# New products for 2019/2020

Connectors and electronics housings

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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 2019/2020 for the transmission of signals, data, and power – including our top three innovations for 2020.
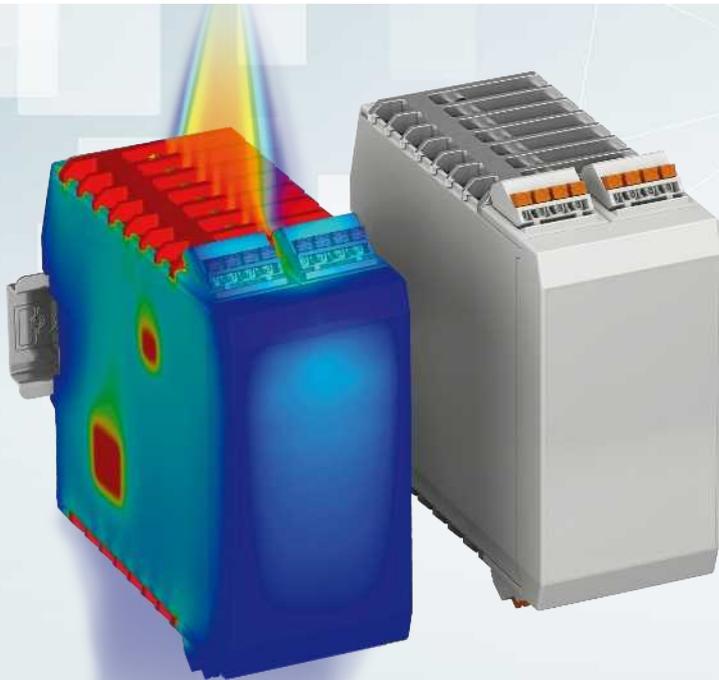
New

Thermal management for ICS series electronics housings

Passive heatsinks for the ICS series enable the finished devices to be used even in thermally demanding applications. By performing extensive thermal simulations, Phoenix Contact also supports you in optimizing your printed circuit board layout.

For further information, see page 40 onwards.

ⓘ **Web code:** #2323

New

M17 MPO series FO data connectors

Phoenix Contact introduces industrial-grade multi-fiber push-on connectors for real-time data transmission in intelligent power grids. The robust interfaces feature high-quality fiber optics which ensure stable bandwidths over long transmission distances.

For further information, see page 28 onwards.

ⓘ **Web code:** #1623

Contents

New

Robust FINEPITCH series board-to-board connectors

With the FINEPITCH board-to-board connectors, Phoenix Contact provides shielded and unshielded solutions for signal and data transmission with 0.8 mm and 1.27 mm pitch for the first time. Benefit from a comprehensive portfolio.

For further information, see page 4 onwards.

[i] **Web code:** #2069

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 board-to-board connectors
Unshielded versions with 0.8 mm pitch

Unshielded board-to-board connectors of the
FINEPITCH 0,8 series are the ideal solution for industrial-
grade PCB connections. The vertical versions are designed
for different stack heights and enable automated optical
inspection (AOI) after the SMT process.
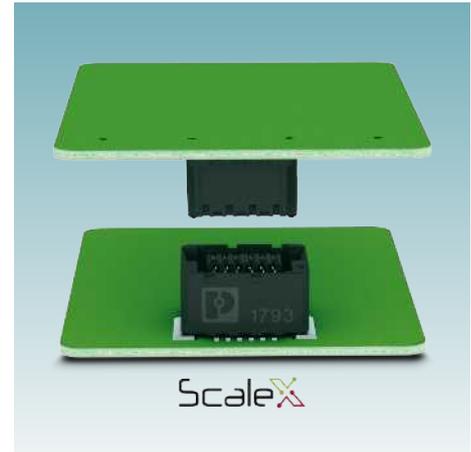
Your advantages

- ☑ 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 packing 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		Female connector	
Design	Vertical, base height: 1.15 mm	Vertical, base height: 2.65 mm	Vertical, base height: 4.85 mm	Vertical, base height: 7.85 mm
Version	Unshielded			
Number of positions	12			
Type	FP 0,8/12-MV 1,15	FP 0,8/12-MV 2,65	FP 0,8/12-FV 4,85	FP 0,8/12-FV 7,85
Order No.	1061725	1061696	1061643	1061580

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

Shielded board-to-board connectors of the FINEPITCH 0,8 series 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**	**Male connector**	**Male connector**	**Female connector**
Design	Horizontal	Vertical, base height: 1.15 mm	Vertical, base height: 2.65 mm	Vertical, base height: 4.85 mm
Version	Shielded			
Number of positions	12			
Type	FP 0,8/12-MH-SH	FP 0,8/12-MV-SH 1,15	FP 0,8/12-MV-SH 2,65	FP 0,8/12-FV-SH 4,85
Order No.	1043791	1043786	1043731	1043710

Versatile board-to-board connectors
High degree of flexibility with 1.27 mm pitch

Board-to-board connectors of the FINEPITCH 1,27 series offer versatile solutions for the connection of several printed circuit boards within the device. Horizontal and vertical male and female connectors enable application-specific arrangements – with assembled flat-ribbon cables for wire-to-board applications available on request.

Your advantages

☑ Reliable mechanical and electrical connections with the double-sided contact system

☑ Compact, high-position board-to-board or wire-to-board connectors for space-saving device designs

☑ Flexible device design: various numbers of positions, designs, and stack heights with high wipe lengths

☑ Can be ordered pre-assembled: IDC female connectors with flat-ribbon cable enable immediate use in the device

Main features
• Pitch: 1.27 mm
• 12- to 80-pos.
• Stack heights: 8 to 13.8 mm
• Currents up to 1.4 A
• Insertion cycles: 500
• Test voltage: 500 V AC

New product for 2019

ℹ **Web code:** #1520

Description	Male connector	Female connector	Male connector	Female connector	IDC female connector
Design	Vertical, base height: 3.25 mm	Vertical, base height: 9.05 mm	Horizontal	Horizontal	Connector with flat-ribbon cable
Version	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded
Number of positions	12	12	12	12	12
Type	FP 1,27 / 12-MV 3,25	FP 1,27 / 12-FV 9,05	FP 1,27 / 12-MH	FP 1,27 / 12-FH	FP 1,27 / 12-FWL-10 / P / 0,1
Order No.	1714924	1714999	1714912	1714869	1010259

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).
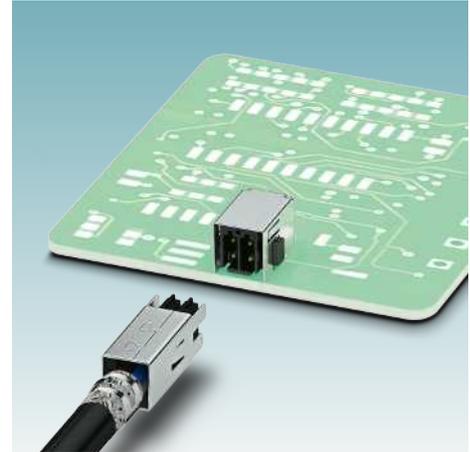
Your advantages

☑ 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

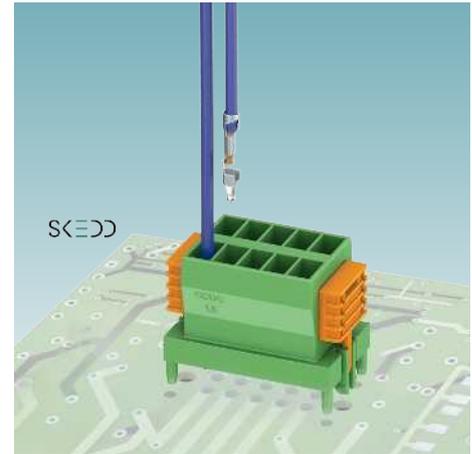☑ Optional tool for manual and automated crimping

Main features

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

New product for 2020 ℹ️ **Web code:** #2332				
Description	**Connector**	**Crimp contact**		**Header**
Number of positions	2 (with four contacts)	-	-	2 (with four contacts)
Type	DMCC 0,5/2-ST-SH 7,0-2,54	MCC 0,5-MP AU 0,14-0,5 (R)	MCC 0,5-MP AU 0,34-0,75 (R)	DMC 0,5/2-G1SH-2,54P20THR24
Order No.	1128660	-	-	1097546
Order No. for bulk goods	-	1013425	1013419	-
Order No. for taped products	-	1013420	1013418	-

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

New product for 2020 [i] **Web code:** #1614	PCB connector		Crimp contact	
Description				
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

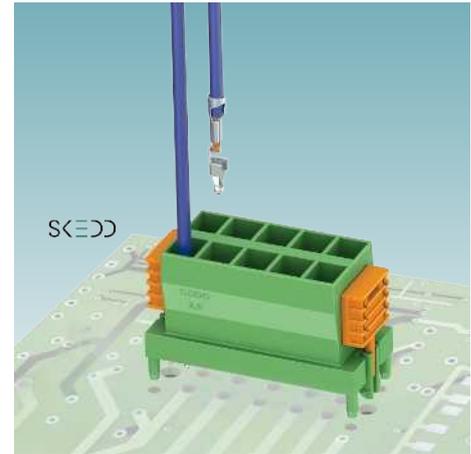☑ Optional tool for manual and automated crimping

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

New product for 2020 ℹ **Web code:** #1615	PCB connector		Crimp contact	
Description	**PCB connector**		**Crimp contact**	
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

Angled THR PCB terminal blocks
Fast connection with Push-in spring connection

PCB terminal blocks of the SPTA-THR 1,5 series extend the product range to include angled, reflow-solderable versions for automated assembly processes. The angled connection makes the PCB terminal blocks particularly suitable for multi-row arrangement on the printed circuit board.
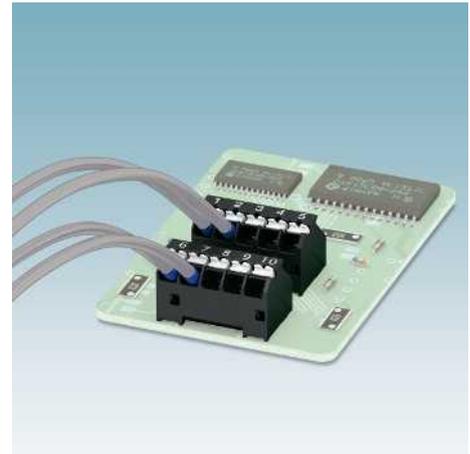
Your advantages

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

☑ Defined contact force ensures the long-term stability of the contact

☑ Intuitive operation with color-coded push button

☑ Angled connection enables multi-row arrangement on the printed circuit board

☑ Designed for integration into the SMT soldering process

Main features

• Currents up to 13.5 A
• Voltages up to 320 V
• Conductor cross sections: 0.2 to 1.5 mm²
• Pitch: 3.81 and 5.08 mm
• 2- to 12-pos.
• Supplied in tape-on-reel packing

New product for 2019 ⓘ **Web code:** #2052				
Description	**Angled PCB terminal block with Push-in spring connection**			
Pitch	3.81 mm	3.81 mm	5.08 mm	5.08 mm
Number of positions	2	5	2	5
Type	SPTA-THR 1,5/2-3,81 R32	SPTA-THR 1,5/5-3,81 R44	SPTA-THR 1,5/2-5,08 R32	SPTA-THR 1,5/5-5,08 R44
Order No.	1071177	1071181	1071199	1071205

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

New product for 2020 ℹ **Web code:** #2333				
Description	**Feed-through connector**			
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

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 specially 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.
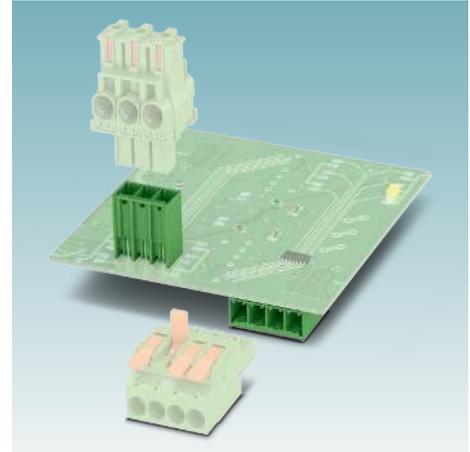
Your advantages

☑ 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 1000 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 ℹ️ **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

PCB connectors with 7.62 mm pitch
Power distribution made easy

PCB connectors of the PC 6/... -ST-BUS series enable custom energy bus systems. Thanks to the use of flexible conductors, you are independent in terms of the spatial arrangement. Insulation displacement connection technology eliminates the need for conductor pretreatment, thereby reducing installation time.
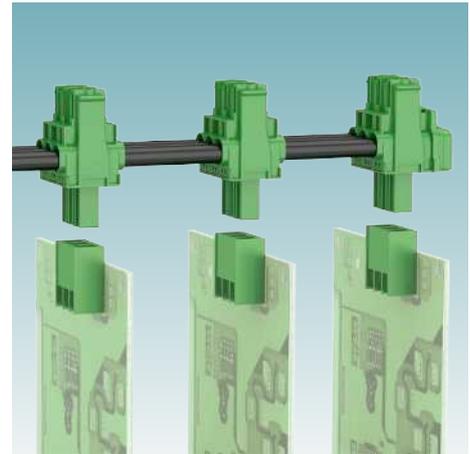
Your advantages

☑ Easy looping through of high power ratings using standard 16 mm² conductors (H07V-K)

☑ Connection without conductor pretreatment provides substantial time savings during installation

☑ Drive screw position easily recognizable with indicator

☑ Increased touch protection even when not plugged in

☑ Can be combined with LPC 6 lever-actuated PCB connector headers

Main features
- Conductor cross section: 16 mm²
- Currents up to 32 A
- Voltages up to 1000 V
- Pitch: 7.62 mm
- 2- and 3-pos.
- Increased touch protection in accordance with IEC/UL 61800-5-1

New product for 2019 [i] Web code: #2051	PCB connector		End cap	
Description	**PCB connector**		**End cap**	
Number of positions	2	3	2	3
Type	PC 6/2-ST-BUS-7,62	PC 6/3-ST-BUS-7,62	EC-PC 6/2-ST-BUS	EC-PC 6/3-ST-BUS
Order No.	1044740	1044738	1044822	1044820

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 wires and cables
• Versions available with gold-plated contacts and with latching or screw flange

New product for 2020

ℹ️ **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	None	Screw flange	None	None	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

M17-M40 PRO series circular connectors Cross-manufacturer compatibility

M17-M40 PRO series circular connectors offer 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[P]

Designed by PHOENIX CONTACT

Your advantages

- ☑ Highest availability worldwide: solutions with cross-manufacturer compatibility for standard and fast locking systems
- ☑ Secure connection: ONECLICK fast locking system with an optically, haptically, and acoustically clear locking position
- ☑ Easy and reliable shield connection for cost-effective cable assembly
- ☑ Reliable under the harshest conditions: cable connectors with vibration brake

Main features
- Voltages up to 630 V
- Currents up to 30 A
- 6- to 19-pos. (signal)
- 5+PE- and 4+3+PE-pos. (power)
- ONECLICK fast locking system
- Device connectors suitable for standard and fast locking systems
- All housings available as pin and socket versions
- Degree of protection: IP66, IP68

New product for 2019

ℹ️ **Web code:** #2054

Description	M23 PRO series signal cable connector		M23 PRO series signal device connector		M23 PRO series power cable connector		M23 PRO series power device connector	
Flange size [mm]	-		26 x 26	28 x 28			26 x 26	28 x 28
Cable clamping range	9 mm ... 15 mm		-		14 mm ... 17 mm		-	
Number of positions	17		17		4+3+PE		4+3+PE	
Locking	ONECLICK fast locking system		-		ONECLICK fast locking system		-	
Type of contact	Female	Male	Female	Male	Female	Male	Female	Male
Order No.	1629157	1629153	1628497	1628492	1628792	1628848	1628488	1628486

M12 device connectors
Fast locking with push-pull

M12 device connectors with pin contacts and with THR and SMD housing screw connections extend the existing M12 portfolio with push-pull fast locking system. Cross-manufacturer connection compatibility ensures superior availability worldwide.
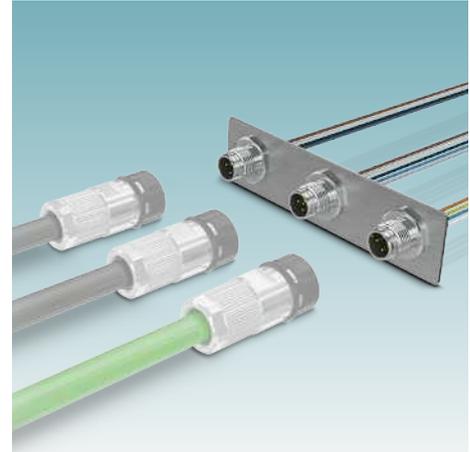
Your advantages

☑ Plug and Produce: convenient and secure connection with the cross-manufacturer locking system

☑ Safely shielded: reliable shield connection even under extreme mechanical strain

☑ Clear feedback: the connector springs back when not snapped into place correctly

☑ Robust connection: suitable for automation and railway applications

Main features
• Push-pull fast locking system
• Versions with litz wires or for wave soldering
• THR/SMD housing screw connections
• A-, D- or L-coded
• Degree of protection: IP65, IP67
• Compatible with full-thread M12

New product for 2020

ⓘ **Web code:** #1620

Description	M12 device connector with push-pull fast locking system				
Designation	With litz wires	One-piece, wave solderable	THR housing screw connection	SMD housing screw connection	
Mounting type	Front/rear	Rear	Front/rear	Front	Rear
Order No. for 4-pos., A-coded	1108117 / 1108128	1108002	1027679 / 1027661	1107999	1107993
Order No. for 5-pos., A-coded	1027694 / 1027697	1027676	1027679 / 1027661	1107999	1107993
Order No. for 4-pos., D-coded	1027688 / 1027691	1027680	1027679 / 1027661	1107999	1107993
L-coded	-/-	-/-	1108115 / 1108101	-	-

M12 connectors for assembly
Fast locking with push-pull

With the push-pull fast locking system, the M12 connectors for assembly lock quickly and securely with just one click. Interlocking is achieved without tools, simply by plugging in. This offers significant advantages during installation, especially in confined spaces.

Your advantages

- ☑ Plug and Produce: convenient and secure connection with the cross-manufacturer locking system
- ☑ Safely shielded: reliable shield connection even under extreme mechanical strain
- ☑ Clear feedback: the connector springs back when not snapped into place correctly
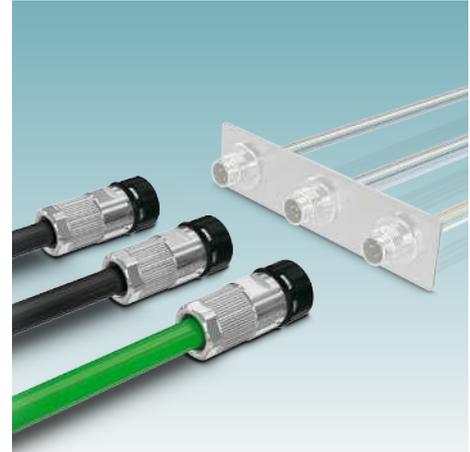- ☑ Robust connection: suitable for railway applications with high shock and vibration loads

Main features
- Push-pull fast locking system
- Crimp connection
- 360° shield connection
- Degree of protection: IP65, IP67

New product for 2020 ⓘ **Web code:** #1618	M12 data connector CAT5		M12 signal connector		Crimp contact	
Description	**M12 data connector CAT5**		**M12 signal connector**		**Crimp contact**	
Coding / number of positions	D-coded / 4-pos.		A-coded / 4-/5-pos.		-	
Conductor cross section	AWG 26 ... AWG 18		0.14 mm² ... 1 mm²		0.14 mm² ... 0.34 mm² AWG 26 ... 22	0.34 mm² ... 1 mm² AWG 22 ... 18
Cable diameter	4.5 mm ... 7.5 mm		4.5 mm ... 7.5 mm			
Version	Female, straight	Female, angled	Female, straight	Female, angled	Socket	
Type	SACC-P12FSD-4CT-CM SH PN	SACC-P12FRD-4CT-CM SH PN	SACC-P12FS-5CT-CM SH	SACC-P12FR-5CT-CM SH	CC1,0-TS-0,34F AU	CC1,0-TS-1,00F AU
Order No.	1021832	1021834	1021817	1021818	1064041	1423646

M12 H and Y distributors for power transmission
Easy high-power distribution

Use M12 power distributors to design your power cabling in accordance with your specific requirements. Distribute and bundle power ratings of up to 16 A and 630 V easily in a compact M12 design. H and Y distributors for AC and DC applications extend the M12 power product range.

Your advantages

☑ Powerful: DC and AC applications up to 16 A and 630 V

☑ Potential savings through the distribution and bundling of power

☑ Safely shielded: reliable 360° shield connection

☑ Secure fixing by means of two mounting holes

☑ M12 connectors can be installed after attaching the distributor

Main features

• Degree of protection: IP65, IP67
• 360° shield connection
• 2 mounting holes
• Standardized in accordance with IEC 61076-2-111

New product for 2020 ⓘ **Web code:** #2336				
Description	**M12 power H and Y distributor**			
Coding / number of positions	S-coded / 3-pos. + PE	T-coded / 4-pos.	K-coded / 4-pos. + PE	L-coded / 4-pos. + FE
Current / voltage	12 A / 630 V AC	12 A / 63 V DC	12 A / 630 V AC	16 A / 63 V DC
H distributor design	1 x male to 3 x female			
Y distributor design	1 x male to 2 x female			
Order No. for H distributor	1080242	1080244	1080246	1080248
Order No. for Y distributor	1080243	1080245	1080247	1080249

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 litz wires 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
- Conductors may be crossed

New product for 2020

ℹ **Web code:** #2337

Description	M12 power connector					
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

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 ℹ **Web code:** #0193				
Description	**M23 hybrid device connector**			
Type of contact	Female	Male	Female	Male
Signal type	CAT5	CAT5	Signal	Signal
Order No.	1096284	1096285	1096282	1096286

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 through 360°: ideal for flexible cable outlets

☑ Battery connection protected against polarity reversal by mechanical coding

☑ Touch-proof battery terminals even when not plugged in

☑ Various color versions for clearer identification

Main features

• Nominal voltage up to 1,500 V DC
• Cross sections: 16 to 25 mm²
• Nominal currents up to 120 A
• Degree of protection: IP65
• Insertion cycles: >100

	Device plug with threaded bolt	Device plug with current bar	Device plug with threaded bolt	Device plug with current bar	Connector with crimp connection	
New product for 2020 ℹ 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	16 ... 25 mm²					
Nominal current	Max. 120 A					
Nominal voltage	1,500 V					
Color	Orange		Black		Orange	Black
Type	ES-FT-BPC-S 16-25 OG	ES-FT-BPC-B 16-25 OG	ES-FT-BPC-S 16-25 BK	ES-FT-BPC-B 16-25 BK	ES-BPC-C 16-25 OG	ES-BPC-C 16-25 BK
Order No.	1106303	1130816	1106304	1130814	1106306	1106307

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.
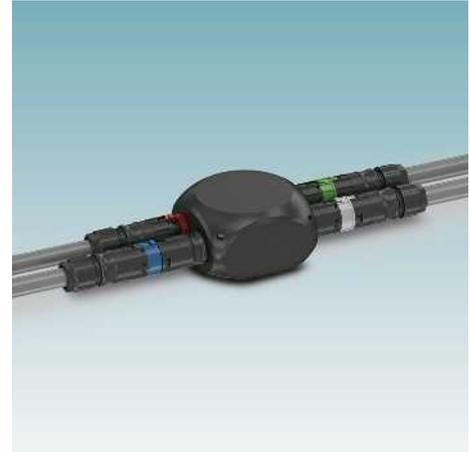
Your advantages

☑ 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 ℹ **Web code:** #2060			
Description	**PRC T distributor**	**PRC H distributor**	**PRC 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 inverted circular connectors
For flying leads with a high degree of protection

Inverted circular connectors of the PRC series enable reliable cable-to-cable connections in building, industrial, and outdoor applications. Thanks to weatherproof materials and the high degree of protection up to IP69K, the connectors transmit high currents even in demanding ambient conditions.

Your advantages

☑ Up to 75% smaller in size than industrial connectors with the same rating

☑ Locking mechanism unlocked manually or using a tool

☑ Suitable for applications in atmospheres containing salt and in direct sunlight

☑ Ideal for indoor and outdoor applications due to the use of weatherproof materials

Main features

- Conductor cross sections: 1.5 to 6 mm²
- Rated voltage: 690 V AC (III/3)
- Rated current: 35 A
- Degree of protection: up to IP69K
- For assembly in the field
- 3- and 5-pos.
- Can be color-coded

New product for 2019

ℹ️ **Web code:** #1628

Description	Male connector	Coding ring for male connector	Coupling	Manual release latch for coupling
3-pos. type	PRC 3-FC-MS6 8-21	PRC FC-M CODE-...	PRC 3-FC-FS6 8-21 HR	PRC FC RELEASE LATCH-...
Order No.	1014498	-	1017635	-
5-pos. type	PRC 5-FC-MS6 8-21	PRC FC-M CODE-...	PRC 5-FC-FS6 8-21 HR	PRC FC RELEASE LATCH-...
Order No.	1014530	-	1017632	-
Order No. gray	-	1014457	-	1002292
Order No. green	-	1014456	-	1002290
Order No. blue	-	1014455	-	1002293

PRC series angled circular connectors
Flexible device and field connection

Basic housings for device and field use extend the portfolio of PRC series circular connectors. Three different angles and a modular system provide greater flexibility during installation. Assembly is by means of 3- or 5-pos. screw connection heads with pin or socket contact.

Your advantages

- ☑ Versatile interfaces with straight and angled connector housings
- ☑ Universal accommodation of existing connector heads with screw connection technology
- ☑ Modular system for optimized storage
- ☑ Locking mechanism unlocked manually or using a tool
- ☑ Ideal for indoor and outdoor applications due to the use of weatherproof materials

Main features

- Rated current: 35 A
- Rated voltage: 690 V AC
- Degree of protection: up to IP69K
- Field connectors can be set at 45° and 90° angle
- Device connectors can be set at 0°, 45°, and 90° angle
- Can be color-coded

New product for 2019 ℹ **Web code:** #2056	Connector housing		Connector head	
Description				
Number of positions	-	-	3	5
Version	Field side 45°/90°	Device side 45°/90°	Coupling side	Coupling side
Type	PRC FC-45/90-HSG 8-21	PRC FT25-45/90-HSG	PRC 3-HEAD-FS6-1	PRC 5-HEAD-FS6-1
Order No.	1065798	1065796	1070198	1070197
Version	-	Device side 0°	Connector side	Connector side
Type	-	PRC FT25-0-HSG	PRC 3-HEAD-MS6-2	PRC 5-HEAD-MS6-2
Order No.		1065795	1070200	1070199

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 enable 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	-	-

Connectors for assembly
Easy motor connection

You can use the connectors for assembly to connect motors quickly and easily without special tools. Thanks to the IP54 degree of protection, your installation is protected against splash water and dust for particularly reliable cabling outdoors, such as on marquees and shutters.

Your advantages

☑ Time savings of up to 80% for on-site connection

☑ Quick and easy assembly without special tools

☑ Highly reliable with robust and vibration-proof housings

Main features
- QUICKON fast connection technology (IDC)
- 4-pos. (3-pos. + PE)
- Voltage: 400 V
- Currents up to 17.5 A
- Degree of protection: IP54
- Shock resistance: IK07
- Temperature range: -40°C ... +100°C

New product for 2019	
i Web code: #2154	
Description	**Connector for assembly**
Number of positions	3-pos. + PE
Conductor cross section	0.5 mm² ... 1.5 mm²
Type	QPD STAK 3PE1,5 BK
Order No.	1065121

Panel feed-throughs with Push-in connection
Easy installation without connectors

The panel feed-throughs for the IPD installation system enable quick and easy installation with Push-in spring connection on the field and device side. There is no connector on the field side. Simply snap the sleeve into place, and the cable is connected.

Push-in Technology®
Designed by PHOENIX CONTACT

Your advantages

☑ Fast cable connection without connectors

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

☑ Ideal for use outdoors and in wet areas, thanks to IP67

☑ Convenient handling, even in areas that are difficult to access

Main features
- Push-in connection
- Voltage: 690 V
- Currents up to 20 A
- Conductor cross section: 0.5 to 2.5 mm²
- Degree of protection: IP67, IP68
- Shock resistance: IK07

New product for 2019 ℹ️ **Web code:** #2055						
Description	**Panel feed-through**					
Number of positions	3				5	
Thread	M20		M25			
Color	Light gray	Black	Light gray	Black	Light gray	Black
Type	IPD WD 3P2,5 M20 GY	IPD WD 3P2,5 M20 BK	IPD WD 3P2,5 M25 GY	IPD WD 3P2,5 M25 BK	IPD WD 5P2,5 M25 GY	IPD WD 5P2,5 M25 BK
Order No.	1047319	1047321	1047322	1047324	1047344	1047345

M17 MPO series FO data connectors
High-performance data distribution

Industrial-grade MPO connectors are ideal for real-time data transmission in 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 highest retention 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

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

New product for 2020

ℹ **Web code:** #1623

D-coded M8 device connectors
Data transmission for Ethernet and PROFINET

Two-piece device connectors with D-coding extend the portfolio of M8 circular connectors for data transmission. The SMD-capable connectors with IP67 degree of protection are suitable for data transmission up to 100 Mbps in Ethernet and PROFINET environments.

Ethernet

Your advantages

☑ Transmit high data rates in a confined space: ideal for compact devices

☑ Designed for integration into the SMT soldering process

☑ Packaging available for automated pick-and-place assembly

☑ Threaded or press-fit housings enable easy integration of the mechanical port screw connection

☑ Sealed tight by optional additional O-ring

Main features

• Pin assignment: 4-pos., D-coded
• Currents up to 4 A
• Voltages up to 60 V
• Standard IEC 61076-2-114
• Black insulating body (other colors on request)
• CAT5 in accordance with IEEE 802.3
• Power over Ethernet
• Shielded or unshielded versions
• Degree of protection: IP67 (when plugged in)

New product for 2019 ⓘ **Web code:** #0237					
Description	**Flush-type connector**	**Flush-type connector**	**Housing screw connection**	**Housing screw connection**	**Press-fit housing**
Number of positions / coding	4-pos. / D-coded	4-pos. / D-coded	-	-	-
Type of contact	Female	Female	-	-	-
Two-piece version, SMD contact carriers in tape-on-reel packing*	Shielded	Unshielded	Front mounting	Rear mounting	Front mounting
Type	SACC-CIP-M8FSD-4P SMD SH R32	SACC-CI-M8FSD-4P SMD R32	SACC-FP-F-M8/ M10 SMD	SACC-BP-F-M8/ M12 SMD	SACC-FP-F-M8/ PRESS SMD
Order No.	1068454	1068453	1412504	1412506	1412501

*For automated pick-and-place assembly, available in tray packing on request

Industrial RJ45 sockets 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.

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 packing for processing in automated reflow processes

☑ Compact design with space-saving footprint

Main features
- Data rates up to 10 Gbps
- Integrated LED as a visual status indicator
- Operating temperature: -40°C ... +105°C
- For THR and wave soldering processes
- Tray packing
- Straight and angled versions with optional shield springs

New product for 2020 ℹ **Web code:** #2059	Angled version with LEDs and shield springs	Angled version with shield springs	Straight version with LEDs	Straight version with shield springs
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.

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 22 ... AWG 26 (rigid and flexible)
• Cable diameters up to 9 mm
• With IDC fast connection
• Also available as push-pull ADVANCE connectors

New product for 2020 [i] **Web code:** #2340				
Description	**RJ45 IP20**	**RJ45 IP20**	**Push-pull ADVANCE**	**Push-pull ADVANCE**
Connection cross section	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 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 sockets 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, THR, and wave soldering, and multi-ports provide the right solution for every application.

PROFI NET **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
- Integrated LED as a visual status indicator
- For SMD, THR, and wave soldering
- Tray and tape-on-reel packing
- 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 with LEDs**	**Angled hybrid version with USB interface**
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	THR	THR	THR
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

Duplex patch cables for indoor use
Wide range for FO cabling

The new duplex patch cables for connecting active and passive components extend the FO patch cable range. The wide range of connector combinations and the various fiber categories enable numerous areas of application.

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

• For all common FO interfaces
• Data rates up to 40 Gbps
• Versions for single mode 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

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
• Height: one rack unit (1RU)
• Versions for single mode and multimode (GOF)
• Maximum protection against the effects of EMI and ESD
• Color: gray

New product for 2020 ℹ️ **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

SUNCLIX connectors with crimp connection
Efficient and fast cabling

Cable photovoltaic systems easily and reliably with SUNCLIX connectors. The new versions with crimp connection are ideal for automated production processes and meet current and future requirements thanks to their international approvals.

Your advantages

☑ High-quality materials ensure a high degree of reliability and long-term stability

☑ Maximum system efficiency with proven, low-loss SUNCLIX contacts

☑ International approvals enable worldwide use

Main features

• Conductor cross sections: 2.5 to 6 mm² (AWG 14 to AWG 10)
• Nominal voltage: 1,500 V (TÜV/UL)
• Nominal currents at 85°C: up to 35 A (TÜV) / up to 50 A (UL)
• Degree of protection: IP65, IP66, IP67, IP68 (24 h/2 m)
• Temperature range: -40°C ... +85°C
• Protection class II
• Approval in accordance with IEC 62852 and UL 6703

New product for 2019 ℹ **Web code:** #2057	Housing for connectors		Contacts for crimp connection	
Description	**Housing for connectors**		**Contacts for crimp connection**	
Nominal voltage	1,500 V		-	
Nominal current	-		Up to 35 A (TÜV) / up to 50 A (UL)	
Type	PV-CM-C-HSG	PV-CF-C-HSG	PV-FT-CCM-2,5-4-R1000 / PV-FT-CCM-6-R1000	PV-FT-CCF-2,5-4-R1000 / PV-FT-CCF-6-R1000
Order No.	1622662	1622661	1704927 1704928	1704930 1704931

DC distributors for photovoltaic systems
Versatile solutions in PV cabling

DC distributors for photovoltaic systems provide greater flexibility when it comes to device cabling. The weatherproof DC distributors route adjacent strings to the inverter with just one string cable. This saves both time and money during installation.

Your advantages

☑ Suitable for current and future requirements with nominal voltages up to 1,500 V

☑ Increased safety and time savings with easy installation

☑ Easy integration into existing systems with pre-assembled modules

☑ Different numbers of node outlets and customer-specific cable lengths available on request

Main features
- Nominal voltages up to 1,500 V
- Nominal currents up to 35 A (TÜV)
- Degree of protection: IP65, IP66, IP67, IP68 (24 h/2 m)
- Temperature range: -40°C ... +85°C
- Protection class II
- Approval in accordance with IEC 62852 and TÜV 2 PfG 1913/04.11

New product for 2019 ℹ️ **Web code:** #2058	DC distributor (cable-based)	
Description	**DC distributor (cable-based)**	
Version	Male to 2 x female (-/++)	Female to 2 x male (+/--)
Type	PV-ED6 / Y-120(2+/1-)	PV-ED6 / Y-120(1+/2-)
Order No.	1030649	1030650

Assembled M12 hybrid cables
Transmit data and power securely

M12 hybrid connectors for communication interfaces and powerful motor connections enable the easy and space-saving transmission of data and power in a single connector. The Advanced Shielding Technology guarantees a totally protected and reliable shield connection.

Advanced Shielding Technology [P]
Designed by PHOENIX CONTACT

Ethernet

Your advantages

☑ Combining data and power in a single connector saves time and space

☑ Shock and vibration-resistant even when subjected to high levels of mechanical strain

☑ Reliable EMC protection with 360° shield connection

☑ Resistant and robust against transient overvoltages and lightning currents up to 20 kA

☑ Minimal generation of heat and secure current flow in the event of a short circuit

Main features
• Y-coding
• 360° shield connection
• 4 power contacts and 4 data contacts
• Degree of protection: IP67
• Currents up to 6 A
• Suitable for CAT5
• Standardized in accordance with IEC 61076-2-113

New product for 2020 [i] **Web code:** #2343						
Description	**M12 hybrid cable**					
Design of head 1	M12 male, straight	M12 male, angled	M12 female, straight	M12 female, angled	M12 male, angled	M12 female, straight
Design of head 2	M12 female, straight	M12 female, angled	M12 female, straight	Free cable end	Free cable end	Free cable end
Sheath material and color	PUR, black					
Type	NBC-M12MSY/2,0-94H/M12FSY	NBC-M12MRY/2,0-94H/M12FRY	NBC-M12FSY/2,0-94H/M12FSY	NBC-M12FRY/2,0-94H	NBC-M12MRY/2,0-94H	NBC-M12FSY/2,0-94H
Order No.	1057782	1057783	1146442	1146377	1146464	1149277

Assembled M12 data cables
Shielding concept for secure data transmission

Advanced Shielding Technology is the innovative shielding concept for assembled data cables. Liquid metal that completely encloses the cable shielding during the manufacturing process guarantees a totally protected shield connection and expansion of the power reserves.

Advanced Shielding Technology
Designed by PHOENIX CONTACT

Ethernet   *CC-Link IE*   (10 Gbit/s)

Your advantages

☑ Shock and vibration-resistant even when subjected to high levels of mechanical strain

☑ Resistant and robust against transient overvoltages and lightning currents up to 20 kA

☑ Minimal generation of heat and secure current flow in the event of a short circuit

☑ Future-proof high-speed data transmission up to 40 Gbps and reliable EMC protection

Main features
- X-coding with consistent pair shielding
- 8-pos.
- Degree of protection: IP67
- Suitable for 10 Gbps CAT6$_A$
- PoE-capable up to 0.5 A with a maximum of 60 V
- Standardized in accordance with IEC 61076-2-114

New product for 2019						
ℹ **Web code:** #2152						
Description	**M12 data cable**					
Design of head 1	M12 male, angled		M12 female, straight			M12 female, angled
Design of head 2	Free cable end	M12 male, straight	Free cable end	M12 male, straight	RJ45 connector, straight	Free cable end
Sheath material and color	PUR, water blue					
Type	NBC-M12MRX/ 1,0-94F	NBC-M12MSX/ 1,0-94F/ M12MRX	NBC-1,0-94F M12FSX	NBC-M12MSX/ 1,0-94F/M12FSX	NBC-M12FSX/ 1,0-94F/R4AC	NBC-1,0-94F/ M12FRX
Order No.	1080716	1080724	1080728	1080742	1080733	1080746

The web code gives you access to additional product versions on our website.

Assembled M8 cables with D-coding
Reliable and secure data transmission

The M8 product range ensures reliable data transmission through symmetrically arranged contacts. You can save installation space by up to 30% compared to M12 connectors. The Advanced Shielding Technology ensures an extremely reliable and robust shield connection.

Advanced Shielding Technology [P]
Designed by PHOENIX CONTACT

PROFI NET®   **Ethernet**

Your advantages

☑ Compact connector dimensions enable Ethernet and PROFINET even in the smallest devices

☑ Reliable and vibration-resistant 360° shield transition

☑ Space savings with Power over Ethernet: field devices are supplied with data and power simultaneously

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 2019 ℹ️ **Web code:** #2150				
Description	**M8 data cable**			
Design of head 1	M8 male, angled			
Design of head 2	Free cable end	M8 male, straight	M8 male, angled	RJ45 connector, straight
Sheath material	PUR			
Sheath color	Green			
Type	NBC-M8MRD/1,0-93B	NBC-M8MSD/1,0-93B/ M8MRD	NBC-M8MRD/1,0-93B/ M8MRD	NBC-M8MRD/1,0-93B/ R4AC
Order No.	1080526	1080538	1080532	1080543

The web code gives you access to additional product versions on our website.

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. By performing extensive thermal simulations, Phoenix Contact also supports you in optimizing your printed circuit board layout.
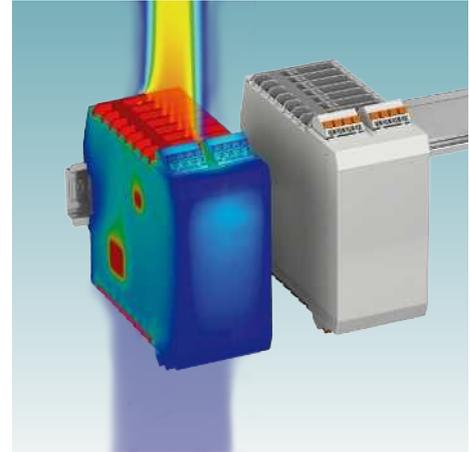
Your advantages

☑ 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: all the services needed for your specific device design

Main features
- Material: aluminum
- Overall width: 50 mm
- 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 two serial contacts for easy module-to-module communication

Main features
- Overall width: 50 mm
- 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

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.
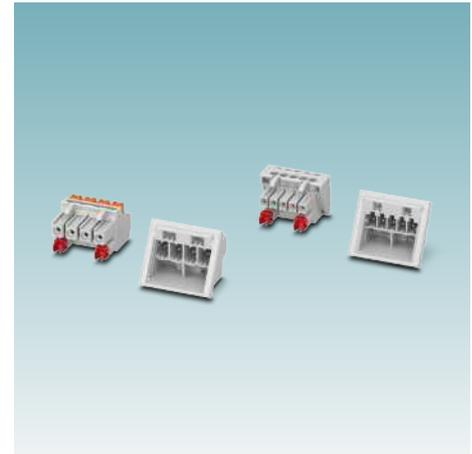
Your advantages

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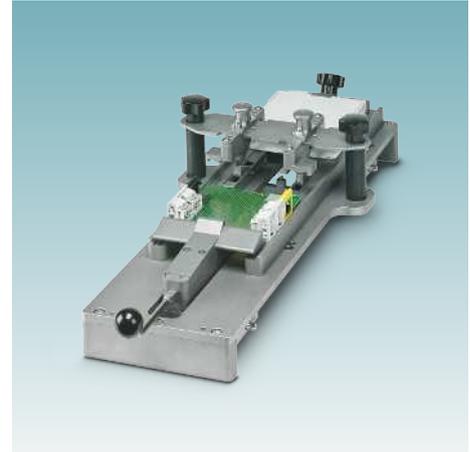
Main features
- Currents up to 16 A
- Voltages up to 300 V
- Pitch: 3.5 and 5.0 mm
- 4- and 5-pos.
- For ICS overall widths of 20, 25, and 50 mm
- 16-way coding

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

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 enables quick and cost-saving final assembly of the electronic devices.

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 ℹ️ **Web code:** #2325	
Description	**ICS mounting device**
Order No.	1118354

Blockbelts for ME-IO series housings
Individual grouping of front connection technology

The comprehensive range of connection technologies for ME-IO series multifunctional housings now includes Blockbelts. These accessories allow you to group different front connectors to form a mechanical unit.

Your advantages

☑ Enables the functional grouping of different connectors

☑ Simplifies servicing and maintenance work

☑ Fast mounting and removal of Blockbelts with snap-in system

Main features
- For 2 to 6 front connectors
- 8 to 36 positions can be grouped together mechanically
- Temperature range: -40°C ... +100°C

New product for 2019 ⓘ **Web code:** #2066					
Description	**Blockbelt**				
Version	For 2 connectors	For 3 connectors	For 4 connectors	For 5 connectors	For 6 connectors
Pcs./Pkt.	50				
Type	HSCP-CB 2U-7035	HSCP-CB 3U-7035	HSCP-CB 4U-7035	HSCP-CB 5U-7035	HSCP-CB 6U-7035
Order No.	1056724	1056723	1056722	1056892	1037100

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 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-RPI universal electronics housings
For Raspberry Pi touch displays

The UCS-RPI series electronics housings feature ready-made cutouts for 7 inch touch displays, as well as 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

☑ Glue and Play: ready-to-install solution with no further processing

☑ 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
- 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-RPI series electronics housing**	
Color	Light gray	Black
Type	UCS 237-195-F-GD-RPI-DT7 7035	UCS 237-195-F-GD-RPI-DT7 9005
Order No.	1104780	1104781

Mounting accessories for UCS series universal housings
Ideal for wall, desktop or DIN rail

DIN rail adapters, stands, and wall brackets extend the range of accessories for UCS series electronics housings. The stands and wall brackets enable the device to be used outside of the control cabinet, while the DIN rail adapters allow the device to be snapped onto standard DIN rails.

Your advantages

☑ Flexible mounting options for control cabinet and field use

☑ Identical receptacles in the housing enable adaptation to the specific application

☑ Different colors for high recognition value inside and outside of the control cabinet
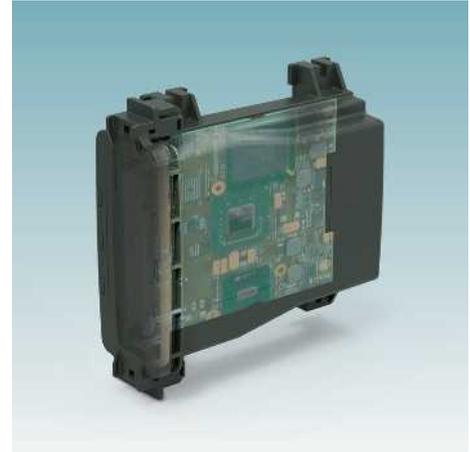
Main features
• DIN rail adapters for flat and tall designs
• Colors: turquoise blue (RAL 5018), light gray (RAL 7035), black (RAL 9005)
• Stands also suitable for wall mounting

New product for 2019 ℹ️ **Web code:** #2049				
Description	**DIN rail adapter**	**DIN rail adapter**	**Stand**	**Wall bracket**
Color example	Light gray (RAL 7035)	Light gray (RAL 7035)	Turquoise blue (RAL 5018)	Black (RAL 9005)
Type	UCS DIN 125-F 7035	UCS DIN 145-F 7035	UCS PED 5018	UCS WM-B 5018
Order No.	2203838	2203839	2203394	2203391
Type	UCS DIN 125-H 7035	UCS DIN 145-H 7035	UCS PED 7035	UCS WM-B 7035
Order No.	2203841	2203840	2203392	2203718
Type	-	-	UCS PED 9005	UCS WM-B 9005
Order No.	-	-	2203393	2203719

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 ℹ **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 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

Indicator accessories for ECS series outdoor housings
Easy visualization of operating states

Passive light guides and active signal lights for ECS series outdoor housings extend the functionality of the robust field housings. The splash-proof accessories are suitable for single-color or multi-color indication of operating states and electronics functions.

Your advantages

☑ Active or passive state indicators for easy function extension

☑ Single-color or multi-color light signals for different operating states

☑ High degree of reliability with splash water protection

☑ The flexible design simplifies placement on the printed circuit board

Main features

• Rigid or flexible design for SMD LEDs
• No pitch (1-pos.)
• Front mounting
• Degree of protection: IP68 (EN 60529)
• Temperature range: -20°C ... +80°C

New product for 2019 ℹ **Web code:** #2064				
Description	**Signal light**	**PCB connector for signal lights**	**Light guide**	**Light guide**
Color	RGB	White	Transparent	Transparent
Version	Active, 4 conductors	Push-in	Passive, rigid	Passive, flexible
Diameter of the indicator	5 mm	-	5.2 mm, spherical	6 mm, lens
Number of positions	-	4	1	1
Type	HS LCA-RGB-10X5-L	PTSM 0,5 / 4-PL-2,5 WH	HS LC-V-T-D4X5,2S-45	HS LC-F-T-6X3-150
Order No.	1082299	1709460	1082300	1082301

Robust ECS series outdoor housings
Small design for compact applications

ECS series outdoor housings are now also available with a more compact installation depth of 109 mm. The smaller design is especially suitable for space-critical applications that require a high degree of protection, such as sensors in special vehicles.

Your advantages

- ☑ Housing design supports the installation of a range of PCB thicknesses for high application diversity
- ☑ Proven PCB connection technology
- ☑ Optional pressure compensation membrane for fluctuating ambient pressure
- ☑ Integrated tamper protection
- ☑ Compatible with existing ECS-P-122X169... front plates

Main features
- Installation depth: 109 mm
- Material: UV-stabilized polycarbonate plastic (UL 94-V0)
- Housing approval in accordance with UL 50/50 E
- Degree of protection: IP69 (EN 60529), IP69K (ISO 20653)
- Colors: black (similar to RAL 9005), gray (similar to RAL 7042)
- Temperature range: -40°C ... +100°C

New product for 2019 ℹ️ **Web code:** #2065			
Description	**Field housing 122 mm x 109 mm, black**		
Front plate	Snap-in locking		Screw locking mechanism	
Version	Unventilated	Ventilated	Unventilated	Ventilated
Type	ECS-B-122X109-L-UV1-NV	ECS-B-122X109-L-UV1-V	ECS-B-122X109-S-UV1-NV	ECS-B-122X109-S-UV1-V
Order No.	1054713	1054714	1054711	1054710

Connection technology for ME and ME MAX housings
Gold-plated contacts for maximum resistance

PCB connectors for modular housings of the ME and ME MAX series are now also available with gold-plated contact surfaces. Thanks to their excellent resistance to corrosion and good transmission properties, they are particularly suitable for demanding device solutions.

Your advantages

☑ Versions available for wave and THR soldering processes

☑ High mechanical strength and resistance to corrosion

☑ Contact resistance with long-term stability for durable use

Main features
- Currents up to 8 A
- Voltages up to 320 V
- Pitch: 5.0 mm
- Orthogonal header
- Oxidation-resistant

New product for 2019 ⓘ **Web code:** #2061						
Description	**Connection technology for ME and ME MAX series electronics housings**					
Version	Wave soldering process			THR		
Number of positions	2	3	4	2	3	4
Type	MSTBO 2,5/2-G1L KMGY AU	MSTBO 2,5/3-G1L KMGY AU	MSTBO 2,5/4-G1L KMGY AU	MSTBO 2,5/2-G1L THRR32 BK AU	MSTBO 2,5/3-G1L THRR44 BK AU	MSTBO 2,5/4-G1L THRR44 BK AU
Order No.	1077603	1077605	1077607	1077609	1077611	1077613
Type	MSTBO 2,5/2-G1R KMGY AU	MSTBO 2,5/3-G1R KMGY AU	MSTBO 2,5/4-G1R KMGY AU	MSTBO 2,5/2-G1R THRR32 BK AU	MSTBO 2,5/3-G1R THRR44 BK AU	MSTBO 2,5/4-G1R THRR44 BK AU
Order No.	1077604	1077606	1077608	1077610	1077612	1077614

Swivel arms for DCS series display carriers
Mobile installation of operator interfaces

Swivel wall and profile brackets for display carriers of the DCS series and for all monitors with standardized VESA interfaces are the ideal addition for stationary display units. The swivel arms can be incrementally adjusted in three axes, thereby enabling optimum alignment of the attached operator interfaces.

Your advantages

☑ High load-bearing capacity enables secure mounting of small and large monitors and operator interfaces

☑ Can be swiveled and tilted in three axes for optimum alignment with the field of view

☑ VESA interface in standard VESA 75 and VESA 100 for easy wall or aluminum profile mounting

Main features
- Mounting plate in accordance with VESA standard
- Can be rotated, swiveled, and tilted in 15° increments
- Load-bearing capacity: 10 kg
- Material: aluminum and plastic

	Housing bracket	Mounting plate for DCS 15 housing	Wall bracket	Profile bracket
New product for 2019 ℹ️ **Web code:** #2063				
Description	**Housing bracket**	**Mounting plate for DCS 15 housing**	**Wall bracket**	**Profile bracket**
Version	Ball joint	VESA 75/100 mm	Plate 75 mm, 4 x hole Ø 6.5 mm	Aluminum profile 40 mm, 2 x sliding block
Type	HS EH-B 140,5 DCS	HS MP VESA75/100 DCS	HS WM-S 75 DCS	HS PM-S 40 DCS
Order No.	1082302	1082303	1082304	1082305

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 can also develop new products tailored to your individual needs. We provide you with help and 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 you find solutions adapted to your specific requirements.

Customized new products
In addition to customer-specific adaptations, we can also develop new products tailored to your individual 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. Take advantage of our extensive development and manufacturing expertise for your individual solution.

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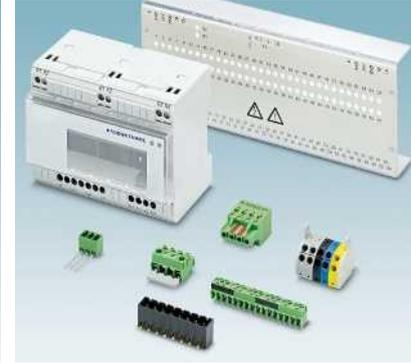
Wide range of color options

Customer-specific cable assemblies

Customized printing

Special punching, coding, and pin lengths

Connection block for temperature sensors

Hybrid connectors for charging stations

Connection system for LED street lighting

Compact controller with front connection technology

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

Convenient download of 3D data for your chosen product

International training provided to customers on products and technologies

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 17,400 employees, we maintain close relationships with our customers, something we believe is essential for 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 our complete product range at:

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