



# M5 to M12 circular connectors

Product overview 2020/2021

# 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<sub>A</sub>

**i** Web code: #0682



### Find out more with the web code

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

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

Or use the direct link:  
[phoenixcontact.net/webcode/#1234](https://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/630 V

- Connection cross sections up to 2.5 mm<sup>2</sup>
- For 1-phase and 3-phase mains voltage applications
- Protected against mismatching for AC and DC applications

**i** Web code: #0681

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# 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. The modular structure and numerous pin assignments enable the device connectors to be easily integrated into your device design.



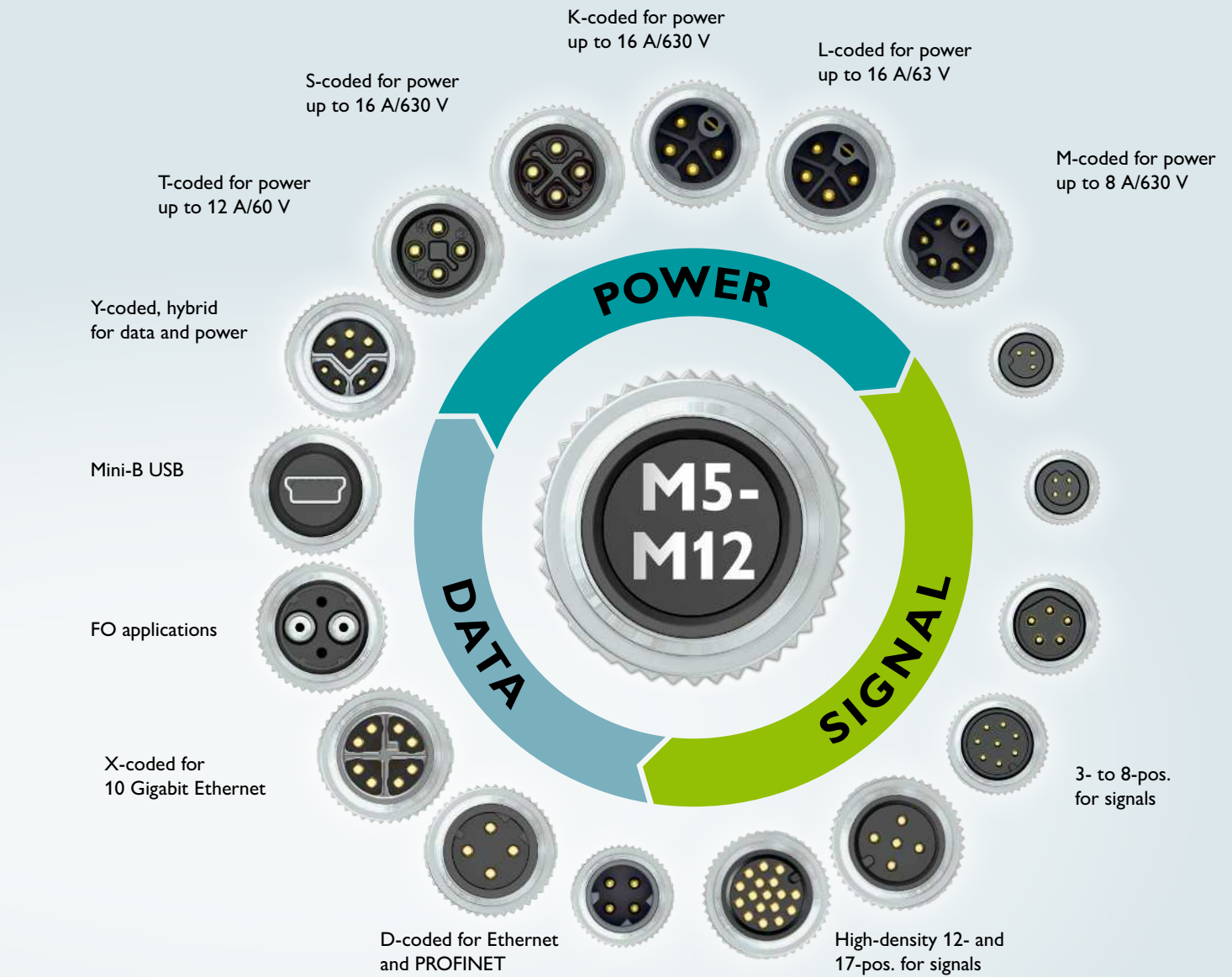
## For virtually every application

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



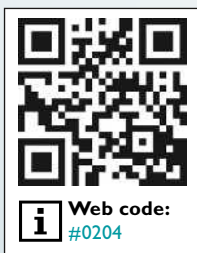
**For fast data transmission**  
M8 and M12 data connectors for up to 10 Gbps



**For high power**  
M12 power connectors for up to 16 A and 630 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 various 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



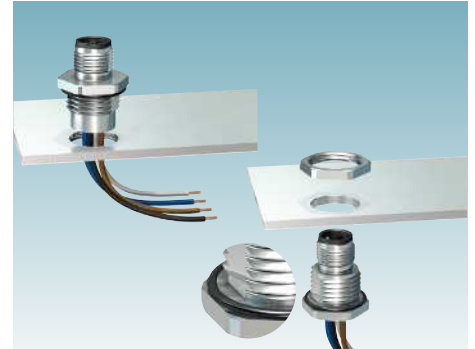
### Pre-assembled cables

- 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



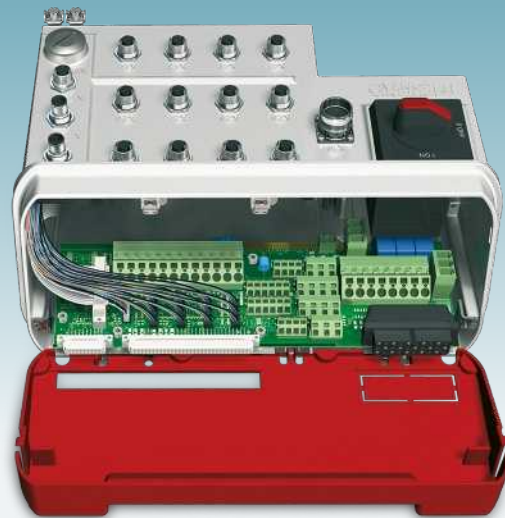
### Fieldbus-specific coding

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

## Main features

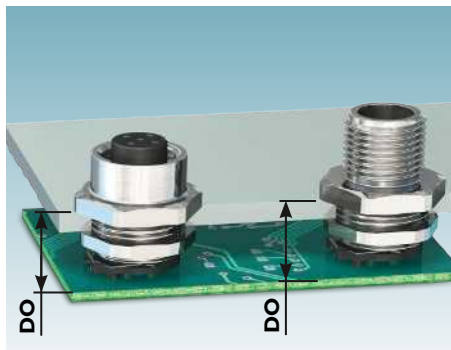
Device connection technology from Phoenix Contact for distributed modules is designed for harsh ambient conditions in industrial production processes.

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



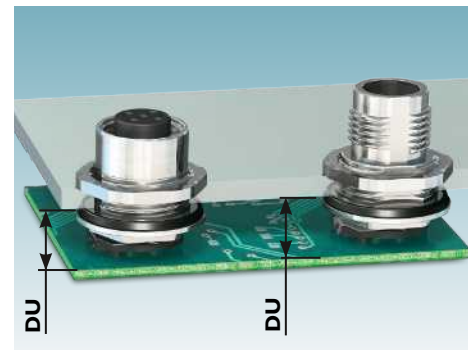
# Device connectors for direct PCB mounting

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

**Safe power transmission**

PE connection to the device housing

**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

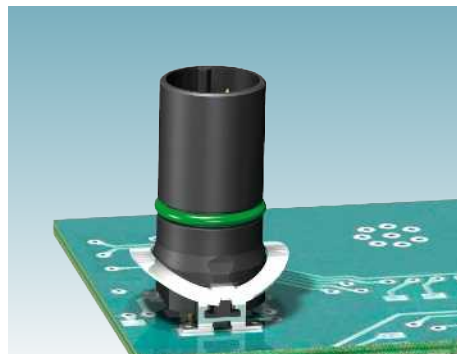
**Seamless shielding**

Shield connection to the PCB via shield spring



For through hole reflow soldering, two-piece

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



For surface-mount technology (SMT), 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 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.

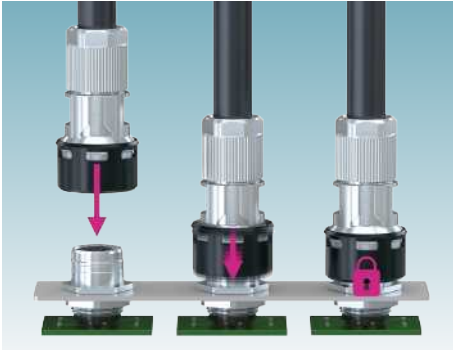


**i** Web code:  
#0561

## Main features

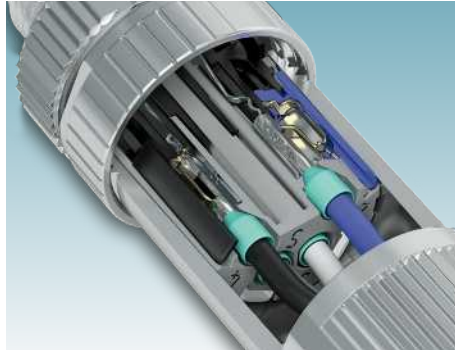
- Short connect time with push-pull fast locking system
- The right cable and connector for every application
- Flexible cabling arrangement with connectors for assembly available in female and male versions
- Customer-specific assemblies and cable lengths

## Your advantages at a glance



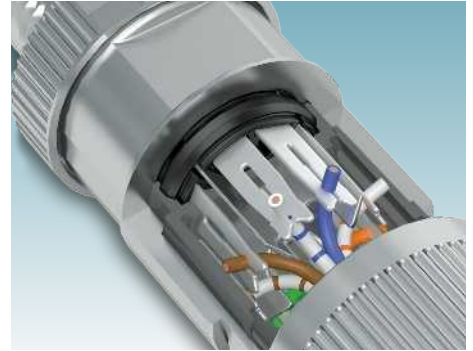
### Locking with a click

Cross-manufacturer M12 push-pull locking system for signal, data, and power transmission.



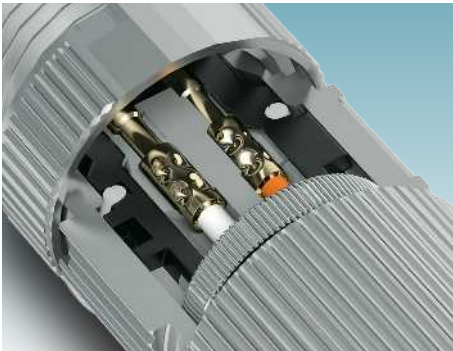
### Push-in connection

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



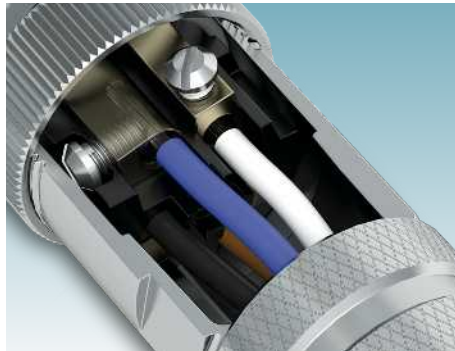
### IDC insulation displacement connection

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 wires axially.

### Safe shielding

Phoenix Contact offers comprehensive shielding concepts and torsion-resistant cables for safe and reliable operation of systems and robots. The large-area, material-bonding 360° shield connection with Advanced Shielding Technology is unique on the market. Liquid metal completely encloses the cable shielding during the manufacturing process and guarantees reliable EMC protection, robustness, and improved performance.

**i** Web code: #2253



# Page navigation






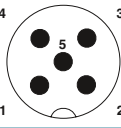
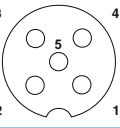
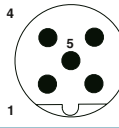
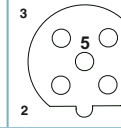
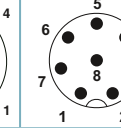
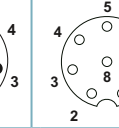
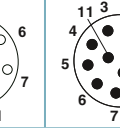
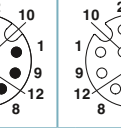
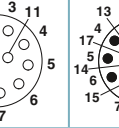
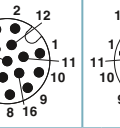
M5 to M12 circular connectors							
Design	Number of positions	3	4		5		6
	Coding	 A	  A	  D	  A	 B	 A
M12 device connectors for litz wire connection							
	Front mounting with litz wires	–	14 / 37	14	14	14	–
	Rear mounting with litz wires	–	16	16	16	16	–
	Front mounting, modular, crimp connection	–	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, for assembly/with molded cable							
	Plastic-molded cables	50	52	52	50	50	–
	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	26
	Two-piece, for SMD soldering processes	28	28	28 / 39	–	28 / 39	28
M8 connectors, for assembly/with molded cable							
	Plastic-molded cables	50	50	51	–	–	–
	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	–	–	–	–

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	49	49	49	49	49	-
26	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-


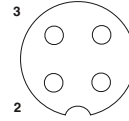

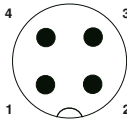
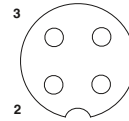



# SIGNAL

M12, with litz wires, front mounting		4-pos.			
 Web code: #0207	Coding	<b>A</b>			<b>D</b>
	Rated voltage	250 V			250 V
	Nominal current	4 A			4 A
	Conductor cross section	0.34 mm <sup>2</sup>			0.34 mm <sup>2</sup>
	Assembly				
	Pin assignment				
<b>Versions with zinc die-cast housing, for screw fastening</b>					
	<b>Pg9</b>	1693762	1693788	–	–
	Flat nut, Pg9				
	<b>M16 x 1.5</b>	1523450	1523434	1551558	1535202
	Flat nut, M16 x 1.5				
<b>New</b>	<b>M16 x 1.5, XL versions, wrench size 19</b>	1411577	1411568	1411578	1411569
	Flat nut, M16 x 1.5				
	<b>Push-pull, M16 x 1.5</b>	1108117	–	1027688	1027686
	Flat nut, M16 x 1.5				
	<b>Pg9, can be positioned</b>	1693775	1693791	–	–
	<b>M16 x 1.5, can be positioned</b>	1523463	1523447	1552256	1535215
	<b>20 mm square flange, mounting holes 4 x Ø 3.2 mm</b>	1419784	1419797	1441626	1441639
	<b>25 mm square flange, mounting holes 4 x Ø 2.7 mm</b>	1419991	1420003	1440957	1440960
<b>Versions with plastic and brass housing (nickel-plated), for screw fastening</b>					
	<b>Plastic, M16 x 1.5</b>	–	–	–	–
	<b>Brass (nickel-plated), M20 x 1.5</b>	1408451	1408436	–	–
<b>Versions with stainless steel housing (1.4404), for screw fastening</b>					
	<b>Pg9</b>	1554555	1555448	–	–
	Flat nut, Pg9				
	<b>M16 x 1.5</b>	1405233	1458855	–	–
	Flat nut, M16 x 1.5				
	<b>Pg9, can be positioned</b>	1554610	1554649	–	–
	<b>M20 x 1.5</b>	1408415	1408416	–	–

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

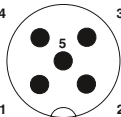
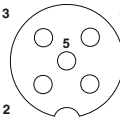
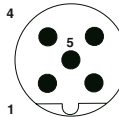
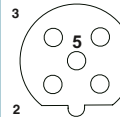
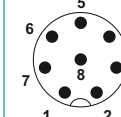
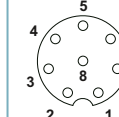
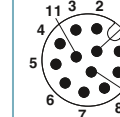
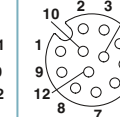
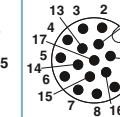
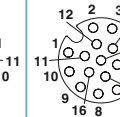
5-pos.		8-pos.		12-pos.		17-pos.			
 A	 B	 A	 A	 A					
60 V	60 V	30 V	30 V	30 V			30 V		
4 A	4 A	2 A	2 A	1.5 A			1.5 A		
0.34 mm <sup>2</sup>	0.34 mm <sup>2</sup>	0.25 mm <sup>2</sup>	0.25 mm <sup>2</sup>	0.14 mm <sup>2</sup>			0.14 mm <sup>2</sup>		
Pre-assembled with 0.5 m long litz wires									
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
									
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	–	–	–	–	–
1408446	1408454	–	–	1408442	1408453	–	–	–	–
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	<b>A</b>		<b>D</b>	
	Rated voltage	250 V		250 V	
	Nominal current	4 A		4 A	
	Conductor cross section	0.34 mm <sup>2</sup>		0.34 mm <sup>2</sup>	
	Pin assignment	Pin 	Socket 	Pin 	Socket 
<b>Modular versions</b>					
	<b>25 mm square flange, mounting holes 4 x Ø 3.2 mm</b>				
	<b>Pre-assembled contact carrier, with 0.5 m long litz wires</b>	1440805	–	1440821	–
	<b>Contact carrier for crimp contacts, for assembly</b>	1440931	–	1440944	–
	<b>Crimp contacts Ø 1.0 mm, 0.08 ... 0.5 mm<sup>2</sup></b>	1452356	–	1452356	–
	<b>Crimp contacts Ø 0.8 mm, 0.08 ... 0.34 mm<sup>2</sup></b>	–	–	–	–
	<b>Crimping tool</b>				
<b>M12, with litz wires, rear mounting</b>		<b>4-pos.</b>			
 Web code: #0209	Coding	<b>A</b>		<b>D</b>	
	Rated voltage	250 V		250 V	
	Nominal current	4 A		4 A	
	Conductor cross section	0.34 mm <sup>2</sup>		0.34 mm <sup>2</sup>	
	Assembly				
Pin assignment	Pin 	Socket 	Pin 	Socket 	
<b>Versions with zinc die-cast housing, for screw fastening</b>					
	<b>Pg9</b>	<b>1556618</b>	<b>1556621</b>	<b>1551532</b>	<b>1551529</b>
	<b>M12 x 1</b>	<b>1551875</b>	–	<b>1551901</b>	–
	<b>M16 x 1.5</b>	<b>1419629</b>	<b>1419632</b>	<b>1419603</b>	<b>1419616</b>
	<b>M16 x 1.5, XL versions, wrench size 19</b>	1411591	1411584	1411592	1411585
	<b>Push-pull, M16 x 1.5</b>	1108128	–	1027691	1027670
<b>Versions with plastic housing, for screw fastening</b>					
	<b>Pg9</b>	–	–	–	–
<b>Versions with stainless steel housing (1.4404), for screw fastening</b>					
	<b>Pg9</b>	1405239	1405240	–	–

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 <sup>2</sup>		0.34 mm <sup>2</sup>		0.25 mm <sup>2</sup>		0.14 mm <sup>2</sup>		0.14 mm <sup>2</sup>	
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
									

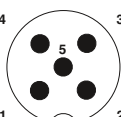
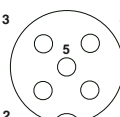
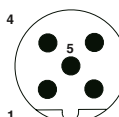
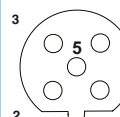
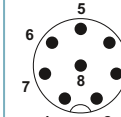
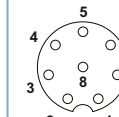
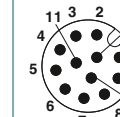
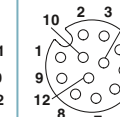
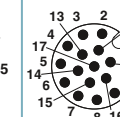
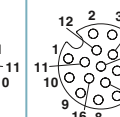
1419959

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 <sup>2</sup>		0.34 mm <sup>2</sup>		0.25 mm <sup>2</sup>		0.14 mm <sup>2</sup>		0.14 mm <sup>2</sup>	

Pre-assembled with 0.5 m long litz wires


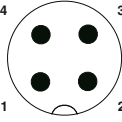
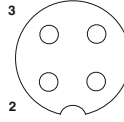
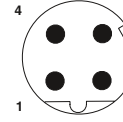
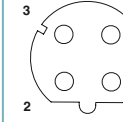


Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
									


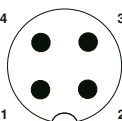
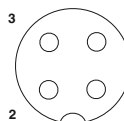
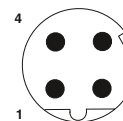
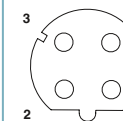



1542703	1542729	1543663	1543676	1542716	1542732	1430459	1430446	1430475	1430462
1551888	-	1551891	-	1551914	-	1437122	-	1437135	-
1419645	1419658	1419661	1419674	1419687	1419690	1419700	1419713	1419726	1419739
1411593	1411586	1411594	1411587	1411595	1411588	1411596	1411589	1411597	1411590
1027697	1027666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

-	1436356	-	-	-	1436369	-	-	-	-
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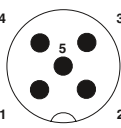
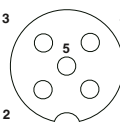
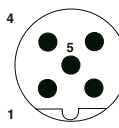
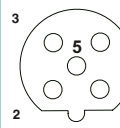
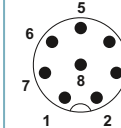
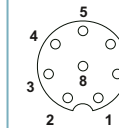
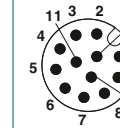
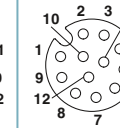
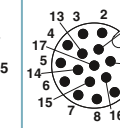
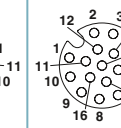
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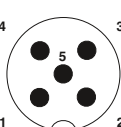
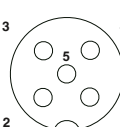
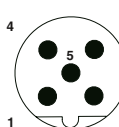
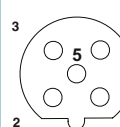
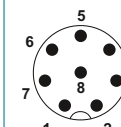
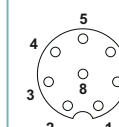
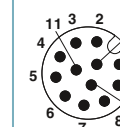
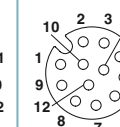
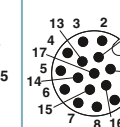
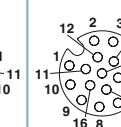
# SIGNAL

M12, with cable, rear mounting		4-pos.			
 Web code: #0210	Coding	<b>A</b>		<b>D</b>	
	Rated voltage	250 V		250 V	
	Nominal current	4 A		4 A	
	Pin assignment	Pin	Socket	Pin	Socket
					
<b>Versions for screw fastening, shielded</b>					
	<b>M16 x 1.5</b> Cable length: 1 m, PUR black	<a href="#">1419399</a>	<a href="#">1419302</a>	–	–
	<b>M16 x 1.5</b> Cable length: 2 m, PUR black	<a href="#">1419386</a>	<a href="#">1419315</a>	–	–
<b>Control cabinet feed-throughs for screw fastening</b>					
	<b>M16 x 1.5</b> Pin to socket	–	–	–	–
	<b>M16 x 1.5</b> Socket to socket	–	–	–	<a href="#">1424326</a>

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

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	
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
									
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	
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
									
1456433	1456446	1456459	1456462	1408574	1408573	-	-	-	-
1436437	-	-	-	1436440	-	-	-	-	-
1436398	-	-	-	1436408	-	-	-	-	-

# SIGNAL

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

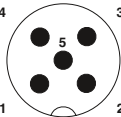
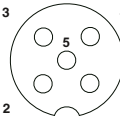
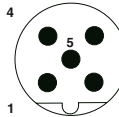
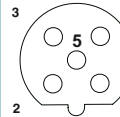
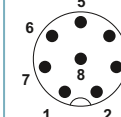
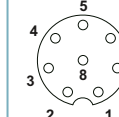
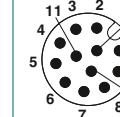
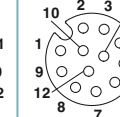
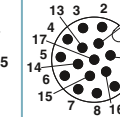
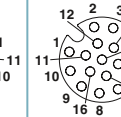
\* Cannot be combined with two-piece contact carriers for PCB mounting for THR, SMD or wave soldering processes.

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	
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
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.			
<b>i</b> Web code: #0214	Coding	A			D
	Rated voltage	250 V		250 V	
	Nominal current	4 A		4 A	
	Pin assignment	Pin	Socket	Pin	Socket
<b>Two-piece, THR contact carriers</b>					
	<b>Straight, shielded, THR, tray packing</b>	1439939	–	1552214	1551451
	<b>Straight, shielded, THR, tape-on-reel</b>	1457500*	1457623*	1457513*	1457636*
	<b>Straight, THR, tray packing</b>	1437164	1439942	–	1414071
	<b>Straight, THR, tape-on-reel</b>	1457490*	1457610*	–	–
<b>Two-piece, wave soldering contact carriers</b>					
	<b>Angled, shielded, wave soldering, blister packing</b>	1432444	1432444	1436673	1432457
	<b>Angled, wave soldering, blister packing</b>	1436628	1436628	–	–
	<b>Straight, shielded, wave soldering, blister packing</b>	–	–	–	1551480
	<b>Straight, wave soldering, blister packing</b>	–	–	–	–
<b>Two-piece, housing screw connections for THR and wave soldering contact carriers</b>					
New	<b>Push-pull versions with O-ring,</b> socket versions also suitable for 8-pos. X-coded (CAT 6 <sub>A</sub> ), see Data section, page 32				
	<b>Rear mounting, M15 x 1 (pin) / M16 x 1 (socket) screw fastening</b>	1027661 <sup>1)</sup>	–	1027661 <sup>1)</sup>	1027662 <sup>1)</sup>
	<b>Front mounting, M14 x 1 screw fastening</b>	1027679 <sup>5)</sup>	–	1027679 <sup>5)</sup>	1027678 <sup>5)</sup>
	<b>Screw versions, rear mounting</b>	M15 x 1 screw fastening			
	<b>SPEEDCON versions, rear mounting</b>	M15 x 1 screw fastening			
	<b>Clip-in versions, for straight, two-piece socket contact carriers, tolerance-compensating, rear snap-in mounting</b> (not suitable for S-coded THR contact carriers or SPEEDCON mating connectors)	<b>Threaded sleeve</b> for housing panel thickness of 1.0 mm ... 1.8 mm			
		<b>Threaded sleeve</b> for housing panel thickness of 1.7 mm ... 2.5 mm			
		<b>Threaded sleeve</b> for housing panel thickness of 2.4 mm ... 3.2 mm			
		<b>Threaded sleeve</b> for housing panel thickness of 3.1 mm ... 3.9 mm			
	<b>Fixing sleeve, can be used universally with any threaded sleeve</b>	<b>Color</b>			
	<b>SPEEDCON versions with O-ring, front mounting</b>	M12 x 1 screw fastening			
	<b>Screw versions with O-ring, front mounting</b>	M12 x 1 screw fastening			
		M14 x 1 screw fastening			
<b>SPEEDCON screw versions with flat gasket, front mounting</b>	M14 x 1 screw fastening				
	<b>Press-in versions, front mounting</b>				

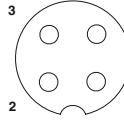
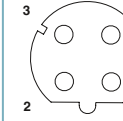







<sup>1), 2)</sup> Distance from PCB upper edge to housing front plate inner edge: DU = <sup>1)</sup> 6 mm <sup>2)</sup> 6.8 mm, see also page 8

<sup>3), 4), 5)</sup> Distance from PCB upper edge to housing front plate outer edge: DO = <sup>3)</sup> 6 mm <sup>4)</sup> 7.5 mm <sup>5)</sup> 9 mm, see also page 8

5-pos.		8-pos.		12-pos.		17-pos.			
A		B		A		A			
60 V		60 V		30 V		30 V			
4 A		4 A		2 A		1.5 A			
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket		
									
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	–	–	–	–	–	–
–	1551464	–	–	–	–	–	–	–	–
1027661 <sup>1)</sup>	1027662 <sup>1)</sup>	–	–	–	–	–	–	–	–
1027679 <sup>5)</sup>	1027678 <sup>5)</sup>	–	–	–	–	–	–	–	–
<b>Pin: 1413997 <sup>1)</sup> / 1413996 <sup>2)</sup> / Socket: 1414004 <sup>1)</sup> / 1414003 <sup>2)</sup></b>									
<b>Pin: 1413999 <sup>1)</sup> / 1413998 <sup>2)</sup> / Socket: 1414020 <sup>1)</sup> / 1414005 <sup>2)</sup></b>									
<b>Socket: 1419630 <sup>5)</sup></b>									
<b>Socket: 1419631 <sup>5)</sup></b>									
<b>Socket: 1419633 <sup>5)</sup></b>									
<b>Socket: 1419634 <sup>5)</sup></b>									
<b>Black</b>	<b>Blue</b>	<b>Water blue</b>	<b>Red</b>	<b>Yellow</b>	<b>Green</b>	<b>Violet</b>	<b>Orange</b>		
1419697	1417782	1417783	1417784	1417785	1417787	1417788	1417789		
<b>Pin: 1551493 <sup>4)</sup> / Socket: 1552243 <sup>4)</sup></b>									
<b>Pin: 1416145 <sup>4)</sup> / Socket: 1416144 <sup>4)</sup></b>									
<b>Pin: 1417984 <sup>5)</sup> / Socket: 1417989 <sup>5)</sup></b>									
<b>Pin: 1436709 <sup>3)</sup> / Socket: 1432460 <sup>3)</sup></b>									
<b>Pin: 1437892 <sup>5)</sup> / Socket: 1437889 <sup>5)</sup></b>									

\* Contact carrier with assembly pad

# SIGNAL

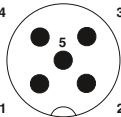
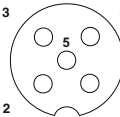
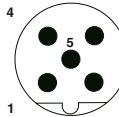
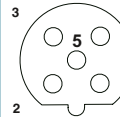
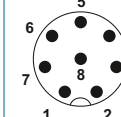
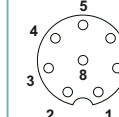
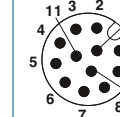
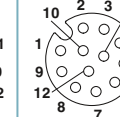
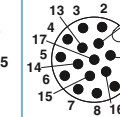
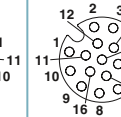
M12, solder connection, PCB mounting, for reflow soldering processes		4-pos.			
 Web code: #0215	Coding	<b>A</b>		<b>D</b>	
	Rated voltage	250 V		250 V	
	Nominal current	4 A		4 A	
	Pin assignment	Pin	Socket	Pin	Socket
					
<b>Two-piece, SMD contact carriers</b>					
	<b>Straight, SMD, tray packing</b>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

<sup>1)</sup> Without additional gasket for the device when not plugged in

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



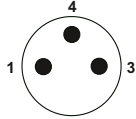
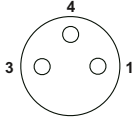




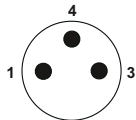
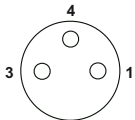



<sup>3)</sup> Distance from PCB upper edge to housing front plate outer edge: DO = 9 mm, see also page 8

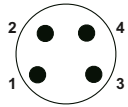
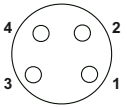
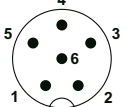
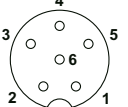
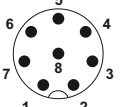
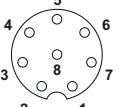
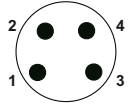
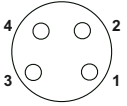
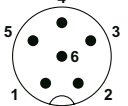
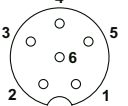
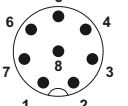
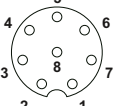


5-pos.		8-pos.		12-pos.		17-pos.			
A		B		A		A			
60 V		60 V		30 V		30 V			
4 A		4 A		2 A		1.5 A			
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket		
									
1411926*	1411913	1411927*	1411914	1411928*	1411915	1411929*	1411916	1411930*	1411917
1411984*	1411976	1411985*	1411977	1411986*	1411978	1411987*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


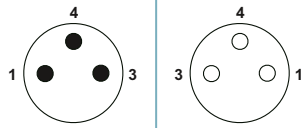
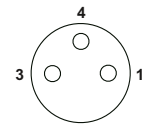
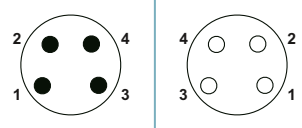
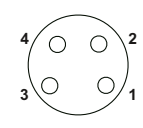






\* Contact carrier with assembly pad

# SIGNAL

M8, with litz wires		3-pos.	
 Web code: #0216	Coding	 <b>A</b>	
	Rated voltage	50 V AC / 60 V DC	
	Nominal current	4 A	
	Conductor cross section	0.25 mm <sup>2</sup>	
	Assembly		
	Pin assignment	Pin 	Socket 
<b>Front mounting</b>			
	<b>M8 x 0.5 fastening thread</b>	1500334	1500350
	M8 flat nut		
	<b>M10 fastening thread</b>	-	-
<b>Rear mounting</b>			
	<b>M8 x 1 fastening thread</b>	1453478	-
	<b>M10 fastening thread</b>	-	1456080
	<b>M12 fastening thread</b>	-	1453449
M8, solder connection, for wave soldering processes		3-pos.	
 Web code: #0218	Coding	 <b>A</b>	
	Rated voltage	50 V AC / 60 V DC	
	Nominal current	4 A	
	Pin assignment	Pin 	Socket 
<b>Rear mounting, one-piece</b>			
	<b>M8 fastening thread, straight</b>	1694334	-
	<b>M12 fastening thread, straight</b>	-	1694363
	<b>M8 fastening thread, straight, shielded</b>	1455997	-
	<b>M8 fastening thread, angled, shielded</b>	1456035	-
	<b>M10 fastening thread, straight, shielded</b>	-	1456116
	<b>M10 fastening thread, angled, shielded</b>	-	1456145
<b>Rear mounting, two-piece</b>			
	<b>M8 fastening thread, straight</b>	-	1524776
	<b>M8 fastening thread, angled</b>	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 <sup>2</sup>		0.14 mm <sup>2</sup>		0.14 mm <sup>2</sup>	
Pre-assembled with 0.5 m long litz wires					
Pin	Socket	Pin	Socket	Pin	Socket
					
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	
Pin	Socket	Pin	Socket	Pin	Socket
					
1694347	-	1436521	-	1424238	-
-	1694376	-	1436534	-	1424237
1456019	-	1456022	-	1424236	-
1456048	-	1424244	-	-	-
-	1456129	-	1456132	-	1424235
-	1456158	-	1424243	-	-
-	1524789	-	-	-	-
1440096	1526169	-	-	-	-

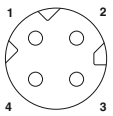
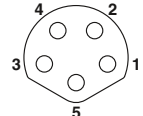
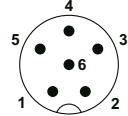
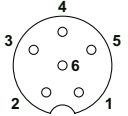
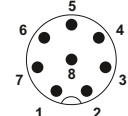
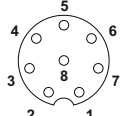
# SIGNAL

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


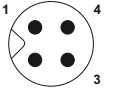
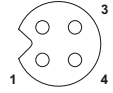
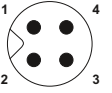
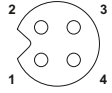


<sup>1)</sup> Distance from PCB upper edge to housing front plate inner edge: DU = 6 mm, see also page 8

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


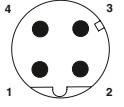
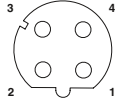
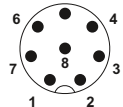
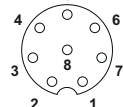







\* Contact carrier with assembly pad

4-pos.	5-pos.	6-pos.		8-pos.	
<b>D</b>	<b>B</b>	<b>A</b>		<b>A</b>	
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	
Socket	Socket	Pin	Socket	Pin	Socket
					
–	1412222	–	1412223	–	1412224
–	1412245	–	1412246	–	1412247
–	1412237	–	1412238	–	1412239
1068454	1412259	–	1412261	–	1412262
–	1412229	–	1412230	–	1412232
1068453	1412252	–	1412253	–	1412254
<b>Pin: 1412505<sup>1)</sup> / Socket: 1412506<sup>1)</sup></b>					
<b>Pin: 1412502<sup>2)</sup> / Socket: 1412504<sup>2)</sup></b>					
1412508					
<b>Pin: 1412500<sup>2)</sup> / Socket: 1412501<sup>2)</sup></b>					

# SIGNAL

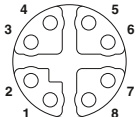
M5		3-pos.		4-pos.	
 Web code: #0220	Coding	A		A	
	Rated voltage	60 V		60 V	
	Nominal current	1 A		1 A	
	Conductor cross section	0.14 mm <sup>2</sup>		0.14 mm <sup>2</sup>	
	Pin assignment	Pin	Socket	Pin	Socket
					
<b>Front mounting, pre-assembled with 0.5 m long litz wires</b>					
	<b>M5 fastening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

# DATA

M12 for networks		4-pos.		8-pos.		
 Web code: #0222	Coding	D		A		
	Rated voltage	250 V		30 V		
	Nominal current	4 A		2 A		
	Conductor cross section	0.14 mm <sup>2</sup> / 0.34 mm <sup>2</sup>		0.14 mm <sup>2</sup>		
	Pin assignment	Pin	Socket	Pin	Socket	
						
Front/screw mounting, with assembled cable						
<b>Ethernet</b> 	M16 x 1.5, can be positioned, water blue, cable type 93E	2 m	–	1405837	–	–
Rear/screw mounting, with assembled cable						
<b>Ethernet</b> 	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						
<b>Ethernet</b> 	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.


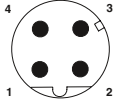
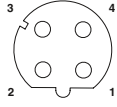
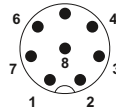
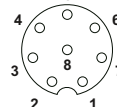










# DATA

M12 for networks		8-pos.	8-pos.	
 Web code: #0224	Coding	<b>X (CAT6<sub>A</sub>)</b>	<b>Y (hybrid)</b>	
	Rated voltage	50 V AC / 60 V DC	60 V	
	Nominal current	0.5 A	0.5 A / 6 A	
	Conductor cross section	0.25 mm <sup>2</sup>	0.14 mm <sup>2</sup> / 0.5 mm <sup>2</sup>	
	Pin assignment	Socket 	Socket 	
<b>Rear/screw mounting, with assembled cable</b>				
 <b>Ethernet</b> 	<b>M16 x 1.5,</b> <b>water blue, cable type 94F</b>	<b>0.5 m</b>	<a href="#">1424135</a>	–
		<b>1 m</b>	<a href="#">1424148</a>	–
		<b>2 m</b>	<a href="#">1424151</a>	–
		<b>5 m</b>	<a href="#">1424164</a>	–
<b>Hybrid</b> 	<b>M16 x 1.5,</b> <b>black, cable type 94H</b>	<b>0.5 m</b>	–	<a href="#">1407504</a>
		<b>1 m</b>	–	<a href="#">1407505</a>
		<b>2 m</b>	–	<a href="#">1407506</a>
		<b>5 m</b>	–	<a href="#">1407507</a>
<b>Rear/screw mounting, pre-assembled with 0.5 m long litz wires</b>				
<b>Hybrid</b> 	<b>M16 x 1.5</b>	–	<a href="#">1407618</a>	
<b>Rear/screw mounting, for wave soldering processes</b>				
 <b>Ethernet Hybrid</b> 	<b>M16 x 1.5, one-piece, wave soldering</b>	<a href="#">1424177</a>	<a href="#">1407503</a>	
	<b>Pg9, one-piece, wave soldering</b>	<a href="#">1404741</a>	–	
<b>Two-piece, contact carriers for wave and reflow soldering processes</b>				
 <b>Ethernet</b> 	Straight, shielded, <b>THR, blister packing</b>	<a href="#">1402457</a>	–	
	Straight, shielded, <b>THR, tape-on-reel</b>	<a href="#">1413446*</a>	–	
	Straight, shielded, <b>SMD, tray packing</b>	<a href="#">1411964*</a>	–	
	Straight, shielded, <b>SMD, tape-on-reel</b>	<a href="#">1081252*</a>	–	
	Angled, shielded, <b>wave soldering</b>	<a href="#">1424180</a>	–	
<b>Hybrid</b> 	Straight, shielded, <b>THR, blister packing</b>	–	<a href="#">1405225</a>	
	Straight, shielded, <b>THR, tape-on-reel</b>	–	<a href="#">1413445*</a>	
	Straight, shielded, <b>SMD, tray packing</b>	–	<a href="#">1411965*</a>	
	Straight, shielded, <b>SMD, tape-on-reel</b>	–	<a href="#">1069566*</a>	
	Angled, shielded, <b>wave soldering</b>	–	<a href="#">1424193</a>	

For housing screw connections for THR and wave soldering contact carriers, see page 22.  
 For housing screw connections for SMD contact carriers, see page 24. \* Contact carrier with assembly pad


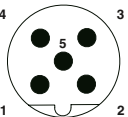
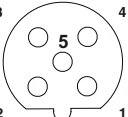








# DATA

M12 for networks		4-pos.		8-pos.		
 Web code: #0226	Coding	D		A		
	Rated voltage	250 V		30 V		
	Nominal current	4 A		2 A		
	Conductor cross section	0.14 mm <sup>2</sup> / 0.34 mm <sup>2</sup>		0.14 mm <sup>2</sup>		
	Pin assignment	Pin	Socket	Pin	Socket	
						
<b>Rear/screw mounting, with assembled cable</b>						
 	<b>M16 x 1.5, red, cable type 93K</b>	0.5 m	1419158	1419154	–	–
		1 m	1419159	1419155	–	–
		2 m	1419160	1419156	–	–
		5 m	1419161	1419157	–	–
<b>Rear/screw mounting, for wave soldering processes</b>						
 	<b>M16 x 1.5, one-piece, contact carrier, red</b>		1457979	1457966	–	–
<b>Rear/screw mounting, with assembled cable</b>						
 	<b>M16 x 1.5, green, cable type 93G</b>	0.5 m	1419138	1419134	–	–
		1 m	1419139	1419135	–	–
		2 m	1419140	1419136	–	–
		5 m	1419141	1419137	–	–
<b>Rear/screw mounting, for wave soldering processes</b>						
 	<b>M16 x 1.5, one-piece, contact carrier, green</b>		1456556	1456569	–	–
<b>Rear/screw mounting, with assembled cable</b>						
 	<b>M16 x 1.5, black, cable type 970, 6-wire</b>	0.5 m	–	–	1429059	1429091
		1 m	–	–	1429062	1429101
		2 m	–	–	1429075	1429114
		5 m	–	–	1429088	1429127


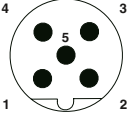
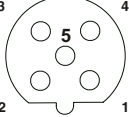






For additional 4-pos. D-coded and 8-pos. A-coded connectors, see Signal – M12 section, from page 14.

# DATA

M12 for fieldbuses		5-pos.		
 Web code: #0229	Coding	<b>B</b>		
	Rated voltage	60 V		
	Nominal current	4 A		
	Conductor cross section	0.34 mm <sup>2</sup>		
	Pin assignment	Pin	Socket	
				
<b>Front/screw mounting, with assembled cable</b>				
 	<b>M16 x 1.5, can be positioned, violet, cable type 910</b>	<b>0.5 m</b>	1525555	1525597
		<b>1 m</b>	1525568	1525607
		<b>2 m</b>	1519561	1519574
		<b>5 m</b>	1525571	1525610
<b>Rear/screw mounting, with assembled cable</b>				
 	<b>Pg9, violet, cable type 910</b>	<b>0.5 m</b>	1437481	1437449
		<b>1 m</b>	1437494	1437452
		<b>2 m</b>	1437504	1437465
		<b>5 m</b>	1437517	1437478
	<b>M16 x 1.5, violet, cable type 910</b>	<b>0.5 m</b>	1534342	1534384
		<b>1 m</b>	1534355	1534397
		<b>2 m</b>	1534368	1534407
		<b>5 m</b>	1534371	1534410
<b>Rear/screw mounting, for wave soldering processes</b>				
 	<b>M16 x 1.5, one-piece, contact carrier, violet</b>		1456475	1456488

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

# DATA


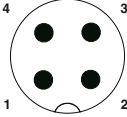
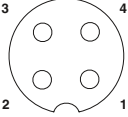







M12 for fieldbuses		5-pos.		
 <b>Web code: #0230</b>	Coding	<b>B</b>		
	Rated voltage	60 V		
	Nominal current	4 A		
	Conductor cross section	0.34 mm <sup>2</sup>		
	Pin assignment	Pin	Socket	
				
<b>Front/screw mounting, with assembled cable</b>				
 	<b>M16 x 1.5, green, cable type 910</b>	<b>0.5 m</b>	1529629	1529742
		<b>1 m</b>	1530223	1529755
		<b>2 m</b>	1529726	1529768
		<b>5 m</b>	1529739	1529771
<b>Rear/screw mounting, with assembled cable</b>				
 	<b>Pg9, green, cable type 900</b>	<b>0.5 m</b>	1437643	1437601
		<b>1 m</b>	1437656	1437614
		<b>2 m</b>	1437669	1437627
		<b>5 m</b>	1437672	1437630
	Pg9 EMC nut	1440177		
	<b>M16 x 1.5, green, cable type 900</b>	<b>0.5 m</b>	1534504	1534546
		<b>1 m</b>	1534517	1534559
		<b>2 m</b>	1534520	1534562
		<b>5 m</b>	1534533	1534575
	M16 x 1.5 EMC nut	1440164		
<b>Rear/screw mounting, for wave soldering processes</b>				
 	<b>M16 x 1.5, one-piece, contact carrier, green</b>		1456572	1456585
	M16 x 1.5 EMC nut	1440164		

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

M12 for fieldbuses		5-pos.		
 <b>Web code: #0231</b>	Coding	<b>A</b>		
	Rated voltage	60 V		
	Nominal current	4 A		
	Conductor cross section	0.25 mm <sup>2</sup> / 0.34 mm <sup>2</sup>		
	Pin assignment	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Pin</p>  </div> <div style="text-align: center;"> <p>Socket</p>  </div> </div>		
<b>Front/screw mounting, with assembled cable</b>				
  <b>M16 x 1.5, violet, cable type 920</b>	<b>0.5 m</b>	1525623	1525678	
	<b>1 m</b>	1525636	1525681	
	<b>2 m</b>	1525649	1525694	
	<b>5 m</b>	1525652	1525704	
<b>Rear/screw mounting, with assembled cable</b>				
  <b>Pg9, violet, cable type 920</b>	<b>0.5 m</b>	1437562	1437520	
	<b>1 m</b>	1437575	1437533	
	<b>2 m</b>	1437588	1437546	
	<b>5 m</b>	1437591	1437559	
	Pg9 EMC nut	1440177		
	<b>M16 x 1.5, violet, cable type 920</b>	<b>0.5 m</b>	1534423	1534465
		<b>1 m</b>	1534436	1534478
		<b>2 m</b>	1534449	1534481
		<b>5 m</b>	1534452	1534494
	M16 x 1.5 EMC nut	1440164		
<b>Rear/screw mounting, for wave soldering processes</b>				
  <b>M16 x 1.5, one-piece, contact carrier, violet</b>		1456491	1456501	
	M16 x 1.5 EMC nut	1440164		
 <b>Pg9, one-piece, stainless steel (1.4404)</b>		1554746	1554733	
 <b>M16 x 1.5, one-piece, contact carrier, blue</b>		1457953	1457940	


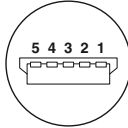

For additional 5-pos. A-coded connectors, see Signal – M12 section, from page 14.



# DATA

M12 for fieldbuses		4-pos.		
 Web code: #0232	Coding	A		
	Rated voltage	250 V		
	Nominal current	4 A		
	Conductor cross section	0.34 mm <sup>2</sup>		
	Pin assignment	Pin 	Socket 	
<b>Rear/screw mounting, with assembled cable</b>				
 	<b>M16 x 1.5, red, cable type 990</b>	0.5 m	–	1559819
		1 m	–	1559822
		2 m	–	1559835
		5 m	–	1559848
<b>Rear/screw mounting, for wave soldering processes</b>				
 	<b>M16 x 1.5, one-piece, contact carrier, green</b>	1457856	1457869	
<b>Front/screw mounting, pre-assembled with 0.5 m long litz wires</b>				
 	<b>Pg9, shielded</b>	1431432	1431429	
	Flat nut, Pg9	1504084		
<b>Rear/screw mounting, for wave soldering processes, shielded</b>				
	<b>M16 x 1.5, one-piece, contact carrier, yellow</b>	1457872	1457885	

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

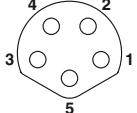



## DATA

M12 for USB		USB
 <b>Web code: #0235</b>	Pin assignment	
<b>Rear/screw mounting, for wave soldering processes</b>		
	<b>M12 x 1, Mini-B USB 2.0</b>	<b>1440711</b>

M12 for FO		FO
 <b>Web code: #0236</b>		
<b>Rear/screw mounting, for wave soldering processes</b>		
	<b>M16 x 1.5, FO transceiver,</b> duplex, 650 nm wavelength for 125 Mbps, for POF and PCF fiber	<b>1416716</b>











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

# DATA

M8 for fieldbuses		4-pos.	5-pos.	
 Web code: #0237	Coding	 D	 B	
	Rated voltage	60 V AC/DC	30 V AC/DC	
	Nominal current	4 A	3 A	
	Conductor cross section	–	0.25 mm <sup>2</sup>	
	Pin assignment	Socket	Pin	Socket
				
<b>Front mounting, pre-assembled with 0.5 m long litz wires</b>				
 	M10 fastening thread	–	1424234	1424233
	<b>Rear mounting, for wave soldering processes</b>			
 	M8 fastening thread, straight, shielded	–	1424242	–
	M8 fastening thread, angled, shielded	–	1424240	–
	M10 fastening thread, straight, shielded	–	–	1424241
	M10 fastening thread, angled, shielded	–	–	1424239
<b>Two-piece, SMD contact carriers for reflow soldering processes</b>				
 	Straight, SMD, tray packing	–	–	1412222
	Straight, SMD, tape-on-reel	–	–	1412245
	Straight, SMD, tape-on-reel, additional gasket for the device when not plugged in <b>Shielded</b>	–	–	1412252
		–	–	1412259
	Straight, SMD, tray packing, additional gasket for the device when not plugged in <b>Shielded</b>	–	–	1412229
		–	–	1412237
 <b>Ethernet</b> 	Straight, SMD, tape-on-reel	1068453	–	–
	additional gasket for the device when not plugged in <b>Shielded</b>	1068454	–	–

For 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		
	Nominal current	16 A		12 A		
	Conductor cross section	AWG 16		AWG 16		
	Pin assignment	Pin	Socket	Pin	Socket	
						
<b>Front mounting, pre-assembled with 0.2 m/0.5 m long litz wires</b>						
	<b>M16 x 1.5 fastening thread, one-piece</b>	1411655 <sup>1)</sup>	1411654 <sup>1)</sup>	1424139 <sup>1)</sup>	1424137 <sup>1)</sup>	
	Flat nut, M16 x 1.5	1504097				
 	<b>M16 x 1.5 fastening thread, XL versions, wrench size 19</b>	AWG 16 litz wires	–	–	1411607 <sup>1)</sup>	1411605 <sup>1)</sup>
		2.5 mm <sup>2</sup> litz wires	–	–	–	–
		PROFINET-specified, AWG 16 litz wires	–	–	–	–
		PROFINET-specified, 2.5 mm <sup>2</sup> litz wires	–	–	–	–
	Flat nut, M16 x 1.5	–	–	–	–	
	<b>25 mm square flange, modular, mounting holes 4 x Ø 2.7 mm</b>	–	–	1424131	–	
	<b>Pre-assembled contact carrier, modular</b>	–	–	1424129 <sup>1)</sup>	–	
<b>Rear mounting, pre-assembled with 0.2 m/0.5 m long litz wires</b>						
	<b>M16 x 1.5 fastening thread, one-piece</b>	1411653 <sup>1)</sup>	1411652 <sup>1)</sup>	1424132 <sup>1)</sup>	1424133 <sup>1)</sup>	
 	<b>M16 x 1.5 fastening thread, XL versions, wrench size 19</b>	AWG 16 litz wires	–	–	1411603 <sup>1)</sup>	1411598 <sup>1)</sup>
		2.5 mm <sup>2</sup> litz wires	–	–	–	–
		PROFINET-specified, AWG 16 litz wires	–	–	–	–
		PROFINET-specified, 2.5 mm <sup>2</sup> litz wires	–	–	–	–

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

<sup>1)</sup> With 0.5 m long litz wires <sup>2)</sup> 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		AWG 16 / 2.5 mm <sup>2</sup>		AWG 16 / 2.5 mm <sup>2</sup>		AWG 16 / 2.5 mm <sup>2</sup>		AWG 16	
Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
1424140 <sup>1)</sup>	1424138 <sup>1)</sup>	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
1411608 <sup>1)</sup>	1411606 <sup>1)</sup>	-	-	-	-	1425635 <sup>2)</sup>	1425636 <sup>2)</sup>	1415300 <sup>2)</sup>	1415301 <sup>2)</sup>
-	-	-	-	1415295 <sup>2)</sup>	1415296 <sup>2)</sup>	1415291 <sup>2)</sup>	1415292 <sup>2)</sup>	-	-
-	-	1425631 <sup>2)</sup>	1425632 <sup>2)</sup>	14256272)*	14256282)*	-	-	-	-
-	-	1425586 <sup>2)</sup>	1425587 <sup>2)</sup>	1425582 <sup>2)</sup> *	1425583 <sup>2)</sup> *	-	-	-	-
1504097									
1424131	-	-	-	-	-	-	-	-	-
1424130 <sup>1)</sup>	-	-	-	-	-	-	-	-	-
1424136 <sup>1)</sup>	1424134 <sup>1)</sup>	-	-	-	-	-	-	-	-
1411604 <sup>1)</sup>	1411599 <sup>1)</sup>	-	-	-	-	1425637 <sup>2)</sup>	1425638 <sup>2)</sup>	1415302 <sup>2)</sup>	1415303 <sup>2)</sup>
-	-	-	-	1415297 <sup>2)</sup>	1415299 <sup>2)</sup>	1415293 <sup>2)</sup>	1415294 <sup>2)</sup>	-	-
-	-	1425633 <sup>2)</sup>	1425634 <sup>2)</sup>	1425629 <sup>2)</sup> *	1425630 <sup>2)</sup> *	-	-	-	-
-	-	1425588 <sup>2)</sup>	1425589 <sup>2)</sup>	1425584 <sup>2)</sup> *	1425585 <sup>2)</sup> *	-	-	-	-

# POWER

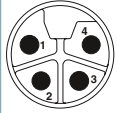

M12 up to 16 A/630 V for soldering processes		4(3+PE)-pos.		4-pos.	
 Web code: #0240	Coding	S		T	
	Rated voltage	630 V		63 V	
	Nominal current	12 A		12 A	
	Pin assignment	Pin	Socket	Pin	Socket
					
<b>Two-piece, THR contact carriers</b>					
	<b>Straight, THR, blister packing</b>	1406410	1406409	1406396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

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

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

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

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

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




<sup>3)</sup> Deviation from the standard color of black: gray contact carrier

# SIGNAL

M12 connectors for assembly			4-pos.		5-pos.		8-pos.		
 Web code: #0243	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket	
<b>Push-in connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.75 mm<sup>2</sup></b>									
	A	Straight	1424657	1424655	1424649	1424652	-	-	
		Angled	1424654	1424656	1424651	1424653	-	-	
<b>Push-in connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.75 mm<sup>2</sup>, shielded</b>									
	A	Straight	1424666	1424668	1424658	1424660	-	-	
		Angled	1424667	1424669	1424659	1424661	-	-	
	B	Straight	-	-	1424662	1424664	-	-	
		Angled	-	-	1424663	1424665	-	-	
<b>IDC connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.34 mm<sup>2</sup></b>									
	A	Straight	1641691	1641688	-	-	-	-	
<b>IDC connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.5 / 0.75 mm<sup>2</sup></b>									
	A	Straight	-	-	1414600	1414601	1424433	1424434	
<b>IDC connection, conductor cross section: 0.34 mm<sup>2</sup> ... 0.75 mm<sup>2</sup></b>									
	A	Straight	1641785	1641772	-	-	-	-	
<b>IDC connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.5 / 0.75 mm<sup>2</sup>, shielded</b>									
	A	Straight	1413993	1413994	1413991	1413992	1414610	1414611	
<b>Crimp connection, shielded</b>									
	A	Straight	1422850	1422852	1422850	1422852	-	-	
		Angled	1422851	1422853	1422851	1422853	-	-	
	Crimp contacts	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>	1064040	1064041	1064040	1064041	-	-	
		0.34 mm <sup>2</sup> ... 1.0 mm <sup>2</sup>	1423645	1423646	1423645	1423646	-	-	
<b>Crimp connection, shielded, with push-pull locking</b>									
 Web code: #1831	A	Straight	1021815	1021817	1021815	1021817	-	-	
		Angled	1021816	1021818	1021816	1021818	-	-	
		Crimp contacts	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>	1064040	1064041	1064040	1064041	-	-
			0.34 mm <sup>2</sup> ... 1.0 mm <sup>2</sup>	1423645	1423646	1423645	1423646	-	-

# SIGNAL








M12 connectors for assembly			4-pos.		5-pos.		8-pos.	
 Web code: #0242	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket
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 for assembly, high-position			12-pos.		17-pos.			
 Web code: #0245	Coding	Design	Pin	Socket	Pin	Socket		
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	-	-		

## SIGNAL

M8 connectors for assembly			3-pos.		4-pos.	
 Web code: #0246	Coding	Design	Pin	Socket	Pin	Socket
<b>IDC connection, conductor cross section: 0.08 mm<sup>2</sup> ... 0.25 mm<sup>2</sup></b>						
	 A	Straight	1441008	1441040	1441011	1441053
<b>IDC connection, conductor cross section: 0.25 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></b>						
	 A	Straight	1441024	1441066	1441037	1441079
<b>Screw connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></b>						
	 A	Straight	1501252	1506888	1501265	1506891
		Angled	1407583	1407582	1407585	1407584
<b>Screw connection, conductor cross section: 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup>, shielded</b>						
	 A	Straight	1542884	1542907	1542897	1542910
<b>Solder connection, conductor cross section: 0.08 mm<sup>2</sup> ... 0.25 mm<sup>2</sup></b>						
	 A	Straight	1681156	1681172	1681169	1681185
		Angled	1699902	1529399	1554209	1513444
<b>Solder connection, conductor cross section: 0.08 mm<sup>2</sup> ... 0.25 mm<sup>2</sup>, shielded</b>						
	 A	Straight	1506901	1506927	1506914	1506930
		Angled	1436453	1436479	1436466	1436482

# DATA

M12 connectors for assembly				4-pos.		5-pos.		8-pos.		
 Web code: #0249	Fieldbuses/ networks	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket	
<b>Push-in connection, shielded</b>										
	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	-	-	
							<b>2-pos.</b>			
							Pin	Socket		
	PROFIBUS DP	B	Straight	-	-	1424678	1424680	-	-	
Angled			-	-	1424679	1424681	-	-		
<b>IDC connection, shielded</b>										
	Ethernet	D/A	Straight	1411066	1411069	-	-	1421679	1421680	
			Angled	1553624	1553637	-	-	1553653	1553666	
	PROFINET	D	Straight	1411068	1411071	-	-	-	-	
			Angled	1554539	1554542	-	-	-	-	
CAT6 <sub>A</sub>	X	Straight	-	-	-	-	1411043	1414586		
	DeviceNet™ CANopen	A	Straight	-	-	1422759	1422760	-	-	
	PROFIBUS PA	A	Straight	1413933	1413934	-	-	-	-	
							<b>2-pos.</b>			
							Pin	Socket		
	PROFIBUS DP	B	Straight	-	-	1413931	1413932	-	-	
<b>Crimp connection, shielded</b>										
	PROFINET	D	Straight	1422846	1422848	-	-	-	-	
			Angled	1422847	1422849	-	-	-	-	
	PROFINET CAT6 <sub>A</sub>	X	Straight	-	-	-	-	1422844	-	
			Angled	-	-	-	-	1422845	-	
	Crimp contacts	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>			1064040	1064041	-	-	1423643	-
		0.34 mm <sup>2</sup> ... 1.0 mm <sup>2</sup>			1423645	1423646	-	-	-	-
<b>Crimp connection, shielded, with push-pull locking</b>										
 Web code: #1831										
New										
	PROFINET	D	Straight	1021830	1021832	-	-	-	-	
			Angled	1021831	1021834	-	-	-	-	
	PROFINET CAT6 <sub>A</sub>	X	Straight	-	-	-	-	1021783	-	
			Angled	-	-	-	-	1021784	-	
	Crimp contacts	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>			1064040	1064041	-	-	1423643	-
		0.34 mm <sup>2</sup> ... 1.0 mm <sup>2</sup>			1423645	1423646	-	-	-	-

Data – M12 connectors for assembly				4-pos.		5-pos.		8-pos.	
<b>Web code: #0249</b>	Fieldbuses/ networks	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket
<b>Piercecon® connection, shielded</b>									
	CAT6 <sub>A</sub>		<b>Straight</b>	–	–	–	–	1417430	–
			<b>Angled</b>	–	–	–	–	1417443	–









Data – cable connectors with IDC, shielded				
<b>Web code: #0249</b>				
Cable cross section	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
Fieldbuses/networks	CAT6 <sub>A</sub> 8-pos.	Ethernet 4-pos.	PROFINET 4-pos.	PROFIBUS 3-pos.
	1414412	1414415	1414416	1420426

Signal – cable connectors with IDC				
<b>Web code: #0243</b>				
Cable cross section	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>	0.34 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
Number of positions	Unshielded	Unshielded	Unshielded	Shielded
3	–	–	1414702	–
4	1641879	1642140	1414698	1414418
5	–	–	1414742	1414417
8	–	–	–	1414612









Power – M12 connectors for assembly				2+PE-pos.		3+PE-pos.		4-pos.	
<b>Web code: #0252</b>	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket	
<b>Screw connection, conductor cross section up to 1.5 mm<sup>2</sup></b>									
		<b>Straight</b>	–	–	–	–	1404643	1404644	
		<b>Angled</b>	–	–	–	–	1408988	1408989	
		<b>Straight</b>	1419639	1419640	1404641	1404642	–	–	
		<b>Angled</b>	1419641	1419642	1408985	1408987	–	–	
<b>Screw connection, conductor cross section up to 2.5 mm<sup>2</sup></b>									
								<b>4+FE-pos.</b>	
		<b>Straight</b>	–	–	–	–	1424707	1424708	
								<b>4+FE-pos.</b>	
	<b>Straight</b>	–	–	–	–	1424709	1424710		



## POWER

M12 connectors for assembly			2+PE-pos.		3+PE-pos.		4-pos.		
 <b>Web code: #0252</b>	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket	
	<b>Crimp connection, conductor cross section up to 2.5 mm<sup>2</sup>, shielded</b>								
 	 <b>T</b>	<b>Straight</b>	–	–	–	–	1027465	1027466	
	 <b>S</b>	<b>Straight</b>	–	–	1027467	1027469	–	–	
								<b>4+PE-pos.</b>	
	 <b>K</b>	<b>Straight</b>	–	–	–	–	1027474	1027476	
								<b>4-pos.</b>	
	 <b>L</b>	<b>Straight</b>	–	–	–	–	1027479	1027480	
								<b>4+FE-pos.</b>	
 <b>L</b>	<b>Straight</b>	–	–	–	–	1027477	1027478		

You can find corresponding crimp contacts at [www.phoenixcontact.com](http://www.phoenixcontact.com) under the accessories for the product.

M12 connectors for assembly			2+PE-pos.		3+PE-pos.		4-pos.		
 <b>Web code: #2337</b>	Coding	Design	Pin	Socket	Pin	Socket	Pin	Socket	
	<b>Push-Lock connection, conductor cross section: 1.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, shielded</b>								
 	 <b>T</b>	<b>Straight</b>	–	–	–	–	1080215	1080218	
	 <b>S</b>	<b>Straight</b>	1080225	1080227	1080220	1080222	–	–	
								<b>4+PE-pos.</b>	
	 <b>K</b>	<b>Straight</b>	–	–	–	–	1080231	1080228	
								<b>4-pos.</b>	
	 <b>L</b>	<b>Straight</b>	–	–	–	–	1080239	1080237	
								<b>4+FE-pos.</b>	
 <b>L</b>	<b>Straight</b>	–	–	–	–	1080235	1080233		











You can find corresponding crimp contacts at [www.phoenixcontact.com](http://www.phoenixcontact.com) under the accessories for the product.

**Cables with M8 or M12 connectors (PUR)**

 Web code: #0283						
	Cable length	Signal cable <b>M8, 3-pos.</b>	Signal cable <b>M8, 4-pos.</b>	Signal cable <b>M12, 3-pos.</b>	Signal cable <b>M12, 4-pos.</b>	Signal cable <b>M12, 5-pos.</b>
<b>Straight male connector, free cable end</b>						
3 m	1681677	1681790	1668027	1668056	1669770	1682744
5 m	1681680	1681800	1668030	1668069	1669783	1682731
10 m	1693584	1694143	1682566	1682993	1683361	1500732
<b>Straight female connector, free cable end</b>						
3 m	1669725	1681855	1694499	1668111	1669835	1682948
5 m	1669628	1681868	1683510	1668124	1669848	1682951
10 m	1694101	1683484	1693034	1683002	1683374	1500758
<b>Straight male connector, straight female connector</b>						
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
<b>Angled female connector, free cable end</b>						
3 m	1669741	1681884	1694512	1668234	1669864	1682977
5 m	1669631	1681897	1694525	1668247	1669877	1682980
10 m	1694169	1694172	1694538	1681389	1694541	1500761

Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at [phoenixcontact.com](http://phoenixcontact.com).

## Network cables with M8 connectors (PUR)

 Web code: #1656	  		  		  	
	<b>4-pos. A-coded</b>		<b>4-pos. D-coded</b>			
Cable length	Straight male	Straight female	Straight male connector		Angled male connector	
<b>Free cable end</b>						
1 m	1407344	–	1423703		1080526	
2 m	1407345	–	1423704		1080528	
5 m	1407346	–	1423705		1080530	
10 m	1407347	–	1423706		1080531	
Variable	1408719	1408716	–		–	
<b>Straight male connector</b>						
1 m	1407348	–	1423707		1080538	
2 m	1407349	–	1423708		1080539	
5 m	1407350	–	1423709		1080540	
10 m	1407351	–	1423710		1080542	
Variable	1408718	1408715	–		–	
<b>Angled male connector</b>						
1 m	–	–	–		1080532	
2 m	–	–	–		1080535	
5 m	–	–	–		1080536	
10 m	–	–	–		1080537	
<b>RJ45 connector</b>						
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](http://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
<b>Straight male connector, free cable end</b>						
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
<b>Straight female connector, free cable end</b>						
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
<b>Straight male connector, straight female connector</b>						
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
<b>Straight male connector, straight male connector</b>						
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	–	–
<b>Termination resistors, M12 male</b>						
					<b>PROFIBUS</b> 1507803	<b>DeviceNet™/ CANopen®</b> 1507816

Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at [phoenixcontact.com](http://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
<b>Male connector, free cable end</b>						
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
<b>Female connector, free cable end</b>						
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
<b>Straight male connector, straight female connector</b>						
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
<b>Angled male connector, angled female connector</b>						
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](http://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 <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
	Cable length			<b>PROFINET-</b> specified	<b>PROFINET-</b> specified		
<b>Straight male connector, free cable end, unshielded</b>							
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	
<b>Straight female connector, free cable end, unshielded</b>							
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	
<b>Angled female connector, free cable end, unshielded</b>							
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	
<b>Straight male connector, free cable end, shielded</b>							
3 m	1424105	1424121	–	1414888	1414871	1414954	
5 m	1424245	1424122	–	1414892	1414876	1414958	
10 m	1424107	1424123	–	1414896	1414880	1414962	
<b>Straight female connector, free cable end, shielded</b>							
3 m	1424097	1424113	–	1414791	1414789	1414911	
5 m	1424098	1424114	–	1414807	1414805	1414919	
10 m	1424099	1424115	–	1414824	1414822	1414927	
<b>Angled female connector, free cable end, shielded</b>							
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](http://phoenixcontact.com).

Accessories

 Web code: #0559	Size	M5		M8		M12	
		Male	Female	Male	Female	Male	Female
<b>Locking screw</b>							
	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
<b>Locking screw for SPEEDCON versions</b>							
	Plastic	–	–	–	–	–	1553129
<b>Sealing cap</b>							
	Plastic	–	–	–	–	1560251	–
	Metal	–	–	–	–	1430488	–
<b>Sealing elements for unused housing cutouts</b>							
	Sealing plug, plastic, for Pg9/Pg11					1670235	
	Locking screw, metal, M16 x 1.5					1453368	
<b>Plastic sealing caps and locking screws, with retaining strap</b>							
	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
<b>Metal sealing caps and locking screws, with fastening chain</b>							
	With Ø 16 mm fastening eye			–	–	1430491	1414147
<b>EMC hexagonal nuts with fine toothing for device connectors</b>							
	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	
<b>Seal for device connector</b>							
	O-ring for M8 socket housing, green, 5 x 0.8					1056022	
	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

Socket, 3-pos.	Pin, 3-pos.	Socket, 4-pos.	Pin, 4-pos.

### Pin assignments of M8 signal connectors

Socket, 3-pos.	Pin, 3-pos.	Socket, 4-pos.	Pin, 4-pos.
Socket, 6-pos.	Pin, 6-pos.	Socket, 8-pos.	Pin, 8-pos.

### Pin assignments of M12 signal connectors

Socket, 4-pos., A-coded	Pin, 4-pos., A-coded	Socket, 4-pos., D-coded	Pin, 4-pos., D-coded

### Litz wire colors Assignment: M5 pin/socket

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

### Litz wire colors Assignment: M8 pin/socket

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		

### Litz wire colors Assignment: M12 pin/socket

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**

Socket, 5-pos., A-coded	Pin, 5-pos., A-coded	Socket, 5-pos., B-coded	Pin, 5-pos., B-coded
Socket, 8-pos.	Pin, 8-pos.	Socket, 12-pos.	Pin, 12-pos.
Socket, 17-pos.	Pin, 17-pos.		

**Litz wire colors**

**Assignment: M12 pin/socket**

Pin	Wire color		Wire color		Wire color	
	5-pos. A-coded		5-pos. B-coded		-	
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**

Socket, 4-pos., Ethernet	Pin, 4-pos., Ethernet	Socket, 5-pos., DeviceNet™, B-coded	Pin, 5-pos., DeviceNet™, B-coded
Socket, 4-pos., PROFINET, D-coded	Pin, 4-pos., PROFINET, D-coded		

**Assignment: PROFINET, 4-pos. D-coded**

Pin	Wire 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	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	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

Socket, 4-pos., A-coded	Pin, 4-pos., A-coded	Socket, 4-pos., D-coded	Pin, 4-pos., D-coded	Socket, 5-pos., B-coded	Pin, 5-pos., B-coded
Socket, 8-pos., A-coded	Pin, 8-pos., A-coded	Socket, 8-pos., X-coded	Socket, 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	Signal DeviceNet™
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	DB
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

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