New products for 2017/2018

Connectors and electronics housings

PHŒNIX CONTACT

INSPIRING INNOVATIONS

New products for 2017/18 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 2017/2018 for the transmission of signals, data, and power – including our top four innovations for 2018.
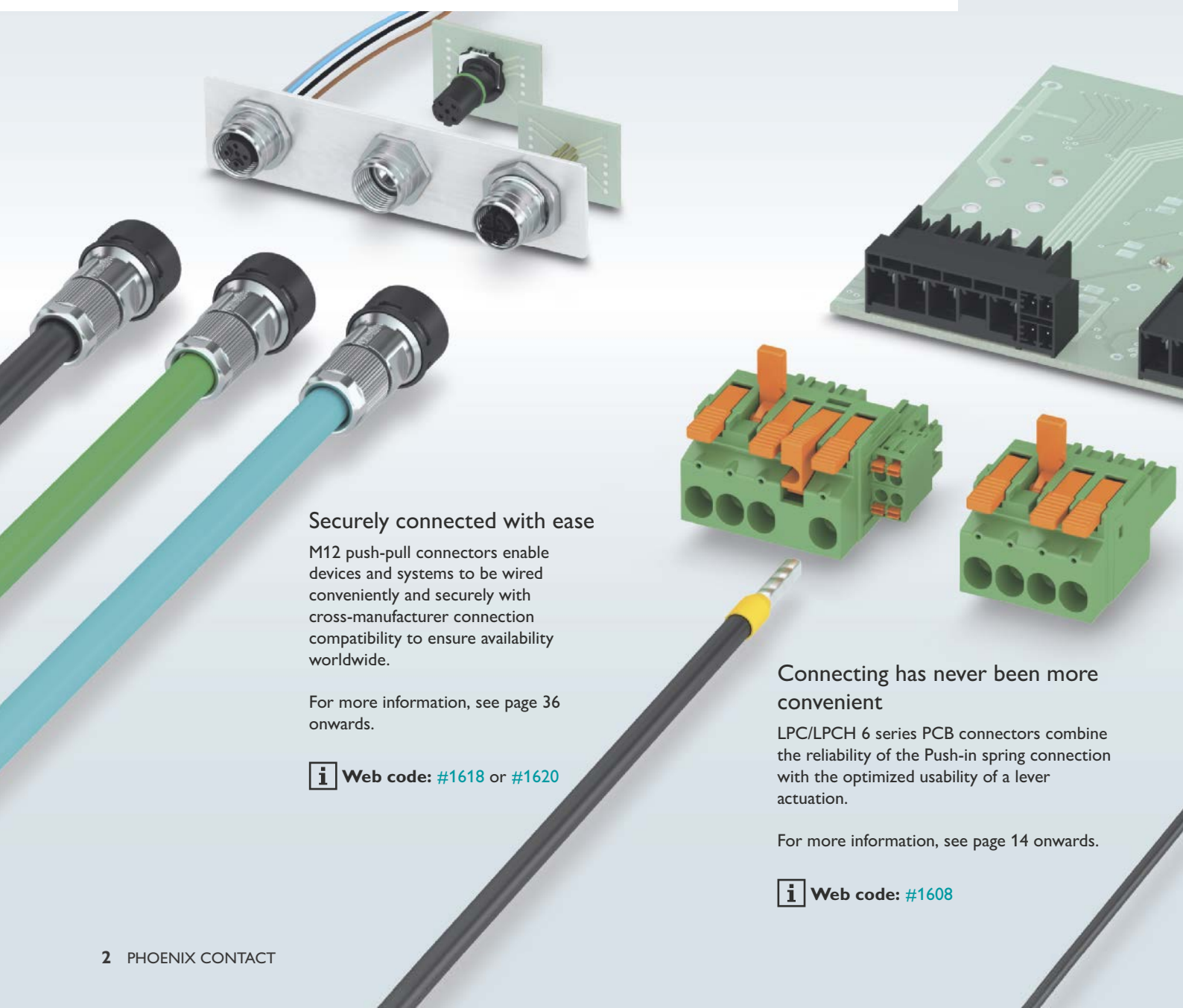
Securely connected with ease

M12 push-pull connectors enable devices and systems to be wired conveniently and securely with cross-manufacturer connection compatibility to ensure availability worldwide.

For more information, see page 36 onwards.

Connecting has never been more convenient

LPC/LPCH 6 series PCB connectors combine the reliability of the Push-in spring connection with the optimized usability of a lever actuation.
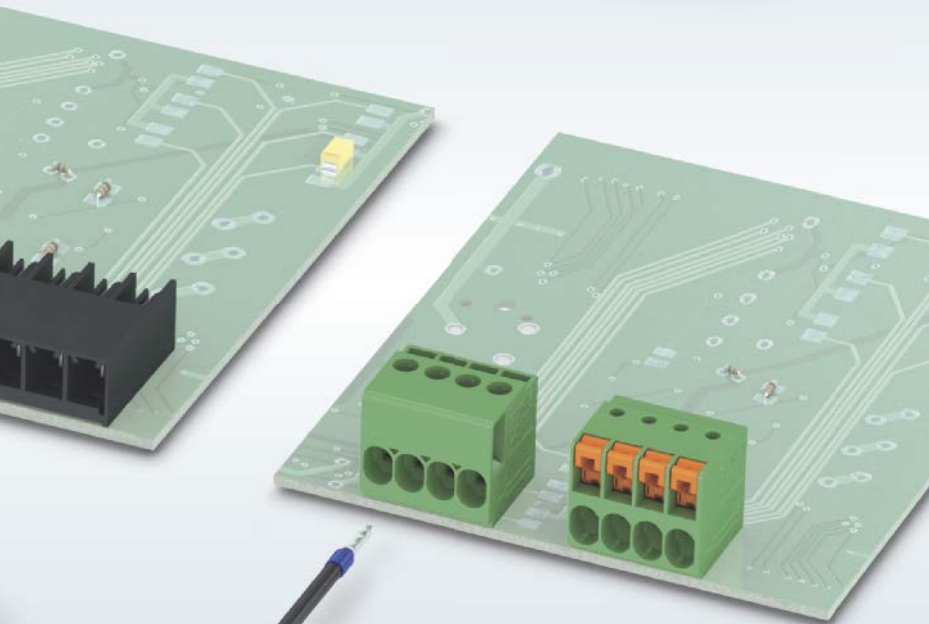
For more information, see page 14 onwards.

Future-proof data transmission

The compact splice boxes ensure continuously reliable data transmission in real time and are uniform in design.

For more information, see page 44.

[i] **Web code:** #1625

Contents

The same but different

TWIN Design PCB terminal blocks enable you to develop unified devices. Thanks to their identical shape, you can flexibly choose either the screw or the Push-in spring connection.

For more information, see page 16 onwards.

[i] **Web code:** #1616 or #1617

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.

[i] **Web code:** #1234 (example)

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

Robust electronics housings for harsh conditions

The robust electronics housings of the ECS series are the ideal solution for indoor and outdoor applications. The IP69 housings are suited for a broad temperature range and reliably protect the integrated electronics against physical influences.

Your advantages

- ☑ Housing design allows for different PCB thicknesses for high application diversity
- ☑ Proven PCB connection technology enables application-oriented customization
- ☑ Optional accessories for wall and mast mounting
- ☑ Optional pressure-equalizing diaphragm for fluctuating ambient pressures

Main features
- Degree of protection: IP69 (EN 60529)
- Temperature range: -40 °C to +85 °C
- Material: UV-stabilized plastic PC (UL 94-V0)
- Color: black (RAL 9005)
- Housing approval in accordance with UL 50 / 50 E

New product for 2018 ⓘ **Web code:** #1606						
Description	**Lower housing part**		**Front plate**			
Connection technology	Snap-in locking	Screw locking	None	1 x M12	2 x M12	Cable gland
Design	Unventilated	Ventilated	Snap-in locking	Screw locking	Snap-in locking	Screw locking
Type	ECS-B-122X169-L-UV1-NV	ECS-B-122X169-S-UV1-V	ECS-P-122X169-L-UV1-B	ECS-P-122X169-S-UV1-1M12	ECS-P-122X169-L-UV1-2M12	ECS-P-122X169-S-UV1-CG
Order number	2230001	2230002	2230004	2230009	2230006	2230011

Optional mounting accessories for electronics housings of the ECS series

PCB retaining clips and the mounting set expand the range of accessories for electronics housings of the ECS series. The retaining clips ensure that the PCB is held securely in the housing. The mounting set makes mounting on a mast fast and easy.

Your advantages

☑ Suitable for all housing versions and PCB thicknesses

☑ Easy to mount and reliable protection against mechanical influences

☑ Optionally orderable for application-oriented use

Main features
- Degree of protection: IP66, IP67, suitable for electronics housings of the ECS series
- Can be used for mast diameters from 51 mm to 152 mm

New product for 2018 ⓘ **Web code:** #1605		
Description	**Retaining clip**	**Mounting set**
Design	Set of 2	Set of 4
Type	ECS-BL	ECS-PM
Order number	2230012	2230013

Universal electronics housings for Raspberry Pi computers

Universal electronics housings of the UCS-RPI series for Raspberry Pi computers round out the UCS product family. The IP40 housings reliably protect the Raspberry Pi B2 and B3 models against mechanical and physical influences. UCS-RPI is suitable for desktop, wall or DIN rail housing.
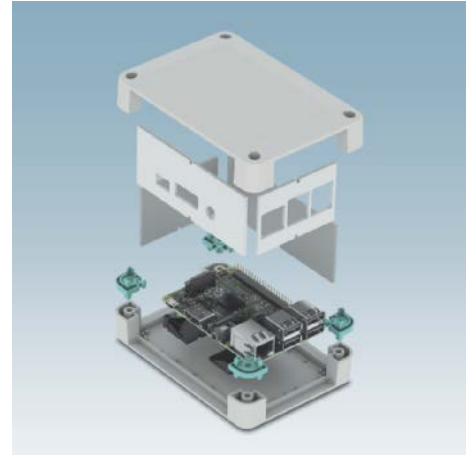
Your advantages

☑ Delivery as a complete housing with already machined side panels

☑ High degree of application flexibility, thanks to the modular housing design

☑ Flexible PCB attachment, adapts to virtually all form factors

☑ Reduced logistics outlay, thanks to components that are compatible with one another
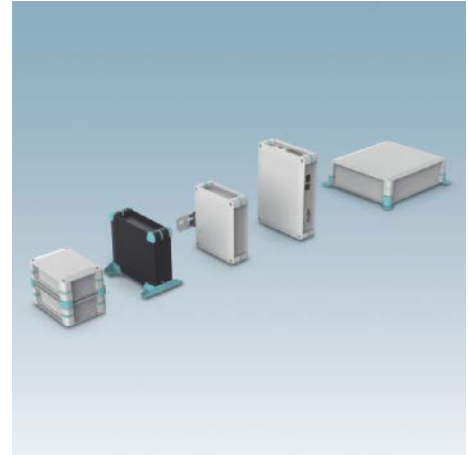
Main features

- Two housing formats: 125 mm x 87 mm, 145 mm x 125 mm
- Degree of protection: IP40
- Temperature range: -40 °C to +85 °C
- Material: polycarbonate PC (UL V0)
- Color: light gray (RAL 7035), black (RAL 9005)

New product for 2018 ⓘ **Web code:** #1601				
Description	**UCS-RPI electronics housing**			
Design	Depth: 47 mm Gray	Depth: 47 mm Black	Depth: 47 mm Gray	Height: 47 mm Black
Type	UCS 125-87-F-GD- 7035	UCS 125-87-F-GD-RPI 9005	UCS 145-125-F-GD-RPI 7035	UCS 145-125-F-GD-RPI 9005
Order number	1019724	1019723	1019749	1019720

Universal electronics housings for embedded systems

The new design-oriented electronics housings of the UCS series are the ideal solution for embedded systems. The IP40 housings reliably protect PCBs in standard form factor from external influences. Removable side panels enable modular housing solutions in customized heights and with interfaces for signals, data, and power.

Your advantages

☑ High degree of application flexibility, thanks to the modular housing design

☑ Flexible PCB attachment, adapts to virtually all form factors

☑ Practical customization options

☑ Reduced logistics outlay, thanks to components that are compatible with one another

Main features

- Heights: 47 mm, 67 mm
- Degree of protection: IP40
- Temperature range: -40 °C to +85 °C
- Can be used as desktop, wall, and DIN rail housing
- Material: polycarbonate PC (UL V0)
- Flexible or fixed PCB attachment for maximum PCB area
- Color: light gray (RAL 7035), black (RAL 9005)

New product for 2017 ℹ **Web code:** #1112					
Description	**UCS** electronics housing				
PCB attachment	Flexible				Fixed
Type	UCS 125-87-… GD 7035	UCS 145-125-… GD 7035	UCS 195-145 … GD 7035	UCS 237-195 … GD 7035	UCS 195-145-… CCD 9005
Version Color / Order number.	Height: 47 mm Gray / 2203328	Height: 47 mm Gray / 2203332	Height: 47 mm Gray / 2203336	Height: 47 mm Gray / 2203341	Height: 47 mm Black / 2203441
Version Color / Order number.	Height: 67 mm Gray / 2203331	Height: 67 mm Gray / 2203334	Height: 67 mm Gray / 2203338	Height: 67 mm Gray / 2203344	Height: 67 mm Black / 2203442

Ergonomic handheld housings for mobile operator panels

The ergonomic electronics housings of the HCS series are suitable for mobile operator panels used in measuring and testing technology as well as for scanners and identification devices. The housings are made from stable ABS plastic and can be used in logistics and distribution, as well as vehicle technology and process technology.

Your advantages

☑ Easy integration of LC displays and membrane keypads

☑ Flexible device design, thanks to graduated or straight housing design

☑ Fast mounting, thanks to the modular design

☑ Customer-specific versions available

Main features
- Degree of protection: IP54
- Temperature range: -20 °C to +50 °C
- Material: stable, shock-resistant ABS plastic
- Color: light gray (RAL 7035)

New product for 2017

ℹ **Web code:** #1114

Description	HCS handheld housing							
Size	Micro	Mini		Mini-P	Medium		Maxi	
Design	Straight	Straight	Graduated	Straight	Straight	Graduated	Straight	Graduated
Order number Version without window	2203124	2203146	2203130	2203154	2203160	2203137	2203165	2203145
Order number Version with window	-	2203147	2203131	2203153	2203162	2203138	2203166	2203142

Easy-to-install electronics housings for stationary and mobile displays

The electronics housings from the DCS series integrate displays of different sizes. They reliably protect mobile and stationary electronics from mechanical influences as well as dust and splash water. Typical areas of application include laboratory and analysis technology as well as healthcare and building automation.

Your advantages

☑ Easy integration of LC displays

☑ Direct entry possible via membrane keypad

☑ Convenient handling, thanks to the integrated rechargeable battery

☑ Customer-specific versions available

Main features
- Degree of protection: IP54
- Temperature range: -20 °C to +50 °C
- Material: stable, shock-resistant ABS plastic
- Color: light gray (RAL 7035)

New product for 2017 ⓘ **Web code:** #1115			
Description	**DCS electronics housing**		
Display size	5.7"	7"	15"
Window (W x H)	118 mm x 88 mm	154.4 mm x 93.4 mm	306 mm x 230 mm
Position of membrane keypad	Right and left	-	-
Order number	2203174	2203183	2203189

Reflow-solderable headers
for electronics housings of the ME-IO series

THR-solderable PCB headers expand the range of connection technologies for electronics housings of the ME-IO series. As a result, for the 4- and 6-pos. PCB connectors there are now fully equipped headers available for the reflow-soldering process as well as fully and partially equipped versions for wave soldering.
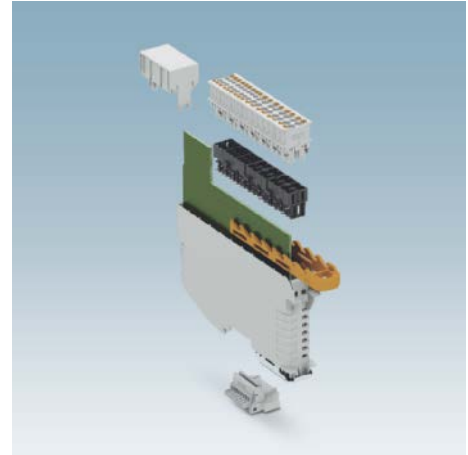
Your advantages

☑ Designed for integration into the SMT process

☑ Packaging in the carrier tape for automated pick and place assembly

☑ Tool-free wiring, thanks to fast Push-in spring connection

Main features

• Currents up to 8 A
• Voltages up to 320 V
• Pitch: 3.45 mm, 5.0 mm
• Material: LCP high-temperature plastic
• Packaging: carrier tape (150 pieces)

New product for 2018 ℹ **Web code:** #1604				
Description	**PCB header for plug with 2.5 mm pitch**		**PCB header for plug with 1.5 mm pitch**	
Slots	2	3	2	3
Number of positions (fully equipped)	8	12	12	18
Pitch value	5.0 mm	5.0 mm	3.45 mm	3.45 mm
Type	HSCH 2,5-2U/ 8 THR 9005	HSCH 2,5-3U/ 12 THR 9005	HSCH 1,5-2U/ 12 THR 9005	HSCH 1,5-3U/ 18 THR 9005
Order number	2203405	2203406	2203409	2203408

8-position DIN rail connectors
for electronics housings of the ME-IO series

The new TBUS8 bus connector enables the efficient transmission of signals and data to and between individual electronics housings of the ME-IO series. The 8-position bus connectors support space-saving and tool-free use in the DIN rail. They make contact when snapped onto the housing.

Your advantages

☑ Space-saving installation under the housing in the DIN rail

☑ Simplified wiring and efficient connection between the individual housings from the ME-IO series

☑ Serial and parallel signal and data transmission using an 8-position bus connector

Main features

- 6 A per parallel position
- 4 A per serial position
- Total current across all 8 contacts: max. 40 A
- Parallel and serial contacts can be combined (8P, 7P+1S, 6P+2S)
- Voltages up to < 30 V
- Pitch: 2.54 mm
- 8-pos.

New product for 2017 ⓘ **Web code:** #1113	DIN rail connector		
Description	**DIN rail connector**		
Overall width	18.8 mm		
Number of positions	8 x parallel	7 x parallel and 1 x serial	6 x parallel and 2 x serial
Type	TBUS8-18,8-PPPPPPPP-7035	TBUS8-18,8-PPPPPPPS-7035	TBUS8-18,8-PPPPPPSS-7035
Order number	2202396	2202399	2202403

Industry-compliant displays for stationary and mobile operator interfaces

Industry-compliant displays for electronics housings of the HCS and DCS series enable functional display solutions in screen diagonals from 2.8 to 15 inches. The FSTN or TFT displays are suitable for displaying data and processes on mobile handheld devices or stationary displays.
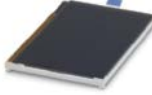
Your advantages

☑ Easy integration into electronics housings of the HCS and DCS series

☑ Functional display technologies for mobile and stationary use

☑ Housings in different form factors for customized device designs

Main features
- Display diagonals from 2.8" to 15"
- Brightness: 220 to 450 cd/m²
- FSTN and TFT panel technology
- Resolution up to 1024 x 768 pixels

New product for 2018 ℹ **Web code:** #1602				
Description	**FSTN display**		**TFT display**	
Display diagonals	2.8"	4.6"	5.7"	7"	15"
Interface	8 bits	Parallel	Parallel	Parallel	LVDS, 6-bit
Display resolution	128 x 64 pixels	128 x 128 pixels	320 x 240 pixels	800 x 480 pixels	1024 x 768 pixels
Recommended housing	HCS-T Mini/Medium; HCS-C Mini P/ Medium/Maxi	HCS-T MAXI	DCS 5.7	DCS 7	DCS 15
Type	D L 2,8 64X 8	D L 4,6 128X P	D L 5,7 QVGA P	D T 7,0 WVGA P	D T 15,0 XGA L
Order number	2203543	2203547	2203549	2203551	2203553

Ergonomic membrane keypads for stationary and mobile operator interfaces

Ergonomic membrane keypads for electronics housings of the HCS and DCS series enable application-oriented data entry using mobile handheld devices or stationary displays.

Your advantages

☑ Easy integration into electronics housings of the HCS and DCS series

☑ Membrane keypads in various sizes and colors for customized device designs

☑ Customer-specific key layouts on request

Main features
- 4 to 45 keys
- Up to four colors
- Membrane cable with crimp connector (pitch: 2.54 mm)

New product for 2018					
ℹ **Web code:** #1603					
Description	**Membrane keypad**				
Dimensions (W x H)	70.4 mm x 69.2 mm	37.6 mm x 139.6 mm	72.6 mm x 79.6 mm	78 mm x 173 mm	2.6 x 103.4 mm
Number of keys/colors	12/3	12/3	16/3	21/3	6
Length of membrane cable	100.5 mm	88.5 mm	62 mm	59 mm	4 mm
Recommended housing	HCS-C MINI-P	HCS-T MICRO	HCS-C MEDIUM	HCS-T MINI	DCS 5.7
Type	KP HCS C-MIN K12 C3 P9	KP HCS T-MIC K12 C3 P9	KP HCS C-MED K16 C3 P8	KP HCS T-MIN K21 C3 P14	KP DCS 4,8-6,4 K6 C4 P7
Order number	2203566	2203567	2203568	2203569	2203572

Lever-actuated PCB connectors for power transmission up to 41 A

PCB connectors of the LPC/LPCH 6 series enable tool-free connection of conductors with cross-sections up to 10 mm². The clear position of the color control lever and the defined contact force of the Push-in spring connection ensure that reliable contact is made.

Push-in Technology[P]
Designed by PHOENIX CONTACT
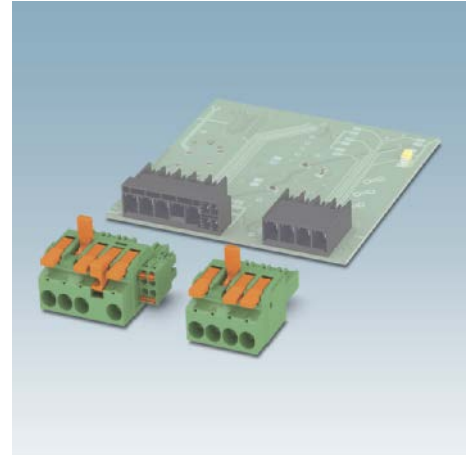
Your advantages

☑ Tool-free lever principle for time-saving connection and disconnection of conductors with or without ferrules

☑ Clear lever positions provide reliable feedback on opened or closed clamping spaces

☑ Defined contact force ensures that contact remains stable over the long term

☑ Time-saving Push-in connection when lever is closed

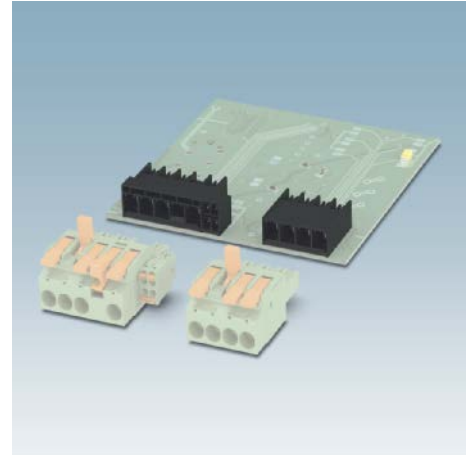☑ Combining signals and power in a single plug saves time and space

Main features
- Conductor cross sections up to 10 mm² (signal up to 1.5 mm²)
- Currents up to 41 A (signal up to 8 A)
- Voltages up to 1000 V (signal up to 160 V)
- Pitch: 7.62 mm (signal: 3.81 mm)
- 2-pos. to 4-pos. (signal: 4-pos.)
- Optional with middle flange
- Increased touch proofness in accordance with IEC/UL 61800-5-1

New product for 2018 [i] **Web code:** #1608			
Description	**PCB connector**	**PCB connector**	**PCB connector, hybrid, middle flange**
Number of positions	2	4	8 (4+4)
Type	LPC 6/2-ST-7,62	LPC 6/4-ST-7,62	LPCH 6/4+4-STL4-7,62
Order number	1716921	1716923	1716987

Touch-proof headers with 7.62 mm pitch for lever-actuated PCB connectors

The PC 6 and PCH 6 headers with 7.62 mm pitch round out the PCB connectors of the LPC 6 series. They are specially designed for the device requirements of the power electronics and provide increased touch proofness in accordance with IEC/UL 61800-5-1.

Your advantages

- ☑ Increased touch proofness for maximum safety even when not plugged in
- ☑ Well-known mounting principle allows worldwide use
- ☑ Combining signals and power in a single header saves time and space

Main features
- Currents up to 41 A (signal up to 8 A)
- Voltages up to 630 V (signal up to 160 V)
- Power: 2-pos. to 4-pos. (signal: 4-pos.)
- Pitch: 7.62 mm (signal: 3.81 mm)
- Optional with middle flange
- Increased touch proofness in accordance with IEC/UL 61800-5-1

New product for 2018 ⓘ **Web code:** #1609			
Description	**Header, horizontal**	**Header, horizontal**	**Header, horizontal, hybrid, middle flange**
Number of positions	2	4	8 (4+4)
Type	PC 6/2-G1-7,62 BK	PC 6/4-G1-7,62 BK	PCH 6/4+4-G1L4-7,62 BK
Order number	1717016	1717018	1717137

Identically shaped PCB terminal blocks with screw connection

Identical shape, different connection technology: thanks to identically shaped PCB terminal blocks, you can develop market-specific devices with a uniform design. Thanks to their identical shape, you can flexibly choose either the screw or the Push-in spring connection – without changing your PCB or device design.
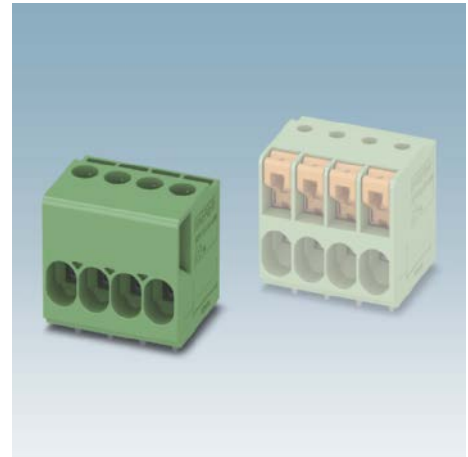
Your advantages

☑ Easy to adapt, thanks to their identical size and the same pinning for Push-in spring connections as for screw connections

☑ Comprehensive connection technology for conductor cross sections from 0.2 mm² to 16 mm² for a broad range of applications

☑ Comprehensive portfolio for power connections with pitches of 5.08 mm, 6.35 mm, and 10.16 mm

☑ Vibration-proof screw connection enables maximum reliability

☑ Acceptance worldwide, thanks to the familiar screw connection

Main features
- TWIN design
- Currents up to 76 A
- Voltages up to 1000 V
- Conductor cross sections: 0.2 mm² to 16 mm²
- 2-pos. to 12-pos.
- Pitch: 5.08 mm, 6.35 mm, 10.16 mm
- Increased touch proofness in accordance with IEC/UL 61800-5-1

New product for 2018 ℹ **Web code:** #1616			
Description	**PCB terminal block with screw connection**		
Pitch value	5.08 mm	6.35 mm	10.16 mm
Number of positions	5	5	5
Type	TDPT 2,5/5-SC-5,08	TDPT 4/5-SC-6,35-ZB	TDPT 16/5-SC-10,16-ZB
Order number	1017494	1017517	1017529

Identically shaped PCB terminal blocks with Push-in spring connection

Identical shape, different connection technology: thanks to identically shaped PCB terminal blocks, you can develop market-specific devices with a uniform design. Thanks to their identical shape, you can flexibly choose either the screw or the Push-in spring connection – without changing your PCB or device design.

Push-in Technology⊡
Designed by PHOENIX CONTACT

Your advantages

☑ Easy to adapt, thanks to their identical size and the same pinning for Push-in spring connections as for screw connections

☑ Comprehensive connection technology for conductor cross sections from 0.2 mm² to 16 mm² for a broad range of applications

☑ Comprehensive portfolio for power connections with pitches of 5.08 mm, 6.35 mm, and 10.16 mm

☑ Tool-free, time-saving Push-in connection

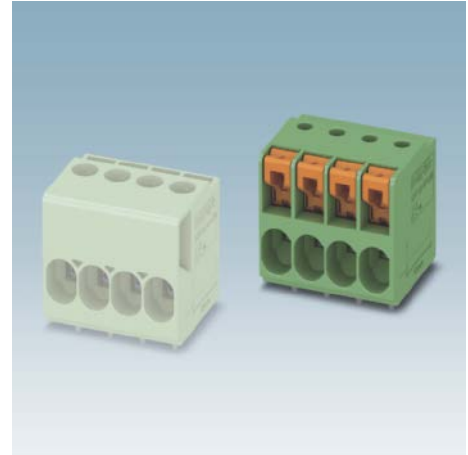☑ Intuitive operation, thanks to color-coded push button

Main features
- TWIN design
- Currents up to 76 A
- Voltages up to 1000 V
- Conductor cross sections: 0.2 mm² to 16 mm²
- 2-pos. to 12-pos.
- Pitch: 5.08 mm, 6.35 mm, 10.16 mm
- Increased touch proofness in accordance with IEC/UL 61800-5-1

New product for 2018 ⓘ **Web code:** #1617			
Description	**PCB terminal block with Push-in connection**		
Pitch value	5.08 mm	6.35 mm	10.16 mm
Number of positions	5	5	5
Type	TDPT 2,5/5-SP-5,08	TDPT 4/5-SP-6,35-ZB	TDPT 16/5-SP-10,16-ZB
Order number	1017506	1017524	1017534

Compact PCB connectors with crimp connection

The connectors of the PTCM series make it possible for the first time to have crimp contacts in the PTSM product family. Thanks to a latching flange on the side, stable latching to the mating connector is possible. Compact solutions can be created for wire-to-wire connections, especially when combined with the inverted PCB connectors.

Your advantages

☑ Cost-effective connection of crimped conductors in large quantities

☑ Plug-compatible PCB connectors with crimp or Push-in technology for flexible conductor connection

☑ Tools for manual and automatic crimping available as an option

☑ Taped products for efficiently automated crimping of high quantities

Main features
- Conductor cross sections: 0.14 mm² to 0.75 mm²
- Currents up to 6 A
- Voltages up to 160 V
- Pitch: 2.5 mm
- 2-pos. to 8-pos.

New product for 2018

ℹ **Web code: #1611**

Description	Connector housing			Crimp contact	
Number of positions	2	5	8	-	-
Type	PTCM 0,5/ 2-PL-2,5 WH	PTCM 0,5/ 5-PL-2,5 WH	PTCM 0,5/ 8-PL-2,5 WH	PTCM-MP-P 0,14-0,5 (R)	PTCM-MP-P 0,34-0,75 (R)
Order number	1015464	1015461	1015458	-	-
Order number for bulk products	-	-	-	1013781	1013780
Order number for taped products	-	-	-	1013778	1013777

Inverted PCB connectors with crimp connection

The inverted connectors of the PTCM series make it possible for the first time to have crimp contacts in the PTSM product family. The small design and high current-carrying capacity make the connection system an ideal connection solution for the power supply.

Your advantages

☑ Cost-effective connection of crimped conductors in large quantities

☑ Plug-compatible PCB connectors with crimp or Push-in technology for flexible conductor connection

☑ Tools for manual and automatic crimping available as an option

☑ Taped products for efficiently automated crimping of high quantities

Main features
- Conductor cross sections: 0.14 mm² to 0.75 mm²
- Currents up to 6 A
- Voltages up to 160 V
- Pitch: 2.5 mm
- 2-pos. to 8-pos.

New product for 2018 ⓘ **Web code:** #1612	Connector housing			Crimp contact	
Description					
Number of positions	2	5	8	-	-
Type	PTCM 0,5/ 2-PI WH	PTCM 0,5/ 5-PI WH	PTCM 0,5/ 8-PI WH	PTCM-MP-PI 0,14-0,5 (R)	PTCM-MP-PI 0,34-0,75 (R)
Order number	1015242	1015245	1015248	-	-
Order number for bulk products	-	-	-	1013990	1013989
Order number for taped products	-	-	-	1013988	1013987

Single-row PCB connectors with 2.54 mm pitch with crimp connection

The single-row PCB connectors of the MCC 0,5 series round out the existing portfolio with a compact pitch of 2.54 mm. Crimp contacts as bulk or taped products enable manual or automated processing of small and large position quantities.

Your advantages

☑ Cost-effective connection of crimped conductors in large quantities

☑ Plug-compatible PCB connectors with crimp or Push-in technology for flexible conductor connection

☑ Gold-plated contacts for transfer quality with long-term stability

☑ Small component size for applications where space is at a premium

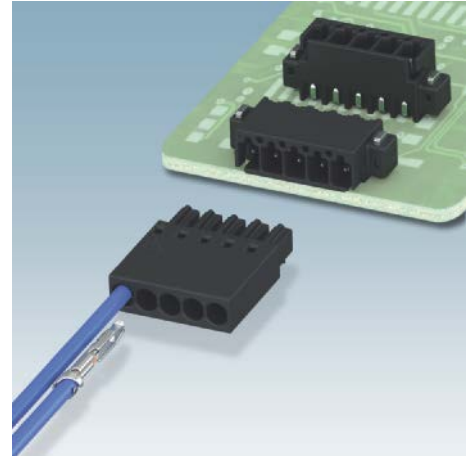☑ Tools for manual and automatic crimping available as an option

Main features
- Conductor cross sections: 0.14 mm² to 0.75 mm²
- Currents up to 6 A
- Voltages up to 160 V
- Pitch: 2.54 mm
- 2-pos. to 16-pos.

New product for 2018 ℹ **Web code:** #1610					
Description	**Connector housing**			**Crimp contact**	
Number of positions	2	10	16	-	-
Type	MCC 0,5/ 2-ST-2,54	MCC 0,5/ 10-ST-2,54	MCC 0,5/ 16-ST-2,54	MCC 0,5-MP AU 0,14-0,5 (R)	MCC 0,5-MP AU 0,34-0,75 (R)
Order number	1012266	1012274	1012282	-	-
Order number for bulk products	-	-	-	1013425	1013419
Order number for taped products	-	-	-	1013420	1013418

Double-row PCB connectors with 2.54 mm pitch with crimp connection

The double-row PCB connectors of the DMCC 0,5 series round out the existing portfolio with a compact pitch of 2.54 mm. Crimp contacts as bulk or taped products enable manual or automated processing of small and large position quantities.

Your advantages

☑ Cost-effective connection of crimped conductors in large quantities

☑ Plug-compatible PCB connectors with crimp or Push-in technology for flexible conductor connection

☑ Gold-plated contacts for transfer quality with long-term stability

☑ Contacts arranged in a double row enable high packing density in a compact area

☑ Tools for manual and automatic crimping available as an option

Main features
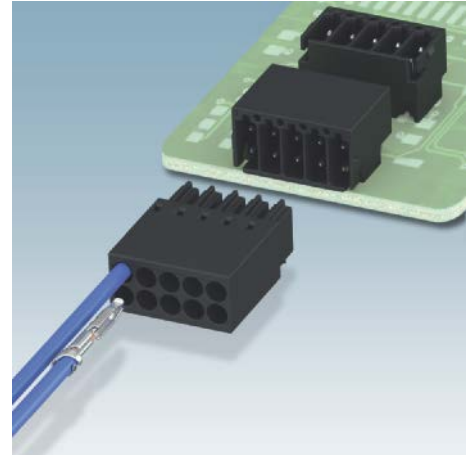- Conductor cross sections: 0.14 mm² to 0.75 mm²
- Currents up to 6 A
- Voltages up to 160 V
- Pitch: 2.54 mm
- 2-pos. to 16-pos. with 4 to 32 contacts

New product for 2018 ⓘ Web code: #1627		Connector housing			Crimp contact	
Description		**Connector housing**			**Crimp contact**	
Number of positions	2	10	16	-	-
Type	DMCC 0,5/ 2-ST-2,54	DMCC 0,5/ 10-ST-2,54	DMCC 0,5/ 16-ST-2,54	MCC 0,5-MP AU 0,14-0,5 (R)	MCC 0,5-MP AU 0,35-0,75 (R)
Order number	1027603	1027612	1027618	-	-
Order number for bulk products	-	-	-	1013425	1013419
Order number for taped products	-	-	-	1013420	1013418

Double-row PCB connectors
with new SKEDD direct connection technology

The SDDC 1,5 double-row PCB connectors are particularly suitable for applications with high contact density. Thanks to SKEDD direct connection technology, the connectors can be connected directly to the PCB. This is possible without tools or an additional header.

Push-in Technology[□]

Designed by PHOENIX CONTACT
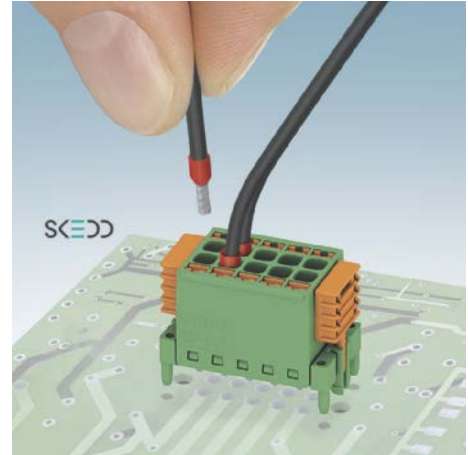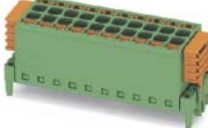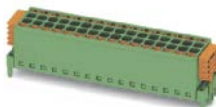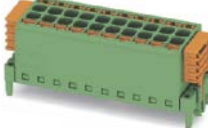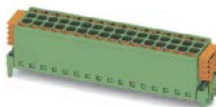
Your advantages

- ☑ SKEDD direct connection technology enables flexible positioning on the PCB
- ☑ Reduced component and process costs: simple insertion by hand and vibration-resistant connection
- ☑ Tool-free, time-saving Push-in connection
- ☑ Intuitive operation, thanks to color-coded push button
- ☑ Compact design with high packing density on the PCB

Main features

- Conductor cross sections: 0.2 mm² to 1.5 mm²
- Currents up to 8 A
- Voltages up to 160 V
- Pitch: 3.5 mm
- 2-pos. to 16-pos. with 4 to 32 contacts

New product for 2017 ⅈ **Web code:** #1121				
Description	**PCB connector**			
Number of positions	2	5	10	16
Type	SDDC 1,5 / 2-PV-3,5	SDDC 1,5 / 5-PV-3,5	SDDC 1,5 / 10-PV-3,5	SDDC 1,5 / 16-PV-3,5
Order number	1848642	1848671	1848723	1848781

Pin strip PCB connectors
for two-piece electronics housings

The new PTS 1,5 / ... -PH-5,0 CLIP PCB connector is ideal for use in two-piece electronics housings. Thanks to its standard snap-in geometry, it can be latched onto the lower housing part without using any tools. Cost-optimized pin strips are used to make contact with the PCB.

Push-in Technology
Designed by PHOENIX CONTACT
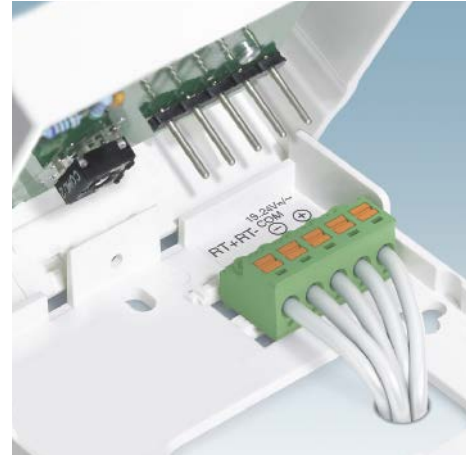
Your advantages

- ☑ Tool-free, time-saving Push-in connection
- ☑ Defined contact force ensures that contact remains stable over the long term
- ☑ Intuitive operation, thanks to color-coded push button
- ☑ Can be snapped into device housing, thanks to CLIP geometry
- ☑ Maximum clamping space in a small component size

Main features

- Conductor cross sections: 0.2 mm² to 2.5 mm²
- Currents up to 10 A
- Voltages up to 400 V
- Pitch: 5.0 mm
- 2-pos. to 12-pos.

New product for 2017 ℹ **Web code:** #1116			
Description	**PCB connector**		
Number of positions	2	6	12
Type	PTS 1,5 / 2-PH-5,0 CLIP	PTS 1,5 / 6-PH-5,0 CLIP	PTS 1,5 / 12-PH-5,0 CLIP
Order number	1848532	1848574	1848639

Reflow-solderable headers with 5.0 mm pitch for SMT soldering processes

The new reflow-solderable headers with 5.0 mm pitch are specifically designed for automated assembly processes. Flexible connection solutions are possible, thanks to 2-position to 12-position versions with straight and angled pins and versions with screw flange or Lock and Release system.
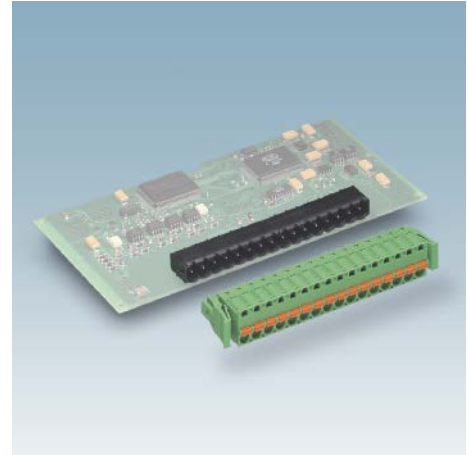
Your advantages

☑ Designed for integration into the SMT soldering process

☑ Packaging available for automated pick-and-place assembly

☑ Contacts satisfy the requirements for position tolerance in accordance with IEC 61760-3

Main features
- Currents up to 12 A
- Voltages up to 320 V
- Pitch: 5.0 mm
- 2-pos. to 12-pos.
- Material: LCP high-temperature plastic
- Standard pin length: 2.0 mm

New product for 2017 ⓘ **Web code:** #1117				
Description	**Header, horizontal**	**Header, horizontal with L and R flange**	**Header, vertical**	**Header, vertical with L and R flange**
Soldering process	THR	THR	THR	THR
Packaging	Bulk / tape-on-reel	Bulk / tape-on-reel	Bulk / tape-on-reel	Bulk / tape-on-reel
Type	CCA 2,5 / …-G P20 THR	CC 2,5 / …-GF-LR P20 THR	CCVA 2,5 / …-G P20 THR	CCV 2,5 / …-GF-LR P20 THR
Order number for 10-pos. version	1836421 / 1836654	1836764 / 1836997	1837103 / 1837336	1837446 / 1837679

High-position headers with 3.5 mm pitch for SMT soldering processes

The new reflow-solderable headers with 3.5 mm pitch are specifically designed for automated assembly processes. Flexible connection solutions are possible, thanks to 13- to 20-position versions with straight and angled pins and versions with screw flange.

Your advantages

☑ Designed for integration into the SMT soldering process

☑ Packaging available for automated pick-and-place assembly

☑ Contacts satisfy the requirements for position tolerance in accordance with IEC 61760-3

Main features

• Currents up to 8 A
• Voltages up to 160 V
• Pitch: 3.5 mm
• 13-pos. to 20-pos.
• Material: LCP high-temperature plastic
• Standard pin length: 2.0 mm

New product for 2017 ⓘ **Web code:** #1120	Header, horizontal	Header, horizontal with flange	Header, vertical	Header, vertical with flange
Description	**Header, horizontal**	**Header, horizontal with flange**	**Header, vertical**	**Header, vertical with flange**
Soldering process	THR and wave soldering			
Packaging	Bulk / tape-on-reel on request			
Type	MC 1,5 / …-G-3,5 P20 THR	MC 1,5 / …-GF-3,5 P20 THR	MCV 1,5 / …-G-3,5 P20 THR	MCV 1,5 / …-GF-3,5 P20 THR
Order number	1713364	1713373	1713384	1713394

High-position THR headers with 5.0 mm pitch for SMT soldering processes

The new reflow-solderable headers with 5.0 mm pitch are specifically designed for automated assembly processes in 13- to 24-position versions with straight and angled pins. Versions with a screw flange or Lock and Release system provide the plugs with a reliable locking option.

Your advantages

☑ Designed for integration into the SMT soldering process

☑ Packaging available for automated pick-and-place assembly

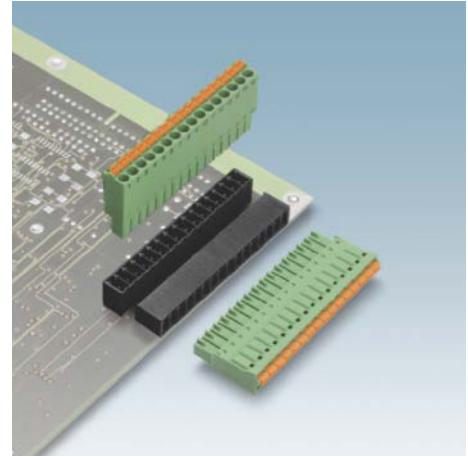☑ Contacts satisfy the requirements for position tolerance in accordance with IEC 61760-3

Main features

• Currents up to 12 A
• Voltages up to 320 V
• Pitch: 5.0 mm
• 13-pos. to 24-pos.
• Material: LCP high-temperature plastic
• Standard pin length: 2.0 mm

New product for 2017				
i Web code: #1118				
Description	**Header, horizontal**	**Header, horizontal with L and R flange**	**Header, vertical**	**Header, vertical with L and R flange**
Soldering process	THR	THR	THR	THR
Packaging	Bulk products	Bulk products	Bulk products	Bulk products
Type	CCA 2,5/ …-G P20 THR	CC 2,5/ …-GF-LR P20 THR	CCVA 2,5/ …-G P20 THR	CCV 2,5/ …-GF-LR P20 THR
Order number for 16-pos. version	1836489	1836829	1837161	1837501

High-position THR headers with 5.08 mm pitch for SMT soldering processes

The new reflow-solderable headers with 5.08 mm pitch are specifically designed for automated assembly processes in 13- to 24-position versions with straight and angled pins. Versions with a screw flange or Lock and Release system provide the plugs with a reliable locking option.
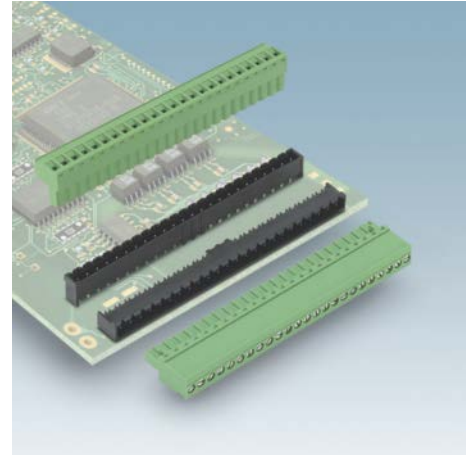
Your advantages

☑ Designed for integration into the SMT soldering process

☑ Packaging available for automated pick-and-place assembly

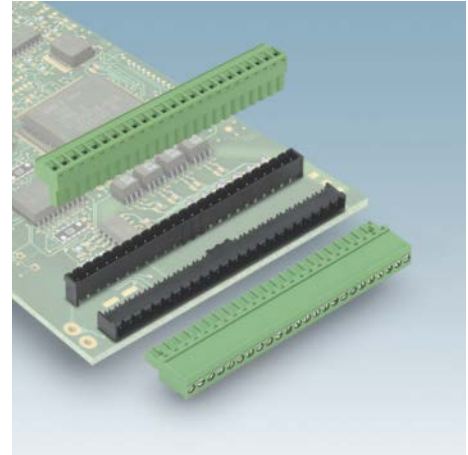☑ Contacts satisfy the requirements for position tolerance in accordance with IEC 61760-3

Main features

- Currents up to 12 A
- Voltages up to 320 V
- Pitch: 5.08 mm
- 13-pos. to 24-pos.
- Material: LCP high-temperature plastic

New product for 2017 ⓘ **Web code: #1119**	Header, horizontal	Header, horizontal with L and R flange	Header, vertical	Header, vertical with L and R flange
Description	**Header, horizontal**	**Header, horizontal with L and R flange**	**Header, vertical**	**Header, vertical with L and R flange**
Soldering process	THR and wave soldering	THR and wave soldering	THR and wave soldering	THR and wave soldering
Packaging	Bulk products	Bulk products	Bulk products	Bulk products
Type	CCA 2,5 / …-G-5,08 P26THR	CC 2,5 / …-GF-5,08-LR P26THR	CCVA 2,5 / …-G-5,08 P26THR	CCV 2,5 / …-GF-5,08-LR P26THR
Order number	1827676	1827553	1827919	1827799

High-current feed-through terminal blocks with screw connection for conductors up to 50 mm²

Conductor cross sections up to 50 mm² can be reliably connected by means of screw connection using the new UW 50 high-current feed-through terminal blocks. The terminal block features a functional design and stable housing construction.
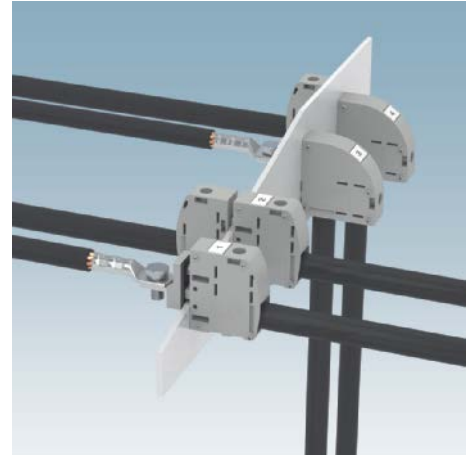
Your advantages

☑ Well-known connection principle enables worldwide use

☑ Tool-free snap-in principle for easy mounting on the housing wall

☑ Automatic panel thickness compensation enables universal use

☑ Molded versions for reliable seal even with low-viscosity molding compounds

Main features

• Conductor cross sections: 16 mm² to 50 mm²
• Currents up to 150 A
• Voltages up to 1000 V (600 V UL)
• 1-pos.
• Wall thicknesses: 1 mm to 4 mm

New product for 2018 ℹ️ **Web code:** #1613				
Description	**Horizontal panel feed-through terminal block**	**Horizontal molded panel feed-through terminal block**	**Vertical panel feed-through terminal block**	**Vertical molded panel feed-through terminal block**
Type	UW 50/S	UW 50-POT/S	UWV 50/S	UWV 50-POT/S
Order number	1713709	1713843	1713711	1713845

High-current feed-through terminal blocks with screw connection for conductors up to 95 mm²

Conductor cross sections up to 95 mm² can be reliably connected by means of screw connection using the new UW 95 high-current feed-through terminal blocks. The terminal block features a functional design and stable housing construction.

Your advantages

☑ Well-known connection principle enables worldwide use

☑ Tool-free snap-in principle for easy mounting on the device panel

☑ Automatic panel thickness compensation enables universal use

☑ Molded versions for reliable seal even with low-viscosity molding compounds

Main features

• Conductor cross sections: 25 mm² to 95 mm²
• Currents up to 232 A
• Voltages up to 1000 V (600 V UL)
• Wall thicknesses: 1 mm to 5 mm
• 1-pos.

	Horizontal panel feed-through terminal block	Vertical panel feed-through terminal block	Horizontal molded panel feed-through terminal block
New product for 2017 ℹ **Web code:** #1122			
Description	**Horizontal panel feed-through terminal block**	**Vertical panel feed-through terminal block**	**Horizontal molded panel feed-through terminal block**
Type	UW 95(-F)/S	UWV 95(-F)/S	UW 95(-F)-POT/S
Order number Without flange	1713223	1713226	1713242
Order number With flange	1713225	1713227	1713243

Panel feed-through terminal blocks with Push-in spring connection for energy technology

Efficiently connect current transformers and voltage transducers, such as grid protection devices, using the new panel feed-through terminal blocks from the PT 4-WE series. The terminal blocks are suitable for device panels with a sheet thickness of up to 2.5 mm. Thanks to the patented snap-on mechanism, the terminal block can be installed quickly and easily using a screwdriver.
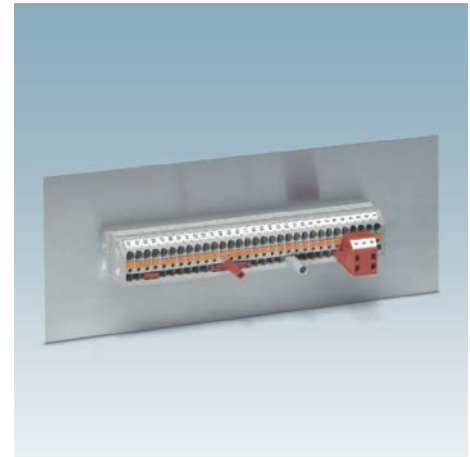
Push-in Technology
Designed by PHOENIX CONTACT

Your advantages

☑ Easy connection of the conductors, thanks to fast Push-in spring connection

☑ Fast mounting in simple rectangular cutouts, thanks to the patented snap-on mechanism

☑ CLIPLINE complete accessories for easy bridging, testing, and marking

☑ Highly flexible, thanks to alignable single terminal blocks

Main features

• Conductor cross sections: 0.2 mm² to 4 mm²
• Currents up to 30 A
• Short-circuit currents in accordance with EN 60255
• Voltage: 6 kV surge voltage
• Pitch: 5.2 mm
• 1-pos. to 20-pos.
• Bridgeable

New product for 2017 ⓘ **Web code:** #1134			
Description	**Panel feed-through terminal block**	**Cover element, left/right**	**Panel feed-through terminal block**
Design	Single terminal block	Cover	6-pos.
Type	PT 4-WE	D-PT 4-WE	PT 4-WE/6
Order number	3044900	3044902	3044911

Contact inserts for heavy-duty connectors with single and double Push-in connection

Push-in contact inserts can be installed quickly and easily. In the A series, you now also obtain Push-in inserts. The new modular TWIN inserts with fixed positions for B series offer you Push-in connection technology with double conductor connection for the first time. All HEAVYCON complete contact inserts are compatible with the market standard.

Push-in Technology
Designed by PHOENIX CONTACT

Your advantages

☑ Comprehensive range with the right Push-in insert for every size

☑ Easy, tool-free installation with Push-in connection

☑ Save installation space and marshalling levels with bridgeable TWIN inserts

☑ Can be flexibly combined with other connection technologies and housings

☑ Reliable connection of inserts with a fixed number of positions, thanks to coding with plastic profiles

Main features
- Push-in connection
- Material: polycarbonate
- Available in pin and socket versions

New product for 2017 ℹ **Web code:** #0655						
Description	**A series contact inserts**			**B series TWIN contact inserts**		
Design	Fixed number of positions			Fixed number of positions		Modular
Housing size	D7	D15/D25		B16	B24	B6 … B48
Rated current	16 A	16 A		10 A		
Rated voltage	230/400 V	250 V		500 V		
Pin type	HC-A04-I-PT-M	HC-A10-I-PT-M	HC-A16-I-PT-M	HC-B16-I-TPT-M	HC-B24-I-TPT-M	HC-M-05L-TPT-M
Order number for pin	1585278	1585359	1585375	1423019	1423021	1423961

Pre-assembled M12 device connectors for PROFINET applications

Pre-assembled versions with a litz wire cross section of 1.5 mm² round out the range of M12 device connectors. The L-coded versions are PROFINET-certified and transmit power at up to 63 V. The K-coded connectors are suitable for power transmission up to 630 V.

Your advantages

☑ Easy-to-install, optimized housing contour with wrench size 19

☑ For compact devices: transmit high power in a confined space

☑ Pre-assembled with 0.2 m long litz wires for immediate use

☑ Molded on the cable side for optimum seal tightness

Main features

- K-coded: 4+PE, up to 630 V / 16 A AC
- L-coded: 4+FE, up to 63 V / 16 A DC with gray insulator
- L-coded: 4-pos., up to 63 V / 16 A DC with sealed FE contact chamber
- Rear and front mounting
- Easy-to-install XL housing

New product for 2018 ℹ **Web code:** #0238	M12 device connector					
Description	**M12 device connector**					
Number of positions/coding	4+PE / K		4+FE / L / gray		4-pos. / L / black	
Order number for front mounting, litz wires: 1.5 mm²	1425635	1425636	1425627	1425628	1425631	1425632
Order number for rear mounting, litz wires: 1.5 mm²	1425637	1425638	1425629	1425630	1425633	1425634
Order number for front mounting, litz wires: 2.5 mm²	1415291	1415292	1425582	1425583	1425586	1425587
Order number for rear mounting, litz wires: 2.5 mm²	1415293	1415294	1425584	1425585	1425588	1425589

Pre-assembled M12 device connectors for the power supply

The new device connectors from the M12 Power series in K, L, and M coding feature an easy-to-install XL housing. They are suitable for front or rear mounting. The device connectors are pre-assembled with 20 cm litz wires ready for use.

Your advantages

☑ Easy-to-install, optimized housing contour with wrench size 19

☑ For compact devices: transmit high power in a confined space

☑ Pre-assembled with 0.2 m long litz wires for immediate use

☑ Molded on the cable side for optimum seal tightness

Main features

- K-coded: 4+PE, up to 630 V / 16 A AC
- L-coded: 4+FE, up to 63 V / 16 A DC
- M-coded: 5+PE, up to 630 V / 8 A AC
- Rear and front mounting

New product for 2017

ℹ **Web code:** #1123

Description	M12 device connector					
Coding	K		L		M	
Number of positions	4+PE		4+FE		5+PE	
Type of contact	Pin	Socket	Pin	Socket	Pin	Socket
Order number for front mounting	1415291	1415292	1415295	1415296	1415300	1415301
Order number for rear mounting	1415293	1415294	1415297	1415299	1415302	1415303

M12 device connectors
with L coding with PROFINET certification

M12 device connectors with L coding for power transmission of up to 63 V and 16 A are now available also with PROFINET certification. One-piece versions for wave soldering processes and two-piece connectors for reflow soldering processes are available.

Your advantages

☑ M12 standard for transmission of high power in confined spaces

☑ Reduced assembly costs, thanks to two-piece device connectors for reflow soldering processes

☑ Packaging available for automated pick-and-place assembly

☑ Easy device integration, thanks to mechanical port screw connections with threaded fastening

Main features

- L-coded: 4+FE, up to 63 V / 16 A DC with gray insulator
- L-coded: 4-pos., up to 63 V / 16 A DC with sealed FE contact chamber
- PROFINET-specified
- Rear- and front-panel screw-on installation
- Delivery of the THR contact carriers with assembly pad

New product for 2018 ⓘ **Web code:** #1622				
Description	**M12 device connector**			
N° of pos./coding/color	4-pos. / L / black		4+FE / L / gray	
Type of contact	Pin	Socket	Pin	Socket
Order number for wave soldering, rear mounting	1425592	1425593	1425590	1425591
Order number for THR contact carrier, tape-on-reel	1425605	1425606	1425599	1425600
Order number for THR contact carrier, shielded, tape-on-reel	1425641	1425642	1425601	1425602
Order number for housing screw connection, rear mounting	For two-piece THR pin contact carrier: 1420826 For two-piece THR socket contact carrier: 1420827			

Versatile M12 device connectors for reflow soldering processes

M12 device connectors for transmitting power up to 630 V and 16 A directly to the PCB are now available also with K, L, and M coding. One-piece versions for wave soldering processes and two-piece connectors for reflow soldering processes are available.

Your advantages

☑ Easy device integration, thanks to mechanical port screw connections

☑ Packaging available for automated pick-and-place assembly

☑ Easy PCB assembly: one-piece connectors for wave soldering

☑ Reduced assembly costs, thanks to two-piece device connectors for reflow soldering processes

Main features

• K-coded: 4+PE, up to 630 V / 16 A AC
• L-coded: 4+FE, up to 63 V / 16 A DC
• M-coded: 5+PE, up to 630 V / 8 A AC
• Rear- and front-panel screw-on installation

New product for 2017	M12 device connector					
ℹ **Web code:** #0240						
Description	**M12 device connector**					
Number of positions/coding	4+PE / K	4+PE / K	4+FE / L	4+FE / L	5+PE / M	5+PE / M
Type of contact	Pin	Socket	Pin	Socket	Pin	Socket
Order number for wave soldering, rear mounting	-	-	1415337	1415338	-	-
Order number for THR contact carrier, tray packaging	1420819	1420821	1420817	1420818	1420822	1420823
Order number for THR contact carrier Tape-on-reel	1420830	1420831	1420828	1420829	1420832	1420833
Order number for housing screw connection, rear mounting	For two-piece THR pin contact carrier: 1420826 For two-piece THR socket contact carrier: 1420827					

M12 device connectors
with push-pull fast locking system

M12 device connectors with push-pull fast locking system expand the existing M12 portfolio. Cross-manufacturer connection compatibility ensures superior availability worldwide and enables the easy extension of existing cabling concepts.

Ethernet
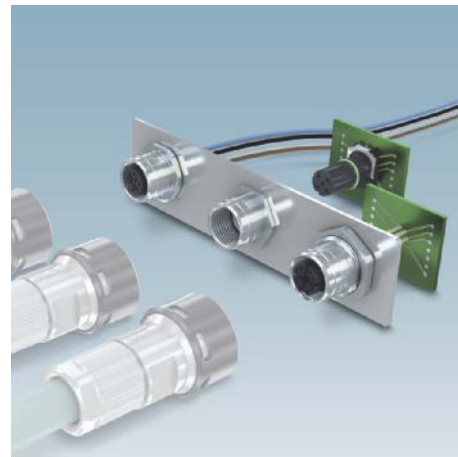
Your advantages

☑ Plug and Produce: convenient and secure connection, thanks to the manufacturer-independent locking system

☑ Safely shielded: reliable overall shielding braid even under extreme mechanical strain

☑ Clear feedback: connector springs back if not snapped in correctly

☑ Robust connection: suitable for railway applications with high shock and vibration loads

Main features

• Push-pull fast locking system
• Versions with litz wires or for the wave soldering, A and D-coded
• THR housing screw connections for A, D and X coding
• Degree of protection: IP65, IP67

New product for 2018 ⓘ **Web code:** #1620					
Description	**M12 device connector with push-pull fast locking system**				
Design	THR housing screw connection	One-piece wave solderer		Litz wire variant	
Number of positions/CAT5 coding	For 4-pos. / D-socket		4-pos. / D-socket		4-pos. / D-socket
Number of positions/coding signal	For 5-pos. / A-socket	5-pos. / A-socket		5-pos. / A-socket	
Number of positions/CAT6$_A$ coding	For 8-pos. / X-socket				
Rear mounting	1027662	1027669	1027696	1027666	1027670
Front mounting	1027678	-	-	1027683	1027686

M12 connectors for assembly with push-pull fast locking system

Thanks to the push-pull fast locking system, you can quickly and securely latch the new M12 connectors for assembly with just one click. The interlock is achieved without tools, simply by plugging in. This offers significant advantages during mounting work, especially in confined spaces.
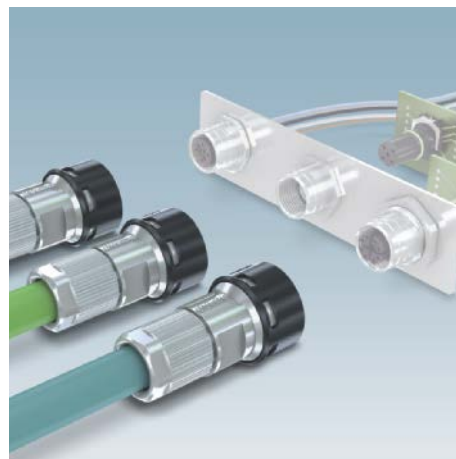
PROFI NET **Ethernet**

Your advantages

☑ Plug and Produce: convenient and secure connection, thanks to the manufacturer-independent locking system

☑ Safely shielded: reliable overall shielding braid even under extreme mechanical strain

☑ Clear feedback: connector springs back if not snapped in correctly

☑ Robust connection: suitable for railway applications with high shock and vibration loads

Main features

• Push-pull fast locking system
• Crimp connection
• 360° overall shielding braid
• Degree of protection: IP65, IP67

New product for 2018 ℹ **Web code: #1618**	M12 CAT6$_A$ data connector		M12 CAT5 data connector		M12 signal connector	
Description	**M12 CAT6$_A$ data connector**		**M12 CAT5 data connector**		**M12 signal connector**	
Number of positions/coding	8-pos. / X		4-pos. / D		4- / 5-pos. / A	
Conductor cross section	AWG 26 … 22		AWG 22 … 18		0.34 mm² … 1.00 mm²	
Outer cable diameter	6.5 mm … 10.0 mm		4.5 mm … 7.5 mm		4.5 mm … 7.5 mm	
Design	Plug, straight	Plug, angled	Plug, straight	Plug, angled	Plug, straight	Plug, angled
Type	SACC-P12MSX-8CT-CL SH	SACC-P12MRX-8CT-CL SH	SACC-P12MSD-4CT-CM SH PN	SACC-P12MRD-4CT-CM SH PN	SACC-P12MS-5CT-CM SH	SACC-P12MR-5CT-CM SH
Order number	1021783	1021784	1021830	1021831	1021815	1021816

M12 connectors for assembly for data and signals

M12 connectors for assembly provide the best connection technology for every application. The new Push-in connectors simplify field installation of stranded conductors. Connectors with crimp connection as well as unshielded QUICKON versions complete the portfolio.

Push-in Technology
Designed by PHOENIX CONTACT

Your advantages

- ☑ Always the best connection technology for your application in M12 design
- ☑ Easy and tool-free connection with Push-in technology
- ☑ Time savings of up to 80% with QUICKON fast connection technology (IDC)
- ☑ Extremely compact connectors with crimp connection for railway applications

Main features
- Shielded and unshielded versions

New product for 2017				
ℹ️ **Web code:** #0610				
Description	PROFINET connector		Signal connector	
Coding	X	D	A	
Connection technology	Crimp	Push-in	Push-in	QUICKON
Shielding	360° shielded housing		Unshielded	
Type	SACC-M12MSX-8CT-CL SH	SACC-M12MSD-4PL SH PN	SACC-M12MS-5PL M	SACC-MS-8QO-0,5-CL SCO
Order number	1422844	1424682	1424649	1424433

Assembled M12 Power cables with K, L, and M coding

The innovative M12 Power cabling offers maximum power in a compact design. Assembled K, L, and M-coded cables complete the existing range with S and T coding. They open access to new AC and DC applications with 5-position and 6-position end consumers.

Your advantages

☑ High power transmission in DC or AC applications up to 16 A and 630 V

☑ Space savings, thanks to the compact M12 design

☑ Protection against mismatching, thanks to coded pin connector patterns

☑ Reliable EMC protection, thanks to optional 360° shielding

Main features
• Cable quality: PUR or PVC
• Degree of protection: IP65, IP67
• 360° shielded connectors
• Standardized in accordance with IEC 61076-2-111
• Approval in accordance with UL 2237

Description	Cable with K-coded connector		Cable with L-coded connector		Cable with M-coded connector
New product for 2017 ⓘ **Web code:** #1108					
Number of positions	5 (4+PE)		5 (4+FE)	4	6 (5+PE)
Shielding	Shielded	Unshielded	Unshielded		Unshielded
Conductor cross section	2.5 mm²		1.5 mm² … 2.5 mm²		1.5 mm²
Current/voltage	16 A / 630 V AC		16 A / 63 V DC		8 A / 630 V AC
Type	SAC-5P-M12MSK/ 1,5-PUR PE SH	SAC-5P-1,5-PUR/ M12FSK PE	SAC-5P-M12MSL/ 1,5-280 FE	SAC-4P- 1,5-105/M12FSL	SAC-6P-M12MSM/ 1,5-PUR PE
Order number	1414867	1414770	1414883	1425033	1414949

M23 device connectors for signals with integrated position nut

The new device connectors in the M23 ADVANCE series have an integrated position nut for the continuous adjustment of the outlet direction. Thanks to the extended internal thread, the signal connectors can be easily and safely integrated into the device panel.

Your advantages

☑ Integrated position nut for continuous adjustment of the outlet direction

☑ Safe use in the field, thanks to the high degree of protection IP65/IP67

☑ Universal mounting, thanks to the extended 10 mm screw-in thread

Main features

• Currents up to 20 A
• Voltages up to 300 V
• 6-pos. to 19-pos.
• Solder or crimp connection
• Degree of protection: IP65, IP67
• Central fastening: M20 x 1.5

New product for 2017 ⓘ **Web code:** #0260								
Description	**M23 ADVANCE device connector, positionable**							
Type of contact	Pin		Socket		Pin		Socket	
Number of positions	6	12	6	12	17	19 (16+2+PE)	17	19 (16+2+PE)
Connection method	Solder	Crimp	Solder	Crimp	Solder	Crimp	Solder	Crimp
Voltage	300 V	150 V	300 V	150 V	150 V	150 V	150 V	150 V
Current	20 A	8 A	20 A	8 A	8 A	8 A / 10 A	8 A	8 A / 10 A
Order number	1624044	1624026	1624045	1624033	1624055	1623630	1624056	1623629

Angled M23 circular connectors for signal transmission

With the angled cable connectors from the M23 ADVANCE series you can transmit signals safely to your device – with comprehensive EMC protection. The IP67 connectors are available as pin and socket versions with solder or crimp connection.

Your advantages

☑ Optical color coding prevents mismatching

☑ Compatible with all signal connectors from the M23 ADVANCE series

☑ With SPEEDCON fast locking system as an option

☑ Wide range of mating connectors available for device connection

Main features
• Currents up to 20 A
• Voltages up to 300 V
• 6-pos. to 19-pos.
• Solder or crimp connection
• Degree of protection: IP65, IP67
• Cable clamping area: 3 mm to 14.5 mm

New product for 2017 ℹ️ **Web code:** #0259								
Description	**M23 ADVANCE cable connector, angled**							
Type of contact	Pin		Socket		Pin		Socket	
Type of locking	SPEEDCON		SPEEDCON		Standard		Standard	
Number of positions	6	12	6	12	17	19	17	19
Connection method	Solder	Crimp	Solder	Crimp	Crimp	Solder	Crimp	Solder
Voltage	300 V	150 V	300 V	150 V	150 V	150 V	150 V	150 V
Current	20 A	8 A	20 A	8 A	8 A	8 A/10 A	8 A	8 A/10 A
Order number	1619449	1619435	1619450	1619436	1620294	1620292	1620295	1620293

M40 hybrid connectors
for signal, data, and power transmission

The new M40 HYBRID circular connector allows you to transmit signals, data, and power safely using just one connector. The new size is suitable for currents of up to 70 A and has been designed for servo drives as well as daisy chain applications.
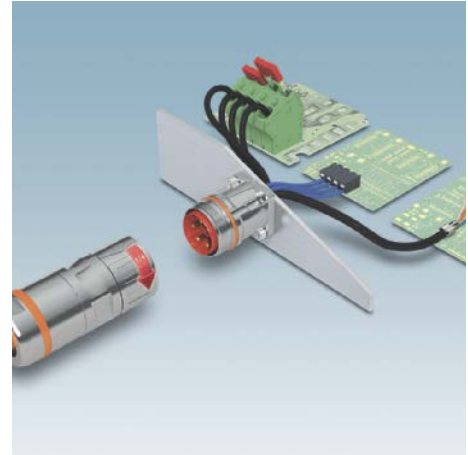
Your advantages

☑ Transmit signals, data, and power using just one circular connector

☑ Mechanical coding for AC and DC applications, as well as for data and signal applications

☑ Various data inserts available

Main features
- Conductor cross sections up to 16 mm²
- Currents up to 70 A
- Voltages up to 630 V AC / 850 V DC
- Contacts:
  - 4 x signal
  - 4 x data (can be swapped for additional 4 x signal)
  - 4 x power + PE
- Degree of protection: IP68, IP69K
- Cable clamping area: 9 mm to 26.5 mm

New product for 2017 ⓘ **Web code:** #0560	M40 cable connector		M40 coupler connector		M40 device connector, angled, rotatable		M40 device connector, straight	
Description								
Type of contact	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin
Cable clamping area	14 mm … 20.5 mm	20.5 mm … 26.5 mm	20.5 mm … 26.5 mm	14 mm … 20.5 mm	-	-	-	-
Coding	AC	AC	AC	AC	AC	AC	AC	AC
Signal type	CAT5	Signal	Signal	CAT5	Signal	CAT5	Signal	CAT5
Order number	1623327	1623337	1623346	1623357	1623366	1623368	1623372	1623374

Connectors for PROFINET applications for safe power transmission

The new push-pull ADVANCE connectors are suitable for power transmission up to 24 V and 16 A. The IP65/IP67 connectors have a one-piece zinc die-cast housing with large wiring space for an outer cable diameter of 6.5 mm to 13 mm. The interlock prevents inadvertent removal.

Your advantages

☑ Push-pull ADVANCE locking system prevents accidental disconnection of the connector

☑ One-piece zinc die-cast housing for maximum safety in IP65/IP67 industrial environments

☑ Easy-to-install front mounting of the power insert with quick-release mechanism

☑ No exposed seals in the function area

☑ Individual production identification for traceability

Main features

- Currents up to 16 A
- Voltages up to 24 V
- Push-pull ADVANCE locking system
- One-piece housing design
- Cable diameter: 6.5 mm to 13 mm
- Degree of protection: IP65, IP67

New product for 2017 ⓘ **Web code:** #1129	Push-pull ADVANCE POWER	
Description	**Push-pull ADVANCE POWER**	
Design	9 mm … 13 mm cable diameter	6.5 mm … 9.5 mm cable diameter
Type	CUC-PPC-C2ZNI-SX / 24FKP5	CUC-PPC-C2ZNI-SS / 24FKP5
Order number	1421783	1421785

Compact splice boxes
for future-proof data transmission

The FDX 20 series splice boxes ensure continuously reliable data transmission in real time. With their compact and uniform design, the splice boxes ensure ample interior space for the secure connection of fiber optics.

Your advantages

☑ Continuously reliable data connections, thanks to extensively tested components

☑ Up to twelve duplex front ports and compact dimensions for more space in the control cabinet

☑ Perfectly sized and patented pigtail tray for easy splicing and compact bending radii

☑ Reduced installation time, thanks to pre-assembled, ready-to-splice design

☑ Intuitive front panel operation and clear control cabinet layout, thanks to uniform Phoenix Contact design

Main features

- Interfaces: each 6 x LC duplex, LC quad, SC duplex, ST duplex, E-2000® (LSH)
- Fiber categories: OM1-OM4 as well as OS2 with PC and APC polish
- Dimensions (W x H x D): 40 mm x 130 mm x 115 mm
- Degree of protection: IP20

New product for 2018 ℹ️ **Web code:** #1625	DIN rail splice box	DIN rail distributor	DIN rail splice box	DIN rail splice box
Description	**DIN rail splice box**	**DIN rail distributor**	**DIN rail splice box**	**DIN rail splice box**
Design	6x ST duplex	6x SC duplex	12x LC duplex	6x LSH (E-2000®) duplex
Fiber type	OM1 62.5/125 µm	Multimode, unequipped	OS2 (PC) 9/125 µm	OS2 (APC) 9/125 µm
Type	FOC-FDX20-PP-STD6-OM1-PT9	FOC-FDX20-PP-SCD6-MM	FOC-FDX20-PP-LCQ6-OSP-PT9	FOC-FDX20-PP-E2D6-OSA-PT9
Order number	1019684	1019686	1019707	1019680

Modular 19-inch marshalling panels for efficient fiber-optic transmission

High packing density, more flexibility: the new 19-inch marshalling panels simplify the fiber-optic cabling and are therefore ideally suited for real-time data transmission. The modular design enables a variety of applications, e.g. in power distribution and process technology.

Your advantages

☑ Optimum use of space in the control cabinet, thanks to high packing density

☑ Fast and reliable cabling, thanks to clear connections on the front

☑ System can be easily expanded later, thanks to the modular design

☑ Compact design of the connector, thanks to parallel optical MT ferrule insert with 12 fibers

Main features

• Modular system
• Degree of protection: IP68, IP20
• Up to 72 LC duplex connections per marshalling panel (3HE)
• Extremely robust circular connector with push-pull locking mechanism
• Fiber category OM1 (62.5/125 µm)

New product for 2018

ℹ️ **Web code:** #1626

Description	19" module carrier	Module insert	Patch bay	Patch cable
Connectors	-	6x LC duplex to 1x Q-ODC-12	12x LC duplex to 2x Q-ODC-12	Q-ODC-12 to Q-ODC-12
Width/height	19-inch / 3 RU	-/3 RU	19-inch / 1 RU	-/-
Type	FOC-FR19:3U	FOC-MODUL:3U-OS12-LCD6-OM1	FOC-FR19:1U-2OS12-LCD12-OM1	FOC-OP12-OP12-GL02/10
Order number	1419976	1419978	1419973	1415353

Compact 19" patch bays for RJ45 connection modules

The new, compact 19" patch bays are particularly suitable for industrial and building cabling. The RJ45 connection modules can be assembled without using special tools and easily and securely latched in the patch bay.

Your advantages

☑ High packing density on one rack unit

☑ Easy mounting and assembly without special tools

☑ Integrated cable outlet and direct grounding concept included

☑ Future-proof modules for data rates up to 10 Gbps.

Main features
• Height: one rack unit (1 RU)
• Designed for 24 RJ45 connection modules
• 19" mounting kit included
• Marking window with interchangeable marking strips
• Color: gray or black

New product for 2017 ℹ **Web code:** #1128			
Description	**19" patch bay**	**19" patch bay**	**RJ45 connection module**
Color	Gray	Black	Silver-gray
Number of ports	24	24	1
Dimensions	43.6 x 482.6 x 83.4 mm	43.6 x 482.6 x 83.4 mm	15.6 x 17.9 x 34.9 mm
Transmission category	-	-	CAT6$_A$
Type	CUC-PP-FR19:1U-I-EMPTY:24	CUC-PP-FR19:1U-I-EMPTY:24 BK	CUC-I-J1ZNI-S/R4IDC8
Order number	1422978	1422979	1417274

Compact DIN rail adapters
for structured copper and fiber-optic cabling

The universal DIN rail adapters offer maximum flexibility in minimum space. The one-piece housing snaps quickly and easily onto the DIN rail. Versions with RJ45, SC simplex, LC duplex, and MTP connections are available for data transmission with copper conductors and fiber optic lines.

Your advantages

☑ Maximum packing density with a compact design

☑ Easy connection and integration of the modules without special tools

☑ Optional overall shielding braid of the modules on the DIN rail

☑ Optional accessories for securing the data interface against unauthorized access or accidental disconnection (layer 1 security)

Main features
- Width of 18 mm (1 HP)
- One-piece housing design
- RJ45 module with $CAT6_A$ transmission properties up to 10 Gbps
- Front-release modules
- Optional marking with terminal markings

New product for 2018 ⓘ **Web code:** #1624	DIN rail adapter	RJ45 insert	LC duplex insert	Layer 1 security
Description	**DIN rail adapter**	**RJ45 insert**	**LC duplex insert**	**Layer 1 security**
Design	Housing including overall shielding braid and protective flap	Cable module	Coupling module	Panel mounting frame for RJ45 modules
Type	NBC-PP-G1PGY	CUC-I-J1ZNI-S / R4IDC8	FOC-I-D1PGN-S/LCGCSM	NBC-PP-F1PWH:10
Order number	1041740	1417274	1041780	1041881

Robust panel mounting frames for RJ45 and fiber-optic connectors

The new push-pull ADVANCE panel mounting frames for data connectors are made from robust zinc die-cast and are ideal for industrial applications. The IP65/IP67 panel mounting frames are designed for the connection of RJ45 or SCRJ connectors. They therefore support flexible solutions for data transmission.

Your advantages

- ☑ Simplified logistics processes: uniform design for RJ45 and fiber-optic pin connector patterns
- ☑ Ideal for industrial applications, thanks to consistent overall shielding braid
- ☑ Consistent mounting accessories for various fields of application, such as 45° outlet or deep device cutouts

Main features
- One-piece design
- With self-closing protective lid
- Material: zinc die-cast
- Degree of protection: IP65, IP67

New product for 2017 ⓘ **Web code:** #1130			
Description	**Push-pull panel mounting frame for RJ45**	**Push-pull panel mounting frame for SCRJ**	**Protective lid**
Design	Zinc die-cast	Zinc die-cast	-
Type	CUC-V14-F1ZNI-EM / R4F8	FOC-V14-F1ZNI-EM / SJB	CUC-V14-A1PBK-PC
Order number	1413961	1413964	1413970

Assembled M8 data cables with D-coding for Ethernet and PROFINET

The new M8 range of products provides for reliable data transmission through symmetrically arranged contacts. Compared to M12 connectors, you save up to 30 % of the installation space. Our shielding sleeve guarantees extremely robust and vibration-resistant overall shielding braid.

PROFI NET **Ethernet**

Your advantages

☑ Ethernet and PROFINET even in the smallest devices, thanks to compact connector dimensions

☑ Reliable and vibration-resistant 360° shield transition

☑ Space savings, thanks to Power-over-Ethernet: provide field devices with data and energy simultaneously

☑ Versions with special material selection for railway applications

Main features

• D-coding with symmetrically arranged contacts
• 4-pos.
• Conductor cross section: 0.34 mm²
• Degree of protection: IP65, IP67
• Suitable for 100 Mbps CAT5
• PoE-capable up to 4 A with a maximum of 60 V
• Standardized in accordance with IEC 61076-2-114

New product for 2018

ℹ **Web code:** #1656

Description	M8 data cable			M8 data cable for the railway industry
Head 1 design	Plug, straight, M8			
Head 2 design	Free cable end	Plug, straight, M8	Plug, straight, RJ45	Plug, straight, M8
Sheath material	PVC			PE-X
Sheath color	Green			Black
Type	NBC-M8MSD/1,0-93B	NBC-M8MSD/1,0-93B/ M8MSD	NBC-M8MSD/1,0-93B/ R4AC	NBC-M8MSD/1,0-939/ M8MSD RAIL
Order number	1423703	1423707	1423711	1423719

You benefit from an excellent level of service

Different colors, shapes, markings, and customized cable assemblies provide you with a wide range of options. In addition to customer-specific adaptations, we also realize innovations individually tailored to your needs. We will provide you with support from the initial concept and design-in all the way to production and quality assurance.

Customer-specific adaptations

Whether you need individual colors, complete cable assemblies, special printing or a specific number of contacts, we will be happy to help find solutions adapted to customer-specific requirements.

Individual new products

In addition to customer-specific adaptations, we also realize innovations individually tailored to your needs. We will be there every step of the way to provide you with help and support, from the initial concept and design-in all the way to production and quality assurance. Why not make use of our extensive development and manufacturing expertise for your individual solution.

Service and support

During the design-in process, we provide assistance with state-of-the-art selection guides, comprehensive product and technology information and also advice tailored to your individual requirements – anywhere in the world.
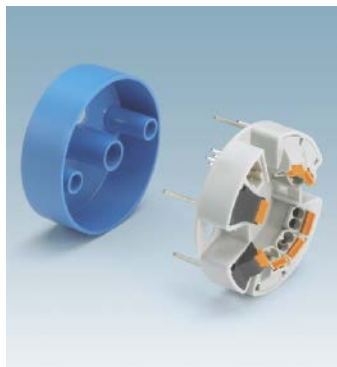
Wide range of color versions

Customer-specific cable assemblies
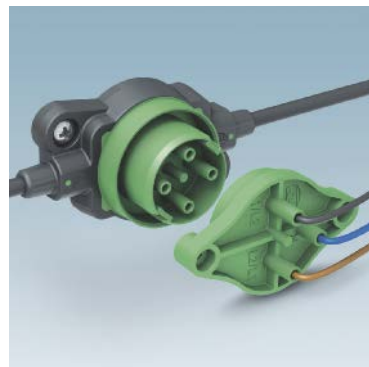

Individual printing

Special punching, coding, and pin lengths

Connection block for temperature sensors

Hybrid connector for charging stations

Connection system for LED street lighting

Compact controller with front connection technology

Fast selection of products in web portal, thanks to many convenient functions, such as online configurators

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International training provided to customers on products and technologies

In dialog with customers and partners worldwide

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