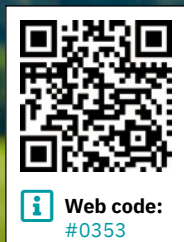# Photovoltaic connectors

Product overview 2025

PHŒNIX CONTACT

Photovoltaic connectors for DC and AC cabling

Are you looking for reliable and innovative connection technology for your photovoltaic panels, inverters, or for the complete photovoltaic system? If so, Phoenix Contact is the right partner for you.

We offer the perfect, comprehensive solution for cabling your photovoltaic system.

Web code:
#0353

Contents

Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter # and the four-digit number in the search field on our website.

ⓘ **Web code:** #1234 (example)

Or use the direct link:
phoenixcontact.com/webcode/#1234

The right connection for every application

The efficiency, reliability, and safety of components are crucial for the profitability of an investment. Connectors and accessories from Phoenix Contact for the cabling of photovoltaic systems are tailored to your application. Whether DC, AC, or hybrid applications: Secure the return on your investment with SUNCLIX, PRC, and VARIOCON connectors.

Web code: #0543

SUNCLIX series DC connectors

- Voltages up to 1,500 V
- Currents up to 60 A
- Conductor cross-sections from 2.5 to 16 mm²
- SUNCLIX spring connection
- Crimp connection
- Degree of protection IP66/IP68 (24 h/2 m)

PRC series AC connectors

- Connection technology for string and micro inverters
- Voltages up to 690 V
- Currents up to 35 A
- Conductor cross-sections from 1.5 to 6 mm²
- Screw and crimp connection
- PRC: Degree of protection IP66/IP68 (24 h/2 m)/IP69K

Ground-mounted systems

Installing the maximum possible number of PV panels in the shortest possible time: This requires preassembled connectors and connectors with fast-connection technology.


Rooftop systems

Compact DC connectors are ideal for cramped installation conditions. With the SUNCLIX spring connection, wiring is easy and reliable – without special tools.

Product range overview of photovoltaic connectors

Consistent connection technology from the photovoltaic panel to feed-in

We have the right connection solution for you – from connection technology for photovoltaic panels and DC connectors for field cabling to device connection for signals, data, and power.

The coordinated, high-quality components make a sustainable contribution to your long-term high system availability.

Web code:
#0353
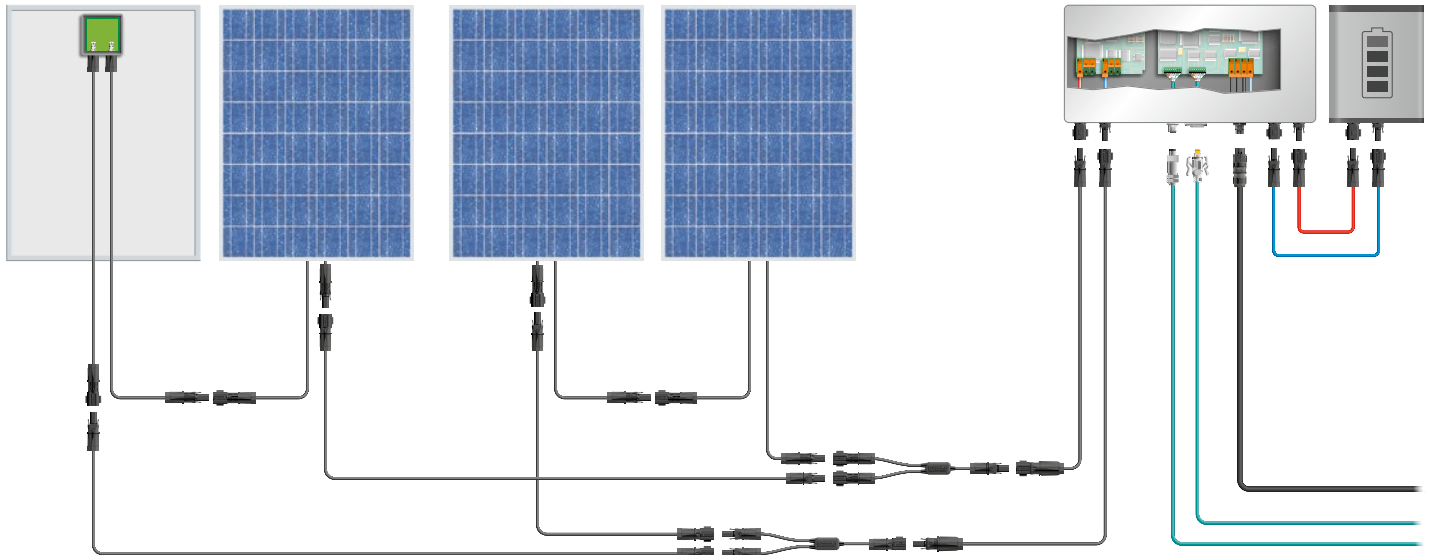
Safety and reliability at market-oriented terms – the Phoenix Contact connection technology portfolio for the international solar market

Generating electrical energy from photovoltaic systems is vital for the power supply of today and tomorrow. This development began with market incentive programs in various regions, but was primarily driven by the Electricity Feed Act in Germany. The potential rates of return from photovoltaic systems were the main motivation for investors to enter this market.

Quality in the details ensures reliability in the system

Today, photovoltaics is a mainstay of the power supply in a growing number of global economies. This means that the electricity must be generated at the lowest possible cost, while ensuring that power is supplied reliably and continuously. Using components with a balanced cost-benefit ratio was and continues to be crucial for the basic return on investment of a

photovoltaic system. The lowest initial investment is worthless if the calculated capital return does not materialize over the service life of the project due to loss of efficiency or failure. However, as soon as photovoltaics becomes relevant to the system, where the economy and the public depend on its reliable function, the failsafe performance of components, and therefore their quality, plays an increasingly important role.

Phoenix Contact has a clear policy of never compromising on quality. Confidence in our company and our products is the foundation for all our business. This is also reflected in our connection technology portfolio for the solar market. Innovative products, sophisticated designs, high-quality materials with long-term stability, and excellent service ensure safety and customer satisfaction. Market-oriented

and competitive terms complement this approach.

Product overview

PCB terminal blocks without insulating bodies

For the fast and secure connection of module junction boxes.

DC connectors with crimp connection

For the field-side connection of your PV panels.

DC connectors with SUNCLIX spring connection

For field-side connection to the device.

Cable-based DC distributors

For fast parallel interconnection of photovoltaic panels.

DC panel feed-throughs

For device connection, preassembled or designed for assembly.

AC connectors

For grid-side connection.

Data and signal connectors

Copper and fiber-optic-based data connectors and signal connectors, M5 to M23, 3- to 19-pos.
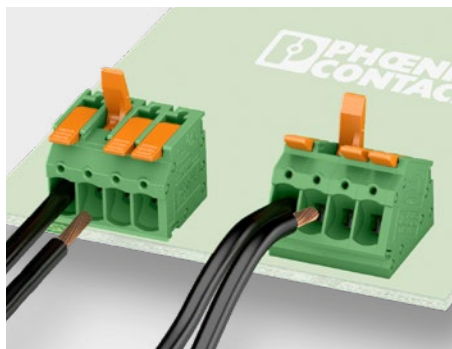
PCB terminal blocks and PCB connectors

For transmitting signals, data, or power.

DC connection technology for PV panels

Using cost-optimized PCB terminal blocks without insulating bodies, you can connect flexible cables to your module junction box quickly and safely. SUNCLIX connectors with crimp connection are ideal for connecting solar panels on the field side and cable assemblies. They are designed for automated processing and meet established international standards.

Web code:
#0361

SUNCLIX DC connectors with crimp connection

- Just one connector for all crimp contacts
- Suitable for automated processing
- Voltages up to 1,500 V
- Currents up to 40 A (IEC), 50 A (UL)
- Conductor cross-sections from 2.5 to 4 mm² (AWG 14 to 12) and 6 mm² (AWG 10)
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with DIN EN 62852, UL 6703
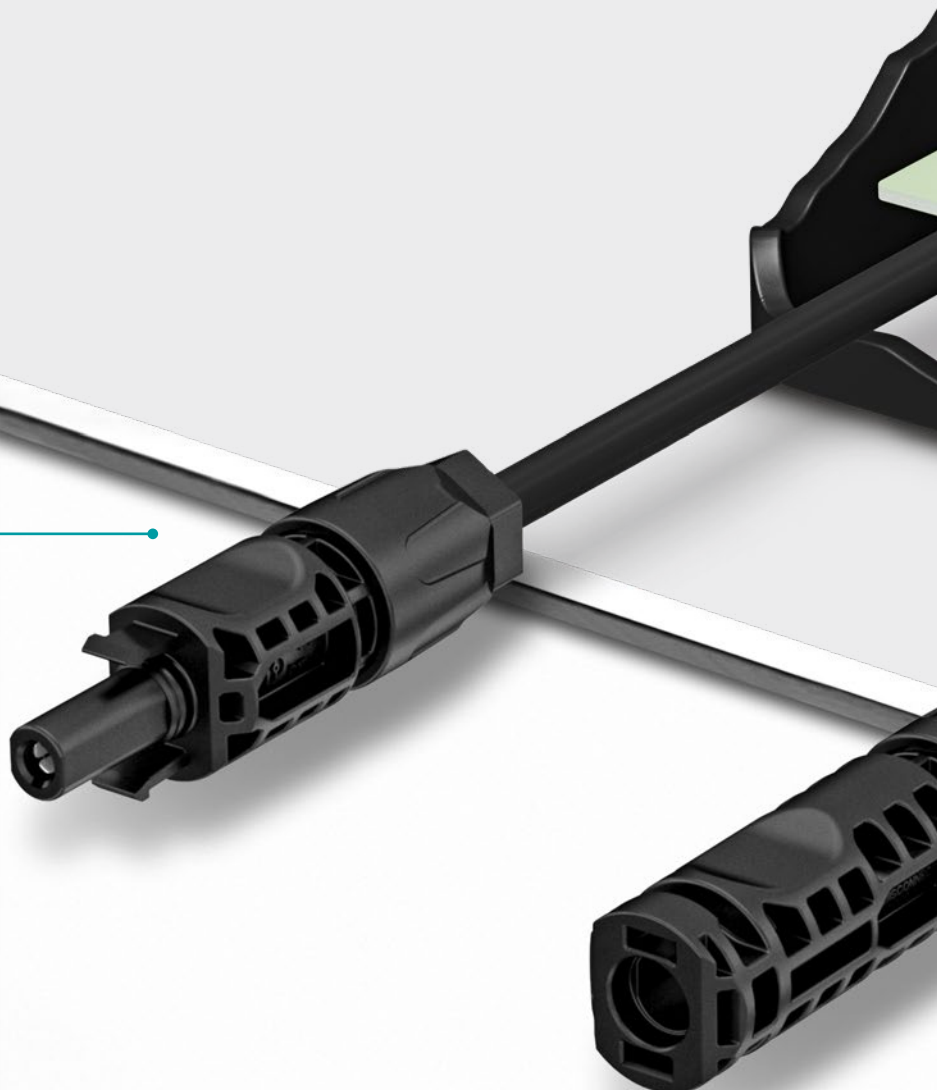
PTSPL 6 PCB terminal block with solder connection

- Designed for automated THR soldering processes
- Available with 2.1 and 2.9 mm solder pin lengths
- Closed version with Push-in connection
- Supplied with open or closed spring on 32 mm reel for automated processes
- Currents up to 41 A
- SUNCLIX spring connection for conductor cross-sections from 2.5 to 6 mm^2
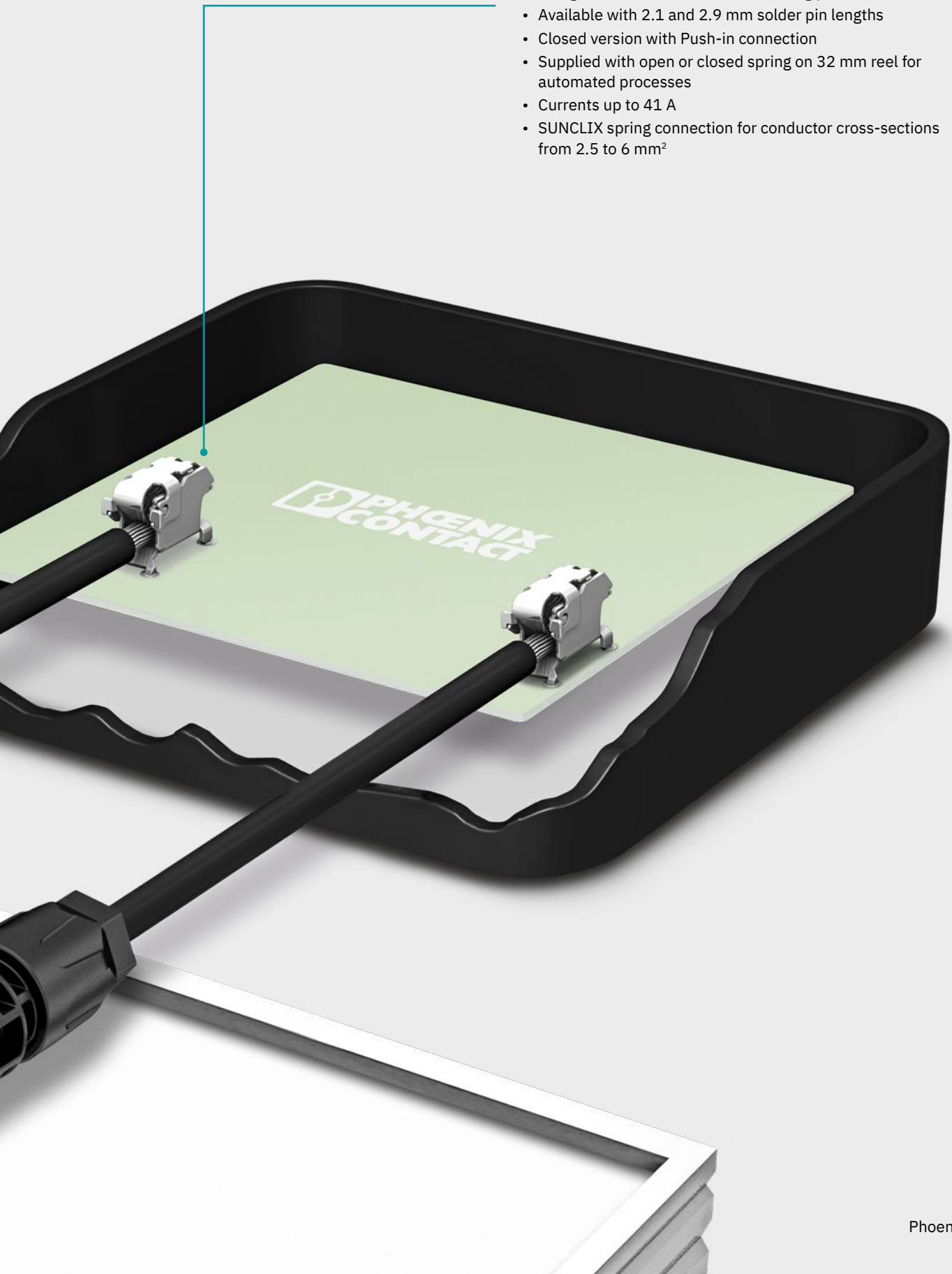
DC connection technology for field cabling

Wire your photovoltaic system efficiently, safely, and reliably from the module through to the inverter – with the SUNCLIX connection system from Phoenix Contact.

The one-piece DC connectors can be connected quickly and easily without using special tools. The unique spring technology ensures permanently reliable and stable conductor contacting.

A comprehensive range of accessories allows the demands placed on quick and safe system installation to be met in accordance with current normative requirements.

Web code:
#0543

DC connectors with crimp connection

- Voltages up to 1,500 V
- Currents up to 40 A (IEC), 50 A (UL)
- For conductor cross-sections from 2.5 to 6 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703
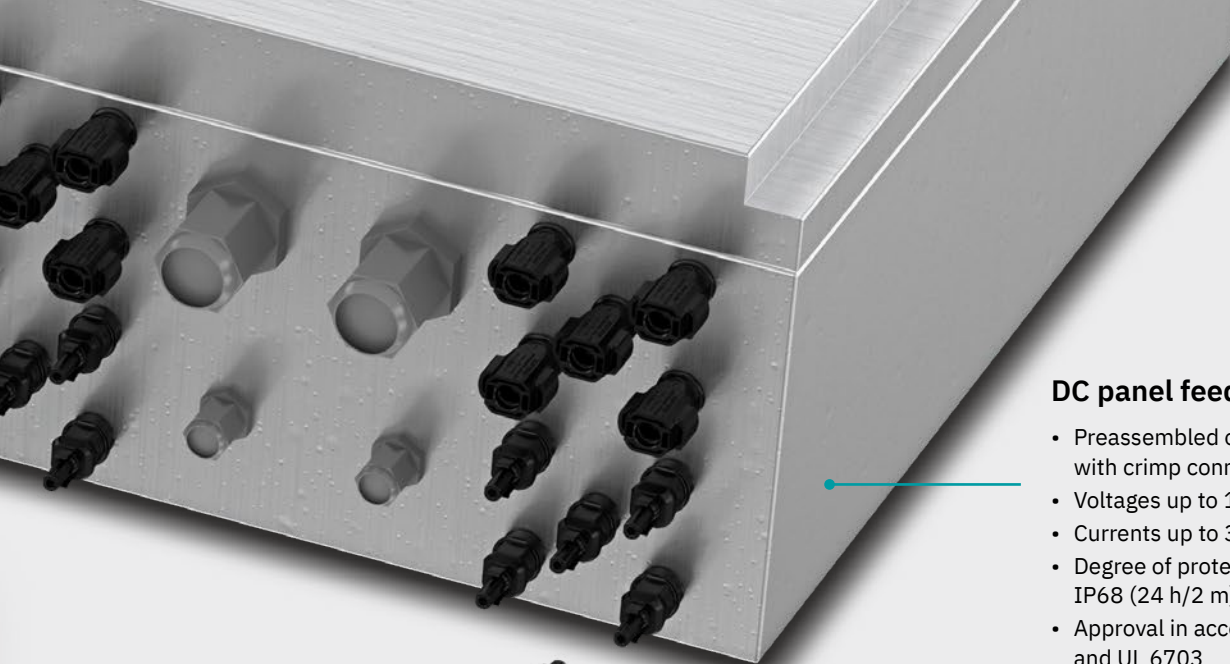
DC panel feed-throughs

- Preassembled or designed for assembly with crimp connection
- Voltages up to 1,500 V
- Currents up to 38 A (IEC), 50 A (UL)
- Degree of protection IP65/IP66/IP67/ IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703

DC connectors for field assembly

- Patented SUNCLIX spring connection
- Voltages up to 1,500 V
- Currents up to 60 A
- Just two versions cover conductor cross-sections from 2.5 to 16 mm²
- Degree of protection IP65/IP66/IP67/ IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703

DC distributors

- For the parallel connection of modules and strings
- Customer-specific preassembly possible
- Optimized for voltages up to 1,500 V
- Currents up to 35 A
- Approval in accordance with 2PfG 1913/04.2011 and IEC 62852

SUNCLIX spring connection

1. Insert the stripped photovoltaic conductor
2. Press down the spring and snap it into place
3. Tighten the screw connection – and you're done!

ohne Spezialwerkzeug
without special tools

AC and DC connection technology for device connection

Phoenix Contact provides a comprehensive range for connection to devices in all performance classes. Whether AC or DC, circular or rectangular, for signals, data, or power – the connectors cover a wide range of requirements. Device connectors, PCB connection technology, and accessories complete the comprehensive portfolio.

Web code:
#035

SUNCLIX DC connectors with spring connection

- Patented SUNCLIX spring connection
- Voltages up to 1,500 V
- Currents up to 60 A
- Just two versions cover conductor cross-sections from 2.5 to 16 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703

Signal and data connectors

- Copper and fiber optic-based data connectors
- M5 to M23 signal connectors, 3- to 19-pos.
- Shielded with a round conductor within the device, 6 kV electric strength, easy routing
- Preassembled connector systems and connector systems designed for assembly
- Solutions for IP20, IP65/IP67, and IP69K
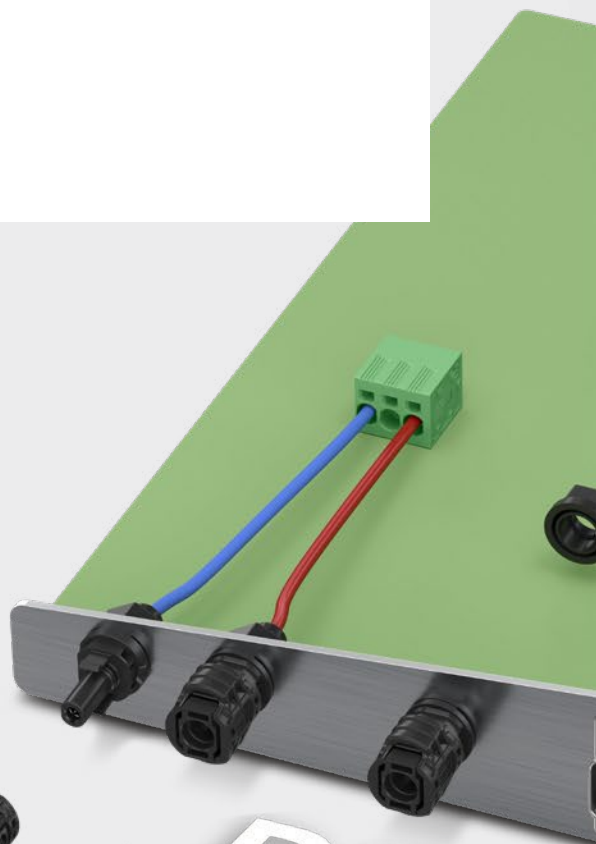
PWO 16-UW/S panel feed-through terminal block with Push-in connection

- Easy connection and removal of conductors with a tool-free, time-saving Push-in connection on the outside
- The screw connection with tension sleeve on the inside
- Voltages up to 1,000 V
- Currents up to 76 A
- Conductor cross-section from 1.5 to 16 mm²
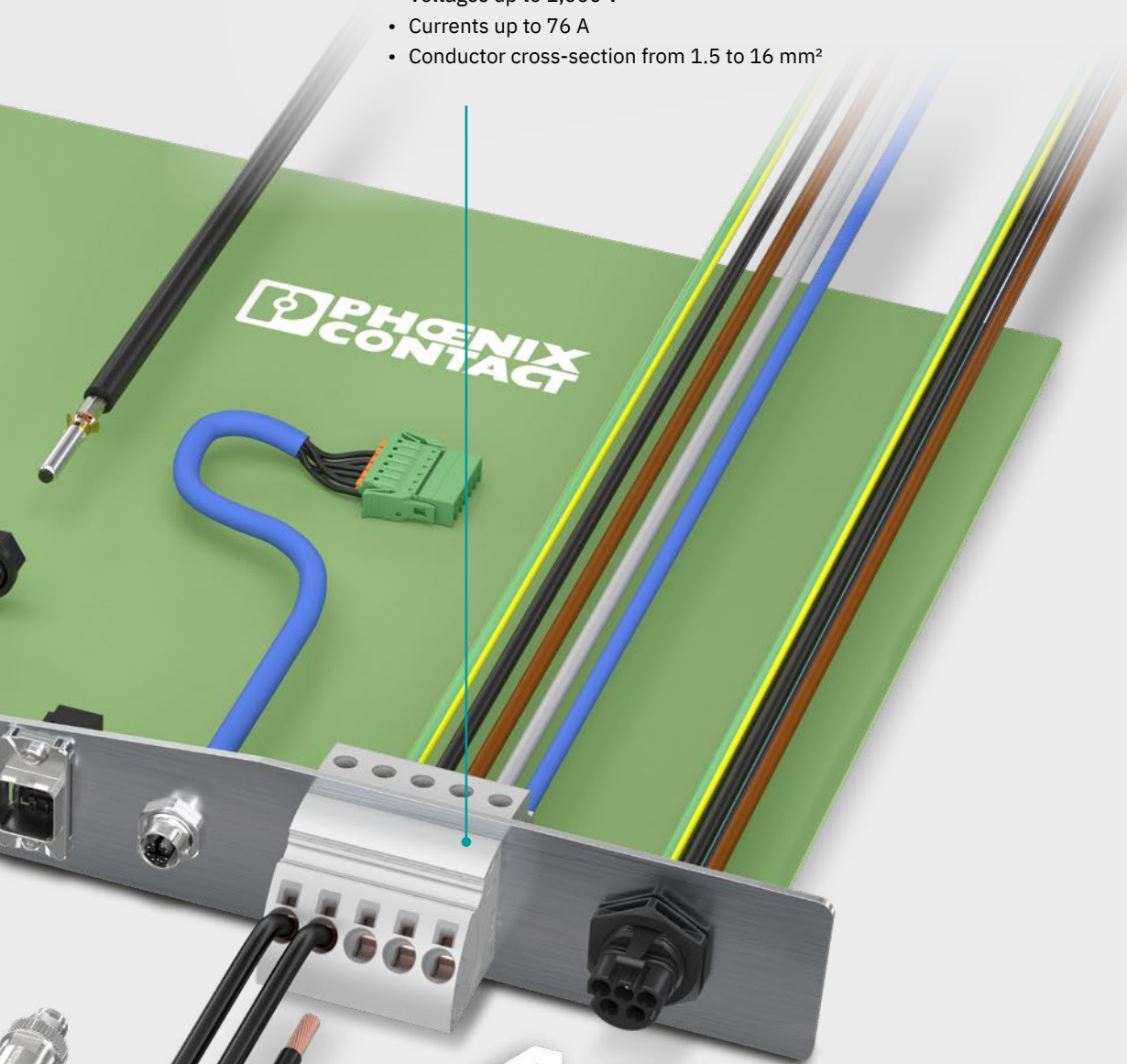
PRC AC connectors with screw connection

- For 1-phase and 3-phase devices
- Can be sealed
- Voltages up to 690 V
- Currents up to 35 A
- Conductor cross-section from 1.5 to 6 mm²
- Degree of protection IP66/IP68 (24 h/2 m)/IP69

Installation system for photovoltaic system technology

Circular connectors from the PRC series are ideal for compact and safe power transmission in outdoor applications. The device, coupler, and field connectors are manufactured from special plastics. They allow countless connection solutions for micro and string inverters, as well as for tracking systems and battery storage systems. The comprehensive range of accessories and customer-specific versions provide additional flexibility.

i Web code:
#1628

The best connection

Cable too short, damaged, or cut through? The PRC conductor connectors can be used anywhere, even where you would like to implement a secure power connection over the long term. Made of robust plastic, PRC conductor connectors are UV and salt water resistant, impact resistant, and waterproof. In addition, the PRC cable end cap offers the possibility of protecting free cable ends against penetrating moisture and subsequent conductor corrosion in the short and long term.

i **Web code:** #2885
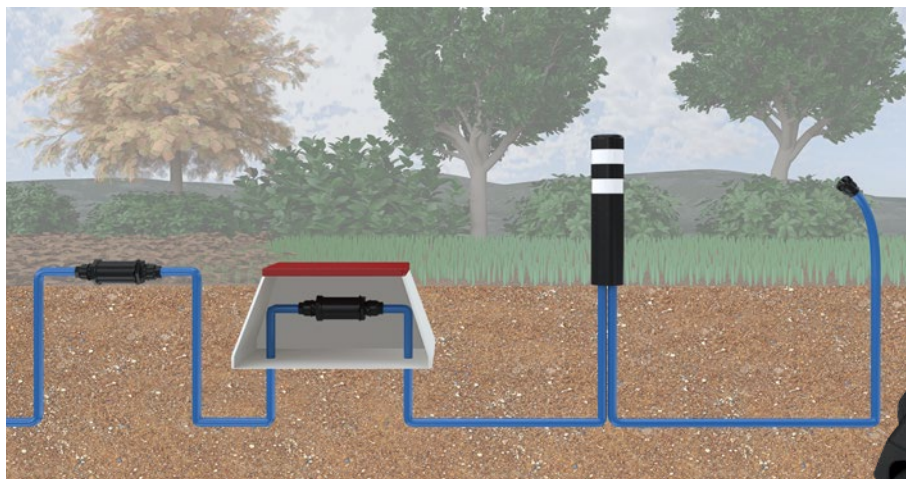
Your advantages

- ✓ 3- and 5-pos. versions, enabling a high power density in a compact design
- ✓ Developed and certified for indoor and outdoor applications with degrees of protection up to IP69K
- ✓ Unplugged device connectors also feature a longitudinal water tightness of IPX5 degree of protection
- ✓ High flexibility in the design-in process with preassembled device connectors and device connectors designed for assembly

AC device connectors

3-pos. and 5-pos. versions with attached litz wires or for self-assembly
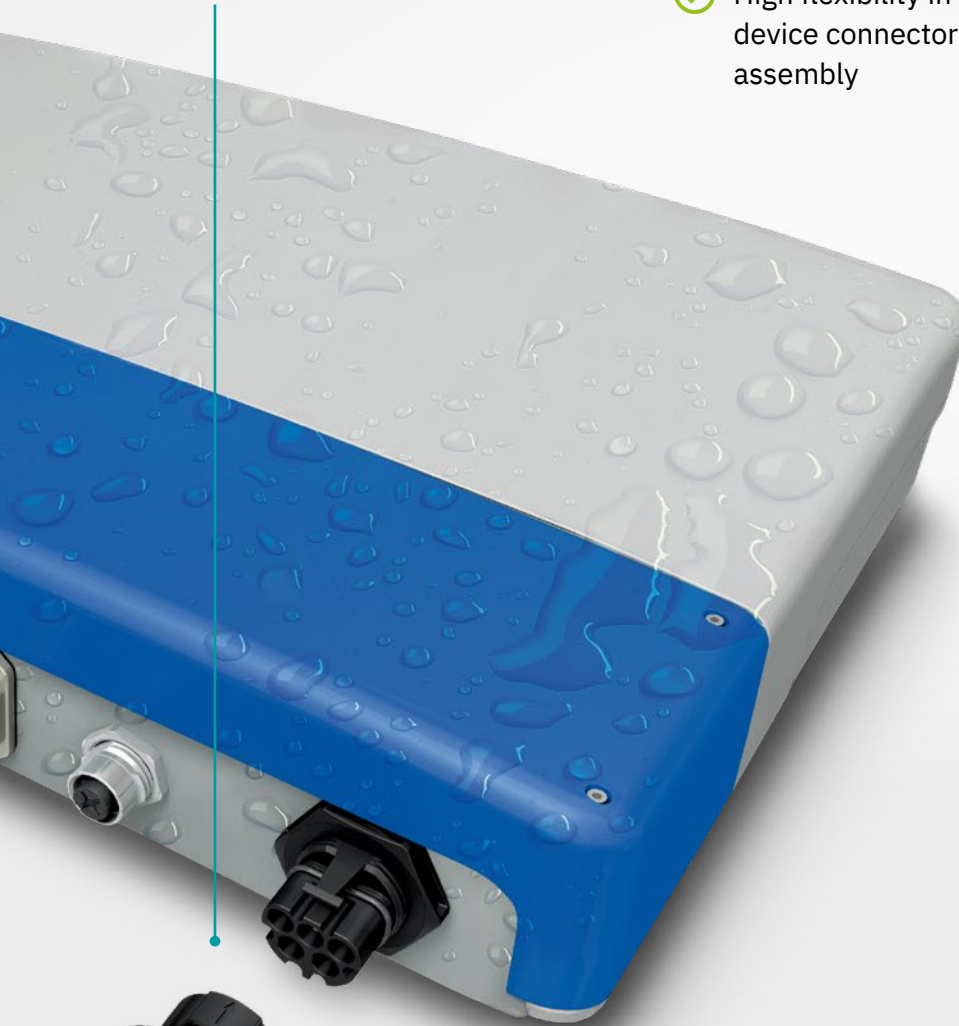
AC connectors with screw connection

Connectors or couplings, 3-pos. and 5-pos. versions, with screw connection for cables with an outside diameter of 8 to 21 mm

DC connection technology for PV panels

PCB terminal blocks without insulating bodies

PCB connection for photovoltaic applications		
Description	**Push-Lock PCB terminal block with spring connection for tin-plated circular conductors or conductors with ferrules**	

	Solder pin length	Item no.	Solder pin length	Item no.
	2.1 mm	1704836	2.1 mm	1705081
	2.9 mm	1704837	2.9 mm	1705085
Version	Closed		Open	
Number of positions	1			
Cross-section	Max. 6 mm²			

Housings and contacts

SUNCLIX DC connectors designed for assembly, with crimp connection

Description	Housing for crimp connector, male (-)	Housing for crimp connector, female (+)	Male (-) crimp connector with unlocking function	Contacts for crimp connection		Contacts for crimp connection (bulk goods in poly bag)	
Type	Male (-)	Female (+)	Male (-)	Male	Female	Male	Female
Item no.	1050770	1050771	1196766	1457398 1050768 1457400 1050766	1478435 1050769 1478436 1050767	1196770 1196772 1196768 1196771	1196767 1196774 1196769 1196775
Cross-section	–	–	–	2.5 / 4 mm² / 6 mm² (14 AWG / 12 AWG / 10 AWG)	2.5 / 4 mm² / 6 mm² (14 AWG / 12 AWG / 10 AWG)	2.5 / 4 mm² / 6 mm² (14 AWG / 12 AWG / 10 AWG)	2.5 / 4 mm² / 6 mm² (14 AWG / 12 AWG / 10 AWG)
Cable outer diameter	5 mm ... 8 mm	5 mm ... 8 mm	5 mm ... 8 mm	–	–	–	–
Rated voltage	1500 V (1500 V UL)	1500 V (1500 V UL)	1500 V (1500 V UL)	–		–	
Rated current	–	–	–	Max. 35 A Max. 40 A		Max. 38 A (IEC) Max. 50 A (UL)	Max. 26...32 A (IEC) Max. 30...35 A (UL)
Degree of protection	IP68 (24 h / 2 m)	IP68 (24 h / 2 m)	IP68 (24 h / 2 m)	–		–	
Product information	Temperature range: -40°C ... +85°C, protection class II, approval in accordance with UL 6703 and IEC 62852			Approval in accordance with UL 6703 and IEC 62852 Pcs./Pkt.: 1000 / 3000 pcs. per roll		Approval in accordance with IEC 62852 and UL 6703 Pcs./Pkt.: 50 / 250 pcs. in a poly bag	

DC connection technology for field cabling

Connectors						ⓘ Web code: #0358
SUNCLIX DC connectors, designed for assembly, with SUNCLIX spring connection						
Description	Field connectors with spring-cage connection					
Type	Male (-)	Female (+)	Male (-)	Female (+)	Male (-)	Female (+)
Item no.	1386384	1386381	1020775	1020776	1284632	1284634
Cross-section	2.5 mm² ... 6 mm²		2.5 mm² ... 6 mm²		6 mm² ... 16 mm²	
Rated voltage	1100 V		1500 V		1500 V	
Rated current	Max. 35 A		Max. 35 A (IEC) / 50 A (UL)		Max. 60 A (IEC)	
Degree of protection	IP66 / IP68 (24 h / 2 m)		IP66 / IP68 (24 h / 2 m)		IP66 / IP68 (2 h / 2 m)	
Product information	Temperature range: -40°C ... +85°C, protection class II, approval in accordance with IEC 62852		Temperature range: -40°C ... +85°C, protection class II, approval in accordance with UL 6703 and IEC 62852		Temperature range: -40°C ... +85°C, protection class II, approval in accordance with IEC 62852	

DC connection technology for device connection

Preassembled DC device connectors

SUNCLIX DC device connectors, 130 mm litz wire length, other lengths available on request

Description	Device plugs					
Type	Male	Female	Male	Female	Male	Female
Item no.	1158446	1158445	1158449	1158447	1158451	1158448
Cross-section	2.5 mm²		4 mm²		6 mm²	
Rated voltage	1500 V		1500 V		1500 V	
Rated current	Max. 26 A		Max. 32 A		Max. 38 A	
Degree of protection	IP65 / IP66 / IP68 (24 h / 2 m)		IP65 / IP66 / IP68 (24 h / 2 m)		IP65 / IP66 / IP68 (24 h / 2 m)	
Product information	Temperature range: -40°C … +85°C, approval in accordance with IEC 62852, required accessories: 1146092					

DC device connectors designed for assembly

Description	Housing		Wall mount	Contacts		Contacts (bulk goods in poly bag)	
Type	Female	Male	–	Female	Male	Male	Female
Item no.	1133364	1133365	1146092	1478435 1050769 1478436 1050767	1457398 1050768 1457400 1050766	1196770 1196772 1196768 1196771	1196767 1196774 1196769 1196775
Cross-section	–			2.5 mm² / 4 mm² / 6 mm² (14 AWG / 12 AWG / 10 AWG)			
Rated voltage	1500 V		–				
Rated current	–			2.5 mm² … 4 mm²: max. 32 A (ICE) / 35 A (UL) 6.0 mm²: max. 38 A (ICE) / 50 A (UL)			
Degree of protection	IP66 / IP68 (24 h/2 m)		–				
Product information	Temperature range: -40°C … +85°C, approval in accordance with IEC 62852 and UL 6703, required accessories: 1146092		Wall mount for securing the device plugs in the housing	Approval in accordance with IEC 62852 and UL 6703 Pcs./Pkt.: 1000 / 3000 pcs. per roll		Approval in accordance with IEC 62852 and UL 6703 Pcs./Pkt.: 50 / 250 pcs. in a poly bag	

Accessories

Description	Filler plug	Filler plug	Protective cap
Item no.	1775631	1623478	1785430
Product information	Filler plug for SUNCLIX connectors, IP67 in the cable gland, 1000 V	Filler plug for SUNCLIX connectors, IP67 in the cable gland, 1500 V	IP67 protective cap for SUNCLIX connectors, transport protection for the pin connector pattern, for sealing and protecting unused device inputs and for transport protection.

DC connection technology for field cabling

Connection systems		Web code: #0358
SUNCLIX		
Description	**DC distributor, cable-based**	**Adapter set SUNCLIX / MC4**
Product information	Connection set with branch line (6 mm²) for fast parallel interconnection of photovoltaic modules. Length of each individual cable 120 mm, other lengths available upon request.	Connection of SUNCLIX connectors to type MC4 connectors from Stäubli without voiding the product warranty or guarantee for the MC4 connectors.
Item no.	1030649	1030650	1079531
Version	Set of 1x string SUNCLIX male to MC4 female and 1x string from SUNCLIX female to MC4 male (as per product image)	–
Trunk line cross-section	6 mm²	
Rated voltage	1500 V	1500 V
Rated current	38 A in accordance with IEC 62852	Up to 38 A in accordance with IEC 62852 / UL 6703
Degree of protection	IP68 (1 h / 1 m)	IP68 (1 h / 1 m)
Ambient temperature (operation)	-40°C ... +85°C	-40°C ... +85°C

PRC series AC connection technology

Panel feed-throughs

Description	Device plugs with crimp connection			Contact carriers		Contacts		
				With nut	Without nut			
Item no. 3-pos.	1409219	1409220	1409221	1409218	1627608	1409207	1409208	1409209
Item no. 5-pos.	1409211	1409212	1409213	1409206	1627609			
Conductor cross-section	2.5 mm²	4.0 mm²	6.0 mm²	–	–	2.5 mm²	4.0 mm²	6.0 mm²
Cable length	150 mm			–	–	–	–	–
Rated voltage	690 V			690 V		–	–	–
Rated current	24 A	32 A	35 A	–	–	24 A	32 A	35 A
Screw connection	M25			–	–	–	–	–

Installation connectors

Description	Coupling, 3-pos.	Coupling, 5-pos.	Connector, 3-pos.	Connector, 5-pos.
Item no. 8.0 mm ... 21.0 mm	1410661	1410656	1014498	1014530
Conductor cross-section	1.5 mm² ... 6.0 mm²			
Rated voltage	690 V			
Rated current	35 A			
Connection method	Screw connection			
Insertion cycles	Approx. 100		Approx. 2000	
Product information	Approvals in accordance with IEC 61984, IEC 61535, 2 PfG 1915, UL 2238, UL 2237, DNV GL 7-2.			

PRC series AC connection technology

PRC special versions		
Description	**Conductor connectors**	**Cable protective cap**
Rated voltage	600 V	
Rated current	25 A	
Cable diameter	9.5 mm ... 12.5 mm	
Item no.	1274812	1274810

Accessories				
Description	**Protective cap for connector**	**Protective cap for coupling**	**Coding ring for connector**	**Nut for device plug**
Item no.	1409237	1409236	1014496	1457937

Tools

Tools for PRC series AC device connectors

Description	Screw pliers	Crimping pliers	
Conductor cross-section	–	2.5 mm² ... 4.0 mm²	4.0 mm² ... 6.0 mm²
Type	UNIFOX-WRENCH	CRIMPFOX-1,6/2,5-ED-4,0	CRIMPFOX-4,0-ED-6,00
Item no.	1212835	1687419	1205859

Tools for SUNCLIX series DC connectors

Description	Crimping pliers	Mounting pliers	WIREFOX stripping tool
Item no.	1212755	1200137	1212511
Product information	For PV-CF(M) contacts 2.5, 4 and 6 mm² (14/12/10 AWG).	For snapping the crimp contacts into the plastic housing. Suitable for a conductor diameter of 4.2 mm ... 6.0 mm.	For standard 2.5, 4, and 6 mm² solar cables, with 15 mm longitudinal stop, for SUNCLIX field connectors.

Tool for SUNCLIX DC connectors with crimp connection

Mounting and release tool for SUNCLIX crimp module connectors	
Description	PV-A-C-DC-TOOL
Item no.	1069522

Device connectors

Device connections for data				ℹ Web code: #0515
Data connectors with standard interfaces such as RJ45, USB, and M12 for data transmission				
Description	**RJ45 female inserts and panel-mount frames, for Freenet system**	**RJ45 female inserts and panel-mount frames, for PCB connection**	**USB socket inserts and panel-mount frames, for flat-ribbon cable connection**	**M12 device connectors for wave soldering processes, one-piece**
Female insert CAT5	1652936		1653854	–
Female insert CAT6	1418984	1653090	1653867	–
Panel-mount frame	1653744	1689446	1653744	–
Flush-type connector 4-pos., female	–			1551503
Flush-type connector 8-pos., female	–			1553860
Number of positions	8	8	4	4-pos. / 8-pos.
Rated voltage	50 V	150 V	30 V	250 V
Nominal current	1 A	1.5 A	1 A	4 A
Contact material	Cu alloy	Cu alloy	Cu alloy	Cu alloy
Connection method	IDC	Solder connection	Flat-ribbon cable connection	Solder pins

You will find further housings, such as our push-pull connections, in our brochure "M5 to M12 circular connectors" (order no.: 52003132) in the Section "Solder connection, PCB mounting, for reflow and wave soldering processes".
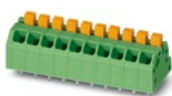
Device connectors

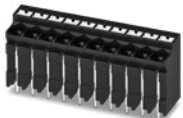| Device connections for signals				ⓘ Web code: #0515
Circular connectors for sensor/actuator applications				
Description	**M8 device connectors with halogen-free litz wires**	**M12 device connectors with halogen-free litz wires**	**M8 device connectors, one-piece**	**M12 device connectors, one-piece**
Soldering process			Wave soldering	Wave soldering
Mounting type	Front mounting	Front mounting	Rear mounting	Rear mounting
Male 5-pos.	1440119	1520068	1424242	1441765
Female 5-pos.	1440106	1520042	1424241	1441778
Number of positions	4 / 5	4 / 5	4 / 5	4 / 5
Rated voltage	30 V	60 V	30 V	60 V
Nominal current	2 A	4 A	2 A	4 A
Contact carrier material	PA 6.6	PA 6.6	PA 6.6	PA 6.6
Contact / contact surface material	Cu alloy / Au	Cu alloy / Au	Cu alloy / Au	Cu alloy / Au
Connection method	Individual litz wires	Individual litz wires	Solder pins	Solder pins

Device connectors

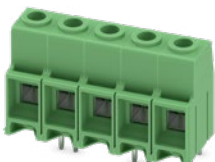| Device connections for signals					ℹ Web code: #0515
Circular connectors for sensor/actuator applications					
Description	**M8 device connectors, two-part**	**M12 device connectors, two-part**	**M12 housing screw connection, two-part**	**M12 device connectors, two-part**	**M12 housing screw connection, two-part**
Soldering process	Reflow process				
Mounting type	Rear mounting	Rear mounting	Rear mounting, standard	Rear mounting	Rear mounting, standard
Male 5-pos.	–	1411943	1414000 / 1107993 (push-pull)	1432350	1027661 (push-pull)
Female 5-pos.	1412222 / Housing 1412506	1411937	1414021 / 1454492 (push-pull)	1432363	1249212 (push-pull)
Number of positions	4 / 5	–	–	4 / 5	–
Rated voltage	30 V	60 V	–	60 V	–
Nominal current	2 A	4 A	–	4 A	–
Contact carrier material	PA 6.6	PA 6.6	–	PA 6T / 6.6	–
Contact / contact surface material	Cu alloy / Au	Cu alloy / Au	–	Cu alloy / Au	–
Connection method	SMD solder connection	SMD solder connection	SMD solder connection	THR solder connection	THR solder connection

You will find further housings, such as our push-pull connections, in our brochure "M5 to M12 circular connectors" (order no.: 52003132) in the Section "Solder connection, PCB mounting, for reflow and wave soldering processes".

PCB connection

PCB terminal blocks, signals, and power				Web code: #0391
Description	**Push-in spring connection, horizontal to the PCB for SMD applications**	**Push-in spring connection, angled (45°) to the PCB**	**Push-in spring connection, horizontal to the PCB**	**Push-in spring connection, horizontal to the PCB for THR applications**
Product family	PTSM 0,5/…-H-SMD	SPTAF 1/…-LL	PTS 1,5	SPT-THR 1,5/…H
Product example Item no.	1771059	1864312	1792892	1822781
Number of positions	2 … 8	2 … 16	2 … 12	2 … 12
Nominal cross-section	0.5 mm²	1.0 mm²	1.5 mm²	1.5 mm²
Pitch	2.5 mm	3.5 mm	5 mm	3.5 / 3.81 mm
Rated voltage IEC / UL	160 V / 150 V	160 V / 300 V	400 V / 300 V	160 V / 300 V
Nominal current IEC / UL	6 A / 5 A	13.5 A / 7 A	16 A / 10 A	17.5 A / 10 A

Description	**Push-in spring connection, angled (45°) to the PCB for THR applications**	**Push-in spring connection, vertical to the PCB for THR applications**	**Push-in spring connection, angled (45°) to the PCB for THR applications**
Product family	SPTA-THR 1,5	SPT-THR 2,5/..-V	SPTA-THR 2,5
Product example Item no.	1071205	1135349	1366007
Number of positions	2 … 12	2 … 12	2 … 12
Nominal cross-section	1.5 mm²	4 mm²	4 mm²
Pitch	5.08 mm	5.0 mm	5.0 mm
Rated voltage IEC / UL	320 V / 300 V	400 V / 300 V	400 V / 300 V
Nominal current IEC / UL	17.5 A / 10 A	32 A / 20 A	32 A / 20 A
Product information	THR soldering	THR soldering	THR soldering

PCB connection

PCB terminal blocks, power				
Description	**Push-in spring connection, vertical to the PCB**	**Push-in spring connection, angled (60°) to the PCB**	**Lever Push-in connection, horizontal to the PCB**	**Screw connection, horizontal to the PCB**
Product family	SPT 5/..-V	SPTA 5/	LPT 6/	MKDS 10 HV
Product example Item no.	1719341	1819118	1098170	1709717
Number of positions	1 ... 12	1 ... 12	1 ... 8	2 ... 9
Nominal cross-section	6 mm²	6 mm²	6 mm²	16 mm²
Pitch	7.5 mm	7.5 mm	7.5 mm	10.16 mm
Rated voltage IEC / UL	1000 V / 600 V	1000 V / 600 V	1000 V / 600 V	1000 V / 600 V
Nominal current IEC / UL	41 A / 36 A	41 A / 33 A	41 A / 40 A	41 A / 36 A
Product information	Also available in vertical and angled connection direction.	Can be bridged, for connecting individual positions.	Also available in angled connection direction.	Unlimited 600 V UL approval thanks to compact zigzag pinning

Description	**Push-in spring connection, horizontal to the PCB**	**Lever Push-in connection, horizontal to the PCB**	**Push-in spring connection, vertical to the PCB**	**Screw connection, horizontal to the PCB**
Product family	SPT 16/...-H	LPT 16/	SPT 35/...-V	MKDSP 50
Product example Item no.	1735817	1119814	1845373	1856155
Number of positions	1 ... 9	1 ... 8	1 ... 5	1 ... 5
Nominal cross-section	16 mm²	16 mm²	35 mm²	70 mm²
Pitch	10 mm	10 mm	15 mm	17.5 mm
Rated voltage IEC / UL	1000 V / 600 V	1000 V / 600 V	1000 V / 600 V	1000 V / 600 V
Nominal current IEC / UL	76 A / 66 A	76 A / 66 A	125 A / 101 A	192 A / 160 A
Product information	Also available in vertical and angled connection direction.	Also available with 15 mm pitch with 1000 V UL approval.	–	Suitable for connecting aluminum conductors.

PCB connectors

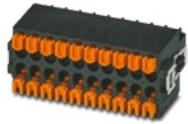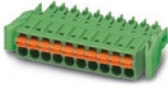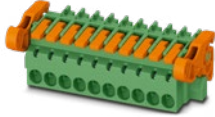| Board-to-board connectors				Web code: #2492
		NEW		
Description	**Board-to-board connectors with ScaleX contact system**			**Board-to-board connectors with standard pin connector pattern**
	FP 0,8 shielded	**FP 0,8 shield-free**	**FP 0,8 unshielded (AOI)**	
Product family	FP 0,8/ ... -SH	FP 0,8/ ... -SL	FP 0,8/ ...	FR 1,27/ ...
Product example Item no.	1043786	1569578	1061725	1373826
Number of positions	12 ... 80	12 ... 80	12 ... 80	6 ... 100
Pitch	0.8 mm	0.8 mm	0.8 mm	1.27 mm
Nominal current per contact	1.7 A	1.7 A	1.7 A	2.3 A
Data transmission rate	≤52 Gbps	≤52 Gbps	≤52 Gbps	≤28 Gbps
Stack heights	6 ... 21 mm	6 ... 21 mm	6 ... 21 mm	8 ... 13.8 mm
PCB arrangement	Mezzanine, orthogonal, and coplanar	Mezzanine, orthogonal, and coplanar	Mezzanine, orthogonal, and coplanar	Mezzanine, orthogonal, and coplanar
Product information	ScaleX Contact system	ScaleX Contact system	ScaleX Contact system	–

PCB connectors

Board-to-board connectors			ℹ Web code: #2492
			NEW
Description	**Flat-ribbon version with standard pin connector pattern**	**Single-beam board-to-board connectors, rigid and floating version**	
Product family	FR 1,27/...-CA	FS 0,635/ ...-R ...	FS 0,635/ ...-F ...
Product example Item no.	1498845	1332120	1439169
Number of positions	12 ... 80	20 ... 80	20 ... 80
Pitch	1.27 mm	0.635 mm	0.635 mm
Nominal current per contact	1.4 A	0.5 A	0.5 A
Data transmission rate	–	≤30 Gbps	≤40 Gbps
Stack heights	–	6 ... 16.6 mm	8 ... 12.6 mm
PCB arrangement	Ribbon cable connection	Mezzanine	Mezzanine
Product information	–	–	0.7 mm floating tolerance in X and Y direction

Panel feed-throughs

Description (outside / inside)	Push-Lock spring connection / Push-in spring connection	Screw connection / screw and bolt connection	T-LOX knee-lever connection / bolt connection	T-LOX knee-lever connection / bolt connection
Product family	PWO 16-UW / PWO 16-POT	UW 25	TW 50	TW 95
Product example Item no.	1844390	3073377	1708749	1708756
Number of positions	1-pos. alignable	1-pos. alignable	1 ... 6	1 ... 6
Nominal cross-section	16 mm²	25 mm²	50 mm²	95 mm²
Panel thickness	1 mm ... 6 mm	1 mm ... 6 mm	1 mm ... 5 mm	1 mm ... 5 mm
Rated voltage IEC / UL	1000 V / 600 V	630 V / 600 V	1000 V / 600 V	1000 V / 600 V
Nominal current IEC / UL	76 A / 66 A	101 A / 112.5 A	150 A / 150 A	232 A / 200 A
Product information	POT versions suitable for molding, tool-free, time-saving Push-in connection.	Suitable for connecting aluminum conductors.	Suitable for connecting aluminum conductors.	Suitable for connecting aluminum conductors.

PCB connection

PCB connectors, signals, and power				ⓘ Web code: #0425

Description	Push-in spring connection with latching flange	Push-in spring connection with latching flange	Lever Push-in connection with lock-and-release locking system	Lever Push-in connection
Product family	DFMC 0,5/…-ST-RF	FMC 1,5/…-ST-RF	LPC 1,5/…-ST-LR	LPC 2,5/…-ST
Product example Item no.	1715737	1952050	1849191	1110584
Number of positions	2 … 16	2 … 16	2 … 16	2 … 20
Nominal cross-section	0.5 mm² (20 AWG)	1.5 mm² (16 AWG)	1.5 mm² (16 AWG)	2.5 mm² (12 AWG)
Pitch	2.54	3.5 mm	3.81 mm	5.08 mm
Rated voltage IEC / UL	160 V / 150 V	160 V / 150 V	160 V / 150 V	320 V / 300 V
Nominal current IEC / UL	6 A / 6 A	8 A / 8 A	8 A / 8 A	16 A / 16 A

Description	Lever Push-in connection with center flange	Energy bus system with insulation displacement connection technology	Lever Push-in connection	Screw connection with screw flange
Product family	LPC 6/…-STL	PC 6/…-ST-BUS	LPC 16 HC/…-ST	PC 35 HC/…-STF
Product example Item no.	1716942	1044738	1716818	1762628
Number of positions	2 … 6	2 … 3	1 … 6	2 … 6
Nominal cross-section	6 mm² (8 AWG)	16 mm² (6 AWG)	16 mm² (4 AWG)	35 mm² (2 AWG)
Pitch	7.62 mm	7.62 mm	10.16 mm	15.0 mm
Rated voltage IEC / UL	1000 V / 600 V	1000 V / 600 V	1000 V / 600 V	1000 V / 600 V
Nominal current IEC / UL	41 A / 35 A	32 A / 30 A	76 A / 66 A	125 A / 115 A

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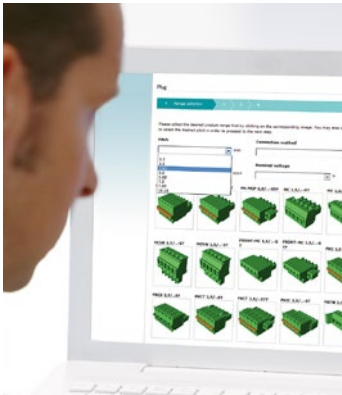
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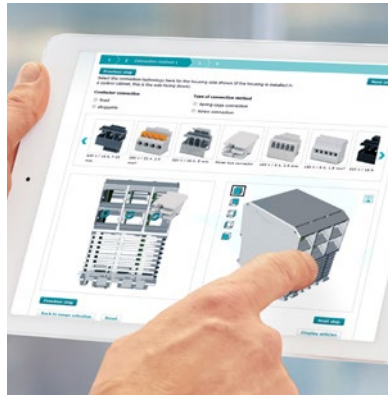

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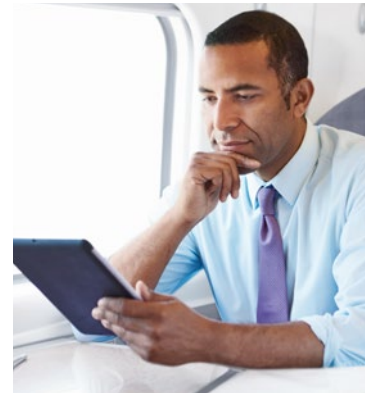*Product samples are available with free shipping*

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