New products for 2020/2021

Connectors and electronics housings

PHOENIX CONTACT
INSPIRING INNOVATIONS

New products for 2020/2021
Connectors and electronics housings

As a leading manufacturer of connectors and electronics housings, Phoenix Contact is always working to find new solutions for the growing requirements placed on your industrial and infrastructure applications. Discover our wide range of new products for 2020/2021 for the transmission of signals, data, and power – including our top five innovations for 2021.

new

Connection couldn't be easier

Install your energy storage systems quickly, safely, and cost-effectively – with plug-in battery connections by means of busbar connection or battery terminal connector. Benefit from the advantages of both connection technologies for the front or rear connection. Use the optimum connector type that is right for your application.

For further information, see page 52 onwards.

phoenixcontact.com/EnergyStorage

Top innovation 2021

Top innovation 2021

new

Ethernet finally goes the distance

Phoenix Contact has launched compact device and cable connectors for the Single Pair Ethernet standard. The standardized SPE interfaces are ideally suited for efficient data transmission in factory and process automation. The application-specific, optimized cabling is therefore the basis for future-proof Ethernet communication from the sensor to the cloud.

For further information, see page 38 onwards.

phoenixcontact.com/SPE

More top innovations

Top innovation 2021

new

The new standard for automation technology

Easy connection, quick latching:
M12 connectors with push-pull internal locking allow secure, tool-free connecting. Realize compact housing designs, even for applications in confined spaces and with high cabling density.

For further information, see page 28 onwards.

phoenixcontact.com/M12PushPull

new

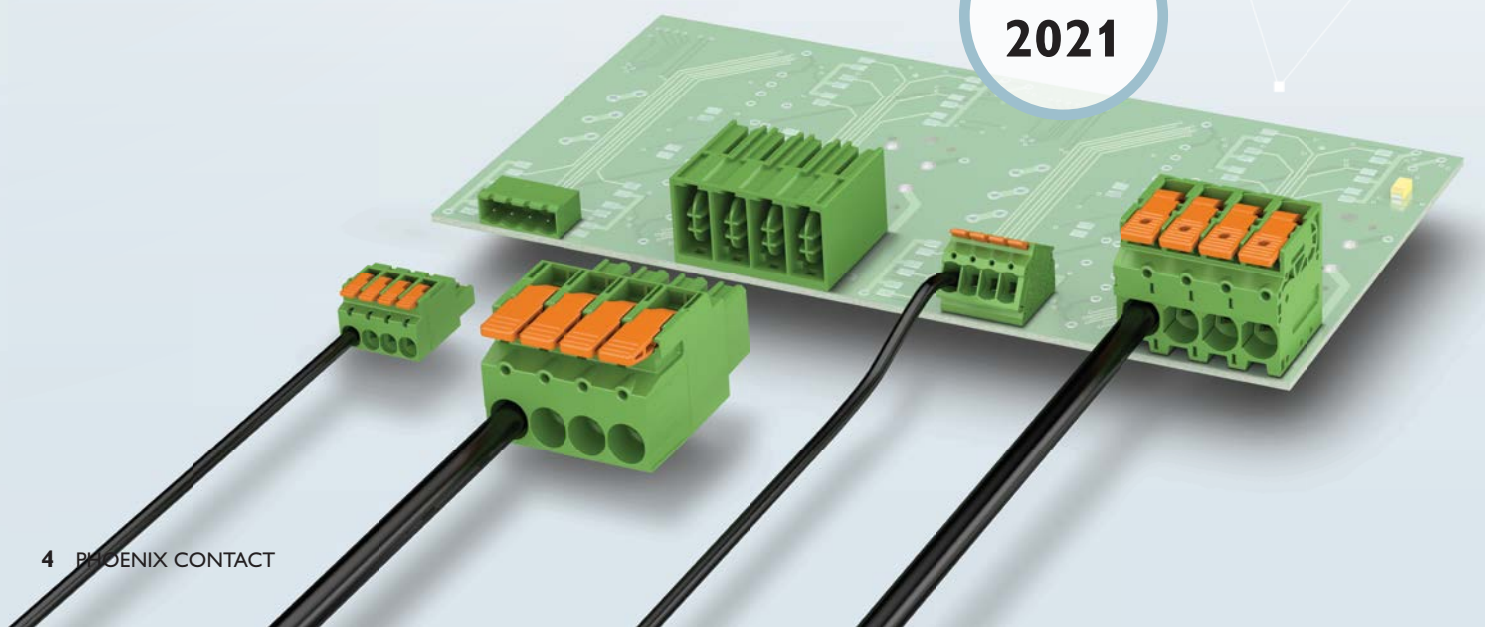
Connecting is a snap

Phoenix Contact takes convenient conductor connection to a new level: lever-actuated PCB terminal blocks and PCB connectors from the consistent LPT and LPC series combine the optimized usability of lever actuation with the reliability of the Push-in connection. In this way you can connect conductors with cross-sections of up to 16 mm² faster and more intuitive than ever before.

For further information, see page 16 onwards.

phoenixcontact.com/SNAP

Top innovation 2021



new

Individual display and operating solutions

Electronics housings are now available with integrated touch displays or displays with membrane key-pads – including a comprehensive service package for your individual housing solution.

For further information, see pages 58, 62, and 64.

phoenixcontact.com/enclosures-with-displays

Contents

PCB terminal blocks and PCB connectors	6
Circular connectors	28
Installation systems	36
Data connectors	38
Photovoltaic connectors	49
Connectors for energy storage	52
Electronics housings	54
Worldwide service and support	68

Find out more with the web code

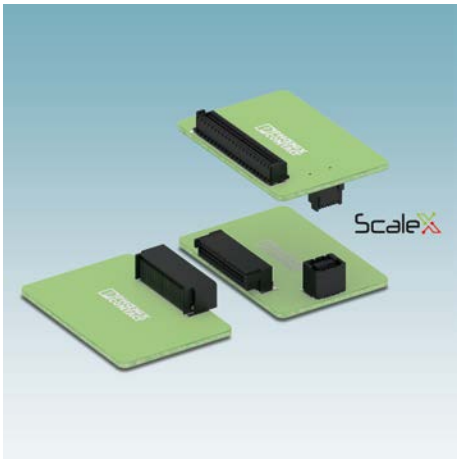
The web codes in this brochure take you to additional product information and product versions.
Simply enter # and the four-digit number in the search field on our website.

Web code: #1234 (example)

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

Robust FP series board-to-board connectors Unshielded versions with 0.8 mm pitch

Unshielded FP 0,8 series board-to-board connectors are the ideal solution for industrial-grade PCB connections. The horizontal and vertical versions enable highly flexible device design as well as automated optical inspection(AOI) after the SMT process.



ScaleX

Your advantages

- Reliable mechanical and electrical connections with the double-sided contact system
- Flexible device design: various numbers of positions, designs, and stack heights with high wipe lengths
- Robustness: ScaleX technology for high tolerance compensation and protection of contacts
- Tape-on-reel packaging and pick-and-place pads for automated SMT processes

Main features

- Pitch: 0.8 mm
- 12- to 80-pos.
- Stack heights: 6 to 12 mm
- Data rates up to 16 Gbps
- Currents up to 1.7 A
- Insertion cycles: 500
- Test voltage: 500 V AC

New product for 2020 **Web code:** #2330				
Description	**Male connector strip**		**Female connector strip**	
Design	Vertical, base height: 1.15 mm	Horizontal	Vertical, base height: 4.85 mm	Horizontal
Version	Unshielded			
Number of positions	12			
Type	FP 0,8/12-MV 1,15	FP 0,8/12-MH	FP 0,8/12-FV 4,85	FP 0,8/12-FH
Order No.	1061725	1104548	1061643	1104540

Robust FP series board-to-board connectors High EMC protection with 0.8 mm pitch

Shielded FP 0,8 series board-to-board connectors are the ideal solution for industrial-grade PCB connections. The horizontal and vertical versions enable highly flexible device design, and the EMC shielding makes them ideal for high-position signal and data transmission.

ScaleX

Your advantages

- Reliable mechanical and electrical connections with the double-sided contact system
- Flexible device design: various numbers of positions, designs, and stack heights with high wipe lengths
- Robustness: ScaleX technology for high tolerance compensation and protection of contacts
- Data rates up to 16 Gbps: with closed shielding concept for high EMC protection

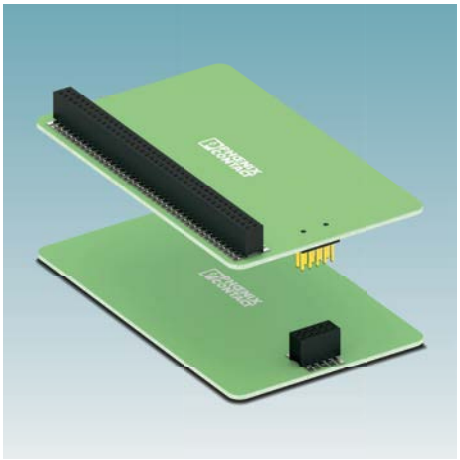
Main features

- Pitch: 0.8 mm
- 12- to 80-pos.
- Stack heights: 6 to 12 mm
- Data rates up to 16 Gbps
- EMC shielding
- Currents up to 1.7 A
- Insertion cycles: 500
- Test voltage: 500 V AC

New product for 2020 **Web code:** #2050	ScaleX	ScaleX	ScaleX	ScaleX
Description	**Male connector strip**		**Female connector strip**	
Design	Vertical, base height: 1.15 mm	Horizontal	Vertical, base height: 4.85 mm	Horizontal
Version	Shielded			
Number of positions	12			
Type	FP 0,8/12-MV-SH 1,15	FP 0,8/12-MH-SH	FP 0,8/12-FV-SH 4,85	FP 0,8/12-FH-SH
Order No.	1043786	1043791	1043710	1043722

FQ series board-to-board connectors
Male and female strips with 1.27 mm pitch

Designed for universal use, FQ series board-to-board connectors with 1.27 mm pitch provide cost-effective solutions for PCB connections inside the device. The SMD male and female strips with 1.27 mm pitch can be used to implement mezzanine connections.



Your advantages

- Reliable mechanical and electrical connections with the double-sided contact system
- Designed for integration into the SMT soldering process
- Simple and cost-optimized design
- Suitable for a wide range of applications

Main features

- Pitch: 1.27 mm
- 10- to 80-pos.
- Stack heights: 6.5 to 7.5 mm
- Currents up to 1 A
- Insertion cycles: 100
- Test voltage: 500 V AC

New product for 2021

Web code: #2658

Description	Male strip	Female strip	Male strip	Female strip
Design	Vertical			
Version	Unshielded			
Number of positions	10		80	
Type	FQ 1,27D/10-PV- 160-1-BR	FQ 1,27D/10-SV- 490-1-BR	FQ 1,27D/80-PV- 160-1-BR	FQ 1,27D/80-SV- 490-1-BR
Order No.	1156861	1156833	1156865	1156842

FQ series board-to-board connectors
Male and female strips with 2.54 mm pitch

Designed for universal use, FQ series board-to-board connectors with 2.54 mm pitch provide cost-effective solutions for PCB connections inside the device. Various SMD male and female strips can be used to implement mezzanine, coplanar, and mother-daughter connections.

Your advantages

- Reliable mechanical and electrical connections with the double-sided contact system
- Stacked, coplanar or orthogonal PCB connections for high flexibility in the device
- Designed for integration into the SMT soldering process
- Simple and cost-optimized design
- Suitable for a wide range of applications

Main features

- Pitch: 2.54 mm
- 10- to 80-pos.
- Stack heights: 14 to 14.9 mm
- Currents up to 3 A
- Insertion cycles: 100
- Test voltage: 500 V AC

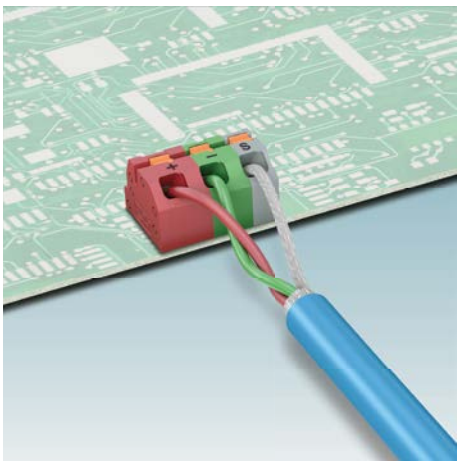
New product for 2021

Web code: #2659

Description	Male strip		Female strip	
Design	Vertical	Horizontal	Vertical	Horizontal
Version	Unshielded			
Number of positions	10			
Type	FQ 2,54D/10-PV- 380-1-BT	FQ 2,54D/10-PH-1-BT	FQ 2,54D/10-SV-1020-1-BT	FQ 2,54D/10-SH-0-BT
Order No.	1156914	1156939	1156886	1156901

APL PCB connection technology
For intelligent process automation

PCB terminal blocks and PCB connectors for Single Pair Ethernet enable the integration of intelligent field devices in switch-based Ethernet environments. The PCB connection technology for the Advanced Physical Layer is ideal for applications in process automation.



ethernet-apl™ advanced physical layer

Your advantages

- Comprehensive portfolio of PCB terminal blocks and PCB connectors for a wide range of applications
- Suitable for versatile device designs with horizontal, vertical, and angled conductor connection directions
- No connection errors: color coding and marking for easy wiring
- Increased safety: versions available for Ex e type of protection in accordance with IEC 60079-7 in potentially explosive areas

Main features

- Conductor cross-sections: 0.14 to 4 mm²
- Pitch: 5.0 and 5.08 mm
- 3-pos.
- Screw or spring connection
- Suitable for wave soldering processes
- Satisfy the requirements of the “APL Port Profile Specification” (Draft 0.3)

New product for 2021

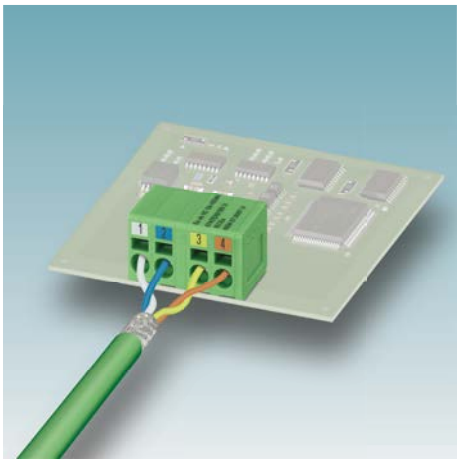
Web code: #2390

Description	3-pos. PCB terminal blocks			3-pos. PCB connectors	
Conductor cross-section	0.2 mm² ... 1.5 mm² AWG 24 ... AWG 16	0.2 mm² ... 4 mm² AWG 24 ... AWG 12	0.14 mm² ... 1.5 mm² AWG 30 ... AWG 14	0.2 mm² ... 2.5 mm² AWG 26 ... AWG 12	0.2 mm² ... 2.5 mm² AWG 30 ... AWG 12
Pitch	5.0 mm		5.08 mm		
Ex versions available [1]	Yes		-		Yes
Type	SPTAF 1/3-5,0-IL MC RDGNGY BD	SPT 2,5/3-V-5,0 EX MCRDGNGYBD	MKDSN 1,5/3-5,08 MCBD:+-S	FKCOR 2,5/3-STF-5,08 MCBD:+-S	MVSTBR 2,5/3-STF-5,08 BUBDWH
Order No.	1161098	1161105	1161119	1161188	1161208

[1] Ex e type of protection in accordance with IEC 60079-7

Versatile PCB terminal blocks
Fixed connections in PROFINET environments

PCB terminal blocks for PROFINET applications simplify fixed connection in numerous applications such as those in process automation. Different outlet directions and connection technologies provide ideal solutions for high-performance PCB connection.



Your advantages

- Comprehensive portfolio of PCB terminal blocks for a wide range of applications
- Suitable for versatile device designs with horizontal, vertical, andangled conductor connection directions
- No connection errors: color coding and marking for easy wiring
- Satisfy CAT5 requirements in accordance with EN 50173 and ISO/IEC 11801

Main features

- Conductor cross-sections: 0.14 to 4 mm²
- Pitch: 3.5 and 5.0 mm
- 4-pos.
- Screw or spring connection
- Suitable for wave soldering processes
- Satisfy the requirements of the “Guideline for PROFINET” (Rev. 05/2017)

New product for 2021

Web code: #1598

Description	4-pos. PCB terminal blocks for PROFINET environments				
Conductor cross-section	0.14 mm² ... 1.5 mm² AWG 26 ... AWG 16	0.2 mm² ... 1.5 mm² AWG 24 ... AWG 16	0.2 mm² ... 2.5 mm² AWG 24 ... AWG 14	0.2 mm² ... 4 mm² AWG 24 ... AWG 12	0.2 mm² ... 4 mm² AWG 24 ... AWG 12
Pitch	3.5 mm	5.0 mm			
Ex versions available [1]	-	Yes			
Type	MKDS 1/4-3,5 PROFINET 2	SPTAF 1/4-5,0-IL PROFINET 3	ZFKDSA 1,5C-5,0- 4-EXPROFINET2	SPT 2,5/4-H-EX PROFINET 2	SPT 2,5/4-V-EX PROFINET 2
Order No.	1050488	1050669	1033604	1034522	1034460

[1] Ex e type of protection in accordance with IEC 60079-7

Double-row PCB connectors
Shielded for reliable data transmission

Shielded PCB connectors of the DMCC 0,5 series extend the existing portfolio with a pitch of 2.54 mm. The EMC shielding enables the reliable supply of data and power to devices – even via a single Ethernet cable (PoE).

Your advantages

- ☑ Space savings with Power over Ethernet: devices are supplied with data and power simultaneously
- ☑ Gold-plated contacts for transmission quality with long-term stability
- ☑ Packaging available for automated pick-and-place assembly
- ☑ Small component size for applications where space is at a premium
- ☑ Optional tool for manual and automated crimping

Main features

- Currents up to 6 A
- Voltages up to 160 V
- Conductor cross-sections: 0.14 to 0.75 mm²
- Pitch: 2.54 mm
- 2- to 4-pos. with four or eight contacts
- CAT5-compatible
- Suitable for Power over Ethernet

New product for 2020

Web code: #2332

Description	Connector		Crimp contact	Horizontal header		Vertical header
Number of positions	2	2	-	2	2	2
Version	Without locking	With locking	Taped products	Without locking	With locking	With locking
Type	DMCC 0,5 / 2-ST-SH 7,0-2,54	DMCC 0,5 / 2-ST-SHL 7,0-2,54	MCC 0,5-MP AU 0,14-0,5 R	DMC 0,5 / 2-G1SH-2,54P20THR24	DMC 0,5 / 2-G1SHL-2,54P20THR24	DMC 0,5 / 2-G1SHL-2,54P20THR24
Order No.	1128660	1150807	1013420	1097546	1150791	1150824

Assembled PCB connectors
For individual connection solutions

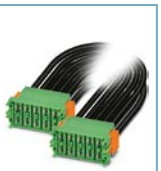
Various PCB connectors with crimp connection are now also available as a convenient assembled connection solution. Freely selectable cable lengths and cross-sections enable custom cable assemblies with various pitches.

Your advantages

- ☑ High degree of flexibility with freely selectable cable lengths and cross-sections
- ☑ Universal use with internationally approved UL components
- ☑ Pre-assembled cables save time during on-site cabling with Plug and Play

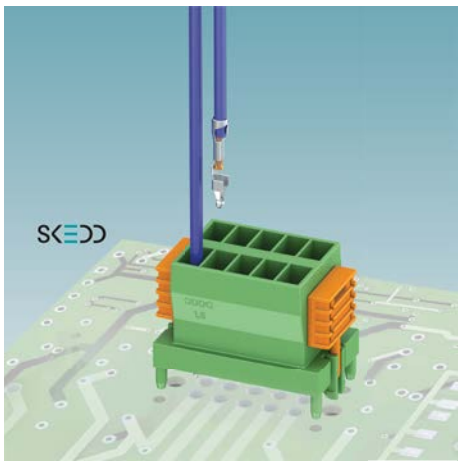
Main features

- Cable lengths from 10 to 300 cm
- Cable cross-sections from AWG 22 to AWG 14 (UL)
- Approval in accordance with UL standard "Wiring Harness Traceability Program"
- High-quality PVC single-core wires and cables
- Versions available with gold-plated contacts and with latching or screw flange

New product for 2020 **Web code:** #2053						
Description	**Selection of configurable cable sets**					
Pitch	2.5 mm	2.54 mm	3.81 mm	5.08 mm	5.08 mm	3.5 / 5.0 mm
Flange	Latching flange	Without	Screw flange	Without	Without	Latching flange
Max. number of positions	8	16	16	16	16	16, double row
Connector housing	PTCM 0,5 / PTCM 0,5...	MCC0,5 / ... / MCC0,5...	MCC1 / ...STZF... / MCC1 / ...STFZ...	MSTBC 2,5/...ST... / MSTBC 2,5 / ...ST	MSTBC 2,5/...ST... / ICC 2,5 / ...	CDDC... / CDDC...
Type	CAC-PTCM 1015461 / D	CAC-MCC 1012269 / D	CAC-MCC 1852396 / D	CAC-MSTBC 1808845 / D	CAC-MSTBC 1808845 / 1823875	CAC-CDDC 1016289 / D
Order No.	1084517	1084541	1084523	1084589	1084560	1084581

SKEDD direct connectors up to 1.5 mm²
The new method of contacting

The double-row PCB connectors of the CDDC 1,5 series with crimp connection are particularly suitable for applications with high contact density. With SKEDD direct connection technology, the connectors can be connected directly to the printed circuit board without tools and without a header.



Your advantages

- ☑ SKEDD direct connection technology enables flexible positioning on the printed circuit board
- ☑ Reduced component and process costs: simple insertion by hand and vibration-resistant connection
- ☑ Compact design with high packing density on the printed circuit board
- ☑ Cost-effective connection of crimped conductors in large quantities
- ☑ Optional tool for manual and automated crimping

Main features

- Currents up to 8 A
- Voltages up to 160 V
- Conductor cross-sections: 0.14 to 1.5 mm²
- Pitch: 3.5 mm
- 2- to 16-pos. in double-row version
- Crimp connection

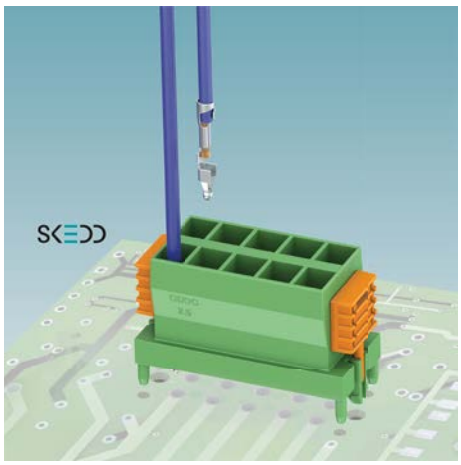
New product for 2020

Web code: #1614

Description	PCB connectors		Crimp contacts	
Version	5-pos.	10-pos.	0.14 mm² ... 0.5 mm²	0.5 mm² ... 1.5 mm²
Type	CDDC 1,5/5-PV-3,5	CDDC 1,5/10-PV-3,5	CDC-MP 0,14-0,5(-R)	CDC-MP 0,5-1,5(-R)
Order No.	1016516	1016521	-	-
Order No. for bulk goods	-	-	1016664	1016662
Order No. for taped products	-	-	1016663	1016661

SKEDD direct connectors up to 2.5 mm²
The new method of contacting

The double-row PCB connectors of the CDDC 2,5 series with crimp connection are particularly suitable for applications with high contact density. With SKEDD direct connection technology, the connectors can be connected directly to the printed circuit board without tools and without a header.



Your advantages

- ☑ SKEDD direct connection technology enables flexible positioning on the printed circuit board
- ☑ Reduced component and process costs: simple insertion by hand and vibration-resistant connection
- ☑ Compact design with high packing density on the printed circuit board
- ☑ Cost-effective connection of crimped conductors in large quantities
- ☑ Optional tool for manual and automated crimping

Main features

- Currents up to 12 A
- Voltages up to 320 V
- Conductor cross-sections: 0.14 to 2.5 mm²
- Pitch: 5.0 mm
- 2- to 16-pos. in double-row version
- Crimp connection

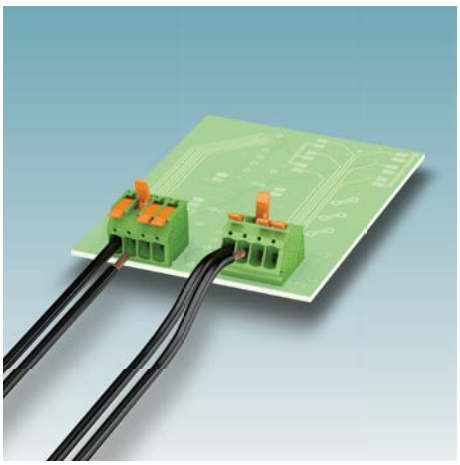
New product for 2020

Web code: #1615

Description	PCB connectors		Crimp contacts	
Version	5-pos.	10-pos.	0.5 mm² ... 1.5 mm²	1.5 mm² ... 2.5 mm²
Type	CDDC 2,5/5-PV-5,0	CDDC 2,5/10-PV-5,0	CDC-MP 0,5-1,5(-R)	CDC-MP 1,5-2,5(-R)
Order No.	1016289	1016279	-	-
Order No. for bulk goods	-	-	1016662	1016660
Order No. for taped products	-	-	1016661	1016659

Lever-actuated PCB terminal blocks up to 4 mm² Safe transmission of currents up to 24 A

Straight and angled PCB terminal blocks of the LPT/LPTA 2,5 series enable the tool-free connection of conductors with cross-sections up to 4 mm². The clear position of the color actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.



Your advantages

- Intuitive operation, thanks to color-coded actuating lever
- Tool-free lever principle enables time-saving connection and release of conductors with or without ferrules
- Clear lever positions provide reliable feedback as to whether the clamping space is open or closed
- Defined contact force ensures that contact remains stable over the long term
- Time-saving Push-in connection when lever is closed

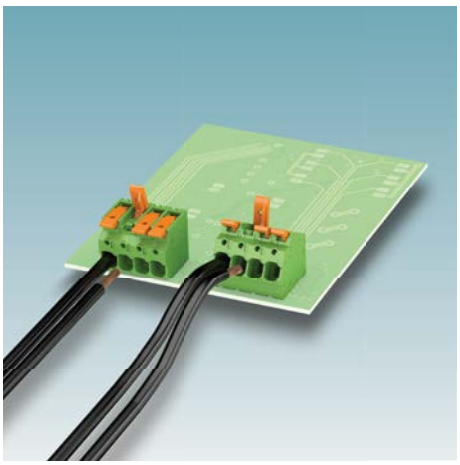
Main features

- Currents up to 24 A
- Voltages up to 630 V
- Conductor cross-sections: 0.2 to 4 mm²
- Pitch: 5.0 mm
- 1- to 12-pos.

New product for 2021 **Web code:** #2660				
Description	**PCB terminal block with lever-actuated Push-in connection**			
Pitch	5.0 mm			
Number of positions	1	10	1	10
Type	LPT 2,5/1-5,0	LPT 2,5/10-5,0	LPTA 2,5/1-5,0	LPTA 2,5/10-5,0
Order No.	1190296	1190307	1190362	1190372

Lever-actuated PCB terminal blocks up to 10 mm² Safe transmission of currents up to 41 A

Straight and angled PCB terminal blocks of the LPT/LPTA 6 series enable the tool-free connection of conductors with cross-sections up to 10 mm². The clear position of the color actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.



Your advantages

- Intuitive operation, thanks to color-coded actuating lever
- Tool-free lever principle enables time-saving connection and release of conductors with or without ferrules
- Clear lever positions provide reliable feedback as to whether the clamping space is open or closed
- Defined contact force ensures that contact remains stable over the long term
- Time-saving Push-in connection when lever is closed

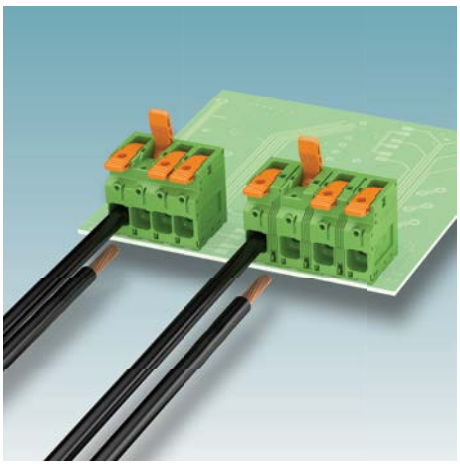
Main features

- Currents up to 41 A
- Voltages up to 1,000 V
- Conductor cross-sections: 0.2 to 10 mm²
- Pitch: 7.5 mm
- 1- to 8-pos.
- Increased touch protection in accordance with IEC/UL 61800-5-1

New product for 2021 **Web code:** #2661				
Description	**PCB terminal block with lever-actuated Push-in connection**			
Pitch	7.5 mm			
Number of positions	1	5	1	5
Type	LPT 6/1-7,5	LPT 6/5-7,5-ZB	LPTA 6/1-7,5	LPTA 6/5-7,5-ZB
Order No.	1098166	1098170	1098174	1098178

Lever-actuated PCB terminal blocks up to 25 mm² Safe transmission of currents up to 76 A

PCB terminal blocks of the LPT 16 series enable the tool-free connection of conductors with cross-sections up to 25 mm². The clear position of the color actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.



Your advantages

- ☑ Intuitive operation, thanks to color-coded actuating lever
- ☑ Tool-free lever principle enables time-saving connection and release of conductors with or without ferrules
- ☑ Clear lever positions provide reliable feedback as to whether the clamping space is open or closed
- ☑ Defined contact force ensures that contact remains stable over the long term
- ☑ Time-saving Push-in connection when lever is closed

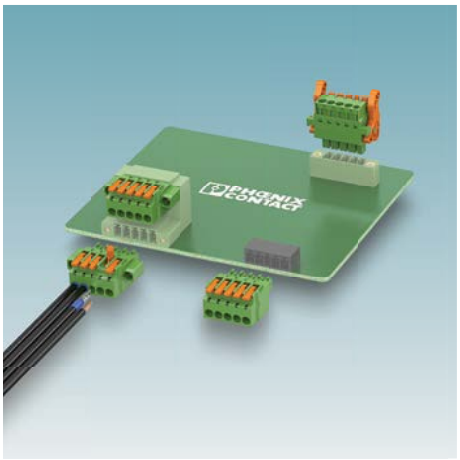
Main features

- Currents up to 76 A
- Voltages up to 1,000 V
- Conductor cross-sections: 0.75 to 25 mm²
- Pitch: 10 and 15 mm
- 1- to 8-pos.
- Increased touch protection in accordance with IEC/UL 61800-5-1

New product for 2021 ⓘ **Web code:** #2662			
Description	**PCB terminal block with lever-actuated Push-in connection**		
Pitch	10 mm		15 mm
Number of positions	1	5	5
Type	LPT 16/1-10	LPT 16/5-7,5-ZB	LPT 16/5-15
Order No.	1119809	1119814	1119821

Lever-actuated PCB connectors
Safe transmission of currents up to 8 A

PCB connectors of the LPC 1,5 series extend the portfolio of lever-actuated connectors with a pitch of 3.81 mm. The clear position of the color actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.

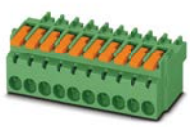
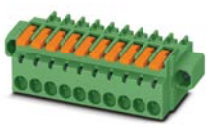
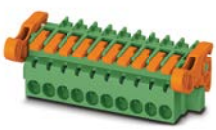


Your advantages

- Tool-free lever principle enables time-saving connection and release of conductors with or without ferrules
- Clear lever positions provide reliable feedback as to whether the clamping space is open or closed
- Defined contact force ensures that contact remains stable over the long term
- Time-saving Push-in connection when lever is closed
- Can be combined with the extensive portfolio of MC headers

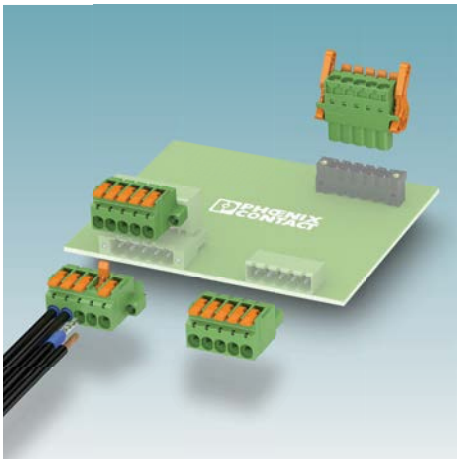
Main features

- Currents up to 8 A
- Voltages up to 160 V
- Conductor cross-sections: 0.14 to 1.5 mm²
- Pitch: 3.81 mm
- 2- to 16-pos.
- With screw flange or Lock and Release lever as an option

New product for 2021 **Web code:** #2663			
Description	**PCB connectors with lever-actuated Push-in connection**		
Number of positions	10		
Locking	Without	Screw flange	Lock and Release lever
Type	LPC 1,5/10-ST-3,81	LPC 1,5/10-STF-3,81	LPC 1,5/10-ST-3,81-LR
Order No.	1848972	1849120	1849272

Lever-actuated PCB connectors
Safe transmission of currents up to 16 A

The PCB connectors of the LPC 2,5 series enable the tool-free connection of conductors with cross-sections up to 2.5 mm². The clear position of the color actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.



Your advantages

- ☑ Tool-free lever principle for time-saving connection and release of conductors with or without ferrules
- ☑ Clear lever positions provide reliable feedback as to whether the clamping space is open or closed
- ☑ Defined contact force ensures that contact remains stable over the long term
- ☑ Time-saving Push-in connection when lever is closed
- ☑ Can be combined with the extensive COMBICON family

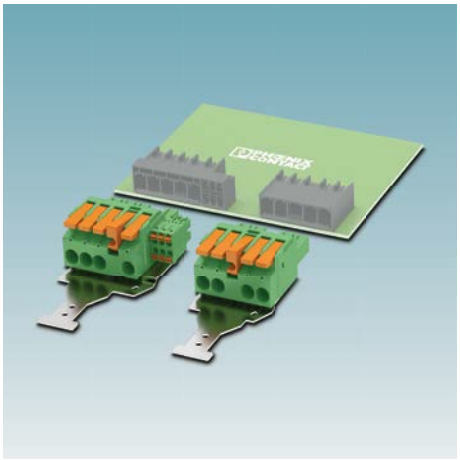
Main features

- Currents up to 16 A
- Voltages up to 320 V
- Conductor cross-sections from 0.2 to 2.5 mm²
- Pitch: 5.08 mm
- 2- to 20-pos.
- With screw flange or Lock and Release lever as an option

New product for 2021 **Web code:** #2664			
Description	**PCB connectors with lever-actuated Push-in connection**		
Number of positions	5		
Locking	Without	Screw flange	Lock and Release lever
Type	LPC 2,5 / 5-ST-5,08	LPC 2,5 / 5-STF-5,08	LPC 2,5 / 5-ST-5,08-LR
Order No.	1110584	1110632	1110610

Shields with high EMC protection
Reliable contact for compact devices

Shields extend the scope of application for lever-actuated PCB connectors of the LPC 6/LPCH 6 series. They ensure a durable shield connection to the device housing and protect against electromagnetic interference such as in the case of servo motors or frequency converters.



Your advantages

- Time savings during commissioning and maintenance with shield contacting in a single connection step
- Space savings compared to conventional flange solutions
- Easy mounting on the connector with self-tapping mounting screws
- Just one cable required for the plug-in device interface

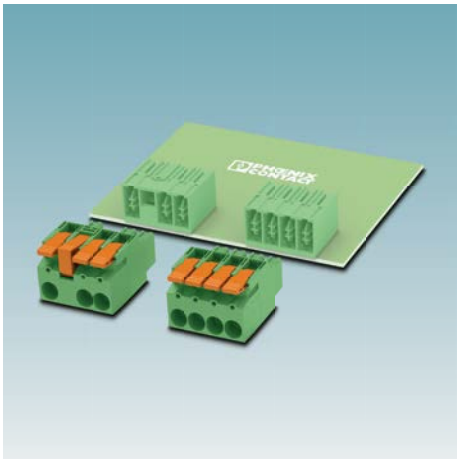
Main features

- Good EMC properties
- Large-surface, low-resistance potential connection
- Conductor support at 180° to the plug-in direction
- Unrestricted use up to 1,000 V (IEC) or 600 V (UL)

New product for 2021 **Web code:** #2666				
Description	**Shield**		**Shield**	
Type	PC 6-SH-PLATE 1-7,62		PC 6-SH-PLATE 2-7,62	
Version	Narrow		Wide	
Compatibility	Standard	Hybrid	Standard	Hybrid
Corresponding connectors	LPC 6/2-STL2-7,62 LPC 6/3-STL2-7,62 LPC 6/4-STL3-7,62	LPCH 6/3+4-STL3-7,62 LPCH 6/3+6-STL3-7,62	LPC 6/5-STL3-7,62 LPC 6/6-STL4-7,62	LPCH 6/4+4-STL4-7,62 LPCH 6/4+6-STL4-7,62 LPCH 6/5+4-STL5-7,62 LPCH 6/5+6-STL5-7,62
Order No.	1128864		1128867	

Lever-actuated PCB connectors
Safe transmission of currents up to 76 A

PCB connectors of the LPC 16 HC series enable the tool-free connection of conductors with cross-sections up to 25 mm². The clear position of the color actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.



Your advantages

- Tool-free lever principle for time-saving connection and release of conductors with or without ferrules
- Clear lever positions provide reliable feedback as to whether the clamping space is open or closed
- Defined contact force ensures that contact remains stable over the long term
- Time-saving Push-in connection when lever is closed

Main features

- Currents up to 76 A
- Voltages up to 1,000 V
- Conductor cross-sections up to 25 mm²
- Pitch: 10.16 mm
- 2- to 6-pos.
- With middle flange as an option
- Increased touch protection in accordance with IEC/UL 61800-5-1

New product for 2021 **Web code:** #2665				
Description	**PCB connectors with lever-actuated Push-in connection**			
Number of positions	2	6	2	6
Locking	Without		Middle flange	
Type	LPC 16 HC/2-ST-10,16	LPC 16 HC/6-ST-10,16	LPC 16 HC/2-STL2-10,16	LPC 16 HC/6-STL4-10,16
Order No.	1716815	1716819	1716824	1716841

THR headers with 7.62 mm pitch
Increased touch protection for high power

The new headers for PCB connectors of the LPC 6 and PC 6/…ST-BUS series extend the range with a 7.62 mm pitch. The headers are specifically designed for the requirements of SMT soldering processes and provide increased touch protection in the pin connector pattern in accordance with IEC/UL 61800-5-1.

Your advantages

- ☑ Designed for integration in SMT soldering processes
- ☑ Increased touch protection for maximum safety even when not plugged in
- ☑ Familiar mounting principle enables worldwide use
- ☑ Maximum flexibility when it comes to device design: one header for connectors with different connection technologies
- ☑ Hybrid versions for the space-saving combination of signals and power

Main features

- Pitch: 7.62 mm
- Currents up to 41 A
- Voltages up to 1,000 V
- 2- to 6-pos.
- With middle flange as an option
- Increased touch protection in accordance with IEC/UL 61800-5-1

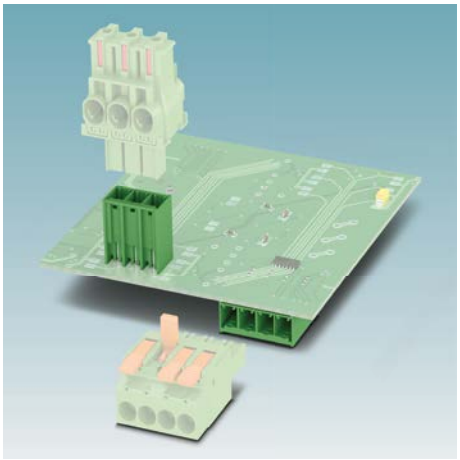
New product for 2021

Web code: #2667

Description	Horizontal header		Horizontal header, rotated 180°	Horizontal header, hybrid	Vertical header	
Locking	Without	Middle flange	Middle flange	Middle flange	Without	Middle flange
Number of positions	4	4	4	8 (4 + 4)	4	4
Pitch	7.62 mm	7.62 mm	7.62 mm	7.62 mm	7.62 mm	7.62 mm
Type	PC 6/4-G-7,62 P26THR	PC 6/4-GL3-7,62 P26THR	PC 6/4-GL3U-7,62 P26THR	PC 6/4+4-GL4-7,62 P26THR	PCV 6/4-G-7,62 P26THR	PCV 6/4-GL3-7,62 P26THR
Order No.	1190490	1190539	1192649	1192616	1192627	1192610

Headers with 7.62 mm pitch
Increased touch protection for high power

The new headers for PCB connectors of the LPC 6 and PC 6/… ST-BUS series extend the range with a 7.62 mm pitch. The headers are specifically designed for the requirements of power electronics and provide increased touch protection in the pin connector pattern in accordance with IEC/UL 61800-5-1.



Your advantages

- ☑ Increased touch protection for maximum safety even when not plugged in
- ☑ Familiar mounting principle enables worldwide use
- ☑ Maximum flexibility when it comes to device design: one header for connectors with different connection technologies

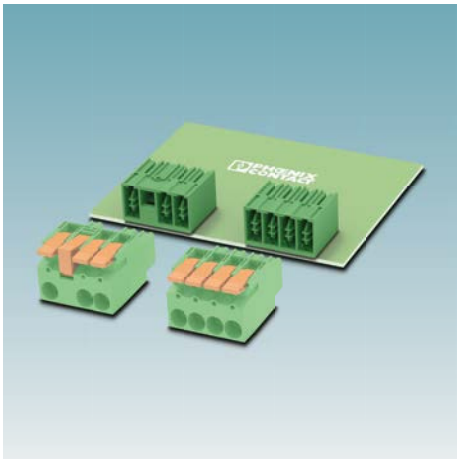
Main features

- Pitch: 7.62 mm
- Currents up to 41 A
- Voltages up to 1,000 V
- 2- to 6-pos.
- With middle flange as an option
- Increased touch protection in accordance with IEC/UL 61800-5-1

New product for 2020 **Web code:** #2331				
Description	**Vertical header**	**Vertical header, middle flange**	**Horizontal header, rotated 180°**	**Horizontal header, rotated 180°, middle flange**
Number of positions	4	4	4	4
Type	PCV 6/4-G-7,62	PCV 6/4-GL3-7,62	PC 6/4-GU-7,62	PC 6/4-GL3U-7,62
Order No.	1131532	1130867	1055253	1136012

Touch-proof headers with 10.16 mm pitch
For maintenance-free PCB connectors

The PC 16 HC series headers with 10.16 mm pitch extend the LPC 16 HC and PC 16 HC series PCB connectors. They are specifically designed for the requirements of power electronics and provide increased touch protection in accordance with IEC/UL 61800-5-1.



Your advantages

- ☑ Increased touch protection for maximum safety even when not plugged in
- ☑ Familiar mounting principle enables worldwide use
- ☑ Maximum flexibility when it comes to device design: one header for connectors with different connection technologies

Main features

- Currents up to 76 A
- Voltages up to 1,000 V
- Pitch: 10.16 mm
- 2- to 6-pos.
- With middle flange as an option
- Increased touch protection in accordance with IEC/UL 61800-5-1

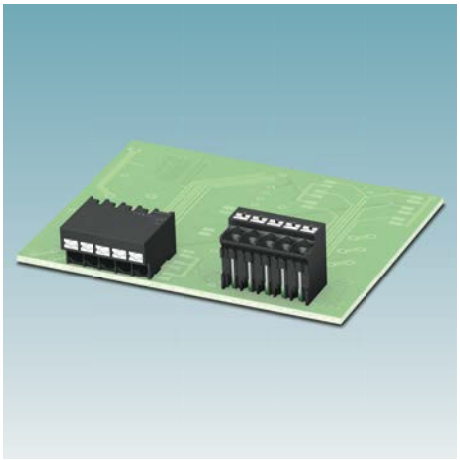
New product for 2021

Web code: #2668

Description	Horizontal header	Horizontal header, middle flange	Horizontal header	Horizontal header, middle flange
Version	Without		Middle flange	
Number of positions	2	6	2	6
Type	PC 16 HC/2-G-10,16	PC 16 HC/6-G-10,16	PC 16 HC/2-GL2-10,16	PC 16 HC/6-GL4-10,16
Order No.	1716846	1716851	1716857	1716874

THR PCB terminal blocks up to 4 mm²
Fast connection with Push-in spring connection

The SPT-THR series PCB terminal blocks extend the portfolio of reflow-solderable items to include the 2.5 mm² cross-section. The color-coded push button ensures intuitive operation and reliable conductor connection.



Your advantages

- Tool-free, time-saving Push-in spring connection
- Defined contact force ensures that contact remains stable over the long term
- Intuitive operation with color-coded push button
- Operation and conductor connection from one direction enables integration into the front of the device
- Designed for integration into the SMT soldering process

Main features

- Currents up to 32 A
- Voltage up to 400 V
- Conductor cross-sections: 0.2 to 4 mm²
- Pitch: 5.0 mm
- 2- to 12-pos.
- Supplied in box or tape-on-reel packaging

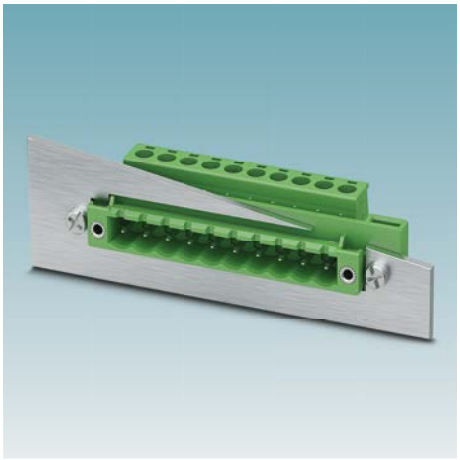
New product for 2021

Web code: #2669

Description	**PCB terminal block with Push-in spring connection**			
Connection direction	Horizontal	Horizontal	Vertical	Vertical
Number of positions	2	10	2	10
Packaging	Tape-on-reel packaging	Box packaging	Tape-on-reel packaging	Box packaging
Solder pin length	2.0 mm	2.6 mm	2.0 mm	2.6 mm
Type	SPT-THR 2,5/2-H-5,0 P20 R24	SPT-THR 2,5/10-H-5,0 P26	SPT-THR 2,5/2-V-5,0 P20 R24	SPT-THR 2,5/10-V-5,0 P26
Order No.	1135280	1135305	1135333	1135354

Feed-through connectors with 5.08 mm pitch Flying leads through the device panel

The new feed-through connectors of the DFK-MSTB 2,5 series enable flying leads through the device panel. The inverted connectors with screw connection are suitable for the MSTB 2,5 and FKC 2,5 series without flange, with screw flange, and with Lock and Release locking.



Your advantages

- Familiar connection principle enables worldwide use
- Screwable flange for superior stability
- Unique connector profile prevents incorrect installation in the device panel
- Flying leads for various connector parts for highly flexible device design
- Optional coding

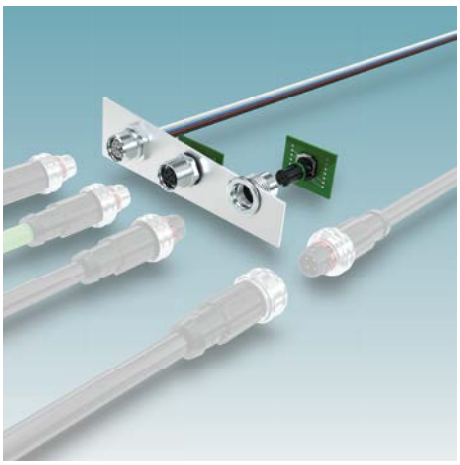
Main features

- Currents up to 12 A
- Voltages up to 320 V
- Conductor cross-sections: 0.2 to 2.5 mm²
- Pitch: 5.08 mm
- 2- to 16-pos.
- Panel thickness of up to 5 mm

New product for 2020 **Web code:** #2333				
Description	**Feed-through connectors**			
Number of positions	2	5	10	16
Type	DFK-MSTB 2,5/2-STF-5,08-LR	DFK-MSTB 2,5/5-STF-5,08-LR	DFK-MSTB 2,5/12-STF-5,08-LR	DFK-MSTB 2,5/16-STF-5,08-LR
Order No.	1096152	1096150	1096142	1095509

M12 push-pull device connectors
Easy and compact device connection

M12 device connectors with push-pull internal locking enable secure and tool-free device connection.
The countersunk M12 push-pull flush-type female connector sits flush with the housing and can be aligned more closely. This saves installation space and allows for compact housing designs.



Your advantages

- ☑ Plug and Produce: fast, secure connection even in confined spaces
- ☑ Greater flexibility: one M12 device connection for screw and push-pull connectors
- ☑ Simple design-in: countersunk M12 ports for compact device concepts
- ☑ High future security: standardized product range for worldwide availability

Main features

- Push-pull internal locking
- Standardized in accordance with IEC 61076-2-010
- THR housing screw connections
- Raised and countersunk versions
- A-coded
- Degree of protection: IP65, IP67
- Duo contour: compatible with full-thread M12

New product for 2021 **Web code:** #2677			
Description	**M12 device connectors with push-pull housing screw connection**		
Designation	THR housing screw connection for A-coding, 4- and 5-pos.		
Mounting type	Front	Front, countersunk	Rear
Order No.	1233779	1233777	1233780

M12 push-pull connectors
The new standard for factory automation

M12 push-pull connectors snap in by means of simple, direct insertion. The push-pull internal locking enables fast and secure connection, especially for applications in confined spaces and with high cabling density, such as in factory automation.

Your advantages

- ☑ Plug and Produce: fast, secure connection even in confined spaces
- ☑ Fast installation: time savings of 80% during installation compared to screw connection
- ☑ Flying leads: connectors with internal and external locking
- ☑ High future security: standardized product range for worldwide availability

Main features

- Push-pull internal and external locking
- Standardized in accordance with IEC 61076-2-010
- A-coded
- Conductor cross-section: 0.34 mm²
- Degree of protection: IP65, IP67, IP68
- PUR, halogen-free, black

New product for 2021 **Web code:** #2679		
Description	**M12 push-pull connectors**	
Coding/number of positions	A-coded/4-pos.	A-coded/5-pos.
Design of head 1	Male connector, straight	
Design of head 2	Female connector, straight	Female connector, angled
Cable length	1.5 m	1.5 m
Type	SAC-4P-P12MS/1,5-PUR/P12FS	SAC-5P-P12MS/1,5-PUR/P12FR
Order No.	1224019	1224223

M12 device connectors
Easy wiring with Push-Lock connection

M12 flush-type connectors with Push-Lock connection enable secure and convenient cabling without tools. Conductors are connected by simply opening the color-coded levers. This means the user has both hands free to insert the conductor.

Your advantages

- ☑ Easy and tool-free connection with Push-Lock connection
- ☑ Easy assignment of individual litz wires with color coding and numerical marking of contact holder levers
- ☑ Convenient connection of flexible conductors via lever
- ☑ Fast and reliable connection of electric cables

Main features

- Push-Lock connection
- Degree of protection: IP65, IP67
- Metal housing
- Front mounting
- M20 fastening thread with anti-rotation protection

New product for 2020

Web code: #2405

Description	M12 device connectors with Push-Lock connection					
Coding/number of positions	D-coded/4-pos.		A-coded/4-pos.		A-coded/5-pos.	
Voltage	48 V AC/60 V DC		250 V AC/250 V DC		48 V AC/60 V DC	
Current	4 A					
Connection cross-section	AWG 26 ... 18		0.14 mm² ... 0.75 mm²		0.14 mm² ... 0.75 mm²	
Version	Male	Female	Male	Female	Male	Female
Order No.	1139796	1139800	1139802	1139803	1139804	1139805

M12 POWER connectors for assembly
Easy wiring with Push-Lock connection

M12 POWER connectors with Push-Lock connection enable quick and convenient power cabling without tools. The clamping chambers of the connector are opened and closed easily via a lever. This means the user has both hands free to insert the conductor.

Your advantages

- Easy and tool-free connection with Push-Lock connection
- Powerful: DC and AC applications up to 16 A and 690 V
- Reliable 360° shielding even under extreme environmental influences
- Increased protection against electric shock with PE connection to all metal components
- Easy assignment of individual conductors with color coding and numerical marking of contact holder levers

Main features

- Push-Lock connection
- Degree of protection: IP65, IP67
- Metal housing
- 360° shielded connectors
- Protected seal in the M12 female connector
- Conductors may be crossed

New product for 2020

Web code: #2337

Description	M12 POWER connectors					
Coding	S-coded		T-coded	K-coded	L-coded	
Number of positions	2-pos. + PE	3-pos. + PE	4-pos.	4-pos. + PE	4-pos.	4-pos. + FE
Current/voltage	16 A/230 V AC	12 A/690 V AC	12 A/63 V DC	16 A/690 V AC	16 A/63 V DC	
Connection cross-section	1.5 mm² ... 2.5 mm²					
Order No. for male	1080225	1080220	1080215	1080231	1080239	1080235
Order No. for female	1080227	1080222	1080218	1080228	1080237	1080233

M12 connectors for assembly Cabling for outdoor applications

M12 connectors for assembly with QUICKON IDC displacement connection enable quick and flexible wiring on site. Weatherproof plastic and M12 stainless steel knurls enable use outdoors.

Your advantages

- Time savings of up to 80% with QUICKON fast connection technology
- Stainless steel type 1.4404 used to provide corrosion protection
- Robust throughout: resistant to oil, salt, UV, and ozone
- Shock- and vibration-resistant connection
- Safe use with high degree of protection

Main features

- QUICKON fast connection technology (IDC)
- Stainless steel (1.4404) M12 knurl
- Protected seal in the M12 female connector
- Degree of protection: IP65, IP67

New product for 2020

Web code: #2403

Description	M12 signal connectors					
Coding	A-coded					
Number of positions	4		5		8	
Current / voltage	250 V AC / 250 V DC		48 V AC / 60 V DC		30 V AC / 30 V DC	
Version	Male	Female	Male	Female	Male	Female
Order No.	1426360	1426362	1426327	1426328	1426329	1426330

M23 hybrid device connectors with knurled nut For connecting coupler connectors

Device connectors of the M23 HYBRID series are now also available with a knurled nut. This enables devices such as servo drives to be connected using either coupler or cable connectors. In daisy chain applications, for example, the inputs and outputs can be clearly differentiated.

Your advantages

- Transmission of signals, data, and power via a single connector
- Ideal for daisy chain applications: visual and mechanical differentiation of inputs and outputs
- High degree of protection ensures safe use in the field
- CAT5 data interface for data rates up to 100 Mbps or four additional signal contacts as an option

Main features

- Currents up to 30 A
- Voltages up to 630 V (AC)/850 V (DC)
- Connection cross-sections up to max. 4.0 mm²
- Pin assignment: 4 + 4 + 4 + PE or 8 + 4 + PE
- Degree of protection: IP67, IP68

New product for 2020

Web code: #0193

Description	M23 hybrid device connectors			
Type of contact	Female	Male	Female	Male
Signal type	CAT5	CAT5	Signal	Signal
Type	SH-8ESC58AY000S	SH-8EPC58AY000S	SH-8ESS48AY000S	SH-8EPS48AY000S
Order No.	1096284	1096285	1096282	1096286

M17-M40 PRO series circular connectors
Two new M23 designs

Device and coupler connectors in size M23 extend the portfolio of M17-M40 PRO series circular connectors. The new versions provide greater flexibility when it comes to the device connection and system cabling. They are compatible with both the standard and ONECLICK fast-locking system.

ONECLICK Technology
Designed by PHOENIX CONTACT

Your advantages

- Highest availability worldwide: can be plugged in with the Speedtec locking system
- Secure connection: compatible with the ONECLICK fast-locking system and with standard locking
- Easy and reliable shield connection for cost-effective cable assembly
- Reliable under the harshest conditions: vibration-resistant to at least 20g

Main features

- Voltages up to 630 V
- Currents up to 30 A
- Signal: 6- to 19-pos. versions
- Power: 6- and 8-pos. versions suitable for standard and ONECLICK fast-locking system
- All housings available as pin and socket versions
- Degree of protection: IP66, IP68, IP69K

New product for 2021

Web code: #2672

Description	Device connector, signal, M23 PRO		Coupler connector, signal, M23 PRO		Device connector, power, M23 PRO		Coupler connector, power, M23 PRO	
Clamping range	-		9 mm ... 15 mm		-		14 mm ... 17 mm	
Flange size in mm	26 x 26	28 x 28	-		26 x 26	28 x 28	-	
Number of positions	12		17		5 + PE		4 + 3 + PE	
Type	M23-12S1 N8AW500S	M23-12P1 N8AW600S	M23-17S1 N8A9004S	M23-17P1 N8A9004S	M23-5ES1 98AW500S	M23-5EP1 98AW600S	M23-7ES1 98A9L25S	M23-7EP1 98A9L25S
Type of contact	Female	Male	Female	Male	Female	Male	Female	Male
Order No.	1629089	1629082	1629109	1629105	1628834	1628776	1628837	1628781

M17-M40 PRO series circular connectors
New M17 design for device connection

M17-M40 PRO series circular connectors are now also available in size M17. The series offers uniform solutions for signal and power transmission. Thanks to the unique ONECLICK fast-locking system, you can connect your device quickly and safely.

ONECLICK Technology
Designed by PHOENIX CONTACT

Your advantages

- Highest availability worldwide: can be plugged in with the Speedtec locking system
- Secure connection: ONECLICK fast-locking system with optically, haptically, and acoustically clear feedback on the locking position
- Easy and reliable shield connection for cost-effective cable assembly
- Reliable under the harshest conditions: vibration-resistant to at least 20g

Main features

- Voltages up to 630 V
- Currents up to 25 A
- Signal: 8- and 17-pos. versions
- Power: 4- to 9-pos. versions
- ONECLICK fast-locking system
- Device and coupler connectors suitable for standard and fast-locking systems
- All housings available as pin and socket versions
- Degree of protection: IP66, IP68, IP69K

New product for 2021

Web code: #2673

Description	Cable connector, signal, M17 PRO		Coupler connector, signal, M17 PRO		Device connector, power, M17 PRO		Device connector, power, M17 PRO	
Clamping range	5.5 mm ... 9.5 mm		5.5 mm ... 9.5 mm		-		-	
Flange size in mm	-		-		26 x 26	28 x 28	26 x 26	28 x 28
Number of positions	8		17		3 + PE		5 + 3 + PE	
Locking	ONECLICK fast-locking system		-		-		-	
Type	M17-08S1 N8A8003S	M17-08P1 N8A8003S	M17-17S1 N8A9003S	M17-17P1 N8A9003S	M17-3EP1 N8AW500S	M17-3ES1 N8AW600S	M17-8ES1 N8AA500S	M17-8EP1 N8AA600S
Type of contact	Female	Male	Female	Male	Female	Male	Female	Male
Order No.	1629012	1629015	1628964	1628967	1628924	1628921	1628502	1628501

PRC series pluggable power distributors
Supply devices quickly and reliably

Pluggable power distributors reliably supply devices with power in indoor and outdoor applications. The distributor boxes are pre-assembled and enable easy and time-saving installation with PRC series connectors.

Your advantages

- ☑ Time-saving Plug and Play installation with pre-assembled distributor boxes
- ☑ Locking mechanism unlocked manually or using a tool
- ☑ Ideal for indoor and outdoor applications due to the use of weatherproof materials
- ☑ Customer-specific versions and assembly available on request

Main features

- Max. rated voltage of 400 V AC
- Rated current: 32 A
- Degree of protection: up to IP69
- Can be color-coded

New product for 2020

Web code: #2060

Description	T distributor	H distributor	H distributor
Version	1-phase, 32 A	3-phase, 32 A	Phase splitter, 1 x 3-phase to 3 x 1-phase, 32 A
Number of positions	Input: 1 x 3 Output: 2 x 3	Input: 1 x 5 Output: 3 x 5	Input: 1 x 5 Output: 3 x 3
Type	PRC ED-T 1I3/2O3-4-HR-GN	PRC ED-H 1I5/3O5-4-HR-GN	PRC ED-H 1I5/3O3-4-HR-GN
Order No.	1079650	1079660	1079661

PRC series pluggable installation system Assembled cable assemblies

PRC series plastic circular connectors are now also available as assembled connection solutions. The pre-assembled connectors and cables are suitable for indoor and outdoor use, and allow fast system startup since no on-site assembly is required.

Your advantages

- ☑ Time savings of 80% for startup with Plug and Play
- ☑ Locking mechanism unlocked manually or using a tool
- ☑ Suitable for use in atmospheres containing salt and in direct sunlight
- ☑ Ideal for indoor and outdoor applications due to the use of weatherproof materials

Main features

- Rated current: 35 A
- Rated voltage: 690 V
- Cable lengths: 1 to 25 m
- Cable type: H07RN-F
- Degree of protection: up to IP69
- 3- and 5-pos.

New product for 2020

Web code: #2345

Description	PRC cable assembly with H07RN-F cable			
Design of head 1, head 2	Male connector, coupling	Male connector, coupling	Male connector, free cable end	Coupling, free cable end
Version	3-pos.	5-pos.	5-pos.	5-pos.
Order No. 1 m	-	-	1150679	1150676
Order No. 2.5 m	-	-	1150678	1150675
Order No. 5 m	1150693	1150682	150677	1150674
Order No. 10 m	1150692	1150681	-	-
Order No. 20 m	1150691	1150680	-	-

M8 connectors for Single Pair Ethernet
Ethernet finally goes the distance

Single Pair Ethernet implements consistent Ethernet communication in the Industrial Internet of Things. Compact and robust M8 device connectors and patch cables for SPE can be used for the space-saving and future-proof transmission of data and power from the OT level right through to the IT level.

Your advantages

- ☑ Future-proof: standardized connectors in accordance with IEC 63171-5 (IP67)
- ☑ Easily integrated: male and female versions of established inductive sensors and flying leads
- ☑ Efficient: device connectors for SMD, THR, and wave soldering processes enable automated processing
- ☑ Straightforward servicing: M8 connectors are compatible with IP20 connectors for SPE
- ☑ Safely shielded: patch cables with Advanced Shielding Technology

Main features

- Transmission standard: 10BASE-T1 to 1000BASE-T1
- Data rates up to 1 Gbps (up to 600 MHz)
- Power over Data Line (PoDL) up to 60 W
- Range of up to 1,000 m
- 360° shielded device connectors for front and rear mounting
- Cable structure: 1 x 2 x AWG 22/7
- Degree of protection: IP67

New product for 2021

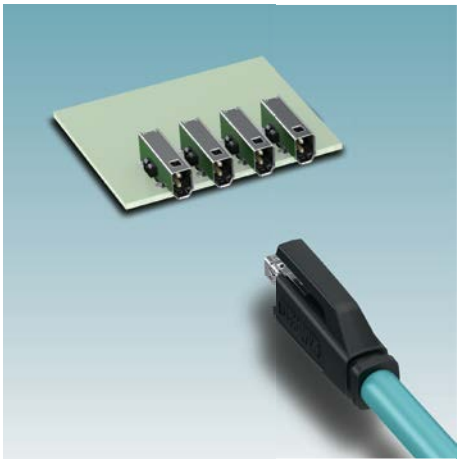
Web code: #2670

Description	SPE M8 female THR 180°*	SPE M8 female SMD 180°*	SPE M8 female THR 90°*	SPE M8 patch cable, 2.0 m	SPE M8 patch cable, 2.0 m
Type of contact	Male	Male	Male	Female - female	Female - male
Soldering process	THR and wave	SMD	THR and wave	-	-
Type	SPE-T1-M8MSM-180	SPE-T1-M8MSM-180-SMD	SPE-T1-M8MRM-90	SPE-T1-M8FSF/2,0-97B/M8FSF	SPE-T1-M8MSM/2,0-97B/M8FSF
Housing screw connection, front mounting	1412502			-	-
Housing screw connection, rear mounting	1412505			-	-
Order No.	1163793	1215777	1163795	1217530	1217524

*) Nut for housing screw connection

IP20 connectors for Single Pair Ethernet
Ethernet finally goes the distance

IP20 PCB connectors and patch cables for Single Pair Ethernet are ideal for efficient data transmission in factory and building automation. Optimized for many applications, this cabling is therefore the basis for future-proof networking from the sensor to the cloud.



Your advantages

- ☑ Future-proof: standardized connectors in accordance with IEC 63171-2 (IP20)
- ☑ Compact: SPE PCB connectors enable higher packing density
- ☑ Efficient: PCB connectors for SMD, THR, and wave soldering processes for automated processing
- ☑ Variable: PCB connectors in straight and angled versions as well as patch cables in various lengths
- ☑ Compatible with M8 connectors for Single Pair Ethernet

Main features

- Transmission standard: 10BASE-T1 to 1000BASE-T1
- Data rates up to 1 Gbps (up to 600 MHz)
- Power over Data Line (PoDL) up to 60 W
- Range of up to 1,000 m
- 360° shielding concept
- Cable structure: 1 x 2 x AWG 22/7
- Cable lengths: 1.0 to 5.0 m
- Degree of protection: IP20

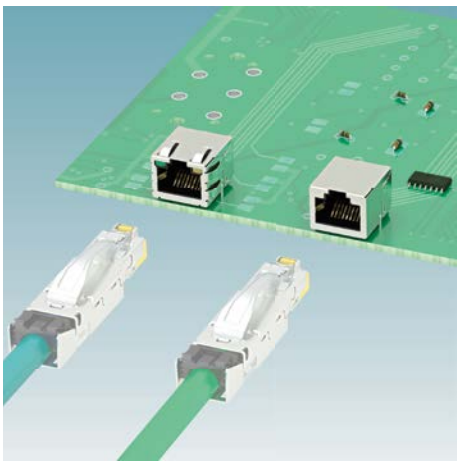
New product for 2021

Web code: #2671

Description	SPE female, 180°	SPE female, 90°	SPE female, 90° LED	SPE patch cable
Type of contact	Male			Female
Soldering process	THR and wave soldering			-
LED	-		Yes	-
Type	SPE-T1-STSM-180	SPE-T1-STSM-90	SPE-T1-STRM-90-LED	SPE-T1-CCP-SF/.../ AWG22/CCP/SF
Order No.	1163798	1163797	1215778	1183807 (1 m) 1183808 (2 m) 1183810 (3 m) 1183811 (5 m)

Industrial RJ45 jacks for PCB mounting
For high-performance data transmission

Device connectors of the RJ45 INDUSTRIAL series enable data rates of up to 10 Gbps in demanding industrial Ethernet applications. The robust design provides high mechanical stability on the printed circuit board as well as outstanding ESD and EMC properties.



PROFINET Ethernet EtherCAT

Your advantages

- Ideal for demanding Ethernet applications
- Particularly vibration-resistant for use in industrial environments
- Interference-free data transmission with high resistance to ESD and EMI
- Tray packaging for processing in automated reflow processes
- Compact design with space-saving footprint

Main features

- Data rates up to 10 Gbps
- Optionally integrated LEDs as a visual status indicator
- Operating temperature: -40°C … +105°C
- For THR and wave soldering processes
- Tray packaging
- Straight and angled version, with shield spring as an option

New product for 2020

Web code: #2059

Description	Angled version with LEDs and shield springs	Angled version with shield springs	Straight version with LEDs	Straight version with shield springs
Version	90°, angled	90°, angled	180°, straight	180°, straight
LEDs	2 x hybrid (yellow/green)	No	2 x hybrid (yellow/green)	No
Shield springs	Yes	Yes	No	Yes
Type	CUC-IND-J1ST-A/R4LS-LED-PG	CUC-IND-J1ST-A/R4LS-PG	CUC-IND-J1ST-S/R4LS-LED	CUC-IND-J1ST-S/R4LS-PG
Order No.	1099281	1099280	1091947	1099279

Industrial RJ45 cable connectors
For data transmission in accordance with CAT6$_A$

The new cable connectors of the RJ45 INDUSTRIAL series enable data rates of up to 10 Gbps in demanding industrial Ethernet applications. The robust zinc die-cast housing in a one-piece design provides high EMC protection and can be assembled in the field easily without special tools.

PROFINET Ethernet EtherCAT 10 Gbit/s

Your advantages

- Data transmission in accordance with CAT6$_A$: ideal for demanding Ethernet applications
- Particularly vibration-resistant for use in industrial environments
- Interference-free data transmission with high resistance to ESD and EMI
- One-piece design for easy handling and connection without special tools

Main features

- Data rates up to 10 Gbps in accordance with CAT6$_A$
- Conductor cross-sections: AWG 26 … AWG 22 (rigid and flexible)
- Cable diameters up to 9 mm
- With IDC fast connection
- Also available as push-pull ADVANCE connectors

New product for 2020 **Web code:** #2340				
Description	**RJ45 IP20**	**RJ45 IP20**	**Push-pull ADVANCE**	**Push-pull ADVANCE**
Connection cross-section (mm²)	0.14 mm² ... 0.25 mm²	0.23 mm² ... 0.32 mm²	0.14 mm² ... 0.25 mm²	0.23 mm² ... 0.32 mm²
Connection cross-section (AWG)	AWG 26 ... AWG 24	AWG 23 ... AWG 22	AWG 26 ... AWG 24	AWG 23 ... AWG 22
Communication system	Ethernet	PROFINET/Ethernet	Ethernet	PROFINET/Ethernet
Type	CUC-IND-C1ZNI-S/ R4IE10G8	CUC-IND-C1ZNI-S/ R4IP10G8	CUC-V14-C1ZNI-S/ R4IE10G8	CUC-V14-C1ZNI-S/ R4IP10G8
Order No.	1149846	1149847	1149841	1149843

RJ45 jacks for PCB mounting
Versatile solutions for data transmission

The new RJ45 device connectors round off the portfolio for copper-based data transmission. Different outlet directions, versions for SMD and wave soldering, and multi-ports provide the right solution for every application.

PROFINET Ethernet EtherCAT

Your advantages

- Wide range of connection options for different device designs
- Space-saving multi-port sockets for compact device designs
- Save costs with automated processing options
- Suitable for high-performance, future-proof Ethernet applications

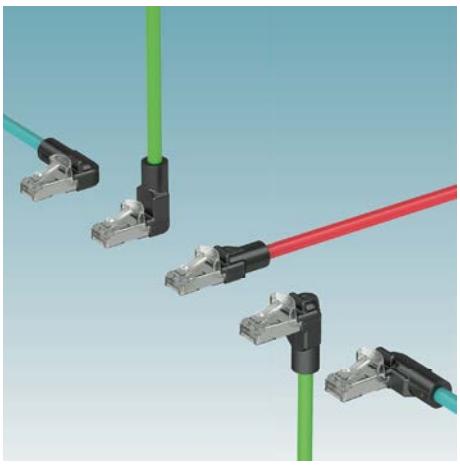
Main features

- Data rates up to 10 Gbps
- Optionally integrated LEDs as a visual status indicator
- For SMD and wave soldering
- Tray and tape-on-reel packaging
- Straight and angled versions

New product for 2020 **Web code:** #2341				
Description	**Angled single-port version**	**Straight single-port version with LEDs**	**Angled multi-port version**	**Angled multi-port version**
Version	90°, angled	180°, straight	90°, angled	90°, angled
Number of ports	1	1	2	4
LEDs	No	2 x hybrid (yellow/green)	No	No
Soldering process	SMD	Wave soldering		
Type	CUC-SP-J1ST-A/R4LT-SMD	CUC-SP-J1ST-S/R4LT-THR-LED	CUC-MP-J1ST-A/2R4LT-THR	CUC-MP-J1ST-A/4R4LB-THR
Order No.	1149882	1149871	1149858	1149849

Industrial RJ45 patch cables
Reliable data transmission in accordance with CAT6$_A$

The molded patch cables of the RJ45 INDUSTRIAL series transmit data rates of up to 10 Gbps in Ethernet and PROFINET environments. Thanks to their robust design and high vibration resistance, they enable complex cabling solutions in industrial applications.



Your advantages

- ☑ Ideal for demanding Ethernet applications with up to 10 Gbps data transmission in accordance with CAT6$_A$
- ☑ Robust design with high-quality molding and protected locking clip
- ☑ Consistent approval for the global market enables diverse use
- ☑ Wide range of possible applications with five cable outlet directions
- ☑ Broad cable portfolio for a wide range of industrial applications

Main features

- Data transmission up to 10 Gbps in accordance with CAT5 and CAT6$_A$
- PROFINET and Ethernet versions
- Cable versions for drag chain and robot applications
- Standard items in 0.3 to 5.0 m as well as configurable cable length up to 80 m
- Increased vibration resistance
- Five cable outlet directions
- Approvals: CE, cULus, EAC

New product for 2021 **Web code:** #2675				
Description	**INDUSTRIAL patch cable for PROFINET**			
Version	Straight / straight	Straight / bottom	Straight / top	Straight / straight
Number of positions	4	4	4	8
Transmission	100 Mbps			1 Gbps ... 10 Gbps
Cable type and length	Configurable			
Type	NBC-R4ACS-R4ACS-PN4/.../...	NBC-R4ACS-R4ACB-PN4/.../...	NBC-R4ACS-R4ACT-PN4/.../...	NBC-R4ACS-R4ACS-IE8/.../...
Order No.	1247656	1247629	1247660	1247639

RJ45 patch cables for building applications Reliable data transmission in accordance with CAT6$_A$

The patch cables of the RJ45 BUILDING series are particularly suitable for future-proof cabling solutions in building automation. With data transmission rates of up to 10 Gbps and worldwide approvals, the shielded patch cables can be optimally used in building applications.

Your advantages

- Ideal for demanding Ethernet applications with up to 10 Gbps data transmission in accordance with CAT6$_A$
- Ideal for building applications due to the use of cable sheath with Low Smoke Zero Halogen (LSZH) material class
- Reliable even after several insertion cycles due to the protected locking clip
- Consistent approval for the global market enables diverse use

Main features

- Data transmission up to 10 Gbps in accordance with CAT5 and CAT6$_A$
- LSZH sheath
- Lengths from 0.3 to 25 m
- Cable shielding
- Locking clip protection
- Approvals: CE, EAC, DNV GL, cULus

New product for 2021 **Web code:** #2676				
Description	**BUILDING patch cable, CAT5**		**BUILDING patch cable, CAT6$_A$**	
Version	Straight / straight			
Number of positions	8			
Transmission	1 Gbps		10 Gbps	
Cable length	2.0 m	5.0 m	2.0 m	5.0 m
Type	NBC-R4AC/C5-2,0/R4AC	NBC-R4AC/C5-5,0/R4AC	NBC-R4AC/C6A-2,0/ R4AC	NBC-R4AC/C6A-5,0/ R4AC
Order No.	1227562	1227564	1227580	1227583

Duplex patch cables for indoor use
Wide range for FO cabling

The new duplex patch cables for connecting active and passive components extend the comprehensive range of FO patch cables. The wide range of connector combinations and the various fiber categories enable use in numerous applications.

Your advantages

- ☑ Maximum protection against the effects of EMI and ESD
- ☑ High data rates and long transmission distances
- ☑ Ideal for use in distributor systems and for connecting end devices
- ☑ Excellent mechanical and optical properties
- ☑ Connectors with UPC and APC polishing for optimum attenuation values

Main features

- All common FO interfaces
- Data rates up to 40 Gbps
- Versions for singlemode and multimode (GOF)
- Degree of protection: IP20
- Different length options from 0.5 to 10 m

New product for 2020

Web code: #2342

Description	Duplex patch cable				
Connector	LC-LC	LC-LC	SC-SC	SC-SC	ST-ST
Polishing	UPC	APC	UPC	APC	UPC
Fiber type	G50/125 µm OM4	E9/125 µm OS2	E9/125 µm OS2	E9/125 µm OS2	G50/125 µm OM2
Sheath color	Violet	Yellow	Yellow	Yellow	Orange
Length	0.5 m	1 m	3 m	5 m	3 m
Type	FOC-LC:PA-LC:PA-OM4:D01/0,5	FOC-LC:AA-LC:AA-OS2:D01/1	FOC-SC:PA-SC:PA-OS2:D01/3	FOC-SC:AA-SC:AA-OS2:D01/5	FOC-ST:PA-ST:PA-OM2:D01/3
Order No.	1115642	1115630	1115547	1115540	1115556

M17 MPO series FO data connectors
Future-proof high-performance data distribution

Industrial-grade MPO connectors are ideal for real-time data transmission for controlling intelligent power grids. The robust interfaces feature high-quality fiber optics which ensure stable bandwidths over long transmission distances.

Your advantages

- ☑ Ideally suited for future-proof data cabling: high-quality fiber optics with optimized return loss
- ☑ Compact device connectors allow for up to 72 FO front connections per rack unit
- ☑ Protection against failure: robust screw locking mechanism ensures the highest pull-out forces
- ☑ Plug and Play: pre-assembled components allow for easy installation without special tools

Main features

- Return loss up to 30 dB
- Pull-out force >500 N
- Integrated MPO interface
- Degree of protection: IP67 (when plugged in)
- Protected against mismatching

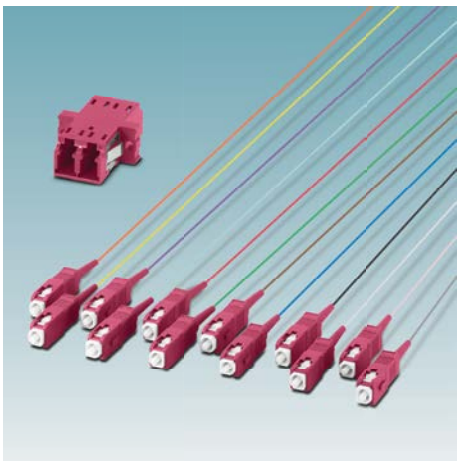
New product for 2020

Web code: #1623

Description	Patch cable	19" connection box (1RU) with one MPO socket	19" connection box (1RU) with two MPO sockets	Plug-in module for empty enclosure (3RU)	19" empty enclosure 3RU
Connection	M17 (MPO) to M17 (MPO)	LC duplex / 1 x M17 (MPO)	LC duplex / 2 x M17 (MPO)	6 x LC duplex / 1 x M17 (MPO)	-
IP protection	IP67	IP67 / IP20	IP67 / IP20	IP67 / IP20	-
Order No. for 4-pos.	1087164	1087135	1087121	-	1419976
Order No. for 12-pos.	1018530	1018568	1018570	1018571	1419976
Order No. for 24-pos.	1087154	1087109	1087112	-	1419976

FO couplings and pigtails
Reliable cabling of fiberglass solutions

Connect passive fiberglass components efficiently and reliably with FO couplings and pigtails. The couplings and pigtails are ideal for splice boxes and other distributors. High variance means that you can adapt your application flexibly to the relevant conditions.



Your advantages

- ☑ Versatile use with the large variety of versions
- ☑ Outstanding transmission properties with optimized attenuation values
- ☑ Ideal for use in splice boxes and distributors

Main features

- 23 coupling versions for multimode and singlemode fibers and all common connector types
- 15 pigtail versions for multimode and singlemode with all common connector types
- Degree of protection: IP20

New product for 2021

Web code: #2678

Description	IP20 coupling			IP20 pigtails		
Pin connector pattern	LC duplex	SC duplex	ST duplex	SC	LC	ST
Fiber type	OS2	OM4	OS2	OS2	OM4	OM1
Color	Blue	Violet	Silver	Blue	Violet	Silver
Type	FOC-ADAPTER:LCD/LCD-OSP	FOC-ADAPTER:SCD/SCD-OM4	FOC-ADAPTER:STD/STD-SM	FOC-PT9:SC-OSP/2.5	FOC-PT9:LC-OM4/2.5	FOC-PT9:ST-OM1/2.5
Order No.	1208077	1208085	1208095	1208113	1208104	1208117

Assembled 19 inch splice boxes For all common FO interfaces

The 19 inch splice boxes of the FDX 20 series provide ample interior space for the convenient and secure connection of fiber optics. The splice boxes can be extended and their depth adjusted. They are ideal for real-time data transmission in industrial applications and data centers.

Your advantages

- Continuously reliable data connection with extensively tested components
- 19 inch format enables convenient splicing for larger bending radii
- Pre-assembled, ready-to-splice design reduces installation time
- Intuitive front panel operation and clear control cabinet layout with uniform Phoenix Contact design
- Connectors with UPC polishing for optimum attenuation values

Main features

- Degree of protection: IP20
- Temperature range: at least -25°C ... +70°C
- Installed height: one rack unit (1RU)
- Versions for singlemode and multimode (GOF)
- Maximum protection against the effects of EMI and ESD
- Color: gray

New product for 2020

Web code: #2348

Description	**19 inch splice box with different connector and fiber types**		
Version	12 x SC duplex	12 x ST duplex	24 x LC duplex
Fiber type	E9/125 µm OS2	G50/125 µm OM2	G50/125 µm OM4
Number of fibers	24	24	48
Type	FOC-FDX20-FR19-SCD12-OSP-PT9	FOC-FDX20-FR19-STD12-OM2-PT9	FOC-FDX20-FR19-LCD24-OM4-PT9
Order No.	1143631	1145398	1145413

Device connectors for photovoltaics
Fast mounting, reliable connection

The new device connectors of the SUNCLIX series extend the proven product range for photovoltaics. The connectors are ideal for cabling inverters and string combiner boxes. The patented fast screw connection enables fast mounting and reliable fixing.

Your advantages

- ☑ Fast mounting and durable fixing with the patented fast screw connection
- ☑ Silver-plated contacts for connection technology with long-term stability
- ☑ Maximum system efficiency with low-loss SUNCLIX contacts
- ☑ Patented UNLOCK system enables smaller actual dimensions as well as convenient release
- ☑ Assembled versions, versions for self-assembly, and customer-specific versions available

Main features

- Conductor cross-sections: 2.5 to 6 mm² (AWG 14 - 10)
- Nominal voltage: 1,500 V (TÜV/UL)
- Nominal currents up to 35 A (TÜV) / 50 A (UL)
- Temperature range: -40°C … +85°C
- Approval in accordance with IEC 62852 and UL 6703
- Protection class II
- Degree of protection: IP66, IP68 (24 h/2 m)

New product for 2021

Web code: #0359

Description	Housing socket	Housing pin	Wall mount	Contact socket	Contact pin
Version	Female	Male	-	Female	Male
Type	PV-FT-C4F-HSG	PV-FT-C4M-HSG	PV-FT-C-WALLMOUNT BK	PV-C3F-C-2,5-4-R3000 PV-C3F-C-6-R3000	PV-C3M-C-2,5-4-R3000 PV-C3M-C-6-R3000
Order No.	1133364	1133365	1146092	1050769 1050767	1050768 1050766

SUNCLIX connectors with crimp connection Efficient cabling of photovoltaic panels

Cable photovoltaic panels easily and reliably using SUNCLIX connectors with crimp connection. The new versions are ideal for (semi-)automated processing. Silver-plated contacts ensure lower contact resistance values during long-term use.

Your advantages

- ☑ Crimp connection technology for automated assembly processes
- ☑ Silver-plated contacts for connection technology with long-term stability
- ☑ International approvals in accordance with IEC and UL enable worldwide use
- ☑ Unique SUNCLIX pin connector pattern
- ☑ Global availability

Main features

- Nominal voltage: 1,500 V (TÜV/UL)
- Nominal currents up to 40 A (TÜV) / 50 A (UL)
- Conductor cross-sections: 2.5 to 6 mm² (AWG 14 - 10)
- Temperature range: -40°C … +85°C
- Approvals in accordance with IEC 62852 and UL 6703
- Protection class II
- Degree of protection: IP66, IP68 (24 h/2 m)

New product for 2021

Web code: #0674

Description	Housing socket	Housing pin	Contact socket	Contact pin
Version	Female	Male	Female	Male
Type	PV-C1F-C HSG	PV-C1M-C-HSG	PV-C3F-C-2,5-4-R3000 PV-C3F-C-6-R3000	PV-C3M-C-2,5-4-R3000 PV-C3M-C-6-R3000
Order No.	1050771	1050770	1050769 1050767	1050768 1050766

Cable-based SUNCLIX string fuse protection For maximum safety and flexibility

Install SUNCLIX string fuses in photovoltaic systems to protect the PV panels from damage caused by undesirable overvoltages. Cable connections make installation easy and flexible. Pre-assembled versions and versions with free cable ends are available.

Your advantages

- Flexible installation options with cable connections
- Tested tripping behavior in accordance with TÜV certification 2PfG 2380
- Customer-specific lengths available on request

Main features

- Version I with voltages up to 1,000 V at currents from 3.5 to 25 A
- Version II with voltages up to 1,500 V at currents from 3.7 to 17 A
- Maximum ambient temperature
- -40°C ... 75°C (depending on the current version)
- Degree of protection: IP66, IP68 (24 h/2 m)

New product for 2021 **Web code:** #1918				
Description	**Photovoltaic string fuse**			
Cable end	Free	SUNCLIX male/female	Free	SUNCLIX male/female
Versions	1,000 V at 3.5 A ... 25 A	1,000 V at 3.5 A ... 25 A	1,500 V at 3.7 A ... 17 A	1,500 V at 3.7 A ... 17 A
Type	PV-PRO/OE-200/F-1000/14	PV-PRO/M/F-200/F-1000/14	PV-PRO/OE-200/F-1500/13	PV-PRO/M/F-200/F-1500/17
Order No.	1214613	1220873	1214616	1220809

Connectors for energy storage systems
Easy plug-in of battery modules

Connectors for connecting to the busbar simplify the installation of plug-in systems in energy storage systems. The connectors with reverse-polarity protection are plugged onto the rear side of a storage system and are suitable for system voltages up to 1,500 V.

Your advantages

- ☑ Quick installation: direct contacting of battery modules on the busbar in the rack
- ☑ Safe installation: touch-proof battery terminals, even when not plugged in
- ☑ Diverse areas of application: modular design allows different currents
- ☑ Plug-in system with integrated interface: no wiring effort during installation

Main features

- System voltages up to 1,500 V
- Nominal currents from 40 to 200 A
- For busbars with a width of 5 mm
- High tolerance compensation of ±4 mm
- Degree of protection: IP20

New product for 2021

Web code: #2674

Description	**Module and corresponding panel-mount frame for connectors for busbars**				
Module designation	ES-BBC-SP 5 BK SET1	ES-BBC-SP 5 BK SET2	ES-BBC-SP 5 BK SET3	ES-BBC-SP 5 BK SET4	ES-BBC-SP 5 BK SET5
Panel-mount frame designation	ES-BBC-MF1	ES-BCC-MF2	ES-BCC-MF3	ES-BCC-MF4	ES-BCC-MF5
Nominal current	40 A	80 A	120 A	160 A	200 A
Nominal voltage	1,500 V				
Order No. module	1155597	1155598	1155599	1155600	1155601
Order No. panel-mount frame	1155603	1155604	1155605	1155607	1155609

Connectors for energy storage systems
Safe connection of battery terminals

Device and cable connectors that are protected against polarity reversal are ideal for use in energy storage systems. Featuring a rotatable design, touch protection, and mechanical coding, the connectors provide maximum flexibility and safety when it comes to connecting battery terminals.

Your advantages

- ☑ Can be rotated 360°: ideal for flexible cable outlets
- ☑ No mismatching: battery connection protected against polarity reversal by mechanical coding
- ☑ Safe installation: touch-proof battery terminals, even when not plugged in
- ☑ Various color versions: easier identification of battery terminals
- ☑ Flexible installation: different device connection technologies

Main features

- Nominal voltage up to 1,500 V DC
- Cross-sections: 50 to 70 mm²
- Nominal currents up to 200 A
- Degree of protection: IP65
- Insertion cycles: >100
- Device plug with crimp connection, current bar, and threaded bolt

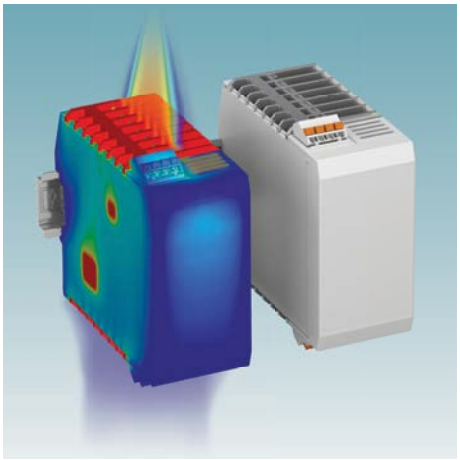
New product for 2021

Web code: #2346

Description	Device plug with threaded bolt	Device plug with current bar	Device plug with threaded bolt	Device plug with current bar	Connector with crimp connection	
Version	Positive terminal (+)		Negative terminal (-)		Pos. terminal (+)	Neg. terminal (-)
Conductor cross-section	35 mm² ... 70 mm²				50 mm² ... 70 mm²	
Nominal current	Max. 200 A					
Nominal voltage	1,500 V					
Color	Orange		Black		Orange	Black
Type	ES-FT-BPC-S 35-70 OG	ES-FT-BPC-S 35-70 OG	ES-FT-BPC-S 35-70 BK	ES-FT-BPC-S 35-70 BK	ES-BPC-C 50-70 OG	ES-BPC-C 50-70 BK
Order No.	1228821	1155483	1228819	1155592	1155594	1155595

Passive heatsinks for ICS series electronics housings For thermally demanding applications

Phoenix Contact is enhancing the versatility of its electronics housings. Passive heatsinks for the ICS series enable the finished devices to be used even in thermally demanding applications. Extensive thermal simulations also support you in optimizing your printed circuit board layout.



Your advantages

- ☑ Heatsinks enable the finished devices to be used in thermally demanding applications
- ☑ Extensive thermal simulations help achieve the optimum arrangement of components on the printed circuit board
- ☑ Customized heatsinks for reliable heat dissipation
- ☑ Simplified engineering process: comprehensive services for your specific device design

Main features

- Material: aluminum
- Overall width: 50 mm
- Installed height: 100 and 122 mm
- Application-specific adjustments for different electronic components
- Easy push-in mounting

New product for 2020 **Web code:** #2323		
Description	**Heatsink for ICS series electronics housings**	
Type	ICE50-R100X67-A1	ICE50-R122X67-A1
Order No.	1118306	1118305

ICS series modular electronics housings
Additional overall width for greater flexibility

ICS series modular electronics housings are now also available with an overall width of 50 mm. The DIN rail housings can accommodate up to four printed circuit boards and they can be connected together quickly and easily using DIN rail connectors.

Your advantages

- ☑ Modular system and unique modularity in the connection technology enable flexible use
- ☑ Standardized connections for RJ45, USB, D-SUB, and antenna sockets as components that can be integrated
- ☑ Optimal space utilization, as well as adaptability of design, colors, and printing
- ☑ 8-pos. DIN rail connectors with parallel and up to four series contacts for easy module-to-module communication

Main features

- Overall width: 50 mm
- Installed heights: 100 and 122 mm
- Can be combined with 25 mm wide filler
- Codable PCB connectors with screw or Push-in spring connection
- Available either with closed upper part or with a transparent hinged cover

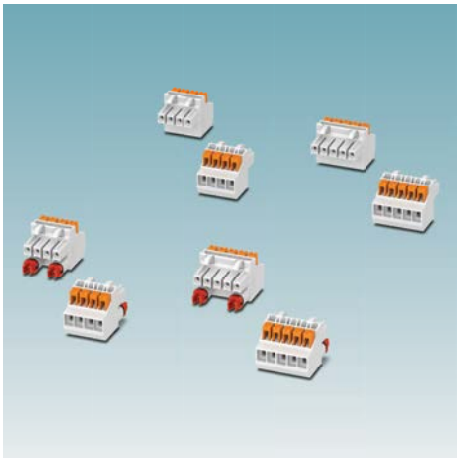
New product for 2020

Web code: #2322

Description	Lower housing part		Upper housing part, closed		Upper housing part with hinged cover	
Dimensions W x H x D [mm]	50 x 100 x 98	50 x 122 x 98	50 x 100 x 12	50 x 122 x 12	50 x 100 x 12	50 x 122 x 12
Type	ICS50-B100X98-V-V-7035	ICS50-B122X98-V-V-7035	ICS50-C100X12-7035	ICS50-C122X12-7035	ICS50-TL100X12-7035	ICS50-TL122X12-7035
Order No.	1076998	1077064	1076995	1076992	1076994	1076991

Push-in connectors with 3.5 mm pitch For ICS series electronics housings

The new PCB connectors with 3.5 mm pitch provide additional connection options for ICS series electronics housings. Integrated coding elements for the connectors enable quick and easy coding.



Your advantages

- Variable coding for reliable protection against mismatching
- Push-in Technology for quick and easy wiring
- High packing density with 3.5 mm pitch
- Quick and easy coding when connector and header are connected for the first time

Main features

- Currents up to 8 A
- Voltages up to 300 V
- Pitch: 3.5 mm
- 4- and 5-pos.
- For ICS overall widths of 20, 25, and 50 mm
- 16-way coding
- Connection method: Push-in spring connection

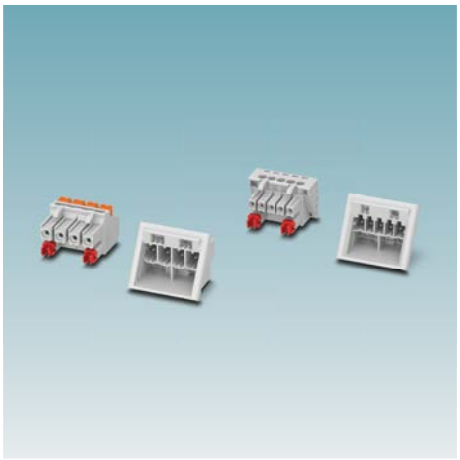
New product for 2021

Web code: #2656

Description	**PCB connector for ICS housing**			
Number of positions	4	5	4	5
Pitch	3.5 mm	3.5 mm	3.5 mm	3.5 mm
Connection method	Push-in spring connection			
Coding	16-way	16-way	-	-
Type	ICC20-PPC1,5/4-3,5-AA-7035	ICC25-PPC1,5/5-3,5-AA-7035	PSPT 1,5/4-ST-3,5 7035	PSPT 1,5/5-ST-3,5 7035
Order No.	1102107	1102108	1102110	1102114

Codable PCB connectors
For ICS series electronics housings

The new PCB connectors and headers provide additional connection options for the ICS housing series. The connectors with 3.5 mm or 5.0 mm pitch enable easy coding via the integrated coding element and are compatible with the existing range.



Your advantages

- ☑ Variable coding for reliable protection against mismatching
- ☑ Designed for integration into the wave soldering process
- ☑ Stable guide rails enable quick and easy push-in mounting of assembled printed circuit boards
- ☑ Quick and easy coding when connector and header are connected for the first time

Main features

- Currents up to 16 A
- Voltages up to 300 V
- Pitch: 3.5 or 5.0 mm
- 4- and 5-pos.
- For ICS overall widths of 20, 25, and 50 mm
- 16-way coding

New product for 2020

Web code: #2324

Description	Header for ICS housings		Connector for ICS housings		
Number of positions	5	5	5	4	4
Pitch	3.5	3.5	3.5	5.0	5.0
Connection method	-	-	Screw	Screw	Push-in
Coding	-	-	16-way	16-way	16-way
Alignment	Left	Right	-	-	-
Type	ICC25-H/5L3,5-7035	ICC25-H/5R3,5-7035	ICC25-PSC1,5/5-3,5-AA-7035	ICC25-PSC2,5/4-5,0-AA-7035	ICC25-PPC2,5/4-5,0-AA-7035
Order No.	1084018	1084017	1084024	1084027	1084034

Displays and membrane keypads for ICS housings
Easy implementation of display and operator panels

The 2.4 inch touch displays and 0.96 inch displays with configurable membrane keypads extend the range of accessories available for the ICS series electronics housings. The displays are optimally integrated into the housing cover and enable the use of individual display and operator panels in the control cabinet.

Your advantages

- Housing systems for visualization and operation in the control cabinet
- Coordinated housings, keypads, and displays
- Time-saving assembly of ready-to-use modules with Plug and Play
- Custom configuration of the membrane keypad
- Positioning of the display using the configurator

Main features

- 0.96 inch TFT display for ICS with 25 mm overall width
- 2.4 inch touch display for ICS50
- Four-key membrane keypad
- Transparent window to protect the display
- Temperature range: -20°C ... +70°C

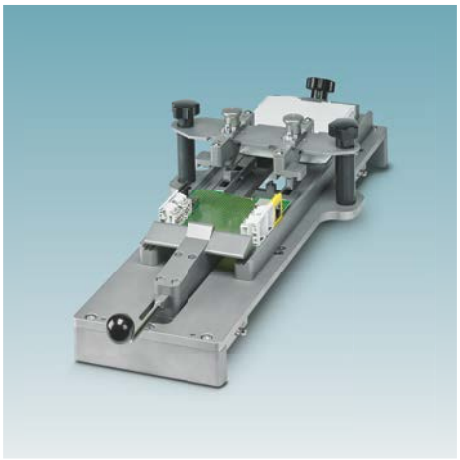
New product for 2021

Web code: #2651

Description	Membrane keypad with display		Membrane keypad with display		Housing cover with touch display	
Version	ICS25 cover with 0.96 inch display	For ICS25-C100	ICS25 cover with 0.96 inch display	For ICS25-C122	ICS50 cover with 2.4 inch touch display, 10 Pcs./Pkt.	ICS50 cover with 2.4 inch touch display, 1 Pcs./Pkt.
Type	ICS25-C122X12-DKP-7035	KP ICS25X100 K4 C3 P5	ICS25-C100X12-DKP-7035	KP ICS25X122 K4 C3 P5	ICS50-C100X12-D2,4-TRG-7035	ICS50-C100X12-D2,4-TRG-7035
Order No.	1215685	1215683	1215686	1215684	1077656	1226370

Accessories for ICS series electronics housings
Fast assembly with mounting device

The range of accessories for the ICS housing series now includes a user-friendly mounting device. The device holds the housing panels in position, allowing the assembled printed circuit boards to be inserted easily. This allows the final assembly of the electronic devices to be carried out quickly and cost-effectively.



Your advantages

- ☑ Simplified handling speeds up final assembly of devices
- ☑ Magnetic mounts enable quick conversion to other ICS sizes
- ☑ Robust material quality and mechanical design for high stability and durability

Main features

- Material: stainless steel guide rails
- CE-compliant
- Non-slip
- Weight: approx. 10 kg

New product for 2020 **Web code:** #2325	
Description	**ICS mounting device**
Order No.	1118354

8-pos. DIN rail connectors
For ICS and ME-IOS series electronics housings

The new TBUS8 8-pos. bus connectors with up to four series contacts extend the range of possible applications for ICS and ME-IO series electronics housings. The DINrail connectors allow you to combine both series for individual I/O or IoT applications.

Your advantages

- Space-saving installation under the electronics housing in the DIN rail
- Efficient connection between the individual housings of the ICS and ME-IO series
- Fast module-to-module communication without additional wiring effort
- Up to four parallel and series contacts respectively for efficient signal and data transmission

Main features

- Four parallel contacts
- Four series contacts
- Pitch: 2.54 mm
- 8-pos.
- Width: 18.8 and 25 mm
- For ICS and ME-IO series electronics housings

New product for 2021 **Web code:** #2654		
Description	**DIN rail connectors**	
Housing family	ME-IO	ICS
Number of positions	8-pos.	8-pos.
Pitch	2.54 mm	2.54 mm
Current carrying capacity	Max. 4 x 6 A, 4 x 4 A, <30 V	Max. 4 x 6 A, 4 x 4 A, <30 V
Type	TBUS8-18,8-PPPPSSSS-7035	TBUS8-25,0-PPPPSSSS-7035
Order No.	1140958	1156781

ME-IO series lower housing parts
Deeper design for more PCB space

Install larger printed circuit boards in ME-IO series electronics housings. New lower housing parts with a larger installation depth provide more space for your PCB and the electronics it holds. This also makes the ME-IO housings suitable for complex I/O applications.

Your advantages

- ☑ Versatile use: deeper design for more PCB space
- ☑ L-design: ideal for flush integration of standard interfaces such as RJ45
- ☑ Wide design: ideal for integrating TFT displays for controllers
- ☑ Greater flexibility: combination with ICS series electronics housings using DIN rail connectors

Main features

- Maximum PCB space per module width: 18.8 mm
- Deeper module base for seven different module types

New product for 2021

Web code: #2652

Description	ME-IO series lower housing parts					
Version	Extended L-base	Extended base	Extended L-base	Extended base	Extended L-base	Extended base
Type	ME-IO 37,6 LEB 10U TBUS 703	ME-IO 37,6 EB 10U TBUS 7035	ME-IO 56,4 LEB 10U TBUS 7035	ME-IO 56,4 EB 10U TBUS 7035	ME-IO 75,2 LEB 10U TBUS 7035	ME-IO 75,2 EB 10U TBUS 7035
Order No.	1103436	1103438	1158982	1159013	1158978	1158981

Touch displays for ME-IO series housings
Display and operating solutions for I/O head stations

With the ME-IO modular housing system, 2.4 inch touch displays provide optimum display and operating solutions for controllers. Input and output values can be visualized intuitively on the touch displays. Resistive touch technology enables easy navigation.

Your advantages

- ☑ Housing system for visualization and operation in the control cabinet
- ☑ Coordinated housings with pre-installed touch displays
- ☑ Time-saving assembly of ready-to-use modules
- ☑ Positioning of the display using the configurator
- ☑ For L-design: ideal for flush integration of standard interfaces such as RJ45

Main features

- Housing dimensions: 110 mm x 57 mm
- Plastic material: polyamide
- Resolution: 320 x 240 pixels
- SPI interface
- Resistive touch technology

New product for 2021 **Web code:** #2653			
Description	**2.4 inch touch display**		
Version	ME-IO-56,4 housing cover with integrated touch display	ME-IO-56,4 housing cover with integrated touch display	2.4 inch touch display
Pcs./Pkt.	12 Pcs./Pkt.	1 Pcs./Pkt.	5 Pcs./Pkt.
Type	ME-IO 56,4 C 10U D2,4-TRG 7035	ME-IO 56,4 C 10U D2,4-TRG 7035-VPE1	DCT T 2.4 QVGA S RTOUCH
Order No.	1209364	1225275	1132710

EH series universal housing system
For higher flammability rating in accordance with UL V0

The EH series product range now includes plastic electronics housings in accordance with UL 94 V0. The ABS polycarbonate used satisfies the stringent requirements concerning flammability. This means that devices can always be operated safely in demanding environments.

Your advantages

- DIN rail or wall mounting for application-specific device attachment
- Easy design-in with variable housing form factor
- Complete flexibility with PCBs with horizontal, frontal, and orthogonal orientation to the front of the device
- Three cover versions for individual PCB connections
- Integration of a wide variety of PCB connection technologies for a functional device design

Main features

- 2 installed heights, 7 overall widths, 3 cover versions
- 100 possible combinations
- Tool-free latching
- Flammability rating: UL 94 V0
- Colors: gray and black

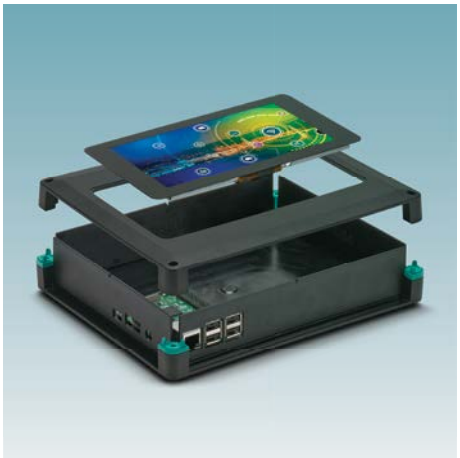
New product for 2020

Web code: #2326

Description	Lower housing part for tall design	Housing cover for tall design	Lower housing part for flat design	Housing cover for flat design
Type	EH 22,5-B/ABS-PC Blend V0	EH 22,5-C DS/ABS-PC Blend V0	EH 52,5 F-B/ABS-PC Blend V0	EH 52,5 F-C CS/ABS PC Blend V0
Color Order No.	Light gray 1025838	Light gray 1025865	Light gray 1074838	Light gray 1074794
Color Order No.	Black 1025842	Black 1025889	Black 1074813	Black 1074754

UCS series universal electronics housings For Raspberry Pi touch displays

The UCS series electronics housings feature ready-made cutouts for 7 inch touch displays, for ready-to-use 2.4 inch touch displays, and for all the standard connections for the mini computers. The electronics housings are suitable for desktop or wall use, and protect the Raspberry Pi B2 and B3 models from external influences.



Your advantages

- ☑ Housing system for visualization and operation in the field
- ☑ Time-saving assembly of ready-to-use modules with Plug and Play
- ☑ Positioning of the display using the configurator
- ☑ Space for additional electronics expands the scope of application of the Raspberry Pi mini computer
- ☑ Universal use with comprehensive accessories

Main features

- Dimensions: 237 mm x 195 mm x 47 mm or 125 mm x 87 mm x 47 mm
- Temperature range: -40°C ... +100°C
- Material: polycarbonate PC (UL V0)
- Colors: light gray (RAL 7035), black (RAL 9005)
- Vibration- and shock-resistant (in accordance with DIN EN 60068-2-6:2008-10)

New product for 2020

Web code: #2327

Description	UCS series electronics housings				
Version	Ready for Raspberry Pi touch display		2.4" touch display already integrated		2.4" touch display, suitable for all UCS sizes
Display size	7"	7"	2.4"	2.4"	2.4"
Color	Light gray	Black	Light gray	Black	
Type	UCS 237-195-F-GD-RPI-DT7 7035	UCS 237-195-F-GD-RPI-DT7 9005	UCS 125-87-F-GD-D2,4-TRG 7035	UCS 125-87-F-GD-D2,4-TRG 9005	DCT T 2,4 QVGA S RTOUCH
Order No.	1104780	1104781	1246286	1246287	1132710

Robust ECS series outdoor housings
New form factor for more compact applications

Outdoor housings with an installation depth of 80 mm extend the portfolio of ECS series outdoor housings. The smaller design featuring a high degree of protection is especially suitable for applications where space is at a premium, such as sensor technology in special vehicles.

Your advantages

- ☑ Device dimensions that are 75% more compact can be achieved
- ☑ Proven PCB connection technology
- ☑ Optional pressure compensation membrane for fluctuating air pressure
- ☑ Integrated tamper protection
- ☑ Ultra-compact housing design for a wide range of applications

Main features

- Installation depth: 80, 109, and 169 mm
- Material: UV-stabilized polycarbonate plastic (UL 94-V0)
- Housing approval in accordance with UL 50/50 E
- Temperature range: -40°C ... +100°C
- Housing approval in accordance with UL 50/50 E
- Degree of protection: IP69 (EN 60529, 80 mm), IP69K (ISO 20653, 109 mm)
- Color: gray (similar to RAL 7040)

New product for 2021

Web code: #2655

Description	**Housing, ventilated**	**Housing, ventilated**	**Front cover, blank**	**Front cover, blank**
Version	Screw version, gray	Snap-in version, gray	Screw version, gray	Snap-in version, gray
Type	ECS-B-64X80-S-UV-V GY	ECS-B-64X80-L-UV-V GY	ECS-P-64X80-S-UV-B GY	ECS-P-64X80-L-UV-B GY
Order No.	1196941	1196942	1186435	1186436

Robust ECS series outdoor housings
New front plates for circular connectors

The new front plates with circular connectors expand the scope of application of the ECS housing series for vehicle manufacturing and sensor/actuator cabling. The robust IP69 housings reliably protect the integrated electronics and are ideal for indoor and outdoor installation.

Your advantages

- ☑ Effective protection of electronics against thermal and mechanical environmental influences
- ☑ Housing design supports the installation of a range of PCB thicknesses for high application diversity
- ☑ Optional pressure compensation membrane for fluctuating ambient pressure
- ☑ Optional accessories for wall and mast mounting

Main features

- Degree of protection: IP69 (EN 60529)
- Temperature range: -40°C ... +100°C
- Material: polycarbonate, UV-stabilized
- Housing approval: UL 50/50E
- Color: black (RAL 9005) or gray (RAL 7042)

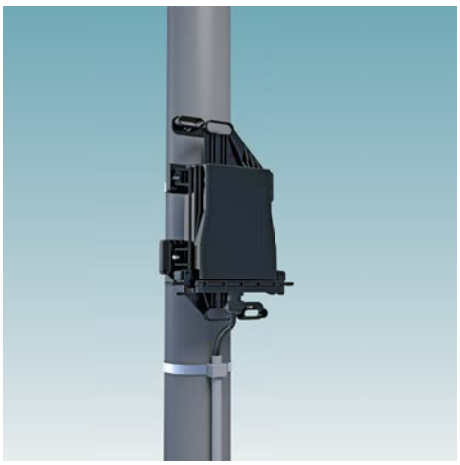
New product for 2020

Web code: #2328

Description	Housing		Front plate		
Mounting	Screw locking mechanism				
Connection technology	-	-	VARIOCON 4	RJ45	D-SUB 25
Color	Black	Black	Black	Black	Black
Type	ECS-B-122X109-S-UV-NV	ECS-B-122X169-S-UV1-V	ECS-P-122X169-S-UV1-VC4AML2/6	ECS-P-122X169-S-UV1-2RJ4	ECS-P-122X169-S-UV1-1DSUB25
Order No.	1054710	2230002	1143770	1143740	1143766

Robust ECS series outdoor housings
New front plates for rectangular connectors

The new front plates with rectangular connectors expand the scope of application of the ECS housing series for cellular communication and renewable energies. The robust IP69 housings reliably protect the integrated electronics and are ideal for indoor and outdoor installation.



Your advantages

- ☑ Effective protection of electronics against thermal and mechanical environmental influences
- ☑ Housing design supports the installation of a range of PCB thicknesses for high application diversity
- ☑ Optional pressure compensation membrane for fluctuating ambient pressure
- ☑ Optional accessories for wall and mast mounting

Main features

- Degree of protection: IP69 (EN 60529)
- Temperature range: -40°C ... +100°C
- Material: polycarbonate, UV-stabilized
- Housing approval: UL 50/50E
- Color: black (RAL 9005) or gray (RAL 7042)

New product for 2020

Web code: #2329

Description	Housing		Front plate		
Mounting	Screw locking mechanism				
Connection technology	-	-	2 PRC 5	1 RJ45	2 SUNCLIX
Color	Black	Black	Black	Black	Black
Type	ECS-B-122X109-S-UVNV	ECS-B-122X169-L-UV1-V	ECS-P-122X169-L-UV1-B M20/M25	ECS-P-122X169-S-UV1-1RJ4	ECS-P-122X169-S-UV-2PV
Order No.	1054710	2230002	1143768	1143761	1143769

Excellent services

Throughout your development process, Phoenix Contact will provide excellent services that make a difference. Discover how modern configurators, comprehensive technical data, and free product samples can make your daily work easier. As your partner, we will support you in the design-in process all the way to the development of tailored connection and housing solutions.

The easy way to more choice
Choose online from 60,000 products and find the right solution quickly:
- Intuitive filter and search functions
- Comprehensive technical data and downloads such as drawings and 3D models
- Personal on-site consultation

The easy way to more individuality
Customize your products with colors, printing, and special designs:
- Customer-specific versions
- Customized new products
- Intuitive online configurators

The easy way to more flexibility
Use our different procurement channels and benefit from worldwide availability.
- All items can easily be ordered online
- Free sample service
- Globally reliable logistics network with direct shipping or distribution

The easy way to more know-how
Always stay up-to-date about technologies and trends with us as your reliable partner.
- Technology, industry, and design-in experts at your side
- We will provide you with tailored training programs – either on site or digitally
- Free online seminars, seminars, and video tutorials

Further information on the Phoenix Contact services: Simply enter the web code in the search field on our website.

Web code: #2594

Simple selection with filters and technical data

There is a separate detail page for every product

There is a data sheet available for download for each item

Thanks to the global network, Phoenix Contact is always close to you

Device connection technology can be comprehensively configured

Housing parts and connection technology are easy to configure

Cable and assembly systems can be configured easily

Phoenix Contact provides support from the initial idea right through to series production

The online sample service is available in a large number of countries

Find the desired product quickly with intuitive filters

Product samples are available with free shipping

Reliable logistics worldwide

Keep up-to-date on new products, trends, and technologies

We will provide you with tailored training programs – either on site or digitally

Stay updated via Phoenix Contact apps and the Phoenix Contact YouTube channel

Remain reliably updated with the Phoenix Contact newsletter

Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation. With a global network reaching across more than 100 countries with over 17,600 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide variety of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. We focus on developing the fields of energy, infrastructure, process, and factory automation.

You can find your local partner at

phoenixcontact.com

MNR 1270238/2020-10-31/00

DC01-20.008.L3

PHOENIX CONTACT
INSPIRING INNOVATIONS