products approved by TÜV in small amounts.

Complete tool for the assembly of the original MC4.

PV-CZM-BS

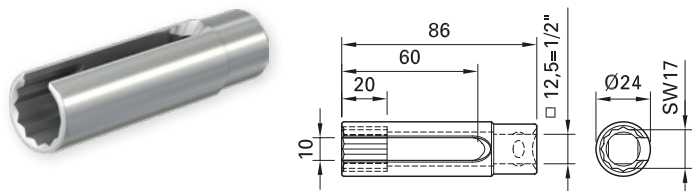


Order No.	Type	Crimp range		suitable for		 Assembly instruction
		mm ²	AWG	MC4	MC4-Evo2	
32.6025	PV-CZM-BS	2.5; 4; 6	–	×		MA289

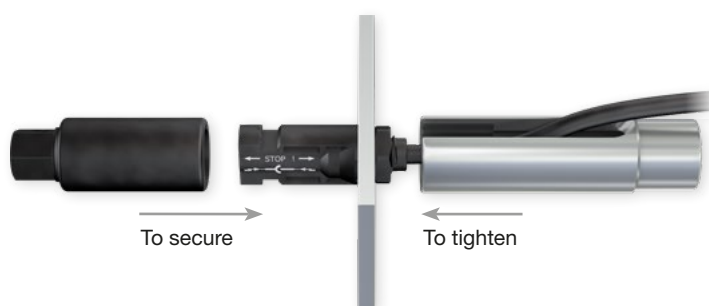
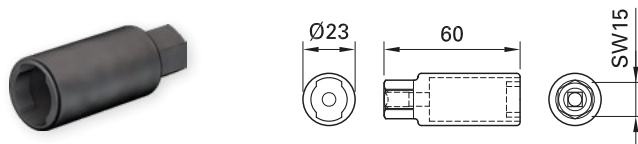
Socket wrench insert


Stäubli recommends these socket wrench inserts for a simple and safe assembly of the panel receptacles.

PV-WZ-AD/GWD



PV-SSE-AD4

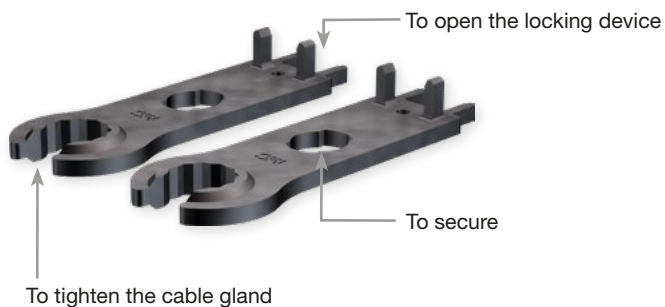


Order No.	Type	suitable for panel receptacles	 Assembly instruction
32.6006	PV-WZ-AD/GWD	MC4	MA231, MA260, MA275
32.6026	PV-SSE-AD4	MC4	MA231, MA260, MA275

Open-end spanner and unlocking tool MC4, MC4-Evo2 and MC4-EvoAC

To tighten and unscrew the cable gland and to open the locking device of the connection.

PV-MS



PV-MS-PLS




PV-MS-PLS/G



PV-MS-EVO AC



Order No.	Type	Description	suitable for	 Assembly instruction
32.6024	PV-MS	Open-end spanner set (consisting of 2 open-end spanners), plastics	MC4	MA231, MA260
32.6058	PV-MS-PLS	Assembly and unlocking tool, incl. belt pouch (consisting of 2 open-end spanners), metal	MC4 MC4-Evo2	MA270
9410888400	PV-MS-PLS/G	Unlocking tool	MC4 MC4-Evo2	
32.6075	PV-MS-EVO AC	Unlocking tool	MC4-EvoAC	MA284



■ Stäubli Units ○ Agents

Global presence of the Stäubli Group

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