

Advanced Contact Technology

Multi-Contact

MC

STÄUBLI GROUP

Solarline

Steckverbinder für erneuerbare Energie
Connectors for Renewable Energy
Connecteurs pour énergies renouvelables

Overview for Installers
More than 15 years of experience in photovoltaics

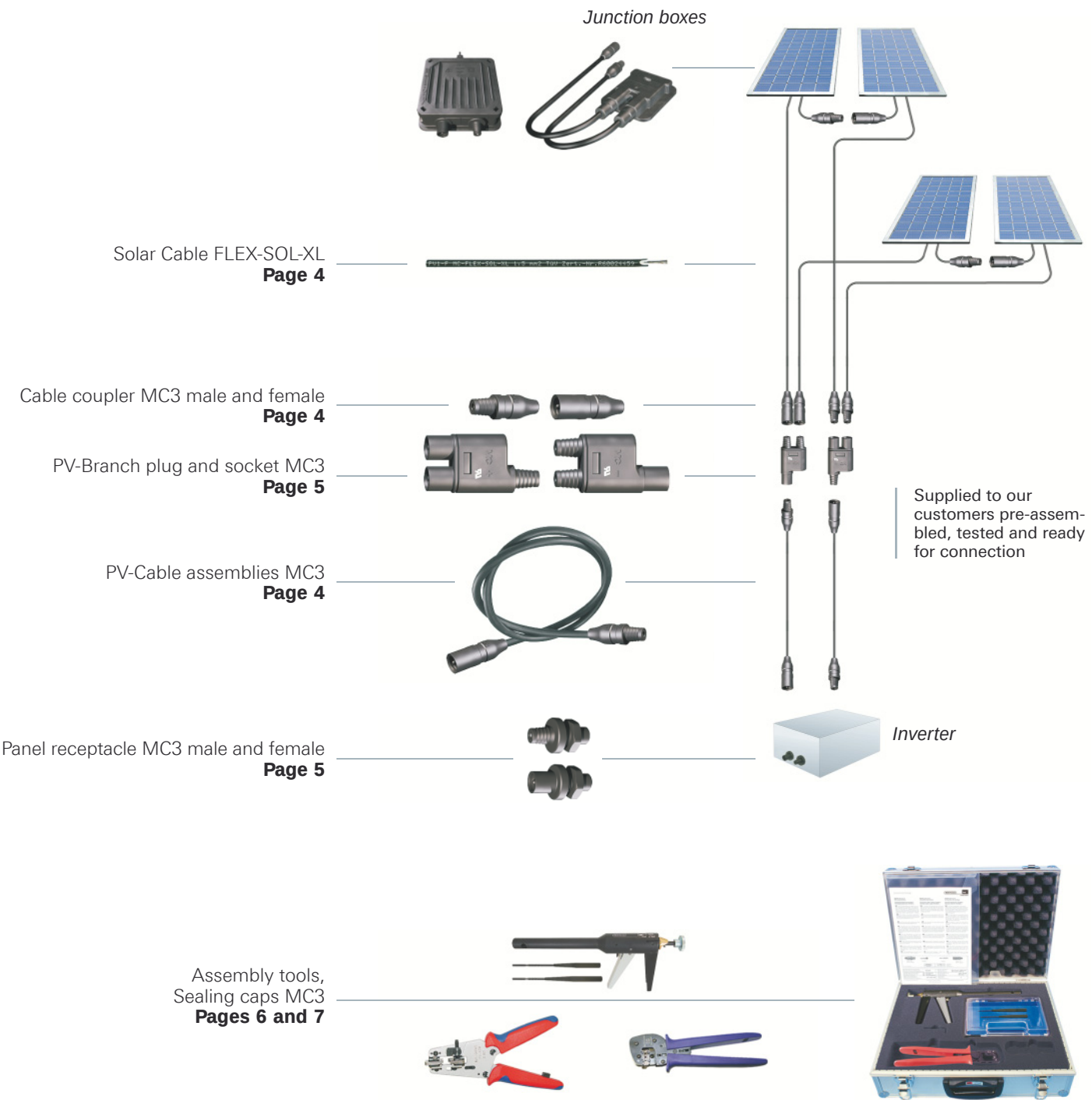
MC3 and MC4

N

MC3 Connector system for photovoltaic



Cabling from the module to the inverter

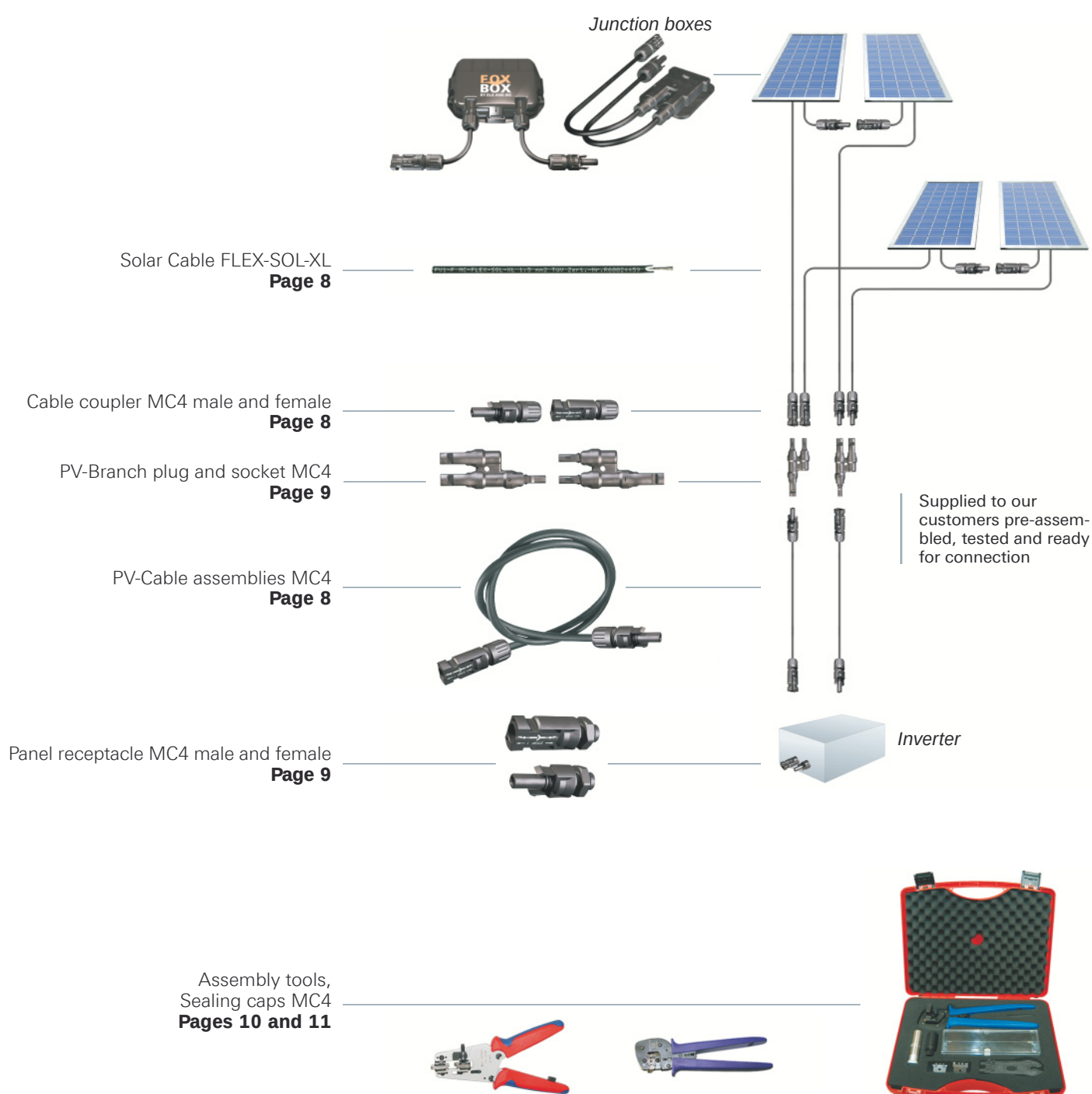


MC4 Connector system for photovoltaic

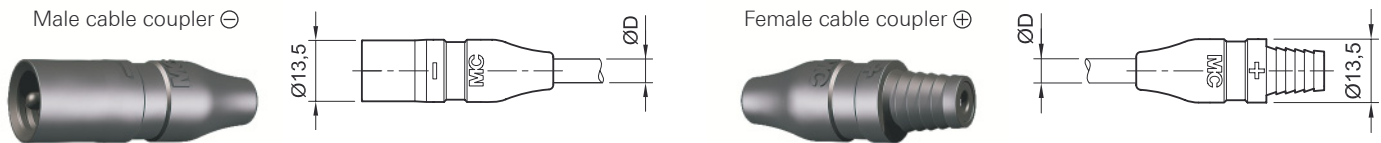


MC4 Ø 4mm

Cabling from the module to the inverter



Male and female cable coupler MC3



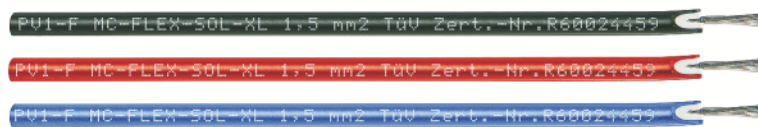
Cable cross section	Ø D (Cable outer diameter)	Male cable coupler Order No.	Female cable coupler Order No.	Rated voltage	Bemessungsspannung	Approvals	
2 – 4mm ²	4,9 – 7,1mm	32.0003	32.0002	20A	1000V		MA207
2 – 4mm ²	6,5 – 9,0mm ¹⁾	32.0005	32.0004	20A	1000V		
6mm ²	4,9 – 7,1mm	32.0047	32.0046	30A	1000V		
6mm ²	6,5 – 9,0mm ¹⁾	32.0007	32.0006	30A	1000V		
2 – 4mm ²	4,9 – 7,1mm	32.0003-UR	32.0002-UR	20A	600V		
6mm ²	6,5 – 9,0mm ¹⁾	32.0007-UR	32.0006-UR	30A	600V		

¹⁾ With assembly device PV-RWZ3, up to Ø 7,6mm; pre-assembled cable, up to Ø 9mm (see below)

Assembly tools see page 6

Solar Cable FLEX-SOL-XL

The single-pole, double insulated solar cable FLEX-SOL-XL was particularly designed for photovoltaic applications. The cable is TÜV certified and fulfills the latest quality standards.



Type	Order-No.	Cardboard box	Order-No.	Spool	Conductor cross section	Conductor Ø	Rated current ¹⁾	Conductor resistance/20°C	Rated voltage	Colours
		m		m	mm ²	mm	A	Ω/km	VDC	
FLEX-SOL-XL 2,5	62.7426-110*	150	62.7426-910*	700	2,5	5,1	41	7,7	1000	
FLEX-SOL-XL 4,0	62.7427-110*	100	62.7427-910*	500	4,0	5,8	55	4,75	1000	21 22 23
FLEX-SOL-XL 6,0	62.7428-110*	75	62.7428-910*	400	6,0	7,0	70	3,39	1000	

* Add the desired colour code

¹⁾ Nominal current up to +60°C ambient temperature according to DIN VDE 0298, part 4

PV-Cable assemblies MC3

We recommend Multi-Contact's various PV-connectors and cable assemblies for safe and professional cabling.

Ordering Information					
Type	Order-No.	Female ⊕	Cable type	Male ⊖	Colours
	32.1063-2)*	•	FLEX-SOL-XL 4,0 (4mm²)	○	
	32.1064-2)*	○	FLEX-SOL-XL 4,0 (4mm²)	•	
	32.1065-2)*	•	FLEX-SOL-XL 4,0 (4mm²)	•	
	32.1066-2)*	•	FLEX-SOL-XL 6,0 (6mm²)	○	21 22 23
	32.1067-2)*	○	FLEX-SOL-XL 6,0 (6mm²)	•	
	32.1068-2)*	•	FLEX-SOL-XL 6,0 (6mm²)	•	

• Cable with connector

○ Free cable end

²⁾ Length in cm, please indicate

* Add the desired colour code

Male and female panel receptacle MC3

Male panel receptacle



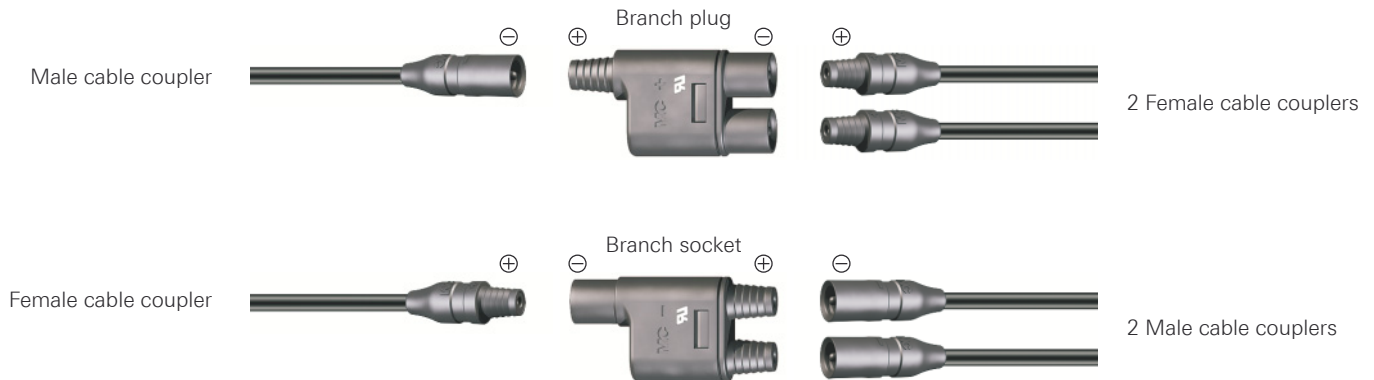
Female panel receptacle



Cable cross section	Male panel receptacle Order No.	Female panel receptacle Order No.	Rated current	Rated voltage	Approvals
2 – 4mm ²	32.0053	32.0052	20A	1000V	
6mm ²	32.0049	32.0048	30A	1000V	

PV-Branch plug and socket MC3

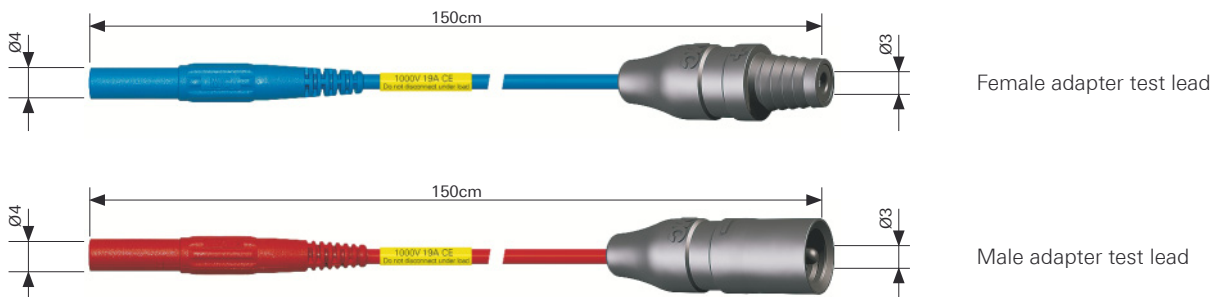
For safe and simple parallel- or serialparallel connection of PV-modules..



Branch plug Order No.	Branch socket Order No.	Rated current ¹⁾	Rated voltage	Approvals
32.0009-UR	32.0008-UR	30A (6mm ²)	1000V (IEC/CEI) 600V (UL)	

PV-Adapter test leads MC3

One end with MC3 PV plug connector, other end with Ø 4mm safety plug for measuring instruments for safe current and voltage-measuring on PV-modules and systems.

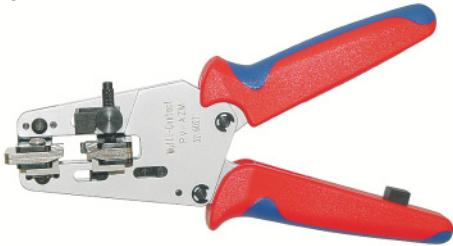


Male adapter test lead Order-No.	Female adapter test lead Order-No.	Rated current	Rated voltage
32.1099-150* 21 22	32.1098-150* 21 23 29	19A	1000V

* Add the desired colour code

Stripping pliers

With length stop for conductor cross sections 1,5mm², 2,5mm², 4mm² and 6mm². Specially adapted for the FLEX-SOL-XL PV cable, for stripping small cable quantities on the site.



For cable cross sections mm²	Order-No.	see assembly instruction	
1,5 / 2,5 / 4 / 6	32.6027	MA207, MA223	

Crimping pliers MC3

For flexible cable only (class 5 and 6).



Crimping pliers MC3¹⁾

Crimping pliers incl. locator and insert



	For cable cross sections mm²	Order-No.	see assembly instruction	
1	2,5 / 4	32.6008	MA207, MA223	
2	2,5 / 4 / 6	32.6020-16100A	MA251	

¹⁾ With exchanged locator and insert also suitable for MC4, see catalogue 2 Solarline

Assembly device MC3 (incl. 2 tapered spindles)

For assembly of the male and femal cable coupler, incl. tapered spindles. Suitable for on-site use.



Description	Order-No.	see assembly instruction	
Assembly device	32.6050	MA207	

Sealing caps MC3

Sealing caps PV-...VK3 made from TPE for tight sealing of unplugged PV connectors. To prevent loss, simply push the strap loop over the cable connector.



For plug side	For socket side	Description
32.0711	32.0710	Sealing cap MC3, with cord
32.0721	32.0720	Sealing cap MC3, without cord

Tool case MC3

Tool case contains:

- 1 Assembly instruction
- 2 Assembly device (Order-No. 32.6050)
- 3 Crimping pliers MC3 (Order-No. 32.6008)



Tool case contains:

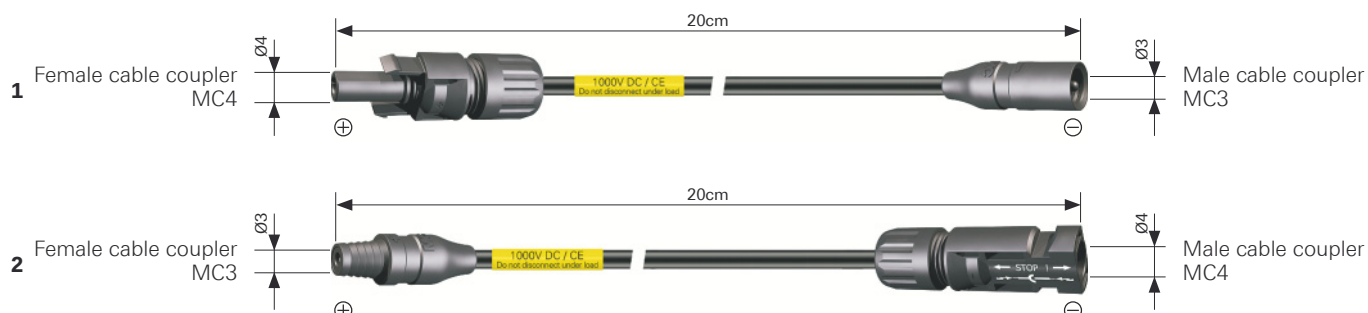
- 1 Assembly instruction
- 2 Assembly device (Order-No. 32.6050)
- 3 Crimping pliers MC3/MC4 (Order-No. 32.6020-16100 A)



Description	Order-No.	Tool case dimensions (mm)		
		width	depth	height
A Tool case MC3	32.6029	458	315	155
B Tool case MC3	13 000 591	458	315	155

PV-Adapter MC3/MC4

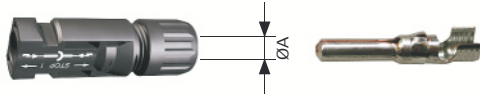
To interconnect the two MC PV-Plug connector systems MC3 and MC4.



1 PV Adapter MC4/MC3 Order-No.	2 PV Adapter MC3/MC4 Order-No.	Rated current	Rated voltage
32.6096	32.6097	20A	1000V

Male and female cable coupler MC4

Male cable coupler ⊖



Female cable coupler ⊕

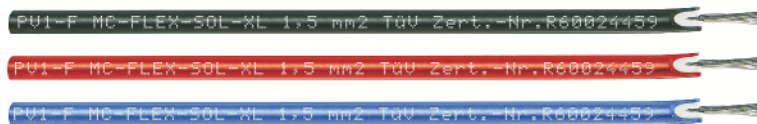


Cable cross section	Ø A (Cable outer diameter)	Male cable coupler Order No.	Female cable coupler Order No.	Rated current	Rated voltage	Approvals	
1,5 – 2,5mm ²	3 – 6mm	32.0011P0001-UR	32.0010P0001-UR	17A (1,5mm ²) 22A (2,5mm ²)	1000V (IEC/CEI) 600V (UL)		MA231
4 – 6mm ²	5,5 – 9mm	32.0017P0001-UR	32.0016P0001-UR	30A (4 – 6mm ²)	1000V (IEC/CEI) 600V (UL)		
1,5 – 2,5mm ²	5,5 – 9mm	32.0013P0001-UR	32.0012P0001-UR	17A (1,5mm ²) 22A (2,5mm ²)	1000V (IEC/CEI) 600V (UL)		
4 – 6mm ²	3 – 6mm	32.0015P0001-UR	32.0014P0001-UR	30A (4 – 6mm ²)	1000V (IEC/CEI) 600V (UL)		

Assembly tools see pages 10-11

Solar Cable FLEX-SOL-XL

The single-pole, double insulated solar cable FLEX-SOL-XL was particularly designed for photovoltaic applications. The cable is TÜV certified and fulfills the latest quality standards.



Type	Order-No.	Cardboard box	Order-No.	Spool	Conductor cross section	Conductor Ø	Rated current ¹⁾	Conductor resistance/20°C	Rated voltage	Colours
		m		m	mm ²	mm	A	Ω/km	VDC	
FLEX-SOL-XL 2,5	62.7426-110*	150	62.7426-910*	700	2,5	5,1	41	7,7	1000	
FLEX-SOL-XL 4,0	62.7427-110*	100	62.7427-910*	500	4,0	5,8	55	4,75	1000	21 22 23
FLEX-SOL-XL 6,0	62.7428-110*	75	62.7428-910*	400	6,0	7,0	70	3,39	1000	

* Add the desired colour code

¹⁾ Nominal current up to +60°C ambient temperature according to DIN VDE 0298, part 4

PV-Cable assemblies MC4

We recommend Multi-Contact's various PV connectors and cable assemblies for safe and professional cabling.

Ordering Information					
Type	Order-No.	Female ⊕	Cable type	Male ⊖	Cable Colours
	32.1133-²⁾*	•	FLEX-SOL-XL 4,0 (4mm²)	○	
	32.1134-²⁾*	○	FLEX-SOL-XL 4,0 (4mm²)	•	
	32.1135-²⁾*	•	FLEX-SOL-XL 4,0 (4mm²)	•	
	32.1136-²⁾*	•	FLEX-SOL-XL 6,0 (6mm²)	○	21 22 23
	32.1137-²⁾*	○	FLEX-SOL-XL 6,0 (6mm²)	•	
	32.1138-²⁾*	•	FLEX-SOL-XL 6,0 (6mm²)	•	

• Cable with connector

○ Free cable end

²⁾ Length in cm, please indicate

* Add the desired colour code

PV-Male and female panel receptacle MC4

(including insulating part)

Male panel receptacle

Female panel receptacle

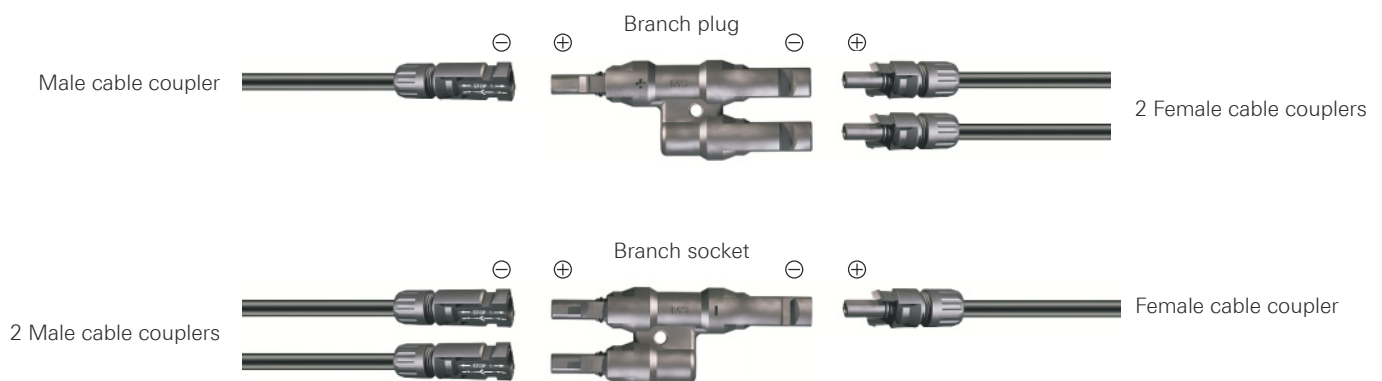


Cable cross section	Male panel receptacle Order No.	Female panel receptacle Order No.	Rated current	Rated voltage	Approvals
1,5 – 2,5mm ²	32.0055P0001	32.0054P0001	17A (1,5mm ²) 22A (2,5mm ²)	1000V (IEC/CEI)	
4 – 6mm ²	32.0057P0001	32.0056P0001	30A (4 – 6mm ²)	1000V (IEC/CEI)	

PV-Branch plug and socket MC4

For safe and simple parallel- or serialparallel connection of PV-modules.

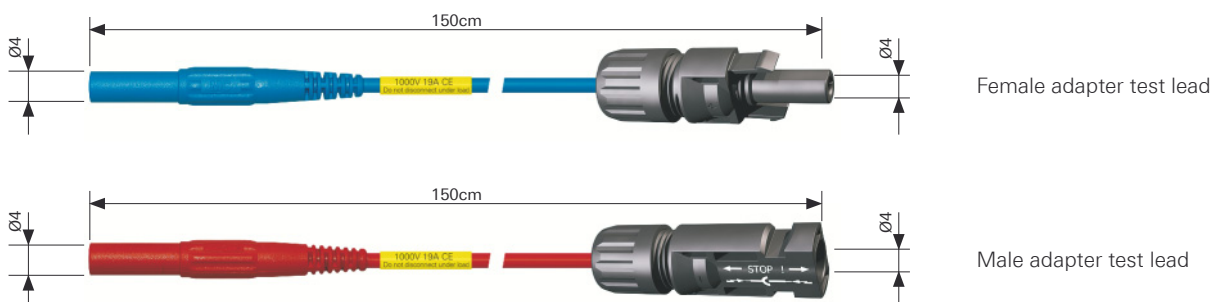
Pluggable with single-pole MC PV-cable coupler MC4.



Male cable coupler Order-No.	Female cable coupler Order-No.	Rated current ¹⁾	Rated voltage
32.0019	32.0018	30A (6mm ²)	1000V (IEC/CEI) 600V (UL)

Male and female PV-Adapter test leads MC4

One end with MC4 PV Plug connector, other end with Ø 4mm safety plug for measuring instruments for safe current and voltage-measuring on PV-modules and systems.

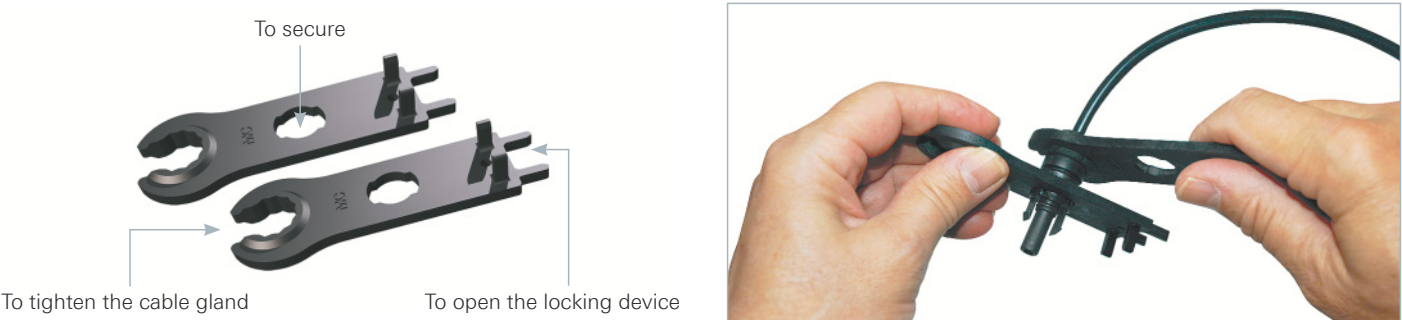


Male adapter test lead Order-No.	Female adapter test lead Order-No.	Rated current	Rated voltage
32.1199-150* 21 22	32.1198-150* 21 23 29	19A	1000V

* Add the desired colour code

Open-end spanner set MC4

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



Order-No.	See assembly instruction	
32.6024	MA252, MA231	

Safety lock clip MC4

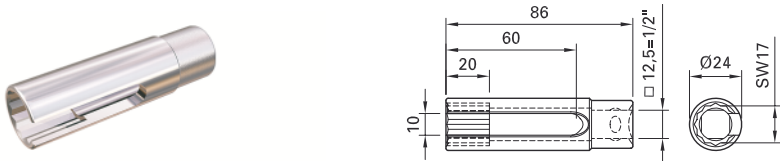
The pluggable safety lock clip secures the PV plug connection and can only be unlocked with the tool (Order-No. 32.6024).



Order-No.	See assembly instruction	
32.5280	MA252	

Socket wrench insert MC4

For the assembly of the MC4 plug connector with a torque wrench



Description	Order-No.	See assembly instruction	
Socket wrench insert	32.6006	MA231	

Sealing caps MC4

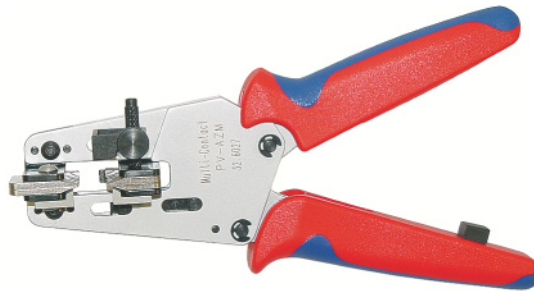
Sealing caps made from TPE for tight sealing of unplugged PV connectors.

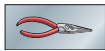


For plug side	For socket side	Description
32.0717	32.0716	Sealing cap MC4, without cord

Stripping pliers

With length stop for conductor cross sections 1,5mm², 2,5mm², 4mm² and 6mm². Specially adapted for the FLEX-SOL-XL PV cable, for stripping small cable quantities on the site.



For cable cross sections mm ²	Order-No.	see assembly instruction	
1,5 / 2,5 / 4 / 6	32.6027	MA207, MA223	

Crimping pliers MC4¹⁾

Crimping pliers incl. locator and insert.



For cable cross sections mm ²	Order-No.	see assembly instruction	
2,5 / 4 / 6	32.6020-19100 A	MA251	

¹⁾ With exchanged locator and insert also suitable for MC3, see catalogue [1 Solarline](#)

Tool case MC4

Tool case contains:

- 1 Crimping pliers MC4
- 2 Open end spanner set MC4
- 3 Plastic box

Optional:

- 4 Stripping pliers (32.6027)
- 5 Socket wrench insert to tighten (32.6006)
- 6 Socket wrench insert to secure (32.6026)
- 7 Insert 1,5mm² / 2,5mm² / 4mm² (32.6021-18100)



Description	Order-No.	Tool case dimensions (mm)		
		width	depth	height
Tool case MC4	32.6019	345	275	90

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More about our photovoltaic products:

1 Solarline
Catalogue MC3

2 Solarline
Catalogue MC4

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