



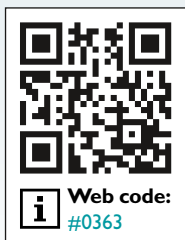
Modular rectangular connectors

Product overview 2021

Modular rectangular connectors for signals, data, and power

The VARIOCON connector system offers compact connections for transmitting currents up to 70 A and voltages up to 1,000 V in devices and junction boxes.

Modular contact inserts with screw and PCB connection, as well as fixed contact inserts with crimp connection for turned and punched contacts are the basis of the product range. With IP68/IP69K degree of protection, the connector system offers a high degree of reliability, even under extreme conditions.

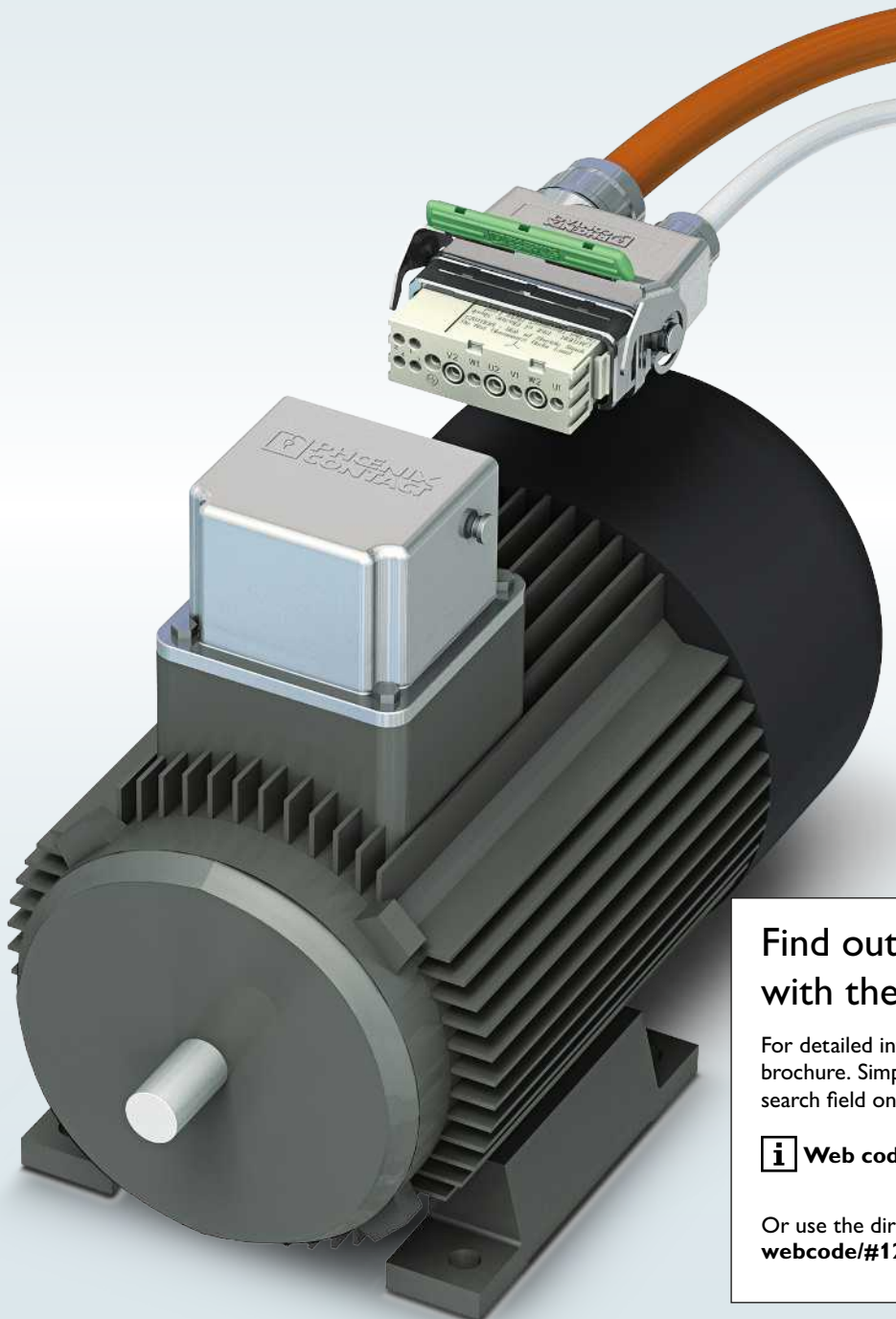


Your advantages

- ✓ Modular contact insert design
- ✓ Combination of power and signal in one connector
- ✓ Housing designs made of plastic and metal
- ✓ Nickel-plated housings available for EMC applications

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Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter the # 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](https://www.phoenixcontact.net/webcode/#1234)

The right solution for every application

Whether for reliable inverters, complex conveying systems or state-of-the-art energy storage applications – the VARIOCON portfolio offers the right solution for every application. The VARIOCON hybrid connectors can be used for any application where power, data, and signals need to be transmitted in an IP-protected connector.



Solutions and application examples



Drive control systems

Thanks to the shielded sleeve housing, signals and data are also transmitted reliably in EMC applications.



Inverters

UV-resistant housings with IP65 degree of protection ensure reliable connection even in a robust environment.



Control cabinet

A variety of base housings allow mounting on the housing panel as well as free-hanging wiring.



Battery units

Important for energy storage: Power and data can be combined in one connector. The battery management system therefore knows the state of the individual modules at all times.



Cranes

Regardless of the wind or weather conditions, power and data can be transmitted without any malfunctions with the high degree of protection up to IP69K.



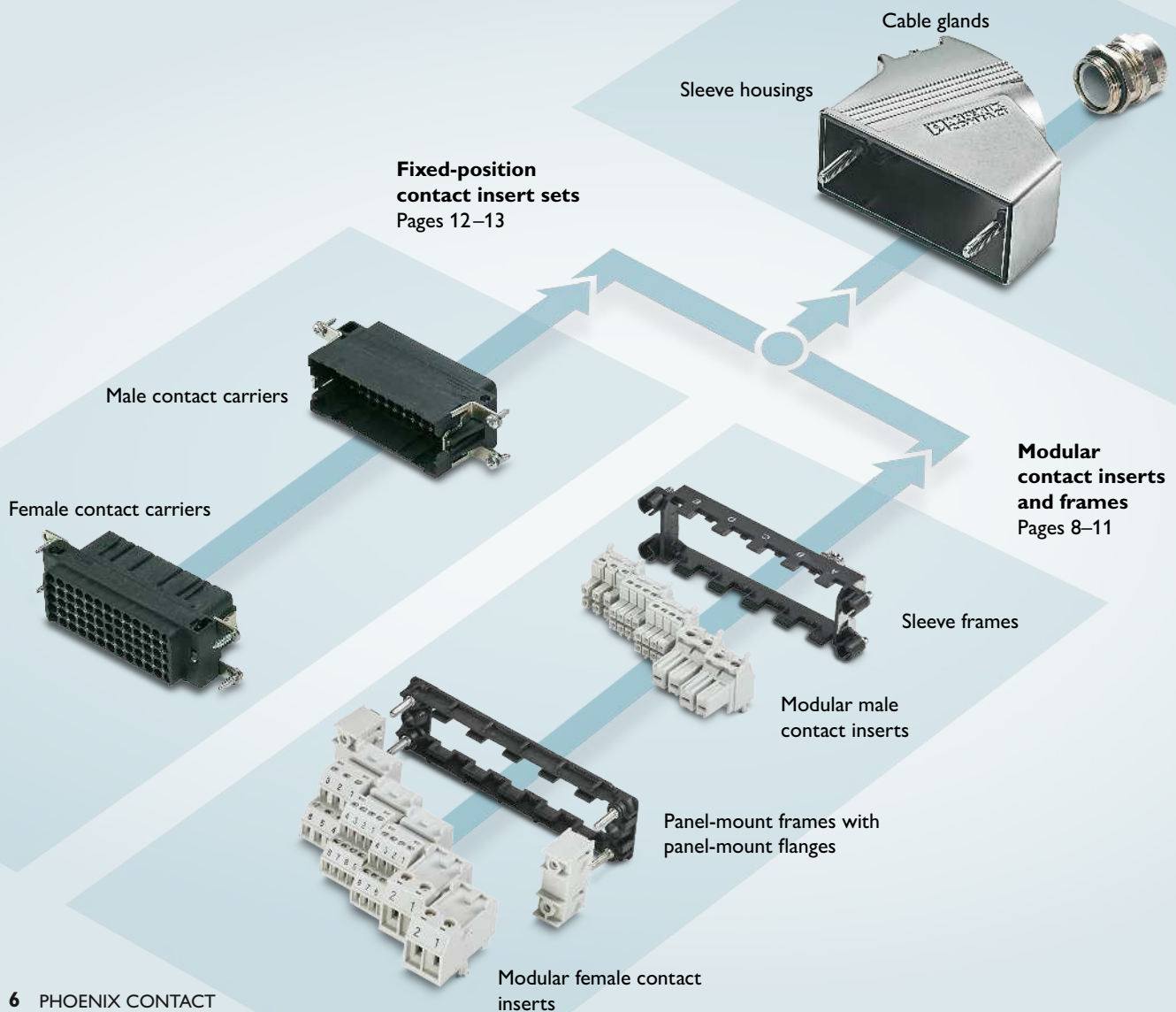
Conveying systems

In the right place at the right time: Modular rectangular connectors can be configured to suit the respective application.

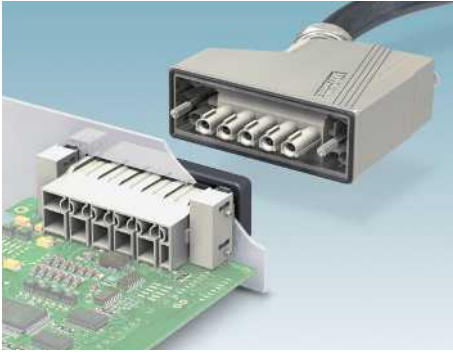
The modular connector system with a compact design

The VARIOCON product range enables power, signal, and data transmission to be combined in a single connector. Screw, crimp or direct PCB connection can be selected for the device side. Crimp contact inserts are available for applications with a high contact density.

Sleeve housings and cable glands
Pages 14–17



Device connections and connectors



PCB connection

Contact inserts with PCB connection for parallel or perpendicular arrangements of the PCB to the device panel.



Screw and crimp connection

Contact inserts with screw and crimp connection for connecting device-internal litz wires.



Surface mounting and coupling housings

For plug-in cabling directly on the device panel or flying leads.



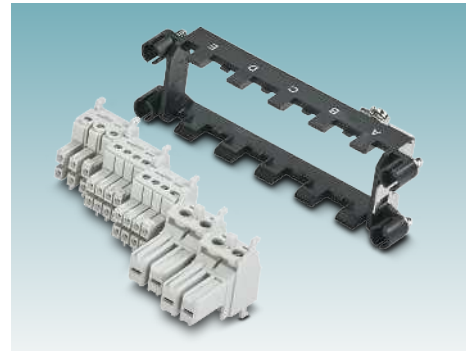
Pre-assembled contact insert sets

Complete sets consisting of frame, mounting screws, pre-assembled modules, and coding profiles.



High-position contact carriers

Male and female contact carriers for turned and rolled crimp contacts for applications with up to 65 positions.



Modular design

Easy combination of power and signal in one connector.



Four sizes

Widths from 32.4 mm to 77.4 mm with two to five module slots.



Different cable outlets














Sleeve housings with angled and straight cable outlet make mounting easier.



Various materials

Sleeve housings, surface mounting housings, and coupling housings made of plastic or die-cast zinc.







Modular contact inserts for device connection

Modular contact inserts – device side									 Web code: #0537
	Type	Number of positions	Module slots	PCB connection			Screw connection	Order No.	
				180°	90°	90° with PE			
Insertion cycles 100	1.5 mm ²	6	1		1884872	1853531	-		1854019 1583555*
	1.5 mm ²	8	1		1884885	1852833	-		1854022 1583568*
	4 mm ²	2	1		1884979	1852859	-		1853528 1583542*
Insertion cycles 50	16 mm ²	4	3		-	1607509	1607516		1607745
	16 mm ²	5	4		-	1607523	1607530		1607748
	16 mm ²	7	5		-	1607537	1607544		1607751

Modular contact inserts for connectors

Modular contact inserts – connector side




 Web code: #0536


Rated current	Rated voltage	Module slots	Screw connection	Order No.
10 A	250 V	1		1853476 1583526*
10 A	160 V	1		1852820 1583536*
20 A	400 V	1		1852846 1583513*
70 A	690 V	3 4 (1 of which is free) 5 (2 of which are free)		1607467** 1607488** 1607495**
70 A	690 V	4 5 (1 of which is free)		1607474** 1607502**
70 A	690 V	5		1607481**

* Contact insert with PE marking



** Items do not require separate panel-mount or sleeve frame




Panel-mount frames for device connection

Panel-mount frames – device side							i Web code: #0539
							
Size	Module slots	Panel-mount frame without PE		Panel-mount frame with PE		Additional EMC shielding frame	
		Type	Order No.	Type	Order No.	Type	Order No.
VC 1	2	VC-AR 1/2 M	1852972*	VC-AR 1/2 M-PEA	1607761*	VC-AR1-EMV	1853214
VC 2	3	VC-AR 2/3 M	1852985*	VC-AR 2/3 M-PEA	1607774*	VC-AR2-EMV	1853227
VC 3	4	VC-AR 3/4 M	1852998*	VC-AR 3/4 M-PEA	1607787*	VC-AR3-EMV	1853230
VC 4	5	VC-AR 4/5 M	1853007*	VC-AR 4/5 M-PEA	1607790*	VC-AR4-EMV	1853243

Male contact inserts including panel-mount frame and flange						i Web code: #0528
						
Size	Number of positions/ conductor cross-section	Rated voltage	Rated current	Type	Order No.	
VC 1	16 x 1.5 mm ²	160 V	10 A	VC-AR 1/2 M-S88-SET	1607394	
	12 x 1.5 mm ²	250 V	10 A	VC-AR 1/2 M-S66-SET	1607346	
	4 x 4 mm ²	400 V	20 A	VC-AR 1/2 M-S22-SET	1607298	
VC 2	24 x 1.5 mm ²	160 V	10 A	VC-AR 2/3 M-S888-SET	1607407	
	18 x 1.5 mm ²	250 V	10 A	VC-AR 2/3 M-S666-SET	1607359	
	6 x 4 mm ²	400 V	20 A	VC-AR 2/3 M-S222-SET	1607311	
VC 3	32 x 1.5 mm ²	160 V	10 A	VC-AR 3/4 M-S8888-SET	1607418	
	24 x 1.5 mm ²	250 V	10 A	VC-AR 3/4 M-S6666-SET	1607370	
	8 x 4 mm ²	400 V	20 A	VC-AR 3/4 M-S2222-SET	1607322	
VC 4	40 x 1.5 mm ²	160 V	10 A	VC-AR 4/5 M-S88888-SET	1607431	
	30 x 1.5 mm ²	250 V	10 A	VC-AR 4/5 M-S66666-SET	1607383	
	10 x 4 mm ²	400 V	20 A	VC-AR 4/5 M-S 22222-SET	1607335	

Sleeve frames for connectors

Sleeve frames – connector side				 Web code: #0538	
					
Size	Module slots	Sleeve frame without PE		Sleeve frame with PE	
		Type	Order No.	Type	Order No.
VC 1	2	VC-TR 1/2 M	1852891	VC-TR 1/2 M-PEA	1607059
VC 2	3	VC-TR 2/3 M	1852901	VC-TR 2/3 M-PEA	1607062
VC 3	4	VC-TR 3/4 M	1852914	VC-TR 3/4 M-PEA	1607075
VC 4	5	VC-TR 4/5 M	1852927	VC-TR 4/5 M-PEA	1607088

Female contact inserts including sleeve frames						 Web code: #0529
		 				
Size	Number of positions/ conductor cross-section	Rated voltage	Rated current	Type	Order No.	
VC 1	16 x 1.5 mm ²	160 V	10 A	VC-TR 1/2 M-PEA-S88-SET	1607239	
	12 x 1.5 mm ²	250 V	10 A	VC-TR 1/2 M-PEA-S66-SET	1607191	
	4 x 4 mm ²	400 V	20 A	VC-TR 1/2 M-PEA-S22-SET	1607143	
VC 2	24 x 1.5 mm ²	160 V	10 A	VC-TR 2/3 M-PEA-S888-SET	1607250	
	18 x 1.5 mm ²	250 V	10 A	VC-TR 2/3 M-PEA-S666-SET	1607202	
	6 x 4 mm ²	400 V	20 A	VC-TR 2/3 M-PEA-S222-SET	1607154	
VC 3	32 x 1.5 mm ²	160 V	10 A	VC-TR 3/4 M-PEA-S8888-SET	1607263	
	24 x 1.5 mm ²	250 V	10 A	VC-TR 3/4 M-PEA-S6666-SET	1607215	
	8 x 4 mm ²	400 V	20 A	VC-TR 3/4 M-PEA-S2222-SET	1607167	
VC 4	40 x 1.5 mm ²	160 V	10 A	VC-TR 4/5 M-PEA-S88888-SET	1607274	
	30 x 1.5 mm ²	250 V	10 A	VC-TR 4/5 M-PEA-S66666-SET	1607226	
	10 x 4 mm ²	400 V	20 A	VC-TR 4/5 M-PEA-S22222-SET	1607178	

* Two panel-mount flanges ([1852862](#)) are to be ordered separately per panel-mount frame

Contact carriers and crimp contacts for device connection

Contact carriers for device connection – device side							 Web code: #0530		
	Description	Size	Number of positions/ conductor cross section	Rated voltage	Rated current	Type	Order No.		
	Female contact carriers for turned crimp contacts	VC 1	15 x 0.14 mm ² ... 1.5 mm ²	250 V	Up to 10 A**	VC-D1-BU15-PE	1855050*		
		VC 2	30 x 0.14 mm ² ... 1.5 mm ²			VC-D2-BU30-PE	1855063*		
		VC 3	50 x 0.14 mm ² ... 1.5 mm ²			VC-D3-BU50-PE	1855076*		
		VC 4	65 x 0.14 mm ² ... 1.5 mm ²			VC-D4-BU65-PE	1855089*		
	Female contact carriers for rolled crimp contacts	VC 1	15 x 0.14 mm ² ... 1.5 mm ²					VC-D1-BU15-PE-R	1884801*
		VC 2	30 x 0.14 mm ² ... 1.5 mm ²					VC-D2-BU30-PE-R	1884791*
		VC 3	50 x 0.14 mm ² ... 1.5 mm ²					VC-D3-BU50-PE-R	1884788*
		VC 4	65 x 0.14 mm ² ... 1.5 mm ²					VC-D4-BU65-PE-R	1884775*
Crimp contacts									
	Description	Type of contact	Conductor cross-section	Type	Order No.				
	Turned female contacts	Single contact, silver-plated	0.14 mm ² /AWG 26	CK 1,6-ED-0,37BU AG	1663394				
			0.50 mm ² /AWG 20	CK 1,6-ED-0,50BU AG	1663404				
			0.75 mm ² /AWG 18	CK 1,6-ED-0,75BU AG	1663417				
			1.00 mm ² /AWG 18	CK 1,6-ED-1,00BU AG	1663420				
			1.50 mm ² /AWG 16	CK 1,6-ED-1,50BU AG	1663433				
		Single contact, gold-plated	0.14 mm ² /AWG 26	CK 1,6-ED-0,37BU AU	1674969				
			0.50 mm ² /AWG 20	CK 1,6-ED-0,50BU AU	1674480				
			0.75 mm ² /AWG 18	CK 1,6-ED-0,75BU AU	1672440				
			1.00 mm ² /AWG 18	CK 1,6-ED-1,00BU AU	1674943				
			1.50 mm ² /AWG 16	CK 1,6-ED-1,50BU AU	1674930				
	Rolled female contacts	Taped, silver-plated	0.34 mm ² ... 1 mm ² / AWG 22 ... AWG 17	CK1,6-BR-1,00BU OIC AG	1004381				
			1.5 mm ² ... 2.5 mm ² / AWG 16 ... AWG 14	CK1,6-BR-2,50BU OIC AG	1004383				
		Single contact, silver-plated	0.34 mm ² ... 1 mm ² / AWG 22 ... AWG 17	CK1,6-ER-1,00BU OIC AG	1004362				
			1.5 mm ² ... 2.5 mm ² / AWG 16 ... AWG 14	CK1,6-ER-2,50BU OIC AG	1004366				
Crimping tools									
	Description					Type	Order No.		
	Crimping tool for turned contacts – CK 1,6 ED ... and CK 2,5 ED ...					CRIMPFOX-1,6/2,5- ED-4,0	1687419		
	Crimping tool, for rolled contacts CK 1,6-ER ... OIC, cross section: 0.14 mm ² ... 2.5 mm ²					CRIMPFOX-P CK 1.6 ER 2.5 OIC-L	1069228		




Contact carriers and crimp contacts for connectors

Contact carriers for connectors – Connector side							i Web code: #0530
	Description	Size	Number of positions/ conductor cross-section	Rated voltage	Rated current	Type	Order No.
	Male contact carriers for turned/rolled crimp contacts	VC 1	15 x 0.14 mm ² ... 1.5 mm ²	250 V	Up to 10 A**	VC-D1-ST15-PE	1855018*
		VC 2	30 x 0.14 mm ² ... 1.5 mm ²			VC-D2-ST30-PE	1855021*
		VC 3	50 x 0.14 mm ² ... 1.5 mm ²			VC-D3-ST50-PE	1855034*
		VC 4	65 x 0.14 mm ² ... 1.5 mm ²			VC-D4-ST65-PE	1855047*
Crimp contacts							
	Description	Type of contact	Conductor cross-section	Type	Order No.		
	Turned male contacts	Single contact, silver-plated	0.14 mm ² /AWG 26	CK 1,6-ED-0,37ST AG	1663336		
			0.50 mm ² /AWG 20	CK 1,6-ED-0,50ST AG	1663349		
			0.75 mm ² /AWG 18	CK 1,6-ED-0,75ST AG	1663352		
			1.00 mm ² /AWG 18	CK 1,6-ED-1,00ST AG	1663365		
		Single contact, gold-plated	1.50 mm ² /AWG 16	CK 1,6-ED-1,50ST AG	1663378		
			0.14 mm ² /AWG 26	CK 1,6-ED-0,37ST AU	1674901		
			0.50 mm ² /AWG 20	CK 1,6-ED-0,50ST AU	1672453		
			0.75 mm ² /AWG 18	CK 1,6-ED-0,75ST AU	1674914		
	Rolled male contacts	Taped, silver-plated	0.34 mm ² ... 1 mm ² / AWG 22 ... AWG 17	CK1,6-BR-1,00ST OIC AG	1004380		
			1.5 mm ² ... 2.5 mm ² / AWG 16 ... AWG 14	CK1,6-BR-2,50ST OIC AG	1004382		
		Single contact, silver-plated	0.34 mm ² ... 1 mm ² / AWG 22 ... AWG 17	CK1,6-ER-1,00ST OIC AG	1004360		
			1.5 mm ² ... 2.5 mm ² / AWG 16 ... AWG 14	CK1,6-ER-2,50ST OIC AG	1004365		
Crimping tools							
	Description					Type	Order No.
	Crimping tool for turned contacts – CK 1,6 ED ... and CK 2,5 ED ...					CRIMPFOX-1,6/2,5-ED-4,0	1687419
	Crimping tool, for rolled contacts CK 1,6-ER ... OIC, cross section: 0.14 mm ² ... 2.5 mm ²					CRIMPFOX-P CK 1.6 ER 2.5 OIC-L	1069228

* Two panel-mount flanges (1855319) are to be ordered separately per contact carrier

** Depending on the connected conductor cross-section









Housings for device connection

Base housings for device connection – device side								 Web code: #0545	
	Description	Size	Module slots	Degree of protection	Pg16		Pg21		
					Type	Order No.	Type	Order No.	
	Surface-mount housing with fixing holes	VC 1	2	IP65/IP66/IP67	VC-MP-S1	1884720	-	-	
		VC 2	3		-	-	VC-MP-S2	1884733	
		VC 3	4		-	-	VC-MP-S3	1884746	
		VC 4	5		-	-	VC-MP-S4	1884759	
	Coupling housing with closed base	VC 1	2	IP65/IP66/IP67	VC-MP-K1	1884568	-	-	
		VC 2	3		-	-	VC-MP-K2	1884571	
		VC 3	4		-	-	VC-MP-K3	1884584	
		VC 4	5		-	-	VC-MP-K4	1884597	




Housings for connectors

Sleeve housings in accordance with IP65/IP66/IP67, die-cast zinc – connector side							 Web code: #0532	
	Description	Size	Module slots	Thread type	Type	Cylinder head screw	Knurled screw	
						Order No.		
	Metric	VC 1	2	M20	VC-MP-T1...	1886676	1886634	
		VC 2	3	M25	VC-MP-T2...	1886689	1886647	
		VC 3	4		VC-MP-T3...	1886692	1886650	
		VC 4	5		VC-MP-T4...	1886702	1886663	
	Pg	VC 1	2	Pg16	VC-MP-T1...	1884898	1855539	
		VC 2	3	Pg21	VC-MP-T2...	1884908	1855542	
		VC 3	4		VC-MP-T3...	1884911	1855555	
		VC 4	5		VC-MP-T4...	1884924	1855568	
	Metric + EMC	VC 1	2	M20	VC-MEMV-T1...	1886553	1886595	
		VC 2	3	M25	VC-MEMV-T2...	1886566	1886605	
		VC 3	4		VC-MEMV-T3...	1886579	1886618	
		VC 4	5		VC-MEMV-T4...	1886582	1886621	
	Pg+EMC	VC 1	2	Pg16	VC-MEMV-T1...	1853324	1855131	
		VC 2	3	Pg21	VC-MEMV-T2...	1853337	1855144	
		VC 3	4		VC-MEMV-T3...	1853340	1855157	
		VC 4	5		VC-MEMV-T4...	1853353	1855160	
Sleeve housings in accordance with IP67, plastic								
	Description	Size	Module slots	Thread type / cable size	Type	Cylinder head screw	Knurled screw	
						Order No.		
	Metric	VC 1	2	M20	VC-K-T1...	1852935	1855097	
		VC 2	3	M25	VC-K-T2...	1852948	1855107	
		VC 3	4		VC-K-T3...	1852961	1855120	
		VC 4	5		VC-K-T4...	1852974	1855133	
	Pg	VC 1	2	Pg16	VC-K-T1...	1852930	1855092	
		VC 2	3	Pg21	VC-K-T2...	1852943	1855102	
		VC 3	4		VC-K-T3...	1852956	1855115	
		VC 4	5		VC-K-T4...	1852969	1855128	
	Integrated Pg screw connection	VC 1	2	-	VC-K-T1...	-	-	
		VC 2	3	Pg29	VC-K-T2...	1583880	-	
		VC 3	4		VC-K-T3...	1424368	-	
		VC 4	5	-	VC-K-T4...	-	-	
	Ribbon cable outlet	VC 2	3	6 x 20.5 mm	VC-K-T2...	1607703	-	
				6 x 24 mm		1607677	-	
				7.5 x 29.5 mm		1607680	-	
				9 x 35 mm		1607693	-	

Cable glands for one cable

Metric cable glands  Web code: #0533									
									
Thread type	Plastic			Metal			EMC		
	Cable diameter [mm]	Type	Order No.	Cable diameter [mm]	Type	Order No.	Cable diameter [mm]	Type	Order No.
M20	6 ... 13	G-INS-M20-M68L-PEPDS-LG	1424515	9 ... 13	G-INS-M20-S68N-NNES-S	1411163	9 ... 13	G-INSEC-M20-S68N-NCR5-S	1411189
	10 ... 14	G-INS-M20-M68N-PNES-LG	1424471	11 ... 16	HC-M-KV-M20(11-16)	1645998	-	-	-
M25	9 ... 17	G-INS-M25-M68L-PEPDS-LG	1424516	11 ... 16	G-INS-M25-M68N-NNES	1411165	-	-	-
	13 ... 18	G-INS-M25-L68N-PNES-LG	1424472	14 ... 21	HC-M-KV-M25(14-21)	1646007	-	-	-
Pg cable glands  Web code: #0534									
									
Thread type	With plastic pressure screw			With brass pressure screw		EMC screw connection with iris spring			
	Cable diameter [mm]	Type	Order No.	Type	Order No.	Type	Order No.		
Pg16	4 ... 6.5	VC-K-KV-PG16(4-6,5)	1854459	VC-M-KV-PG16(4-6,5)	1853942	-	-		
	5 ... 8	VC-K-KV-PG16(5-8)	1853735	VC-M-KV-PG16(5-8)	1853955	-	-		
	6.5 ... 9.5	VC-K-KV-PG16(6,5-9,5)	1853748	VC-M-KV-PG16(6,5-9,5)	1853968	-	-		
	7 ... 10.5	VC-K-KV-PG16(7-10,5)	1853751	VC-M-KV-PG16(7-10,5)	1853971	-	-		
	9 ... 13	VC-K-KV-PG16(9-13)	1853764	VC-M-KV-PG16(9-13)	1853984	-	-		
	11.5 ... 15.5	VC-K-KV-PG16(11,5-15,5)	1854844	VC-M-KV-PG16(11,5-15,5)	1854857	-	-		
Pg21	7 ... 10.5	VC-K-KV-PG21(7-10,5)	1853890	VC-M-KV-PG21(7-10,5)	1853997	-	-		
	9 ... 13	VC-K-KV-PG21(9-13)	1853900	VC-M-KV-PG21(9-13)	1854006	VC-EMV-KV-PG21(9-13/9,5)	1854200		
	9 ... 13	-	-	-	-	VC-EMV-KV-PG21(9-13/12)	1854213		
	11.5 ... 15.5	VC-K-KV-PG21(11,5-15,5)	1853913	VC-M-KV-PG21(11,5-15,5)	1854035	VC-EMV-KV-PG21(11,5-15,5/13,5)	1854242		
	14 ... 18	VC-K-KV-PG21(14-18)	1853926	VC-M-KV-PG21(14-18)	1854048	VC-EMV-KV-PG21(14-18/14,5)	1854255		
	17 ... 20.5	VC-K-KV-PG21(17-20,5)	1853939	VC-M-KV-PG21(17-20,5)	1854051	-	-		

Cable glands for several cables

Pg cable glands in accordance with IP65					 Web code: #0535
					
Thread type	With plastic pressure screw			With brass pressure screw	
	Cable diameter [mm]	Type	Order No.	Type	Order No.
Pg16	1 x 3 / 1 x 8	VC-K-KV-PG16 1X3/1X8	1885376	VC-M-KV-PG16 1X3/1X8	1885457
	1 x 3 / 1 x 9	VC-K-KV-PG16 1X3/1X9	1885389	VC-M-KV-PG16 1X3/1X9	1885460
	1 x 6 / 1 x 8	VC-K-KV-PG16 1X6/1X8	1885392	VC-M-KV-PG16 1X6/1X8	1885473
	1 x 5 / 1 x 9	VC- K-KV-PG16 1X5/1X9	1885402	VC-M-KV-PG16 1X5/1X9	1885486
	1 x 3 / 2 x 8	VC-K-KV-PG16 1X3/2X8	1885415	VC-M-KV-PG16 1X3/2X8	1885499
	1 x 5 / 2 x 6	VC-K-KV-PG16 1X5/2X6	1885428	VC-M-KV-PG16 1X5/2X6	1885509
	2 x 6 / 1 x 7	VC-K-KV-PG16 2X6/1X7	1885431	VC-M-KV-PG16 2X6/1X7	1885512
	3 x 7	VC-K-KV-PG16 3X7	1885444	VC-M-KV-PG16 3X7	1885525
Pg21	1 x 6 / 2 x 9	VC-K-KV-PG21 1X6/2X9	1885538	VC-M-KV-PG21 1X6/2X9	1885619
	1 x 8.5 / 1 x 12	VC-K-KV-PG21 1X8,5/1X12	1885279	VC-M-KV-PG21 1X8,5/1X12	1854970
	2 x 4.5 / 1 x 13	VC-K-KV-PG21 2X4,5/1X13	1885282	-	-
	2 x 6 / 2 x 8	VC-K-KV-PG21 2X6/2X8	1885554	VC-M-KV-PG21 2X6/2X8	1885635
	2 x 7.2 / 1 x 10.5	VC-K-KV-PG21 2X7,2/1X10,5	1885567	VC-M-KV-PG21 2X7,2/1X10,5	1885648
	3 x 7	VC-K-KV-PG21 3X7	1885570	VC-M-KV-PG21 3X7	1885651
	3 x 9	VC-K-KV-PG21 3X9	1885583	VC-M-KV-PG21 3X9	1885664
	4 x 6.5	VC-K-KV-PG21 4X6,5	1885596	VC-M-KV-PG21 4X6,5	1885677
	4 x 8	VC-K-KV-PG21 4X8	1885606	VC-M-KV-PG21 4X8	1885680

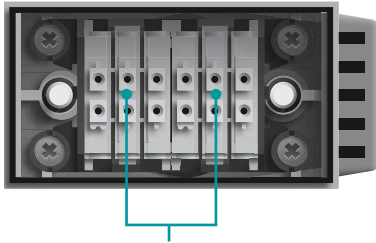
Accessories

Additional items				
	Description	Design	Type	Order No.
	IP40 protective cover	VC 1	VC-SD1	1853670
		VC 2	VC-SD2	1853683
		VC 3	VC-SD3	1853696
		VC 4	VC-SD4	1853706
	IP50 protective cover	VC 1	VC-SD-T1	1886728
		VC 2	VC-SD-T2	1886731
		VC 3	VC-SD-T3	1886744
		VC 4	VC-SD-T4	1886757
	IP50 protective cover	VC 1	VC-SD-A1	1886760
		VC 2	VC-SD-A2	1886773
		VC 3	VC-SD-A3	1886786
		VC 4	VC-SD-A4	1886799
	Removal tool	-	EWR	1665075
	Panel-mount flange (Two panel-mount flanges are to be ordered per panel-mount frame)	-	VC-AF	1852862
	Marking label	-	VC-BZS-WH	1852875
	Coding profile	-	CP-HCC 4	1600027

Configuration examples

Size VC1

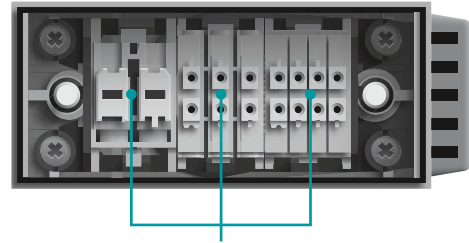
- 2 module slots
- Panel cutout:
19.5^{-0.2} mm x
32.4^{+0.3} mm



2 x 6-pos. signals

Size VC2

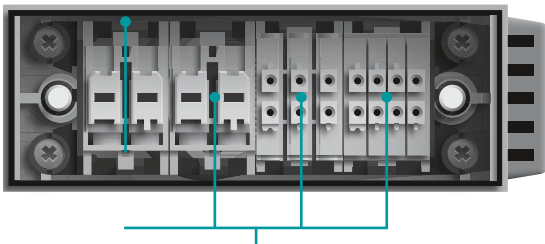
- 3 module slots
- Panel cutout:
19.5^{-0.2} mm x
47.4^{+0.3} mm



1 x 2-pos. power, 1 x 6-pos. signals,
1 x 8-pos. signals

Size VC3

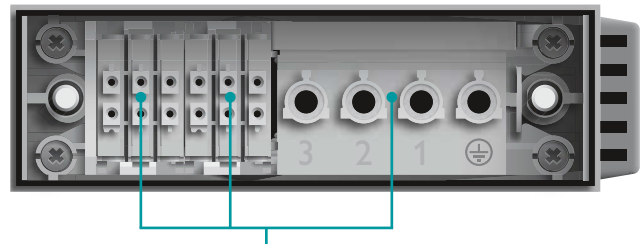
- 4 module slots
- Panel cutout:
19.5^{-0.2} mm x
62.4^{+0.3} mm



2 x 2-pos. power,
1 x 6-pos. signals, 1 x 8-pos. signals

Size VC4

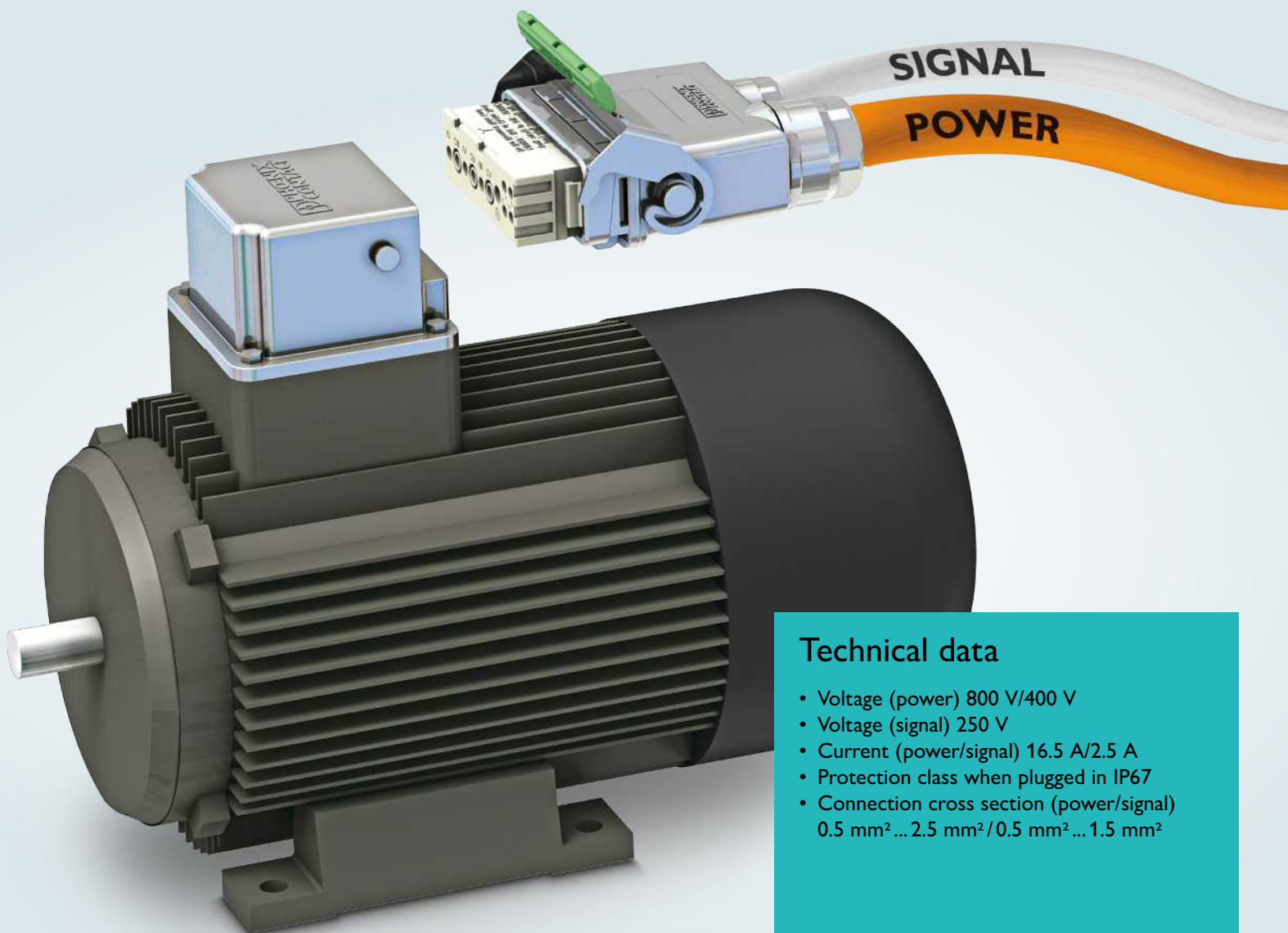
- 5 module slots
- Panel cutout:
19.5^{-0.2} mm x
77.4^{+0.3} mm



2 x 6-pos. signals,
1 x 3+1-pos. power

Hybrid connectors for direct motor connection

The HC-MOT hybrid connector combines signals and power in the same housing, which are connected to the contact insert via a Push-in spring connection. The vibration-resistant locking latch ensures a secure connection, which saves considerable time, especially during servicing. With the star-delta bridge, it is no longer necessary to preset the drives. Combine HC-MOT and VARIOCON to establish an efficient connection from the motor through to the frequency converter.



Technical data

- Voltage (power) 800 V/400 V
- Voltage (signal) 250 V
- Current (power/signal) 16.5 A/2.5 A
- Protection class when plugged in IP67
- Connection cross section (power/signal)
0.5 mm² ... 2.5 mm² / 0.5 mm² ... 1.5 mm²

Your advantages



Integrated star-delta bridge for quick and easy rewiring.



Simple and robust locking latch plus fast and reliable Push-in spring connection.



Signals and power combined in parallel in the same housing.

Ordering data

 Web code: #0540

Panel-mount bases for drives

							
Description	Motor-mounted EMC housing	Coated protective cover	Crimp contacts (male) 1.00 mm		Crimp contacts (male) 2.00 mm		Crimping tool for 1 mm/2 mm contacts
			0.14 ... 0.5 mm ²	0.14 ... 1.0 mm ²	0.35 ... 1 mm ²	1.5 ... 2.5 mm ²	
Type	HC-MOT-AFL-SET	HC-MOT-SD-L-KU	CK 1,0-ED-0,5ST AU	CK 1,0-ED-1,0ST AU	CK2,0-ED-1,0ST AU-L	CK2,0-ED-2,5ST AU-L	CRIMPFOX-TC-MP-1
Order No.	1409053	1409147	1409121	1409082	1099993	1099992	1212620

Sleeve connectors

				
Description	Sleeve housing with EMC protection	IP54 protective cover	Star-delta bridge	Coding profile
Type	HC-MOT-TML-SET	HC-MOT-SD-FLT-KU-IP54	HC-MOT-ST/DR-BR	CP-HCC 4
Order No.	1409066	1409134	1409150	1600027

Excellent services

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

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

 Web code: #2594



Simple selection with filters and technical data



There is a separate detail page for every product



There is a data sheet available for download for each item



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



Device connection technology can be comprehensively configured



Housing parts and connection technology are easy to configure



Cable and assembly systems can be configured easily



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



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



Find the desired product quickly with intuitive filters



Product samples are available with free shipping



Reliable logistics worldwide



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



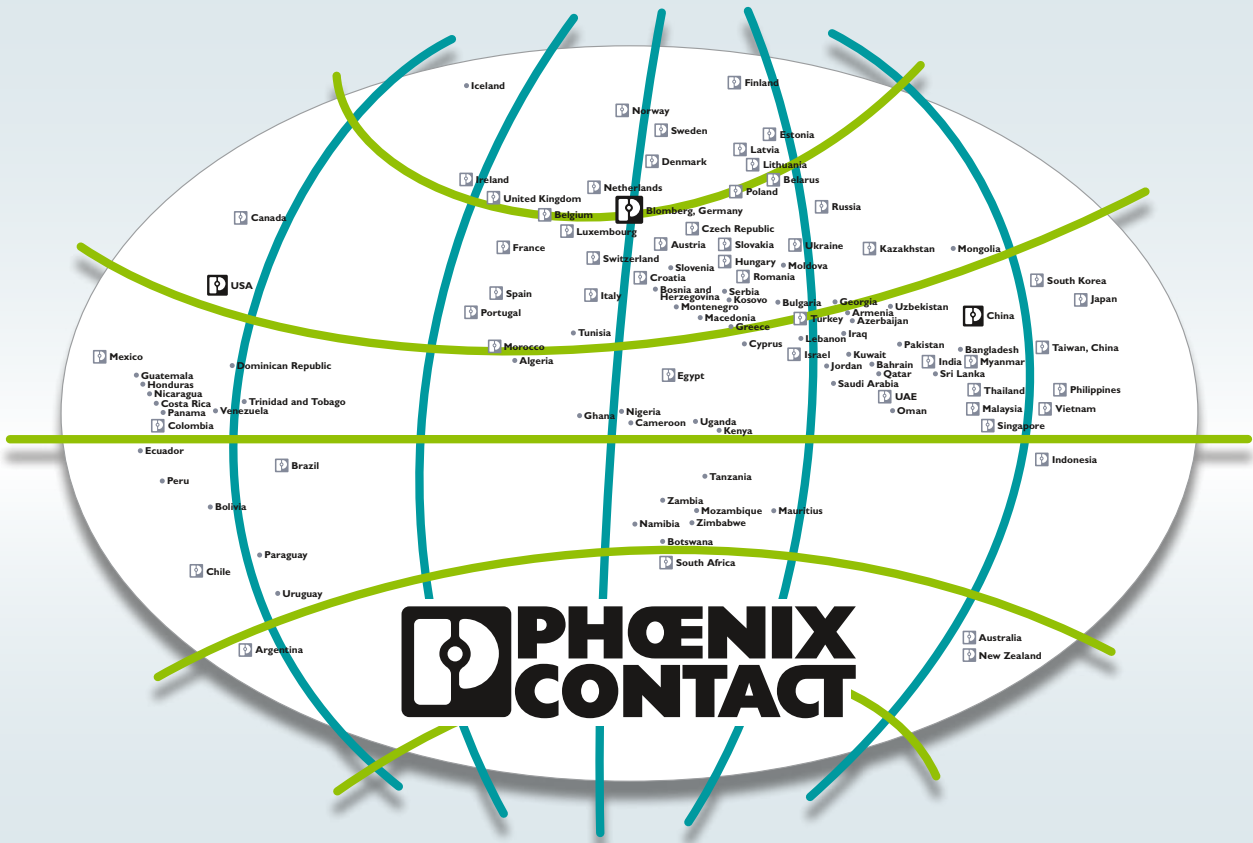
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Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation. With a global network reaching across more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

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

You can find your local partner at
phoenixcontact.com



M5 to M12 circular connectors

Product overview 2021

M5 to M12 circular connectors

Circular connectors in metric sizes M5 to M12 have become standard in numerous industries and areas of application. The broad product range from Phoenix Contact enables uniform connection solutions for signal, data, and power transmission in the device.

DATA

Data up to 10 Gbps

- Codings for all common fieldbus systems
- Hybrid connectors for simultaneous data and power transmission (Power over Ethernet)
- Components in accordance with CAT6_A

i Web code: #0682



Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter the # 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



SIGNAL

Signals up to 17-pos.

- Currents up to 4 A
- Voltages up to 250 V
- Available with optional shield connection

i Web code: #0680

POWER

Power up to 16 A/690 V

- Connection cross sections up to 2.5 mm²
- For 1-phase and 3-phase mains voltage applications
- Protected against mismatching for AC and DC applications

i Web code: #0681

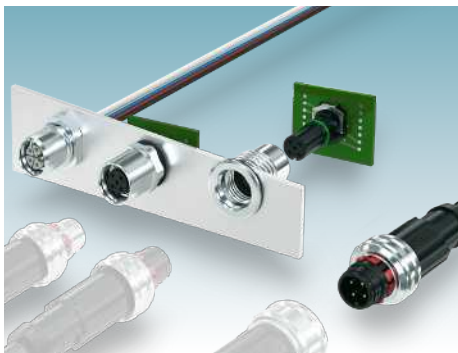


Contents

Overview: M5 to M12 circular connectors	2
Unrivalled variety for signals, data, and power	4
Page navigation	12
Device connectors	
Signals	14
Data	31
Power	40
Connectors designed for assembly	
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Assembled cables	
Signals	50
Data	51
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Accessories	55
Pin assignments and litz wire colors	56
Excellent services	60

Unrivalled variety for signals, data, and power

Industrial electronics is developing at a rapid pace and constantly placing new demands on connection technology. Phoenix Contact offers innovative circular connectors for virtually all areas of application. A modular structure and numerous pin assignments enable the device connectors to be easily integrated into your device design.



Push-pull fast-locking system

Simple design-in: With the duo-contour, M12 push-pull housings are compatible with standard M12 screw-in connectors



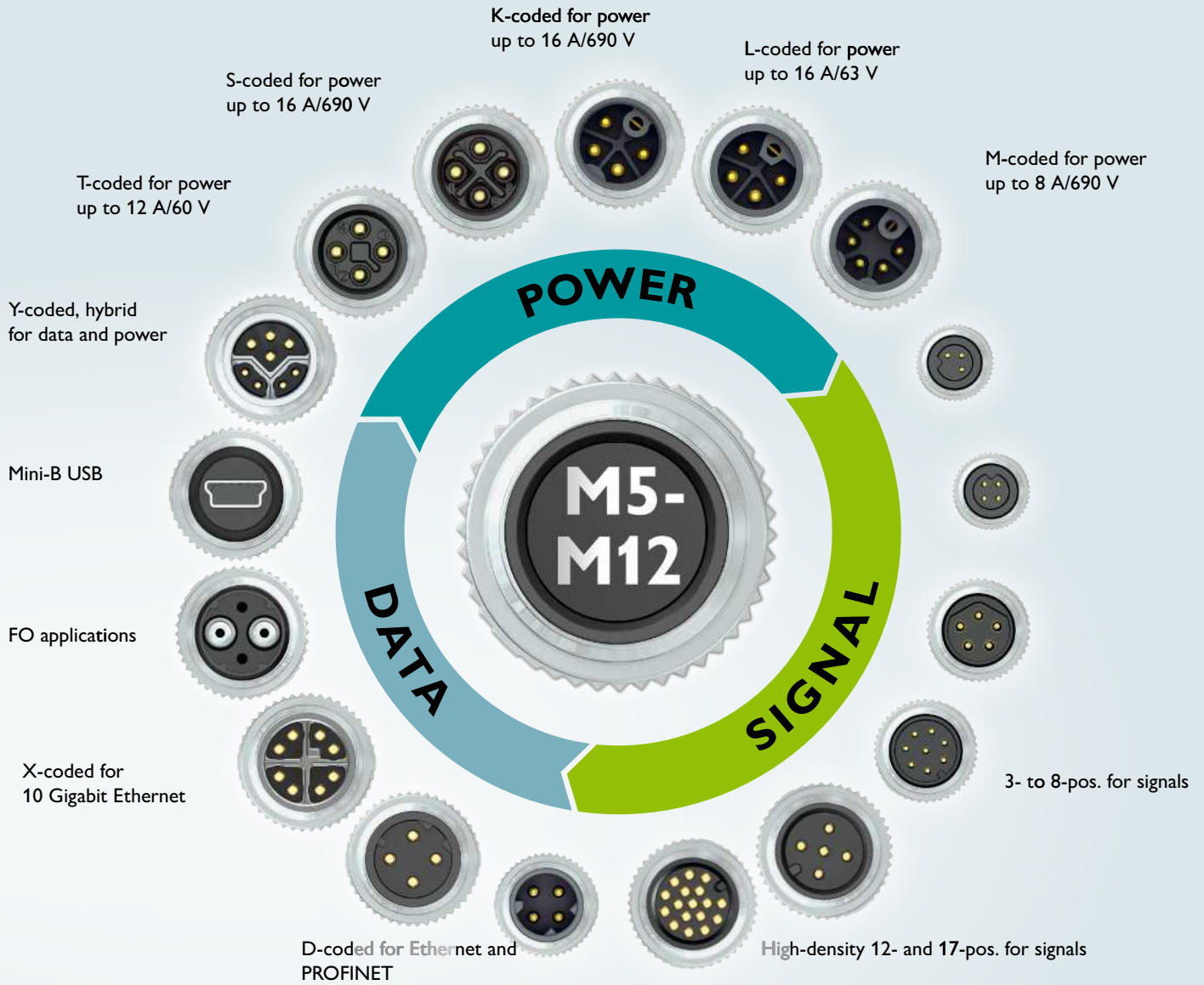
For virtually every application

Various installation options for practical integration into your device



For reliable transmission

M8 and M12 connectors for soldering processes with optional shield connection to the housing



For high contact density

M5, M8, and M12 signal connectors for up to 17 positions



For fast data transmission

M8 and M12 data connectors for up to 10 Gbps

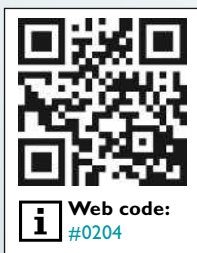


For high power

M12 power connectors for up to 16 A and 690 V

Device connectors with litz wire and cable connection

Device connectors with litz wires or round cables in sizes M5, M8, and M12 are a reliable alternative to permanent cable connections. The diverse housing designs from Phoenix Contact offer the right solution for every device design, and are also available with seamless shield connection as an option.



Your advantages at a glance



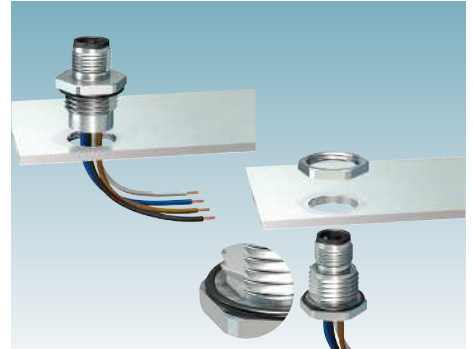
Pre-assembled cables

- No field assembly necessary
- Various cable lengths and assemblies



Easy positioning

- Defined cable outlet direction



Safe mounting

- XL housing versions simplify the device cutout
- Increased safety and tightness of seal with tightening limitation



Reliable seals

- Protection of device electronics when not plugged in



Reliable transmission

- 360° shield connection
- Fieldbus-specific cables



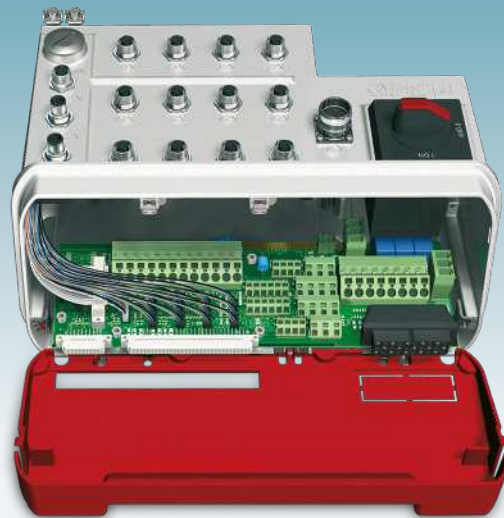
Fieldbus-specific coding

- Protection against mismatching with color and mechanical fieldbus-specific codings

Main features

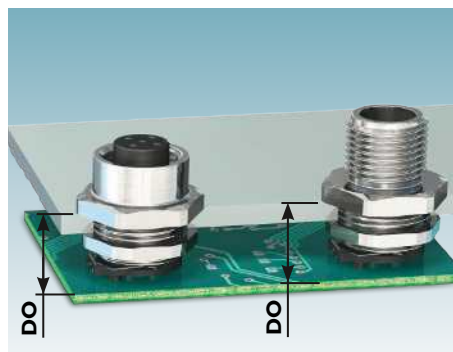
Device connection technology from Phoenix Contact for distributed modules is designed for harsh ambient conditions in industrial production processes.

- Pre-assembled with litz wires or cables
- Optional shield connection
- Numerous mounting types: front, rear or modular mounting
- Metric or Pg fastening thread



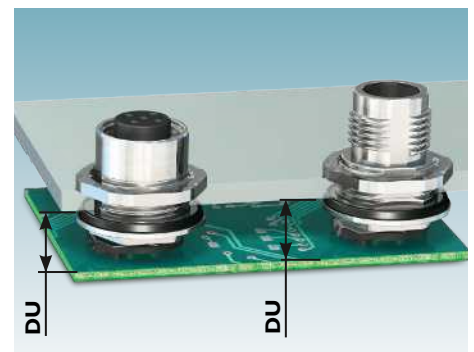
Device connectors for direct PCB mounting

Phoenix Contact offers a comprehensive range of one- and two-piece device connectors for direct PCB mounting. The connectors are suitable for wave, THR, and SMT soldering processes and provide uniform mechanical installation conditions for front and rear mounting.



Front mounting, two-piece

Distance DO: uniform installation conditions from PCB upper edge to housing front plate outer edge



Rear mounting, two-piece

Distance DU: uniform installation conditions from PCB upper edge to housing front plate inner edge

Various device port solutions

Use of housing screw connections with threaded fastening, press-in contour or for direct integration into the front plate

Automatic pick-and-place assembly

Tape-on-reel or tray packing

Unique tolerance compensation

M12 VARIOPORT screw connection compensates for process-related production tolerances between the housing and PCB

Reliable protection

Additional gasket for the device when not plugged in

Identical mechanical installation conditions

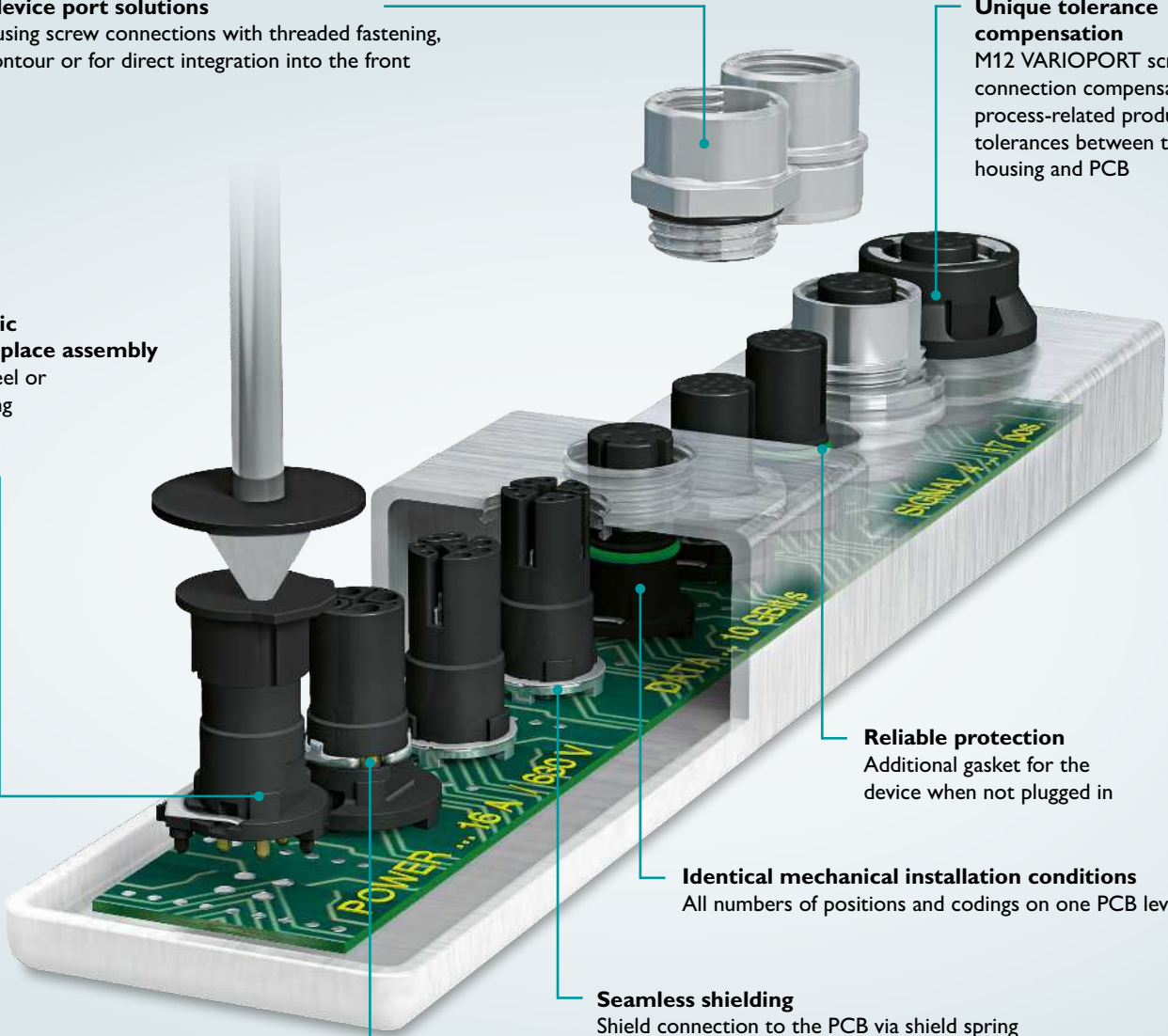
All numbers of positions and codings on one PCB level

Seamless shielding

Shield connection to the PCB via shield spring

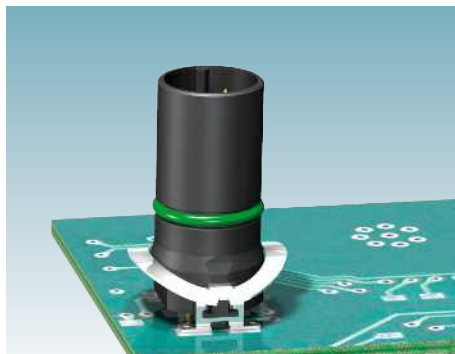
Secure power transmission

PE connection to the device housing



For through-hole reflow soldering, two-piece

4- to 17-pos. contact carriers and housing screw connections in M12



For surface-mount technology, two-piece

3- to 17-pos. contact carriers and housing screw connections in M8 and M12



For wave soldering, one- and two-piece

3- to 17-pos. versions in M5, M8, and M12

Connectors and cables for field cabling

Connect your devices quickly and safely in the field. You can wire different cable types and lengths on site with connectors designed for assembly. You have access to a comprehensive range of assembled cables for quick and convenient field cabling. Halogen-free PUR cables, which we use as standard, already meet the relevant requirements in many fields of application.



 Web code:
#0561

Main features

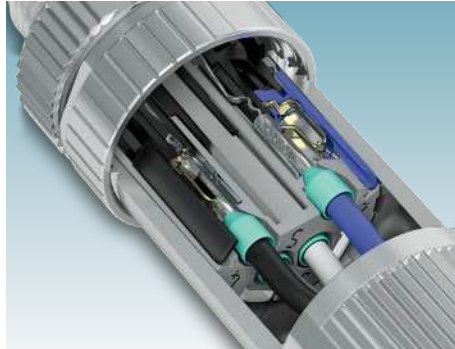
- Short connect time with push-pull fast-locking system
- Reliable 360° shielding even under extreme environmental influences
- Save space with high-position connectors
- Convenient: increased machine availability with quick and easy diagnostics
- Customer-specific assemblies and cable lengths

Your advantages at a glance



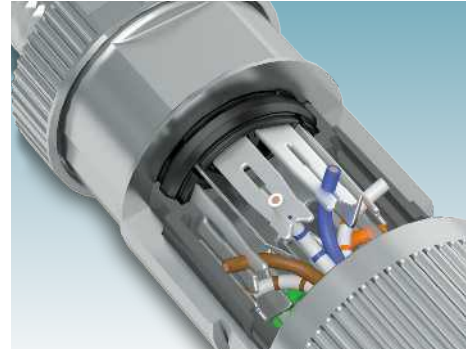
Innovative shielding concept

Maximum resistance to shock and vibration with the seamless, large-area shield connection with Advanced Shielding Technology.



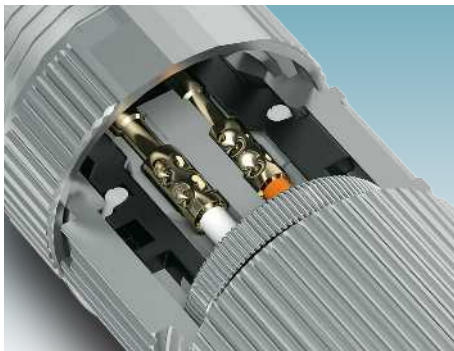
Push-in connection

Tool-free wiring of all conductor types with direct insertion. Color-coded lever for reliable assembly.



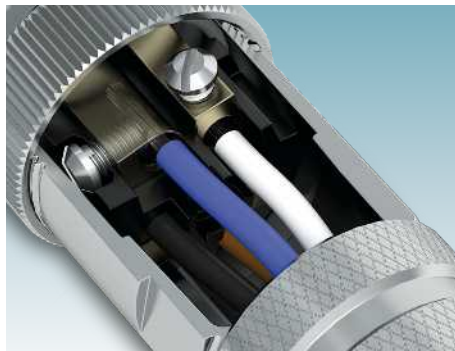
IDC insulation displacement connection

QUICKON provides the fastest connection for M12 connectors. The insulation displacement contact provides a vibration-resistant and gas-tight contact.



Crimp connection

Connection can be automated for high production volumes. The extremely compact connector is suitable for railway applications.



Screw connection

The classic solution for connection technology. You can assemble a variety of cables and cable qualities universally on site.



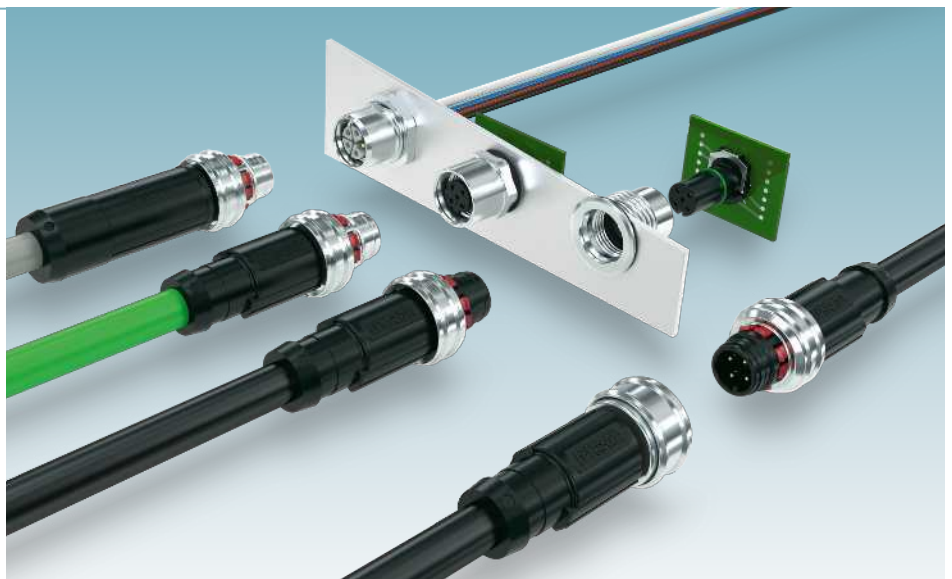
Pierce connection

Compact and high-position connection. The contact is made via a contact pin, which pierces the single-core wires axially.

M12 push-pull connectors The new standard for automation technology

Simple connection, quick latching: M12 connectors with push-pull inner interlocking enable secure connection without tools, even in narrow spaces. Implement compact housing designs with recessed M12 ports and higher packing density. With the push-pull inner and outer interlocking, you can easily implement flying leads.

 Web code: #1831



Page navigation

M5 to M12 circular connectors							
Design	Number of positions	3	4		5		6
	Coding	 A	  A	  D	  A	 B	 A
M12 device connectors for litz wire connection							
	Front mounting with litz wires	–	14 / 37	14	14	14	–
	Rear mounting with litz wires	–	16	16	16	16	–
	Front mounting, modular, crimp connection	–	16	16	16	16	–
	Front mounting with solder cups	–	–	–	18	–	–
	Rear mounting with solder cups	–	–	–	20	–	–
M12 device connectors with assembled cable							
	Front mounting	–	–	31	36	34	–
	Rear mounting	–	18 / 37	31 / 33	18 / 36	34	–
M12 device connectors for PCB connection							
	One-piece, front mounting	–	18	18	18	18	–
	One-piece, rear mounting	–	20 / 37	20 / 31 / 33	20 / 36	34	–
	Two-piece, for wave/THR soldering processes	–	22	22	22	22	–
	Two-piece, for SMD soldering processes	–	24	24	24	24	–
M12 connectors, designed for assembly/with molded cable							
	Plastic-molded cables	50	52	52	50	50	–
	Designed for assembly	–	44	47	44 / 47	47	–
M8 device connectors with litz wires							
	Front mounting	26	26	–	–	39	26
	Rear mounting	26	26	–	–	–	26
M8 device connectors for PCB connection							
	One-piece, rear mounting	26	26	39	–	39	26
	Two-piece, for SMD soldering processes	28	28	28 / 39	–	28 / 39	28
M8 connectors, designed for assembly/with molded cable							
	Plastic-molded cables	50	50	51	–	–	–
	Designed for assembly	46	46	–	–	–	–
M5 device connectors with litz wires							
	Front mounting	30	30	–	–	–	–
M5 device connectors for PCB connection							
	One-piece, rear mounting	30	30	–	–	–	–

SIGNAL






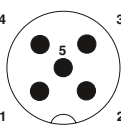
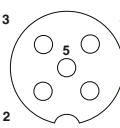
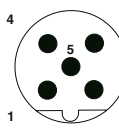
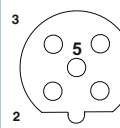
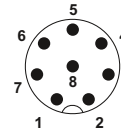
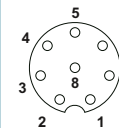
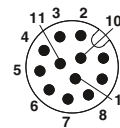
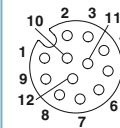
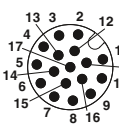
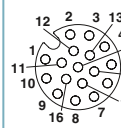
DATA

POWER


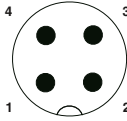
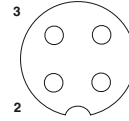
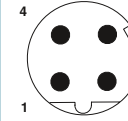
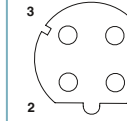


8			12	17	2+PE	3+PE	4	4+PE	4/4+FE	5+PE
A	X	Y	A	A	S	S	T	K	L	M
14	-	-	14	14	40	40	40	40	40	40
16	-	32	16	16	40	40	40	40	40	40
16	-	-	-	-	-	40	40	-	-	-
18	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
18 / 31 / 33	32	32	18	18	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-
20	32	32	20	20	-	-	-	-	43	-
22	32	32	22	22	-	42	42	43	43	43
24	32	32	24	24	-	-	42	-	-	-
52	52	52	-	-	-	54	54	54	54	54
44 / 47	47	-	45	45	48 / 49	48 / 49	48 / 49	48 / 49	48 / 49	-
26	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-
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28	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-


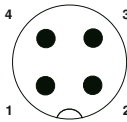
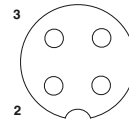
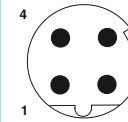
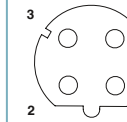



M12, with litz wires, front mounting		4-pos.			
 Web code: #0207	Coding	A	D		
	Rated voltage	250 V	250 V		
	Rated current	4 A	4 A		
	Conductor cross-section	0.34 mm ²	0.34 mm ²		
	Assembly				
	Pin assignment	Male 	Female 	Male 	Female 
Versions with zinc die-cast housing, for screw fastening					
	Pg9	1693762	1693788	–	–
	Flat nut, Pg9				
	M16 x 1.5	1523450	1523434	1551558	1535202
	Flat nut M16 x 1.5				
new	M16 x 1.5, XL versions, wrench size 19	1411577	1411568	1411578	1411569
	Flat nut M16 x 1.5				
	Push-pull, M16 x 1.5	1108117	–	1027688	1027686
	Flat nut M16 x 1.5				
	Pg9, can be positioned	1693775	1693791	–	–
	M16 x 1.5, can be positioned	1523463	1523447	1552256	1535215
	20 mm square flange, mounting holes 4 x Ø 3.2 mm	1419784	1419797	1441626	1441639
	25 mm square flange, mounting holes 4 x Ø 2.7 mm	1419991	1420003	1440957	1440960
Versions with plastic and brass housing (nickel-plated), for screw fastening					
	Plastic M16 x 1.5	–	–	–	–
	Flat nut M16 x 1.5				
	Brass (nickel-plated) M20 x 1.5	1408451	1408436	–	–
	Flat nut, M20 x 1.5				
Versions with stainless steel housing (1.4404), for screw fastening					
	Pg9	1554555	1554448	–	–
	Flat nut, Pg9				
	M16 x 1.5	1405233	1458855	–	–
	Flat nut M16 x 1.5				
	Pg9, can be positioned	1554610	1554649	–	–
	M20 x 1.5	1408415	1408416	–	–

Products **in bold** feature the SPEEDCON fast-locking system and are fully compatible with the M12 standard locking system.

5-pos.		8-pos.		12-pos.		17-pos.			
 A	 B	 A	 A	 A					
60 V	60 V	30 V	30 V	30 V			30 V		
4 A	4 A	2 A	1.5 A	1.5 A			1.5 A		
0.34 mm ²	0.34 mm ²	0.25 mm ²	0.14 mm ²	0.14 mm ²			0.14 mm ²		
Pre-assembled with 0.5 m long litz wires									
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
									
1671111	1671098	–	–	1513774	1513758	–	–	–	–
1504084									
1520055	1520039	1520013	1520000	1523492	1523476	1556265	1556252	1556304	1556294
1504097									
1411579	1411579	1411580	1411572	1411581	1411573	1411582	1411574	1411583	1411576
1504097									
1027694	1027683	–	–	–	–	–	–	–	–
1504097									
1671124	1671108	1515057	1515044	1513787	1513761	–	–	–	–
1520068	1520042	1520026	1519998	1523502	1523489	–	–	–	–
1441642	1441655	1441668	1441671	1441684	1441697	1441707	1441710	1441723	1441736
1440973	1440986	1440999	1441558	1441561	1441574	1441587	1441590	1441600	1441613
1436411									
1436411	–	–	–	1436424	–	–	–	–	–
1640692									
1408446	1408454	–	–	1408442	1408453	–	–	–	–
1411242									
1554568									
1554568	1699863	–	1452343	1554571	1554607	–	–	–	–
1404984									
1458868	1458871	–	–	1405221	1458842	1405238	1405242	1405243	1405244
1404983									
1554623	1554652	–	1424023	1554636	1554665	–	–	–	–
1452097	1452107	1452084	1452097	1452107	1452110	–	–	–	–

SIGNAL

M12, crimp connection, front mounting		4-pos.			
 Web code: #0208	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Conductor cross-section	0.34 mm ²		0.34 mm ²	
	Pin assignment	Male	Female	Male	Female
					
Modular versions					
	25 mm square flange, mounting holes 4 x Ø 3.2 mm				
	Pre-assembled contact carrier, with 0.5 m long litz wires	1440805	–	1440821	–
	Contact carrier for crimp contacts, designed for assembly¹⁾	1440931	–	1440944	–
	Crimp contacts Ø 1.0 mm, 0.08 ... 0.5 mm²	1452356	–	1452356	–
	Crimp contacts Ø 0.8 mm, 0.08 ... 0.34 mm²	–	–	–	–
	Crimping tool				

M12, with litz wires, rear mounting		4-pos.			
 Web code: #0209	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Conductor cross-section	0.34 mm ²		0.34 mm ²	
	Assembly				
	Pin assignment	Male	Female	Male	Female
					
Versions with zinc die-cast housing, for screw fastening					
	Pg9	1556618	1556621	1551532	1551529
	M12 x 1	1551875	–	1551901	–
	M16 x 1.5	1419629	1419632	1419603	1419616
	M16 x 1.5, XL versions, wrench size 19	1411591	1411584	1411592	1411585
	Push-pull, M16 x 1.5	1108128	–	1027691	1027670
Versions with plastic housing, for screw fastening					
	Pg9	–	–	–	–
Versions with stainless steel housing (1.4404), for screw fastening					
	Pg9	1405239	1405240	–	–

¹⁾ The information on rated current is valid for max. connection cross-section. Products in bold feature the SPEEDCON fast-locking system and are fully compatible with the M12 standard locking system.

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
0.34 mm ²		0.34 mm ²		0.25 mm ²		0.14 mm ²		0.14 mm ²	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female

1419959

1440818	-	1440759	-	1457827	-	-	-	-	-
1419988	-	1440915	-	1440928	-	-	-	-	-
1452356	-	1452356	-	-	-	-	-	-	-
-	-	-	-	1452372	-	-	-	-	-

1212510

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
0.34 mm ²		0.34 mm ²		0.25 mm ²		0.14 mm ²		0.14 mm ²	

Pre-assembled with 0.5 m long litz wires


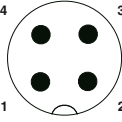
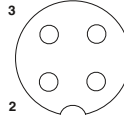
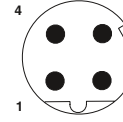
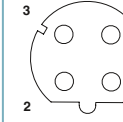


Male	Female	Male	Female	Male	Female	Male	Female	Male	Female


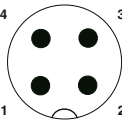
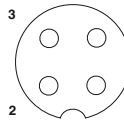
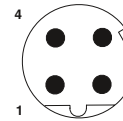
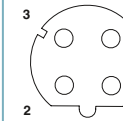



1542703	1542729	1543663	1543676	1542716	1542732	1430459	1430446	1430475	1430462
1551888	-	1551891	-	1551914	-	1437122	-	1437135	-
1419645	1419658	1419661	1419674	1419687	1419690	1419700	1419713	1419726	1419739
1411593	1411586	1411594	1411587	1411595	1411588	1411596	1411589	1411597	1411590
1027697	1027666	-	-	-	-	-	-	-	-

-	1436356	-	-	-	1436369	-	-	-	-
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1554681	1554717	-	-	1554694	1554720	-	-	-	-
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SIGNAL

M12, with cable, rear mounting		4-pos.			
 Web code: #0210	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Versions for screw fastening, shielded					
	M16 x 1.5 cable length: 1 m, PUR black	1419399	1419302	–	–
	M16 x 1.5 cable length: 2 m, PUR black	1419386	1419315	–	–
Control cabinet feed-throughs for screw fastening					
	M16 x 1.5 male to female	–	–	–	–
	M16 x 1.5 female to female	–	–	–	1424326


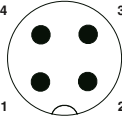
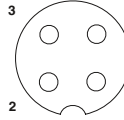
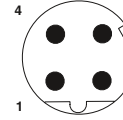
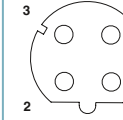





Signal – M12, solder connection, front mounting		4-pos.			
 Web code: #0212	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Versions for PCB mounting, with torsion protection, for wave soldering processes					
	20 mm square flange, direct PCB mounting	1456417	1456420	1456394	1456404
Plastic versions, with solder cups, for screw fastening					
	M12 x 1	–	–	–	–
	M16 x 1.5	–	–	–	–

Products in bold feature the SPEEDCON fast-locking system and are fully compatible with the M12 standard locking system.

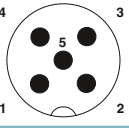
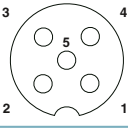
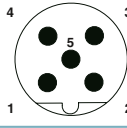
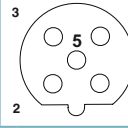
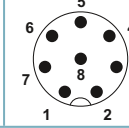
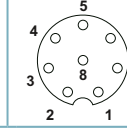
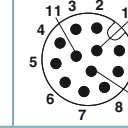
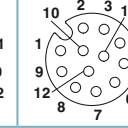
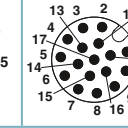
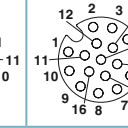
5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1419409	1419328	-	-	1419425	1419357	1442227	1442188	1442308	1442269
1419412	1419331	-	-	1419438	1419344	1442230	1442191	1442311	1442272
1551671	-	1551684	-	1551697	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

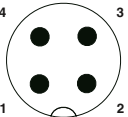
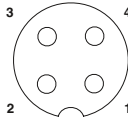
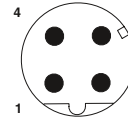
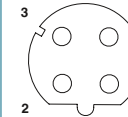








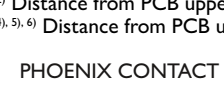

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1456433	1456446	1456459	1456462	1408574	1408573	-	-	-	-
1436437	-	-	-	1436440	-	-	-	-	-
1436398	-	-	-	1436408	-	-	-	-	-

SIGNAL

M12, solder connection, rear mounting, for wave soldering processes		4-pos.				
 Web code: #0213	Coding	A	D			
	Rated voltage	250 V		250 V		
	Rated current	4 A		4 A		
	Pin assignment	Male	Female	Male	Female	
						
Versions with zinc die-cast housing, one-piece, straight, for screw fastening						
	Pg9	6 mm solder pins	1553459	1553462	1551516	1551503
		12 mm solder pins	–	1410777	1552308	1552272
	M12 x 1	6 mm solder pins	1551820	–	1551859	–
	M16 x 1.5	6 mm solder pins	1419742	1419755	1441749	1441752
	Push-pull, M16 x 1.5	6 mm solder pins	1108002	–	1027680	1027696
	Pg9, with shield contact	6 mm solder pins	–	1556841	1553035	1553006
		12 mm solder pins	1558535	1558522	1558519	1558506
	M12 x 1, with shield contact	6 mm solder pins	1552955	–	1552984	–
	M16 x 1.5, with shield contact	6 mm solder pins	1419768	1419771	1441862	1441875
Versions with plastic housing, one-piece, straight for screw fastening						
	Pg9		–	–	–	–
	Pg9 with solder cups	Max. 0.34 mm ²	–	–	–	–
		Max. 0.25 mm ²	–	–	–	–
Versions with stainless steel housing (1.4404), one-piece, straight for screw fastening						
	Pg9		1404979	1404974	–	–
Versions with brass housing (nickel-plated), two-piece including housing, straight*						
	Straight, shielded, for fastening in the feed-through hole		–	–	–	1534627
	Straight, for fastening in the feed-through hole		–	–	–	–

* Cannot be combined with two-piece contact carriers for PCB mounting for THR, SMD or wave soldering processes.

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
									
1542745	1542761	1543647	1543650	1542758	1542774	1559932	1559929	1559961	1559958
1552311	1552285	1552324	1552298	-	1408770	-	-	-	-
1551833	-	1551846	-	1551862	-	1559945	-	1559974	-
1441765	1441778	1441781	1441794	1441804	1441817	1441820	1441833	1441846	1441859
1027676	1027669	-	-	-	-	-	-	-	-
1553048	1553019	1553051	1553022	1553873	1553860	1436783	1436770	1436819	1436806
1558551	1558548	1558577	1558564	-	1408771	-	-	-	-
1552968	-	1552971	-	1552997	-	1437106	-	1437119	-
1441888	1441891	1441901	1441914	1441927	1441930	1441943	1441956	1441969	1441972
-	1436330	-	-	-	1436343	-	-	-	-
-	1436314	-	-	-	-	-	-	-	-
-	-	-	-	-	1436327	-	-	-	-
1554746	1554733	-	-	1529807	1529797	-	-	-	-
1437193	1421685	1437203	1437180	-	-	-	-	-	-
1694211	1694237	1514883	1515934	1424017	1556854	-	-	-	-

M12, solder connection, PCB mounting, for reflow and wave soldering processes		4-pos.			
i Web code: #0214	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Two-piece, THR contact carriers					
	Straight, shielded, THR, tray packaging	1439939	–	1552214	1551451
	Straight, shielded, THR, tape-on-reel	1457500*	1457623*	1457513*	1457636*
	Straight, THR, tray packaging	1437164	1439942	–	1414071
	Straight, THR, tape-on-reel	1457490*	1457610*	–	–
Two-piece, wave soldering contact carriers					
	Angled, shielded, wave soldering, blister packing	1439887	1432444	1436673	1432457
	Angled, wave soldering, blister packing	1436660	1436628	–	–
	Straight, shielded, wave soldering, blister packing	–	–	–	1551480
	Straight, wave soldering, blister packing	–	–	–	–
Two-piece, housing screw connections for THR and wave soldering contact carriers					
new					
	Push-pull outside interlocking, male				
	Front mounting	1027679 ⁵⁾	–	1027679 ⁵⁾	–
	Rear mounting	1027661 ¹⁾	–	1027661 ¹⁾	–
	Push-pull inner locking system, female				
	Raised front mounting, M12 x 1, flat gasket	–	1233779 ¹⁾	–	–
	Raised front mounting, M14 x 1, O-ring	–	1249211 ⁵⁾	–	–
	Recessed front mounting, M14 x 1, flat gasket	–	1233777 ⁶⁾	–	–
	Raised rear mounting, M16 x 1	–	1249212 ¹⁾ 1233780 ²⁾	–	–
	Push-pull outside interlocking, female				
	Front mounting ⁷⁾	–	–	–	1027679 ¹⁾
Rear mounting ⁷⁾	–	–	–	1027661 ¹⁾	
	Screw versions, rear mounting	M15 x 1 screw fastening			
	SPEEDCON versions, rear mounting	M15 x 1 screw fastening			
	Clip-in versions, rear snap-in mounting, tolerance-compensating (not suitable for S-coded THR contact carriers or SPEEDCON)	Threaded sleeve for straight socket contact carriers			Color
		Fixing sleeve , can be used universally with any threaded sleeve			
	SPEEDCON versions with O-ring, front mounting	M12 x 1 screw fastening			
	Screw versions with O-ring, front mounting	M12 x 1 screw fastening			
		M14 x 1 screw fastening			
	SPEEDCON screw versions with flat gasket, front mounting	M12 x 1 screw fastening			
	Press-in versions, front mounting				

^{1), 2)} Distance from PCB upper edge to housing front plate inner edge: DU = ¹⁾ 6 mm ²⁾ 6.8 mm, also see page 8.


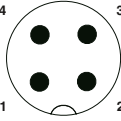
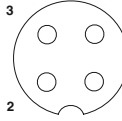
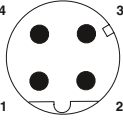
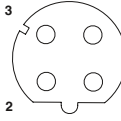







^{3), 4), 5), 6)} Distance from PCB upper edge to housing front plate outer edge: DO = ³⁾ 6 mm ⁴⁾ 7.5 mm ⁵⁾ 9 mm ⁶⁾ approx. 19 mm, also see page 8.

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1432350	1432363	1552230	1551435	1557581	1551422	1442065*	1442052*	1442081*	1442078*
1457539*	1457652*	1457542*	1457665*	1457568*	1457681*	1457584*	1457704*	1457607*	1457720*
1552227	1551448	–	1414070	1552269	1557808	1441985*	1441970*	1442007*	1441998*
1457526*	1457649*	–	–	1457555*	1457678*	1457571*	1457694*	1457597*	1457717*
1439890	1432431	1436699	1432512	1437038	1437009	1424198	1424199	1424200	1424201
1436686	1436644	–	–	1436987	1436990	1424194	1424195	1424196	1424197
–	–	–	1551477	–	–	–	–	–	–
1116457	1551464	–	–	–	–	–	–	–	–
1027679 ⁵⁾	–	–	–	–	–	–	–	–	–
1027661 ¹⁾	–	–	–	–	–	–	–	–	–
–	1233779 ¹⁾	–	–	–	–	–	–	–	–
–	1249211 ⁵⁾	–	–	–	–	–	–	–	–
–	1233777 ⁶⁾	–	–	–	–	–	–	–	–
–	1249212 ¹⁾ 1233780 ²⁾	–	–	–	–	–	–	–	–
–	1027679 ¹⁾	–	–	–	–	–	–	–	–
–	1027661 ¹⁾	–	–	–	–	–	–	–	–
Male: 1413997 ¹⁾ / 1413996 ²⁾ / Female: 1414004 ¹⁾ / 1414003 ²⁾									
Male: 1413999 ¹⁾ / 1413998 ²⁾ / Female: 1414020 ¹⁾ / 1414005 ²⁾									
Housing panel thickness		1.0 mm ... 1.8 mm: 1419630 ⁵⁾ / 1.7 mm ... 2.5 mm: 1419631 ⁵⁾ / 2.4 mm ... 3.2 mm: 1419633 ⁵⁾ / 3.1 mm ... 3.9 mm: 1419634 ⁵⁾							
Black	Blue	Water blue	Red	Yellow	Green	Violet	Orange		
1419697	1417782	1417783	1417784	1417785	1417787	1417788	1417789		
Male: 1551493 ⁴⁾ / Female: 1552243 ⁴⁾									
Male: 1416145 ⁴⁾ / Female: 1416144 ⁴⁾									
Male: 1417984 ⁵⁾ / Female: 1417989 ⁵⁾									
Male: 1436709 ³⁾ / Female: 1432460 ³⁾									
Male: 1437892 ⁵⁾ / Female: 1437889 ⁵⁾									

⁷⁾ Female versions with push-pull outer interlocking also suitable for 8-pos. X-coded (CAT6_A), see Data section.

* Contact carrier with assembly pad.

SIGNAL

M12, solder connection, PCB mounting, for reflow soldering processes		4-pos.			
 Web code: #0215	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Two-piece, SMD contact carriers					
	Straight, SMD, tray packaging	1411924*	1411907	1411925*	1411912
	Straight, SMD, tape-on-reel	1411982*	1411974	1411983*	1411975
	Straight, shielded, SMD, tray packing, additional gasket for the device when not plugged in	1411955*	1411949	1411956*	1411950
	Straight, shielded, SMD, tape-on-reel, additional gasket for the device when not plugged in	1412010*	1412004	1412011*	1412005
	Straight, SMD, tray packing, additional gasket for the device when not plugged in	1411941*	1411935	1411942*	1411936
	Straight, SMD, tape-on-reel, additional gasket for the device when not plugged in	1411996*	1411990	1411997*	1411991
Two-piece, housing screw connections for SMD contact carriers					
new					
	Push-pull versions with O-ring				
	Rear mounting, M15 x 1 screw fastening	1107993 ²⁾	–	1107993 ²⁾	–
	Front mounting, M14 x 1 screw fastening	1107999 ³⁾	–	1107999 ³⁾	–
	Screw versions, rear mounting	M15 x 1 screw fastening			
	SPEEDCON versions, rear mounting	M15 x 1 screw fastening			
	Clip-in versions, tolerance-compensating, rear snap-in mounting	Threaded sleeve for housing panel thickness of 0.9 mm ... 1.6 mm			
		Threaded sleeve for housing panel thickness of 1.6 mm ... 2.3 mm			
		Threaded sleeve for housing panel thickness of 2.3 mm ... 3.0 mm			
	Fixing sleeve, can be used universally with any threaded sleeve	Color			
	Screw versions, front mounting	M14 x 1 screw fastening			
	Flat nut M14 x 1				
	Press-in versions, front mounting				

¹⁾ Not with additional gasket for the device when not plugged in.


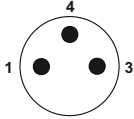
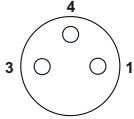



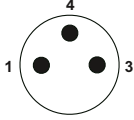
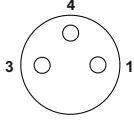



²⁾ Distance from PCB upper edge to housing front plate inner edge: DU = 6 mm, also see page 8.

³⁾ Distance from PCB upper edge to housing front plate outer edge: DO = 9 mm, also see page 8.

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1411926*	1411913	1411927*	1411914	1411928*	1411915	1411929*	1411916	1411930*	1411917
1411984*	1411976	1411985*	1411977	1411986*	1411978	1411987*	1411979	1411988*	1411980
1411957*	1411951	1411958*	1411952	1411959*	1411953	1411960*	1411954	1411961*	1411966 ¹⁾
1412012*	1412006	1412013*	1412007	1412014*	1412008	1412015*	1412009	1412016*	1412018 ¹⁾
1411943*	1411937	1411944*	1411938	1411945*	1411939	1411946*	1411940	1411947*	–
1411998*	1411992	1411999*	1411993	1412000*	1411994	1412001*	1411995	1412002*	–
1107993 ²⁾	–	–	–	–	–	–	–	–	–
1107999 ³⁾	–	–	–	–	–	–	–	–	–
Male: 1414000 ²⁾ / Female: 1414021 ²⁾									
Male: 1414002 ²⁾ / Female: 1414023 ²⁾									
Female: 1419569 ³⁾									
Female: 1419570 ³⁾									
Female: 1419571 ³⁾									
Black	Water blue			Green			Violet		
1419568	1419565			1419566			1419567		
Male: 1412078 ³⁾ / Female: 1412079 ³⁾									
1412077									
Male: 1412080 ³⁾ / Female: 1412081 ³⁾									

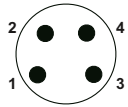
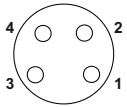
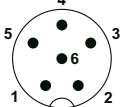
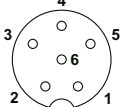
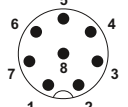
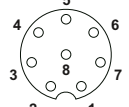
* Contact carrier with assembly pad.

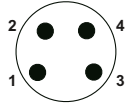
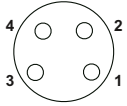
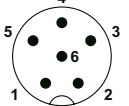
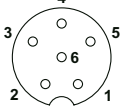
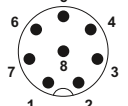
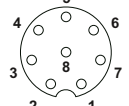
SIGNAL

M8, with litz wires		3-pos.	
 Web code: #0216	Coding	A	
	Rated voltage	50 V AC / 60 V DC	
	Rated current	4 A	
	Conductor cross-section	0.25 mm ²	
	Assembly		
	Pin assignment	Male 	Female 
Front mounting			
	M8 x 0.5 fastening thread	1500334	1500350
	M8 flat nut		
	M10 fastening thread	–	–
Rear mounting			
	M8 x 1 fastening thread	1453478	–
	M10 fastening thread	–	1456080
	M12 fastening thread	–	1453449
M8, solder connection, for wave soldering processes		3-pos.	
 Web code: #0218	Coding	A	
	Rated voltage	50 V AC / 60 V DC	
	Rated current	4 A	
	Pin assignment	Male 	Female 
Rear mounting, one-piece			
	M8 fastening thread, straight	1694334	–
	M12 fastening thread, straight	–	1694363
	M8 fastening thread, straight, shielded	1455997	–
	M8 fastening thread, angled, shielded	1456035	–
	M10 fastening thread, straight, shielded	–	1456116
	M10 fastening thread, angled, shielded	–	1456145
Rear mounting, two-piece			
	M8 fastening thread, straight	–	1524776
	M8 fastening thread, angled	1440070	1524788


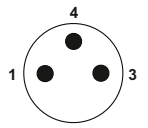
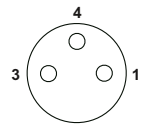
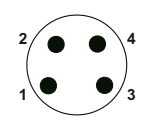
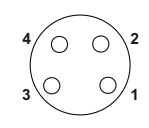






4-pos.	6-pos.	8-pos.
A	A	A
50 V AC / 60 V DC	30 V AC / 30 V DC	30 V AC / 30 V DC
4 A	2 A	1.5 A
0.25 mm ²	0.14 mm ²	0.14 mm ²

Pre-assembled with 0.5 m long litz wires

Male	Female	Male	Female	Male	Female
					
1500347	1500363	1542664	1542677	-	-
1504071					
-	-	-	-	1424232	1424231
1453481	-	1453494	-	1424230	-
-	1456093	-	1456103	-	-
-	1453452	-	1453465	-	-

4-pos.	6-pos.	8-pos.			
A	A	A			
50 V AC / 60 V DC	30 V AC / 30 V DC	30 V AC / 30 V DC			
4 A	2 A	1.5 A			
Male	Female	Male	Female	Male	Female
					
1694347	-	1436521	-	1424238	-
-	1694376	-	1436534	-	1424237
1456019	-	1456022	-	1424236	-
1456048	-	1424244	-	-	-
-	1456129	-	1456132	-	1424235
-	1456158	-	1424243	-	-
-	1524789	-	-	-	-
1440096	1526169	-	-	-	-

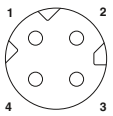
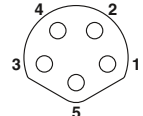
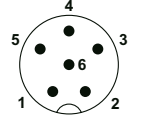
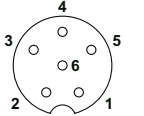
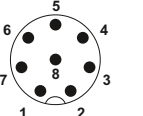
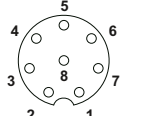
SIGNAL

M8, solder connection, PCB mounting, for reflow soldering processes		3-pos.		4-pos.	
		A		A	
 Web code: #0219	Coding	A		A	
	Rated voltage	50 V AC / 60 V DC		50 V AC / 60 V DC	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Two-piece, SMD contact carriers					
	Straight, SMD, tray packaging	1412225*	1412220	1412226*	1412221
	Straight, SMD, tape-on-reel	1412248*	1412243	1412249*	1412244
	Straight, shielded, SMD, tray packing, additional gasket for the device when not plugged in	1412240*	1412235	1412241*	1412236
	Straight, shielded, SMD, tape-on-reel, additional gasket for the device when not plugged in	1412263*	1412257	1412264*	1412258
	Straight, SMD, tray packing, additional gasket for the device when not plugged in	1412233*	1412227	1412234*	1412228
	Straight, SMD, tape-on-reel, additional gasket for the device when not plugged in	1412255*	1412250	1412256*	1412251
Two-piece, housing screw connections for SMD contact carriers					
	Screw versions, rear mounting	M12 x 1 screw fastening			
	Screw versions, front mounting	M10 x 0.75 screw fastening			
	Flat nut, M10 x 0.75				
	Press-in versions, front mounting				


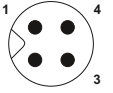
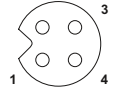
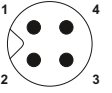
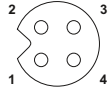


¹⁾ Distance from PCB upper edge to housing front plate inner edge: DU= 6 mm, also see page 8.

²⁾ Distance from PCB upper edge to housing front plate outer edge: DO= 9 mm, also see page 8.


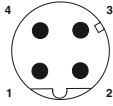
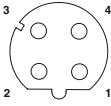
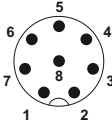
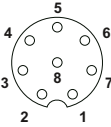







* Contact carrier with assembly pad.

4-pos.	5-pos.	6-pos.		8-pos.	
D	B	A		A	
60 V AC/DC	30 V AC/DC	30 V AC / 30 V DC		30 V AC / 30 V DC	
4 A	3 A	2 A		1.5 A	
Female	Female	Male	Female	Male	Female
					
–	1412222	–	1412223	–	1412224
–	1412245	–	1412246	–	1412247
–	1412237	–	1412238	–	1412239
1068454	1412259	–	1412261	–	1412262
–	1412229	–	1412230	–	1412232
1068453	1412252	–	1412253	–	1412254
Male: 1412505 ¹⁾ / Female: 1412506 ¹⁾					
Male: 1412502 ²⁾ / Female: 1412504 ²⁾					
1412508					
Male: 1412500 ²⁾ / Female: 1412501 ²⁾					

SIGNAL

M5		3-pos.		4-pos.	
 Web code: #0220	Coding	A		A	
	Rated voltage	60 V		60 V	
	Rated current	1 A		1 A	
	Conductor cross-section	0.14 mm ²		0.14 mm ²	
	Pin assignment	Male	Female	Male	Female
					
Front mounting, pre-assembled with 0.5 m long litz wires					
	M5 fastening thread	1530582	1530605	1530595	1530618
	Flat nut with M5 thread	1535901			
Rear mounting, one-piece for wave soldering processes					
	M5 fastening thread	1530621	1530647	1530634	1530650
	Flat nut with M5 thread	1535901			

DATA

M12 for networks			4-pos.		8-pos.		
 Web code: #0222	Coding		D		A		
	Pin assignment		Male	Female	Male	Female	
							
Front/screw mounting, with assembled cable							
Ethernet 	M16 x 1.5, can be positioned, water blue, cable type 93E	2 m	–	1405837	–	–	
Rear/screw mounting, with assembled cable							
Ethernet 	M16 x 1.5, water blue, cable type 93E	2 m	–	1405866	–	–	
	M16 x 1.5, water blue, cable type 94B	5 m	–	–	–	1407877	
	M16 x 1.5, water blue, cable type 94C	2 m	–	–	–	1412820	
Rear/screw mounting, for wave soldering processes							
Ethernet 	M16 x 1.5, one-piece, contact carrier, water blue		1456514	1456527	1456530	1456543	
Rear/screw mounting, with assembled cable							
 	Pg9, green, cable type 93B	0.5 m	1437805	1437766	–	–	
		1 m	1437818	1437779	–	–	
		2 m	1437821	1437782	–	–	
		5 m	1437834	1437795	–	–	
		M16 x 1.5, green, cable type 93C	2 m	–	1416209	–	–
		M16 x 1.5, green, cable type 93R	5 m	–	1416263	–	–
Rear/screw mounting, for wave soldering processes							
 	M16 x 1.5, one-piece, contact carrier, green		1456556	1456569	–	–	

For additional 4-pos. D-coded and 8-pos. A-coded connectors, see Signal – M12 section, from page 14.

DATA


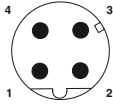
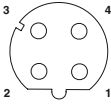
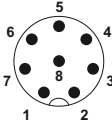
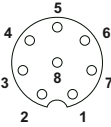










M12 for networks		8-pos.	8-pos.	
 Web code: #0224	Coding	X (CAT6_A)	Y (hybrid)	
	Pin assignment	Female	Female	
				
Rear/screw mounting, with assembled cable				
 Ethernet 	M16 x 1.5, water blue, cable type 94F	0.5 m	1424135	–
		1 m	1424148	–
		2 m	1424151	–
		5 m	1424164	–
Hybrid 	M16 x 1.5, black, cable type 94H	0.5 m	–	1407504
		1 m	–	1407505
		2 m	–	1407506
		5 m	–	1407507
Rear/screw mounting, pre-assembled with 0.5 m long litz wires				
	M16 x 1.5	–	1407618	
Rear/screw mounting, for wave soldering processes				
 Ethernet Hybrid 	M16 x 1.5, one-piece, wave soldering	1424177	1407503	
	Pg9, one-piece, wave soldering	1404741	–	
Two-piece, contact carriers for wave and reflow soldering processes				
 Ethernet 	Straight, shielded, THR, blister packing	1402457	–	
	Straight, shielded, THR, tape-on-reel	1413446*	–	
	Straight, shielded, SMD, tray packing	1411964*	–	
	Straight, shielded, SMD, tape-on-reel	1081252*	–	
	Angled, shielded, wave soldering	1424180	–	
Hybrid 	Straight, shielded, THR, blister packing	–	1405225	
	Straight, shielded, THR, tape-on-reel	–	1413445*	
	Straight, shielded, SMD, tray packing	–	1411965*	
	Straight, shielded, SMD, tape-on-reel	–	1069566*	
	Angled, shielded, wave soldering	–	1424193	

Housing screw connections for THR and wave soldering contact carriers, see page 22.

Housing screw connections for SMD contact carriers, see page 24.


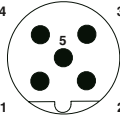
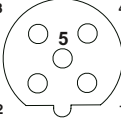






* Contact carrier with assembly pad.

DATA

M12 for networks		4-pos.		8-pos.		
 Web code: #0226	Coding	D		A		
	Pin assignment	Male	Female	Male	Female	
						
Rear/screw mounting, with assembled cable						
 	M16 x 1.5, red, cable type 93K	0.5 m	1419158	1419154	–	–
		1 m	1419159	1419155	–	–
		2 m	1419160	1419156	–	–
		5 m	1419161	1419157	–	–
Rear/screw mounting, for wave soldering processes						
 	M16 x 1.5, one-piece, contact carrier, red		1457979	1457966	–	–
Rear/screw mounting, with assembled cable						
 	M16 x 1.5, green, cable type 93B	0.5 m	1419138	1419134	–	–
		1 m	1419139	1419135	–	–
		2 m	1419140	1419136	–	–
		5 m	1419141	1419137	–	–
Rear/screw mounting, for wave soldering processes						
 	M16 x 1.5, one-piece, contact carrier, green		1456556	1456569	–	–
Rear/screw mounting, with assembled cable						
 	M16 x 1.5, black, cable type 970, 6-wire	0.5 m	–	–	1429059	1429091
		1 m	–	–	1429062	1429101
		2 m	–	–	1429075	1429114
		5 m	–	–	1429088	1429127


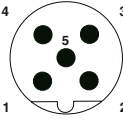
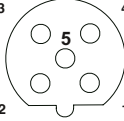






For additional 4-pos. D-coded and 8-pos. A-coded connectors, see Signal – M12 section, from page 14.

DATA

M12 for fieldbuses		5-pos.		
 Web code: #0229	Coding	B		
	Pin assignment	Male	Female	
				
Front/screw mounting, with assembled cable				
 	M16 x 1.5, can be positioned, violet, cable type 910	0.5 m	1525555	1525597
		1 m	1525568	1525607
		2 m	1519561	1519574
		5 m	1525571	1525610
Rear/screw mounting, with assembled cable				
 	Pg9, violet, cable type 910	0.5 m	1437481	1437449
		1 m	1437494	1437452
		2 m	1437504	1437465
		5 m	1437517	1437478
	M16 x 1.5, violet, cable type 910	0.5 m	1534342	1534384
		1 m	1534355	1534397
		2 m	1534368	1534407
		5 m	1534371	1534410
Rear/screw mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, violet		1456475	1456488


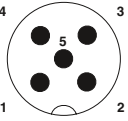
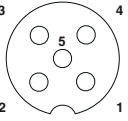








For additional 5-pos. B-coded connectors, see Signal – M12 section, from page 14.

DATA

M12 for fieldbuses		5-pos.		
 Web code: #0230	Coding	B		
	Pin assignment	Male	Female	
				
Front/screw mounting, with assembled cable				
 	M16 x 1.5, green, cable type 910	0.5 m	1529629	1529742
		1 m	1530223	1529755
		2 m	1529726	1529768
		5 m	1529739	1529771
Rear/screw mounting, with assembled cable				
 	Pg9, green, cable type 900	0.5 m	1437643	1437601
		1 m	1437656	1437614
		2 m	1437669	1437627
		5 m	–	1437630
	Pg9 EMC nut	1440177		
	M16 x 1.5, green, cable type 900	0.5 m	1534504	1534546
		1 m	1534517	1534559
		2 m	1534520	1534562
		5 m	1534533	1534575
	M16 x 1.5 EMC nut	1440164		
Rear/screw mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, green	1456572	1456585	
	M16 x 1.5 EMC nut	1440164		


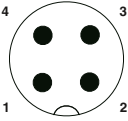
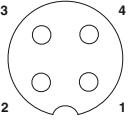







For additional 5-pos. B-coded connectors, see Signal – M12 section, from page 14.

DATA

M12 for fieldbuses		5-pos.		
 Web code: #0231	Coding	A		
	Pin assignment	Male	Female	
				
Front/screw mounting, with assembled cable				
 	M16 x 1.5, violet, cable type 920	0.5 m	1525623	1525678
		1 m	1525636	1525681
		2 m	1525649	1525694
		5 m	1525652	1525704
		Rear/screw mounting, with assembled cable		
 	Pg9, violet, cable type 920	0.5 m	1437562	1437520
		1 m	1437575	1437533
		2 m	1437588	1437546
		5 m	1437591	1437559
	Pg9 EMC nut	1440177		
	M16 x 1.5, violet, cable type 920	0.5 m	1534423	1534465
		1 m	1534436	1534478
		2 m	1534449	1534481
		5 m	1534452	1534494
	M16 x 1.5 EMC nut	1440164		
Rear/screw mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, violet	1456491	1456501	
	M16 x 1.5 EMC nut	1440164		
	Pg9, one-piece, stainless steel (1.4404)	1554746	1554733	
	M16 x 1.5, one-piece, contact carrier, blue	1457953	1457940	


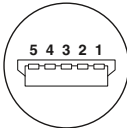

For additional 5-pos. A-coded connectors, see Signal – M12 section, from page 14.

DATA


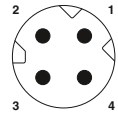
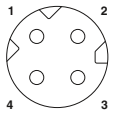
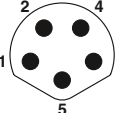
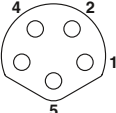









M12 for fieldbuses		4-pos.		
 Web code: #0232	Coding	A		
	Pin assignment	Male	Female	
				
Rear/screw mounting, with assembled cable				
 	M16 x 1.5, red, cable type 990	0.5 m	–	1559819
		1 m	–	1559822
		2 m	–	1559835
		5 m	–	1559848
Rear/screw mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, green	1457856	1457869	
Front/screw mounting, pre-assembled with 0.5 m long litz wires				
 	Pg9, shielded	1431432	1431429	
	Flat nut, Pg9	1504084		
Rear/screw mounting, for wave soldering processes, shielded				
	M16 x 1.5, one-piece, contact carrier, yellow	1457872	–	

For additional 4-pos. A-coded connectors, see Signal – M12 section, from page 14.

DATA













M12 for USB		USB
 Web code: #0235	Pin assignment	
Rear/screw mounting, for wave soldering processes		
	M12 x 1, Mini-B USB 2.0	

DATA

M8 for fieldbuses		4-pos.		5-pos.	
 Web code: #0237	Coding	D		B	
	Pin assignment	Male	Female	Male	Female
					
Front mounting, pre-assembled with 0.5 m long litz wires					
 	M10 fastening thread	–	–	1424234	1424233
Rear mounting, for wave soldering processes					
 Ethernet	M8 fastening thread, straight, shielded	1253761	–	1424242	–
 	M8 fastening thread, angled, shielded	1253764	–	1424240	–
	M10 fastening thread, straight, shielded	–	1253763	–	1424241
	M10 fastening thread, angled, shielded	–	1253765	–	1424239
Two-piece, SMD contact carriers for reflow soldering processes					
 	Straight, SMD, tray packaging	–	–	–	1412222
	Straight, SMD, tape-on-reel	–	–	–	1412245
	Straight, SMD, tape-on-reel, additional gasket for the device when not plugged in	–	–	–	1412252
	Shielded	–	–	–	1412259
	Straight, SMD, tray packaging, additional gasket for the device when not plugged in	–	–	–	1412229
	Shielded	–	–	–	1412237
 Ethernet	Straight, SMD, tape-on-reel	–	1068453	–	–
	Additional gasket for the device when not plugged in	–	1068454	–	–
	Shielded	–	–	–	–

Housing screw connections for SMD contact carriers, see page 28.

POWER

M12 up to 16 A/630 V		3(2+PE)-pos.		4 (3+PE)-pos.		
 Web code: #0238	Coding	S		S		
	Rated voltage	630 V		630 V		
	Rated current	16 A		12 A		
	Conductor cross-section	AWG 16		AWG 16		
	Pin assignment	Male	Female	Male	Female	
						
Front mounting, pre-assembled with 0.2/0.5 m long litz wires						
	M16 x 1.5 fastening thread, one-piece	1411655 ¹⁾	1411654 ¹⁾	1424139 ¹⁾	1424137 ¹⁾	
	Flat nut M16 x 1.5	1504097				
 	M16 x 1.5 fastening thread, XL versions, wrench size 19	AWG 16 litz wires	–	–	1411607 ¹⁾	1411605 ¹⁾
		2.5 mm ² litz wires	–	–	–	–
		PROFINET-specified, AWG 16 litz wires	–	–	–	–
		PROFINET-specified, 2.5 mm ² litz wires	–	–	–	–
	Flat nut M16 x 1.5	–	–	–	–	
	25 mm square flange, modular, mounting holes 4 x Ø 2.7 mm	–	–	1424131	–	
	Pre-assembled contact carrier, modular	–	–	1424129 ¹⁾	–	
Rear mounting, pre-assembled with 0.2/0.5 m long litz wires						
	M16 x 1.5 fastening thread, one-piece	1411653 ¹⁾	1411652 ¹⁾	1424132 ¹⁾	1424133 ¹⁾	
 	M16 x 1.5 fastening thread, XL versions, wrench size 19	AWG 16 litz wires	–	–	1411603 ¹⁾	1411598 ¹⁾
		2.5 mm ² litz wires	–	–	–	–
		PROFINET-specified, AWG 16 litz wires	–	–	–	–
		PROFINET-specified, 2.5 mm ² litz wires	–	–	–	–

L-coding, 4+FE-pos.: FE not connected to accessible metal parts, no protective function

¹⁾ With 0.5 m long litz wires ²⁾ With 0.2 m long litz wires

* Deviation from the standard color of black: gray contact carrier

4-pos.		5(4+FE)-pos.		5(4+PE)-pos.		6(5+PE)-pos.			
T		L		L		K		M	
63 V		63 V		63 V		630 V		630 V	
12 A		12 A / 16 A		12 A / 16 A		12 A / 16 A		8 A	
AWG 16		16 AWG/2.5 mm ²		16 AWG/2.5 mm ²		16 AWG/2.5 mm ²		AWG 16	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1424140 ¹⁾	1424138 ¹⁾	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
1411608 ¹⁾	1411606 ¹⁾	-	-	-	-	1425635 ²⁾	1425636 ²⁾	1415300 ²⁾	1415301 ²⁾
-	-	-	-	1415295 ²⁾	1415296 ²⁾	1415291 ²⁾	1415292 ²⁾	-	-
-	-	1425631 ²⁾	1425632 ²⁾	14256272)*	14256282)*	-	-	-	-
-	-	1425586 ²⁾	1425587 ²⁾	1425582 ²⁾ *	1425583 ²⁾ *	-	-	-	-
1504097									
1424131	-	-	-	-	-	-	-	-	-
1424130 ¹⁾	-	-	-	-	-	-	-	-	-
1424136 ¹⁾	1424134 ¹⁾	-	-	-	-	-	-	-	-
1411604 ¹⁾	1411599 ¹⁾	-	-	-	-	1425637 ²⁾	1425638 ²⁾	1415302 ²⁾	1415303 ²⁾
-	-	-	-	1415297 ²⁾	1415299 ²⁾	1415293 ²⁾	1415294 ²⁾	-	-
-	-	1425633 ²⁾	1425634 ²⁾	1425629 ²⁾ *	1425630 ²⁾ *	-	-	-	-
-	-	1425588 ²⁾	1425589 ²⁾	1425584 ²⁾ *	1425585 ²⁾ *	-	-	-	-

POWER

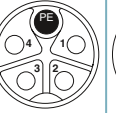


M12 up to 16 A/630 V for soldering processes		4 (3+PE)-pos.		4-pos.	
 Web code: #0240	Coding	S		T	
	Rated voltage	630 V		63 V	
	Rated current	12 A		12 A	
	Pin assignment	Male	Female	Male	Female
					
Two-piece, THR contact carriers					
	Straight, THR, blister packing	1406410	1406409	1406396	1406411
	Straight, THR, tape-on-reel	1418343	1418344	1418339 *	1418340 *
	Straight, shielded, THR, blister packing	–	–	1406397	1406412
	Straight, shielded, THR, tape-on-reel	–	–	1418341 *	1418342 *
Two-piece, SMD contact carriers					
	Straight, SMD, tray packaging	–	–	1411931 *	1411918
	Straight, SMD, tape-on-reel	–	–	1411989 *	1411981
	Straight, shielded, SMD, tray packaging	–	–	–	1411967
	Straight, shielded, SMD, tape-on-reel	–	–	–	1412019
	Straight, SMD, tray packing, additional gasket for the device when not plugged in	–	–	1411948 *	–
	Straight, SMD, tape-on-reel, additional gasket for the device when not plugged in	–	–	1412003 *	–
	Straight, shielded, SMD, tray packing, additional gasket for the device when not plugged in	–	–	1411962 *	–
	Straight, shielded, SMD, tape-on-reel, additional gasket for the device when not plugged in	–	–	1412017 *	–

For housing screw connections for S- and T-coded THR contact carriers, see page 22.

Housing screw connections for T-coded SMD contact carriers, see page 24.

* Contact carrier with assembly pad.

POWER

M12 up to 16 A/630 V for soldering processes		4-pos.		5(4+FE)-pos.		5(4+PE)-pos.		6(5+PE)-pos.	
 Web code: #0240	Coding	L		L		K		M	
	Rated voltage	63 V		63 V		630 V		630 V	
	Rated current	16 A		16 A		16 A		8 A	
	Pin assignment	Male	Female	Male	Female	Male	Female	Male	Female
									
One-piece, wave soldering, rear/screw mounting									
 	M16 x 1.5, XL versions, wrench size 19	–	–	1415337	1415338	–	–	–	–
	PROFINET- specified	1425592	1425593	1425590 ³⁾	1425591 ³⁾	–	–	–	–
Two-piece, THR contact carriers									
 	Straight, THR, tray packing *	–	–	1420817	1420818	1420819	1420821	1420822	1420823
	PROFINET- specified	1425603	1425604	1425594 ³⁾	1425595 ³⁾	–	–	–	–
	Straight, THR, tape-on-reel *	–	–	1420828	1420829	1420830	1420831	1420832	1420833
	PROFINET- specified	1425605	1425606	1425599 ³⁾	1425600 ³⁾	–	–	–	–
 	Straight, shielded, THR, tray packing *	–	–	1421314	1421315	–	–	–	–
	PROFINET- specified	1425639	1425640	1425597 ³⁾	1425598 ³⁾	–	–	–	–
	Straight, shielded, THR, tape-on-reel *	–	–	1421317	1421318	–	–	–	–
	PROFINET- specified	1425641	1425642	1425601 ³⁾	1425602 ³⁾	–	–	–	–
Two-piece, housing screw connections for K-, L-, and M-coded THR contact carriers									
	Front mounting Push-pull, M14 x 1	Male: 1108115 ²⁾							
	Front mounting Screw fastening M14 x 1	Male: 1420824 ²⁾ / Female: 1420825 ²⁾							
	Flat nut M14 x 1	1412077							
	Rear mounting Push-pull, M15 x 1	Male: 1108101 ¹⁾							
	Rear mounting, Screw fastening M15 x 1	Male: 1420826 ¹⁾ / Female: 1420827 ¹⁾							

K- and M-coding: PE applied to housing

L-coding, 4+FE-pos.: FE applied separately to the PCB, not connected to accessible metal parts, no protective function.

* Contact carrier with assembly pad.

¹⁾ Distance from PCB upper edge to housing front plate inner edge: DU = 6 mm, also see page 8.

²⁾ Distance from PCB upper edge to housing front plate outer edge: DO = 9 mm, also see page 8.




³⁾ Deviation from the standard color of black: gray contact carrier

SIGNAL

M12 connectors designed for assembly			4-pos.		5-pos.		8-pos.	
 Web code: #0242	Coding	Design	Male	Female	Male	Female	Male	Female
Push-in connection, conductor cross section: 0.14 mm² ... 0.75 mm²								
	A	Straight	1424657	1424655	1424649	1424652	-	-
		Angled	1424654	1424656	1424651	1424653	-	-
Push-in connection, conductor cross section: 0.14 mm² ... 0.75 mm², shielded								
	A	Straight	1424666	1424668	1424658	1424660	-	-
		Angled	1424667	1424669	1424659	1424661	-	-
	B	Straight	-	-	1424662	1424664	-	-
		Angled	-	-	1424663	1424665	-	-
IDC connection, conductor cross section: 0.14 mm² ... 0.34 mm²								
	A	Straight	1641691	1641688	-	-	-	-
IDC connection, conductor cross section: 0.14 mm² ... 0.5 / 0.75 mm²								
	A	Straight	-	-	1414600	1414601	1424433	1424434
IDC connection, conductor cross section: 0.34 mm² ... 0.75 mm²								
	A	Straight	1641785	1641772	-	-	-	-
IDC connection, conductor cross section: 0.14 mm² ... 0.5/0.75 mm², shielded								
	A	Straight	1413993	1413994	1413991	1413992	1414610	1414611
Crimp connection, shielded								
	A	Straight	1422850	1422852	1422850	1422852	-	-
		Angled	1422851	1422853	1422851	1422853	-	-
	Crimp contacts	0.14 mm ² ... 0.34 mm ²	1064040	1064041	1064040	1064041	-	-
		0.34 mm ² ... 1.0 mm ²	1423645	1423646	1423645	1423646	-	-
Crimp connection, shielded, with push-pull outer interlocking								
	A	Straight	1021815	1021817	1021815	1021817	-	-
Angled		1021816	1021818	1021816	1021818	-	-	
	Crimp contacts	0.14 mm ² ... 0.34 mm ²	1064040	1064041	1064040	1064041	-	-
		0.34 mm ² ... 1.0 mm ²	1423645	1423646	1423645	1423646	-	-



SIGNAL

M12 connectors designed for assembly			4-pos.		5-pos.		8-pos.	
 Web code: #0242	Coding	Design	Male	Female	Male	Female	Male	Female
Screw connection, outside cable Ø: 4 mm ... 6 mm								
	A	Straight	1662528	1681127	1663116	1662968	-	-
		Angled	1681101	1681143	1663129	1662984	-	-
Screw connection, outside cable Ø: 6 mm ... 8 mm								
	A	Straight	1523230	1696439	1681460	1681486	1513334	1513347
		Angled	-	-	1681473	1681499	-	-
Screw connection, outside cable Ø: 4 mm ... 6 mm, with SKINTOP® screw connection								
	A	Straight	1556870	1430381	1456466	1559000	-	-
		Angled	-	-	-	-	-	-
Screw connection, outside cable Ø: 6 mm ... 8 mm, with SKINTOP® screw connection								
	A	Straight	-	-	1556825	1556838	-	-
		Angled	-	-	1561742	1556812	-	-
Screw connection, outside cable Ø: 4 mm ... 6 mm, shielded								
	A	Straight	1693830	1694295	1693416	1694305	-	-
		Angled	1694279	-	1693429	-	-	-
Screw connection, outside cable Ø: 6 mm ... 8 mm, shielded								
	A	Straight	1501540	1515170	1694266	1694318	1511857	1511860
		Angled	-	-	1694282	1430433	-	-


M12 connectors designed for assembly, high-position			12-pos.		17-pos.			
 Web code: #0245	Coding	Design	Male	Female	Male	Female		
Piercecon® connection, conductor cross section: 0.14 mm²								
	A	Straight	1559592	1559631	1559602	1559644		
		Angled						
Solder connection, conductor cross section: 0.08 mm² ... 0.25 mm², shielded								
	A	Straight	1404410	1404411	-	-		
		Angled	1404412	1404413	-	-		




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

M8 connectors designed for assembly			3-pos.		4-pos.	
 Web code: #0246	Coding	Design	Male	Female	Male	Female
IDC connection, conductor cross section: 0.08 mm² ... 0.25 mm²						
	 A	Straight	1441008	1441040	1441011	1441053
IDC connection, conductor cross section: 0.25 mm² ... 0.5 mm²						
	 A	Straight	1441024	1441066	1441037	1441079
Screw connection, conductor cross section: 0.14 mm² ... 0.5 mm²						
	 A	Straight	1501252	1506888	1501265	1506891
		Angled	1407583	1407582	1407585	1407584
Screw connection, conductor cross section: 0.14 mm² ... 0.5 mm², shielded						
	 A	Straight	1542884	1542907	1542897	1542910
Solder connection, conductor cross section: 0.08 mm² – 0.25 mm²						
	 A	Straight	1681156	1681172	1681169	1681185
		Angled	1699902	1529399	1554209	1513444
Solder connection, conductor cross section: 0.08 mm² ... 0.25 mm², shielded						
	 A	Straight	1506901	1506927	1506914	1506930
		Angled	1436453	1436479	1436466	1436482











Signal – cable connectors with IDC		3-pos.	4-pos.	5-pos.	8-pos.
 Web code: #0243	Cable cross section				
	0.14 mm ² ... 0.34 mm ² , unshielded	–	1641879	–	–
	0.34 mm ² ... 0.75 mm ² , unshielded	–	1642140	–	–
	0.5 mm ² ... 1.5 mm ² , unshielded	1414702	1414698	1414742	
	0.14 mm ² ... 0.75 mm ² , shielded	–	1414418	1414417	1414612

DATA



M12 connectors designed for assembly				4-pos.		5-pos.		8-pos.		
 Web code: #0249	Fieldbuses/ networks	Coding	Design	Male	Female	Male	Female	Male	Female	
Push-in connection, shielded										
	PROFINET	D	Straight	1424682	1424683	–	–	–	–	
			Angled	1424684	1424685	–	–	–	–	
	DeviceNet™ CANopen	A	Straight	–	–	1424670	1424672	–	–	
			Angled	–	–	1424671	1424673	–	–	
	CC-Link	A	Straight	1424699	1424700	–	–	–	–	
	INTERBUS	B	Straight	–	–	1424674	1424676	–	–	
			Angled	–	–	1424675	1424677	–	–	
							2-pos.			
							Male	Female		
	PROFIBUS DP	B	Straight	–	–	1424678	1424680	–	–	
Angled			–	–	1424679	1424681	–	–		
IDC connection, shielded										
	Ethernet	D/A	Straight	1411066	1411069	–	–	1421679	1421680	
			Angled	1553624	1553637	–	–	1553653	1553666	
	PROFINET	D	Straight	1411068	1411071	–	–	–	–	
			Angled	1554539	1554542	–	–	–	–	
CAT6 _A	X	Straight	–	–	–	–	1411043	1414586		
	DeviceNet™ CANopen	A	Straight	–	–	1422759	1422760	–	–	
	PROFIBUS PA	A	Straight	1413933	1413934	–	–	–	–	
							2-pos.			
							Male	Female		
	PROFIBUS DP	B	Straight	–	–	1413931	1413932	–	–	
Crimp connection, shielded										
	PROFINET	D	Straight	1422846	1422848	–	–	–	–	
			Angled	1422847	1422849	–	–	–	–	
	PROFINET CAT6 _A	X	Straight	–	–	–	–	1422844	–	
			Angled	–	–	–	–	1422845	–	
	Crimp contacts	0.14 mm ² ... 0.34 mm ²		–	1064040	1064041	–	–	1423643	–
		0.34 mm ² ... 1.0 mm ²		–	1423645	1423646	–	–	–	–
Crimp connection, shielded, with push-pull outer interlocking										
	PROFINET	D	Straight	1021830	1021832	–	–	–	–	
			Angled	1021831	1021834	–	–	–	–	
	PROFINET CAT6 _A	X	Straight	–	–	–	–	1021783	–	
			Angled	–	–	–	–	1021784	–	
	Crimp contacts	0.14 mm ² ... 0.34 mm ²		–	1064040	1064041	–	–	1423643	–
		0.34 mm ² ... 1.0 mm ²		–	1423645	1423646	–	–	–	–

Data – M12 connectors designed for assembly				4-pos.		5-pos.		8-pos.	
 Web code: #0249	Fieldbuses/ networks	Coding	Design	Male	Female	Male	Female	Male	Female
Piercecon® connection, shielded									
	CAT6 _A		Straight	–	–	–	–	1417430	–
			Angled	–	–	–	–	1417443	–

Data – cable connectors with IDC, shielded		3-pos.	4-pos.		8-pos.
 Web code: #0249	Fieldbuses/ networks	PROFIBUS	PROFINET	Ethernet	CAT6_A
	Cable cross section	0.25 mm ² ... 0.75 mm ²	0.14 mm ² ... 0.5 mm ²	0.14 mm ² ... 0.5 mm ²	0.14 mm ² ... 0.34 mm ²
		1420426	1414416	1414415	1414412

Power – M12 connectors designed for assembly				2+PE-pos.		3+PE-pos.		4+PE-pos.	
 Web code: #0252	Coding	Design	Male	Female	Male	Female	Male	Female	
Push-Lock connection, conductor cross section: 1.5 mm² ... 2.5 mm², shielded									
		Straight	1080225	1080227	1080220	1080222	–	–	
		Straight	–	–	–	–	1080231	1080228	
								4-pos.	
		Straight	–	–	–	–	1080215	1080218	
		Straight	–	–	–	–	1080239	1080237	
								4+FE-pos.	
	Straight	–	–	–	–	1080235	1080233		
Push-Lock connection, conductor cross section: 1.5 mm² ... 2.5 mm², unshielded									
								4-pos.	
		Straight	–	–	–	–	1151362	1151366	
								4+FE-pos.	
	Straight	–	–	–	–	1151368	1151390		

POWER

M12 connectors designed for assembly			2+PE-pos.		3+PE-pos.		4-pos.		
	S	Straight	1419639	1419640	1404641	1404642	–	–	
		Angled	1419641	1419642	1408985	1408987	–	–	
	T	Straight	–	–	–	–	1404643	1404644	
		Angled	–	–	–	–	1408988	1408989	
Screw connection, conductor cross section: 0.75 mm² ... 1.5 mm², unshielded									
			2+PE-pos.		3+PE-pos.		4+PE-pos.		
	Coding	Design	Male	Female	Male	Female	Male	Female	
	S	Straight	1027467	1027469	1027467	1027469	–	–	
	K	Straight	–	–	–	–	1027474	1027476	
								4-pos.	
	T	Straight	–	–	–	–	1027465	1027466	
	L	Straight	–	–	–	–	1027479	1007480	
								4+FE-pos.	
L	Straight	–	–	–	–	1027477	1027478		
Crimp contacts									
			S-, T-coding		K-, L-coding				
	Connection cross-section		Male	Female	Male	Female			
	1.5 mm ²		1029394	1029395	1029394	1029396			
	2.5 mm ²		1029388	1029390	1029388	1029392			
	PE male, 1.5 mm ²		1029398	–	–	1029398			
	PE male, 2.5 mm ²		1029389	–	–	1029389			
	PE female, 1.5 mm ²		–	1029400	1029401	–			
	PE female, 2.5 mm ²		–	1029391	1029393	–			




Please order crimp contacts separately.

SIGNAL

Cables with M8 or M12 connectors (PUR)








 Web code: #0283						
	Cable length	Signal cable M8, 3-pos.	Signal cable M8, 4-pos.	Signal cable M12, 3-pos.	Signal cable M12, 4-pos.	Signal cable M12, 5-pos.
Straight connector, free cable end						
3 m	1681677	1681790	1668027	1668056	1669770	1682744
5 m	1681680	1681800	1668030	1668069	1669783	1682731
10 m	1693584	1694143	1682566	1682993	1683361	1500732
Straight female connector, free cable end						
3 m	1669725	1681855	1694499	1668111	1669835	1682948
5 m	1669628	1681868	1683510	1668124	1669848	1682951
10 m	1694101	1683484	1693034	1683002	1683374	1500758
Straight male connector, straight female connector						
0.3 m	1681907	1682142	1681509	1668357	1681583	1500884
0.6 m	1681910	1682155	1681512	1668360	1681596	1500897
1.5 m	1681923	1682168	1681525	1668373	1681606	1500907
3 m	1681936	1682171	1681538	1668386	1681619	1500910
Angled female connector, free cable end						
3 m	1669741	1681884	1694512	1668234	1669864	1682977
5 m	1669631	1681897	1694525	1668247	1669877	1682980
10 m	1694169	1694172	1694538	1681389	1694541	1500761

Cables with M12 push-pull connectors (PUR)

new		
 Web code: #2679		
Cable length	Signal cable 4-pos.	Signal cable 5-pos.
Straight male connector, straight female connector		
1.5 m	1224019	
Straight male connector, angled female connector		
1.5 m	1021834	


Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at phoenixcontact.com.

Network cables with M8 connectors (PUR)

 Web code: #1656	  Ethernet		  Ethernet		  Ethernet	
	4-pos. A-coded		4-pos. D-coded			
Cable length	Male, straight	Female, straight	Male, straight	Male, angled		
Free cable end						
1 m	1407344	–	1423703	1080526		
2 m	1407345	–	1423704	1080528		
5 m	1407346	–	1423705	1080530		
10 m	1407347	–	1423706	1080531		
Variable	1408719	1408716	–	–		
Male, straight						
1 m	1407348	–	1423707	1080538		
2 m	1407349	–	1423708	1080539		
5 m	1407350	–	1423709	1080540		
10 m	1407351	–	1423710	1080542		
Variable	1408718	1408715	–	–		
Male, angled						
1 m	–	–	–	1080532		
2 m	–	–	–	1080535		
5 m	–	–	–	1080536		
10 m	–	–	–	1080537		
RJ45 connector						
1 m	1407352	–	1423711	1080543		
2 m	1407353	–	1423712	1080544		
5 m	1407354	–	1423713	1080545		
10 m	1407355	–	1423714	1080546		
Variable	1408717	1408714	–	–		














Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at phoenixcontact.com.

Network cables with M12 connectors (PUR)

 Web code: #0284	 Ethernet	Ethernet	Ethernet			
						
Cable length	X-coded	D-coded	Y-coded	D-coded	B-coded	A-coded
Straight male connector, free cable end						
1 m	1407467	1407356	1407487	1407495	–	–
2 m	1407468	1407357	1407488	1407496	1507243	1507421
5 m	1407469	1407358	1407489	1407497	1507256	1507434
10 m	1407470	1407359	1407490	1407498	1507269	1507447
15 m	–	–	–	–	1507272	1507450
Variable	1408648	1408713	1408642	1408640	1538047	1538102
Straight female connector, free cable end						
1 m	–	1407380	–	1407528	–	–
2 m	–	1407381	–	1407529	1507298	1507476
5 m	–	1407382	–	1407530	1507308	1507489
10 m	–	1407383	–	1407531	1507311	1507492
15 m	–	–	–	–	1507324	1507502
Variable	–	1408697	–	1408623	1538063	1538128
Straight male connector, straight female connector						
0.3 m	–	–	–	–	1507340	1507528
0.5 m	–	–	–	–	1507353	1507531
0.6 m	–	–	–	–	–	–
1 m	–	1407400	–	1407553	1507366	1507544
2 m	–	1407401	–	1407554	1507379	1507557
5 m	–	1407402	–	1407555	1507382	1507560
10 m	–	1407403	–	1407556	1507395	1507572
15 m	–	–	–	–	1507405	1507586
Variable	–	1408692	–	1408617	1538089	1538144
Straight male connector, straight male connector						
1 m	1407483	1407376	1407491	1407524	–	–
2 m	1407484	1407377	1407492	1407525	–	–
5 m	1407485	1407378	1407493	1407526	–	–
10 m	1407486	1407379	1407494	1407527	–	–
Variable	1408644	1408706	1408641	1408634	–	–
Termination resistors, M12 male						
					PROFIBUS 1507803	DeviceNet™/ CANopen® 1507816

Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at phoenixcontact.com.

Network cables with M12 connectors (PUR)

 Web code: #0284						
						
Cable length	B-coded, straight	B-coded, angled	Stainless steel, A-coded, straight	Stainless steel, A-coded, angled	A-coded, straight	A-coded, angled
Male connector, free cable end						
2 m	1507065	–	1419092	1419097	1431173	–
5 m	1507078	–	1419093	1419098	1431186	–
10 m	1507081	–	1419094	1419099	1431199	–
15 m	1507094	–	1419095	1419100	1431209	–
20 m	–	–	1419096	1419101	–	–
Variable	1537983	1430970	–	–	1431322	1431335
Female connector, free cable end						
2 m	1507117	–	1419082	1419087	1431212	–
5 m	1507120	–	1419083	1419088	1431225	–
10 m	1507133	–	1419084	1419089	1431238	–
15 m	1507146	–	1419085	1419090	1431241	–
20 m	–	–	1419086	1419091	–	–
Variable	1538005	–	–	–	1431348	1431351
Straight male connector, straight female connector						
0.3 m	1507162	–	1419102	1419110	1431254	–
0.5 m	1507175	–	1419103	1419111	1431267	–
1 m	1507188	–	1419104	1419112	1431270	–
2 m	1507191	–	1419105	1419113	1431283	–
5 m	1507201	–	1419106	1419114	1431296	–
10 m	1507214	–	1419107	1419115	1431306	–
15 m	1507227	–	1419108	1419116	1431319	–
20 m	–	–	1419109	1419117	–	–
Variable	1538021	1431005	–	–	1431364	1431377
Angled male connector, angled female connector						
0.3 m	–	–	1419118	1419126	–	–
0.5 m	–	–	1419119	1419127	–	–
1 m	–	–	1419120	1419128	–	–
2 m	–	–	1419121	1419129	–	–
5 m	–	–	1419122	1419130	–	–
10 m	–	–	1419123	1419131	–	–
15 m	–	–	1419124	1419132	–	–
20 m	–	–	1419125	1419133	–	–
Variable	1431005	1431018	–	–	1431380	1431393

Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at phoenixcontact.com.

POWER

Cables with M12 connectors (PUR)

 Web code: #1081							
	Coding	S	T	L	L	K	M
	Number of positions	3+PE	4	4	4+FE	4+PE	5+PE
	Conductor cross-section	1.5 mm ²	1.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	1.5 mm ²
	Cable length			PROFINET-specified	PROFINET-specified		
Straight male connector, free cable end, unshielded							
2 m	1408836	1408813	–	–	–	–	
3 m	–	–	1425066	1414887	1414870	1414953	
5 m	1408837	1408814	1425067	1414891	1414875	1414957	
10 m	1408838	1408815	1425028	1414895	1414879	1414961	
Straight female connector, free cable end, unshielded							
2 m	1408844	1408824	–	–	–	–	
3 m	–	–	1425074	1414790	1414788	1414910	
5 m	1408845	1408825	1425075	1414806	1414804	1414918	
10 m	1408846	1408826	1425076	1414823	1414821	1414926	
Angled female connector, free cable end, unshielded							
2 m	1408852	1408828	–	–	–	–	
3 m	–	–	1425078	1414786	1414784	1414907	
5 m	1408853	1408829	1425079	1414802	1414800	1414916	
10 m	1408854	1408830	1425080	1414819	1414817	1414924	
Straight male connector, free cable end, shielded							
3 m	1424105	1424121	–	1414888	1414871	1414954	
5 m	1424245	1424122	–	1414892	1414876	1414958	
10 m	1424107	1424123	–	1414896	1414880	1414962	
Straight female connector, free cable end, shielded							
3 m	1424097	1424113	–	1414791	1414789	1414911	
5 m	1424098	1424114	–	1414807	1414805	1414919	
10 m	1424099	1424115	–	1414824	1414822	1414927	
Angled female connector, free cable end, shielded							
3 m	1424101	1424117	–	1414787	1414785	1414908	
5 m	1424102	1424118	–	1414803	1414801	1414917	
10 m	1424103	1424128	–	1414820	1414818	1414925	

Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at phoenixcontact.com.

Accessories

 Web code: #0559	Size	M5		M8		M12	
		Male connectors	Female connectors	Male connectors	Female connectors	Male connectors	Female connectors
Locking screws							
	Plastic	–	1533288	–	1682540	–	1680539
	Plastic for K-, L-, and M-coded versions	–	–	–	–	–	1092802
	Metal, with slotted screw head	–	–	–	–	–	1503302
	Metal, with hexagonal screw head	–	–	–	–	–	1414148
	Stainless steel V4A	–	–	–	–	–	1555538
Locking screws for SPEEDCON versions							
	Plastic	–	–	–	–	–	1553129
Sealing caps							
	Plastic	–	–	–	–	1560251	–
	Metal	–	–	–	–	1430488	–
Sealing elements for unused housing cutouts							
	Sealing plug, plastic, for Pg9/Pg11					1670235	
	Locking screw, metal, M16 x 1.5					1453368	
Plastic sealing caps and locking screws, with retaining strap							
	For cables			1430857	1430860	1430873	1430899
	With Ø 3 mm fastening eye			–	1441105	–	–
	With Ø 8 mm fastening eye			1441082	–	–	–
	With Ø 12 mm fastening eye			–	1441095	1456187	–
	With Ø 15 mm fastening eye			–	–	1456190	1456200
Metal sealing caps and locking screws, with fastening chain							
	With Ø 16 mm fastening eye			–	–	1430491	1414147
EMC hexagonal nuts with fine toothing for device connectors							
	With fine toothing facing inwards. This prevents visible scratch marks from appearing on the device surface.			M12 x 1		1440151	
				M15 x 1		1104648	
				M16 x 1.5		1440164	
				Pg9		1440177	
Seals for device connectors							
	O-ring for M8 socket housing, green, 5 x 0.8					1098590	
	O-ring for M8 socket housing, black, 7 x 1					1437070	
	O-ring for M12 socket housing, green, 8 x 1.3					1426211	
	O-ring for M12 fastening thread, black, 12 x 1.5					1424275	
	Flat gasket for M16 fastening thread, black, 13 x 16.6 x 1.5					1430394	
	Flat gasket for Pg9 fastening thread, black, 13 x 16.6 x 2					1556320	

Pin assignments and litz wire colors

Pin assignments of M5 signal connectors

Female, 3-pos.	Male, 3-pos.	Female, 4-pos.	Male, 4-pos.

Litz wire colors Assignment: M5 male/female

Pin	Wire color		Wire color	
	3-pos.		4-pos.	
1	BN		BN	
2	–		WH	
3	BU		BU	
4	BK		BK	

Pin assignments of M8 signal connectors

Female, 3-pos.	Male, 3-pos.	Female, 4-pos.	Male, 4-pos.
Female, 6-pos.	Male, 6-pos.	Female, 8-pos.	Male, 8-pos.

Litz wire colors Assignment: M8 male/female

Pin	Wire color		Wire color		
	3-pos.		4-pos.		
1	BN		BN		
2	–		WH		
3	BU		BU		
4	BK		BK		
		6-pos.		8-pos.	
1	BN		WH		
2	WH		BN		
3	BU		GN		
4	BK		YE		
5	GY		GY		
6	PK		PK		
7	–		BU		
8	–		RD		

Pin assignments of M12 signal connectors

Female, 4-pos., A-coded	Male, 4-pos., A-coded	Female, 4-pos., D-coded	Male, 4-pos., D-coded

Litz wire colors Assignment: M12 male/female

Pin	Wire color		Wire color	
	4-pos. A-coded		4-pos. D-coded	
1	BN		YE	
2	WH		WH	
3	BU		OG	
4	BK		BU	

Pin assignments and litz wire colors

Pin assignments of M12 signal connectors

Female, 5-pos., A-coded	Male, 5-pos., A-coded	Female, 5-pos., B-coded	Male, 5-pos., B-coded
Female, 8-pos.	Male, 8-pos.	Female, 12-pos.	Male, 12-pos.
Female, 17-pos.	Male, 17-pos.		

Litz wire colors

Assignment: M12 male/female

Pin	5-pos. A-coded		5-pos. B-coded		Wire color	
	Wire color	Color	Wire color	Color	-	
1	BN		BN			
2	WH		WH			
3	BU		BU			
4	BK		BK			
5	GY		GY			
	8-pos.		12-pos.		17-pos.	
1	WH		BN		BN	
2	BN		BU		BU	
3	GN		WH		WH	
4	YE		GN		GN	
5	GY		PK		PK	
6	PK		YE		YE	
7	BU		BK		BK	
8	RD		GY		GY	
9	-		RD		RD	
10	-		VT		VT	
11	-		GYPK		GYPK	
12	-		RDBU		RDBU	
13	-		-		WHGN	
14	-		-		BNGN	
15	-		-		WHYE	
16	-		-		YEBN	
17	-		-		WHGY	

Pin assignments of M8 data connectors

Female, 4-pos., Ethernet	Male, 4-pos., Ethernet	Female, 5-pos., DeviceNet™, B-coded	Male, 5-pos., DeviceNet™, B-coded
Female, 4-pos., PROFINET, D-coded	Male, 4-pos., PROFINET, D-coded		

Assignment: PROFINET, 4-pos. D-coded

Pin	Wire color	Color	Signal PROFINET
1	YE		TD+
2	WH		RD+
3	OG		TD-
4	BU		RD-

Assignment: CANopen®/DeviceNet™, 5-pos. B-coded

Pin	Wire color	Color	Signal DeviceNet™
1	Shield		Drain
2	RD		V+
3	WH		CAN_H
4	BK		V-
5	BU		CAN_L

Assignment: Ethernet, 4-pos. A-coded

Pin	Wire color	Color	Signal Ethernet
1	YE		TD+
2	OG		TD-
3	WH		RD+
4	BU		RD-

Pin assignments and litz wire colors

Pin assignments of M12 data connectors

Female, 4-pos., A-coded	Male, 4-pos., A-coded	Female, 4-pos., D-coded	Male, 4-pos., D-coded	Female, 5-pos., B-coded	Male, 5-pos., B-coded
Female, 8-pos., A-coded	Male, 8-pos., A-coded	Female, 8-pos., X-coded	Female, 8-pos., Y-coded		

Assignment: PROFIBUS, 5-pos. B-coded

Pin	Wire color	Signal PROFIBUS
1	–	–
2	GN	A cable
3	–	–
4	RD	B cable
5	Flexible filler lead	–

Shield on housing

Assignment: CANopen®, 5-pos. A-coded

Pin	Wire color	Signal CANopen®
1	Shield	Drain
2	RD	V+
3	BK	V–
4	WH	CAN_H
5	BU	CAN_L

Shield on housing

Assignment: DeviceNet™, 5-pos. A-coded

Pin	Wire color	DeviceNet™ signal
1	Shield	Drain
2	RD	V+
3	BK	V–
4	WH	CAN_H
5	BU	CAN_L

Shield on housing

Assignment: INTERBUS, 5-pos. B-coded

Pin	Wire color	Signal
1	YE	DO
2	GN	DO
3	GY	DI
4	PK	DI
5	BN	COM
–	WH	NC

Shield on housing

Assignment: PROFINET, EtherCAT®, Sercos, 4-pos. D-coded

Pin	Wire color	Signal
1	YE	TD+
2	WH	RD+
3	OG	TD–
4	BU	RD–

Assignment: Ethernet, 4-pos. D-coded

Pin	Wire color	Signal Ethernet
1	WHOG	TD+
2	WHGN	RD+
3	OG	TD–
4	GN	RD–

Shield on housing

Assignment: VARAN, 8-pos., A-coded

Pin	Wire color	Signal
1	n. c.	
2	OG	TD–
3	WHOG	TD+
4	n. c.	
5	WHGN	RD+
6	BU	
7	BN	
8	GN	RD–

Assignment: AS-Interface, 4-pos. A-coded

Pin	Wire color	Signal
1	BU	AS-i+
2	WH	
3	BN	AS-i–
4	BK	

Assignment: CC-Link, 4-pos. A-coded









Pin	Wire color	Signal
1	Shield	SLD
2	WH	DS
3	YE	DG
4	BU	DA

Assignment: FOUNDATION Fieldbus, 4-pos. A-coded









Pin	Wire color	Signal
1	BU	DATA–
2	OG	DATA+
3		Shield
4		

Pin assignments and litz wire colors









Assignment: Ethernet, 8-pos. A-coded

Pin	Wire color	Signal Ethernet
1	WHBU 	D3-
2	WHBN 	D4+
3	BN 	D4-
4	OG 	D1-
5	WHGN 	D2+
6	WHOG 	D1+
7	BU 	D3+
8	GN 	D2-





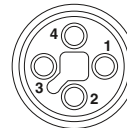
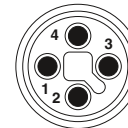
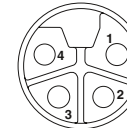
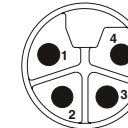
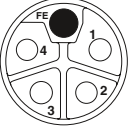
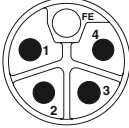

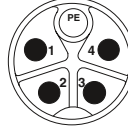
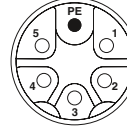
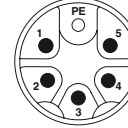
Assignment: Ethernet, 8-pos. X-coded

Pin	Wire color	Signal Ethernet
1	WHOG 	D1+
2	OG 	D1-
3	WHGN 	D2+
4	GN 	D2-
5	WHBN 	D4+
6	BN 	D4-
7	WHBU 	D3-
8	BU 	D3+




Assignment: Ethernet hybrid, 8-pos. Y-coded

Pin	Wire color	Signal Ethernet
1	WHOG 	D1+
2	OG 	D1-
3	WHGN 	D2+
4	GN 	D2-
5	BU 	D4+
6	WH 	D4-
7	BN 	D3-
8	BK 	D3+





Pin assignments of M12 power connectors

							
Female, 2+PE, S-coded	Male, 2+PE, S-coded	Female, 3+PE, S-coded	Male, 3+PE, S-coded	Female, 4-pos., T-coded	Male, 4-pos., T-coded	Female, 4-pos., L-coded	Male, 4-pos., L-coded
							
Female, 4+FE, L-coded	Male, 4+FE, L-coded	Female, 4+PE, K-coded	Male, 4+PE, K-coded	Female, 5+PE, M-coded	Male, 5+PE, M-coded		





Assignment: 2+PE, S-coded

Pin	Wire color
1	BK1 
3	BK2 
PE	GNYE 





Assignment: 3+PE, S-coded

Pin	Wire color
1	BK1 
2	BK2 
3	BK3 
PE	GNYE 






Assignment: 4-pos. T-coded

Pin	Wire color
1	BN 
2	WH 
3	BU 
4	BK 







Assignment: 4-pos. L-coded

Pin	Wire color
1	BN 
2	WH 
3	BU 
4	BK 






Assignment: 4+PE, K-coded

Pin	Wire color
1	BK1 
2	BK2 
3	BK3 
4	BK4 
PE	GNYE 

Assignment: 5+PE, M-coded

Pin	Wire color
1	BK1 
2	BK2 
3	BK3 
4	BK4 
5	BK5 
PE	GNYE 

Assignment: 4+FE, L-coded

Pin	Wire color
1	BN 
2	WH 
3	BU 
4	BK 
FE	GY 

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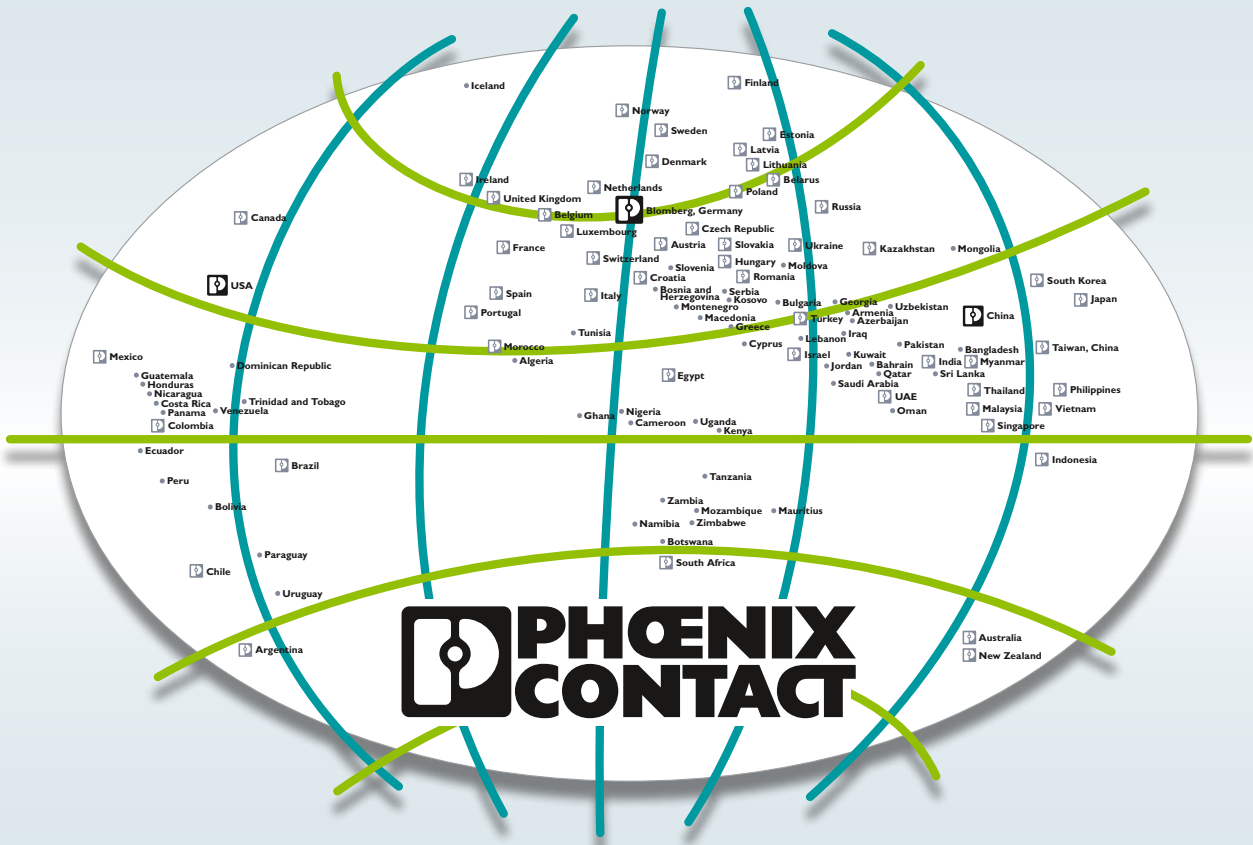
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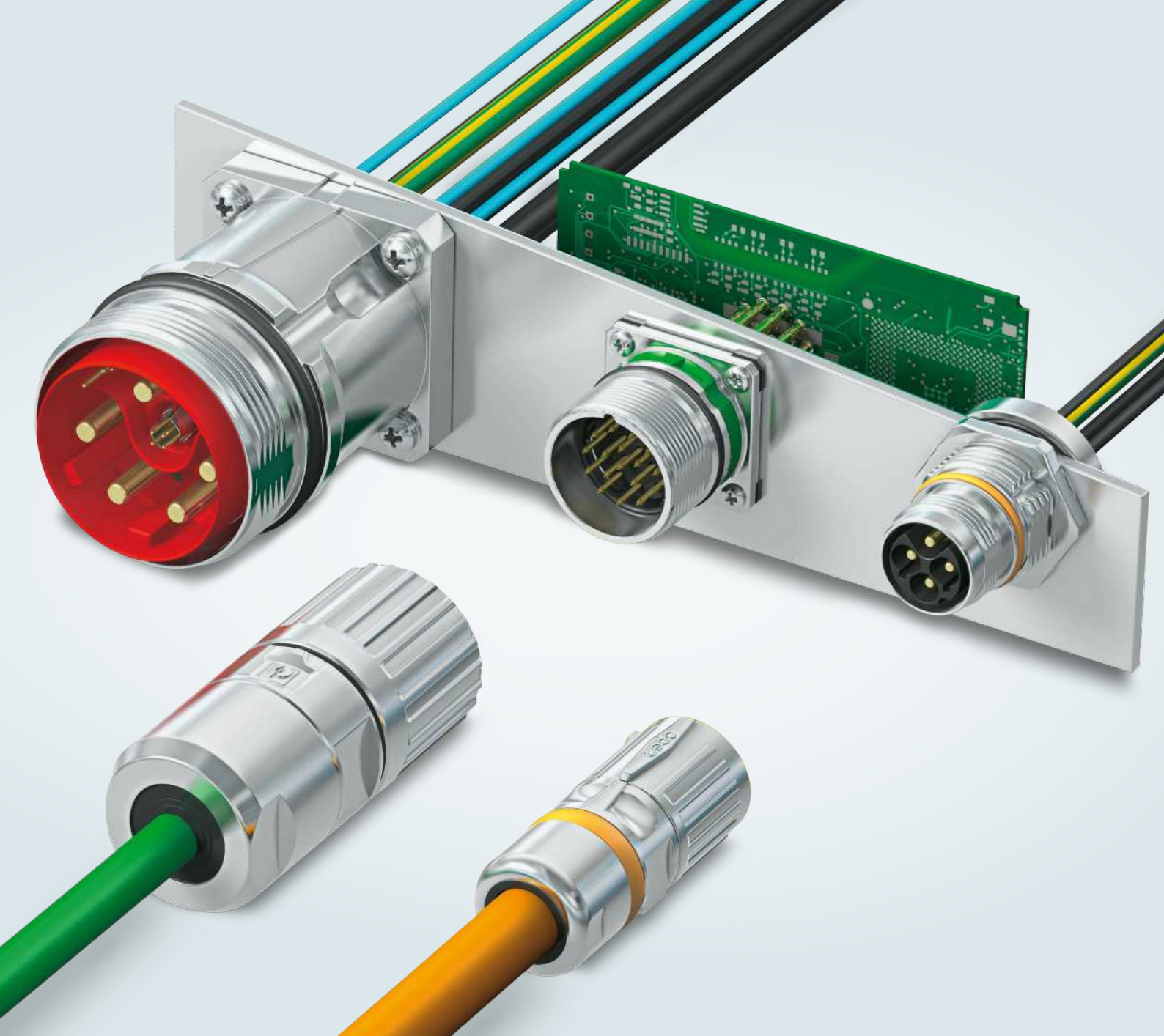
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M17 to M58 circular connectors

Product overview 2021

M17 to M58 circular connectors

As a specialist in the field, Phoenix Contact offers circular connectors from M5 to M58 – the largest range of robust circular connectors on the market, from small to large, straight or angled, for signals or power, molded or for on-site assembly. These products have been tried and tested over many years, in various fields – industrial automation, electrical drive technology, and in infrastructure applications.

SIGNAL

Signal connectors
up to 19-pos.

- 6- to 19-pos.
- Sizes M17 and M23
- All housings can be fitted with male or female contacts
- EMC protection
- IP67 degree of protection
- Plastic-molded designs

i Web code: #0253



Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter the # 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



■ HYBRID

Hybrid connectors up to 70 A/850 V DC/630 V AC

- Transmission of signals, data, and power in just a single connector
- Sizes M23 and M40
- CAT5 interface, alternative:
4 additional signal contacts
- Connection cross-sections up to 16 mm²
- Up to 70 A and 850 V DC/630 V AC
- Plastic-molded designs

i Web code: #0254

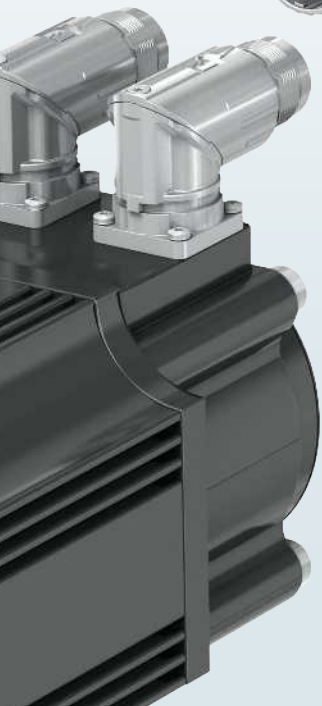


■ POWER

Power connectors up to 150 A/630 V

- Sizes M17, M23, M40, and M58
- 3+PE up to 5+3+PE
- Connection cross sections up to 50 mm²
- IP67 degree of protection
- Plastic-molded designs

i Web code: #0255



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Excellent services	68

Unique variety for signals, data, and power

The circular connector product line ranges from signal connectors in sizes M17 and M23 to hybrid connectors and finally power connectors in sizes M17 to M58 for a maximum of 150 A and 630 V.

The wide range of designs and pin assignments facilitates consistent solutions for transmitting signals and data as well as supplying power to electrical devices and drives. For smaller sizes and connectors for data transmission up to 10 Gbps, visit phoenixcontact.com



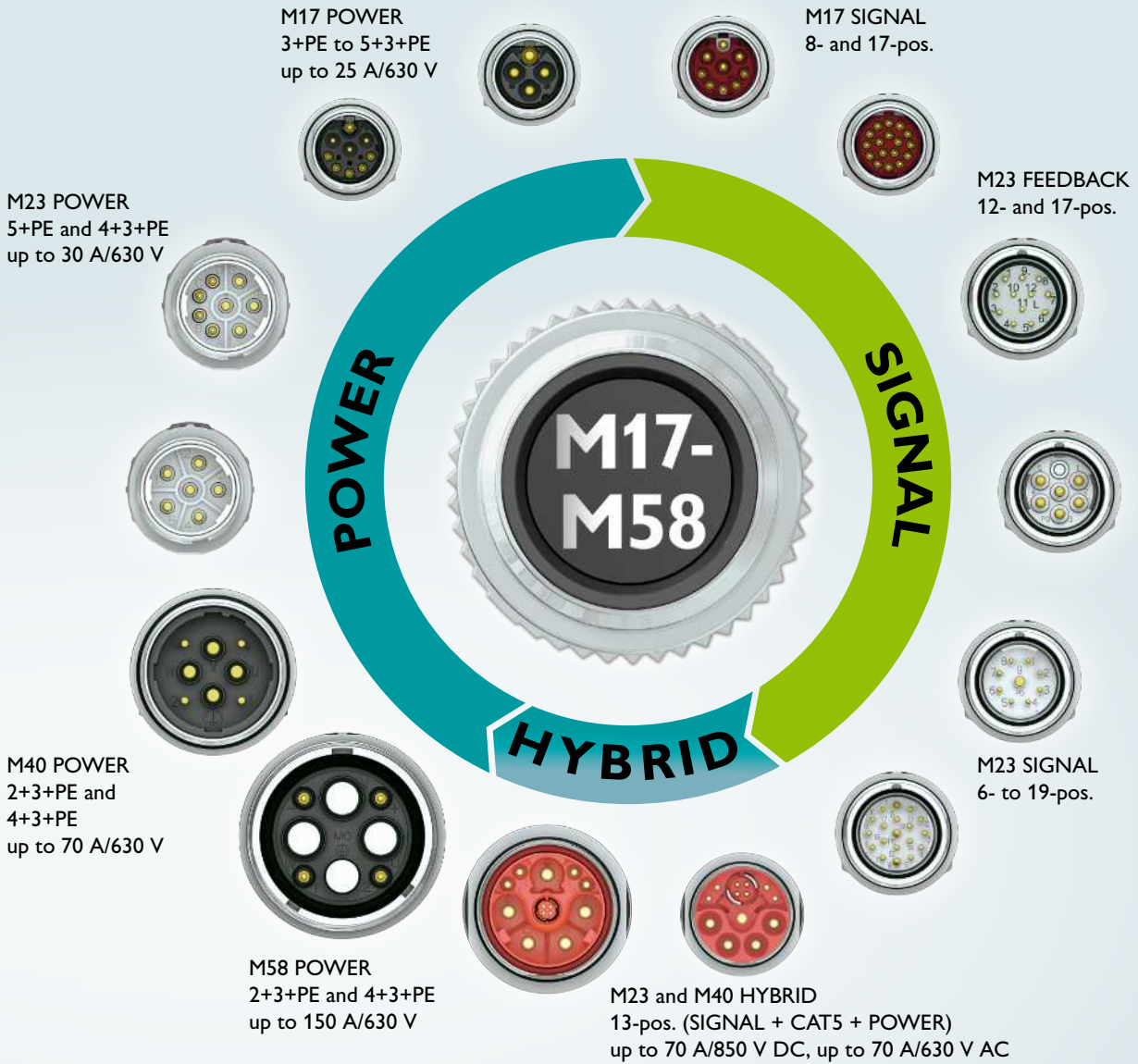
High contact density

6- to 19-pos. connectors in sizes M17 and M23 for signal applications



Versatile pin assignments

Uniform solutions for signal, data, and power transmission



Compact device connection

Straight front or rear mounting and angled rotating incremental adjustment of the output direction



Flexible conductor connection

Cable and coupler connectors for secure cable assembly



Easy cabling

Pre-assembled cables in straight and angled design with signal, power, and hybrid position figures

Page navigation

M17 to M58 circular connectors										
Design	Size	Number of positions	6	7	8	8+1	12	12 Reverse	16	17
Cable connectors, cross-manufacturer compatible, ONECLICK fast-locking system										
	M17 PRO		–	–	10	–	–	–	–	10
	M23 PRO		12	12	–	12	12	12	–	12
Cable connectors, cross-manufacturer compatible, standard locking										
	M17 PRO		–	–	10	–	–	–	–	10
	M23 PRO		12	12	–	12	12	12	–	12
Coupler connectors, cross-manufacturer compatible										
	M17 PRO		–	–	10	–	–	–	–	10
	M23 PRO		12	12	–	12	12	–	–	12
Device connectors, cross-manufacturer compatible										
	M17 PRO, straight		–	–	10	–	–	–	–	10
	M17 PRO angled, rotatable		–	–	10	–	–	–	–	10
	M23 PRO, straight		12	12	–	12	12	–	–	12
	M23 PRO angled, rotatable		–	–	–	–	12	12	–	12
Cable connectors, SPEEDCON fast-locking system										
	M17		–	–	24	–	–	–	–	24
	M23		26	26	–	26	26	–	26	26
	M23 angled		28	28	–	28	28	–	28	28
	M40		–	–	–	–	–	–	–	–
Cable connectors, standard locking										
	M17		–	–	24	–	–	–	–	24
	M23		26	26	–	26	26	–	26	26
	M23 angled		28	28	–	28	28	–	28	28
	M40		–	–	–	–	–	–	–	–
	M58		–	–	–	–	–	–	–	–
Coupler connectors										
	M17		–	–	24	–	–	–	–	24
	M23		26	26	–	26	26	–	26	26
	M40		–	–	–	–	–	–	–	–
	M58		–	–	–	–	–	–	–	–
Panel feed-throughs										
	M17		–	–	24	–	–	–	–	24
	M23		–	–	–	–	–	–	–	–
Device connectors										
	M17, straight		–	–	25	–	–	–	–	25
	M17 angled, rotatable		–	–	25	–	–	–	–	25
	M23, straight		30	30	–	30	30	–	30	30
	M23 angled, rotatable		–	–	–	30	30	–	–	30
	M40, straight		–	–	–	–	–	–	–	–
	M40 angled, rotatable		–	–	–	–	–	–	–	–
Plastic-molded cables										
	M17		–	–	–	–	–	–	–	56
	M23		–	–	–	–	56	56	–	56
	M23 angled		–	–	–	–	56	56	–	56
	M40		–	–	–	–	–	–	–	–

SIGNAL

HYBRID

POWER

16+3 16+2+PE	4+4+4+PE CAT5	8+4+PE Signal	3+PE	5+PE	2+3+PE	6+PE	7+PE	4+3+PE	5+3+PE
-	-	-	16	16	-	16	16	-	16
12	-	-	-	20	-	-	-	20	-
-	-	-	16	16	-	16	16	-	16
12	-	-	-	20	-	-	-	20	-
-	-	-	16	16	-	16	16	-	16
12	-	-	-	20	-	-	-	20	-
-	-	-	16	16	-	16	16	-	16
12	-	-	-	20	-	-	-	20	-
-	-	-	16	16	-	16	16	-	16
-	-	-	16	16	-	16	16	-	16
12	-	-	-	21	-	-	-	21	-
-	-	-	-	21	-	-	-	21	-
-	-	-	40	40	-	40	40	-	40
26	34	34	-	44	-	-	-	44	-
28	-	-	-	-	-	-	-	-	-
-	36	-	-	-	46	-	-	46	-
-	-	-	40	40	-	40	40	-	40
26	34	34	-	44	-	-	-	44	-
28	-	-	-	-	-	-	-	-	-
-	-	-	-	-	46	-	-	46	-
-	-	-	-	-	48	-	-	48	-
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26	34	34	-	44	-	-	-	44	-
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-	-	-	40	40	-	40	40	-	40
-	-	-	-	45	-	-	-	45	-
-	-	-	42	42	-	42	42	-	42
-	-	-	42	42	-	42	42	-	42
30	35	35	-	45	-	-	-	45	-
-	35	35	-	45	-	-	-	45	-
-	36	-	-	-	46	-	-	46	-
-	36	-	-	-	46	-	-	46	-
-	-	-	-	-	48	-	-	48	-
-	-	-	60	60	-	-	60	-	-
-	58	-	56	56	-	-	-	56	-
-	58	-	-	62	-	-	-	62	-
-	-	-	-	-	66	-	-	66	-

Cross-manufacturer compatible connectors – M17 to M40 PRO

Cross-manufacturer compatible: signal and power connectors from the M17 to M40 PRO series offer uniform solutions for signal and power transmission. Thanks to the unique ONECLICK fast-locking system, you can connect your device quickly and safely.



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Available worldwide

Solutions with cross-manufacturer compatibility for standard and fast-locking systems

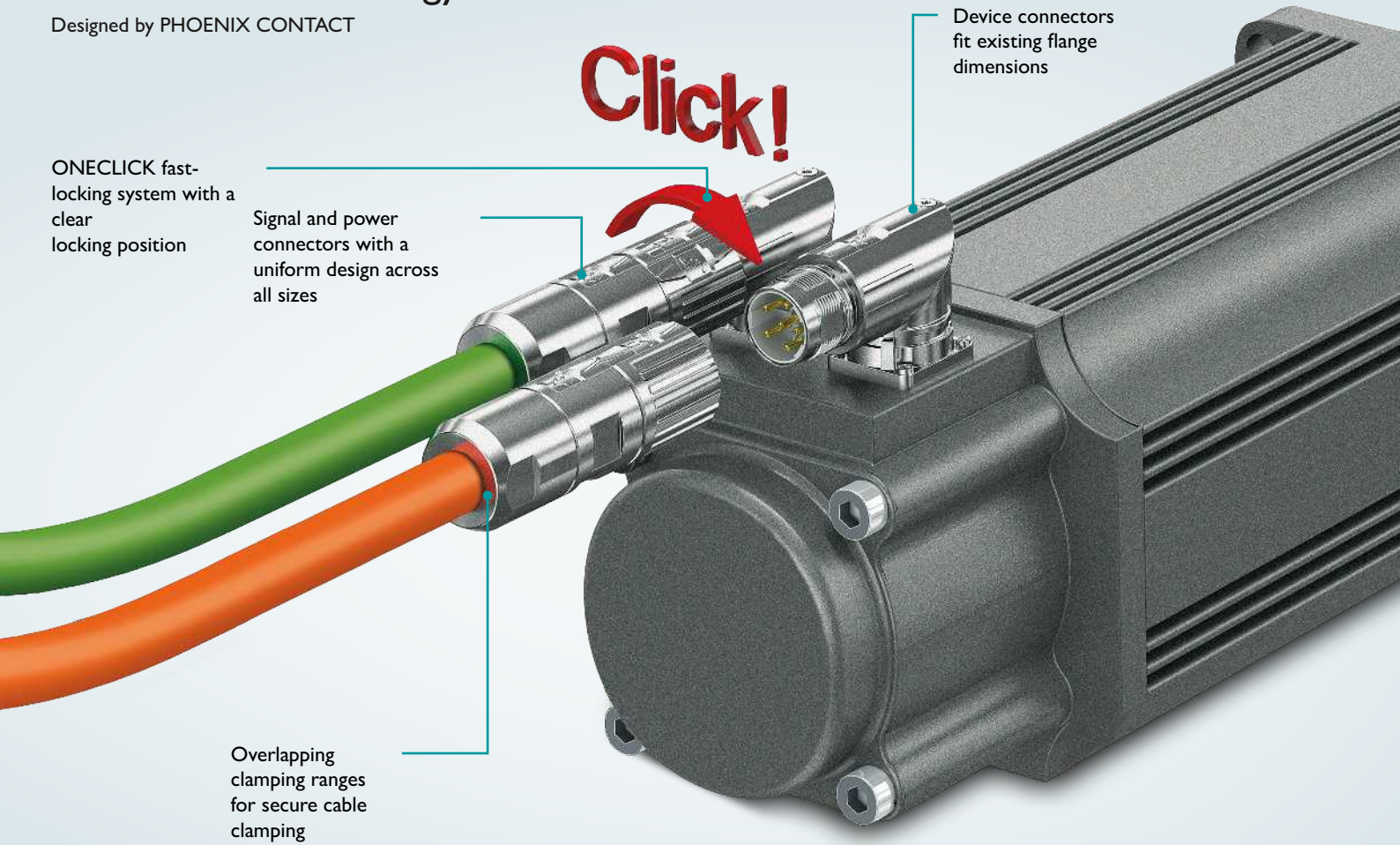


Secure locking

ONECLICK fast-locking system with an optically, haptically, and acoustically clear locking position

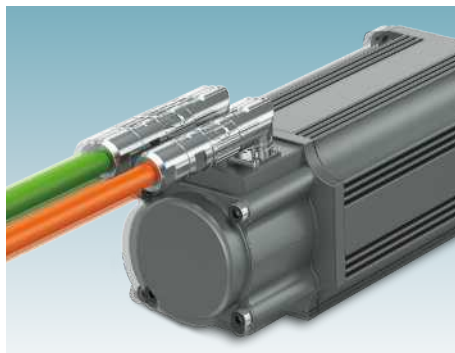
ONECLICK Technology

Designed by PHOENIX CONTACT



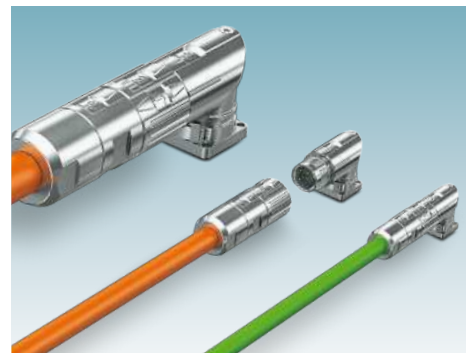
Easy assembly

Easy and reliable shield connection for cost-effective cable assembly




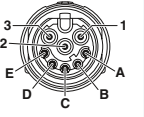
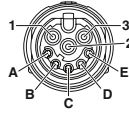








Vibration-resistant connection

Vibration brake in the cable connector for reliable connection under the harshest conditions



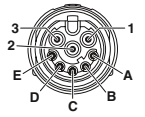
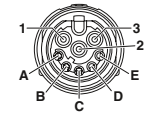

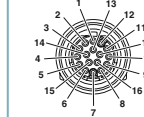


Consistent design

Modern, consistent design for highly convenient operation

M17 PRO series			8-pos.	17-pos.			
 Web code: #2068	Connection method		Crimp		Crimp		
	Rated voltage [V AC/DC]		60		60		
	Rated current ¹⁾ [A]		8		3.6		
	Number of contacts/diameter [mm]		8 x 1.0		17 x 0.6		
	Litz wire cross-sections [mm ²]		0.06 ... 1.0		0.06 ... 0.5		
	Pin assignment		Male	Female	Male	Female	
							
Cable connectors, ONECLICK fast-locking system							
	Cable clamping range [mm] ONECLICK Technology  <small>Designed by PHOENIX CONTACT</small>	3.5 ... 6.5	1629016	1629013	1629010	1629007	
		5.5 ... 9.5	1629015	1629012	1629009	1629006	
		8.5 ... 12	1629014	1629011	1629008	1629005	
Cable connectors, standard locking							
	Cable clamping range [mm]	3.5 ... 6.5	1629058	1629055	1629052	1629049	
		5.5 ... 9.5	1629057	1629054	1629051	1629048	
		8.5 ... 12	1629056	1629053	1629050	1629047	
Coupler connectors							
	Cable clamping range [mm]	3.5 ... 6.5	1628974	1628971	1628968	1628965	
		5.5 ... 9.5	1628973	1628970	1628967	1628964	
		8.5 ... 12	1628972	1628969	1628966	1628963	
Device connectors, front mounting							
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm		1628932	1628931	1628928	1628927	
	Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm		1628930	1628929	1628926	1628925	
Device connectors, angled, rotatable, front mounting							
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm		1628527	1628526	1628523	1628522	
	Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm		1628525	1628524	1628521	1628520	

¹⁾ Rated current for max. connection cross section.

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. Please order crimp contacts separately; see table on the right.

M17 PRO series crimp contacts			8-pos.		17-pos.		
	Connection method		Crimp		Crimp		
	Rated voltage	[V AC/DC]	60		60		
	Rated current ¹⁾	[A]	8		3.6		
	Number of contacts/diameter	[mm]	8 x 1.0		17 x 0.6		
	Litz wire cross-sections	[mm ²]	0.06 ... 1.0		0.06 ... 0.5		
	Pin assignment		Male	Female	Male	Female	
							
Crimp contacts, turned, Ø 0.6 mm							
	Crimp range	[mm ²]	0.06 ... 0.25	–	–	1607577	1607580
			0.14 ... 0.34	–	–	1607578	1607581
			0.34 ... 0.50	–	–	1607579	1607582
Crimp contacts, turned, Ø 1 mm							
	Crimp range	[mm ²]	0.06 ... 0.25	1618255	1618239	–	–
			0.25 ... 1.00	1618458	1618464	–	–


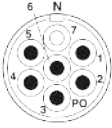
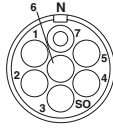
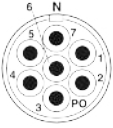





¹⁾ Rated current for max. connection cross section

Please order crimp contacts separately. Crimping tools as accessories for contacts can be found at phoenixcontact.com.

M23 PRO series		6-pos.	7-pos.			
 Web code: #2068	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	300		300		
	Rated current ¹⁾ [A]	20		20		
	Number of contacts/diameter [mm]	6 x 2.0		7 x 2.0		
	Litz wire cross-sections [mm ²]	0.5 ... 2.5		0.5 ... 2.5		
	Pin assignment	Male	Female	Male	Female	
						
Cable connectors, ONECLICK fast-locking system						
	Cable clamping range [mm] ONECLICK Technology  <small>Designed by PHOENIX CONTACT</small>	3 ... 15	1629188	1629184	1629176	1629180
		4 ... 8.5	1629191	1629187	1629179	1629183
		6 ... 10	1629190	1629186	1629178	1629182
		9 ... 15	1629189	1629185	1629177	1629181
Cable connectors, standard locking						
	Cable clamping range [mm]	3 ... 15	1629232	1629236	1629224	1629228
		4 ... 8.5	1629235	1629239	1629227	1629231
		6 ... 10	1629234	1629238	1629226	1629230
		9 ... 15	1629233	1629237	1629225	1629229
Coupler connectors						
	Cable clamping range [mm]	3 ... 15	1629140	1629136	1629128	1629132
		4 ... 8.5	1629143	1629139	1629131	1629135
		6 ... 10	1629142	1629138	1629130	1629134
		9 ... 15	1629141	1629137	1629129	1629133
Device connectors, straight, front mounting						
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 2.7 mm	1132736	1132558	1132738	1132737	
		Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1629095	1629094	1629092	1629093
		Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm	–	–	–	–
Device connectors, angled, rotatable, front mounting						
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	–	–	–	–	
		Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm	–	–	–	–

¹⁾ Rated current for max. connection cross section.
 The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user.
 Please order crimp contacts separately; see page 14.

■ 9(8+1)-pos.		■ 12-pos.		■ 12-pos., reverse		■ 17-pos.		■ 19(16+2+PE)-pos.	
Crimp		Crimp		Crimp		Crimp		Crimp	
300		150		150		125		150	
8 / 20		8		8		8		8 / 10	
8 x 1.0 / 1 x 2.0		12 x 1.0		12 x 1.0		17 x 1.0		16 x 1.0 / 3 x 1.5	
0.08 ... 1.0 / 0.5 ... 2.5		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0 / 0.5 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1629168	1629172	1629160	1629164	1069326	1069322	1629152	1629156	1629144	1629148
1629171	1629175	1629163	1629167	1069323	1069319	1629155	1629159	1629147	1629151
1629170	1629174	1629162	1629166	1069324	1069320	1629154	1629158	1629146	1629150
1629169	1629173	1629161	1629165	1069325	1069321	1629153	1629157	1629145	1629149
1629216	1629220	1629208	1629212	1069317	1069313	1629200	1629204	1629192	1629196
1629219	1629223	1629211	1629215	1069314	1069309	1629203	1629207	1629195	1629199
1629218	1629222	1629210	1629214	1069315	1069311	1629202	1629206	1629194	1629198
1629217	1629221	1629209	1629213	1069316	1069312	1629201	1629205	1629193	1629197
1629120	1629124	1629112	1629116	–	–	1629104	1629108	1629096	1629100
1629123	1629127	1629115	1629119	–	–	1629107	1629111	1629099	1629103
1629122	1629126	1629114	1629118	–	–	1629106	1629110	1629098	1629102
1629121	1629125	1629113	1629117	–	–	1629105	1629109	1629097	1629101
1132741	1132740	1132744	1132742	–	–	1132747	1132745	–	–
1629090	1629091	1629088	1629089	–	–	1629086	1629087	1629084	1629085
–	–	1629082	1629083	–	–	1629080	1629081	–	–
–	–	1628498	1628499	1069328	1069327	1628496	1628497	–	–
–	–	1628494	1628495	1069330	1069329	1628492	1628493	–	–


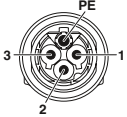
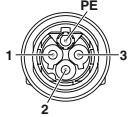






M23 PRO series crimp contacts			6-pos.	7-pos.			
	Connection method		Crimp		Crimp		
	Rated voltage [V AC/DC]		300		300		
	Rated current ¹⁾ [A]		20		20		
	Number of contacts/diameter [mm]		6 x 2.0		7 x 2.0		
	Litz wire cross-sections [mm ²]		0.5 ... 2.5		0.5 ... 2.5		
	Pin assignment		Male	Female	Male	Female	
							
Crimp contacts, turned, Ø 1 mm							
	Crimp range [mm ²]	0.08 ... 0.22	–	–	–	–	
		0.14 ... 0.56	–	–	–	–	
		0.5 ... 1.0	–	–	–	–	
Crimp contacts, rolled, Ø 1 mm							
	Crimp range [mm ²]						
	Roll of 500 pcs.	0.08 ... 0.22	–	–	–	–	
	Roll of 10,000 pcs.	0.08 ... 0.22	–	–	–	–	
	Roll of 500 pcs.	0.22 ... 0.56	–	–	–	–	
Roll of 10,000 pcs.	0.22 ... 0.56	–	–	–	–		
Crimp contacts, turned, Ø 1.5 mm							
	Crimp range [mm ²]	0.08 ... 0.22	–	–	–	–	
		0.5 ... 1.0	–	–	–	–	
	Leading contact	0.5 ... 1.0	–	–	–	–	
Crimp contacts, turned, Ø 2 mm							
	Crimp range [mm ²]	0.5 ... 0.75	1603529	1603530	1603529	1603530	
		0.75 ... 1.0	1603489	1603501	1603489	1603501	
		1.0 ... 1.5	1603513	1603517	1603513	1603517	
		1.5 ... 2.5	1603505	1603509	1603505	1603509	

¹⁾ Rated current for max. connection cross section.

Please order crimp contacts separately. Crimping tools as accessories for contacts can be found at phoenixcontact.com.

■ 9(8+1)-pos.		■ 12-pos.		■ 12-pos., reverse		■ 17-pos.		■ 19(16+2+PE)- pos.	
Crimp		Crimp		Crimp		Crimp		Crimp	
300		150		150		125		150	
8 / 20		8		8		8		8 / 10	
8 x 1.0 / 1 x 2.0		12 x 1.0		12 x 1.0		17 x 1.0		16 x 1.0 / 3 x 1.5	
0.08 ... 1.0 / 0.5 ... 2.5		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0 / 0.5 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1596770	1596772	1596770	1596772	1596770	1596772	1596770	1596772	1596770	1596772
1597862	1599600	1597862	1599600	1597862	1599600	1597862	1599600	1597862	1599600
1602996	1602998	1602996	1602998	1602996	1602998	1602996	1602998	1602996	1602998
1603313	1603318	1603313	1603318	1603313	1603318	1603313	1603318	1603313	1603318
1611637	1616500	1611637	1616500	1611637	1616500	1611637	1616500	1611637	1616500
1603324	1603330	1603324	1603330	1603324	1603330	1603324	1603330	1603324	1603330
1603325	1603332	1603325	1603332	1603325	1603332	1603325	1603332	1603325	1603332
-	-	-	-	-	-	-	-	-	1627290
-	-	-	-	-	-	-	-	1623779	1623775
-	-	-	-	-	-	-	-	1623780	-
1603529	1603530	-	-	-	-	-	-	-	-
1603498	1603501	-	-	-	-	-	-	-	-
1603513	1603517	-	-	-	-	-	-	-	-
1603505	1603509	-	-	-	-	-	-	-	-


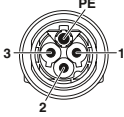
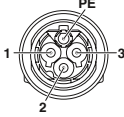



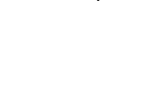
POWER

M17 PRO series		4 (3+PE)-pos.		
 Web code: #2067	Connection method		Crimp	
	Rated voltage	[V AC/DC]	630	
	Rated current ¹⁾	[A]	25 / 20	
	Number of contacts/diameter	[mm]	4 x 2.0 / 4 x 1.5 *	
	Litz wire cross-sections	[mm ²]	0.25 ... 2.5	
	Pin assignment		Male 	Female 
Cable connectors, ONECLICK fast-locking system				
new 	Cable clamping range [mm] ONECLICK Technology  <small>Designed by PHOENIX CONTACT</small>	3.5 ... 6.5	1629004 / 1069487 *	1629001 / 1069490 *
		5.5 ... 9.5	1629003 / 1069488 *	1629000 / 1069491 *
		8.5 ... 12	1629002 / 1069489 *	1628999 / 1069492 *
Cable connectors, standard locking				
new 	Cable clamping range [mm]	3.5 ... 6.5	1629046 / 1069481 *	1629043 / 1069484 *
		5.5 ... 9.5	1629045 / 1069482 *	1629042 / 1069485 *
		8.5 ... 12	1629044 / 1069483 *	1629041 / 1069486 *
Coupler connectors				
new 	Cable clamping range [mm]	3.5 ... 6.5	1628962 / 1069495 *	1628959 / 1069498 *
		5.5 ... 9.5	1628961 / 1069496 *	1628958 / 1069499 *
		8.5 ... 12	1628960 / 1069497 *	1628957 / 1069509 *
Device connectors, front mounting				
new 	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm		1628924 / 1069502 *	1628923 / 1069500 *
		Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm		1628922 / 1069503 *
Device connectors, angled, rotatable, front mounting				
new 	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm		1628519 / 1069505 *	1628518 / 1069506 *
		Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm		1628517 / 1069507 *

¹⁾ Rated current for max. connection cross section. * Items with contact Ø 1.5 mm.
 The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user.
 Please order crimp contacts separately; see page 18.

6(5+PE)-pos.		7(6+PE)-pos.		8(7+PE)-pos.		9(5+3+PE)-pos.	
Crimp		Crimp		Crimp		Crimp	
630		630		630		60 / 630	
14		14		14		3.6 / 14	
6 x 1.0		7 x 1.0		8 x 1.0		5 x 0.6 / 4 x 1.0	
0.06 ... 1.0		0.06 ... 1.0		0.06 ... 1.0		0.06 ... 0.5 / 0.06 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female
1628998	1628995	1628992	1628989	1628986	1628983	1628980	1628977
1628997	1628994	1628991	1628988	1628985	1628982	1628979	1628976
1628996	1628993	1628990	1628987	1628984	1628981	1628978	1628975
1629040	1629037	1629034	1629031	1629028	1629025	1629022	1629019
1629039	1629036	1629033	1629030	1629027	1629024	1629021	1629018
1629038	1629035	1629032	1629029	1629026	1629023	1629020	1629017
1628956	1628953	1628950	1628947	1628944	1628941	1628938	1628935
1628955	1628952	1628949	1628946	1628943	1628940	1628937	1628934
1628954	1628951	1628948	1628945	1628942	1628939	1628936	1628933
1628920	1628919	1628916	1628915	1628912	1628911	1628908	1628907
1628918	1628917	1628914	1628913	1628910	1628909	1628906	1628905
1628515	1628514	1628511	1628510	1628507	1628506	1628503	1628502
1628513	1628512	1628509	1628508	1628505	1628504	1628501	1628500

POWER

M17 PRO series crimp contacts			4(3+PE)-pos.		
	Connection method		Crimp		
	Rated voltage	[V AC/DC]	630		
	Rated current ¹⁾	[A]	25 / 20		
	Number of contacts/diameter	[mm]	4 x 2.0 / 4 x 1.5		
	Litz wire cross-sections	[mm ²]	0.25 ... 2.5		
	Pin assignment		Male 	Female 	
Crimp contacts, turned, Ø 0.6 mm					
	Crimp range	[mm ²]	0.06 ... 0.25	–	–
			0.14 ... 0.34	–	–
			0.34 ... 0.50	–	–
Crimp contacts, turned, Ø 1 mm					
	Crimp range	[mm ²]	0.06 ... 0.25	–	–
			0.25 ... 1.00	–	–
Crimp contacts, turned, Ø 1.5 mm					
	Crimp range	[mm ²]	0.25 ... 2.50	1213852	1213854
Crimp contacts, turned, Ø 2 mm					
	Crimp range	[mm ²]	0.25 ... 1.00	1607655	1607657
			1.00 ... 2.50	1607656	1607658

¹⁾ Rated current for max. connection cross section.

Please order crimp contacts separately. Crimping tools as accessories for contacts can be found at phoenixcontact.com.

■ 6(5+PE)-pos.		■ 7(6+PE)-pos.		■ 8(7+PE)-pos.		■ 9(5+3+PE)-pos.	
Crimp		Crimp		Crimp		Crimp	
630		630		630		60 / 630	
14		14		14		3.6 / 14	
6 x 1.0		7 x 1.0		8 x 1.0		5 x 0.6 / 4 x 1.0	
0.06 ... 1.0		0.06 ... 1.0		0.06 ... 1.0		0.06 ... 0.5 / 0.06 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female
-	-	-	-	-	-	1607577	1607580
-	-	-	-	-	-	1607578	1607581
-	-	-	-	-	-	1607579	1607582
1618255	1618239	1618255	1618239	1618255	1618239	1618255	1618239
1618458	1618464	1618458	1618464	1618458	1618464	1618458	1618464
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-



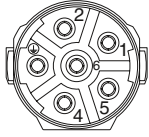
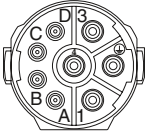





POWER

M23 PRO series		6(5+PE)-pos.		8(4+3+PE)-pos.		
 Web code: #2067	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	630		250 / 630		
	Rated current ¹⁾ [A]	30		9 / 30		
	Number of contacts/diameter [mm]	6 x 2		4 x 1 / 4 x 2		
	Litz wire cross-sections [mm ²]	0.25 ... 4.0		0.06 ... 1.0 / 0.25 ... 4.0		
	Pin assignment	Male	Female	Male	Female	
						
Cable connectors, ONECLICK fast-locking system						
	Cable clamping range [mm]	5.5 ... 15	1628871	1628815	1628867	1628811
	Short design, Cable Ø 5.5 mm ... 14.5 mm ONECLICK Technology [®] <small>Designed by PHOENIX CONTACT</small>	5.5 ... 8	1628874	1628818	1628869	1628813
		7.5 ... 12	1628873	1628817	1628870	1628814
		9.5 ... 14.5	1628872	1628816	1628868	1628812
	Cable clamping range [mm]	7.5 ... 17	1628852	1628796	1628847	1628791
	Long design, Cable Ø 5.5 mm ... 17 mm ONECLICK Technology [®] <small>Designed by PHOENIX CONTACT</small>	5.5 ... 8	1628856	1628800	1628850	1628795
		7.5 ... 12	1628855	1628799	1628851	1628794
		9.5 ... 14.5	1628854	1628798	1628849	1628793
		14 ... 17	1628853	1628797	1628848	1628792
Cable connectors, standard locking						
	Cable clamping range [mm]	5.5 ... 15	1628879	1628823	1628875	1628819
	Short design, Cable Ø 5.5 mm ... 14.5 mm	5.5 ... 8	1628882	1628826	1628878	1628822
		7.5 ... 12	1628881	1628825	1628877	1628821
		9.5 ... 14.5	1628880	1628824	1628876	1628820
	Cable clamping range [mm]	7.5 ... 17	1628862	1628806	1628857	1628801
	Long design, Cable Ø 5.5 mm ... 17 mm	5.5 ... 8	1628866	1628810	1628861	1628805
		7.5 ... 12	1628865	1628809	1628860	1628804
		9.5 ... 14.5	1628864	1628808	1628859	1628803
		14 ... 17	1628863	1628807	1628858	1628802
Coupler connectors						
new 	Cable clamping range [mm]	5.5 ... 15	1628786	1628842	1628780	1628836
	Cable Ø 5.5 mm ... 17 mm	7.5 ... 17	1628785	1628841	1628779	1628835
		5.5 ... 8	1628790	1628846	1628784	1628840
		7.5 ... 12	1628789	1628845	1628783	1628839
		9.5 ... 14.5	1628788	1628844	1628782	1628838
		14 ... 17	1628787	1628843	1628781	1628837

¹⁾ Rated current for max. connection cross section.

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. Please order crimp contacts separately; see table on the right.

POWER

M23 PRO series			6(5+PE)-pos.		8(4+3+PE)-pos.		
 Web code: #2067	Connection method		Crimp		Crimp		
	Rated voltage	[V AC/DC]	630		250 / 630		
	Rated current ¹⁾	[A]	30		9 / 30		
	Number of contacts/diameter	[mm]	6 x 2		4 x 1 / 4 x 2		
	Litz wire cross-sections	[mm ²]	0.25 ... 4.0		0.06 ... 1.0 / 0.25 ... 4.0		
	Pin assignment		Male	Female	Male	Female	
							
Device connectors, straight, front mounting							
 	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm		1628778	1628834	1628777	1628833	
	Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm		1628776	1628832	1628775	1628831	
Device connectors, angled, rotatable, front mounting							
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm		1628487	1628491	1628486	1628490	
	Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm		1628485	1628489	1628484	1628488	
Crimp contacts, turned, Ø 1 mm							
	Crimp range	[mm ²]	0.06 ... 0.25	–	–	1618255	1618239
			0.25 ... 1.0	–	–	1618458	1618464
Crimp contacts, turned, Ø 2 mm							
	Crimp range	[mm ²]	0.25 ... 1.0	1050147	1621576	1050147	1621576
			1.5 ... 2.5	1050205	1621577	1050205	1621577
			2.5 ... 4.0	1050210	1621578	1050210	1621578

¹⁾ Rated current for max. connection cross section

Please order crimp contacts separately. Crimping tools as accessories for contacts can be found at phoenixcontact.com.

M17 and M23 signal connectors

The M17 and M23 circular connectors cover numerous industrial signal applications. They also satisfy requirements relating to tightness of seal, vibration resistance, and EMC protection. The 6- to 19-pos. circular connectors are supplemented by a complete range of plastic-molded designs.



SIGNAL

Signal connectors up to 19-pos.

- 6- to 19-pos.
- Sizes M17 and M23
- All housings can be fitted with male or female contacts
- Connectors with external thread suitable for standard and SPEEDCON locking
- EMC protection
- IP67 degree of protection
- Plastic-molded designs

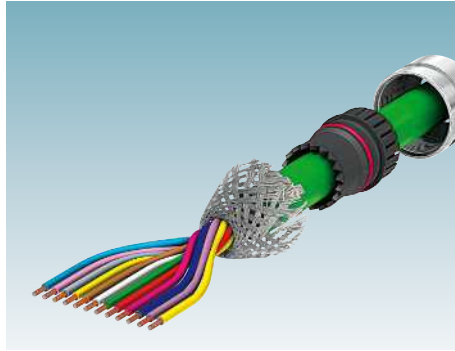


Your advantages at a glance



Pre-assembled cables

Angled design with adjustable cable outlet direction, customer-specific assemblies and cable lengths available



Reliable transmission

All connectors with 360° shield connection



Fast locking

Faster connection time with optional SPEEDCON fast-locking system, safe and vibration-free



Various connection methods

Crimp connection, solder connection, and device connectors with additional solder-in connection



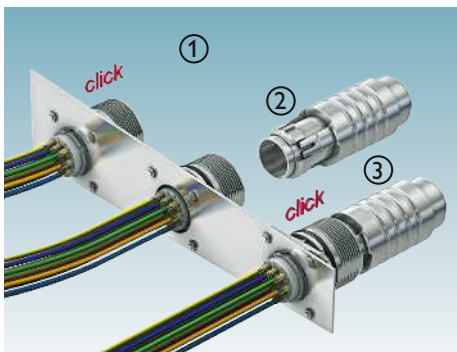
Visual color coding

Connection errors are prevented, thanks to customer-specific marking of the connectors with color rings



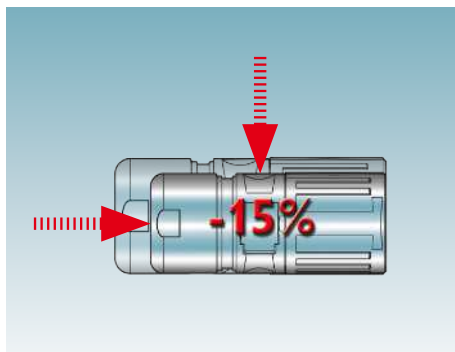
High contact density

6- to 19-pos. for a variety of signal and feedback applications



Easy mounting/removal

1. Insert M23 contact carrier from connection side and snap into place
2. Attach removal tool on the plug side
3. Release contact carrier



Ideal for compact devices

M17 COMPACT is 15% smaller than the standard M17



Flexible assembly

All housings can be fitted with male or female contacts



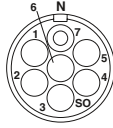
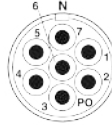
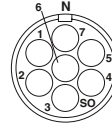





M17		8-pos.	17-pos.				
i Web code: #0256	Connection method	Crimp		Crimp			
	Rated voltage [V AC/DC]	48 / 74		48 / 74			
	Rated current ¹⁾ [A]	8		3.6			
	Number of contacts/diameter [mm]	8 x 1.0		17 x 0.6			
	Litz wire cross-sections [mm ²]	0.06 ... 1.0		0.06 ... 0.5			
	Pin assignment	Male	Female	Male	Female		
Cable connectors, SPEEDCON fast-locking system, M17 COMPACT series							
	Cable clamping range [mm]	3.5 ... 5.5	1618641	1613370	1618682	1613288	
		5.5 ... 8.5	1618648	1613371	1618683	1613324	
		9 ... 10.5	1618649	1613372	1618684	1613325	
Coupler connectors, M17 COMPACT series							
	Cable clamping range [mm]	3.5 ... 5.5	1617799	1618724	1613497	1618756	
		5.5 ... 8.5	1617813	1618725	1613896	1618757	
		9 ... 10.5	1617830	1618726	1614532	1618758	
Panel feed-throughs, front/rear mounting, flange dimensions 25.7 mm x 25.7 mm, M17 COMPACT series							
	Cable clamping range [mm]	3.5 ... 5.5	1617925	1618801	1617863	1618834	
		Mounting holes 4 x Ø 3.2 mm	5.5 ... 8.5	1617929	1618802	1617872	1618835
		9 ... 10.5	1617932	1618805	1617873	1618836	
Cable connectors, SPEEDCON fast-locking system							
	Cable clamping range [mm]	5 ... 8	1618999	1619007	1607625	1607642	
		8 ... 10	1619000	1619008	1607627	1607644	
		10 ... 12.5	1619001	1619009	1624529	1624532	
Cable connectors, standard locking							
	Cable clamping range [mm]	5 ... 8	1618995	1619003	1607624	1607641	
		8 ... 10	1618996	1619004	1607626	1607643	
		10 ... 12.5	1618997	1619005	1624528	1624531	
Coupler connectors							
	Cable clamping range [mm]	5 ... 8	1619011	1619015	1607630	1607647	
		8 ... 10	1619012	1619016	1607631	1607649	
		10 ... 12.5	1619013	1619017	1624530	1624533	

¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

M17		8-pos.	17-pos.		
i Web code: #0258	Connection method	Crimp		Crimp	
	Rated voltage [V AC/DC]	48 / 74		48 / 74	
	Rated current ¹⁾ [A]	8		3.6	
	Number of contacts/diameter [mm]	8 x 1.0		17 x 0.6	
	Litz wire cross-sections [mm ²]	0.06 ... 1.0		0.06 ... 0.5	
	Pin assignment	Male	Female	Male	Female
					
Device connectors, front mounting, flange dimensions 21.6 mm x 21.6 mm					
	Snap-in contact insert Mounting holes 4 x Ø 2.7 mm	1613286	1619039	1607636	1607654
	Contact insert for support on the device Mounting holes 4 x Ø 2.7 mm	1619037	1619038	1607634	1607653
Device connectors, front mounting, flange dimensions 25.75 mm x 25.75 mm					
	Snap-in contact insert Mounting holes 4 x Ø 3.2 mm	1619219	1619220	1619225	1619226
	Contact insert for support on the device Mounting holes 4 x Ø 3.2 mm	1619196	1619197	1619202	1619206
Device connectors, angled, rotatable, front mounting, flange dimensions 25.75 mm x 25.75 mm					
	Mounting holes 4 x Ø 2.7 mm	1620439	1620440	1620441	1620442
	Mounting holes 4 x Ø 3.2 mm	1620456	1620455	1620458	1620457
Device connectors, front mounting, central fastening					
	M18 x 0.75 mm fastening thread	1618584	1619036	1613540	1613542
	Accessories: M18 x 0.75 mm locking nut	1613831			
Device connectors, rear mounting, central fastening					
	M20 x 1.5 fastening thread	1619034	1619035	1613541	1613543
	Accessories: M20 x 1.5 mm locking nut	1600417			

¹⁾ Rated current for max. connection cross-section
For color rings for individually marking the connectors, see page 49.
Please order crimp contacts separately, see page 52 onwards.

M23 ADVANCE		6-pos.		7-pos.			
 Web code: #0259	Connection method	Crimp, solder		Crimp, solder			
	Rated voltage [V AC/DC]	48 / 74		48 / 74			
	Rated current ¹⁾ [A]	20		20			
	Number of contacts/diameter [mm]	6 x 2.0		7 x 2.0			
	Litz wire cross-sections [mm ²]	0.5 ... 2.5		0.5 ... 2.5			
	Pin assignment	Male	Female	Male	Female		
							
Cable connectors, SPEEDCON fast-locking system							
	Solder connection 	Cable clamping range [mm]	3 ... 14.5	1619604	1619605	1619600	1619601
		4 ... 6	1619578	1619579	1619574	1619575	
		6 ... 10	1619533	1619534	1619529	1619530	
		10 ... 14.5	1619507	1619508	1619503	1619504	
	Crimp connection 	Cable clamping range [mm]	3 ... 14.5	1619602	1619603	1619598	1619599
		4 ... 6	1619576	1619577	1619572	1619573	
		6 ... 10	1619531	1619532	1619527	1619528	
		10 ... 14.5	1619505	1619506	1619501	1619502	
Cable connectors, standard locking							
	Solder connection	Cable clamping range [mm]	3 ... 14.5	1619775	1619776	1619771	1619772
		4 ... 6	1619749	1619750	1619745	1619746	
		6 ... 10	1619723	1619724	1619719	1619720	
		10 ... 14.5	1619658	1619659	1619654	1619655	
	Crimp connection	Cable clamping range [mm]	3 ... 14.5	1619773	1619774	1619769	1619770
		4 ... 6	1619747	1619748	1619743	1619744	
		6 ... 10	1619721	1619722	1619717	1619718	
		10 ... 14.5	1619656	1619657	1619652	1619653	
Coupler connectors							
	Solder connection	Cable clamping range [mm]	3 ... 14.5	1620171	1620172	1620167	1620168
		4 ... 6	1620144	1620145	1620140	1620141	
		6 ... 10	1620118	1620119	1620114	1620115	
		10 ... 14.5	1620045	1620046	1620041	1620042	
	Crimp connection	Cable clamping range [mm]	3 ... 14.5	1620169	1620170	1620165	1620166
		4 ... 6	1620142	1620143	1620138	1620139	
		6 ... 10	1620116	1620117	1620080	1620081	
		10 ... 14.5	1620043	1620044	1620037	1620038	

¹⁾ Rated current for max. connection cross-section

²⁾ 16+2+FE for 19-pos. crimp connection, 16+3 (without FE) available on request.

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. For crimp connection: Please order crimp contacts separately, see page 52 onwards.

9(8+1)-pos.		12-pos.		16-pos.		17-pos.		19(16+3)-pos. ²⁾	
Crimp, solder		Crimp, solder		Crimp, solder		Crimp, solder		Crimp, solder	
48 / 74		48 / 74		48 / 74		48 / 74		48 / 74	
8 / 20		8		8		8		8 / 10	
8 x 1.0 / 1 x 2.0		12 x 1.0		16 x 1.0		17 x 1.0		16 x 1.0 / 3 x 1.5	
0.08 ... 1.0 / 0.5 ... 2.5		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0 / 0.5 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1619596	1619597	1619592	1619593	1619588	1619589	1619584	1619585	1619580	1619581
1619570	1619571	1619548	1619567	1619544	1619545	1619540	1619541	1619536	1619537
1619525	1619526	1619521	1619522	1619517	1619518	1619513	1619514	1619509	1619510
1619499	1619500	1619495	1619496	1619486	1619487	1619482	1619483	1619478	1619479
1619594	1619595	1619590	1619591	1619586	1619587	1619582	1619583	1623837	1623838
1619568	1619569	1619546	1619547	1619542	1619543	1619538	1619539	1623835	1623836
1619523	1619524	1619519	1619520	1619515	1619516	1619511	1619512	1623833	1623834
1619497	1619498	1619488	1619489	1619484	1619485	1619480	1619481	1623831	1623832
1619767	1619768	1619763	1619764	1619759	1619760	1619755	1619756	1619751	1619752
1619741	1619742	1619737	1619738	1619733	1619734	1619729	1619730	1619725	1619726
1619715	1619716	1619709	1619710	1619705	1619706	1619701	1619702	1619660	1619661
1619650	1619651	1619646	1619647	1619642	1619643	1619638	1619639	1619634	1619635
1619765	1619766	1619761	1619762	1619757	1619758	1619753	1619754	1623845	1623846
1619739	1619740	1619735	1619736	1619731	1619732	1619727	1619728	1623843	1623844
1619711	1619714	1619707	1619708	1619703	1619704	1619699	1619700	1623841	1623842
1619648	1619649	1619644	1619645	1619640	1619641	1619636	1619637	1623839	1623840
1620163	1620164	1620159	1620160	1620155	1620156	1620150	1620151	1620146	1620147
1620136	1620137	1620132	1620133	1620128	1620129	1620124	1620125	1620120	1620121
1620078	1620079	1620074	1620075	1620070	1620071	1620051	1620052	1620047	1620048
1620035	1620036	1620031	1620032	1620027	1620028	1620023	1620024	1620019	1620020
1620161	1620162	1620157	1620158	1620152	1620154	1620148	1620149	1624010	1624006
1620134	1620135	1620130	1620131	1620126	1620127	1620122	1620123	1624013	1624009
1620076	1620077	1620072	1620073	1620053	1620069	1620049	1620050	1624012	1624008
1620033	1620034	1620029	1620030	1620025	1620026	1620021	1620022	1624011	1624007

M23 ADVANCE		6-pos.		7-pos.		
i Web code: #0259	Connection method	Crimp, solder		Crimp, solder		
	Rated voltage [V AC/DC]	48 / 74		48 / 74		
	Rated current ¹⁾ [A]	20		20		
	Number of contacts/diameter [mm]	6 x 2.0		7 x 2.0		
	Litz wire cross-sections [mm ²]	0.5 ... 2.5		0.5 ... 2.5		
	Pin assignment	Male	Female	Male	Female	
Cable connectors, angled, SPEEDCON fast-locking system						
	Cable clamping range [mm] Solder connection 	3 ... 14.5	1619449	1619450	1619445	1619446
		4 ... 6	1619423	1619424	1619419	1619420
		6 ... 10	1619397	1619398	1619393	1619394
		10 ... 14.5	1619371	1619372	1619365	1619366
	Cable clamping range [mm] Crimp connection 	3 ... 14.5	1619447	1619448	1619443	1619444
		4 ... 6	1619421	1619422	1619417	1619418
		6 ... 10	1619395	1619396	1619391	1619392
		10 ... 14.5	1619367	1619368	1619363	1619364
Cable connectors, angled, standard locking						
	Cable clamping range [mm] Solder connection	3 ... 14.5	1619342	1619343	1619338	1619339
		4 ... 6	1620290	1620291	1620286	1620287
		6 ... 10	1620261	1620262	1620257	1620258
		10 ... 14.5	1620211	1620212	1620207	1620208
	Cable clamping range [mm] Crimp connection	3 ... 14.5	1619340	1619341	1619336	1619337
		4 ... 6	1620288	1620289	1620284	1620285
		6 ... 10	1620259	1620260	1620255	1620256
		10 ... 14.5	1620209	1620210	1620191	1620192

¹⁾ Rated current for max. connection cross-section

²⁾ 16+2+FE for 19-pos. crimp connection, 16+3 (without FE) available on request.

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. For crimp connection: Please order crimp contacts separately, see page 52 onwards.

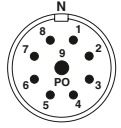
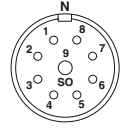
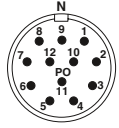
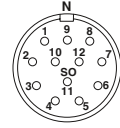
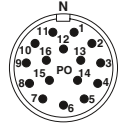

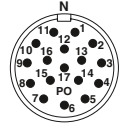

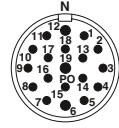
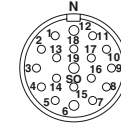
■ 9(8+1)-pos.		■ 12-pos.		■ 16-pos.		■ 17-pos.		■ 19(16+3)-pos. ²⁾	
Crimp, solder		Crimp, solder		Crimp, solder		Crimp, solder		Crimp, solder	
48 / 74		48 / 74		48 / 74		48 / 74		48 / 74	
8 / 20		8		8		8		8 / 10	
8 x 1.0 / 1 x 2.0		12 x 1.0		16 x 1.0		17 x 1.0		16 x 1.0 / 3 x 1.5	
0.08 ... 1.0 / 0.5 ... 2.5		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0 / 0.5 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1619441	1619442	1619437	1619438	1619433	1619434	1619429	1619430	1619425	1619426
1619415	1619416	1619411	1619412	1619407	1619408	1619403	1619404	1619399	1619400
1619389	1619390	1619385	1619386	1619381	1619382	1619377	1619378	1619373	1619374
1619361	1619362	1619357	1619358	1619352	1619353	1619348	1619349	1619344	1619345
1619439	1619440	1619435	1619436	1619431	1619432	1619427	1619428	1624084	1624080
1619413	1619414	1619409	1619410	1619405	1619406	1619401	1619402	1624085	1624081
1619387	1619388	1619383	1619384	1619379	1619380	1619375	1619376	1624086	1624082
1619359	1619360	1619354	1619356	1619350	1619351	1619346	1619347	1624087	1624083
1619334	1619335	1619330	1619331	1620300	1620301	1620296	1620297	1620292	1620293
1620282	1620283	1620278	1620279	1620274	1620275	1620267	1620268	1620263	1620264
1620253	1620254	1620249	1620250	1620245	1620246	1620217	1620218	1620213	1620214
1620189	1620190	1620185	1620186	1620181	1620182	1620177	1620178	1620173	1620174
1619332	1619333	1620302	1620303	1620298	1620299	1620294	1620295	1624075	1624071
1620280	1620281	1620276	1620277	1620271	1620273	1620265	1620266	1624076	1624072
1620251	1620252	1620247	1620248	1620219	1620244	1620215	1620216	1624077	1624073
1620187	1620188	1620183	1620184	1620179	1620180	1620175	1620176	1624078	1624074

M23 ADVANCE		6-pos.	7-pos.			
i Web code: #0260	Connection method	Solder, crimp, solder-in		Solder, crimp, solder-in		
	Rated voltage [V AC/DC]	48 / 74		48 / 74		
	Rated current ¹⁾ [A]	20		20		
	Number of contacts/diameter [mm]	6 x 2.0		7 x 2.0		
	Litz wire cross-sections [mm ²]	0.5 ... 2.5		0.5 ... 2.5		
	Pin assignment	Male	Female	Male	Female	
Device connectors, front mounting, central fastening Pg13.5						
	Solder connection, axial seal	1619902	1619903	1619898	1619899	
	Crimp connection, axial seal	1619900	1619901	1619896	1619897	
Device connectors, front mounting, central fastening M20 x 1.5						
	Solder connection, axial seal	1619876	1619877	1619872	1619873	
	Accessories: M20 x 1.5 mm locking nut					
	Crimp connection, axial seal	1619874	1619875	1619870	1619871	
	Accessories: M20 x 1.5 mm locking nut					
Device connectors, front mounting, positionable, central fastening M20 x 1.5						
	Solder connection, axial seal	1624044	1624045	1624046	1624047	
	Crimp connection, axial seal	1624022	1624030	1624023	1624031	
Device connectors, front mounting, flange dimensions 25 mm x 25 mm						
	Solder connection Mounting holes 4 x Ø 3.2 mm, flat gasket	1619992	1619993	1619988	1619989	
	Crimp connection Mounting holes 4 x Ø 3.2 mm, flat gasket	1619990	1619991	1619986	1619987	
	Solder-in connection Mounting holes 4 x Ø 3.2 mm Flat gasket	Free solder pin length [mm]: 3.5	1619954	1619955	1619952	1619953
		10.0	1619930	1619931	1619928	1619929
		17.5	1619915	1619916	1619913	1619914
Device connectors, angled, rotatable, front mounting, flange dimensions 26 mm x 26 mm						
	Solder connection Mounting holes 4 x Ø 3.2 mm	–	–	–	–	
	Crimp connection Mounting holes 4 x Ø 3.2 mm	–	–	–	–	
Device connectors, rear mounting, central fixing nut M25 x 1.5						
	Solder connection, axial seal	1619850	1619851	1619846	1619847	
	Crimp connection, axial seal	1619848	1619849	1619844	1619845	

¹⁾ Rated current for max. connection cross-section

²⁾ 16+2+FE for 19-pos. crimp connection, 16+3 (without FE) available on request.

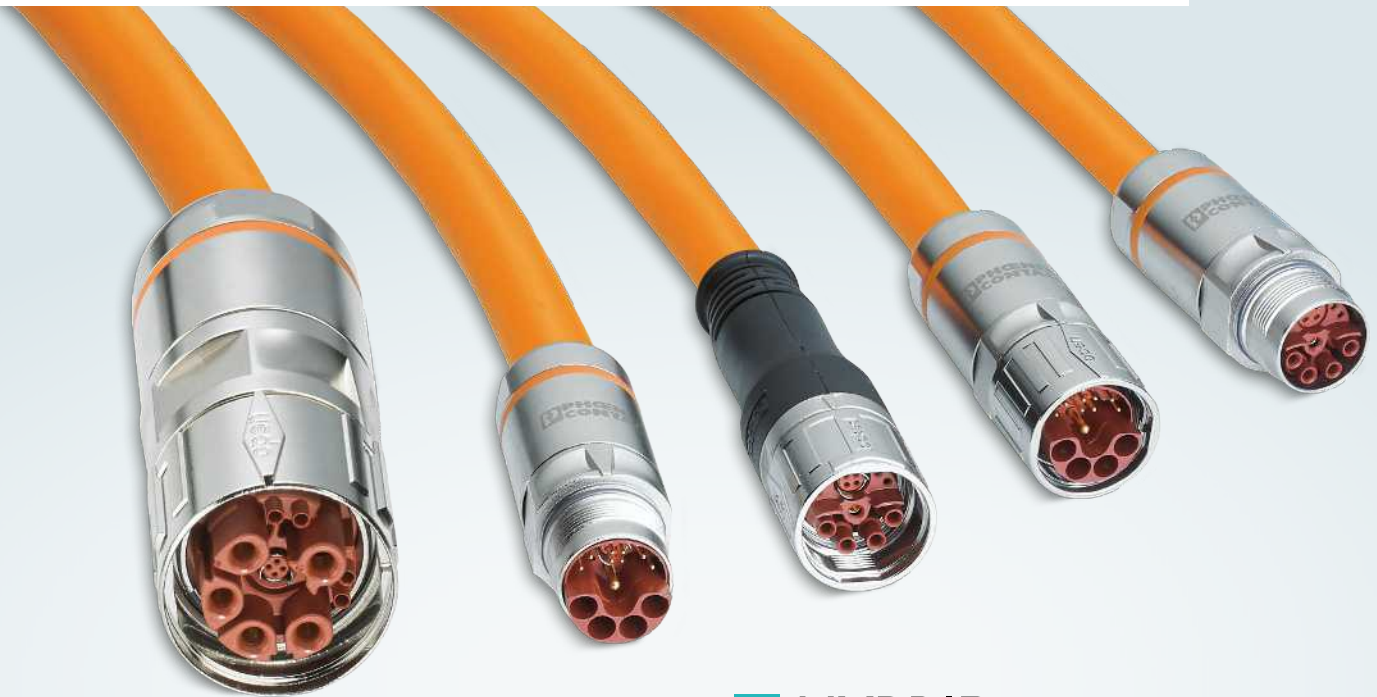
For color rings for individually marking the connectors, see page 49. For crimp connection: Please order crimp contacts separately, see page 52 onwards.

9(8+1)-pos.		12-pos.		16-pos.		17-pos.		19(16+3)-pos. ²⁾	
Solder, crimp, solder-in		Solder, crimp, solder-in		Solder, crimp, solder-in		Solder, crimp, solder-in		Crimp, solder	
48 / 74		48 / 74		48 / 74		48 / 74		48 / 74	
8 / 20		8		8		8		8 / 10	
8 x 1.0 / 1 x 2.0		12 x 1.0		16 x 1.0		17 x 1.0		16 x 1.0 / 3 x 1.5	
0.08 ... 1.0 / 0.5 ... 2.5		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0		0.08 ... 1.0 / 0.5 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
									
1619894	1619895	1619890	1619891	1619886	1619887	1619882	1619883	1619878	1619879
1619892	1619893	1619888	1619889	1619884	1619885	1619880	1619881	1624018	1624019
1619868	1619869	1619864	1619865	1619860	1619861	1619856	1619857	1619852	1619853
1600417									
1619866	1619867	1619862	1619863	1619858	1619859	1619854	1619855	1624016	1624017
1600417									
1624048	1624049	1624050	1624051	1624053	1624054	1624055	1624056	1624057	1624058
1624024	1624032	1624026	1624033	1624027	1624034	1624029	1624035	1623630	1623629
1619972	1619973	1619968	1619969	1619964	1619965	1619960	1619961	1619956	1619957
1619970	1619971	1619966	1619967	1619962	1619963	1619958	1619959	1624014	1624015
1619950	1619951	1619948	1619949	1619934	1619935	1619932	1619933	-	-
1619926	1619927	1619924	1619925	1619919	1619923	1619917	1619918	-	-
1619911	1619912	1619909	1619910	1619907	1619908	1619904	1619905	-	-
1621746	-	1621741	-	-	-	1621745	-	-	-
1621735	-	1621738	-	-	-	1621744	-	-	-
1619842	1619843	1619789	1619790	1619785	1619786	1619781	1619782	1619777	1619778
1619791	1619841	1619787	1619788	1619783	1619784	1619779	1619780	1624020	1624021

M23 and M40 hybrid connectors

The M23 and M40 hybrid connectors from Phoenix Contact allow you to reliably transmit signals, data, and power in a single connector.

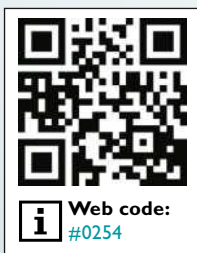
The hybrid connectors are highly flexible: the CAT5 data interface can be replaced by four signal contacts. As a result, a total of eight contacts are available for transmitting signals.



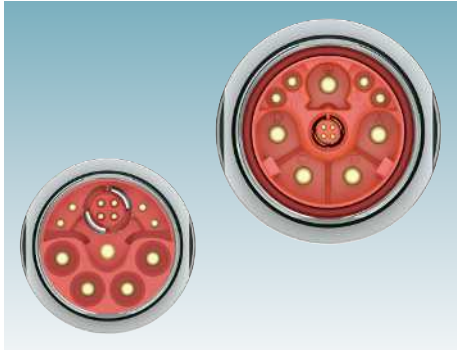
■ HYBRID

Hybrid connectors
up to 70 A/850 V DC/630 V AC

- Transmission of signals, data, and power in just a single connector
- Sizes M23 and M40
- Connectors with external thread suitable for standard and SPEEDCON locking
- CAT5 interface, alternative: 4 additional signal contacts
- Connection cross-sections up to 16 mm²
- Plastic-molded designs

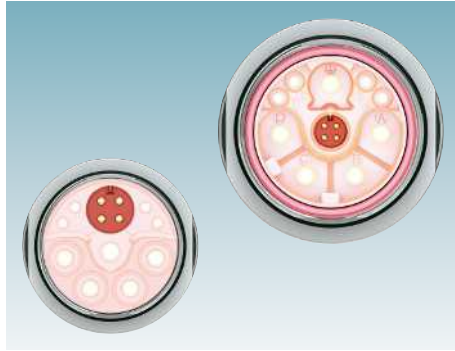


Your advantages at a glance



Reliable data transmission

Pin assignments 4+4+4+PE: Reliable transmission of data (CAT5), signals, and power



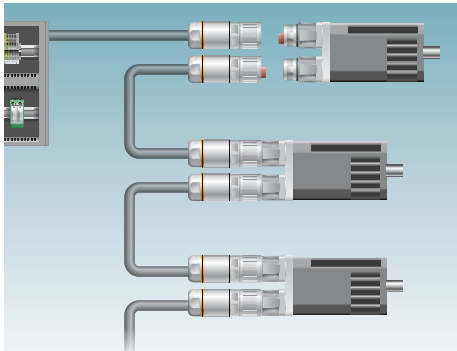
Additional flexibility

Pin assignments 8+4+PE: Four additional signal contacts by replacing the CAT5 interface



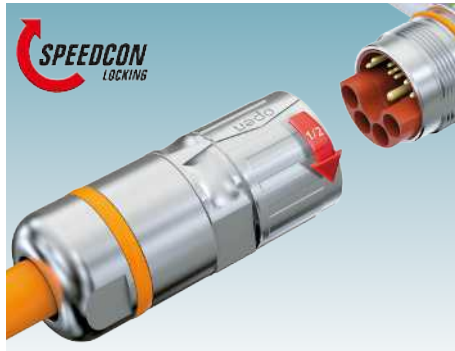
Reliable connection

M40 with mechanical coding for all pin assignments reliably prevents connection errors



Reduced cabling effort

Daisy chain application with hybrid connectors for distributed drive concepts



Fast locking

Faster connection time with optional SPEEDCON fast-locking system, safe and vibration-free



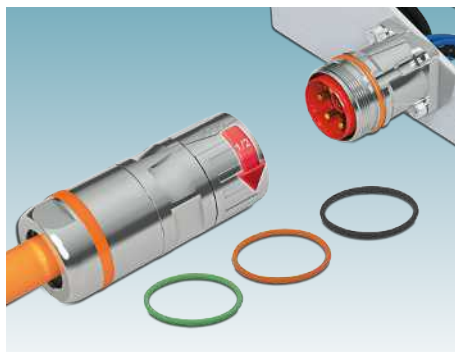
Variable assembly

All housings can be fitted with male or female contacts



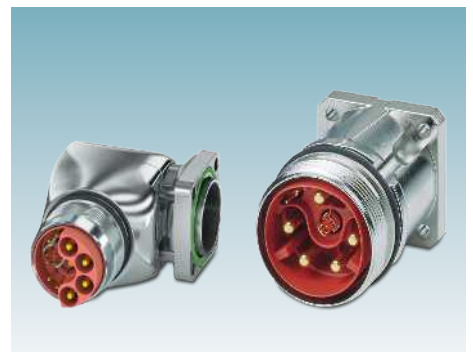
Pre-assembled M23 cables

Angled design with adjustable cable outlet direction, customer-specific assemblies and cable lengths available




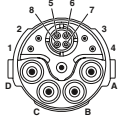
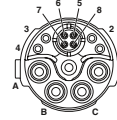
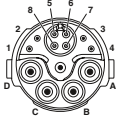
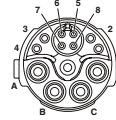





Visual color coding

Connection errors are prevented, thanks to customer-specific marking of the connectors with color rings



Versatile device connection technology

Straight and angled rotatable device connectors with infinitely variable adjustment of the output direction up to 310°


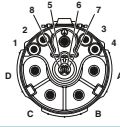
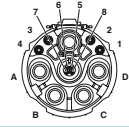






M23		4+4+4+PE-pos.		8+4+PE-pos.		
 Web code: #0263	Signal type	CAT5 (100 Mbps)		Signal		
	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	50 / 50 / 630/850		50 / 630/850		
	Rated current ¹⁾ [A]	3.6 / 8 / 30		8 / 30		
	Number of contacts/diameter [mm]	4 x 0.8 / 4 x 1 / 5 x 2		8 x 1 / 5 x 2		
	Litz wire cross-sections [mm ²]	0.08 ... 0.5 / 0.06 ... 1.0 / 0.25 ... 4.0		0.06 ... 1.0 / 0.25 ... 4.0		
	Pin assignment	Male	Female	Male	Female	
						
Cable connectors, SPEEDCON fast-locking system						
 	Cable clamping range [mm]	7.5 ... 18	1621529	1621517	1621534	1621524
		7.5 ... 9	1621530	1621520	1621535	1621525
		9 ... 12	1621531	1621521	1621536	1621526
		12 ... 15	1621532	1621522	1621537	1621527
		15 ... 18	1621533	1621523	1621538	1621528
Cable connectors, standard locking						
	Cable clamping range [mm]	7.5 ... 18	1622007	1621997	1622012	1622002
		7.5 ... 9	1622008	1621998	1622013	1622003
		9 ... 12	1622009	1621999	1622014	1622004
		12 ... 15	1622010	1622000	1622015	1622005
		15 ... 18	1622011	1622001	1622016	1622006
Coupler connectors						
	Cable clamping range [mm]	7.5 ... 18	1621549	1621539	1621554	1621544
		7.5 ... 9	1621550	1621540	1621555	1621545
		9 ... 12	1621551	1621541	1621556	1621546
		12 ... 15	1621552	1621542	1621557	1621547
		15 ... 18	1621553	1621543	1621558	1621548
Hybrid cables (accessories)						
	Cable length [m]	1	1623127	-		
		20	1622080	-		
		100	1623039	-		
Hybrid cable, shielded, cable design: 5 x 2.5 + 2 x (2 x 0.5) + (4 x AWG 22)C)C, outside cable Ø: 15.5 mm ±0.5 mm, suitable for drag chain applications, outer sheath color: Orange RAL 2003						

¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.


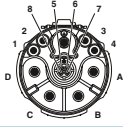
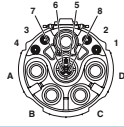






M23		4+4+4+PE-pos.	8+4+PE-pos.		
i Web code: #0264	Signal type	CAT5 (100 Mbps)		Signal	
	Connection method	Crimp		Crimp	
	Rated voltage [V AC/DC]	50 / 50 / 630/850		50 / 630/850	
	Rated current ¹⁾ [A]	3.6 / 8 / 30		8 / 30	
	Number of contacts/diameter [mm]	4 x 0.8 / 4 x 1 / 5 x 2		8 x 1 / 5 x 2	
	Litz wire cross-sections [mm ²]	0.08 ... 0.5 / 0.06 ... 1.0 / 0.25 ... 4.0		0.06 ... 1.0 / 0.25 ... 4.0	
	Pin assignment	Male	Female	Male	Female
Device connectors, front mounting					
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1621569	1621567	1621570	1621568
Device connectors, with knurled nut, SPEEDCON fast-locking system, front mounting					
new 	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1096285	1096284	1096286	1096282
Device connectors, angled, rotatable, front mounting					
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1621565	1621563	1621566	1621564
	Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm	1621561	1621559	1621562	1621560
Device connectors, rear mounting					
	Central fastening M26 x 1	1627205	1624344	1627206	1627204

¹⁾ Rated current for max. connection cross-section
 For color rings for individually marking the connectors, see page 49.
 Please order crimp contacts separately, see page 52 onwards.

M40		Coding 1		
		4+4+4+PE-pos.		
 Web code: #0560	Signal type	CAT5 (100 Mbps)		
	Connection method	Crimp		
	Rated voltage [V AC/DC]	50 / 500 / 630/850		
	Rated current ¹⁾ [A]	3.6 / 8 / 70		
	Number of contacts/diameter [mm]	4 x 0.8 / 4 x 1 / 5 x 3.6		
	Litz wire cross-sections [mm ²]	0.08 ... 0.5 / 0.06 ... 1.5 / 2.5 ... 16.0		
	Pin assignment, coding 1	Male 	Female 	
Cable connectors, SPEEDCON fast-locking system				
 	Cable clamping range [mm]	9 ... 14	1623332	1623324
		14 ... 20.5	1623333	1623327
		20.5 ... 26.5	1623334	1623328
Coupler connectors				
	Cable clamping range [mm]	9 ... 14	1623356	1623339
		14 ... 20.5	1623357	1623341
		20.5 ... 26.5	1623358	1623342
Device connectors, front mounting				
	Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.2 mm		1623374	1623371
Device connectors, angled, rotatable, front mounting				
	Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.4 mm		1623368	1623365
Hybrid cables (accessories)				
	Cable length [m]	Hybrid cable, shielded, cable design: (5 x 10 + 4 x 1.5 + (4 x AWG 22) C)C, outer cable Ø: 21.4 mm ±0.7 mm, suitable for drag chain applications, outer sheath color: Orange RAL 2003	1	1627298
		20	1627299	

¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

M40		Coding 2		
		4+4+4+PE-pos.		
 Web code: #0560	Signal type	CAT5 (100 Mbps)		
	Connection method	Crimp		
	Rated voltage [V AC/DC]	50 / 500 / 630/850		
	Rated current ¹⁾ [A]	3.6 / 8 / 70		
	Number of contacts/diameter [mm]	4 x 0.8 / 4 x 1 / 5 x 3.6		
	Litz wire cross-sections [mm ²]	0.08 ... 0.5 / 0.06 ... 1.5 / 2.5 ... 16.0		
	Pin assignment, coding 2	Male	Female	
				
Cable connectors, SPEEDCON fast-locking system				
 	Cable clamping range [mm]	9 ... 14	1623692	1623683
		14 ... 20.5	1623693	1623684
		20.5 ... 26.5	1623694	1623685
Coupler connectors				
	Cable clamping range [mm]	9 ... 14	1623710	1623701
		14 ... 20.5	1623711	1623702
		20.5 ... 26.5	1623712	1623703
Device connectors, front mounting				
	Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.2 mm		1623728	1623725
Device connectors, angled, rotatable, front mounting				
	Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.4 mm		1623722	1623719
Hybrid cables (accessories)				
	Cable length [m]	Hybrid cable, shielded, cable design: (5 x 10 + 4 x 1.5 + (4 x AWG 22) C)C, outer cable Ø: 21.4 mm ±0.7 mm, suitable for drag chain applications, outer sheath color: Orange RAL 2003	1	1627298
		20	1627299	

¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately; see page 52 onwards.

M17 to M58 power connectors

Power connectors from Phoenix Contact are the right choice for the easy and time-saving connection of electrical drives at transmission capacities up to 150 A/630 V.

Characteristic features include the lateral, radial clip-in of contacts into the contact carrier and the elegant shielding. This saves installation time and ensures fast and secure connection.



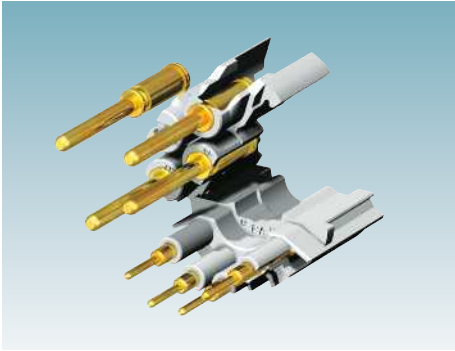
POWER

Power connectors up to 150 A/630 V

- Sizes M17, M23, M40, and M58
- Connectors with external thread suitable for standard and SPEEDCON locking
- 3+PE up to 5+3+PE
- Connection cross sections up to 50 mm²
- IP67 degree of protection
- Plastic-molded designs



Your advantages at a glance



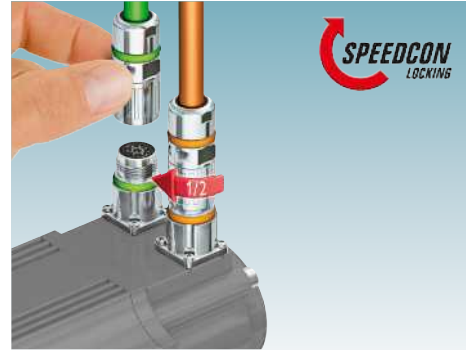
Fast installation

Lateral clip-in of contacts saves installation time



Simple shielding

Protruding braided shield is simply screwed in, 360° shield connection



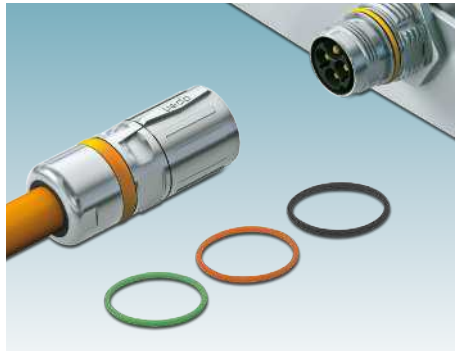
Fast locking

Faster connection time with optional SPEEDCON fast-locking system, safe and vibration-free



Flexible cable outlet

Rotatable device connectors with infinitely variable adjustment of the output direction up to 310°



Visual color coding

Connection errors are prevented, thanks to customer-specific marking of the connectors with color rings



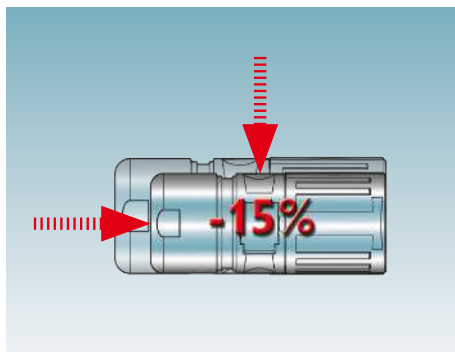
Flexible connection

Numerous housing designs for the device and cable side in sizes M17 to M58



Pre-assembled cables

Angled design with adjustable cable outlet direction, customer-specific assemblies and cable lengths available



Ideal for compact devices



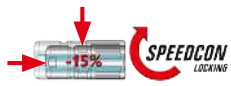








M17 COMPACT is 15% smaller than the standard M17



Simple device integration









Device connectors for front and rear mounting for various installation situations

POWER


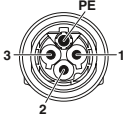





M17		4(3+PE)-pos.				
 Web code: #0266	Connection method	Crimp				
	Rated voltage	[V AC/DC]	630			
	Rated current ¹⁾	[A]	25			
	Number of contacts/diameter	[mm]	4 x 2			
	Litz wire cross-sections	[mm ²]	0.25 ... 2.5			
	Pin assignment		<table border="1"> <thead> <tr> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Male	Female	
Male	Female					
Cable connectors, SPEEDCON fast-locking system, M17 COMPACT series						
 	Cable clamping range [mm]	3.5 ... 5.5	1618602	1618312		
		5.5 ... 8.5	1618574	1618408		
		9 ... 10.5	1618575	1618603		
Coupler connectors, M17 COMPACT series						
 	Cable clamping range [mm]	3.5 ... 5.5	1620614	1618695		
		5.5 ... 8.5	1618406	1618694		
		9 ... 10.5	1618690	1618693		
Panel feed-throughs, front/rear mounting, flange dimensions 25.7 mm x 25.7 mm, M17 COMPACT series						
 	Cable clamping range mounting holes 4 x Ø 3.2 mm [mm]	3.5 ... 5.5	1618402	1618762		
		5.5 ... 8.5	1618407	1618763		
		9 ... 10.5	1618760	1618764		
Cable connectors, SPEEDCON fast-locking system						
 	Cable clamping range [mm]	5 ... 8	1607665	1607683		
		8 ... 10	1607667	1607685		
		10 ... 12.5	1624535	1624538		
Cable connectors, standard locking						
	Cable clamping range [mm]	5 ... 8	1607663	1607682		
		8 ... 10	1607666	1607684		
		10 ... 12.5	1624534	1624537		
Coupler connectors						
	Cable clamping range [mm]	5 ... 8	1607670	1607688		
		8 ... 10	1607671	1607689		
		10 ... 12.5	1624536	1624539		

¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

6(5+PE)-pos.		7(6+PE)-pos.		8(7+PE)-pos.		9(5+3+PE)-pos.	
Crimp		Crimp		Crimp		Crimp	
630		630		630		60 / 630	
14		14		14		3.6 / 14	
6 x 1		7 x 1		8 x 1		5 x 0.6 / 4 x 1	
0.06 ... 1.0		0.06 ... 1.0		0.06 ... 1.0		0.06 ... 0.5 / 0.06 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female
							
1618614	1618621	1618622	1618632	1618640	1618633	1618681	1618674
1618615	1618620	1618623	1618631	1618639	1618634	1618680	1618675
1618616	1618619	1618624	1618630	1618638	1618635	1618679	1618676
1618703	1618696	1618704	1618708	1618712	1618716	1618740	1618748
1618702	1618697	1618705	1618709	1618713	1618717	1618741	1618749
1618701	1618698	1618706	1618710	1618714	1618718	1618742	1618750
1618767	1618772	1618776	1618780	1618788	1618787	1618818	1618825
1618768	1618773	1618777	1618781	1618790	1618786	1618819	1618824
1618769	1618774	1618778	1618782	1618791	1618785	1618820	1618823
1607700	1607718	1613559	1613578	1607736	1607756	1613601	1613620
1607702	1607720	1613561	1613580	1607738	1607759	1613603	1613622
1624541	1624544	1624547	1624550	1624553	1624556	1624637	1624639
1607699	1607717	1613558	1613577	1607735	1607755	1613600	1613619
1607701	1607719	1613560	1613579	1607737	1607758	1613602	1613621
1624540	1624543	1624546	1624549	1624552	1624555	1624636	1624638
1607706	1607723	1613564	1613583	1607741	1607764	1613606	1613625
1607707	1607724	1613565	1613584	1607742	1607765	1613607	1613626
1624542	1624545	1624548	1624551	1624554	1624557	1624653	1624654


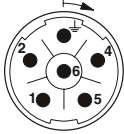
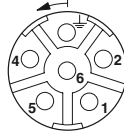
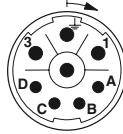
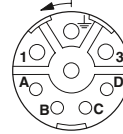








POWER

M17		4(3+PE)-pos.	
 Web code: #0267	Connection method	Crimp	
	Rated voltage	[V AC/DC]	630
	Rated current ¹⁾	[A]	25
	Number of contacts/diameter	[mm]	4 x 2
	Litz wire cross-sections	[mm ²]	0.25 ... 2.5
	Pin assignment		Male 
Device connectors, front mounting, flange dimensions 21.6 mm x 21.6 mm			
	Snap-in contact insert Mounting holes 4 x Ø 2.7 mm	1607674	1607692
	Contact insert for support on the device Mounting holes 4 x Ø 2.7 mm	1607675	1607694
Device connectors, front mounting, flange dimensions 25.7 mm x 25.7 mm			
	Snap-in contact insert Mounting holes 4 x Ø 3.2 mm	1619209	1619212
	Contact insert for support on the device Mounting holes 4 x Ø 3.2 mm	1619186	1619189
Device connectors, angled, rotatable, front mounting, flange dimensions 25.7 mm x 25.7 mm			
	Mounting holes 4 x Ø 2.7 mm	1620427	1620428
	Mounting holes 4 x Ø 3.2 mm	1620444	1620443
Device connectors, front mounting, central fastening			
	M18 x 0.75 fastening thread	1613544	1613546
	Accessories: M18 x 0.75 mm locking nut		
Device connectors, rear mounting, central fastening			
	M20 x 1.5 fastening thread	1613545	1613547
	Accessories: M20 x 1.5 mm locking nut		

¹⁾ Rated current for max. connection cross-section

For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

■ 6(5+PE)-pos.		■ 7(6+PE)-pos.		■ 8(7+PE)-pos.		■ 9(5+3+PE)-pos.	
Crimp		Crimp		Crimp		Crimp	
630		630		630		60 / 630	
14		14		14		3.6 / 14	
6 x 1		7 x 1		8 x 1		5 x 0.6 / 4 x 1	
0.06 ... 1.0		0.06 ... 1.0		0.06 ... 1.0		0.06 ... 0.5 / 0.06 ... 1.0	
Male	Female	Male	Female	Male	Female	Male	Female
1607710	1607727	1613569	1613588	1607746	1607768	1613611	1613630
1607711	1607728	1613570	1613589	1607747	1607769	1613612	1613631
1619213	1619214	1619215	1619216	1619217	1619218	1620462	1620461
1619190	1619191	1619192	1619193	1619194	1619195	1620460	1620459
1620431	1620432	1620433	1620434	1620435	1620436	1620437	1620438
1620448	1620447	1620450	1620449	1620452	1620451	1620454	1620453
1613548	1613550	1613553	1613572	1613590	1613592	1613595	1613614
1613831							
1613549	1613551	1613568	1613587	1613591	1613593	1613610	1613629
1600417							

M23		6(5+PE)-pos.		8(4+3+PE)-pos.		
 Web code: #0268	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	630		250 / 630		
	Rated current ¹⁾ [A]	30		9 / 30		
	Number of contacts/diameter [mm]	6 x 2		4 x 1 / 4 x 2		
	Litz wire cross-sections [mm ²]	0.25... 4.0		0.06... 1.0 / 0.25... 4.0		
	Pin assignment	Male	Female	Male	Female	
						
Cable connectors, SPEEDCON fast-locking system						
	Cable clamping range [mm] Short version, cable Ø 7.5 mm ... 14 mm 	7.5 ... 14	–	1618197	–	1618207
		5.5 ... 8.5	–	1627030	–	1627032
		7.5 ... 9	–	1618194	–	1618204
		9 ... 11	–	1618195	–	1618205
		11 ... 14	–	1618196	–	1618206
	Cable clamping range [mm] Long version, cable Ø 7.5 mm ... 18 mm 	7.5 ... 18	–	1618202	–	1618212
		7.5 ... 9	–	1618201	–	1618211
		9 ... 12	–	1618200	–	1618210
		12 ... 15	–	1618199	–	1618209
		15 ... 18	–	1618198	–	1618208
Cable connectors, standard locking						
	Cable clamping range [mm] Short version, cable Ø 7.5 mm ... 14 mm	7.5 ... 14	–	1605532	–	1605602
		5.5 ... 8.5	–	1627038	–	1627033
		7.5 ... 9	–	1605524	–	1605595
		9 ... 11	–	1605526	–	1605596
		11 ... 14	–	1605529	–	1605597
	Cable clamping range [mm] Long version, cable Ø 7.5 mm ... 18 mm	7.5 ... 18	–	1605549	–	1605617
		7.5 ... 9	–	1605548	–	1605614
		9 ... 12	–	1605546	–	1605610
		12 ... 15	–	1605545	–	1605607
		15 ... 18	–	1605543	–	1605605
Coupler connectors						
	Cable clamping range [mm] Short version, cable Ø 7.5 mm ... 14 mm	7.5 ... 14	1605499	–	1605575	–
		5.5 ... 8.5	1627034	–	1627035	–
		7.5 ... 9	1605494	–	1605568	–
		9 ... 11	1605496	–	1605570	–
		11 ... 14	1605498	–	1605571	–
	Cable clamping range [mm] Long version, cable Ø 7.5 mm ... 18 mm	7.5 ... 18	1605510	–	1605583	–
		7.5 ... 9	1605509	–	1605582	–
		9 ... 12	1605508	–	1605581	–
		12 ... 15	1605507	–	1605580	–
		15 ... 18	1605505	–	1605578	–

¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

M23		6(5+PE)-pos.		8(4+3+PE)-pos.		
 Web code: #0269	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	630		250 / 630		
	Rated current ¹⁾ [A]	30		9 / 30		
	Number of contacts/diameter [mm]	6 x 2		4 x 1 / 4 x 2		
	Litz wire cross-sections [mm ²]	0.25 ... 4.0		0.06 ... 1.0 / 0.25 ... 4.0		
	Pin assignment	Male	Female	Male	Female	
						
Device connectors, front mounting						
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1605520	–	1605589	–	
	With reinforced contact carrier for angled mating connectors Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1620619	–	1620620	–	
Device connectors, angled, rotatable, front mounting						
	Flange dimensions 26 mm x 26 mm Mounting holes 4 x Ø 3.2 mm	1620657	–	1620660	–	
	Flange dimensions 28 mm x 28 mm Mounting holes 4 x Ø 3.2 mm	1620661	–	1620662	–	
Device connectors, with knurled nut, front mounting						
	Straight Flange dimensions 26 mm x 26 mm, Mounting holes 4 x Ø 3.2 mm	–	1607082	–	1605622	
	Angled Flange dimensions 26 mm x 26 mm, Mounting holes 4 x Ø 3.2 mm	–	1607405	–	1607429	
Panel feed-throughs, front mounting, male-female²⁾						
	Fully wired internally and fitted with contacts Mounting holes 4 x Ø 3.2 mm	1605492		1605567		
Panel feed-throughs, rear mounting						
	Cable clamping range [mm] Short design Cable Ø 7.5 mm ... 14 mm Mounting holes 4 x Ø 3.2 mm	7.5 ... 14	1605517	–	1607051	–
		7.5 ... 9	1605516	–	1607048	–
		9 ... 11	1607037	–	1607049	–
		11 ... 14	1607038	–	1607050	–
	Cable clamping range [mm] Long design Cable Ø 7.5 mm ... 18 mm Mounting holes 4 x Ø 3.2 mm	7.5 ... 18	1605518	–	1607056	–
		7.5 ... 9	1607042	–	1607055	–
		9 ... 12	1607041	–	1607054	–
		12 ... 15	1607040	–	1607053	–
		15 ... 18	1607039	–	1607052	–

¹⁾ Rated current for max. connection cross-section

²⁾ Panel feed-through, male-female, only compatible with standard M23 screw locking mechanism.

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

POWER

M40		6(2+3+PE)-pos.		8(4+3+PE)-pos.		
i Web code: #0270	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	250 / 630		250 / 630		
	Rated current ¹⁾ [A]	30 / 70		30 / 70		
	Number of contacts/diameter [mm]	2 x 2 / 4 x 3.6		4 x 2 / 4 x 3.6		
	Litz wire cross-sections [mm ²]	0.14 ... 4.0 / 0.75 ... 16.0		0.14 ... 4.0 / 0.75 ... 16.0		
	Pin assignment	Male	Female	Male	Female	
Cable connectors, SPEEDCON fast-locking system						
	Cable clamping range [mm] Connection cross section up to 16 mm² 	9 ... 14	–	1613428	–	1613434
		14 ... 20.5	–	1613429	–	1613435
		20.5 ... 26.5	–	1613430	–	1613436
Cable connectors, standard locking						
	Cable clamping range [mm] Connection cross section up to 16 mm²	9 ... 14	–	1613518	–	1613528
		14 ... 20.5	–	1613519	–	1613529
		20.5 ... 26.5	–	1613520	–	1613530
Coupler connectors						
	Cable clamping range [mm] Connection cross section up to 16 mm²	9 ... 14	1613425	–	1613431	–
		14 ... 20.5	1613426	–	1613432	–
		20.5 ... 26.5	1613427	–	1613433	–
Device connectors, front mounting						
	Flange dimensions 40 mm x 40 mm mounting holes 4 x Ø 4.2 mm connection cross section up to 10 mm²	1613517	–	1613527	–	
Device connectors, angled, rotatable, front mounting						
	Flange dimensions 40 mm x 40 mm mounting holes 4 x Ø 4.4 mm connection cross section up to 10 mm²	1620663	–	1620664	–	


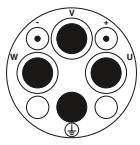
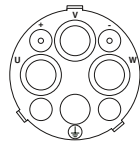
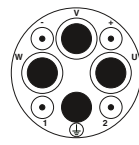
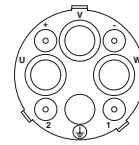



¹⁾ Rated current for max. connection cross-section

The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. For color rings for individually marking the connectors, see page 49. Please order crimp contacts separately, see page 52 onwards.

M40		6(2+3+PE)-pos.		8(4+3+PE)-pos.	
i Web code: #0272	Connection method	Crimp		Crimp	
	Rated voltage [V AC/DC]	250 / 630		250 / 630	
	Rated current ¹⁾ [A]	30 / 70		30 / 70	
	Number of contacts/diameter [mm]	2 x 2 / 4 x 3.6		4 x 2 / 4 x 3.6	
	Litz wire cross-sections [mm ²]	0.14 ... 4.0 / 0.75 ... 16.0		0.14 ... 4.0 / 0.75 ... 16.0	
	Pin assignment	Male	Female	Male	Female
Device connectors, with knurled nut, SPEEDCON fast-locking system, front mounting					
	Straight Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.2 mm Connection cross section up to 16 mm ² 	–	1613524	–	1613534
	Angled Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.2 mm Connection cross section up to 16 mm ² 	–	1613525	–	1613535
Device connectors, with knurled nut, standard locking, front mounting					
	Straight Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.2 mm Connection cross section up to 16 mm ²	–	1605823	–	1605865
	Angled Flange dimensions 40 mm x 40 mm Mounting holes 4 x Ø 4.2 mm Connection cross section up to 16 mm ²	–	1607532	–	1607543




¹⁾ Rated current for max. connection cross-section
 Please order crimp contacts separately; see page 52 onwards.

POWER

M58		6(2+3+PE)-pos.		8(4+3+PE)-pos.		
 Web code: #0273	Connection method	Crimp		Crimp		
	Rated voltage [V AC/DC]	250 / 630		250 / 630		
	Rated current ¹⁾ [A]	12 / 150		12 / 150		
	Number of contacts/diameter [mm]	2 x 1.6 / 4 x 10		4 x 1.6 / 4 x 10		
	Litz wire cross-sections [mm ²]	0.75 ... 1.5 / 10 ... 50		0.75 ... 1.5 / 10 ... 50		
	Pin assignment	Male	Female	Male	Female	
						
Cable connectors, standard locking						
	Cable clamping range [mm]	17 ... 25	–	1607503	–	1607508
		25 ... 36	–	1607501	–	1607507
Coupler connectors						
	Cable clamping range [mm]	17 ... 25	1607500	–	1607506	–
		25 ... 36	1607499	–	1607505	–
Device connectors, front mounting						
	Flange dimensions 60 mm x 60 mm, Mounting holes 4 x Ø 5.4 mm	1615686	–	1615687	–	

¹⁾ Rated current for max. connection cross-section




The cable clamping ranges specified may vary depending on the cable material and cable design. Selection and testing is the responsibility of the user. Please order crimp contacts separately, see page 52 onwards.

Color rings	For connectors, on the cable side	For device connectors			
 Web code: #0275					
	For individual marking of the connectors, 50 pcs. per set.				
Color rings for M17 COMPACT / M17 signal/power connectors					
Green	1617993	1620621			
Orange	1618049	1620622			
Black	1618050	1620623			
Color rings for M23 ADVANCE signal connectors					
Green	1620588	1620700 ¹⁾	1620704 ²⁾	1620624 ³⁾	
Orange	1620592	1620701 ¹⁾	1620705 ²⁾	1620625 ³⁾	
Black	1620593	1620702 ¹⁾	1620706 ²⁾	1620626 ³⁾	
Color rings for M23 HYBRID / M23 power connectors					
Green	1620585	1620624			
Orange	1620586	1620625			
Black	1620587	1620626			
Color rings for M40 HYBRID / M40 power connectors					
Green	1620558	1620627			
Orange	1620559	1620628			
Black	1620560	1620629			

¹⁾ For device connectors, front mounting: Pg13.5 and M20 fastening thread / rear mounting: Central fastening thread.

²⁾ For device connectors, front mounting: Flange dimensions 25 mm x 25 mm.

³⁾ For device connectors, angled, rotatable, front mounting: flange dimensions 26 mm x 26 mm.

Plastic protective caps	For connectors with external thread	For connectors with knurled nut
 Web code: #0566		
	IP40 when locked	
Plastic protective cap for signal connectors		
M17	1607776	1607777
M17 COMPACT	1621049	1621904
M23	1604225	1604223
M23, antistatic	1611797	1611796
M23, with eyelet for fastening wire	1607449	–
Plastic protective cap for hybrid connectors		
M23	1622137	1604223
M40	1605866	1624199
Plastic protective cap for power connectors		
M17	1607776	1607777
M17 COMPACT	1621049	1621904
M23	1604225	1604223
M23, antistatic	1611797	1611796
M23, with eyelet for fastening wire	1607449	–
M40	1605866	1624199 *
M58	1607926	–

* Only suitable for SPEEDCON fast-locking system.

Metal protective caps	For connectors with external thread	For connectors with knurled nut
<p>i Web code: #0566</p>	 <p style="text-align: center;">IP67 when locked</p>	
Metal protective cap for signal connectors		
M17	1616069	-
M17, with steel wire and eyelet for fastening on the device	1616068	-
M17, with steel wire and loop for fastening on the cable	-	1627217
M23	1604260	-
M23, with steel wire and eyelet for fastening on the device	1604236	1604228
M23, with steel wire and loop for fastening on the cable	-	1627224
Metal protective cap for hybrid connectors		
M23	1622138	1622140
M23, with steel wire and eyelet for fastening on the device	1622139	1622141
M23, with steel wire and loop for fastening on the cable	-	1627226
M40	1623827	-
M40, with steel wire and eyelet for fastening on the device	1623828	-
M40, with steel wire and loop for fastening on the cable	-	1627218
Metal protective cap for power connectors		
M17	1616069	-
M17, with steel wire and eyelet for fastening on the device	1616068	-
M17, with steel wire and loop for fastening on the cable	-	1627217
M23	1605456	1622140
M23, with steel wire and eyelet for fastening on the device	1605457	1622141
M23, with steel wire and loop for fastening on the cable	-	1627226
M40	1623827	-
M40, with steel wire and eyelet for fastening on the device	1623828	-
M40, with steel wire and loop for fastening on the cable	-	1627218

Crimp contacts Ø 0.6 to Ø 1.6 mm		Signal			
Web code: #0276	Series	M17 COMPACT / M17		M23 ADVANCE	
	Crimp range [mm ²]	Male	Female	Male	Female
Crimp contacts, turned, Ø 0.6 mm					
	0.06 ... 0.25	1607577	1607580	–	–
	0.14 ... 0.34	1607578	1607581	–	–
	0.34 ... 0.5	1607579	1607582	–	–
Crimp contacts, turned, Ø 0.8 mm					
	0.08 ... 0.25	–	–	–	–
	0.34 ... 0.5	–	–	–	–
Crimp contacts, turned, Ø 1.0 mm					
	0.06 ... 0.2	–	–	–	–
	0.06 ... 0.25	1618255	1618239	–	–
	0.08 ... 0.22	–	–	1596770 1623776 ¹⁾	1596772
	0.14 ... 0.5	–	–	–	–
	0.14 ... 0.56	–	–	1597862 1623777 ¹⁾	1599600
	0.34 ... 0.5	–	–	–	–
	0.25 ... 1.0	1618458	1618464	–	–
	0.5 ... 1.0	–	–	1602996 1623778 ¹⁾	1602998
	0.5 ... 1.5	–	–	–	–
	1.0 ... 1.5	–	–	–	–
Crimp contacts, rolled, Ø 1.0 mm					
	0.08 ... 0.22, Roll of 500 pcs.	–	–	1603313	1603318
	0.08 ... 0.22, Roll of 10,000 pcs.	–	–	1611637	1616500
	0.22 ... 0.56, Roll of 500 pcs.	–	–	1603324	1603330
	0.22 ... 0.56, Roll of 10,000 pcs.	–	–	1603325	1603332
Crimp contacts, turned, Ø 1.5 mm					
	0.08 ... 0.22	–	–	–	1627290
	0.5 ... 1.0	–	–	1623779	1623775
	0.5 ... 1.0	–	–	1623780 ²⁾	–
Crimp contacts, turned, Ø 1.6 mm					
	0.75 ... 1.0	–	–	–	–
Crimping tools					
Crimping tools as accessories for contacts can be found at phoenixcontact.com					

¹⁾ For 19-pos. ²⁾ Leading contact. ³⁾ M40 hybrid CAT5 version. ⁴⁾ M40 hybrid signal version.
Crimp contacts Ø 2.0 mm / Ø 3.6 mm / Ø 10.0 mm see page 54.

Hybrid				Power							
M23		M40		M17 COMPACT / M17		M23		M40		M58	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
-	-	-	-	1607577	1607580	-	-	-	-	-	-
-	-	-	-	1607578	1607581	-	-	-	-	-	-
-	-	-	-	1607579	1607582	-	-	-	-	-	-
1621574	1621571	1621574 ³⁾	1621571 ³⁾	-	-	-	-	-	-	-	-
1621575	1621573	1621575 ³⁾	1621573 ³⁾	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
1618255	1618239	1623607 ^{3), 4)} 1618255 ⁴⁾	1623603 ^{3), 4)} 1618239 ⁴⁾	1618255	1618239	1605559	1605562	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	1607355	1607356	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	1623611 ^{3), 4)}	1623604 ^{3), 4)}	-	-	-	-	-	-	-	-
1618458	1618464	1618458 ⁴⁾	1618464 ⁴⁾	1618458	1618464	1605554	1605557	-	-	-	-
-	-	1623612 ^{3), 4)}	1623605 ^{3), 4)}	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1605566	-	-	-	-
-	-	1623613 ^{3), 4)}	1623606 ^{3), 4)}	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	1607909	1607956

SIGNAL

HYBRID


POWER

Crimp contacts Ø 2.0 to Ø 10.0 mm		Signal			
Web code: #0276	Series	M17 COMPACT / M17		M23 ADVANCE	
	Crimp range [mm ²]	Male	Female	Male	Female
Crimp contacts, turned, Ø 2.0 mm					
	0.14 ... 0.25	-	-	-	-
	0.25 ... 1.0	-	-	-	-
	0.50 ... 0.75	-	-	1603529	1603530
	0.75 ... 1.0	-	-	1603498	1603501
	0.75 ... 1.5	-	-	-	-
	1.0 ... 1.5	-	-	1603513	1603517
	1.0 ... 2.5	-	-	-	-
	1.5 ... 2.5	-	-	1603505	1603509
	2.5 ... 4.0	-	-	-	-
	4.0	-	-	-	-
Crimp contacts, turned, Ø 3.6 mm					
	0.75 ... 1.5	-	-	-	-
	1.0 ... 2.5	-	-	-	-
	2.5 ... 4.0	-	-	-	-
	4.0 ... 6.0	-	-	-	-
	6.0 ... 10.0	-	-	-	-
	10.0	-	-	-	-
	16.0	-	-	-	-
Crimp contacts, turned, Ø 10.0 mm					
	10.0	-	-	-	-
	16.0	-	-	-	-
	25.0	-	-	-	-
	35.0	-	-	-	-
	50.0	-	-	-	-
Crimping tools					
Crimping tools as accessories for contacts can be found at phoenixcontact.com					

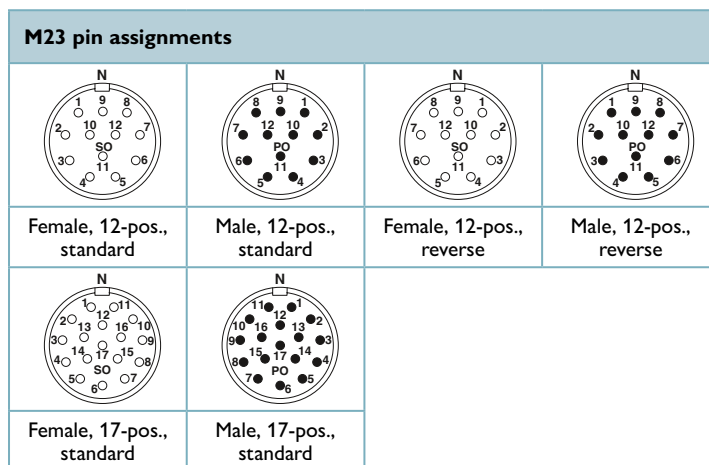
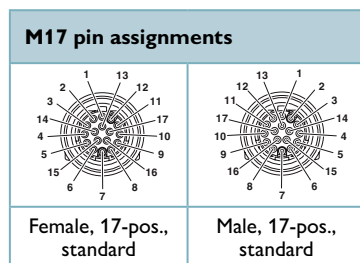
¹⁾ Only for device connectors. ²⁾ Only for coupler connectors. ³⁾ Not suitable for device connectors, angled, rotatable.

Hybrid				Power							
M23		M40		M17 COMPACT / M17		M23		M40		M58	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
-	-	-	-	-	-	1605646	-	1605646 ¹⁾	-	-	-
1621579	1621576	-	-	1607655	1607657	1605634	1605636	1605634 ¹⁾ 1605738 ²⁾	1605636	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	1607376	1605631	1607376 ¹⁾ 1605736 ²⁾	1605631	-	-
-	-	-	-	-	-	-	-	-	-	-	-
1621580	1621577	-	-	1607656	1607658	1605639	1605643	1605639 ¹⁾ 1605739 ²⁾	1605643	-	-
1621581	1621578	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	1605626	1605628	1605626 ¹⁾ 1605741 ²⁾	1605628	-	-
-	-	-	-	-	-	-	-	1605743 ¹⁾	-	-	-
-	-	-	-	-	-	-	-	1607057 ¹⁾ 1605749 ²⁾	1605756	-	-
-	-	1623383	1623378	-	-	-	-	1605750 ²⁾	1605758	-	-
-	-	1623384	1623379	-	-	-	-	1605745 ¹⁾ 1605754 ²⁾	1605760	-	-
-	-	-	-	-	-	-	-	1605747 ¹⁾ 1605752 ²⁾	1605762	-	-
-	-	1623385	1623380	-	-	-	-	-	-	-	-
-	-	1623386 ³⁾	1623381 ³⁾	-	-	-	-	1623970 ²⁾	1623972	-	-
-	-	-	-	-	-	-	-	-	-	1607911	1607916
-	-	-	-	-	-	-	-	-	-	1607912	1607917
-	-	-	-	-	-	-	-	-	-	1607913	1607918
-	-	-	-	-	-	-	-	-	-	1607914	1607919
-	-	-	-	-	-	-	-	-	-	1607915	1607920











SIGNAL















M17 and M23, plastic molded		M17 straight	M23 straight	M23 angled
		17-pos., standard	12-pos., reverse	12-pos., reverse
Cable type		E01	E00	E00
Cable design	[mm ²]	3x2x0.14+2x0.5+4x0.14+4x0.22	4x2x0.25+2x0.5	4x2x0.25+2x0.5
Cable color		Green	Orange	Orange
Rated voltage	[V AC/DC]	48 / 74	48 / 74	48 / 74
Rated current	[A]	3.6	9	9
Temperature range, flexible	[°C]	-30 ... +60	-20 ... +60	-20 ... +60
Temperature range, fixed	[°C]	-30 ... +80	-40 ... +80	-40 ... +80
Grip/sheath/wire insulation material		TPU/TPU/TPM	TPU/TPU/PP	TPU/TPU/PP
 Web code: #0277				
		Female	Female	Female
Free cable end	Cable length			
	2 m	1624780	1619247	1619280
	5 m	1624781	1619248	1619281
	10 m	1624782	1619249	1619282
M17, male				
	2 m	1624778	–	–
	5 m	1624783	–	–
	10 m	1624784	–	–
M23, male				
	2 m	–	1619289	–
	5 m	–	1619290	–
	10 m	–	1619291	–

Customer-specific versions and lengths, also with SPEEDCON fast-locking system, are available on request.










M23 straight	M23 angled	M23 straight	M23 angled
12-pos., standard	12-pos., standard	17-pos., standard	17-pos., standard
E00	E00	E01	E01
4x2x0.25+2x0.5	4x2x0.25+2x0.5	3x2x0.14+2x0.5+4x0.14+4x0.22	3x2x0.14+2x0.5+4x0.14+4x0.22
Orange	Orange	Green	Green
48 / 74	48 / 74	48 / 74	48 / 74
9	9	9	9
-20 ... +60	-20 ... +60	-30 ... +60	-30 ... +60
-40 ... +80	-40 ... +80	-30 ... +80	-30 ... +80
TPU/TPU/PP	TPU/TPU/PP	TPU/TPU/TPM	TPU/TPU/TPM
			
Female	Female	Female	Female
1619250	1619285	1619277	1619286
1619273	1619283	1619278	1619287
1619274	1619284	1619279	1619288
-	-	-	-
-	-	-	-
-	-	-	-
1619292	-	1619295	-
1619293	-	1619296	-
1619294	-	1619297	-

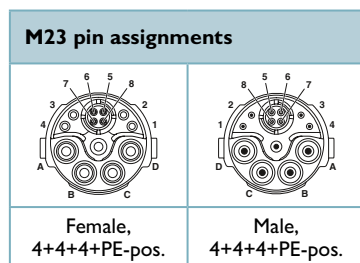
Assignment: cable type E00, feedback, 12-pos.					
Pin	Wire color		Pin	Wire color	
1	PK		7	VT	
2	RD		8	GY	
3	BK		9	Outer shield	
4	BU		10	WH	
5	BN		11	n.c.	
6	GN		12	BN	



Assignment: cable type E01, feedback, 17-pos.					
Pin	Wire color		Pin	Wire color	
1	YE		10	BNRD	
2	GN		11	BK	
3	RD		12	BN	
4	n.c.		13	OG	
5	BU		14	WHBK	
6	n.c.		15	BNGY	
7	BNBU		16	BNYE	
8	GNBK		17	n.c. Inner shields on housing	
9	GNRD				

HYBRID

M23, in molded plastic		M23 straight	M23 straight
		4+4+4+PE-pos. (CAT5, 100 Mbps)	
Cable type		H00	H00
Cable design	[mm ²]	(5 x 2.5 + 4 x AWG 22/C + 4 x 0.5)C	(5 x 2.5 + 4 x AWG 22/C + 4 x 0.5)C
Cable color		Orange	Orange
Rated voltage	[V AC/DC]	630 / 850	630 / 850
Rated current	[A]	26 / 8	26 / 8
Temperature range, flexible	[°C]	-30 ... +60	-30 ... +60
Temperature range, fixed	[°C]	-40 ... +80	-40 ... +80
Grip/sheath/wire insulation material		TPU/PUR/TPE, polyolefin	TPU/PUR/TPE, polyolefin
 Web code: #0282			
		Female	Male
Free cable end	Cable length		
	2 m	1622224	1622227
	5 m	1622225	1622228
	10 m	1622226	1622229
M23 straight, male			
	2 m	1622244	–
	5 m	1622245	–
	10 m	1622246	–
M23 straight, male			
	2 m	1622247	–
	5 m	1622248	–
	10 m	1622249	–
M23 angled, male			
	2 m	–	–
	5 m	–	–
	10 m	–	–





Customer-specific versions and lengths are available on request.



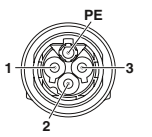
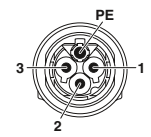



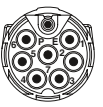
■ M23 angled	■ M23 angled
4+4+4+PE-pos. (CAT5, 100 Mbps)	
H00	H00
(5 x 2.5 + 4 x AWG 22/C + 4 x 0.5)C	(5 x 2.5 + 4 x AWG 22/C + 4 x 0.5)C
Orange	Orange
630 / 850	630 / 850
26 / 8	26 / 8
-30 ... +60	-30 ... +60
-40 ... +80	-40 ... +80
TPU/PUR/TPE, polyolefin	TPU/PUR/TPE, polyolefin
	
Female	Male
1622230	1622233
1622231	1622234
1622232	1622243
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
1622250	-
1622251	-
1622252	-

Assignment: cable type H00, hybrid, 4+4+4+PE							
Pin	Wire color		Cross section	Pin	Wire color		Cross section
			[mm ²]				[mm ²]
A	BK1	●	2.5	3	BK	●	0.5
B	BK2	●	2.5	4	GN	●	0.5
C	BK3	●	2.5	5	BU	●	0.34
D	BK4	●	2.5	6	YE	●	0.34
PE	GNYE	●	2.5	7	WH	○	0.34
1	BN	●	0.5	8	OG	●	0.34
2	VT	●	0.5				

POWER



M17, in molded plastic		M17 straight	
		4 (3+PE)-pos.	
Cable type		B00	B01
Cable design	[mm ²]	4x1.5	4 x 2.5
Cable color		Orange	Orange
Rated voltage	[V AC/DC]	630	630
Rated current	[A]	18	26
Temperature range, flexible	[°C]	-20 ... +60	-20 ... +70
Temperature range, fixed	[°C]	-40 ... +80	-50 ... +80
Grip/sheath/wire insulation material		TPU/PUR/TPM	TPU/TPU/TPM
 Web code: #0279			
Free cable end	Cable length		
	2 m	1619298	1619301
	5 m	1619299	1619302
	10 m	1619300	1619303
M17 straight, male			
	2 m	1619304	1619326
	5 m	1619305	1619327
	10 m	1619306	1619328

Customer-specific versions and lengths, also with SPEEDCON fast-locking system, are available on request.

M17 pin assignments			
			
Female, 3+PE-pos.	Male, 3+PE-pos.	Female, 5+PE-pos.	Male, 5+PE-pos.
			
Female, 7+PE-pos.	Male, 7+PE-pos.		

Assignment: cable type B00/B01, servo, 3+PE			
Pin	Wire color		Function
1	BK U	●	U motor
2	BK V	●	V motor
3	BK W	●	W motor
PE	GNYE	●	⏏

Assignment: cable type C00, servo, 5+PE			
Pin	Wire color		Function
1	BK1	●	U motor
6	BK2	●	V motor
7	BK3	●	W motor
PE	GNYE	●	⏏
3	BK5	●	Brake
4	BK6	●	Brake

M17 straight		M17 straight	
6(5+PE)-pos.		8(7+PE)-pos.	
C00	C01	D00	D01
4 x 0.75 + 2 x 0.5	4 x 1.0 + 2 x 0.5	4 x 0.75 + 2 x 2 x 0.34	4 x 1.0 + 2 x 2 x 0.75
Orange	Orange	Orange	Orange
630	630	630	630
12 / 9	15 / 9	12 / 6	15 / 12
-30 ... +70	-5 ... +70	-30 ... +90	-20 ... +60
-40 ... +80	-30 ... +70	-40 ... +90	-40 ... +80
TPU/PUR/TPM	TPU/PUR/TPE	TPU/PUR/TPM	TPU/PUR/TPM
			
Female	Female	Female	Female
1619307	1619310	1624785	1619313
1619308	1619311	1624786	1619314
1619309	1619312	1624792	1619315
1619316	1619319	1624787	1619323
1619317	1619321	1624788	1619324
1619318	1619322	1624789	1619325


Assignment: cable type C01, servo, 5+PE

Pin	Wire color	Function
1	BK U ●	U motor
6	BK V ●	V motor
7	BK W ●	W motor
PE	GNYE ●	⏏
3	BK ●	Brake
4	WH ○	Brake

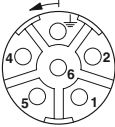
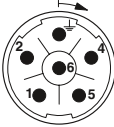
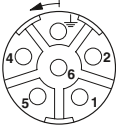
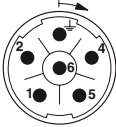
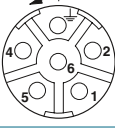
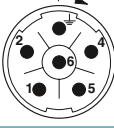
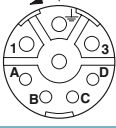
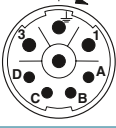
Assignment: Cable type D00/D01, servo, 7+PE

Pin	Wire color	Function
1	BK1 ●	U motor
2	BK2 ●	V motor
3	BK3 ●	W motor
PE	GNYE ●	⏏
4	BK5 ●	Brake
5	BK6 ●	Brake
6	BK7 ●	Temp +
7	BK8 ●	Temp -

POWER



M23, in molded plastic		M23 straight	
		4 (3+PE)-pos.	5(4+PE)-pos.
Cable type		A00	A01
Cable design	[mm ²]	4 x 4.0	5 x 4.0
Cable color		Gray	Gray
Rated voltage	[V AC/DC]	630	630
Rated current	[A]	34	34
Temperature range, flexible	[°C]	–	–
Temperature range, fixed	[°C]	-40 ... +90	-40 ... +90
Grip/sheath/wire insulation material		TPU/PVC/PVC	TPU/PVC/PVC
 Web code: #0280			
		Female	Female
Free cable end	Cable length		
	2 m	1624771	1625776
	5 m	1619622	1625777
	10 m	1624772	1625775
M17 straight, male			
	2 m	1624773	1625779
	5 m	1619606	1625781
	10 m	1624774	1625780

Customer-specific versions and lengths, also with SPEEDCON fast-locking system, are available on request.

M23 pin assignments			
			
Female, 3+PE-pos.	Male, 3+PE-pos.	Female, 4+PE-pos.	Male, 4+PE-pos.
			
Female, 5+PE-pos.	Male, 5+PE-pos.	Female, 4+3+PE-pos.	Male, 4+3+PE-pos.

Assignment: cable type A00, energy, 3+PE			
Pin	Wire color		Function
1	n.c.		
2	BK3	●	
4	BK1	●	
5	BK2	●	
6	n.c.		
PE	GNYE	●	⏏

Assignment: cable type A01, energy, 4+PE			
Pin	Wire color		Function
1	BK4	●	
2	BK3	●	
4	BK1	●	
5	BK2	●	
6	n.c.		
PE	GNYE	●	⏏

M23 straight		M23 straight	
6(5+PE)-pos.		8(4+3+PE)-pos.	
C02	C03	D02	D03
4 x 1.5 + 2 x 1.5	4x2.5 + 2x1.5	4 x 1.5 + 2 x 2 x 0.75	4 x 2.5 + 2 x 2 x 1.0
Orange	Orange	Orange	Orange
630	630	630 / 250	630 / 250
18	26 / 18	18 / 12	26 / 12
-20 ... +60	-20 ... +70	-20 ... +60	-20 ... +60
-40 ... +80	-50 ... +80	-40 ... +80	-40 ... +80
TPU/PUR/TPM	TPU/TPU/TPM	TPU/PUR/TPM	TPU/PUR/TPM
			
Female	Female	Female	Female
1618957	1620396	1620399	1620402
1618958	1620397	1620400	1620404
1618959	1620398	1620401	1620405
1618964	1620406	1620409	1620412
1618965	1620407	1620410	1620413
1618966	1620408	1620411	1620414




Assignment: cable type C02/C03, servo, 5+PE

Pin	Wire color	Function
1	BK U ●	U motor
2	BK V ●	V motor
6	BK W ●	W motor
PE	GNYE ●	⊥
4	BK ●	Brake
5	WH ○	Brake

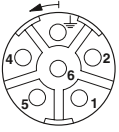
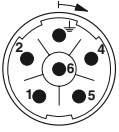
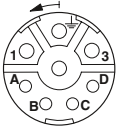
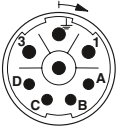
Assignment: cable type D02/D03, servo, 4+3+PE



Pin	Wire color	Function
1	BK1 ●	U motor
3	BK2 ●	V motor
4	BK3 ●	W motor
PE	GNYE ●	⊥
A	BK5 ●	Brake
B	BK6 ●	Brake
C	BK7 ●	Temp +
D	BK8 ●	Temp -

POWER

M23, in molded plastic		M23 angled
		6(5+PE)-pos.
Cable type		C02
Cable design	[mm ²]	4 x 1.5 + 2 x 1.5
Cable color		Orange
Rated voltage	[V AC/DC]	630
Rated current	[A]	18
Temperature range, flexible	[°C]	-20 ... +60
Temperature range, fixed	[°C]	-40 ... +80
Grip/sheath/wire insulation material		TPU/PUR/TPM
 Web code: #0280		 Female
Free cable end	Cable length	
	2 m	1620415
	5 m	1620416
	10 m	1620417

Angled designs can be combined with straight device connectors with a reinforced contact carrier. For 5+PE: [1620619](#), 4+3+PE: [1620620](#); see page 45. Customer-specific versions and lengths, also with SPEEDCON fast-locking system, are available on request.

M23 pin assignments			
			
Female, 5+PE-pos.	Male, 5+PE-pos.	Female, 4+3+PE-pos.	Male, 4+3+PE-pos.

M23 angled		M23 angled	
6(5+PE)-pos.		8(4+3+PE)-pos.	
C03		D02	D03
4x2.5 + 2x1.5		4 x 1.5 + 2 x 2 x 0.75	4 x 2.5 + 2 x 2 x 1.0
Orange		Orange	Orange
630		630 / 250	630 / 250
26 / 18		18 / 12	26 / 12
-20 ... +70		-20 ... +60	-20 ... +60
-50 ... +80		-40 ... +80	-40 ... +80
TPU/TPU/TPM		TPU/PUR/TPM	TPU/PUR/TPM
			
Female		Female	Female
1620418		1620421	1620424
1620419		1620422	1620425
1620420		1620423	1620426





Assignment: cable type C02/C03, servo, 5+PE

Pin	Wire color	Function
1	BK U ●	U motor
2	BK V ●	V motor
6	BK W ●	W motor
PE	GNYE ●	⏏
4	BK ●	Brake
5	WH ○	Brake

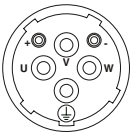
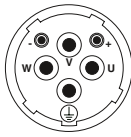
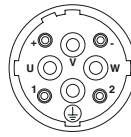
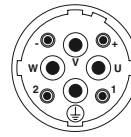
Assignment: cable type D02/D03, servo, 4+3+PE

Pin	Wire color	Function
1	BK1 ●	U motor
3	BK2 ●	V motor
4	BK3 ●	W motor
PE	GNYE ●	⏏
A	BK5 ●	Brake
B	BK6 ●	Brake
C	BK7 ●	Temp +
D	BK8 ●	Temp -

POWER

M40, in molded plastic		M40 straight		
		6(2+3+PE)-pos.		
Cable type		C03	C04	C05
Cable design	[mm ²]	4x2.5 + 2x1.5	4 x 4.0 + 2 x 1.5	4 x 6.0 + 2 x 1.5
Cable color		Orange	Orange	Orange
Rated voltage	[V AC/DC]	630 / 250	630 / 250	630 / 250
Rated current	[A]	26 / 18	34 / 18	44 / 18
Temperature range, flexible	[°C]	-20 ... +70	-20 ... +70	20 ... +70
Temperature range, fixed	[°C]	-50 ... +80	-50 ... +80	50 ... +80
Grip/sheath/wire insulation material		TPU/TPU/TPM	TPU/TPU/TPM	TPU/PUR/TPE
 Web code: #0281				
Free cable end	Cable length			
	2 m	1619329	1620311	1620316
	5 m	1620309	1620313	1620317
	10 m	1620310	1620314	1620318
M40 straight, male				
	2 m	1620345	1620348	1620376
	5 m	1620346	1620349	1620377
	10 m	1620347	1620375	1620378

Customer-specific versions and lengths, also with SPEEDCON fast-locking system, are available on request.

M40 pin assignments			
			
Female, 2+3+PE-pos.	Male, 2+3+PE-pos.	Female, 4+3+PE-pos.	Male, 4+3+PE-pos.

M40 straight

8(4+3+PE)-pos.

C06	D03	D04	D05	D06
4x10.0 + 2x1.5	4 x 2.5 + 2 x 2 x 1.0	4 x 4.0 + 2 x 1.5 + 2 x 1.0	4 x 6.0 + 2 x 1.5 + 2 x 1.0	4 x 10.0 + 2 x 1.5 + 2 x 1.0
Orange	Orange	Orange	Orange	Orange
630 / 250	630 / 250	630 / 250	630 / 250	630 / 250
61 / 18	26 / 12	34 / 18 / 15	44 / 18 / 15	61 / 18 / 15
-20 ... +70	-20 ... +60	-30 ... +80	-30 ... +60	-20 ... +60
-50 ... +80	-40 ... +80	-45 ... +80	-30 ... +80	-40 ... +80
TPU/TPU/TPM	TPU/PUR/TPM	TPU/PUR/TPM	TPU/PUR/TPM	TPU/PUR/TPM



Female	Female	Female	Female	Female
1620319	1620322	1620325	1620339	1620342
1620320	1620323	1620337	1620340	1620343
1620321	1620324	1620338	1620341	1620344
1620379	1620382	1620385	1620390	1620393
1620380	1620383	1620386	1620391	1620394
1620381	1620384	1620387	1620392	1620395

Assignment: cable type C03/C04/C05/C06, servo, 2+3+PE

Pin	Wire color	Function
U	BK U ●	U motor
V	BK V ●	V motor
W	BK W ●	W motor
PE	GNYE ●	⏚
+	BK ●	BR1 brake
-	WH ○	BR2 brake

Assignment: Cable type D03/D04/D05/D06, servo, 4+3+PE

Pin	Wire color	Function
U	BK1 ●	U motor
V	BK2 ●	V motor
W	BK3 ●	W motor
PE	GNYE ●	⏚
+	BK7 ●	Temp +
-	BK8 ●	Temp -
1	BK5 ●	Brake
2	BK6 ●	Brake

Excellent services

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

The easy way to more choice

Choose online from 60,000 products and find the right solution quickly:

- Intuitive filter and search functions
- Comprehensive technical data and downloads such as drawings and 3D models
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The easy way to more individuality

Customize your products with colors, printing, and special designs:

- Customer-specific versions
- Customized new products
- Intuitive online configurators





Simple selection with filters and technical data



There is a separate detail page for every product



There is a data sheet available for download for each item



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



Device connection technology can be comprehensively configured



Housing parts and connection technology are easy to configure



Cable and assembly systems can be configured easily



Phoenix Contact provides support, from the initial idea all the way to series production

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

i Web code: #2594

Excellent services

Phoenix Contact supports device designers with excellent services, even beyond the design-in process. Benefit from flexible procurement and global availability of our items. As your expert partner, our experts will keep you up-to-date on the latest technologies and trends.

The easy way to more flexibility

Use our different procurement channels and benefit from worldwide availability.

- All products can easily be ordered online
- Free sample service
- Globally reliable logistics network thanks to direct shipping or distribution

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Always stay up-to-date about technologies and trends with us as your reliable partner.

- Technology, industry, and design-in experts by your side
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The online sample service is available in a large number of countries



Find the desired product quickly with intuitive filters



Product samples are available with free shipping



Reliable logistics worldwide



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



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




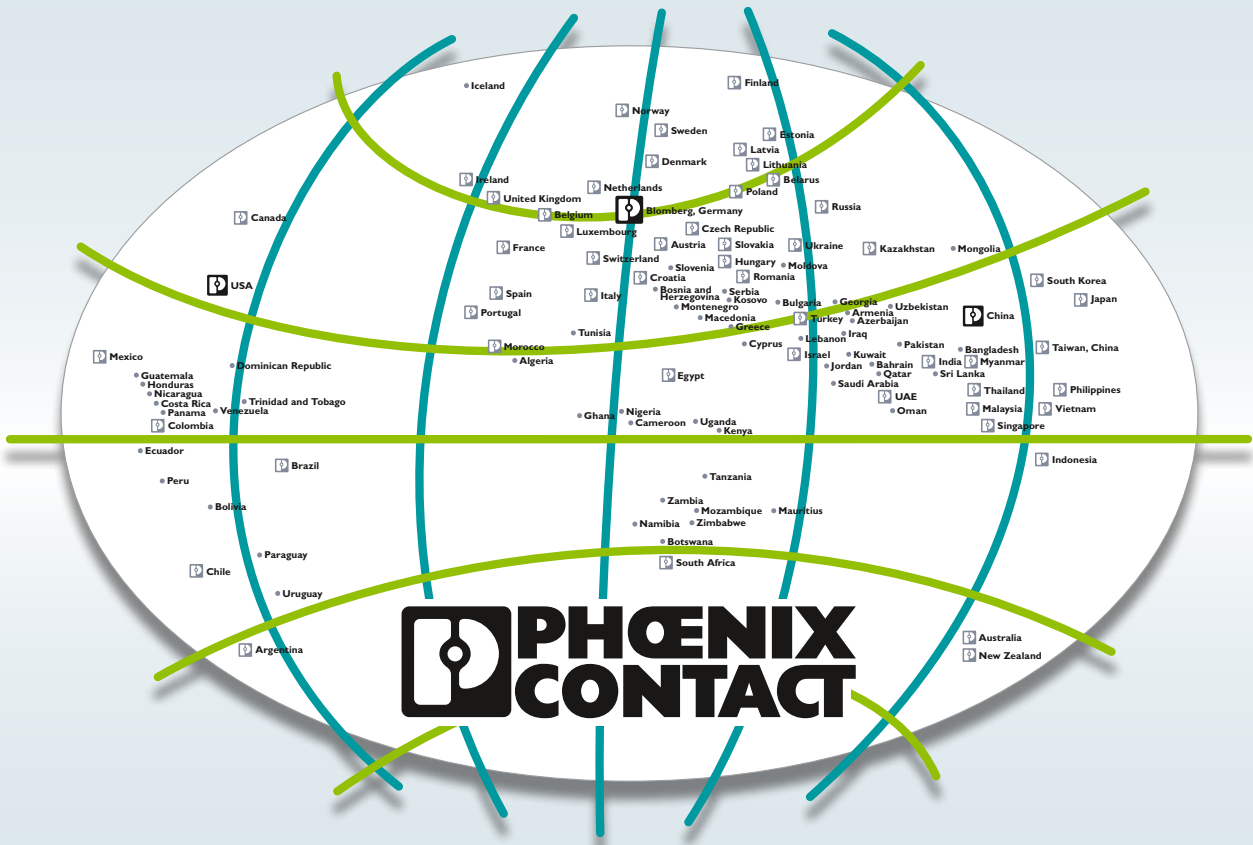
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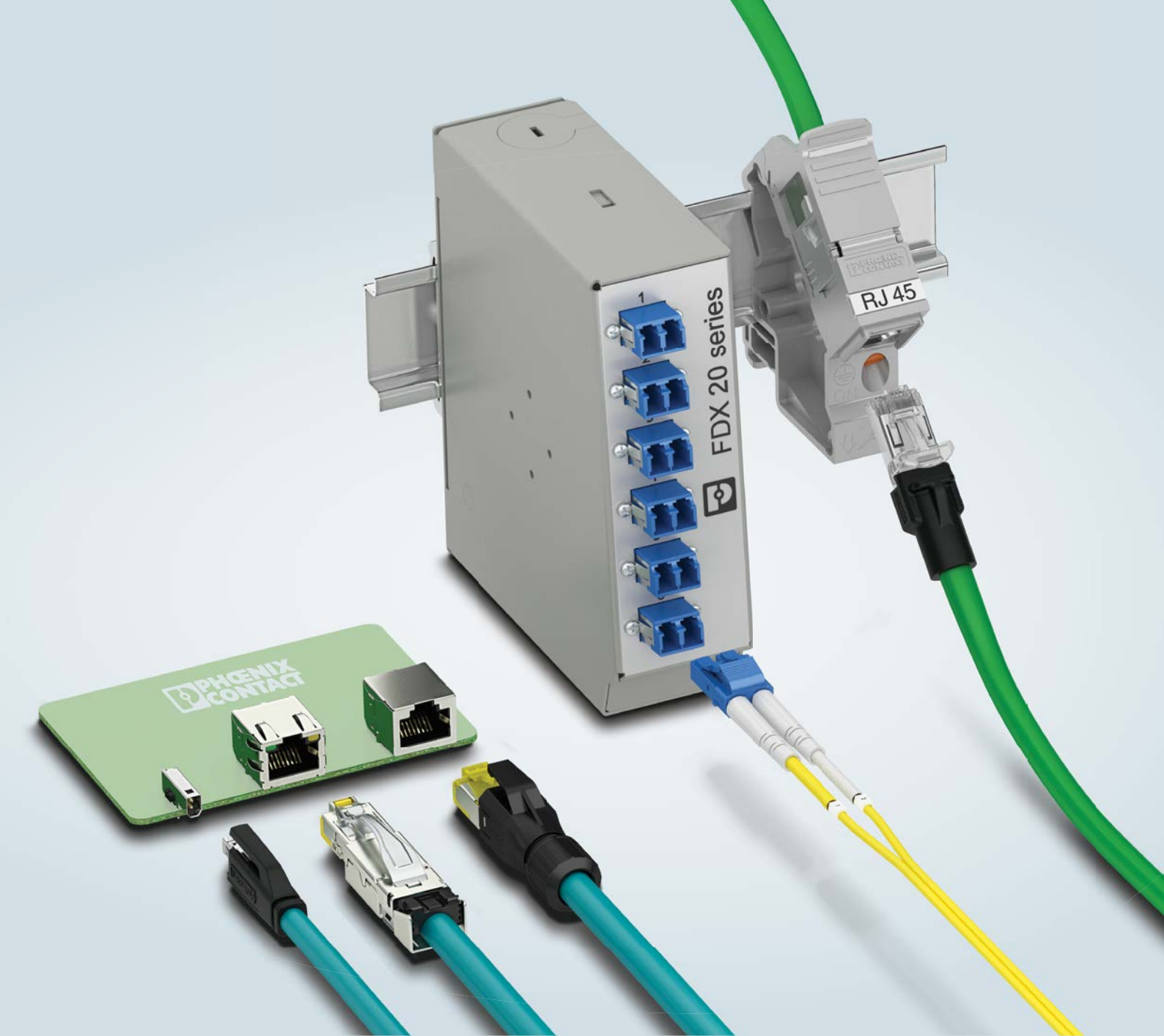
Open communication with customers and partners worldwide

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

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

You can find your local partner at

phoenixcontact.com

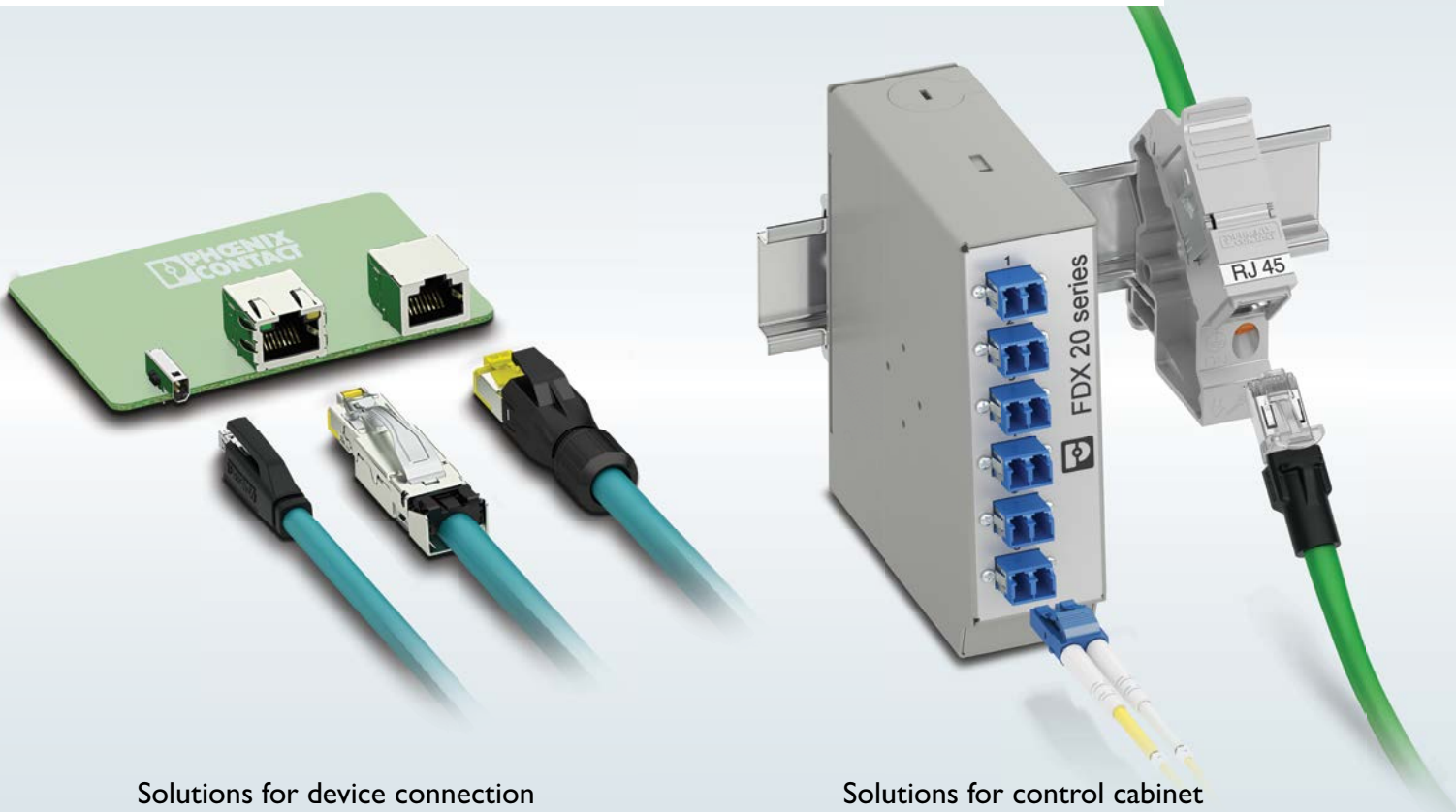


Data connectors

Product overview 2021

Reliable data connectors for copper and FO applications

Phoenix Contact provides reliable data connectors for a huge range of industrial and semi-industrial applications. Whether for copper or fiber optics, IP20 or IP69K protection class – our connection solutions satisfy the highest demands. Splice boxes, distributors, and adapters round out the comprehensive solution range.



Solutions for device connection

Phoenix Contact has the right device connector for your application. From SPE for printed circuit boards and M12 panel feed-throughs to D-SUB connectors, Phoenix Contact has a comprehensive portfolio of different pin connector patterns for a wide range of transmission properties.

Solutions for control cabinet cabling

Along with classic connectors, the product portfolio also includes creative solutions for your control cabinet application. Phoenix Contact DIN rail adapters and splice boxes combine high packing density with easy handling.



Solutions for field cabling

From IP20 degree of protection right through to IP67, Phoenix Contact enables assembly without the need for special tools and provides reliable components for every application. Whether for use directly on your machine, in buildings, or even outdoors, Phoenix Contact connection solutions are the perfect choice in any environment.

Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter the # 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

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Excellent services	

Unrivalled variety for copper and FO cabling

Create consistent solutions for reliable data transmission at speeds of up to 40 Gbps with our wide range of designs, codings, and pin assignments.

Always the right connection



For compact device connection



For flexible on-site connection



For easy cabling

F-SMA



SC DUPLEX



LC DUPLEX



SC-RJ



SC-RJ
version 6



SC-RJ
version 14



ODC/Q-ODC



M17 MPO



SPE IP20

new



ST



ODC

MPO

ST

F-SMA

FO

SPE M8

new



SPE

SC

DATA

RJ45

new



RJ45 INDUSTRIAL



CU

RJ45

RJ45 version 6



D-SUB

USB



D-SUB 9/15/25



USB mini M12



USB type A and B



RJ45 version 14

Copper-based data cabling for networks and fieldbuses

Complex automation processes call for high volumes of data at ever-increasing transmission speeds. Benefit now from high-performance connectors and cables designed for assembly on site. Whether future-proof high-speed cabling up to 10 Gbps or innovative hybrid cabling – we have the perfect solution for your automation network.

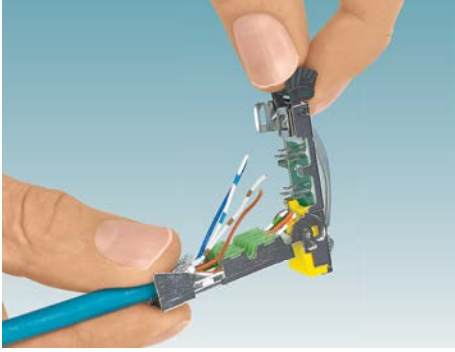


i Web code:
#0297

Main features

- Transmission speeds of up to 10 Gbps
- Solutions from IP20 through to IP69K
- Spring, pierce, and IDC connection
- 360° shielding concepts

Your advantages at a glance



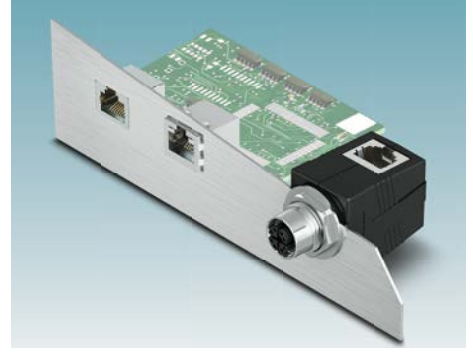
Fast assembly

without special tools – with IDC and pierce fast connection.



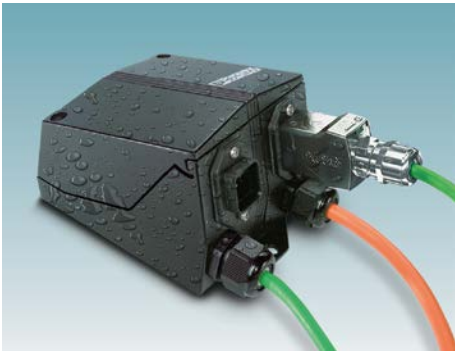
Wide range of connectors

from SPE and RJ45 through USB and D-SUB to M12.



Flexible device connection

with versatile housing feed-throughs for devices and control cabinets.



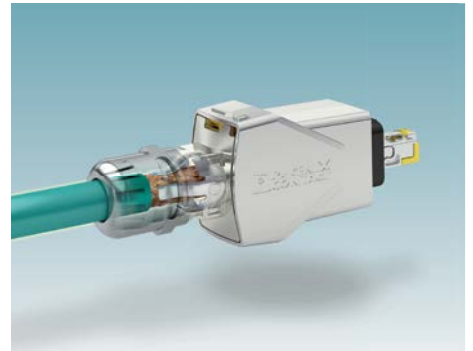
Reliable protection

against extreme temperatures, liquids, vibrations, and UV light.



Fast data transmission

with data rates of up to 10 Gbps and components in accordance with the CAT6_A standard.



Special shielding concepts

with 360° EMC shielding guarantee a high level of resistance to EMI and ESD.

Choose a flexible type of cabling

Whether for machine building and systems manufacturing, building automation or process automation – with copper-based data connectors from Phoenix Contact, you are opting for a flexible type of cabling that supports a wide range of bus systems:

- EtherNet/IP™, Ethernet, VARAN
- EtherCAT®, PROFINET, Sercos®
- INTERBUS, PROFIBUS, CANopen®
- DeviceNet™, CC-Link

FO-based data cabling for networks and fieldbuses

High transmission speed, low attenuation, resistance to electromagnetic interference: FO cables are a modern transmission medium for industrial systems and infrastructure applications. Whatever the fiber type or interface – you can choose the right connection technology from the extensive Phoenix Contact portfolio.



Main features

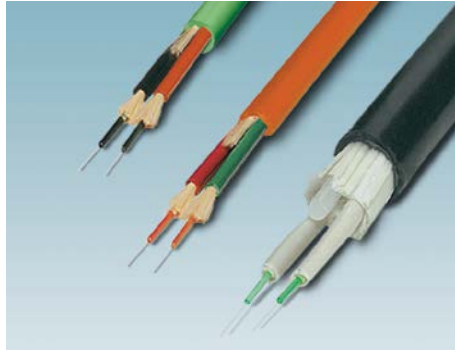
- Transmission speeds of up to 40 Gbps
- Solutions for IP20, IP65/IP67, and IP68
- For all common fiber types
- Maximum protection against the effects of EMI and ESD

Your advantages at a glance



Wide choice of versions

from SC-RJ, LC, SC, F-SMA to ST, plus POF, PCF, and GOF fiber types.



Comprehensive range of cables

for all applications, networks, and standard interfaces.



Fast assembly

in the field using professional tools.



Reliable protection

against extreme temperatures, liquids, and UV light.



Large selection

of patch cable versions for all typical connection methods.



High packing density

and large splice tray in splice boxes for DIN rail and 19" mounting.

Choose the right fiber type for your application

- POF (Polymer Optical Fiber) for short transmission distances up to 75 m and data rates up to max. 100 Mbps
- PCF (Polymer-Clad Fiber) for medium transmission distances up to 500 m and data rates up to max. 1 Gbps
- GOF (Glass Optical Fiber) multimode for long transmission distances up to 550 m at 10 Gbps
- GOF singlemode for up to 50 km and data rates up to 40 Gbps

Solutions for industrial device connection

Special shielding concepts and torsion-resistant, optimally coordinated components are essential for the reliable operation of robots and conveying systems.

Use Phoenix Contact's reliable and consistent product range for error-free data transmission.



Product overview



RJ45 INDUSTRIAL jacks

The RJ45 INDUSTRIAL jacks for PCB mounting in combination with the RJ45 INDUSTRIAL connectors are the perfect connector system. The optimally coordinated components guarantee the highest transmission reliability in industrial applications. Optional LEDs and shield springs complete the portfolio perfectly.



RJ45 PCB jacks

The RJ45 PCB jacks are a cost-effective choice for reliable data transmission. With various connection options such as SMD and wave soldering, the single-port and multi-port jacks are suitable for a wide range of applications.



SPE IP20 jacks

IP20 PCB connectors for Single Pair Ethernet are ideal for efficient data transmission in factory and building automation. The application-specific, optimized cabling is therefore the basis for future-proof Ethernet communication from the sensor to the cloud.

 Web code: #2240



SPE M8 jack

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

 Web code: #2240



M8/M12 jack

Phoenix Contact offers a comprehensive range of one- and two-piece device connectors for PCB mounting in M8 and M12 designs. You can therefore choose from a wide range of connection solutions for wave, THR, and SMD soldering processes. The two-piece connectors allow you to realize all numbers of positions and codings for signal, data, and power supply in identical mechanical installation conditions.

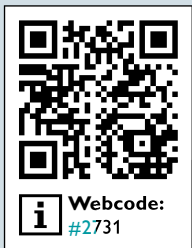


D-SUB contact inserts

The D-SUB contact carrier product portfolio provides solutions for individual areas of application, from the standard contact insert and 44-pos. high-density contact inserts to hybrid contact inserts for signal and power transmission.

Solutions for industrial device connection

Complex automation processes demand communication in many areas. Benefit now from reliable PCB terminal blocks and PCB connectors that have been qualified based on various transmission standards, including ethernet-apl, PROFINET, Ethernet CAT5, and EtherCAT P, among others.



Ethernet



Product overview

ethernet-apl

Ethernet-APL technology enables communication through to the field level with 10 Mbps via two-wire Ethernet. The connection points are marked and color-coded for easy installation.

You will find further products, also for use in potentially explosive areas, on pages 28, 31, and 54, for example, and via the web code:

 Web code: [#2390](#)



SPTAF 1/ 3-5,0-IL
MC RDGNGY BD
Order No. [1161098](#)



MVSTBR 2,5/ 3-STF-
5,08 BUDDWH
Order No. [1161208](#)

PROFINET

PROFINET features high transmission speeds of up to 100 Mbps through to the field level. Phoenix Contact PCB terminal blocks satisfy the requirements laid out in the “Guideline for PROFINET” and also, in part, increased safety requirements of the “Ex e” type of protection in accordance with IEC 60079-7.

You will find a product overview on pages 27, 32, and 36, for example, and via the web code:

 Web code: [#1598](#)



SPTAF 1/ 4-5,0-IL-
EXPROFINET 3
Order No. [1071100](#)



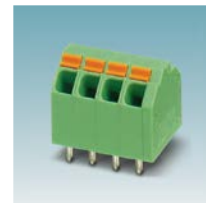
SPT 2,5/ 4-H-EX
PROFINET 2
Order No. [1034522](#)

Ethernet CAT5

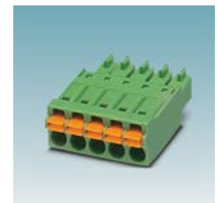
Ethernet is one of the most widely used data transmission technologies, and can transmit 100 Mbps / 1 Gbps in Category 5. Phoenix Contact provides products for CAT5 transmission that are in part equipped with empty positions to prevent crosstalk, ensuring reliable communication.

You will find these on pages 29, 30, and 49, for example, and via the web code:

 Web code: [#2713](#)



SPTA 1,5/ 4-3,81
Order No. [1751493](#)



FMC 1,5/ 5-ST-3,5
Order No. [1952296](#)

EtherCAT P

Along with Category 5, the DMCC 0,5 also features EtherCAT P qualification, which realizes voltage supply (24 V/3 A) via the data line (100 Mbps). Moreover, shielding and an optional latching function are also available.

You will find the qualified DMCC 0,5/ ST-SH series Phoenix Contact portfolio, created in accordance with the EtherCAT P standard, on page 43 and via the web code:

 Web code: [#2332](#)



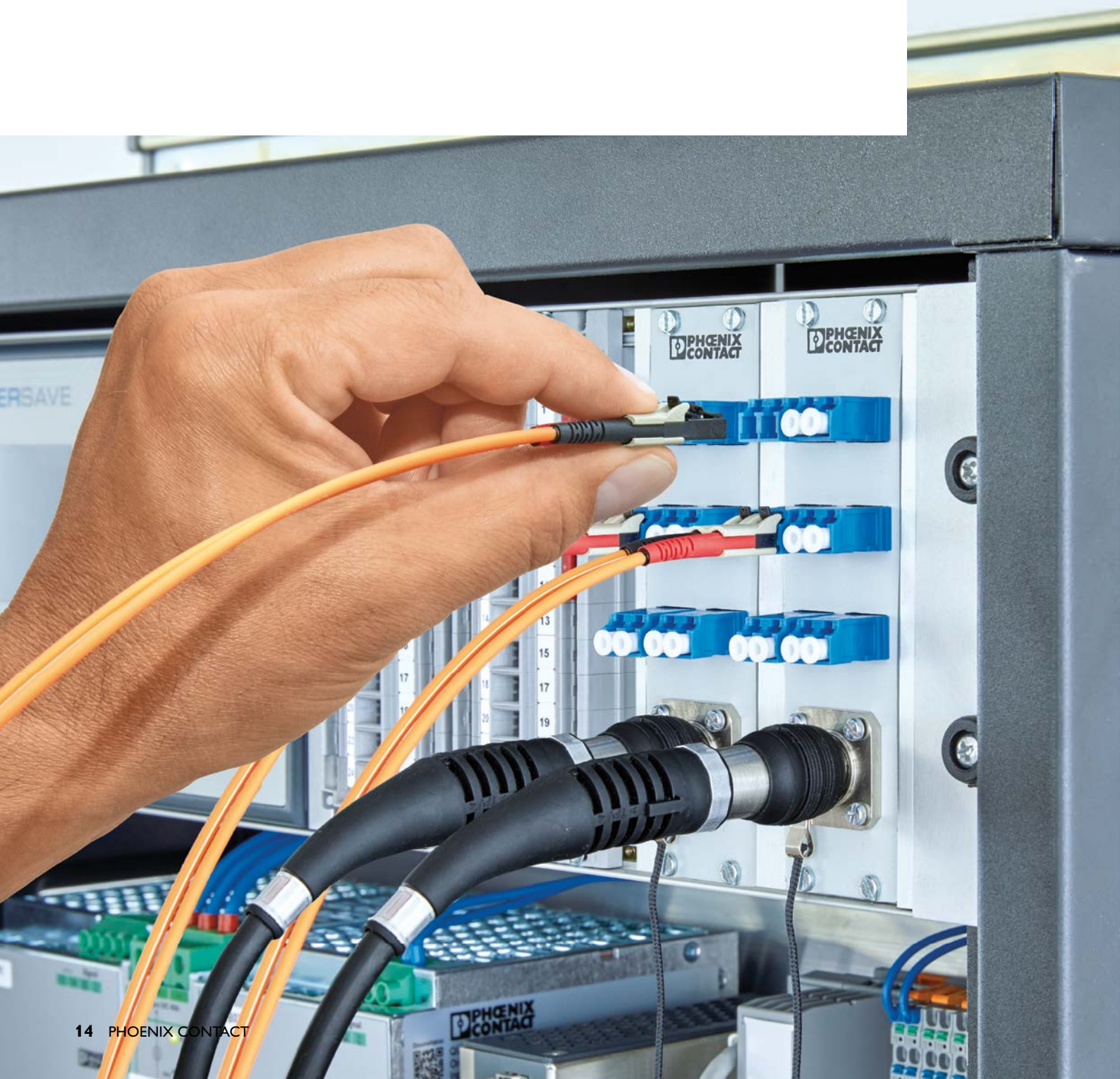
DMCC 0,5/ 2-ST-SH
7,0-2,54
Order No. [1128660](#)



DMCC 0,5/2-ST-SHL
7,0-2,54
Order No. [1150807](#)

Solutions for control cabinet cabling

Select the FO or copper components in cabling solutions for Ethernet and PROFINET applications that suit your data transmission system. The comprehensive product range for control cabinet applications provides the right solution for your requirements.



Product overview



Splice boxes

The FDX 20 series splice boxes ensure continuously reliable real-time data transmission. With their compact and uniform design, the splice boxes for both DIN rail and the 19" mounting provide plenty of interior space for the secure connection of fiber optics.



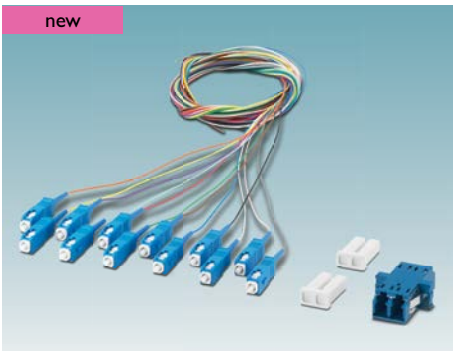
19" distributors

High packing density, greater flexibility: The 19" marshalling panels simplify FO cabling, and are therefore ideal for real-time data transmission. The modular design enables a variety of applications, e.g., in power distribution and process technology.



DIN rail adapters

The universal DIN rail adapters offer maximum flexibility in a confined space. The one-piece housing snaps quickly and easily onto the DIN rail. Module inserts with RJ45, SC simplex, LC duplex, and MTP connections are available for data transmission with copper and FO conductors.



FO couplings and pigtails

FO couplings and pigtails enable safe and reliable cabling inside the FDX20 splice boxes – both for DIN rail and 19" mounting. The comprehensive product portfolio enables a high degree of flexibility, whatever the application.



Copper cable connection and couplings

The cable connections and coupling modules for RJ45 ensure the secure connection of your cables and the reliable transmission of data via the interface. The versions for Freenet and Keystone can be integrated into existing panel-mount frames or integrated directly into the DIN rail adapter.

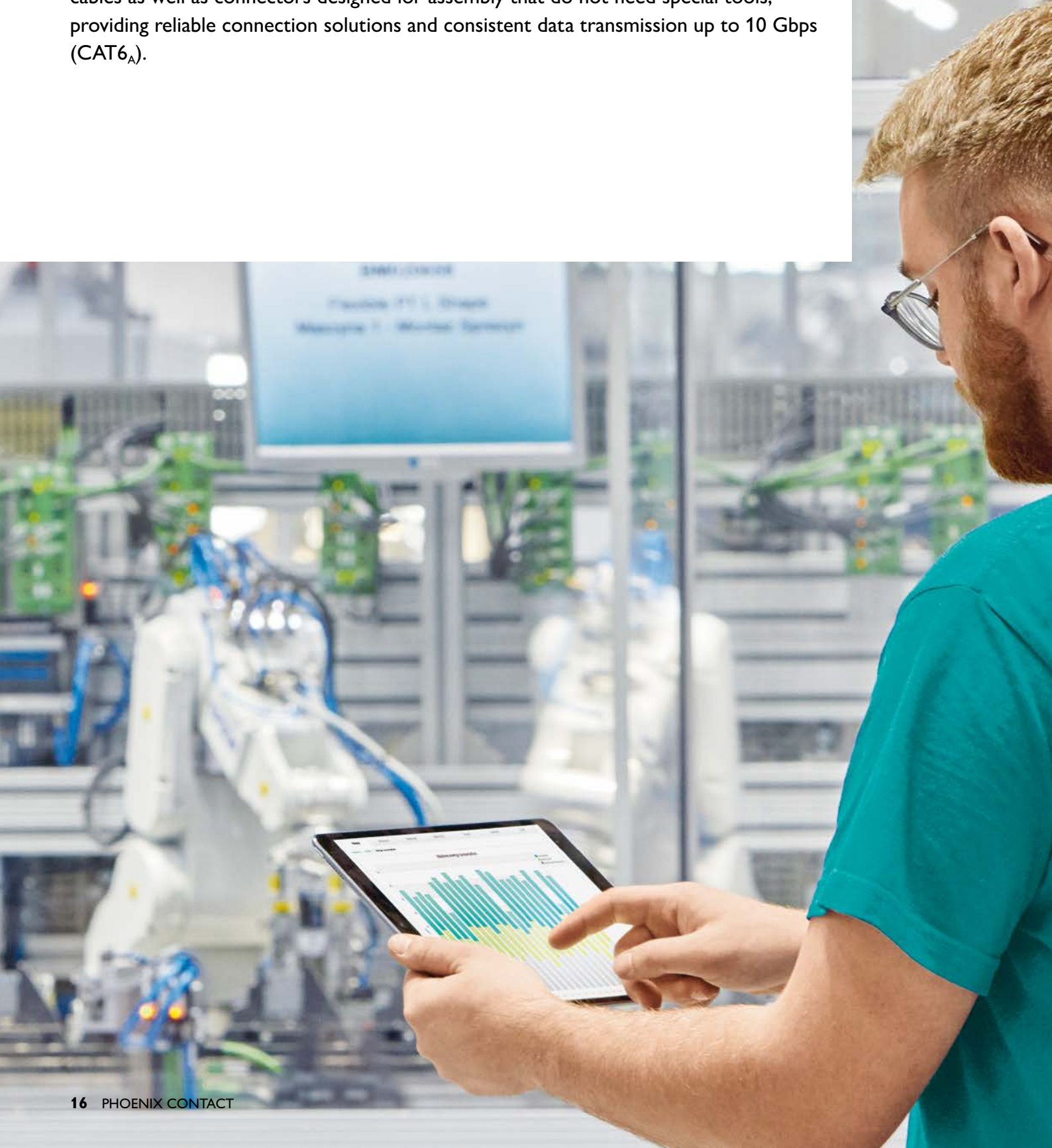


Bulkheads

The compact control cabinet feed-throughs provide a high degree of flexibility for through-panel applications with an interface change. They are available in various outlet directions and for various M12 codings.

Solutions for industrial IP20 cabling

For the special requirements in industrial cabling, Phoenix Contact offers RJ45 patch cables as well as connectors designed for assembly that do not need special tools, providing reliable connection solutions and consistent data transmission up to 10 Gbps (CAT6_A).



Product overview



RJ45 INDUSTRIAL CAT6_A connectors

The RJ45 INDUSTRIAL connectors for data transmission speeds up to 10 Gbps are a future-oriented solution for your interface. Specifically developed for industrial use, the connectors guarantee that the connection will be optimally protected from vibrations. Furthermore, the one-piece design and assembly without the need for special tools enable easy handling.



RJ45 INDUSTRIAL CAT5 connectors

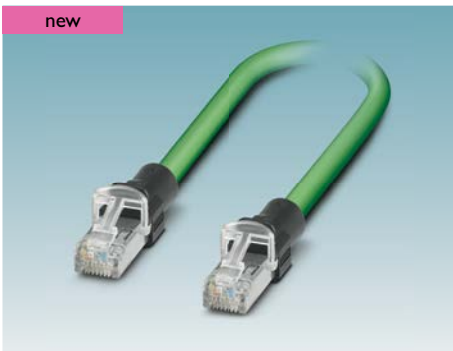
The proven RJ45 INDUSTRIAL connectors for data rates up to 1 Gbps. The safe shielding against external electrical influences and the robust design guarantee reliable transmission, especially in industrial environments. The intuitive assembly of the one-piece connector, which does away with the need for special tools, also saves valuable time during installation and prevents a variety of application-specific errors.



SPE IP20 patch cables

The new patch cables for Single Pair Ethernet conform to IEC 63171-2, and are therefore designed for use in IP20 environments. The innovative SPE connection system from Phoenix Contact reduces the amount of space required and the installation effort involved, and also enables the last level of manufacturing to be integrated into Industrial Ethernet.

i Web code: #2240



RJ45 INDUSTRIAL patch cables for PROFINET

Thanks to a large selection of cable types, the new, molded RJ45 INDUSTRIAL patch cables for PROFINET provide the ideal solution for a variety of applications. Along with cables for drag chain and robot applications, versions are also available for railway technology applications, among others.



Angled RJ45 INDUSTRIAL patch cables

Angled RJ45 INDUSTRIAL patch cables from Phoenix Contact are the ideal solution for special industrial applications that require a cable outlet in different directions. Five different outlet directions enable permanently reliable communication, even in applications where space is at a premium.



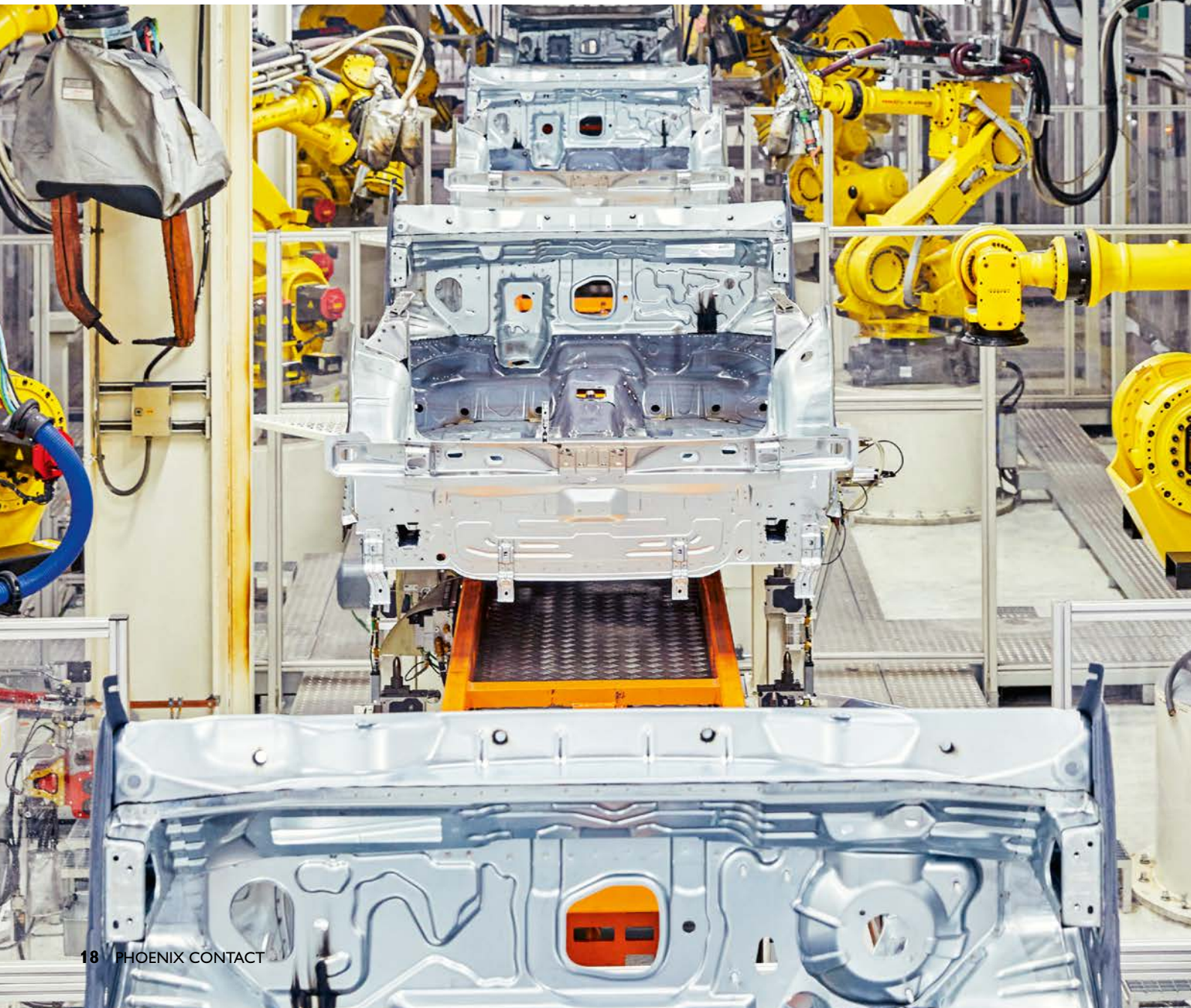
RJ45 INDUSTRIAL patch cables for Ethernet

Even high transmission speeds up to CAT6_A in industrial applications are no problem, thanks to the new robust RJ45 INDUSTRIAL patch cables. The molded connectors provide optimum protection for the connection, ensuring permanently reliable data transmission.

i Web code: #1975

Solutions for industrial IP6X cabling

Special shielding concepts and torsion-resistant components are essential for the reliable operation of robots and conveying systems. Use Phoenix Contact's reliable and consistent product range for error-free data transmission.



Product overview



Version 14 RJ45 connectors

Push-pull ADVANCE is the new connector for PROFINET and Ethernet cabling in the high IP65/IP67 protection class. With its 360° shielding and the optional mechanical locking mechanism, it provides maximum safety in field applications.



Version 14 FO connectors

With their robust design, IP65/IP67 protection class, and optional mechanical locking mechanism, the push-pull ADVANCE connectors provide maximum safety for FO cabling in the field.



SPE M8 patch cables

The new SPE M8 patch cables are the Ethernet interface for the industrial field cabling of the future. Established inductive sensors can be connected to the Ethernet protocol easily using the standardized connectors in accordance with IEC 63171-5. Thanks to Advanced Shielding Technology, the patch cables with male or female contacts provide optimum protection against external interference.

i Web code: #2240



Push-pull power

The 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 outside cable diameters of 6.5 mm to 13 mm. The interlock prevents inadvertent removal.



Push-pull panel-mount frames

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



Push-pull outlets

Thanks to the flexible options for combining power and data interfaces, push-pull outlets are ideal for creating IP-protected interfaces from free cable ends.

Solutions for office and building cabling

Our connectors and patch cables enable you to realize secure and flexible cabling in your building. From copper-based transmission up to 10 Gbps through to FO-based transmission at 40 Gbps, Phoenix Contact provides the right solution for any application.



Product overview



RJ45 QUICKON connectors

The RJ45 connectors with QUICKON fast-connection technology for assembly without the need for special tools guarantee quick and easy installation in the field. Phoenix Contact provides connectors for PROFINET cabling up to 1 Gbps and Ethernet cabling up to 10 Gbps, depending on the application.



RJ45 crimp connectors

The RJ45 connectors with crimp connection technology provide a secure cabling solution for data transmission from CAT5 to CAT6_A.



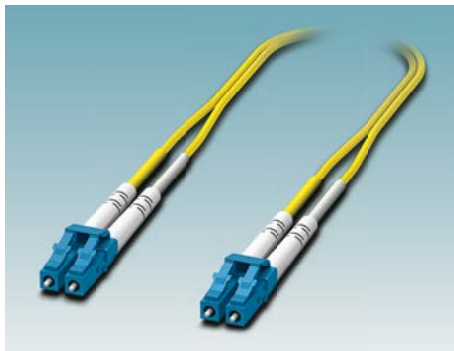
RJ45 office/building patch cables

The new RJ45 patch cables for building applications are ideal for data cabling within enclosed spaces. With materials and approvals specifically intended for these applications, the patch cables enable permanently reliable communication at up to 1 Gbps.



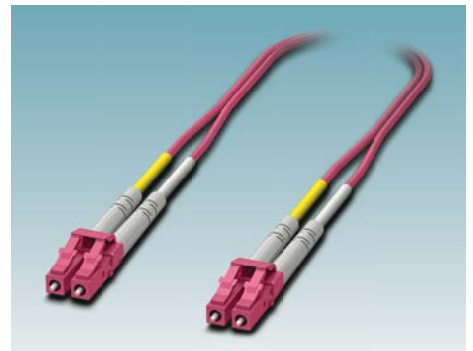
FO connectors

The new, innovative FO connectors feature high process reliability and are quick and easy to connect. Multimode and singlemode versions are available for quartz glass. Furthermore, these connectors can also be re-used.



FO singlemode patch cables

The FO singlemode patch cables from Phoenix Contact are high-quality cabling solutions and are ideal for high-speed cabling at data rates up to 40 Gbps covering distances of up to 40 km.



FO multimode patch cables

Thanks to their exceptional quality, the FO multimode patch cables provide the ideal conditions for reliable data transmission. Various connector combinations and cable lengths allow custom solutions to be created for any application.

Solutions for outdoor applications

High demands are placed on components used for outdoor data transmission, for example in fields such as telecommunications and renewable energy. Phoenix Contact provides special connectors for outdoor applications. These can withstand aggressive environmental conditions with extreme temperature variations, humidity, UV rays, and vibrations.



Product overview



Multi-fiber FO connectors

Industrial-grade multi-fiber data connectors are ideally suited 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.



Version 6 FO connectors

The version 6 data connectors, developed in-house by Phoenix Contact, are a cost-effective option for IP-protected connectors. The practical latching wings ensure a reliable connection with the corresponding panel-mount frame, yet can be operated easily.



Version 6 RJ45 connectors

The version 6 data connectors from Phoenix Contact are a cost-effective option for IP-protected connectors. The portfolio of packaged RJ45 connectors includes versions with IDC and crimp connection for CAT5 and CAT6_A applications, as well as pre-assembled patch cables.



Version 6 panel-mount frames

The version 6 panel-mount frames are a convenient and simple option for creating a reliable IP-protected connection between version 6 data connectors and devices.



Version 6 panel-mount frames and inserts

The version 6 panel-mount frames can be extended to create the matching insert for your mating connector by adding the appropriate coupling modules for RJ45 and FO connections as well as the cable connection modules for copper connections.











D-SUB IP6X housings

The IP-protected plastic housings for D-SUB connectors ensure a reliable connection for your interface, even under harsh conditions. The optional protective caps provide reliable protection even when a connector is not plugged in.




Product application overview of data connectors



		Application	Solutions for industrial device connection	Solutions for the control cabinet	Solutions for industrial IP20 cabling	Solutions for industrial IP6X cabling	Solutions for office and building cabling	Solutions for outdoor applications
Copper								
SPE		Female	25					
		Patch cable			30	34		
RJ45		Female/coupling	24	29		32-33		44-45
		Male			30-31	32	38	44
		Patch cable			30-31	34-35	38-39	
M12		Female	25					
		Male				37		
D-SUB		Contact insert	26					
		Panel-mount frame/sleeve housing	27					
USB		Female						45
		Patch cable					39	

		Application	Solutions for industrial device connection	Solutions for the control cabinet	Solutions for industrial IP20 cabling	Solutions for industrial IP6X cabling	Solutions for office and building cabling	Solutions for outdoor applications
Copper								
Power		Female				36		
		Male				36		
FO								
POF, PCF, and GOF		Coupling		29		32-33	40	45
		Male				32	40	44
		Patch cable					41	42-43
Splice boxes		DIN rail		28				
		19"		28				
Copper/FO								
Distributors				29				

Solutions for industrial device connection

RJ45 INDUSTRIAL PCB jacks				
 Web code: #2059				
	Soldering process: Wave/THR			
Alignment	90° horizontal		180° vertical	
Housing shield springs	Yes	No	Yes	No
Without LED	1099280	1091946	1099279	1091942
With LED	1099281	1091950	1099282	1091947

RJ45 single-port PCB jacks						
 Web code: #2341						
	Soldering process: SMD			Wave		
Alignment	180° vertical	90° horizontal		180° vertical	90° horizontal	
Locking clip		Top	Bottom		Top	Bottom
Without LED	1149611	1149882	1149874	1149872	1149870	1149868
With LED		1149873		1149871	1149867	1149866


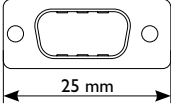
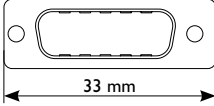
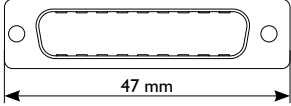














RJ45 multi-port PCB jacks				
 Web code: #2341				
	Soldering process: Wave			
Alignment	90° horizontal			
RJ45 ports	2		4	
Locking clip	Top	Bottom	Top	Bottom
Without LED	1149858	1149855	1149851	1149849
With LED	1149854	1149852	1149848	1149616

	SPE IP20 jack		SPE M8 jack		
new					
i Web code: #2341					
Soldering process	Wave/THR		SMD	Wave/THR	
Type of contact	Male contact				
Alignment	180° vertical	90° horizontal	180° vertical		90° horizontal
Without LED	1163798	1163797	1215777	1163793	1163795
With LED		1215778			







M12 device connectors with PCB connection							
i Web code: #0222							
Network	Technology	Wave soldering		THR		SMD	
		Male	Female	Male	Female	Male	Female
Ethernet	CAT5, 4-pos.	1456514	1456527	1552214	1551451	1411956	1411950
	CAT, 8-pos.	1456530	1456543	1557578	1557549		
	CAT, 8-pos. hybrid		1407503		1405225		1411965
	CAT6 _A , 8-pos.		1424177		1402457		1411964
PROFINET	4-pos.	1456556	1456569	1552175	1542648		
Sercos	4-pos.	1457979	1457966				
EtherCAT	4-pos.	1456556	1456569				
PROFIBUS	5-pos.	1456475	1456488				
INTERBUS	5-pos.	1456572	1456585				
CANopen, EtherNet/IP	5-pos.	1456491	1456501				
CC-Link	4-pos.	1457856	1457869				
FOUNDATION Fieldbus	4-pos.	1457872	1457885				

M12 device connectors with assembled cable							
i Web code: #0222							
Category/version	CAT5, 93E	CAT5, 93B		CAT5, 93K		CAT5, 94H	CAT6 _A , 94F
	Female	Male	Female	Male	Female	Female	Female
0.5		1427805	1437766	1410158	1419154	1407504	1424135
1		1437818	1437779	1419159	1419155	1407505	1424148
2	1405866	1437821	1437782	1428160	1419156	1407506	1424751
5		1437834	1437795	1437161	1419157	1407507	1424164

Solutions for industrial device connection

		Housing size 1	Housing size 2	Housing size 3		
 Web code: #0340		 25 mm	 33 mm	 47 mm		
D-SUB contact inserts						
	Connection technology	Thread/drill hole	Contacts	Housing size	Male	Female
Signal	 Screw connection	3 mm drill hole	9 x signal	1	1688379	1688395
			15 x signal	2	1688078	1688094
			25 x signal	3	1689789	1689776
	 Solder connection with solder cup	3 mm drill hole	9 x signal	1	1688793	1688803
			15 x signal	2	1688874	1688887
			25 x signal	3	1689899	1689909
	 PCB connection with straight solder pins	3 mm drill hole	9 x signal	1	1418717	1418726
			15 x signal	2	1418718	1418728
			25 x signal	3	1418725	1418729
	 PCB connection with angled solder pins	M3 thread	9 x signal	1	1688382	1688405
			15 x signal	2	1688081	1688120
			25 x signal	3	1689873	1689886
	 Crimp connection	3 mm drill hole	9 x signal	1	1688858	1688861
			15 x signal	2	1688939	1688942
25 x signal			3	1689954	1689967	
 Crimp connection for high-density contacts	3 mm drill hole	15 x signal	1	1655137	1655124	
		26 x signal	2	1655195	1655182	
		44 x signal	3	1655250	1655247	
 IDC connection for flat-ribbon cables	4-40 UNC thread	9 x signal	1	1418739	1418742	
		15 x signal	2	1418740	1418744	
		25 x signal	3	1418741	1418745	
 Male/male female/female	4-40 UNC thread	9 x signal	1	1652651	1688722	
		15 x signal	2	1652677	1652664	
		25 x signal	3	1652693	1652680	
Hybrid	 Solder connection with solder cup	3 mm drill hole	1 x power / 4 x signal	1	1689006	1689019
			2 x power / 5 x signal	2	1688227	1688230
			3 x power / 10 x signal	3	1689996	1690008
			4 x power / 5 x signal	3	1655386	1655373
			1 x power / 10 x signal	2	1418755	1418759
			2 x power / 15 x signal	3	1418757	1418760
			1 x power / 20 x signal	3	1418758	1418761
	 PCB connection with straight solder pins	4-40 UNC thread	1 x power / 4 x signal	1	1418762	1418766
			2 x power / 5 x signal	2	1418763	1418767
			1 x power / 10 x signal	2	1418771	1418775
			2 x power / 15 x signal	3	1418773	1418776
			1 x power / 20 x signal	3	1418774	1418777
			3 x power / 10 x signal	3	1418764	1418768
			4 x power / 5 x signal	3	1418765	1418770
	 PCB connection with angled solder pins	4-40 UNC thread	1 x power / 4 x signal	1	1655315	1655302
			2 x power / 5 x signal	2	1655360	1655344
			3 x power / 10 x signal	3	1655425	1655412
			4 x power / 5 x signal	3	1655409	1655399
 PCB connection with angled solder pins	4-40 UNC thread	1 x power / 10 x signal	2	1418778	1418781	
		2 x power / 15 x signal	3	1418779	1418782	
		1 x power / 20 x signal	3	1418780	1418783	
Power	 PCB connection for angled combination contacts with solder pin	4-40 UNC thread	2 x power	1	1655292	1655289
			3 x power	2	1655331	1655328
			5 x power	3	1655441	1655438
	 Solder connection for straight combination contacts with solder cup	3 mm drill hole	2 x power	1	1688418	1688421
			3 x power	2	1688201	1688214
			5 x power	3	1689970	1689983








Panel-mount frames/sleeve housings for D-SUB contact inserts

											
		IP20 full metal				IP20 metal-plated				IP67 plastic	
Contacts	Housing size	Straight		Angled		Straight		Angled		Panel-mount frame	Sleeve housing
		Screw locking	Snap-in locking	Screw locking	Snap-in locking	Screw locking	Snap-in locking	Screw locking	Snap-in locking		
9 x signal	1	1419722	1419746	1419723	1419754	1419705	1419729	1419706	-	1688366	1688353
15 x signal	2	1419724	1419756	1419725	1419757	1419710	1419731	1419718	1419732	1688036	1688052
25 x signal	3	1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792

Power contacts for hybrid and power contact inserts

													
Connection		Solder cup				PCB mounting				Solder pin			
Connection cross-section		AWG 14 - 12											
Rated current		20 A (at +20°C)		40 A (at +20°C)		40 A (at +20°C)		20 A (at +20°C)					
Type of contact		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
Order No.		1688243	1688256	1688269	1688272	1655467	1655454	1426073	1426074				

Signal contacts for contact inserts with crimp connection

													
Contact		Standard								High density			
Conn. cross-section		AWG 28 - 26				AWG 24 - 20				AWG 28 - 20			
Type of contact		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
Order No.		1418784	1418787	1418786	1418788	1418789	1418790						

Solutions for the control cabinet

FO splice boxes, FDX 20 series, IP20

i Web code: #0336



DIN rail mounting

	6 x LC duplex	12 x LC duplex	6 x SC duplex	6 x ST duplex	6 x LSH duplex
Without pigtails	1019710	1019705	1019686	1019681	
OM1 (G62.5/125 μm)				1019684	
OM2 (G50/125 μm)	1019713	1019709	1019700	1019683	
OM4 (G50/125 μm)	1019712	1019708	1019698		
OS2 (PC) (E9/125 μm)	1019711	1019707	1019692	1019682	
OS2 (APC) (E9/125 μm)	1083665				1019680

FO splice boxes, FDX 20 series, 19" mounting

i Web code: #0336



	12 x LC duplex	24 x LC duplex	12 x SC duplex	24 x SC duplex	12 x ST duplex	24 x ST duplex
OM1 (G62.5/125 μm)					1145399	1145389
OM2 (G50/125 μm)	1145416	1145375	1145408	1145407	1145398	1145397
OM4 (G50/125 μm)	1145415	1145413	1145406	1145403		
OS2 (PC) (E9/125 μm)	1145411	1145409	1143631	1145400	1145395	1145392



DIN rail adapters/marshalling panels

 Web code: #1643			
	Type	DIN rail adapter	Marshalling panel
	Gray, set item	1100077	
	Gray, unassembled	1041740	1422978
	Black, unassembled		1422979





RJ45 modules for the DIN rail adapter

 Web code: #1643			
	Inserts	RJ45 coupling module	RJ45 cable connection with IDC connection
	CAT6 _A	1041760	1417274





FO coupling modules for the DIN rail adapter

 Web code: #1643		
	Inserts	FO coupling module
	LC duplex, singlemode APC	1041780
	SC simplex, singlemode APC	1041800
	MTP type A	1041820
	MTP type B	1041840

M12-RJ45 bulkheads




 Web code: #0339				
	Protocol	Ethernet		PROFINET
	Category	CAT5	CAT6 _A	CAT5
	180° version	1414396	1404549	1414398
	90° version	1414393	1404548	1414397

Solutions for industrial IP20 cabling

RJ45 INDUSTRIAL connectors			
 Web code: #0330			
Connection technology			
Protocol	PROFINET		
Connection area	AWG 23 ... 22		
Category	CAT5		
Cable outlet	Straight	Top	Bottom
Order No.	1421126	1421127	1421128

RJ45 INDUSTRIAL patch cables				
 Web code: #1975				
Protocol	PROFINET			
Transmission	100 Mbps			
Web code	#0326			
Head 1 cable outlet	Straight	Straight	Straight	Top
Head 2 cable outlet	-	Straight	Top	Top
Cable	93B	93B	93B	93B
	93C	93C	93C	93C
	93M	93M	93M	93M
	93R	93R	93R	93R
	93K	93K	93K	93K
Item	1247661	1247656	1247660	1247630

Selection of cables				
Protocol	PROFINET			
Transmission	100 Mbps			
Cable designation	93B	93C	93M	93R
Application	Flexible installation	Drag chain	Flexible installation	Robot/torsion
Sheath material	PVC	PUR	PUR	PUR
Cable structure	1 x 4 x AWG 22/7	1 x 4 x AWG 22/7	1 x 4 x AWG 22/7	1 x 4 x AWG 22/19
Shielding	SF	SF	SF	SF

SPE IP20 patch cables			
			
 Web code: #2240			
Transmission	1 Gbps (up to 600 MHz)	1.0 m	1183807
Sheath material	PVC	2.0 m	1183808
Cable structure	1 x 2 x AWG 22	3.0 m	1183810
Shielding	SFTP	5.0 m	1183811



IDC insulation displacement connectors

Ethernet				
AWG 26 ... 24				
CAT6 _A	CAT5			CAT6 _A
Straight	Straight	Top	Bottom	Straight
1149847	1421607	1421876	1421877	1149846









EtherCAT		Ethernet			
100 Mbps		100 Mbps	1 Gbps		10 Gbps
		#0327			
		#0328			
Top	Straight	Bottom	Bottom	Straight	Straight
-	Bottom	Bottom	-	-	Straight
93B	93B	93B	93B		
93C	93C	93C	93C		
93M	93M	93M	93M		
93R	93R	93R	93R	94C	94C
93K	93K	93K	93K	94F	94F
1247634	1247629	1247649	1247658	1247647	1247639




Configurable cable and cable length

EtherCAT		Ethernet		
100 Mbps		100 Mbps	1 Gbps	10 Gbps
937	93K	93E	94C	94F
Railway	Flexible installation	Flexible installation	Drag chain	Flexible installation
P-EX	PVC	PUR	PUR	PUR
1 x 4 x AWG 22/7	1 x 4 x AWG 22/7	2 x 2 x AWG 26/7	2 x 4 x AWG 26/7	2 x 4 x AWG 26/7
SF	SF	SF/UTP	S/UTP	S/FTP






Solutions for industrial IP6X cabling

Version 14 RJ45 connectors							
 Web code: #0325							
	IDC insulation displacement connector						
Connection technology	IDC insulation displacement connector						Crimp
Cable outlet	Straight		Bottom		Top		Straight
Connection	AWG 26 ... AWG 24	AWG 23 ... AWG 22	AWG 26 ... AWG 24	AWG 23 ... AWG 22	AWG 26 ... AWG 24	AWG 23 ... AWG 22	AWG 26 ... AWG 24
CAT5	1422661	1422664	1422662	1422665	1422663	1422667	
CAT6 _A	1149841	1149843					1422108

Version 14 FO connectors			
 Web code: #0334			
	POF		
Fiber type	POF		
Material	Die-cast zinc		
Cable outlet	Straight	Bottom	Top
Order No.	1407896	1407902	1408028

Version 14 panel-mount frames and inserts			
 Web code: #0325			
	Rectangular		
Panel-mount frame, unassembled	For PCB modules		For AVAGO transceivers
Order No.	1413963		1413981
Panel-mount frame, assembled	CAT6 _A cable connection	CAT6 _A coupler module	SC-RJ coupler
Order No.	1413961	1413962	1405235

RJ45 modules and couplings

 Web code: #0325				
Type	RJ45 cable module for V14 panel-mount frames	RJ45 coupler module for V14 panel-mount frames	RJ45 V14 coupling	SC-RJ V14 coupling
CAT5	1652936	1419022	1405183	
CAT6 _A	1418984	1086111		
FO				1405206




Version 14 multi-ports

 Web code: #0325					
Connection	Power	RJ45	SC-RJ	Power/RJ45	Power/SC-RJ
Connection	AWG 18 ... AWG 13	AWG 26 ... AWG 22		AWG 18 ... AWG 13 AWG 26 ... AWG 22	AWG 18 ... AWG 13
Cable module	1403681	1403678	1404319	1403682	1404321
Coupling	1403684	1403685		1406395	














Terminal outlets

 Web code: #0325					
Connection	Power/RJ45	RJ45/RJ45	SC-RJ/SC-RJ	M12 D-coded/ M12 D-coded	M12 A-coded/ M12 A-coded
Order No.	1404333	1404281	1404320	1404294	1404304

Solutions for industrial IP6X cabling

SPE M8 patch cables			
new			
i Web code: #2240			
Transmission	1 Gbps (up to 600 MHz)		
Sheath material	PUR		
Cable structure	1 x 2 x AWG 22		
Shielding	SFTP		
Head 1	External thread male contact	External thread male contact	Internal thread female contact
Head 2	External thread male contact	Internal thread female contact	Internal thread female contact
2.0 m	1217526	1217524	1217530





i Web code: #0326 Up to 100 Mbps, IP65/IP67, variable cable length								
		Free cable end	RJ45 connector, straight, IP20	RJ45 connector, angled	RJ45 connector, version 14, metal	RJ45 connector, version 14, plastic	M12 male, straight	M12 male, angled
	RJ45 connector, version 14, metal	1411859	1411863	–	1411866	–	1408636	1408610
	RJ45 connector, version 14, plastic	1411860	1411864	–	–	1411867	1408635	1408609
	M12 male, straight	1408640	1408639	1408638	1408636	1408635	1408634	1408608
	M12 male, angled	1408633	1408632	1408631	1408628	1408626	1408625	1408624
	M12 female, straight	1408623	1408622	1408621	1408619	1408618	1408617	1408616
	M12 female, angled	1408615	1408613	1408612	1408610	1408609	1408608	1408607
	M12 flush-type female connector, rear mounting, limited cable length	1 m 1437779	0.5 m 1404367	–	–	–	–	–
		2 m 1437782	1 m 1404368	–	–	–	–	–
		5 m 1437795	5 m 1404369	–	–	–	–	–

i Web code: #0327 Up to 1 Gbps, IP65/IP67, variable cable length								
	Free cable end	RJ45 connector, IP20	RJ45 connector, version 6, IP20	RJ45 connector, version 14, metal	RJ45 connector, version 14, plastic	M12 male, straight	M12 male, angled	
IP65/IP67 cables, variable cable length								
	RJ45 connector, version 6	1411839	1411843	1411846	–	–	1408679	1408671
	RJ45 connector, version 14, metal	1411840	1411844	–	1411847	–	1408678	1408670
	RJ45 connector, version 14, plastic	1411841	1411845	–	–	1411848	1408677	1408668
	M12 male, straight	1408682	1408681	1408679	1408678	1408677	1408676	1408667
	M12 male, angled	1408675	1408674	1408671	1408670	1408668	1408667	1408666
	M12 flush-type female connector, rear mounting, cable length limited to 5 m	1407877	1412082	1412231	1412503	1412590	–	–




i Web code: #0328 Up to 10 Gbps, IP65/IP67, variable cable length							
	Free cable end	RJ45 connector, IP20	RJ45 connector, version 6, plastic	RJ45 connector, version 14, metal	RJ45 connector, version 14, plastic	M12 male, straight	
	RJ45 connector, version 6	1415639	1414321	1414322	–	–	
	RJ45 connector, version 14, metal	1415637	1411855	–	1414323	–	
	RJ45 connector, version 14, plastic	1415638	1411856	–	–	1414324	
	M12 male, straight	1408648	1408647	–	1408646	1408645	1408644
	M12 flush-type female connector, rear mounting, limited cable length	1 m 1424148	–	–	–	–	–
		2 m 1424151	–	–	–	–	–
		5 m 1424164	–	–	–	–	–

Solutions for industrial IP6X cabling

Version 14 power connectors				
 Web code: #0341				
Connection	AWG 18 ... AWG 13			
Coding	Fixed		Variable	
Outside cable diameter	6.5 mm ... 9 mm	9 mm ... 13 mm	6.5 mm ... 9 mm	9 mm ... 13 mm
Order No.	1421785	1421783	1425515	1425514

Assembled version 14 panel-mount frames					
 Web code: #0321					
Panel cutout	Rectangular			Circular	
Connection	AWG 18 ... AWG 13				
Assembly	Fixed coding	Variable coding	Unassembled, silver	Fixed	Variable
Order No.	1608249	1408235	1608087	1405248	1409036

Push-pull power contact inserts			
 Web code: #0321			
Alignment	90° horizontal		180° vertical
Order No.	1657915		1609565

Version 14 power distributors			
 Web code: #0341			
Cable	5 x 2.5 mm ² / 0.2 m cable		
Type	Y distributor		H distributor
Connection	2 x push-pull / 1 x push-pull		2 x push-pull / 2 x push-pull
Order No.	1404799		1405387


M12 connectors

 Web code: #0338								
	Push-in connection		IDC connection		Piercecon connection		Screw connection	
	Straight	Angled	Straight	Angled	Straight	Angled	Straight	Angled

Networks


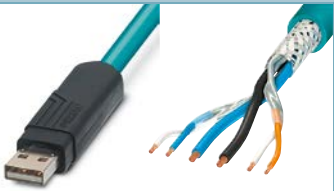


Ethernet	CAT5, 4-pos.	Male			1411066	1553624			1521261	
		Female			1411069	1553637				
	CAT5, 8-pos.	Male			1421679	1553653				
		Female			1421680	1553666				
	CAT6 _A , 8-pos.	Male			1411043		1417430	1417443		
		Female			1414586					
PROFINET	Male	1424682	1424684	1411068	1554539			1521261		
	Female	1424686	1424685	1411071	1554542					
VARAN	Male			1429130	1429156					
	Female			1429143	1429169					
Fieldbuses										
INTERBUS	Male	1424674	1424675					1507764	1430417	
	Female	1424676	1424677					1507777	1430420	
PROFIBUS	Male	1424678	1424679	1413931				1507764	1430417	
	Female	1424680	1424681	1413932				1507777	1430420	
CANopen, DeviceNet	Male	1424670	1424671	1422759				1508352		
	Female	1424672	1424673	1422760				1508365		
CC-Link	Male	1424699								
	Female	1424700								

Solutions for office and building cabling

RJ45 connectors						
	i Web code: #0330					
Protocol	Ethernet			PROFINET	Ethernet	
Connection technology	IDC insulation displacement connectors				Crimp	
Connection area	AWG 26 ... AWG 24	AWG 26 ... AWG 23		AWG 22	AWG 27 ... AWG 24	
CAT5		1656725	1658008	1658435	1414382	1414400
CAT6_A	1419001				1414395	1414402







RJ45 office patch cables				
	i Web code: #0331			
Transmission	CAT5		CAT6	CAT6 _A
Shielding	U/UTP	SF/UTP	S/FTP	S/FTP
Length	0.3 m		2891181	1413158
	0.5 m	1413086	2891288	1413159
	1 m	1410595	2891385	1413160
	2 m	1410596	2891589	1413161
	3 m	1413019	2891686	1413162
	5 m	1410694	2891783	1413163
	10 m	1412973	2891877	1413164
	15 m	1412971	2891372	1413165
	20 m	1412974	2891576	1413166

Assembled USB cables, type A

 Web code: #0335				
Degree of protection		IP20		IP67
Other end		Free cable end	USB connector, type B	M12 mini USB, SPEEDCON
Length	1 m	1655771	1654853	1420168
	2 m	1655784	1653935	1420171
	4 m			1420184
	5 m	1655797	1653948	




Accessories for office patch cables

Accessories for female connectors








					
Color coding	Security element	Color coding	Safe clip	Security frame	Dust protection cap
For easy visual color coding	Self-locking, protection against unintentional release, lockable	For easy visual color coding of the security elements	Self-locking, protection against unintentional release	For SFN switches and patch fields, including key	For RJ45 jacks
Black 2891194	Lockable element 2891424	Black 2891136	2891246	Green 2891615	2832991
Blue 2891291	Key 2891521	Blue 2891233		Red 2891712	
Brown 2891495		Orange 2891330		White 2891819	
Yellow 2891592		Yellow 2891437		Lock 2891220	
Gray 2891699		Turquoise 2891534		Key 2891327	
Green 2891796		Green 2891631			
Red 2891893		Red 2891738			
Violet 2891990		Violet 2891835			

Solutions for office and building cabling

FO connectors – PCF							
 Web code: #0332							
Type	SC-RJ	SC-RJ	ST	SC	SC-RJ	ST	F-SMA
Cable diameter	ø (2.2 mm)				ø (2.9 mm)		
Connector	1411304	1404087	2313782	2313779	1654866	2708481	2799487
Tool set	1411051	2708876	2708465	2708876	2708876	2708465	2799526

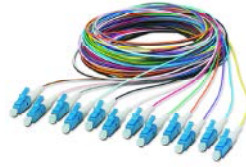
FO connectors – GOF	
 Web code: #0332	 
Type	LC duplex SC duplex
MM	1089521 1089518
SM PC	1089520 1089517
SM APC	1089519 1089516
Tool set	1089515

FO connectors – POF			
 Web code: #0332			
Description	Connectors		Tools
Type	SC-RJ	F-SMA	SC-RJ F-SMA
Order No.	1654879	2799720	1658820 2744131

FO couplings – GOF, PCF, and POF							
							
Description	LC duplex	SC duplex	ST duplex	ST duplex, SC duplex	ST simplex	F-SMA	SC-RJ
Multimode	1207355	1208081	x	x	x	x	x
Multimode, metal	1208069	1208083	1208094	1208096	1208099	2799416	1652978
OM3	1208070	1208084	x	x	x	x	x
OM4	1208072	1208085	x	x	x	x	x
OS2 PC polishing	1208073	1208086	x	x	x	x	x
OS2 APC polishing	1208077	1208088	x	x	x	x	x
Singlemode	x	x	1208095	1208098	1208100	x	1652978

FO pigtails

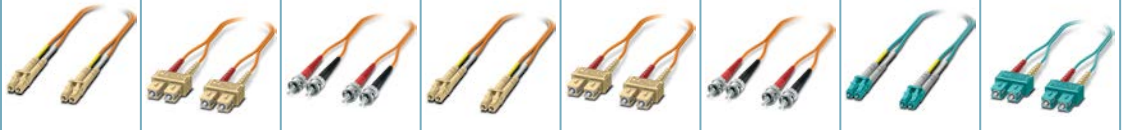
new



Description	LC	SC	ST	Description	LC	SC	ST
OM1	1250833	1208107	1208117	OM4	1208104	1208112	x
OM2	1208101	1208109	1208118	OS2 PC	1208105	1208113	1208119
OM3	1208103	1208111	x	OS2 APC	1208106	1208114	x

FO patch cables (1 m)*

i Web code: #0333



Description	OM1			OM2			OM3	
Type	LC	SC	ST	LC	SC	ST	LC	SC
LC	1146497	1146498	1146499	1115633	1115607	1115588	1185473	1185480
SC	1146498	1146504	-	1115607	1115536	1115574	1185480	1185485
ST	1146499	-	1146501	1115588	1115574	1115560	-	-

i Web code: #0333






Description	OS2 PC			OS2 APC		OM4	
Type	LC	SC	ST	LC	SC	LC	SC
LC	1115636	1115618	1115596	1115630	1115613	1115625	1115601
SC	1115618	1115550	1115582	1115613	1115544	1115601	1115424
ST	1115596	1115582	1115565	-	-	-	-

* Other lengths available: 0.5 / 1 / 2 / 3 / 5 / 10 m

	Zip cord fiber classes	Sheath color	Fiber category	Typical range	Typical wavelength	Fiber structure
Multimode		Orange	OM1	1000Base-SX: min. 350 m 1000Base-LX: min. 550 m	850 nm 1,300 nm	
		Orange	OM2	1000Base-SX: min. 525 m 1000Base-LX: min. 1,000 m	850 nm 1,300 nm	
		Aqua	OM3	1000Base-SX: min. 1,000 m 1000Base-LX: min. 550 m 10GBase-SX: min. 300 m	850 nm 1,300 nm	
		Heather violet	OM4	1000Base-SX: min. 1,040 m 1000Base-LX: min. 600 m 10GBase-SX: min. 550 m	850 nm 1,300 nm	
Singlemode		Yellow	OS2	10GBase-LR: min. 10 km 10GBase-ER: min. 40 km	1,310 nm 1,550 nm	

Solutions for outdoor applications

FO multi-fiber patch cables (plug)							
 Web code: #1623							
	Length	ODC 4-pos.	Q-ODC 12-pos.	Q-ODC 24-pos.	M17 4-pos.	M17 12-pos.	M17 24-pos.
5 m						1018494	
10 m	1415228	1415353	1007606	1087168	1018526	1087149	
15 m	1419720	1415229	1007608				
20 m	1415347	1415354	1007629	1087167	1019181	1087150	
25 m	1419733	1419692	1007609	1183913	1184007	1183986	
30 m	1419734	1419693	1007632	1087166	1018528	1087152	
35 m	1419735	1419694	1007612	1183914	1184008	1183987	
40 m	1415348	1415355	1007803	1087165	1018529	1087153	
45 m	1419737	1419695	1007621	1183915	1183993	1183988	
50 m	1419738	1419696	1007602	1087164	1018530	1087154	
55 m	1419740	1419707		1183958	1184009	1183989	
60 m	1415349	1415230	1007626	1087163	1018554	1087148	
65 m	1419743	1419708			1184011	1183991	
70 m	1419744	1419709	1007635	1087162	1018556	1087155	
75 m	1419745	1419711			1184012	1183992	
80 m	1415350	1415356	1007627	1087161	1018557	1087156	
85 m	1419747	1419712					
90 m	1419748	1419714	1007636	1087160	1018559	1087127	
95 m	1419749	1419715					
100 m	1415352	1415357	1007809	1087158	1018560	1087125	
105 m	1421802	1421800					
110 m	1419750	1419716		1087157	1126995	1087128	
115 m	1421823	1421806					
120 m	1419751	1419717	1007638	1087146	1127010	1087130	
125 m	1421824	1421807					
130 m	1421825	1421808		1087145	1127004	1087132	
135 m	1421826	1421809					
140 m	1421827	1421810	1007808	1087144	1127003	1087123	
145 m	1421828	1421811					
150 m	1421829	1421812		1087430	1127002	1087133	
155 m	1421830	1421813					
160 m	1421831	1421814	1007640	1087143	1127001	1087134	
165 m	1421832	1421815					
170 m	1421833	1421816		1087142	1127000	1087122	
175 m	1421834	1421817					
180 m	1421835	1421818	1007807	1087141	1150514	1087120	
185 m	1421836	1421819					
190 m	1421837	1421820		1087139	1150515	1087117	
195 m	1421838	1421821					
200 m	1421839	1421822	1007641	1087138	1018562	1087116	

FO multi-fiber socket cables, ODC and Q-ODC

i Web code: #0337



		ODC 4-pos.		Q-ODC 12-pos.		Q-ODC 24-pos.
		2 x LC duplex	4 x ST	6 x LC duplex	12 x ST	12 x LC duplex
Length	0.6 m	1419753		1419752		1007804
	1 m	1415231		1415232		
	2 m	1419656	1419620	1419643	1419644	1007805

FO multi-fiber socket cables, M17

i Web code: #1623



		M17 4-pos.		M17 12-pos.	M17 24-pos.
		2 x LC duplex	4 x ST	6 x LC duplex	12 x LC duplex
Length	0.6 m	1087118	1126996	1018563	1087113
	1 m	1087115	1087108	1018564	1087111
	2 m	1087114	1087107	1018567	1087110






FO multi-fiber connection boxes and modules

i Web code: #1626







		ODC 4-pos.	Q-ODC 12-pos.	Q-ODC 24-pos.	M17 4-pos.	M17 12-pos.	M17 24-pos.
Rack unit	1U, 2 sockets	1076851	1419973	1081340	1087121	1018570	1087112
	1U, 1 socket	1076661	1419974	1081342	1087135	1018568	1087109
	3U, 1 socket		1419978			1018571	
19" mounting frame, 3U				1419976			
Central plate, 3U				1419977			

Solutions for outdoor applications






Version 6 RJ45 connectors				
 Web code: #0329				
Connection technology	IDC	Crimp	IDC	Crimp
Outside cable diameter	5 mm ... 8.5 mm			
Connection area	AWG 26 ... AWG 23	AWG 27 ... AWG 24	AWG 26 ... AWG 23	AWG 27 ... AWG 24
Color	Gray		Black	
CAT5	1656990	1414383*	1658493	1414408*
CAT6_A		1414406*		1414410*

* Tool 1653265 required






Version 6 FO connectors		
 Web code: #0329		
Connection	FO	
Fiber type	POF	PCF
Order No.	1657009	1657012

Version 6 couplings and terminal outlets			
 Web code: #0329			
Description	Coupling		Terminal outlet
Connections	1 x RJ45/RJ45	SC-RJ SC-RJ	2 x RJ45
Gray	1689268	1410050	
Black	1658684		1404278








Version 6 panel-mount frames

 Web code: #0329					
	Circular		Rectangular		
	Color	Gray	Black	Gray	Black
	For Keystone modules	1689844	1658053	1689080	1658642
	For Freenet modules	1653744	1658668		
	For PCB modules			1689446	1658655

RJ45 jack insert

 Web code: #0329					
	Description	Cable module	Coupler		PCB module
	Connection system	Freenet	Keystone	Freenet	
	CAT5	1652936	1689064		1653087
	CAT6 _A	1418984	1086108	1086111	
	POF/GOF/PCF			1652978	

Version 6 USB device connectors

 Web code: #0335							
	Panel-mount frame, assembled		Panel-mount frame, unassembled	Freenet modules		Solder connection	
	Connection	USB A / USB B	USB B / USB A	Freenet	USB A	USB B	M12 / mini USB
	Order No.	1411904	1411905	1653744	1653854	1653867	1440711

Excellent services

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

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- Comprehensive technical data and downloads such as drawings and 3D models
- Personal on-site consultation

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- Customized new products
- Intuitive online configurators





Simple selection with filters and technical data



There is a separate detail page for every product



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



Device connection technology can be comprehensively configured



Housing parts and connection technology are easy to configure



Cable and assembly systems can be configured easily



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

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 Web code: #2594

Excellent services

Phoenix Contact supports device designers with excellent services, even beyond the design-in process. Benefit from flexible procurement and global availability of our items. As your expert partner, our experts will keep you up-to-date on the latest technologies and trends.

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Reliable logistics worldwide



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



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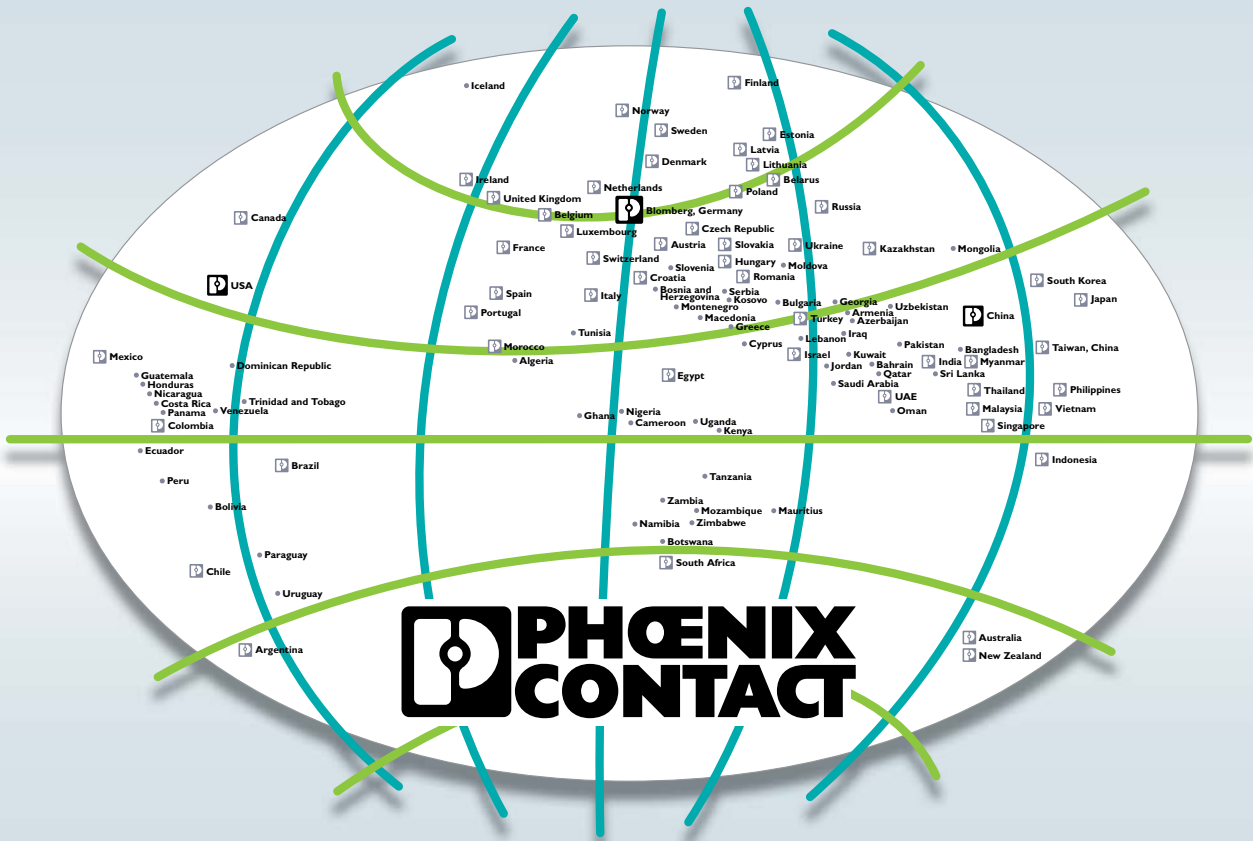
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Open communication with customers and partners worldwide

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

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

You can find your local partner at

phoenixcontact.com



Photovoltaic connectors

Product overview 2021

Photovoltaic connectors for DC and AC cabling

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

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





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DC connection technology for field cabling	10
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Modular rectangular connectors for signals, data, and power	16
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Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter the # 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

The right connection for every application

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



SUNCLIX series DC connectors

- Voltages up to 1,500 V
- Currents up to 65 A
- Conductor cross-sections from 2.5 to 16 mm²
- SUNCLIX spring connection
- Crimp connection
- IP66/IP68 degree of protection (24 h/2 m)



VARIOCON and PRC series AC connectors

- Connection technology for micro inverters
- Voltages up to 690 V
- Currents up to 70 A
- Conductor cross-sections from 1.5 to 16 mm²
- Screw connection
- VARIOCON: IP65/IP68 degree of protection (24 h/2 m)
- PRC: IP66/IP68 (24 h/2 m)/IP69K



Ground-mounted systems

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



Rooftop systems

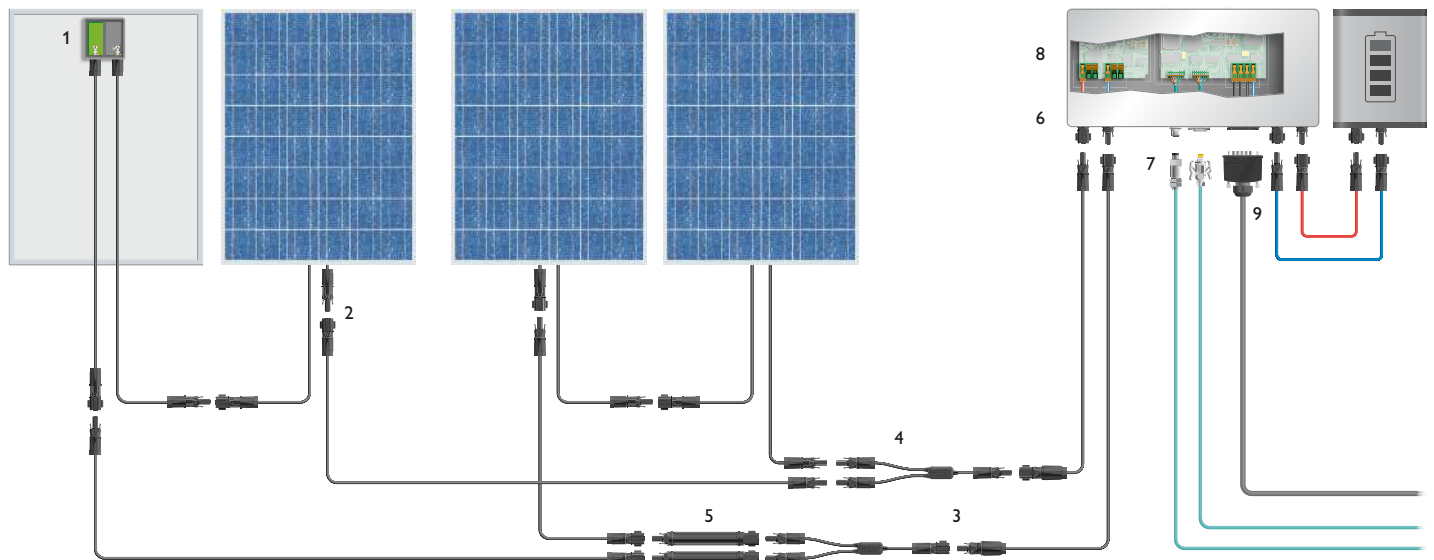
Compact DC connectors are ideally suited for cramped installation conditions. Thanks to the SUNCLIX spring connection, wiring is easy and reliable, without special tools.

Product range overview of photovoltaic connectors

Uniform connection technology from the photovoltaic panel through to feed-in

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

The coordinated, high-quality components contribute to the long-term high availability of your system.



Safety and reliability on market-oriented terms – the Phoenix Contact connection technology portfolio for the international solar market

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

Quality in the details ensures reliability in the system

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

system. The lowest initial investment is worthless if the calculated capital return does not materialize over the service life of the project due to loss of efficiency or failure. However, as soon as photovoltaics becomes relevant to the system – where the economy and the public depend on its reliable function – the failsafe performance of components, and therefore their quality, plays an increasingly important role. Phoenix Contact has a clear policy of never compromising on quality. Confidence in our company and our products is the foundation for all of our business. This is also reflected in our connection technology portfolio for the solar market. Innovative products, sophisticated designs, high-quality materials with long-term stability, and excellent service ensure safety and customer satisfaction. Market-oriented and competitive terms complement this approach.

Product overview



PCB terminal blocks without insulating bodies

for the fast and secure connection of module junction boxes



DC connectors with crimp connection

for the field-side connection of your PV panels



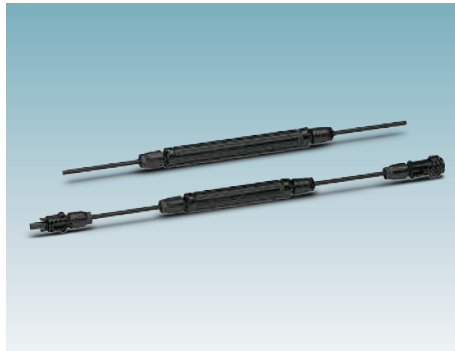
DC connectors with SUNCLIX spring connection

for field-side connection to the device



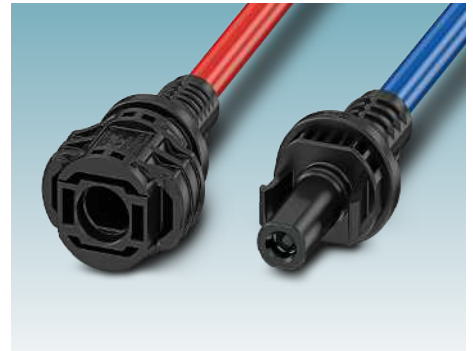
Cable-based DC distributors

for fast parallel interconnection of photovoltaic panels



DC fuse plugs

for safeguarding modules and devices in photovoltaic systems



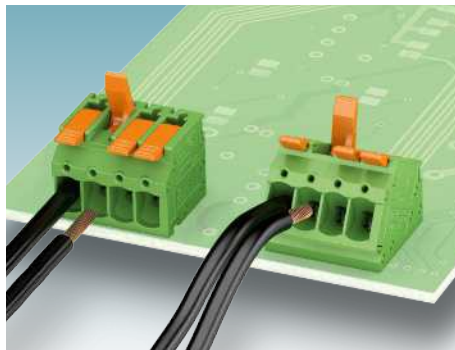
DC panel feed-throughs

for device connection, pre-assembled or designed for assembly



Data and signal connectors

copper and fiber-optic-based data connectors and signal connectors, M5 to M23, 3- to 19-positions



PCB terminal blocks and PCB connectors

for transmitting signals, data, or power



AC connectors

for grid-side connection

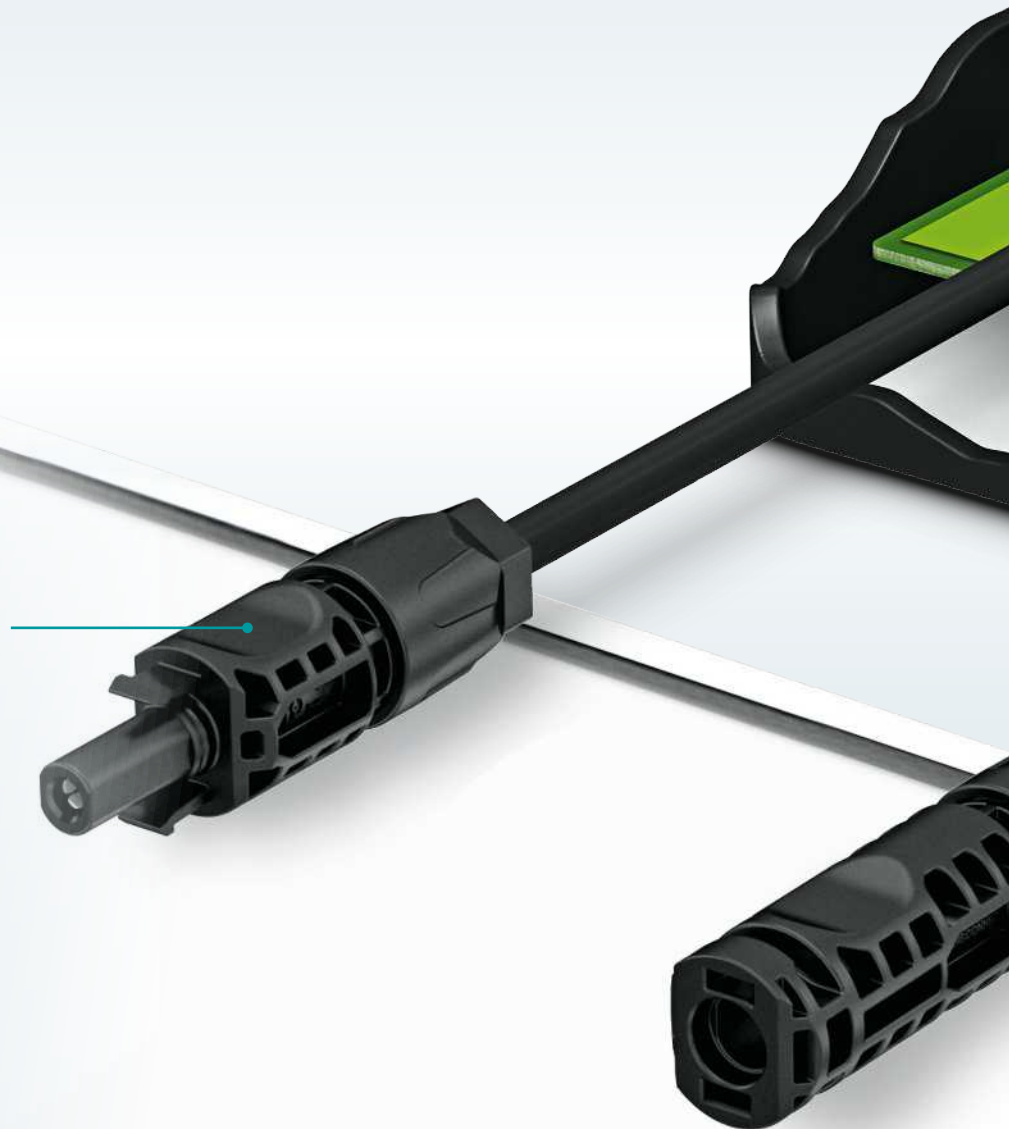
DC connection technology for PV panels

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



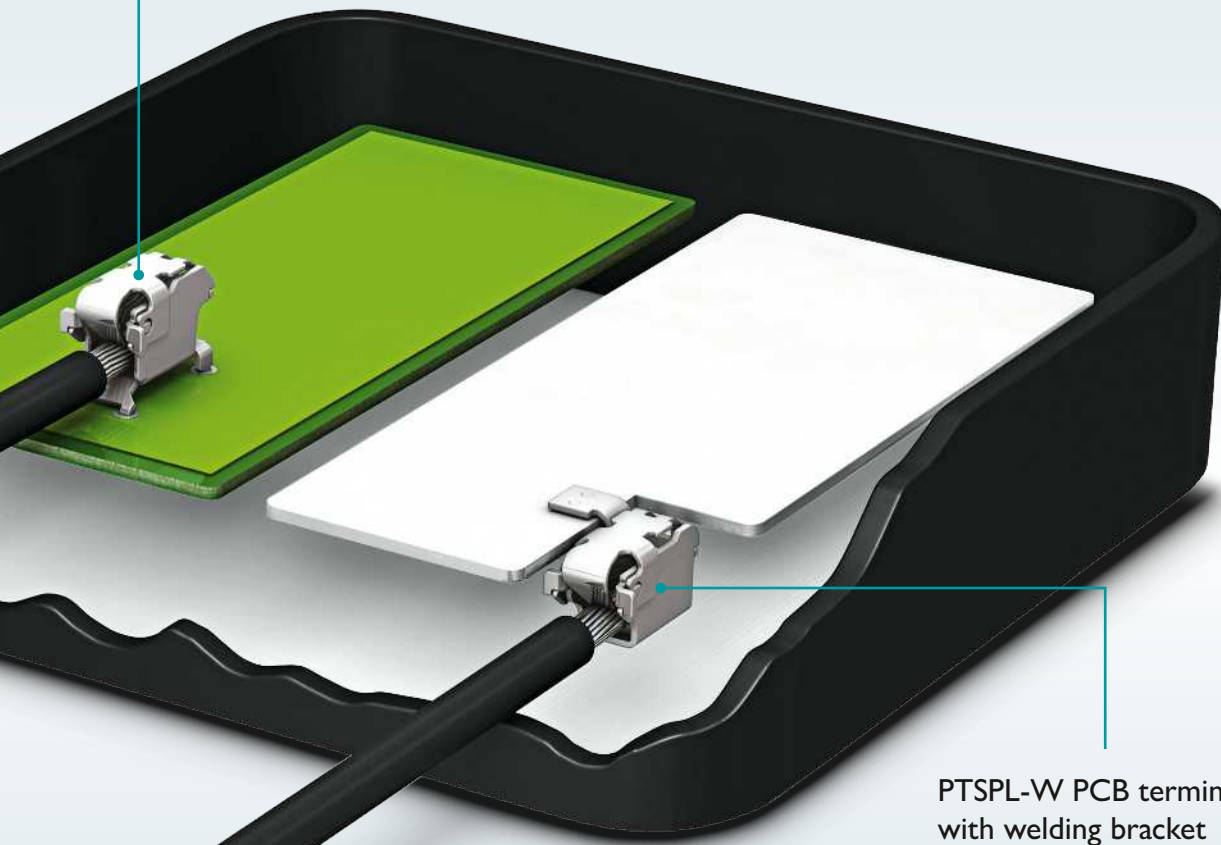
SUNCLIX DC connectors with crimp connection

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



PTSPL 6 PCB terminal block with solder connection

- Designed for automated THR soldering processes
- Available with a solder pin length of 2.1 or 2.9 mm
- Closed version with Push-in connection
- Supplied with open or closed spring on 32 mm reel for automated processes
- Currents up to 41 A
- SUNCLIX spring connection for conductor cross-sections from 2.5 to 6 mm²



PTSPL-W PCB terminal block with welding bracket

- Available with the welding bracket on the right or left for spot welding processes
- Supplied with closed spring as bulk goods or in a tray for automated processes
- Currents up to 41 A
- SUNCLIX spring connection for conductor cross-sections from 2.5 to 6 mm²

DC connection technology for field cabling

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

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

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

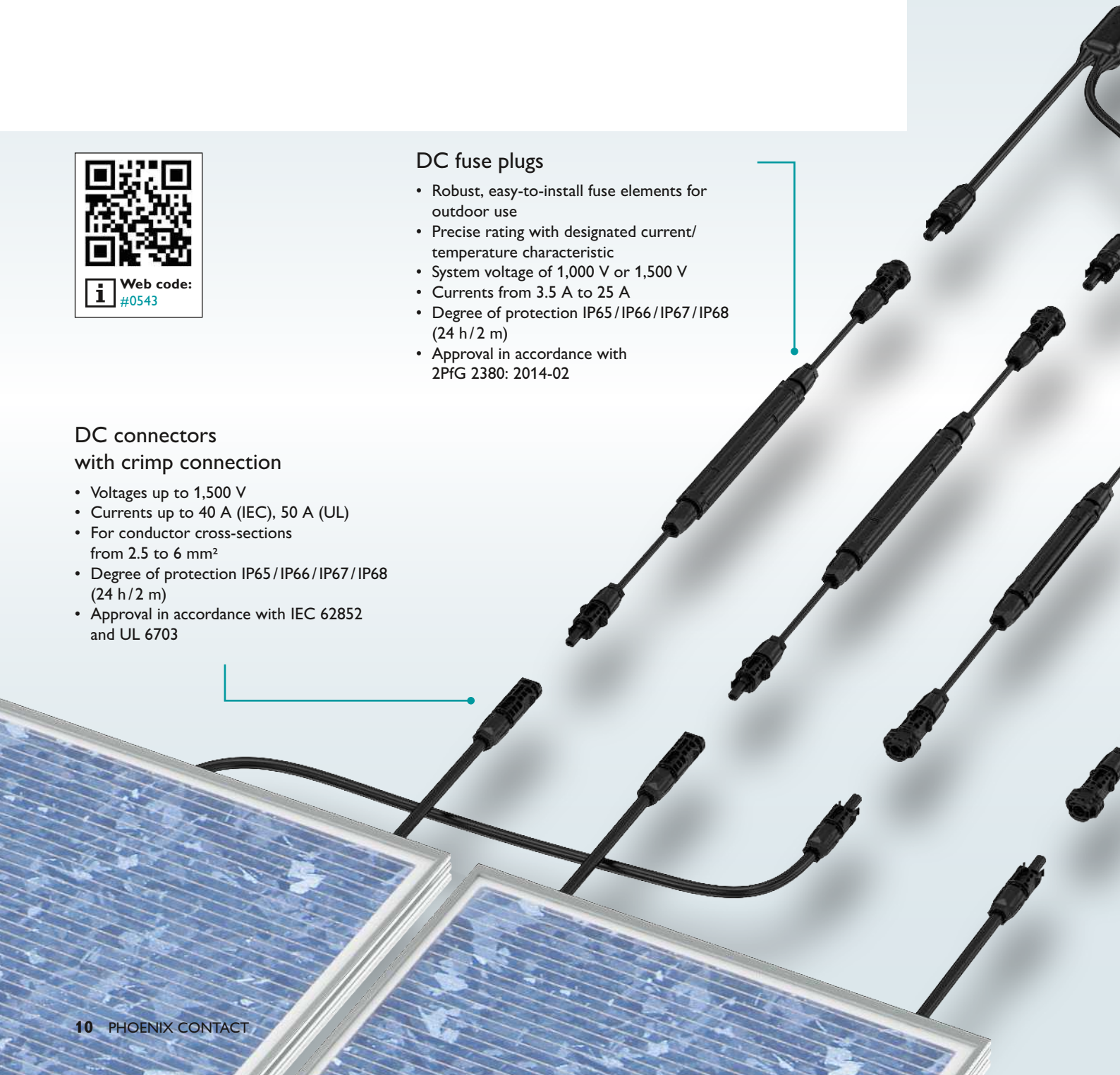


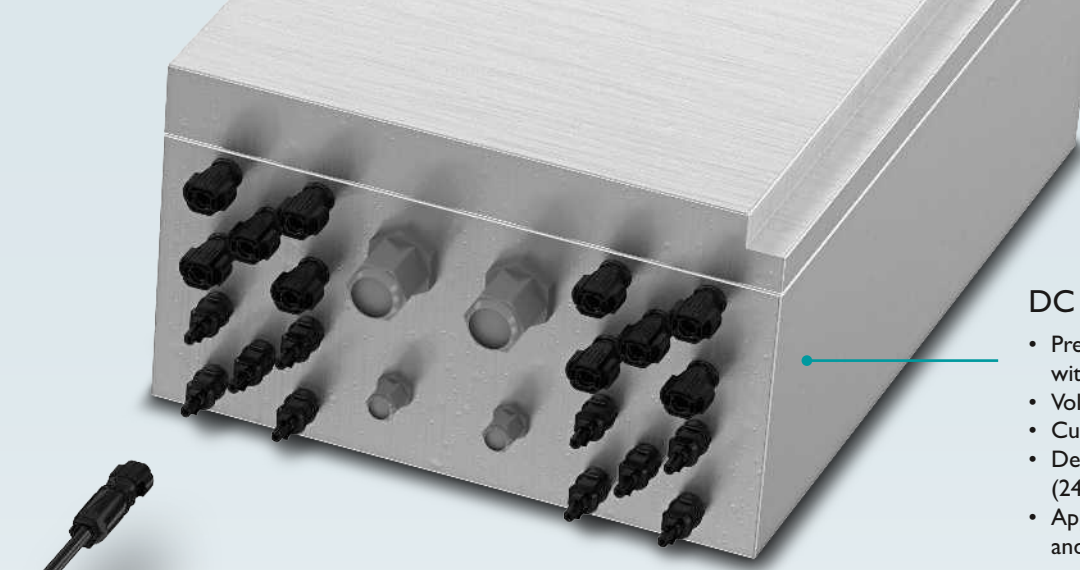
DC fuse plugs

- Robust, easy-to-install fuse elements for outdoor use
- Precise rating with designated current/temperature characteristic
- System voltage of 1,000 V or 1,500 V
- Currents from 3.5 A to 25 A
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with 2PfG 2380: 2014-02

DC connectors with crimp connection

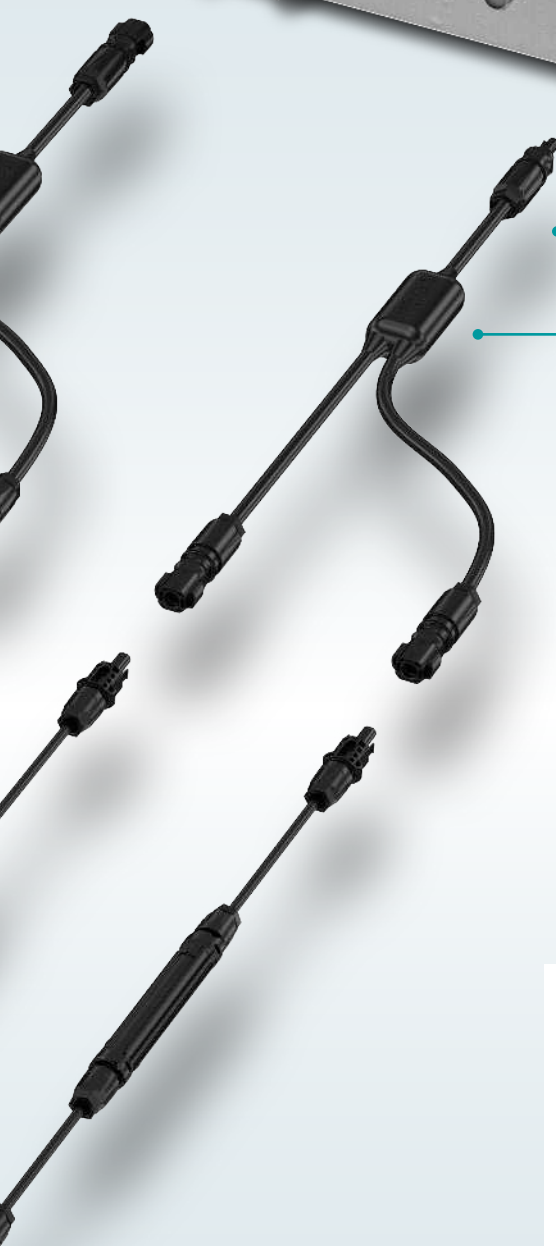
- Voltages up to 1,500 V
- Currents up to 40 A (IEC), 50 A (UL)
- For conductor cross-sections from 2.5 to 6 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703





DC panel feed-throughs

- Pre-assembled or designed for assembly with crimp connection
- Voltages up to 1,500 V
- Currents up to 40 A (IEC), 50 A (UL)
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703



DC distributors

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

DC connectors for field assembly

- Patented SUNCLIX spring connection
- Voltages up to 1,500 V
- Currents up to 65 A
- Just two versions cover conductor cross-sections from 2.5 to 16 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703

SUNCLIX spring connection

1. Insert the stripped photovoltaic conductor
2. Press down the spring and snap it into place

3. Tighten the screw connection – and you're done!



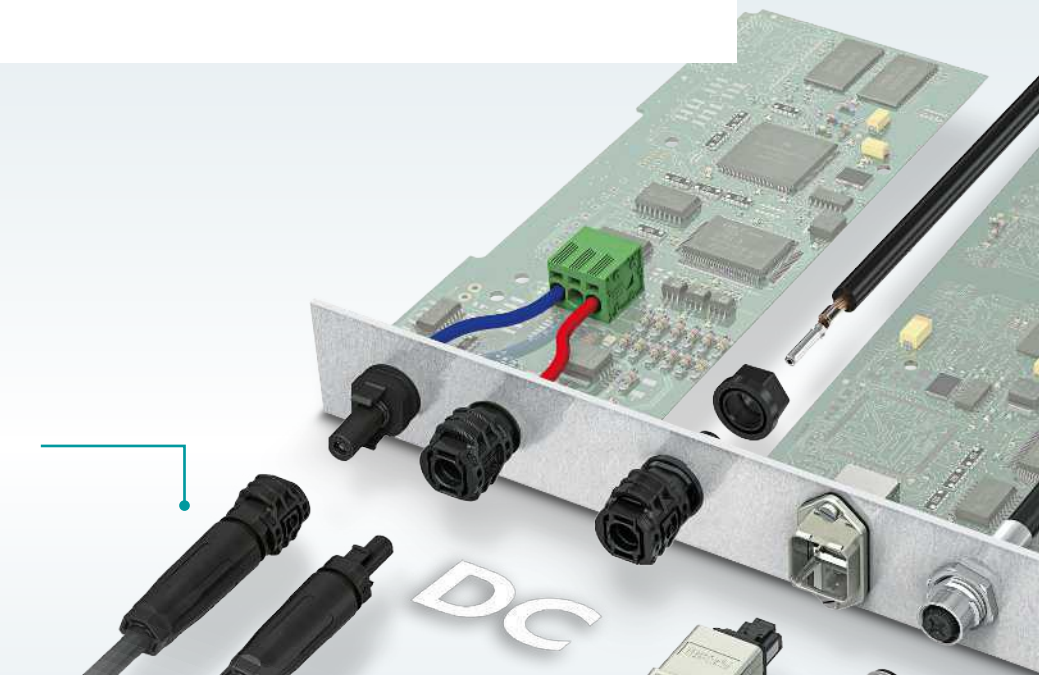
AC and DC connection technology for device connection

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



SUNCLIX DC connectors with spring connection

- Patented SUNCLIX spring connection
- Voltages up to 1,500 V
- Currents up to 65 A
- Just two versions cover conductor cross-sections from 2.5 to 16 mm²
- Degree of protection IP65/IP66/IP67/IP68 (24 h/2 m)
- Approval in accordance with IEC 62852 and UL 6703



Signal and data connectors

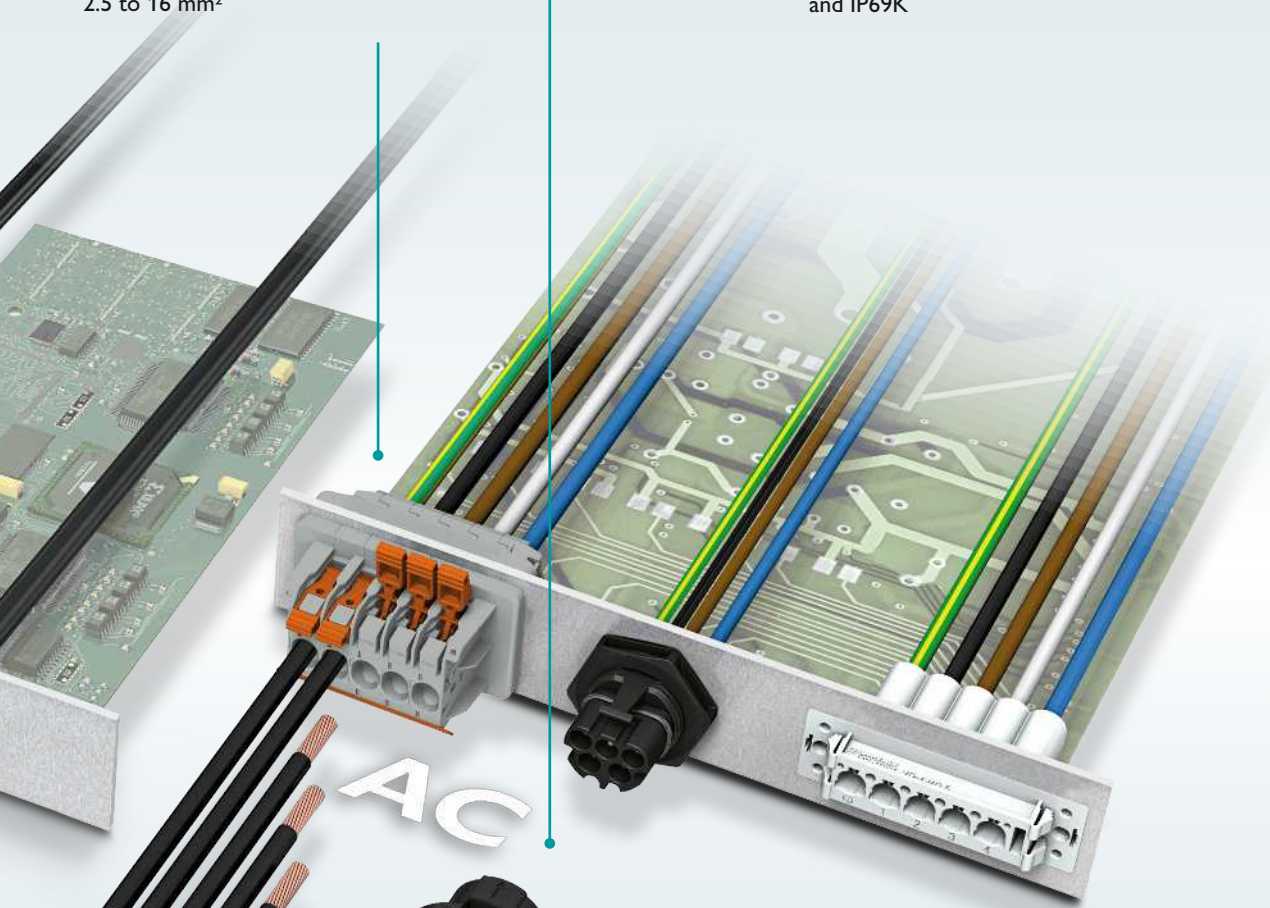
- Copper and FO-based data connectors
- M5 to M23 signal connectors, 3- to 19-pos.
- Shielded with round cable inside the device, 6 kV electric strength, easy installation
- Pre-assembled connector systems and connector systems designed for assembly
- Solutions for IP20, IP65/IP67 and IP69K

PLW 16 panel feed-through terminal blocks with Push-Lock spring connection

- For 1-phase and 3-phase devices
- Easy conductor connection and release with Push-Lock spring connection on the outside
- Fast Push-in spring connection on the inside
- Can be sealed
- Voltages up to 1,000 V
- Currents up to 41 A
- Conductor cross-section from 2.5 to 16 mm²

PRC AC connectors with screw connection

- For 1-phase and 3-phase devices
- Can be sealed
- Voltages up to 690 V
- Currents up to 35 A
- Conductor cross-section from 1.5 to 6 mm²
- Degree of protection: IP68 (24 h/2 m) and IP69K



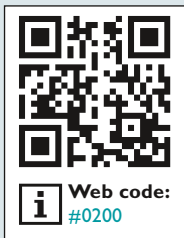
VARIOCON AC connectors with screw connection

- For 1-phase and 3-phase devices
- Hybrid-capable with the modular design
- Voltages up to 1,000 V
- Currents up to 70 A
- Conductor cross-section from 1.5 to 16 mm²
- Degree of protection: IP65/IP68 (24 h/2 m)

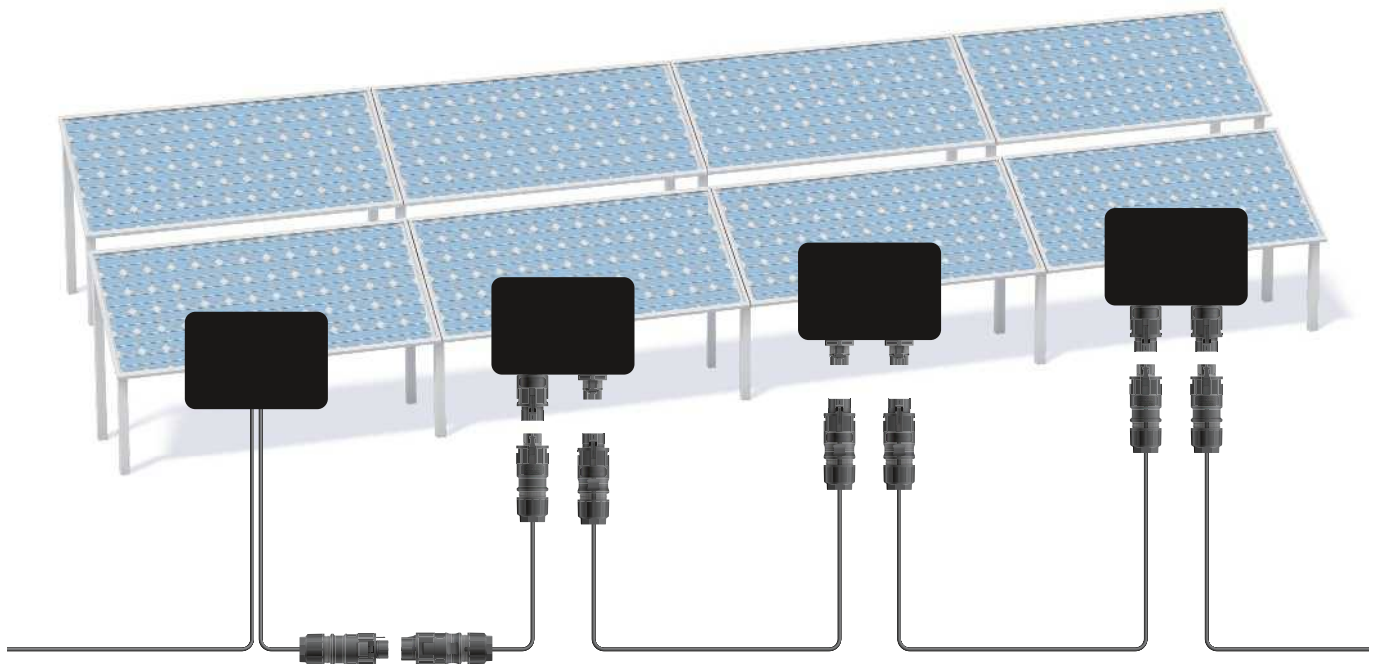


Installation system for photovoltaic system technology

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



The basic modular principle of the PRC installation system



Your advantages

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

AC device connectors

3-position and 5-position versions with attached litz wires or for self-assembly



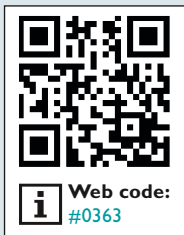
AC connectors with screw connection

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

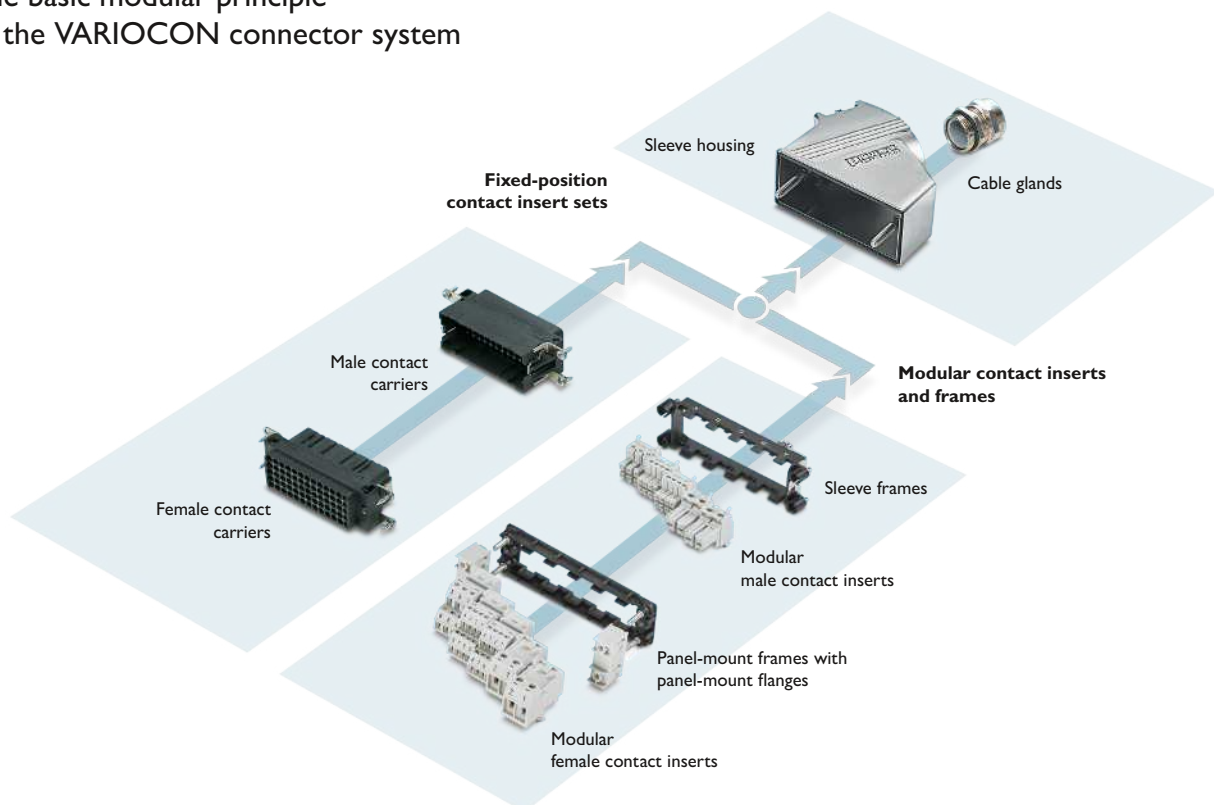


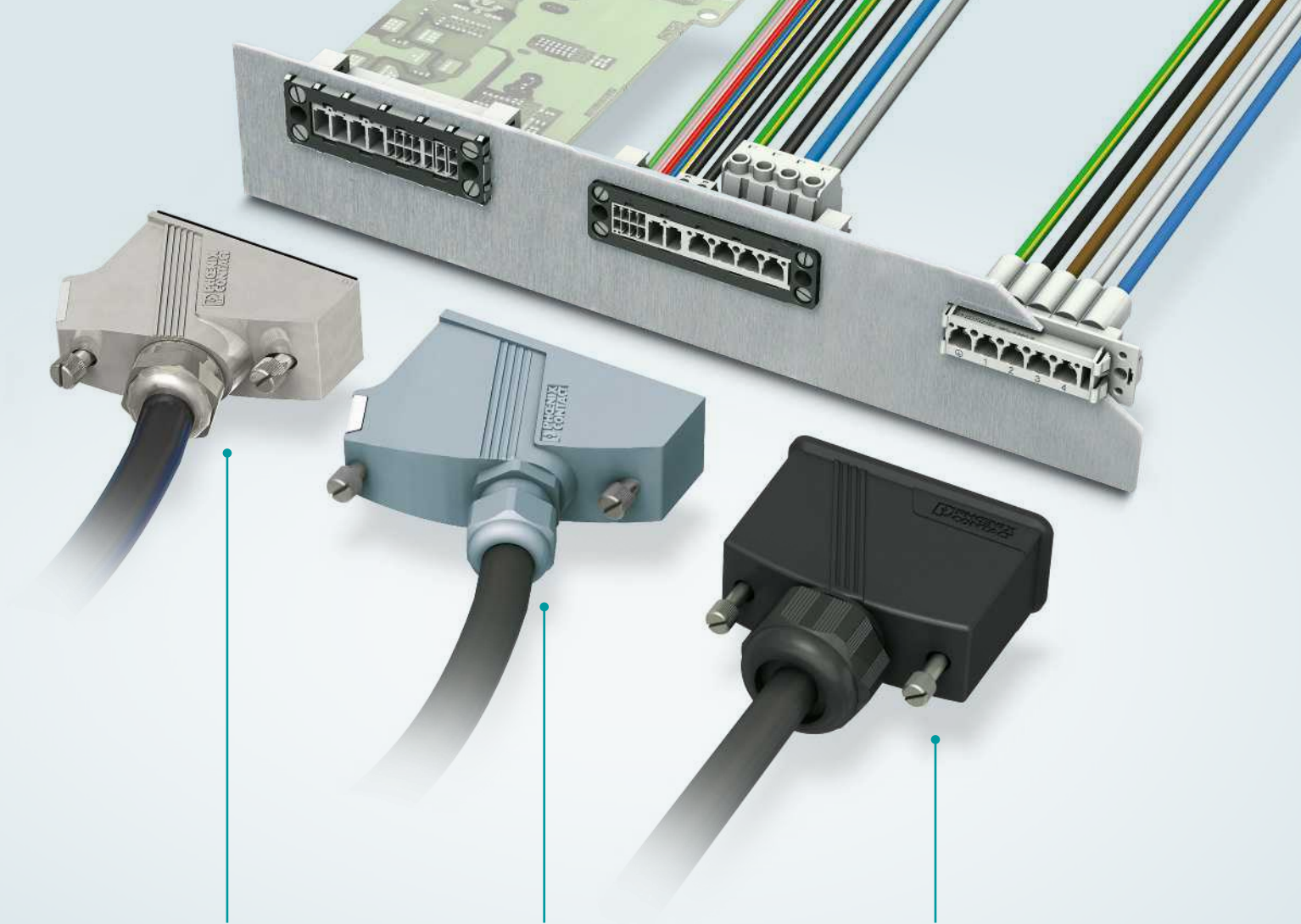
Modular rectangular connectors for signals, data, and power

The VARIOCON connector system offers compact connection solutions for transmitting currents up to 70 A and voltages up to 1,000 V in devices and junction boxes. Modular contact inserts with screw and PCB connection, as well as fixed contact inserts with crimp connection for turned and punched contacts, are the basis of the product range. With IP68/IP69K degree of protection, the connector system offers a high degree of reliability, even under extreme conditions.



The basic modular principle
of the VARIOCON connector system





The right material for every application

- Plastic
- Powder-coated die-cast zinc
- Nickel-plated die-cast zinc

Four sizes

- For use in various applications
- Two to five free module slots
- Various power and signal inserts available
- Angled cable outlet

Optimized for outdoor use





- UV-resistant plastic sleeve
- Degree of protection IP65/IP66/IP67
- Can be sealed
- Straight cable outlet

Your advantages

- ✓ Modular contact insert design
- ✓ Combination of power and signal in one connector
- ✓ Housing designs made of plastic and metal
- ✓ Nickel-plated housings available for EMC applications
- ✓ Easy configuration via online configurator:

i Web code: #1711

DC connection technology for PV panels

PCB terminal blocks without insulating bodies					 Web code: #0361	
PCB connection for photovoltaic applications						
Description	Push-Lock PCB terminal blocks with spring connection for tin-plated circular conductors or conductors with ferrules				Push-Lock terminal blocks with spring connection and welding bracket	
	Solder pin length	Order No.	Solder pin length	Order No.	Version	Order No.
	2.1 mm	1704836	2.1 mm	1705081	Welding bracket on right	1705624
	2.9 mm	1704837	2.9 mm	1705085	Welding bracket on left	1705625
Design	Closed		Open		Closed	
Number of positions	1					
Cross-section	Max. 6 mm ²					

Housings and contacts					 Web code: #0674	
SUNCLIX DC connectors designed for assembly with crimp connection						
Description	Housing for crimp connector, male (-)	Housing for crimp connector, female (+)	Contacts for crimp connection		Contacts for crimp connection	
Type	Male (-)	Female (+)	Male	Female	Male	Female
Order No.	1050770	1050771	1050768	1050769	1050766	1050767
Cross-section	–	–	2.5/4 mm ² AWG 14/ AWG 12	2.5/4 mm ² AWG 14/ AWG 12	6 mm ² AWG 10	6 mm ² AWG 10
Outside cable diameter	5 mm...8 mm	5 mm...8 mm	–	–	–	–
Rated voltage	1,500 V (1,500 V UL)	1,500 V (1,500 V UL)	–		–	
Rated current	–	–	Max. 35 A		Max. 40 A	
Degree of protection	IP68 (24 h/2 m)	IP68 (24 h/2 m)	–		–	
Product information	Temperature range: -40°C...+85°C, protection class II, approval in accordance with UL 6703 and IEC 62852			Temperature range: -40°C...+85°C, approval in accordance with UL 6703 and IEC 62852 Pcs./Pkt.: 1,000 pcs. per roll		

DC connection technology for field cabling

Connectors





 Web code: #0358

SUNCLIX
DC connectors
designed for
assembly with
SUNCLIX spring
connection







Description		Field connectors with spring-cage connection				
Type	Male (-)	Female (+)	Male (-)	Female (+)	Male (-)	Female (+)
Order No.	1774687	1774674	1020775	1020776	1790797	1790784
Cross-section	2.5 mm ² ... 6 mm ²		2.5 mm ² ... 6 mm ²		6 mm ² ... 16 mm ²	
Rated voltage	1,100 V		1,500 V		1,500 V	
Rated current	Max. 40 A		Max. 35 A (IEC) / 50 A (UL)		Max. 65 A	
Degree of protection	IP65 / IP68 (24 h / 2 m)		IP66 / IP68 (24 h / 2 m)		IP66 / IP68 (24 h / 2 m)	
Product information	Temperature range: -40°C ... +85°C, protection class II, approval in accordance with IEC 62852		Temperature range: -40°C ... +85°C, protection class II, approval in accordance with UL 6703 and IEC 62852		Temperature range: -40°C ... +85°C, protection class II, approval in accordance with IEC 62852	

DC connection technology for field cabling

Connection systems					 Web code: #0358	
SUNCLIX						
Description	Fuse plugs		DC distributors (cable-based)		Adapter set SUNCLIX/MC4	
Product information	Fuse plugs for protecting panels and devices in photovoltaic systems.		Connection set with branch line (6 mm ²) for fast parallel connection of photovoltaic panels. Length of each individual cable 120 mm; other lengths available on request.		Connection of SUNCLIX connectors to type MC4 connectors from Stäubli without voiding the product warranty or guarantee for the MC4 connectors. Rated voltage: 1,500 V rated current: up to 35 A in accordance with IEC 62852/UL 6703 6 mm ² Multinorm cable	
	Nominal voltage		Cross-section Trunk line	Design	Order No.	
	OE		6 mm ²	Male to 2 x female (-/++)	1030649	
	1,000 V	I_{nom}	1,500 V	I_{nom}		
	1220829	3.5	1220822	3.7	6 mm ²	Female to 2 x male (+/--)
	1220828	6	1220821	5		1030650
	1220827	8	1220820	7		
	1220826	10	1220819	9		
	1220825	11	1220818	11		Order No. 1079531
	1214613	14	1214616	13		
	1214610	19	1214620	17		
	1220824	23				
	1220823	25				
	M/F					
	1,000 V	I_{nom}	1,500 V	I_{nom}		
	1220881	3.5	1220814	3.7		
	1220879	6	1220813	5		
	1220878	8	1220812	7		
	1220876	10	1220811	9		
	1220874	11	1220810	11		
	1220873	14	1220808	13		
	1220866	19	1220809	17		
	1220863	23				
	1220861	25				
Degree of protection	IP65 / IP66 / IP67 / IP68 (24 h / 2 m)		IP68 (1 h / 1 m)			
Ambient temperature (operation)			-40°C... +85°C			
Accessories	A spacer for improved heat dissipation is available as an option (see Accessories on page 21)					

DC connection technology for device connection

Pre-assembled DC device connectors							 Web code: #0359
SUNCLIX DC device connectors, 130 mm litz wire length, other lengths available on request							
Description	Device plugs						
Type	Male	Female	Male	Female	Male	Female	
Order No.	1158446	1158445	1158449	1158447	1158451	1158448	
Cross-section	2.5 mm ²		4 mm ²		6 mm ²		
Rated voltage	1,500 V		1,500 V		1,500 V		
Rated current	Max. 20 A		Max. 30 A		Max. 35 A		
Degree of protection	IP65/IP66/IP68 (24 h/2 m)		IP65/IP66/IP68 (24 h/2 m)		IP65/IP66/IP68 (24 h/2 m)		
Product information	Temperature range: -40°C... +85°C, approval in accordance with IEC 62852, required accessories: 1146092						

DC device connectors designed for assembly						 Web code: #0359
						
Description	Housing		Wall mount	Contacts		
Type	Female	Male		Female	Male	
Order No.	1133364	1133365	1146092	1050769 1050767	1050768 1050766	
Product information	Temperature range: -40°C... +85°C, approval in accordance with IEC 62852 and UL 6703, required accessories: 1146092		Wall mount for securing SUNCLIX "C4" device plugs in the housing			

Accessories					 Web code: #0362
					
Description	Filler plugs	Filler plugs	Protective caps	Spacers	
Order No.	1775631	1623478	1785430	1623253	
Product information	Filler plug for SUNCLIX connectors, IP67 in the cable gland, 1,000 V.	Filler plug for SUNCLIX connectors, IP67 in the cable gland, 1,500 V.	IP67 protective cap for SUNCLIX connectors, transport protection for the pin connector pattern, for sealing and protecting unused device inputs and for transport protection.	Spacers for fuse plugs ensure better heat dissipation if multiple fuses are bundled together in an application.	

PRC series AC connection technology



AC device connectors							Web code: #0200		
									
Description	Device plugs with crimp connection			Contact carriers		Contacts			
				With nut	Without nut				
Order No. 3-pos.	1409219	1409220	1409221	1409218	1627608	1409207	1409208	1409209	
Order No. 5-pos.	1409211	1409212	1409213	1409206	1627609				
Conductor cross-section	2.5 mm ²	4.0 mm ²	6.0 mm ²	–	–	2.5 mm ²	4.0 mm ²	6.0 mm ²	
Cable length	150 mm			–	–	–	–	–	
Rated voltage	690 V			690 V		–	–	–	
Rated current	24 A	32 A	35 A	–	–	24 A	32 A	35 A	
Screw connection	M25			–	–	–	–	–	

AC connectors for field assembly				
				
Description	Coupling, 3-pos.	Coupling, 5-pos.	Connector, 3-pos.	Connector, 5-pos.
Order No. 8.0 mm... 12.0 mm	1410658	1410629	1014502	1014522
Order No. 12.0 mm... 16.0 mm	1409217	1409205	1014529	1014506
Order No. 16.0 mm... 21.0 mm	1410659	1410655	1014531	1014505
Order No. 8.0 mm... 21.0 mm	1410661	1410656	1014498	1014530
Conductor cross-section	1.5 mm ² ... 6.0 mm ²			
Rated voltage	690 V			
Rated current	35 A			
Connection method	Screw connection			
Insertion cycles	Approx. 100		Approx. 2,000	
Product information	Approvals in accordance with IEC 61984, IEC 61535, 2 PFG 1915, UL 2238, UL 2237, DNV GL 7-2.			

Accessories				
				
Description	Protective cap for connector	Protective cap for coupling	Coding ring for connector	Nut for device plug
Order No.	1409237	1409236	1014496	1457937

Tools

Tools for PRC series AC device connectors

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

Tools for SUNCLIX series DC connectors

			
Description	Crimping tool	Mounting pliers	WIREFOX stripping tool
Order No.	1212755	1200137	1212511
Product information	For PV-CF(M) contacts, 2.5, 4, and 6 mm ² (AWG 14/12/10).	For snapping the crimp contacts into the plastic housing. Suitable for conductor diameters of 4.2 mm... 6.0 mm.	For standard 2.5, 4, and 6 mm ² solar cables, with 15 mm longitudinal stop, for SUNCLIX field connectors.














Tool for SUNCLIX DC connectors with crimp connection








Mounting and removal tool for SUNCLIX crimp module connectors	
Description	PV-A-C-DC-TOOL
Order No.	1069522

VARIOCON series modular rectangular connectors

Sleeve housings in accordance with IP65/IP66/IP67, die-cast zinc – connector side							 Web code: #0363	
	Description	Size	Module slots	Thread type	Type	Cylinder head screw	Knurled screw	
						Order No.		
	Metric	VC 1	2	M20	VC-MP-T1...	1886676	1886634	
		VC 2	3	M25	VC-MP-T2...	1886689	1886647	
		VC 3	4		VC-MP-T3...	1886692	1886650	
		VC 4	5		VC-MP-T4...	1886702	1886663	
	Pg	VC 1	2	Pg16	VC-MP-T1...	1884898	1855539	
		VC 2	3	Pg21	VC-MP-T2...	1884908	1855542	
		VC 3	4		VC-MP-T3...	1884911	1855555	
		VC 4	5		VC-MP-T4...	1884924	1855568	
	Metric + EMC	VC 1	2	M20	VC-MEMV-T1...	1886553	1886595	
		VC 2	3	M25	VC-MEMV-T2...	1886566	1886605	
		VC 3	4		VC-MEMV-T3...	1886579	1886618	
		VC 4	5		VC-MEMV-T4...	1886582	1886621	
	Pg+EMV	VC 1	2	Pg16	VC-MEMV-T1...	1853324	1855131	
		VC 2	3	Pg21	VC-MEMV-T2...	1853337	1855144	
		VC 3	4		VC-MEMV-T3...	1853340	1855157	
		VC 4	5		VC-MEMV-T4...	1853353	1855160	
Sleeve housings in accordance with IP67, plastic								
	Description	Size	Module slots	Thread type	Type	Cylinder head screw	Knurled screw	
						Order No.		
	Metric	VC 1	2	M20	VC-K-T1...	1852935	1855097	
		VC 2	3	M25	VC-K-T2...	1852948	1855107	
		VC 3	4		VC-K-T3...	1852961	1855120	
		VC 4	5		VC-K-T4...	1852974	1855133	
	Pg	VC 1	2	Pg16	VC-K-T1...	1852930	1855092	
		VC 2	3	Pg21	VC-K-T2...	1852943	1855102	
		VC 3	4		VC-K-T3...	1852956	1855115	
		VC 4	5		VC-K-T4...	1852969	1855128	
	Integrated Pg screw connection	VC 1	2	-	VC-K-T1...	-	-	
		VC 2	3	Pg29	VC-K-T2...	1583880	-	
		VC 3	4		VC-K-T3...	1424368	-	
		VC 4	5	-	VC-K-T4...	-	-	
	Ribbon cable outlet	VC 2	3	Cable size (mm) 6 x 20.5 6 x 24 7.5 x 29.5 9 x 35	VC-K-T2...	1607703	-	
						1607677	-	
						1607680	-	
						1607693	-	





Modular contact inserts


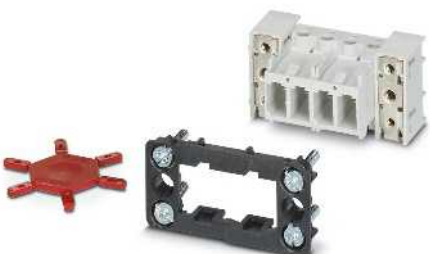
Modular contact inserts – device side								 Web code: #0537	
	Type	Number of positions	Module slots	PCB connections			Screw connection	Order No.	
					180°	90°			90° with PE
Insertion cycles 100	1.5 mm ²	6	1		1884872	1853531	–		1854019 1583555*
	1.5 mm ²	8	1		1884885	1852833	–		1854022 1583568*
	4 mm ²	2	1		1884979	1852859	–		1853528 1583542*
Insertion cycles 50	16 mm ²	4	3		–	1607509	1607516		1607745
	16 mm ²	5	4		–	1607523	1607530		1607748
	16 mm ²	7	5		–	1607537	1607544		1607751

Modular contact inserts – connector side								 Web code: #0536	
	Type	N° of positions	Module slots	Rated current	Rated voltage	Screw connection	Order No.		
Insertion cycles 100	1.5 mm ²	6	1	10 A	250 V		1853476 1583526*		
	1.5 mm ²	8	1	10 A	160 V		1852820 1583536*		
	4 mm ²	2	1	20 A	400 V		1852846 1583513*		
Insertion cycles 50	16 mm ²	4	3 4 (1 of which is free) 5 (2 of which are free)	70 A	690 V		1607467** 1607488** 1607495**		
	16 mm ²	5	4 5 (1 of which is free)	70 A	690 V		1607474** 1607502**		
	16 mm ²	7	5	70 A	690 V		1607481**		




*) Contact insert with PE marking. **) Items do not require separate panel-mount frame or sleeve frame.



Panel-mount frames for device connection

Panel-mount frames – device side							 Web code: #0539	
								
Size	Module slots	Panel-mount frame without PE		Panel-mount frame with PE		Additional EMC shielding frame		
		Type	Order No.	Type	Order No.	Type	Order No.	
VC 1	2	VC-AR 1/2 M	1852972*	VC-AR 1/2 M-PEA	1607761*	VC-AR1-EMV	1853214	
VC 2	3	VC-AR 2/3 M	1852985*	VC-AR 2/3 M-PEA	1607774*	VC-AR2-EMV	1853227	
VC 3	4	VC-AR 3/4 M	1852998*	VC-AR 3/4 M-PEA	1607787*	VC-AR3-EMV	1853232	
VC 4	5	VC-AR 4/5 M	1853007*	VC-AR 4/5 M-PEA	1607790*	VC-AR4-EMV	1853243	

Male contact inserts incl. panel-mount frame and flange						 Web code: #0528	
							
Size	Number of positions / conductor cross-section	Rated voltage	Rated current	Type	Order No.		
VC 1	16 x 1.5 mm ²	160 V	10 A	VC-AR1/2M-S88-SET	1607394		
	12 x 1.5 mm ²	250 V	10 A	VC-AR1/2M-S66-SET	1607346		
	4 x 4 mm ²	400 V	20 A	VC-AR1/2M-S22-SET	1607298		
VC 2	24 x 1.5 mm ²	160 V	10 A	VC-AR2/3M-S888-SET	1607407		
	18 x 1.5 mm ²	250 V	10 A	VC-AR2/3M-S666-SET	1607359		
	6 x 4 mm ²	400 V	20 A	VC-AR2/3M-S222-SET	1607311		
VC 3	32 x 1.5 mm ²	160 V	10 A	VC-AR3/4M-S8888-SET	1607418		
	24 x 1.5 mm ²	250 V	10 A	VC-AR3/4M-S6666-SET	1607370		
	8 x 4 mm ²	400 V	20 A	VC-AR3/4M-S2222-SET	1607322		
VC 4	40 x 1.5 mm ²	160 V	10 A	VC-AR4/5M-S88888-SET	1607431		
	30 x 1.5 mm ²	250 V	10 A	VC-AR4/5M-S66666-SET	1607383		
	10 x 4 mm ²	400 V	20 A	VC-AR4/5M-S22222-SET	1607335		

Sleeve frames for connectors






Sleeve frames – connector side				 Web code: #0538	
					
Size	Module slots	Sleeve frame without PE		Sleeve frame with PE	
		Type	Order No.	Type	Order No.
VC 1	2	VC-TR 1/2 M	1852891	VC-TR 1/2 M-PEA	1607059
VC 2	3	VC-TR 2/3 M	1852901	VC-TR 2/3 M-PEA	1607062
VC 3	4	VC-TR 3/4 M	1852914	VC-TR 3/4 M-PEA	1607075
VC 4	5	VC-TR 4/5 M	1852927	VC-TR 4/5 M-PEA	1607088

Female contact inserts incl. sleeve frames						 Web code: #0529
						
Size	Number of positions/ conductor cross-section	Rated voltage	Rated current	Type	Order No.	
VC 1	16 x 1.5 mm ²	160 V	10 A	VC-TR1/2M-PEA-S88-SET	1607239	
	12 x 1.5 mm ²	250 V	10 A	VC-TR1/2M-PEA-S66-SET	1607191	
	4 x 4 mm ²	400 V	20 A	VC-TR1/2M-PEA-S22-SET	1607143	
VC 2	24 x 1.5 mm ²	160 V	10 A	VC-TR2/3M-PEA-S888-SET	1607250	
	18 x 1.5 mm ²	250 V	10 A	VC-TR2/3M-PEA-S666-SET	1607202	
	6 x 4 mm ²	400 V	20 A	VC-TR2/3M-PEA-S222-SET	1607154	
VC 3	32 x 1.5 mm ²	160 V	10 A	VC-TR3/4M-PEA-S8888-SET	1607263	
	24 x 1.5 mm ²	250 V	10 A	VC-TR3/4M-PEA-S6666-SET	1607215	
	8 x 4 mm ²	400 V	20 A	VC-TR3/4M-PEA-S2222-SET	1607167	
VC 4	40 x 1.5 mm ²	160 V	10 A	VC-TR4/5M-PEA-S88888-SET	1607274	
	30 x 1.5 mm ²	250 V	10 A	VC-TR4/5M-PEA-S66666-SET	1607226	
	10 x 4 mm ²	400 V	20 A	VC-TR4/5M-PEA-S22222-SET	1607178	










Device connectors

Device connections for signals		 Web code: #0515			
PLUSCON circular connectors for sensor/ actuator applications					
Description		M8 device connectors with halogen-free litz wires, front mounting	M12 device connectors with halogen-free litz wires, front mounting	M8 device connectors for wave soldering processes, one-piece, rear mounting	M12 device connectors for wave soldering processes, one-piece, rear mounting
Male	5-pos.	1440119	1520068	1424242	1441765
Female	5-pos.	1440106	1520042	1424241	1441778
Number of positions		4/5	4/5	4/5	4/5
Rated voltage		30 V	60 V	30 V	60 V
Nominal current		2 A	4 A	2 A	4 A
Contact carrier material		PA 66	PA 66	PA 66	PA 66
Contact/contact surface material		Cu alloy/Au	Cu alloy/Au	Cu alloy/Au	Cu alloy/Au
Connection method		Individual litz wires	Individual litz wires	Solder pins	Solder pins
PLUSCON circular connectors for sensor/ actuator applications					
Description		M8 device connectors for reflow process, two-piece, rear mounting	M12 device connectors for reflow process, two-piece, rear mounting	M12 housing screw connections for reflow process, two-piece, rear mounting, standard	M12 device connectors for reflow process, rear mounting
Male	5-pos.		1411943	1414000/1414002 (SPEEDCON)	1551752
Female	5-pos.	1412222/housing 1412506	1411937	1414021/1414023 (SPEEDCON)	1542622
Number of positions		4/5	4/5		4/5
Rated voltage		30 V	60 V		60 V
Nominal current		2 A	4 A		4 A
Contact carrier material		PA 66	PA 66		PPA
Contact/contact surface material		Cu alloy/Au	Cu alloy/Au		Cu alloy/Au
Connection method		SMD solder connection	SMD solder connection		THR solder connection

Device connectors

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

PCB connections





PCB terminal blocks, signals, and power				 Web code: #0391
PCB terminal blocks, conductor cross-sections from 0.14 to 95 mm ² , pitch 2.5 mm to 20 mm				
Description	Push-in spring connection, horizontal to the PCB for SMD applications	Push-in spring connection, angled (45°) to the PCB	Push-in spring connection, horizontal to the PCB	Double Push-in spring connection, angled (45°) to the PCB
Product family	PTSM 0,5/...-H-SMD	SPTAF 1/...-LL	PTS 1,5	PTDA 2,5
Product example Order No.	1771059	1864312	1792892	1725341
Number of positions	2...8	2...16	2...12	2...16
Nominal cross-section	0.5 mm ²	1.0 mm ²	1.5 mm ²	2.5 mm ²
Pitch	2.5 mm	3.5 mm	5 mm	5 mm
Rated voltage IEC/UL	160 V/150 V	160 V/300 V	400 V/300 V	400 V/300 V
Nominal current IEC/UL	6 A/5 A	16 A/8 A	12 A/10 A	13.5 A/13.5 A
PCB terminal blocks, conductor cross-sections from 0.14 to 95 mm ² , pitch 2.5 mm to 20 mm				
Description	Lever connection, angled (45°) to the PCB	Push-in spring connection, horizontal to the PCB	Push-in spring connection, angled (60°) to the PCB	Lever connection, horizontal to the PCB
Product family	LPTA 2,5/	TDPT 4/...-SP	SPTA 5	LPT 6/
Product example Order No.	1190366	1017524	1819118	1098170
Number of positions	1...12	2...6	1...12	1...8
Nominal cross-section	2.5 mm ²	4 mm ²	6 mm ²	6 mm ²
Pitch	5 mm	6.35 mm	7.5 mm	7.5 mm
Rated voltage IEC/UL	400 V/300 V	1,000 V/600 V	1,000 V/600 V	1,000 V/600 V*
Nominal current IEC/UL	24 A/20 A*	41 A/30 A	41 A/33 A	41 A/35 A*
Product information			Can be bridged, for connecting individual positions	

* The specified value is expected upon approval

PCB connections






PCB terminal blocks, power

i Web code: #0391




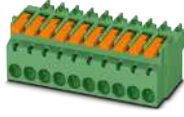





<p>PCB terminal blocks, conductor cross-sections from 0.14 to 95 mm², pitch 2.5 mm to 20 mm</p>				
<p>Description</p>	<p>Push-in spring connection, horizontal to the PCB</p>	<p>Lever connection, horizontal to the PCB</p>	<p>Push-in spring connection, vertical to the PCB</p>	<p>Screw connection, horizontal to the PCB</p>
<p>Product family</p>	<p>SPT 16/...-H</p>	<p>LPT 16/</p>	<p>SPT 35/...-V</p>	<p>MKDSP 50</p>
<p>Product example Order No.</p>	<p>1735817</p>	<p>1119814</p>	<p>1845373</p>	<p>1856155</p>
<p>Number of positions</p>	<p>1...9</p>	<p>1...8</p>	<p>1...5</p>	<p>1...5</p>
<p>Nominal cross-section</p>	<p>16 mm²</p>	<p>16 mm²</p>	<p>25 mm²</p>	<p>70 mm²</p>
<p>Pitch</p>	<p>10 mm</p>	<p>10 mm</p>	<p>15 mm</p>	<p>17.5 mm</p>
<p>Rated voltage IEC/UL</p>	<p>1,000 V / 600 V</p>	<p>1,000 V / 600 V*</p>	<p>1,000 V / 600 V</p>	<p>1,000 V / 600 V</p>
<p>Nominal current IEC/UL</p>	<p>76 A / 66 A</p>	<p>76 A / 66 A*</p>	<p>125 A / 101 A</p>	<p>192 A / 160 A</p>
<p>Product information</p>		<p>Also available with 15 mm pitch with 1,000 V UL* approval</p>		<p>Suitable for connecting aluminum conductors</p>

^{*)} The specified value is expected upon approval

Panel feed-throughs

High-current feed-through terminal blocks, power				 Web code: #0456
High-current feed-through terminal blocks, conductor cross-sections from 4 to 95 mm ² , for panel thickness from 1 to 6 mm				
Description (outside/inside)	Screw connection / screw and bolt connection	Push-Lock spring connection / Push-in spring connection	T-LOX knee-lever connection / bolt connection	T-LOX knee-lever connection / bolt connection
Product family	UW 25	PLW 16-6	TW 50	TW 95
Product example Order No.	3073377	1821083	1708749	1708756
Number of positions	1-pos. alignable	3...5	1...6	1...6
Nominal cross-section	25 mm ²	16 mm ²	50 mm ²	95 mm ²
Panel thickness	1 mm...6 mm	Free choice of screw fastening	1 mm...5 mm	1 mm...5 mm
Rated voltage IEC/UL	1,000 V / 600 V	1,000 V / 600 V	1,000 V / 600 V	1,000 V / 600 V
Nominal current IEC/UL	101 A / 112.5 A	41 A / 40 A	150 A / 150 A	232 A / 230 A
Product information	Suitable for connecting aluminum conductors	Optional sealing prevents unintentional release	Suitable for connecting aluminum conductors	Suitable for connecting aluminum conductors

PCB connections

PCB connectors, signals, and power				 Web code: #0425
PCB connectors, conductor cross-sections from 0.14 to 35 mm ² , pitch 2.5 to 15 mm				
Description	Push-in spring connection with latching flange	Push-in spring connection with latching flange	Push-in spring connection with lever actuation and Lock and Release locking	Push-in spring connection, SKEDD direct connection technology
Product family	DFMC 0,5/...-ST-RF	FMC 1,5/...-ST-RF	LPC 1,5/...-ST-LR	SDDC 1,5/...-PV
Product example Order No.	1715737	1952050	1849191	1713868
Number of positions	2...16	2...16	2...16	2...16
Nominal cross-section	0.5 mm ² (AWG 20)	1.5 mm ² (AWG 16)	1.5 mm ² (AWG 16)	1.5 mm ² (AWG 16)
Pitch	2.54	3.5 mm/3.81 mm	3.81 mm	3.5 mm
Rated voltage IEC/UL	160 V/150 V	160 V/300 V	160 V/150 V	160 V/300 V
Nominal current IEC/UL	6 A/6 A	8 A/8 A	8 A/8 A	8 A/8 A
PCB connectors, conductor cross-sections from 0.14 to 35 mm ² , pitch 2.5 to 15 mm				
Description	Push-in spring connection, SKEDD direct connection technology	Flat Push-in spring connection	Push-in spring connection with lever actuation and middle flange	Energy bus system with insulation displacement connection technology
Product family	CDDC 2,5/...-PV-5,0	FKCN 2,5/...-ST	LPC 6/...-STL	PC 6/...-ST-BUS
Product example Order No.	1016289	1754597	1716942	1044738
Number of positions	2...16	2...18	2...6	2...3
Nominal cross-section	2.5 mm ² (AWG 12)	2.5 mm ² (AWG 14)	6 mm ² (AWG 8)	16 mm ² (AWG 6)
Pitch	5.0 mm	5.0 mm/5.08 mm	7.62 mm	7.62 mm
Rated voltage IEC/UL	320 V/300 V	320 V/300 V	1,000 V/600 V	1,000 V/600 V
Nominal current IEC/UL	12 A/12 A	12 A/10 A	41 A/35 A	32 A/30 A

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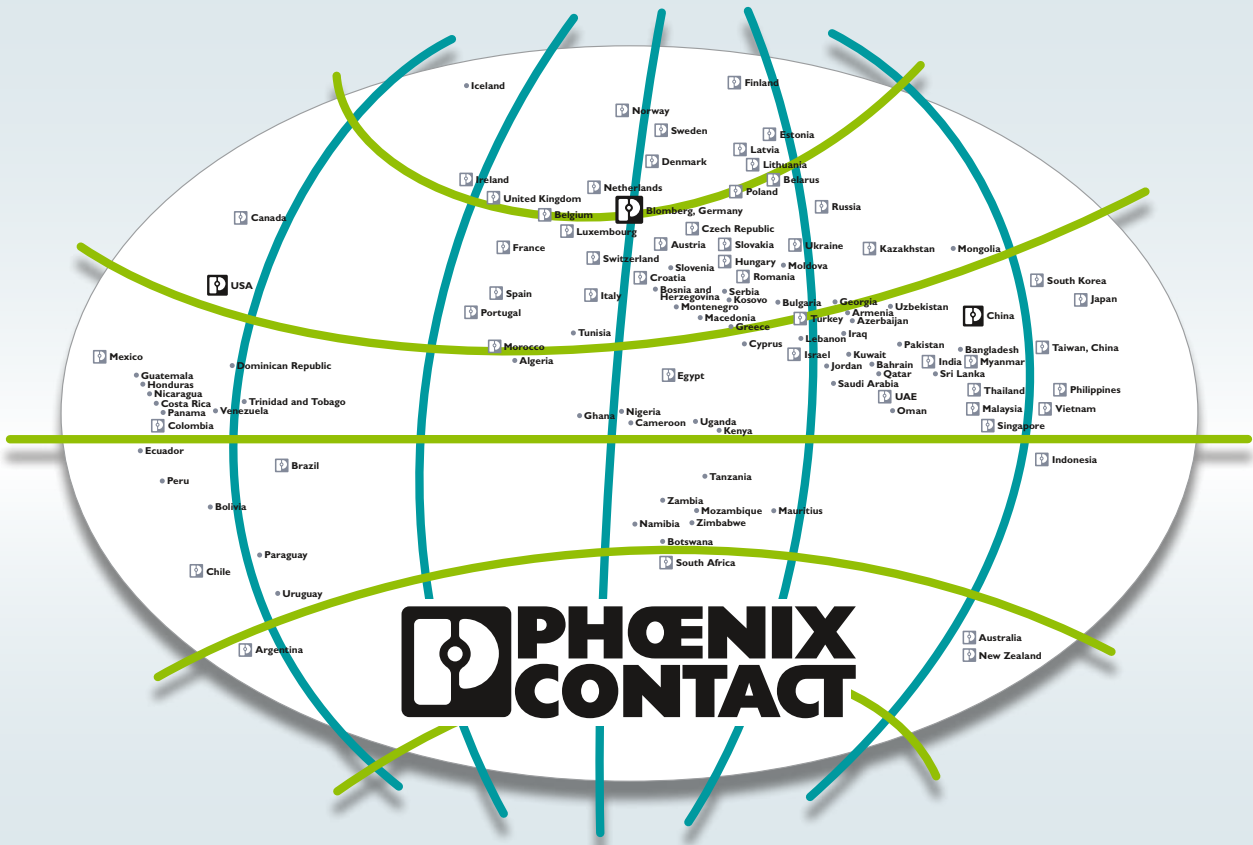
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