

M5 to M12 circular connectors

Product overview 2024



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 rates up to 10 Gbps

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

i Web code: #0682



Find out more with the web code

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

i Web code: #1234 (example)

Or use the direct link:

phoenixcontact.com/webcode/#1234



SIGNAL

Signals up to 17-pos.

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

i Web code: #0680

POWER

Power up to 16 A/690 V

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

i Web code: #0681



Contents

Unrivalled variety for signals, data, and power	4
M12 push-pull – the new standard in automation technology	6
Device connectors with litz wire and cable connection	8
Device connectors for direct PCB mounting	10
Connectors and cables for field cabling	12
Page navigation	14
Accessories	59
Pin assignments and wire colors	62
Excellent services	66

Unrivalled variety for signals, data, and power

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



Sustainable and future-proof

Phoenix Contact is empowering sustainable products and already offers a comprehensive portfolio which is produced in accordance with future EU directives, with a reduced lead content below 0.1%. This corresponds to RoHS II without Exemption 6c.

You will find items that comply with the future EU directive and have a maximum lead content of 0.1% on our website via the standard item, using the filter “Lead content (EU-RoHS) – lead-free (Pb < 0.1%)”, or by entering the respective web code in the search field.

i Web code: #2904

New

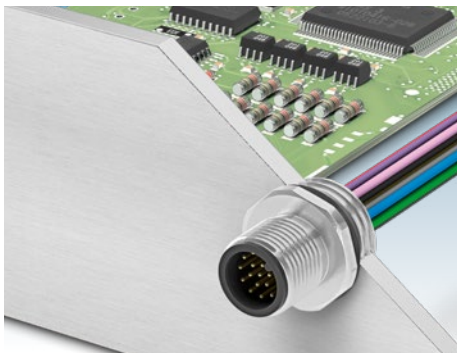
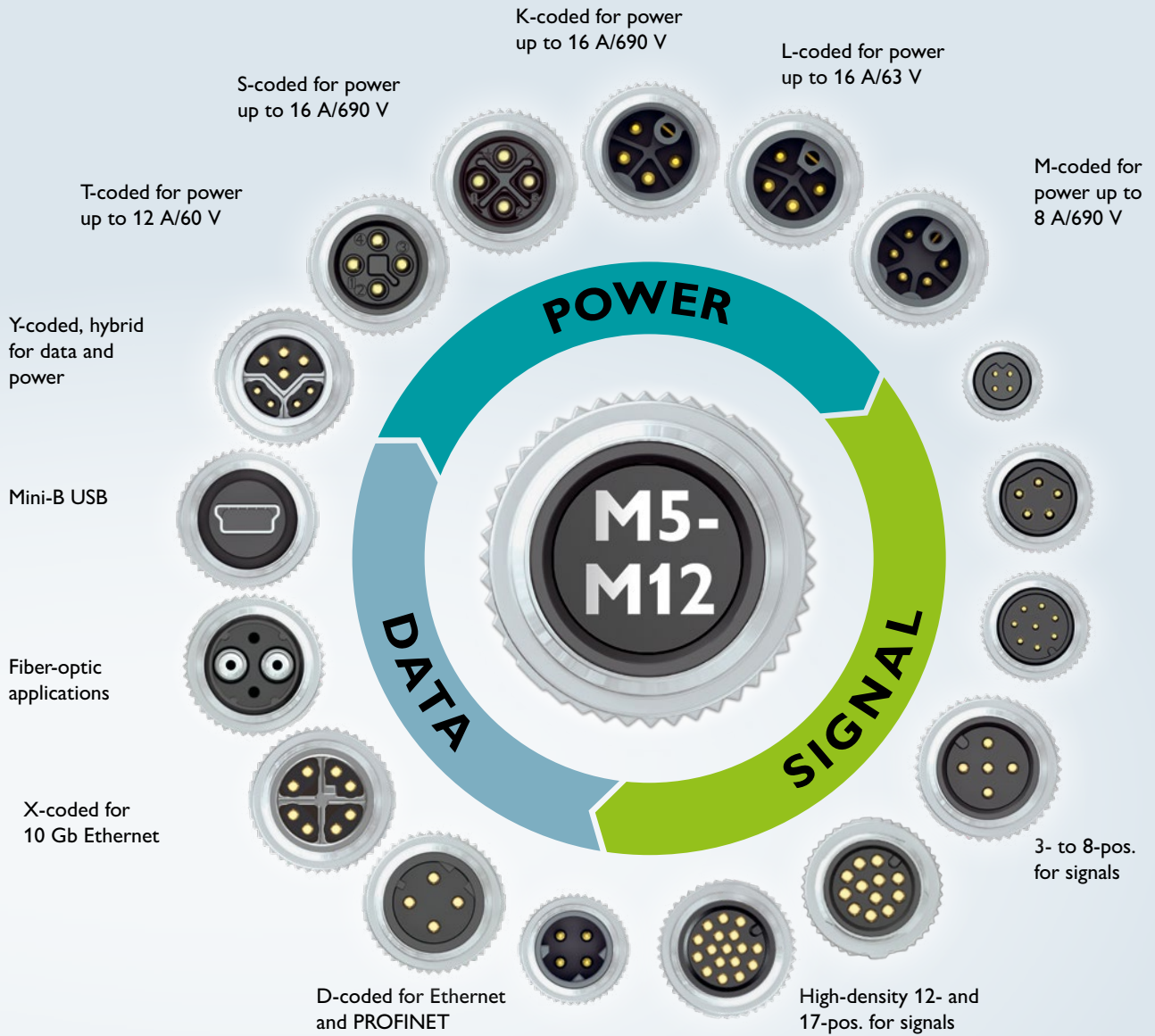
RoHS

Pb < 0,1%

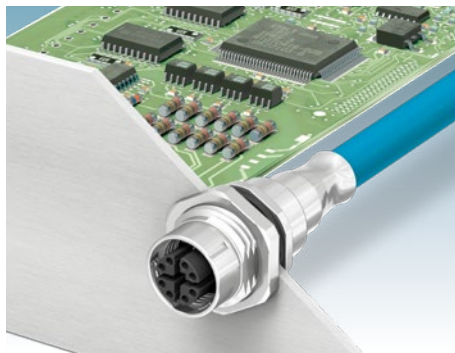


For virtually every application

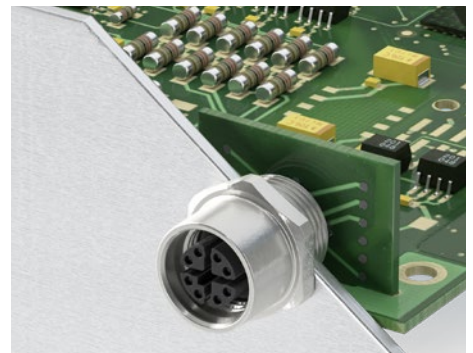
Various installation options for practical integration into your device



For high contact density
M5, M8, and M12 signal connectors for up to 17 positions



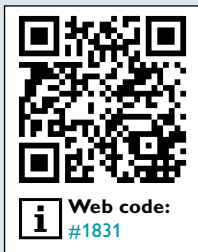
For fast data transmission
M8 and M12 data connectors for up to 10 Gbps



For high power
M12 power connectors for up to 16 A and 690 V

M12 push-pull – the new standard in automation technology

Easy connection, fast-locking: M12 connectors with push-pull fast-locking system guarantee secure, tool-free plugging, even in confined spaces and with a high cabling density. Versions with internal locking also enable compact housing designs.



Highly future-proof

The consistently standardized push-pull product range guarantees worldwide availability.



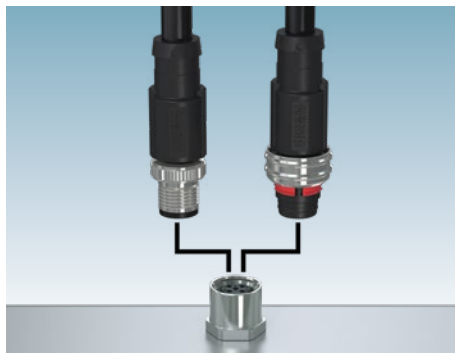
Flying leads

Establish flying leads with connectors in pin and socket versions.



More compact designs

The new M12 push-pull concept with countersunk M12 ports allows flush integration into the housing. This allows you to achieve more compact device designs.



Greater flexibility

The M12 duo contour allows for a flexible field wiring with proven M12 screw connectors or the new push-pull fast-locking system.

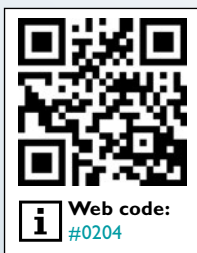
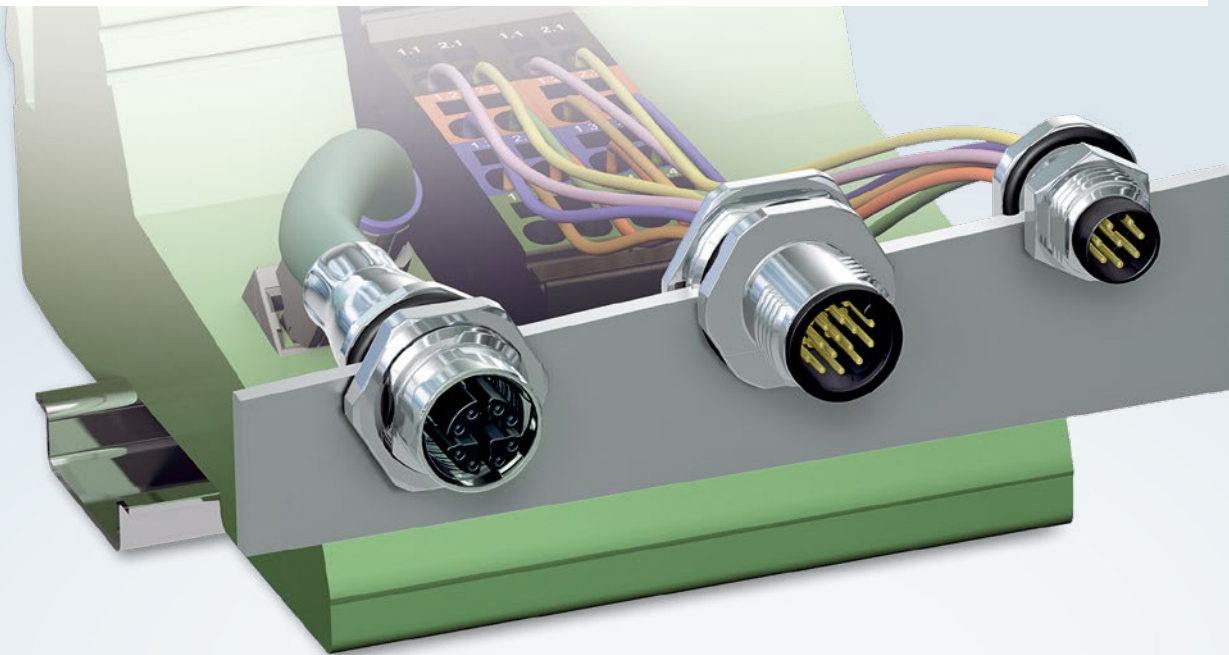


Plug and Produce

With the cross-manufacturer locking system, you can save up to 80% of installation time, compared to screw connection.

Device connectors with litz wire and cable connection

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

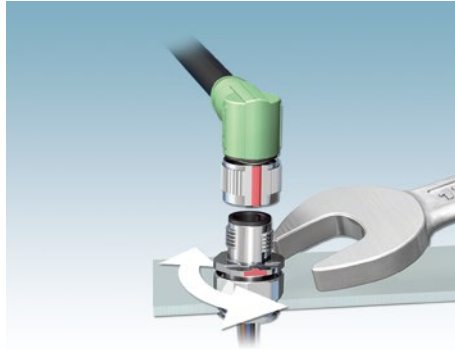


Your advantages at a glance



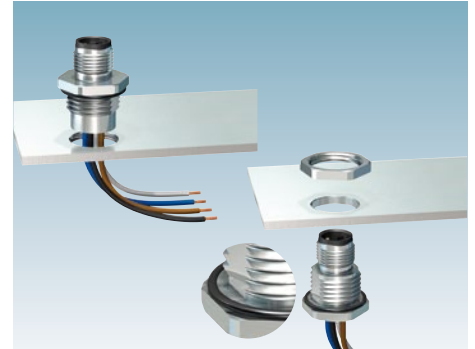
Preassembled cables

- 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



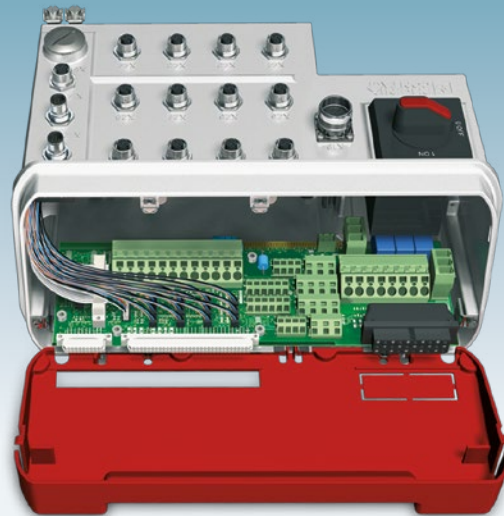
Fieldbus-specific coding

- Secure against connection errors with color and mechanical fieldbus-specific coding

Main features

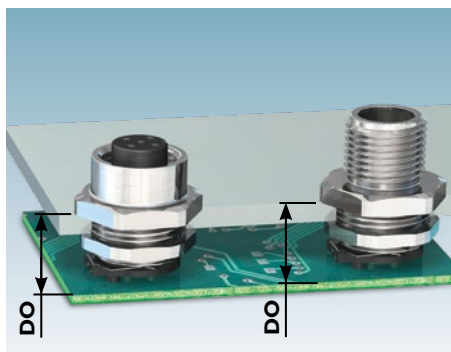
Device connection technology from Phoenix Contact for distributed modules is designed for harsh ambient conditions in industrial production processes.

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



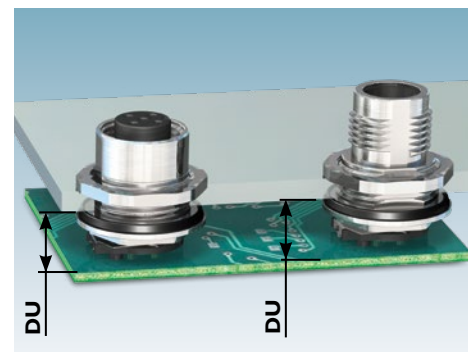
Device connectors for direct PCB mounting

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

Wide range of device port solutions

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

Space-saving construction

The M12 push-pull flush-type female connector sits flush with the housing and can be aligned more closely

Automatic pick-and-place assembly

Tape-and-reel or tray packaging

Secure power transmission

PE connection to the device housing

Seamless shielding

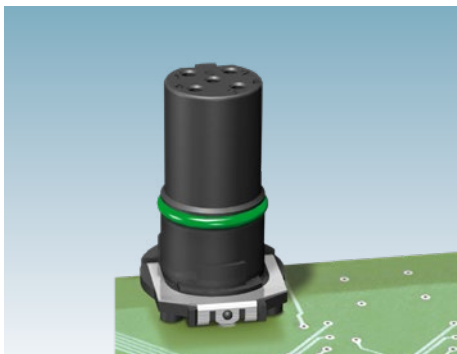
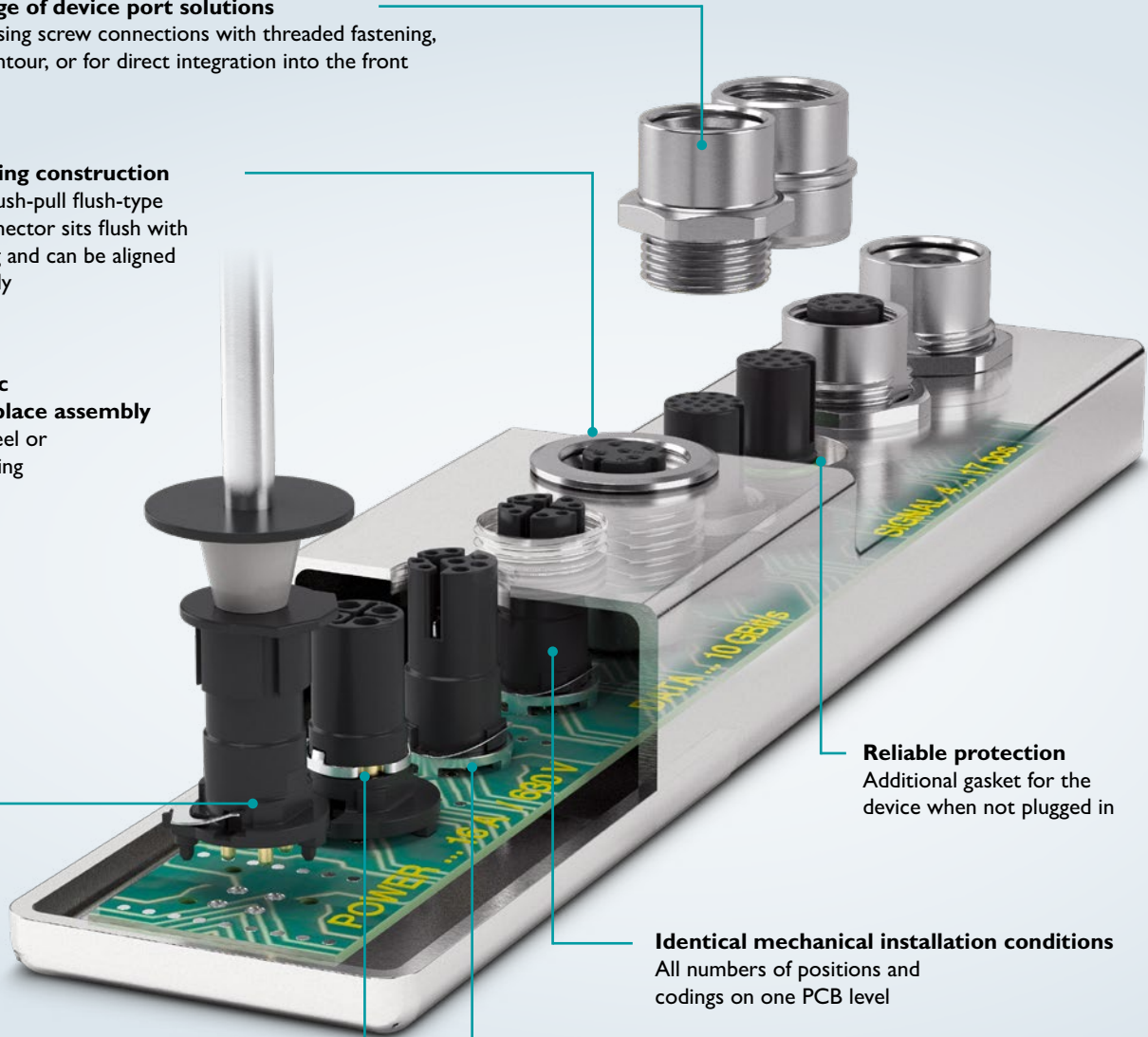
Shield connection to the PCB via shield spring

Reliable protection

Additional gasket for the device when not plugged in

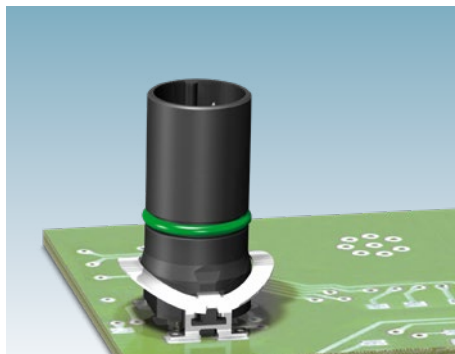
Identical mechanical installation conditions

All numbers of positions and codings on one PCB level



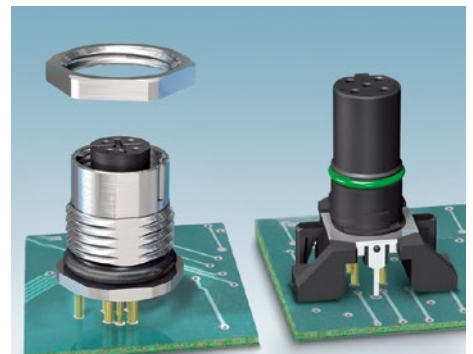
For THR soldering, two-piece

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



For 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 designed for assembly. You have access to a comprehensive range of assembled cables for quick and convenient field cabling. Halogen-free PUR cables, which we use as standard, already meet the relevant requirements in many fields of application.



 Web code:
#0561

Main features

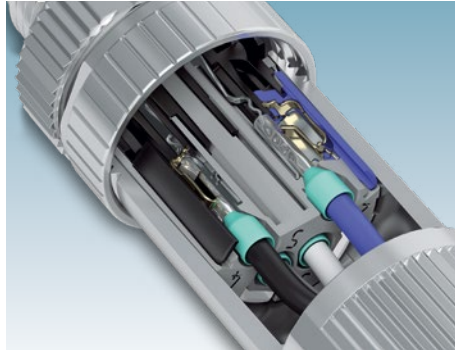
- Short connect time with push-pull fast-locking system
- Reliable 360° shielding even under extreme environmental influences
- Save space with high-position connectors
- Convenient: increased machine availability with quick and easy diagnostics
- Customer-specific assemblies and cable lengths

Your advantages at a glance



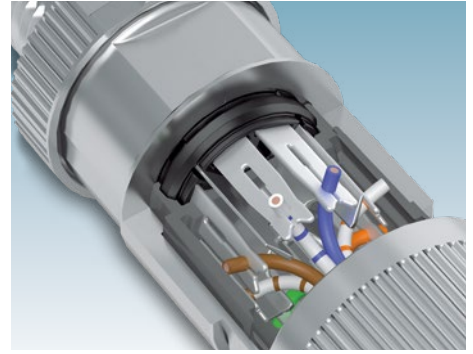
Locking with a click

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



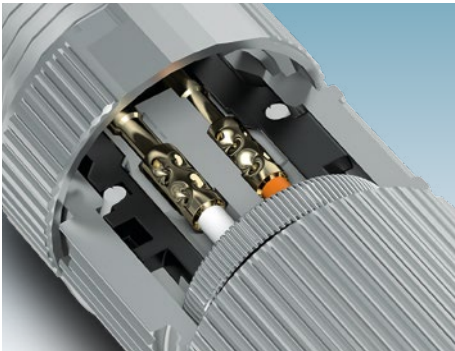
Push-Lock connection

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



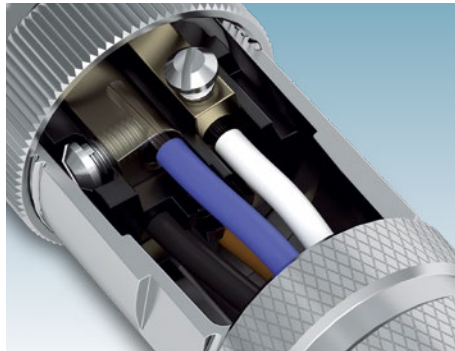
IDC insulation displacement connection

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



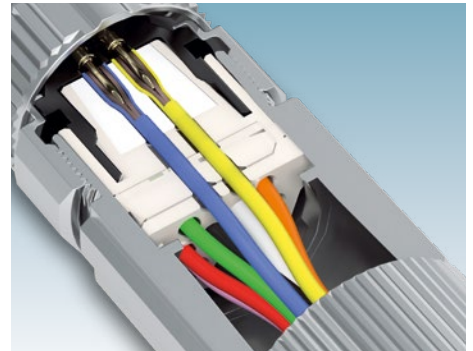
Crimp connection

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



Screw connection

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



Pierce connection

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

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.

 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	–	16	16	16	16	–
	Rear mounting with litz wires	–	18	18	18	18	–
	Front mounting, modular, crimp connection	–	18	18	18	18	–
	Front mounting with solder cups	–	–	–	20	–	–
	Rear mounting with solder cups	–	–	–	22	–	–
M12 device connectors with assembled cable							
	Front mounting	–	–	33	38	36	–
	Rear mounting	–	20 / 39	33	20 / 38	36	–
M12 device connectors for PCB connection							
	One-piece, front mounting	–	20	20	20	20	–
	One-piece, rear mounting	–	22 / 39	22 / 33 / 35	22 / 38	36	–
	Two-piece, for wave / THR soldering processes	–	24	24	24	24	–
	Two-piece, for SMD soldering processes	–	26	26	26	26	–
M12 connector, designed for assembly / with molded cable							
	Designed for assembly	–	46	50	46 / 47	50	–
	Plastic-molded cables	53 / 54	53 / 54	55	53 / 54	57	–
M8 device connectors with litz wires							
	Front mounting	28	28	–	–	41	28
	Rear mounting	28	28	–	–	–	28
M8 device connectors for PCB connection							
	One-piece, rear mounting	28	28	41	–	41	28
	Two-piece, for SMD soldering processes	30	30	30 / 41	–	30 / 41	30
M8 connector, designed for assembly / with molded cable							
	Designed for assembly	49	49	–	–	–	–
	Plastic-molded cables	53	53 / 55	55	–	–	–
M5 device connectors with litz wires							
	Front mounting	32	32	–	–	–	–
M5 device connectors for PCB connection							
	One-piece, rear mounting	32	32	–	–	–	–



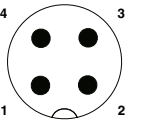
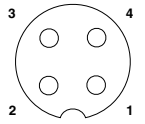
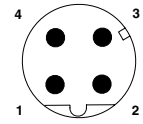
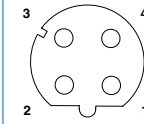






SIGNAL

DATA

POWER






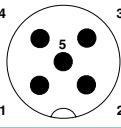
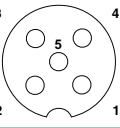
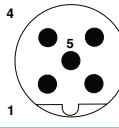
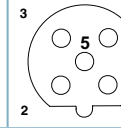
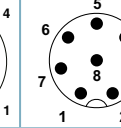
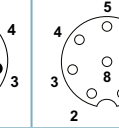
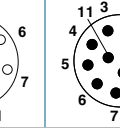
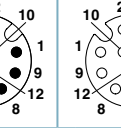
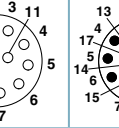
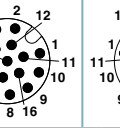
8			12	17	2+PE	3+PE	4	4+PE	4 / 4+FE	5+PE
A	X	Y	A	A	S	S	T	K	L	M
16	-	-	16	16	42	42	42	42	42	42
18	-	34	18	18	42	42	42	42	42	42
18	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
20 / 33 / 35	34	34	20	20	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-
22	34	34	22	22	-	-	-	-	45	-
24	34	34	24	24	-	44	44	45	45	45
26	34	34	26	26	-	-	44	-	-	-
46 / 47	50	-	48	48	51 / 52	51 / 52	51 / 52	51 / 52	51 / 52	-
56	56	56	-	-	-	58	58	58	58	58
28	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

SIGNAL


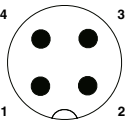
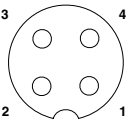
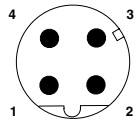
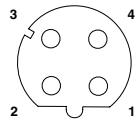


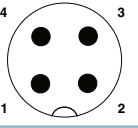
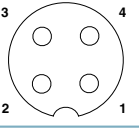
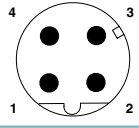
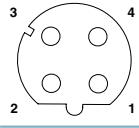


M12 device connectors, with litz wires, front mounting		4-pos.			
 Web code: #0207  Lead-free alternative items available	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Conductor cross-section	0.34 mm ²		0.34 mm ²	
	Assembly				
	Pin assignment		Male	Female	Male
					
Versions with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

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

¹⁾ No alternative items yet available with reduced lead content below 0.1%.

5-pos.		8-pos.		12-pos.		17-pos.			
 A	 B	 A	 A	 A					
60 V	60 V	30 V	30 V	30 V			30 V		
4 A	4 A	2 A	1.5 A	1.5 A			1.5 A		
0.34 mm ²	0.34 mm ²	0.25 mm ²	0.14 mm ²	0.14 mm ²			0.14 mm ²		
Preassembled with 0.5 m long litz wires									
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
									
1027694	-	-	-	-	-	-	-	-	-
1520055	1520039	1520013	1520000	1523492	1523476	1556265	1556252	1556304	1556294
1504097									
1411579	1411571	1411580	1411572	1411581	1411573	1411582	1411574	1411583	1411576
1504097									
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 ¹⁾	-	-	-	1436424 ¹⁾	-	-	-	-	-
1640692 ¹⁾									
1408446	1408454	-	-	1408442	1408453	-	-	-	-
1411242									
1458868	1458871	-	-	1405221	1458842	1405238	1405242	1405243	1405244
1404983									
1452097	1452107	1452084	1452097	1452107	1452110	-	-	-	-

SIGNAL

M12 device connector, crimp connection, front mounting		4-pos.			
 <p>i Web code: #0208</p> <p>Lead-free alternative items available</p>	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Modular versions					
	25 mm square flange, mounting holes 4 x Ø 3.2 mm				
	Preassembled contact carrier, with 0.5 m long litz wires	1440805	–	1440821	–
	Contact carrier for crimp contacts, designed for assembly ¹⁾	1440931	–	1440944	–
	Crimp contacts Ø 1.0 mm, 0.08 mm ² ... 0.5 mm ²	1452356	–	1452356	–
	Crimp contacts Ø 0.8 mm, 0.08 mm ² ... 0.34 mm ²	–	–	–	–
	Crimping tools				
Device connectors with Push-Lock connection					
	i Web code: #2405	0.14 mm ² ... 0.75 mm ²		AWG 26 ... AWG 18	
	M20 fastening thread with anti-rotation protection	1139802	1139803	1139796	1139800
M12 device connectors, with litz wires, rear mounting		4-pos.			
 <p>i Web code: #0209</p> <p>Lead-free alternative items available</p>	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Conductor cross-section	0.34 mm ²		0.34 mm ²	
	Assembly				
	Pin assignment	Male	Female	Male	Female
					
Versions with zinc die-cast housing, for screw fastening					
	Push-pull, M16 x 1.5	1108128	–	1027691	–
	M12 x 1	1551875	–	1551901	–
	M16 x 1.5	1419629	1419632	1419603	1419616
	M16 x 1.5, XL versions, wrench size 19	1411591	1411584	1411592	1411585
Versions with plastic housing, for screw fastening					
	Pg9	–	–	–	–
Versions with stainless steel housing (1.4404), for screw fastening					
	Pg9	1405239	1405240	–	–

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

²⁾ No alternative items yet available with reduced lead content below 0.1%.

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

1419959

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

1212510

0.14 mm ² ... 0.75 mm ²									
1139804	1139805	-	-	-	-	-	-	-	-

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

Preassembled with 0.5 m long litz wires



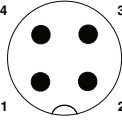
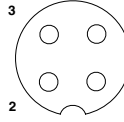
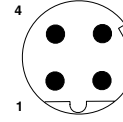
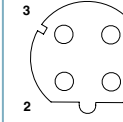


Male	Female	Male	Female	Male	Female	Male	Female	Male	Female



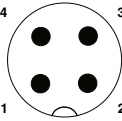
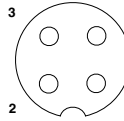
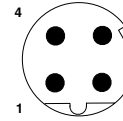
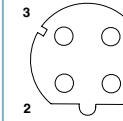



1027697	-	-	-	-	-	-	-	-	-
1551888	-	1551891	-	1551914	-	1437122	-	1437135	-
1419645	1419658	1419661	1419674	1419687	1419690	1419700	1419713	1419726	1419739
1411593	1411586	1411594	1411587	1411595	1411588	1411596	1411589	1411597	1411590

-	1436356 ²⁾	-	-	-	1436369 ²⁾	-	-	-	-
---	-----------------------	---	---	---	-----------------------	---	---	---	---

1554681	1554717	-	-	1554694	1554720	-	-	-	-
---------	---------	---	---	---------	---------	---	---	---	---

SIGNAL

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



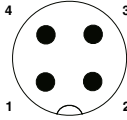
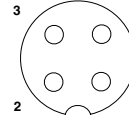
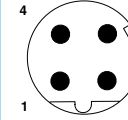
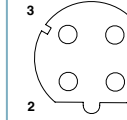





M12 device connectors, solder connection, front mounting		4-pos.			
 Web code: #0212  Lead-free alternative items available	Coding	A	D		
	Rated voltage	250 V	250 V		
	Rated current	4 A	4 A		
	Pin assignment	Male	Female	Male	Female
					
Versions for PCB mounting, with torsion protection, for wave soldering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

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

¹⁾ No alternative items yet available with reduced lead content below 0.1%.

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1419409	1419328	–	–	1419425	1419357	1442227	1442188	1442308	1442269
1419412	1419331	–	–	1419438	1419344	1442230	1442191	1442311	1442272
1551671 ¹⁾	–	1551684 ¹⁾	–	1551697 ¹⁾	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–



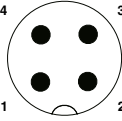
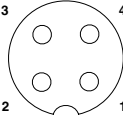
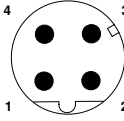
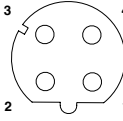





5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1456433	1456446	1456459	1456462	1408574	1408573	–	–	–	–
1436437 ¹⁾	–	–	–	1436440 ¹⁾	–	–	–	–	–
1436398 ¹⁾	–	–	–	1436408	–	–	–	–	–

M12 device connectors, solder connection, rear mounting, for wave soldering processes			4-pos.			
 Web code: #0213  Lead-free alternative items available	Coding		A		D	
	Rated voltage		250 V		250 V	
	Rated current		4 A		4 A	
	Pin assignment		Male	Female	Male	Female
						
Versions with brass or zinc die-cast housing, one-piece, straight, for screw fastening						
	Push-pull, M16 x 1.5	6 mm solder pins	1108002	–	1027680	–
	M12 x 1	6 mm solder pins	1551820	–	1551859	–
	M16 x 1.5	6 mm solder pins	1419742	1419755	1441749	1441752
	M12 x 1, with shield contact	6 mm solder pins	1552955	–	1552984	–
	M16 x 1.5 with shield contact	6 mm solder pins	1419768	1419771	1441862	1441875
Versions with plastic housing, one-piece, straight for screw fastening						
	Pg9		–	–	–	–
	Pg9 with solder cups	Max. 0.34 mm ²	–	–	–	–
		Max. 0.25 mm ²	–	–	–	–
Versions with stainless steel housing (1.4404), one-piece, straight for screw fastening						
	Pg9		1404979	1404974	–	–
Versions with brass housing (nickel-plated), two-piece including housing, straight ¹⁾						
	Straight, shielded, for fastening in the feed-through hole		–	–	–	1534627 ²⁾
	Straight, for fastening in the feed-through hole		–	–	–	–

¹⁾ Cannot be combined with two-piece contact carriers for PCB mounting for THR, SMD or wave soldering processes.

²⁾ No alternative items yet available with reduced lead content below 0.1%.

5-pos.				8-pos.		12-pos.		17-pos.	
A		B		A		A		A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1027676	-	-	-	-	-	-	-	-	-
1551833	-	1551846	-	1551862	-	1559945	-	1559974	-
1441765	1441778	1441781	1441794	1441804	1441817	1441820	1441833	1441846	1441859
1552968	-	1552971	-	1552997	-	1437106	-	1437119	-
1441888	1441891	1441901	1441914	1441927	1441930	1441943	1441956	1441969	1441972
-	1436330 ²⁾	-	-	-	1436343 ²⁾	-	-	-	-
-	1436314 ²⁾	-	-	-	-	-	-	-	-
-	-	-	-	-	1436327 ²⁾	-	-	-	-
1554746	1554733	-	-	1529807	1529797	-	-	-	-
1437193 ²⁾	1421685 ²⁾	1437203 ²⁾	1437180 ²⁾	-	-	-	-	-	-
1694211 ²⁾	1694237 ²⁾	1514883 ²⁾	1515934 ²⁾	1424017 ²⁾	1556854 ²⁾	-	-	-	-



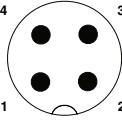
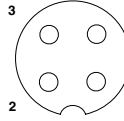
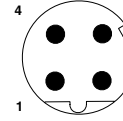
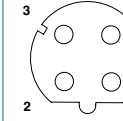
M12 device connector, solder connection, for reflow and wave soldering processes		4-pos.			
 	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					
Two-piece, THR contact carriers					
	Straight, shielded, THR, tray packaging	1439939	1439955	1552214	1551451
	Straight, shielded, THR, tape-and-reel	1457500 ⁷⁾	1457623*	1457513 ⁷⁾	1457636 ⁷⁾
	Straight, THR, tray packaging	1437164	1439942	–	1414071
	Straight, THR, tape-and-reel	1457490 ⁷⁾	1457610 ⁷⁾	–	1195616 ⁷⁾
Two-piece, wave soldering contact carriers					
	Angled, shielded, wave soldering, blister packaging	1439887	1432444	1436673	1432457
	Angled, wave soldering, blister packaging	1436660	1436628	–	–
Two-piece, housing screw connections for THR and wave soldering contact carriers					
  	Front mounting				
	Push-pull	Male M12 x 1 / Female M12 x 1			
	Screw locking mechanism	Male M12 x 1 / Female M12 x 1			
	Push-pull	Male M12 x 1 / Female M12 x 1, flat gasket			
	Push-pull	Male M14 x 1 / Female M14 x 1			
	Screw locking mechanism	Male M14 x 1 / Female M14 x 1			
	Push-pull	Female countersunk M16 x 1, flat gasket			
	Flat nut				
	Rear mounting				
	Push-pull	Male M15 x 1 / Female M16 x 1			
	Screw locking mechanism	Male M15 x 1 / Female M15 x 1			
	Press-in versions				
	Push-pull	Male / Female			
Screw locking mechanism	Male / Female				

^{1), 2)} Distance from PCB upper edge to housing front plate inner edge: DU = ¹⁾ 6 mm ²⁾ 6.8 mm, more information from page 10.




^{3), 4), 5), 6)} Distance from PCB upper edge to housing front plate outer edge: DO = ³⁾ 6 mm ⁴⁾ 7.5 mm ⁵⁾ 9 mm ⁶⁾ 18.5 mm, more information from page 10.

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			
Male	Female	Male	Female	Male	Female	Male	Female		
1432350	1432363	1552230	1551435	1557581	1551422	1442065 ⁷⁾	1442052 ⁷⁾	1442081 ⁷⁾	1442078 ⁷⁾
1457539 ⁷⁾	1457652 ⁷⁾	1457542 ⁷⁾	1457665 ⁷⁾	1457568 ⁷⁾	1457681 ⁷⁾	1457584 ⁷⁾	1457704 ⁷⁾	1457607 ⁷⁾	1457720 ⁷⁾
1552227	1551448	–	1414070	1552269	1557808	1441985 ⁷⁾	1441970 ⁷⁾	1442007 ⁷⁾	1441998 ⁷⁾
1457526 ⁷⁾	1457649 ⁷⁾	–	–	1457555 ⁷⁾	1457678 ⁷⁾	1457571 ⁷⁾	1457694 ⁷⁾	1457597 ⁷⁾	1457717 ⁷⁾
1439890	1432431	1436699	1432512	1437038	1437009	1424198	1424199	1424200	1424201
1436686	1436644	–	1436657	1436987	1436990	1424194	1424195	1424196	1424197
Male: 1454488 ⁴⁾ / Female: 1454487 ⁴⁾									
Male: 1416145 ⁴⁾ / Female: 1416144 ⁴⁾									
Male: 1454490 ³⁾ / Female: 1233779 ³⁾									
Male: 1341713 ⁵⁾ / Female: 1249211 ⁵⁾									
Male: 1417984 ⁵⁾ / Female: 1417989 ⁵⁾									
Female: 1233777 ⁶⁾									
M12 x 1: 1405639 / M14 x 1: 1412077 / M16 x 1: 1312511									
Male: 1027661 ¹⁾ / 1454489 ²⁾ / Female: 1249212 ¹⁾ / 1233780 ²⁾									
Male: 1413997 ¹⁾ / 1413996 ²⁾ / Female: 1414004 ¹⁾ / 1414003 ²⁾									
Male: 1454498 ⁵⁾ / Female: 1454499 ⁵⁾									
Male: 1437892 ⁵⁾ / Female: 1437889 ⁵⁾									


⁷⁾ Contact carriers with assembly pad.

M12 device connector, solder connection, for reflow soldering processes		4-pos.			
 Web code: #0215  Lead-free alternative items available	Coding	A		D	
	Rated voltage	250 V		250 V	
	Rated current	4 A		4 A	
	Pin assignment	Male	Female	Male	Female
					

Two-piece, SMD contact carriers

	Straight, SMD, tray packaging	1411924 ⁵⁾	1411907	1411925 ⁵⁾	1411912
	Straight, SMD, tape-and-reel	1411982 ⁵⁾	1411974	1411983 ⁵⁾	1411975
	Straight, shielded, SMD, tray packaging, additional gasket for the device when not plugged in	1411955 ⁵⁾	1411949	1411956 ⁵⁾	1411950
	Straight, shielded, SMD, tape-and-reel, additional gasket for the device when not plugged in	1412010 ⁵⁾	1412004	1412011 ⁵⁾	1412005
	Straight, SMD, tray packaging, additional gasket for the device when not plugged in	1411941 ⁵⁾	1411935	1411942 ⁵⁾	1411936
	Straight, SMD, tape-and-reel, additional gasket for the device when not plugged in	1411996 ⁵⁾	1411990	1411997 ⁵⁾	1411991

Two-piece, housing screw connections for SMD contact carriers



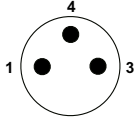
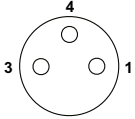
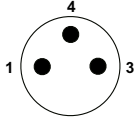
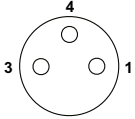
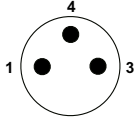
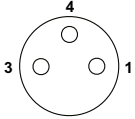




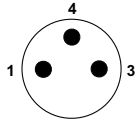
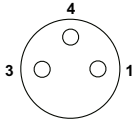
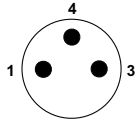
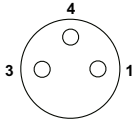
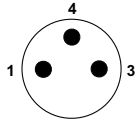
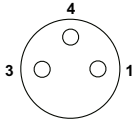



	Front mounting		
	Push-pull	Male M14 x 1 / Female M16 x 1	
	Screw locking mechanism	Male M14 x 1 / Female M14 x 1	
	Push-pull	Female countersunk M16 x 1, flat gasket	
	Flat nut		
	Rear mounting		
	Push-pull	Male M15 x 1 / Female M16 x 1	
	Screw locking mechanism	Male M15 x 1 / Female M15 x 1	
	Press-in versions		
	Push-pull	Male / Female	
	Screw locking mechanism	Male / Female	

¹⁾ Not with additional gasket for the device when not plugged in.
²⁾ Distance from PCB upper edge to housing front plate inner edge: DU = 6 mm, more information from page 10.
³⁾ Distance from PCB upper edge to housing front plate outer edge: DO = 9 mm, more information from page 10.
⁴⁾ Distance from PCB upper edge to housing front plate outer edge: DO = 17 mm, more information from page 10.

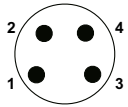
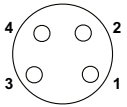
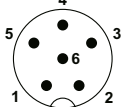
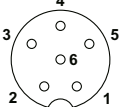
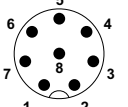
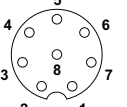
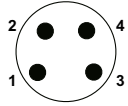
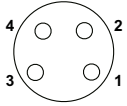
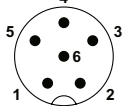
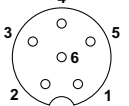
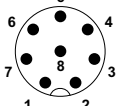
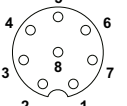
5-pos.				8-pos.		12-pos.		17-pos.	
■ A		■ B		■ A		■ A		■ A	
60 V		60 V		30 V		30 V		30 V	
4 A		4 A		2 A		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1411926 ⁵⁾	1411913	1411927 ⁵⁾	1411914	1411928 ⁵⁾	1411915	1411929 ⁵⁾	1411916	1411930 ⁵⁾	1411917
1411984 ⁵⁾	1411976	1411985 ⁵⁾	1411977	1411986 ⁵⁾	1411978	1411987 ⁵⁾	1411979	1411988 ⁵⁾	1411980
1411957 ⁵⁾	1411951	1411958 ⁵⁾	1411952	1411959 ⁵⁾	1411953	1411960 ⁵⁾	1411954	1411961 ⁵⁾	1411966 ¹⁾
1412012 ⁵⁾	1412006	1412013 ⁵⁾	1412007	1412014 ⁵⁾	1412008	1412015 ⁵⁾	1412009	1412016 ⁵⁾	1412018 ¹⁾
1411943 ⁵⁾	1411937	1411944 ⁵⁾	1411938	1411945 ⁵⁾	1411939	1411946 ⁵⁾	1411940	1411947 ⁵⁾	—
1411998 ⁵⁾	1411992	1411999 ⁵⁾	1411993	1412000 ⁵⁾	1411994	1412001 ⁵⁾	1411995	1412002 ⁵⁾	—
Male: 1107999 ³⁾ / Female: 1454494 ³⁾									
Male: 1412078 ³⁾ / Female: 1412079 ³⁾									
Female: 1454497 ⁴⁾									
M14 x 1: 1412077 / M16 x 1: 1312511									
Male: 1107993 ²⁾ / Female: 1454492 ²⁾									
Male: 1414000 ²⁾ / Female: 1414021 ²⁾									
Male: 1454496 ³⁾ / Female: 1454495 ³⁾									
Male: 1412080 ³⁾ / Female: 1412081 ³⁾									

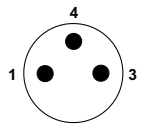
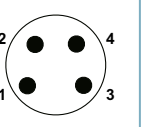
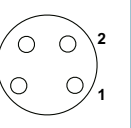


⁵⁾ Contact carriers with assembly pad.

SIGNAL

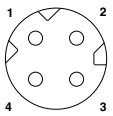
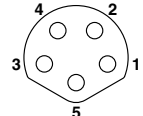
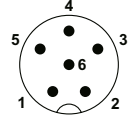
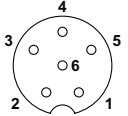
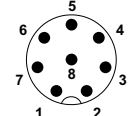
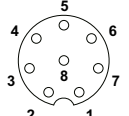
M8 device connectors, with litz wires		3-pos.					
	 Web code: #0216	Coding	A				
		Rated voltage	50 V AC / 60 V DC				
		Rated current	4 A				
		Conductor cross-section	0.25 mm ²				
		Assembly					
		Pin assignment	<table border="1"> <thead> <tr> <th>Male</th> <th>Female</th> </tr> </thead> <tbody>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

¹⁾ No alternative items yet available with reduced lead content below 0.1%.





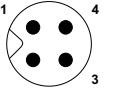
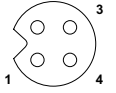
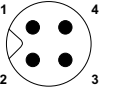
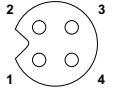


4-pos.		6-pos.		8-pos.	
■ A		■ A		■ A	
50 V AC / 60 V DC		30 V AC / 30 V DC		30 V AC / 30 V DC	
4 A		1.5 A		1.5 A	
0.25 mm ²		0.14 mm ²		0.14 mm ²	
Preassembled with 0.5 m long litz wires					
Male	Female	Male	Female	Male	Female
					
1500347 ¹⁾	1500363 ¹⁾	1542664 ¹⁾	1542677 ¹⁾	–	–
1504071 ¹⁾					
–	–	–	–	1424232 ¹⁾	1424231 ¹⁾
1453481 ¹⁾	–	1453494 ¹⁾	–	1424230 ¹⁾	–
–	1456093 ¹⁾	–	1456103 ¹⁾	–	–
–	1453452 ¹⁾	–	1453465 ¹⁾	–	–
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		1.5 A		1.5 A	
Male	Female	Male	Female	Male	Female
					
1694347 ¹⁾	–	1436521 ¹⁾	–	1424238 ¹⁾	–
–	–	–	–	–	1424237 ¹⁾
–	1694376 ¹⁾	–	1436534 ¹⁾	–	–
1456019 ¹⁾	–	1456022 ¹⁾	–	1424236 ¹⁾	–
1456048 ¹⁾	–	1424244 ¹⁾	–	–	–
–	1456129 ¹⁾	–	1456132 ¹⁾	–	1424235 ¹⁾
–	1456158 ¹⁾	–	1424243 ¹⁾	–	–
–	1524789 ¹⁾	–	–	–	–
1440096 ¹⁾	1526169 ¹⁾	–	–	–	–

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

¹⁾ Distance from PCB upper edge to housing front plate inner edge: DU = 6 mm, more information from page 10.
²⁾ Distance from PCB upper edge to housing front plate outer edge: DO = 9 mm, more information from page 10.
³⁾ Contact carriers with assembly pad.



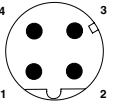
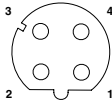
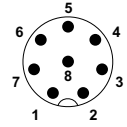
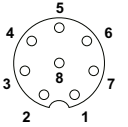







4-pos.	5-pos.	6-pos.		8-pos.	
D	B	A		A	
60 V AC / 60 V DC	30 V AC / 30 V DC	30 V AC / 30 V DC		30 V AC / 30 V DC	
4 A	3 A	1.5 A		1.5 A	
Female	Female	Male	Female	Male	Female
					
-	1412222	-	1412223	-	1412224
1068453	1412245	-	1412246	-	1412247
-	1412237	-	1412238	-	1412239
1068454	1412259	-	1412261	-	1412262
-	1412229	-	1412230	-	1412232
1163177	1412252	-	1412253	-	1412254
Male: 1412502 ²⁾ / Female: 1412504 ²⁾					
1412508					
Male: 1412505 ¹⁾ / Female: 1412506 ¹⁾					
Male: 1412500 ²⁾ / Female: 1412501 ²⁾					

SIGNAL

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




¹⁾ No alternative items yet available with reduced lead content below 0.1%.

DATA

M12 device connectors for networks			4-pos.		8-pos.	
 Web code: #0222  Lead-free alternative items available	Coding		■ D		■ A	
	Pin assignment		Male	Female	Male	Female
						
Front mounting, with assembled cable						
Ethernet 	M16 x 1.5, can be positioned, water blue, cable type 93E	0.5 m	–	1136432	–	–
		2 m	–	1405837	–	–
Rear mounting, with assembled cable						
Ethernet 	M16 x 1.5, water blue, cable type 93E	0.5 m	–	1413936	–	–
		2 m	–	1405866	–	–
	M16 x 1.5, water blue, cable type 94B	0.5 m	–	1401057	–	–
		5 m	–	–	–	1407877
M16 x 1.5, water blue, cable type 94C	2 m	–	–	–	1412820	
Rear mounting, for wave soldering processes						
Ethernet 	M16 x 1.5, one-piece, contact carrier, water blue		1456514	1456527	1456530	1456543
Rear 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 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 section Signals – M12, more information from page 16.

DATA



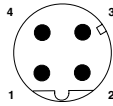
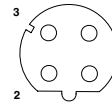
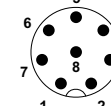
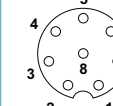










M12 device connectors for networks		8-pos.	8-pos.	
 Web code: #0224  Lead-free alternative items available	Coding	X (CAT6_A)	Y (hybrid)	
	Pin assignment	Female 	Female 	
Rear mounting, with assembled cable				
 Ethernet 	M16 x 1.5, water blue, cable type 94F	0.5 m	1424135	–
		1 m	1424148	–
		2 m	1424151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

Housing screw connections for THR and wave soldering contact carriers, more information from page 24.

Housing screw connections for SMD contact carriers, more information from page 26.



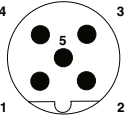
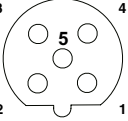






¹⁾ Contact carriers with assembly pad.

DATA

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



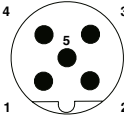
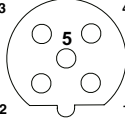






For additional 4-pos. D-coded and 8-pos. A-coded connectors, see section Signals – M12, more information from page 16.

DATA

M12 device connectors for fieldbuses		5-pos.		
 Web code: #0229  Lead-free alternative items available	Coding	B		
	Pin assignment	Male	Female	
				
Front mounting, with assembled cable				
 	M16 x 1.5, can be positioned, violet, cable type 910	0.5 m	1525555	1525597
		1 m	1525568	1525607
		2 m	1519561	1519574
		5 m	1525571	1525610
Rear mounting, with assembled cable				
 	M16 x 1.5, violet, cable type 910	0.5 m	1534342	1534384
		1 m	1534355	1534397
		2 m	1534368	1534407
		5 m	1534371	1534410
Rear mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, violet		1456475	1456488



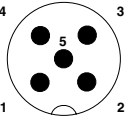
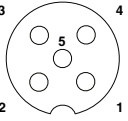








For additional 5-pos. B-coded connectors, see section Signals – M12, more information from page 16.

DATA

M12 device connectors for fieldbuses		5-pos.		
 Web code: #0230  Lead-free alternative items available	Coding	B		
	Pin assignment	Male	Female	
				
Front mounting, with assembled cable				
 	M16 x 1.5, green, cable type 910	0.5 m	1529629	1529742
		1 m	1530223	1529755
		2 m	1529726	1529768
		5 m	1529739	1529771
Rear mounting, with assembled cable				
 	M16 x 1.5, green, cable type 900	0.5 m	1534504	1534546
		1 m	1534517	1534559
		2 m	1534520	1534562
		5 m	1534533	1534575
	M16 x 1.5 EMC nut	1440164		
Rear mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, green		1456572	1456585
	M16 x 1.5 EMC nut	1440164		



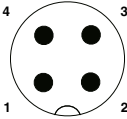
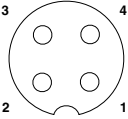





For additional 5-pos. B-coded connectors, see section Signals – M12, more information from page 16.

DATA

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

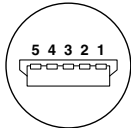

For additional 5-pos. A-coded connectors, see section Signals – M12, more information from page 16.

DATA



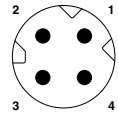
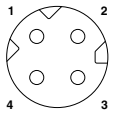
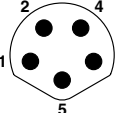
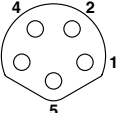









M12 device connectors for fieldbuses		4-pos.		
 Web code: #0232  Lead-free alternative items available	Coding	A		
	Pin assignment	Male	Female	
				
Rear mounting, with assembled cable				
 	M16 x 1.5, red, cable type 990	0.5 m	–	1559819
		1 m	–	1559822
		2 m	–	1559835
		5 m	–	1559848
Rear mounting, for wave soldering processes				
 	M16 x 1.5, one-piece, contact carrier, green	1457856	1457869	
Rear mounting, for wave soldering processes, shielded				
	M16 x 1.5, one-piece, contact carrier, yellow	1457872	–	

For additional 4-pos. A-coded connectors, see section Signals – M12, more information from page 16.

DATA

M12 device connectors for USB		USB
<p>i Web code: #0235</p> <p>RoHS</p> <p>Lead-free alternative items available</p>	Pin assignment	
Rear mounting, for wave soldering processes		
	<p>M12 x 1, Mini-B USB 2.0</p>	<p>1440711</p>













DATA

M8 device connectors for fieldbuses		4-pos.		5-pos.		
 Web code: #0237  Lead-free alternative items available	Coding	D		B		
	Pin assignment	Male	Female	Male	Female	
						
Front mounting, preassembled with 0.5 m long litz wires						
 		M10 fastening thread	–	–	1424234 ¹⁾	1424233 ¹⁾
Rear mounting, for wave soldering processes						
  		M8 fastening thread, straight, shielded	1253761 ¹⁾	–	1424242 ¹⁾	–
		M8 fastening thread, angled, shielded	1253764 ¹⁾	–	1424240 ¹⁾	–
		M10 fastening thread, straight, shielded	–	1253763 ¹⁾	–	1424241 ¹⁾
		M10 fastening thread, angled, shielded	–	1253765 ¹⁾	–	1424239 ¹⁾
Two-piece, SMD contact carriers for reflow soldering processes						
 		Straight, SMD, tray packaging	–	–	–	1412222
		Straight, SMD, tape-and-reel	–	–	–	1412245
		Straight, SMD, tape-and-reel, additional gasket for the device when not plugged in	–	–	–	1412252
		shielded	–	–	–	1412259
		Straight, SMD, tray packaging, additional gasket for the device when not plugged in	–	–	–	1412229
		shielded	–	–	–	1412237
 		Straight, SMD, tape-and-reel	–	1068453	–	–
		Straight, SMD, tape-and-reel, additional gasket for the device when not plugged in	–	1068454	–	–
		shielded	–	–	–	–

Housing screw connections for SMD contact carriers, more information from page 30

¹⁾ No alternative items yet available with reduced lead content below 0.1%.

POWER

M12 device connectors up to 16 A / 630 V		3(2+PE)-pos.		4(3+PE)-pos.	
 Web code: #0238  Lead-free alternative items available	Coding	S		S	
	Rated voltage	630 V		630 V	
	Rated current	16 A		12 A	
	Conductor cross-section	16 AWG		16 AWG	
	Pin assignment	Male	Female	Male	Female
					
Front mounting, preassembled with 0.2 / 0.5 m long litz wires					
	M16 x 1.5 fastening thread, one-piece	1411655 ¹⁾	1411654 ¹⁾	1424139 ¹⁾	1424137 ¹⁾
	Flat nut M16 x 1.5	1504097			
 	M16 x 1.5 fastening thread, XL versions, wrench size 19 Litz wires: 16 AWG Litz wires: 2.5 mm ² PROFINET-specified, litz wires: AWG 16 PROFINET-specified, litz wires: 2.5 mm ²	–	–	1411607 ¹⁾	1411605 ¹⁾
		–	–	–	–
		–	–	–	–
		–	–	–	–
	Flat nut M16 x 1.5	–	–		
Rear mounting, preassembled with 0.2 / 0.5 m long litz wires					
	M16 x 1.5 fastening thread, one-piece	1411653 ¹⁾	1411652 ¹⁾	1424132 ¹⁾	1424133 ¹⁾
	 	M16 x 1.5 fastening thread, XL versions, wrench size 19 Litz wires: 16 AWG Litz wires: 2.5 mm ² PROFINET-specified, litz wires: AWG 16 PROFINET-specified, litz wires: 2.5 mm ²	–	–	1411603 ¹⁾
–			–	–	–
–			–	–	–
–			–	–	–

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

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

³⁾ 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	
16 AWG		16 AWG / 2.5 mm ²		16 AWG / 2.5 mm ²		16 AWG / 2.5 mm ²		16 AWG	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1424140 ¹⁾	1424138 ¹⁾	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
1411608 ¹⁾	1411606 ¹⁾	–	–	–	–	1425635 ²⁾	1425636 ²⁾	1415300 ²⁾	1415301 ²⁾
–	–	–	–	1415295 ²⁾	1415296 ²⁾	1415291 ²⁾	1415292 ²⁾	–	–
–	–	1425631 ²⁾	1425632 ²⁾	1425627 ^{2) 3)}	1425628 ^{2) 3)}	–	–	–	–
–	–	1425586 ²⁾	1425587 ²⁾	1425582 ^{2) 3)}	1425583 ^{2) 3)}	–	–	–	–
1504097									
1424136 ¹⁾	1424134 ¹⁾	–	–	–	–	–	–	–	–
1411604 ¹⁾	1411599 ¹⁾	–	–	–	–	1425637 ²⁾	1425638 ²⁾	1415302 ²⁾	1415303 ²⁾
–	–	–	–	1415297 ²⁾	1415299 ²⁾	1415293 ²⁾	1415294 ²⁾	–	–
–	–	1425633 ²⁾	1425634 ²⁾	1425629 ^{2) 3)}	1425630 ^{2) 3)}	–	–	–	–
–	–	1425588 ²⁾	1425589 ²⁾	1425584 ^{2) 3)}	1425585 ^{2) 3)}	–	–	–	–

POWER

M12 device connectors up to 16 A / 630 V		4(3+PE)-pos.		4-pos.	
 Web code: #0240  Lead-free alternative items available	Coding	S		T	
	Rated voltage	630 V		63 V	
	Rated current	12 A		12 A	
	Pin assignment	Male	Female	Male	Female
					
Two-piece, THR contact carriers					
	Straight, THR, blister packaging	1406410	1406409	1406396	1406411
	Straight, THR, tape-and-reel	1418343	1418344	1418339 ¹⁾	1418340 ¹⁾
	Straight, shielded, THR, blister packaging	–	–	1406397	1406412
	Straight, shielded, THR, tape-and-reel	–	–	1418341 ¹⁾	1418342 ¹⁾
Two-piece, SMD contact carriers					
	Straight, SMD, tray packaging	–	–	1411931 ¹⁾	1411918
	Straight, SMD, tape-and-reel	–	–	1411989 ¹⁾	1411981
	Straight, shielded, SMD, tray packaging	–	–	–	1411967
	Straight, shielded, SMD, tape-and-reel	–	–	–	1412019
	Straight, SMD, tray packaging, additional gasket for the device when not plugged in	–	–	1411948 ¹⁾	–
	Straight, SMD, tape-and-reel, additional gasket for the device when not plugged in	–	–	1412003 ¹⁾	–
	Straight, shielded, SMD, tray packaging, additional gasket for the device when not plugged in	–	–	1411962 ¹⁾	–
	Straight, shielded, SMD, tape-and-reel, additional gasket for the device when not plugged in	–	–	1412017 ¹⁾	–



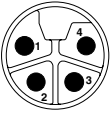
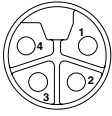
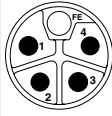
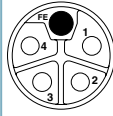
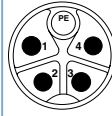
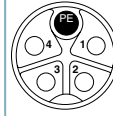
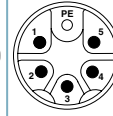
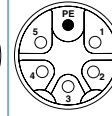








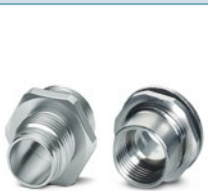
Push-pull housings are not compatible with the S or T coding.

Housing screw connections for S- and T-coded THR contact carriers, more information from page 24.

Housing screw connections for T-coded SMD contact carriers, more information from page 26.

¹⁾ Contact carriers with assembly pad.

POWER

M12 device connectors up to 16 A / 630 V		4-pos.		5(4+FE)-pos.		5(4+PE)-pos.		6(5+PE)-pos.		
 Web code: #0240  RoHS Lead-free alternative items available	Coding	L		L		K		M		
	Rated voltage	63 V		63 V		630 V		630 V		
	Rated current	16 A		16 A		16 A		8 A		
	Pin assignment	Male	Female	Male	Female	Male	Female	Male	Female	
										
One-piece, wave soldering, rear / screw mounting										
 	M16 x 1.5, XL versions, wrench size 19	–	–	1415337	1415338	–	–	–	–	
	PROFINET-specified	1425592	1425593	1425590 ³⁾	1425591 ³⁾	–	–	–	–	
Control cabinet feed-through, rear / screw mounting										
 	M16 x 1.5 Male to female PROFINET-specified	–	–	1456298 ³⁾		–	–	–	–	
Two-piece, THR contact carriers										
 	Straight, THR, Tray packaging	–	–	1420817 ⁵⁾	1420818 ⁵⁾	–	–	–	–	
	PROFINET-specified	1425603 ⁵⁾	1425604 ⁵⁾	1425594 ³⁾⁵⁾	1425595 ³⁾⁵⁾	–	–	–	–	
	Straight, THR, Tape-on-reel	–	–	1420828 ⁵⁾	1420829 ⁵⁾	–	–	–	–	
	PROFINET-specified	1425605 ⁵⁾	1425606 ⁵⁾	1425599 ³⁾⁵⁾	1425600 ³⁾⁵⁾	–	–	–	–	
 	Straight, shielded, THR, tray packaging	–	–	1421314 ⁵⁾	1421315 ⁵⁾	1420819 ⁵⁾	1420821 ⁵⁾	1420822 ⁵⁾	1420823 ⁵⁾	
	PROFINET-specified	1425639 ⁵⁾	1425640 ⁵⁾	1425597 ³⁾⁵⁾	1425598 ³⁾⁵⁾	–	–	–	–	
	Straight, shielded, THR, tape-and-reel	–	–	1421317 ⁵⁾	1421318 ⁵⁾	1420830 ⁵⁾	1420831 ⁵⁾	1420832 ⁵⁾	1420833 ⁵⁾	
	PROFINET-specified	1425641 ⁵⁾	1425642 ⁵⁾	1425601 ³⁾⁵⁾	1425602 ³⁾⁵⁾	–	–	–	–	
Two-piece, housing screw connections for K-, L-, and M-coded THR contact carriers										
	Front mounting									
	Push-pull	Male M14 x 1 / Female M14 x 1	Male: 1108115 ²⁾ / Female: 1249213 ²⁾							
	Screw locking mechanism	Male M14 x 1 / Female M14 x 1	Male: 1420824 ²⁾ / Female: 1420825 ²⁾							
	Push-pull	Female countersunk M16 x 1	Female: 1454491 ⁴⁾							
	Flat nut	M14 x 1: 1412077 / M16 x 1: 1312511								
	Rear mounting									
Push-pull	Male M15 x 1 / Female M16 x 1	Male: 1108101 ¹⁾ / Female: 1249217 ¹⁾								
Screw locking mechanism	Male M15 x 1 / Female M15 x 1	Male: 1420826 ¹⁾ / Female: 1420827 ¹⁾								

K- and M-coding: PE applied to housing.

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

¹⁾ Distance from PCB upper edge to housing front plate inner edge: DU= 6 mm, more information from page 10.

²⁾ / ⁴⁾ Distance from PCB upper edge to housing front plate outer edge: ²⁾ DO= 9 mm, ⁴⁾ DO=18.5 mm, more information from page 10.

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

⁵⁾ Contact carriers with assembly pad.




SIGNAL

M12 connector, designed for assembly			4-pos.		5-pos.		8-pos.	
 Web code: #0242  Lead-free items available	Coding	Design	Male	Female	Male	Female	Male	Female
	Push-Lock connection, conductor cross-section: 0.14 mm ² ... 0.75 mm ²							
	 A	Straight	1424657	1424655	1424649	1424652	–	–
		Angled	1424654	1424656	1424651	1424653	–	–
Push-Lock connection, conductor cross-section: 0.14 mm ² ... 0.75 mm ² , shielded								
	 A	Straight	1424666	1424668	1424658	1424660	–	–
		Angled	1424667	1424669	1424659	1424661	–	–
	 B	Straight	–	–	1424662	1424664	–	–
		Angled	–	–	1424663	1424665	–	–
Push-Lock connection, conductor cross-section: 0.14 mm ² ... 0.75 mm ² , with push-pull internal locking								
	 A	Straight	1438146	1438151	1438156	1438159	–	–
		Angled	1438148	1438155	1438158	1438162	–	–
Push-Lock connection, conductor cross-section: 0.14 mm ² ... 0.75 mm ² , shielded, with push-pull internal locking								
	 A	Straight	1438165	1438169	1438175	1438180	–	–
		Angled	1438168	1438172	1438179	1438181	–	–
IDC connection, conductor cross-section: 0.14 mm ² ... 0.34 mm ²								
	 A	Straight	1641691	1641688	–	–	–	–
IDC connection, conductor cross-section: 0.14 mm ² ... 0.5 / 0.75 mm ²								
	 A	Straight	–	–	1414600	1414601	1424433	1424434
IDC connection, conductor cross-section: 0.34 mm ² ... 0.75 mm ²								
	 A	Straight	1641785	1641772	–	–	–	–
IDC connection, conductor cross-section: 0.14 mm ² ... 0.5 / 0.75 mm ² , shielded								
	 A	Straight	1413993	1413994	1413991	1413992	1414610	1414611


M12 connector, designed for assembly			4-pos.		5-pos.		8-pos.	
 Web code: #0242  Lead-free items available	Coding	Design	Male	Female	Male	Female	Male	Female
	Crimp connection, shielded							
	 A	Straight	1422850	1422852	1422850	1422852	–	–
		Angled	1422851	1422853	1422851	1422853	–	–
	Crimp contacts	0.14 mm ² ... 0.34 mm ²	1064040	1064041	1064040	1064041	–	–
		0.34 mm ² ... 1.0 mm ²	1423645	1423646	1423645	1423646	–	–
Crimp connection, shielded, with push-pull external locking								
 Web code: #1831 	 A	Straight	1021815	1021817	1021815	1021817	–	–
		Angled	1021816	1021818	1021816	1021818	–	–
	Crimp contacts	0.14 mm ² ... 0.34 mm ²	1064040	1064041	1064040	1064041	–	–
		0.34 mm ² ... 1.0 mm ²	1423645	1423646	1423645	1423646	–	–
Screw connection, external cable diameter: 4 mm ... 6 mm								
	 A	Straight	1662528 ¹⁾	1681127 ¹⁾	1663116 ¹⁾	1662968 ¹⁾	–	–
		Angled	1681101 ¹⁾	1681143 ¹⁾	1663129 ¹⁾	1662984 ¹⁾	–	–
Screw connection, external cable diameter: 6 mm ... 8 mm								
	 A	Straight	1523230 ¹⁾	1696439 ¹⁾	1681460 ¹⁾	1681486 ¹⁾	1513334 ¹⁾	1513347 ¹⁾
		Angled	–	–	1681473 ¹⁾	1681499 ¹⁾	–	–
Screw connection, external cable diameter: 4 mm ... 6 mm, with SKINTOP® screw connection								
	 A	Straight	1556870 ¹⁾	1430381 ¹⁾	1456466 ¹⁾	1559000 ¹⁾	–	–
Screw connection, external cable diameter: 6 mm ... 8 mm, with SKINTOP® screw connection								
	 A	Straight	–	–	1556825 ¹⁾	1556838 ¹⁾	–	–
		Angled	–	–	1561742 ¹⁾	1556812 ¹⁾	–	–
Screw connection, external cable diameter: 4 mm ... 6 mm, shielded								
	 A	Straight	1693830 ¹⁾	1694295 ¹⁾	1693416 ¹⁾	1694305 ¹⁾	–	–
		Angled	1694279 ¹⁾	–	1693429 ¹⁾	–	–	–
Screw connection, external cable diameter: 6 mm ... 8 mm, shielded								
	 A	Straight	1501540 ¹⁾	1515170 ¹⁾	1694266 ¹⁾	1694318 ¹⁾	1511857 ¹⁾	1511860 ¹⁾
		Angled	–	–	1694282 ¹⁾	1430433 ¹⁾	–	–

¹⁾ No items yet available with reduced lead content below 0.1%.














SIGNAL

M12 connectors designed for assembly, high-position			12-pos.		17-pos.			
 Lead-free items available	Web code: #0245							
	Coding	Design	Male	Female	Male	Female		
Piercecon® connection, conductor cross-section: 0.14 mm ²								
		A	Straight	1559592 ¹⁾	1559631	1559602 ¹⁾	1559644	
Solder connection, conductor cross-section: 0.08 mm ² ... 0.25 mm ² , shielded								
		A	Straight	1404410 ¹⁾	1404411 ¹⁾	–	–	
			Angled	1404412 ¹⁾	1404413 ¹⁾	–	–	

¹⁾ No items yet available with reduced lead content below 0.1%.









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

SIGNAL







M8 connector, designed for assembly			3-pos.		4-pos.	
 Web code: #0246  Lead-free items available	Coding	Design	Male	Female	Male	Female
	IDC connection, conductor cross-section: 0.08 mm² ... 0.25 mm²					
	 A	Straight	1441008	1441040	1441011	1441053
IDC connection, conductor cross-section: 0.25 mm² ... 0.5 mm²						
	 A	Straight	1441024	1441066	1441037	1441079
Screw connection, conductor cross-section: 0.14 mm² ... 0.5 mm²						
	 A	Straight	1501252 ¹⁾	1506888 ¹⁾	1501265 ¹⁾	1506891 ¹⁾
		Angled	1407583 ¹⁾	1407582 ¹⁾	1407585 ¹⁾	1407584 ¹⁾
Screw connection, conductor cross-section: 0.14 mm² ... 0.5 mm², shielded						
	 A	Straight	1542884 ¹⁾	1542907 ¹⁾	1542897 ¹⁾	1542910 ¹⁾
Solder connection, conductor cross-section: 0.08 mm² ... 0.25 mm²						
	 A	Straight	1681156 ¹⁾	1681172 ¹⁾	1681169 ¹⁾	1681185 ¹⁾
		Angled	1699902 ¹⁾	1529399 ¹⁾	1554209 ¹⁾	1513444 ¹⁾
Solder connection, conductor cross-section: 0.08 mm² ... 0.25 mm², shielded						
	 A	Straight	1506901 ¹⁾	1506927 ¹⁾	1506914 ¹⁾	1506930 ¹⁾
		Angled	1436453 ¹⁾	1436479 ¹⁾	1436466 ¹⁾	1436482 ¹⁾


¹⁾ No items yet available with reduced lead content below 0.1%.









DATA

M12 connector, designed for assembly				4-pos.		5-pos.		8-pos.				
 Web code: #0249  Lead-free items available				Fieldbuses/ networks	Coding	Design	Male	Female	Male	Female	Male	Female
Push-Lock connection, shielded												
	PROFINET	D	Straight	1424682	1424683	–	–	–	–	–	–	
			Angled	1424684	1424685	–	–	–	–	–	–	
	DeviceNet™ CANopen®	A	Straight	–	–	1424670	1424672	–	–	–	–	
			Angled	–	–	1424671	1424673	–	–	–	–	
	CC-LINK	A	Straight	1424699	1424700	–	–	–	–	–	–	
	INTERBUS	B	Straight	–	–	1424674	1424676	–	–	–	–	
			Angled	–	–	1424675	1424677	–	–	–	–	
							2-pos.					
							Male	Female				
	PROFIBUS DP	B	Straight	–	–	1424678	1424680	–	–	–	–	
Angled			–	–	1424679	1424681	–	–	–	–		
Push-Lock connection, shielded, with push-pull internal locking												
 				PROFINET	D	Straight	1438182	1438183	–	–	–	–
						Angled	1438184	1438185	–	–	–	–
IDC connection, shielded												
	Ethernet	D/A	Straight	1411066	1411069	–	–	1421679	1421680	–	–	
			Angled	1553624 ¹⁾	1553637 ¹⁾	–	–	1553653 ¹⁾	1553666 ¹⁾	–	–	
	PROFINET	D	Straight	1411068	1411071	–	–	–	–	–	–	
			Angled	1554539 ¹⁾	1554542 ¹⁾	–	–	–	–	–	–	
CAT6 _A	X	Straight	–	–	–	–	1411043	1414586	–	–		
	DeviceNet™	A	Straight	–	–	1422759	1422760	–	–	–	–	
	PROFIBUS PA	A	Straight	1413933	1413934	–	–	–	–	–	–	
							2-pos.					
							Male	Female				
PROFIBUS DP	B	Straight	–	–	1413931	1413932	–	–	–	–		
Crimp connection, shielded												
	PROFINET	D	Straight	1422846	1422848	–	–	–	–	–	–	
			Angled	1422847	1422849	–	–	–	–	–	–	
	PROFINET CAT6 _A	X	Straight	–	–	–	–	1422844	–	–	–	
			Angled	–	–	–	–	1422845	–	–	–	
	Crimp contacts	0.14 mm ² ... 0.34 mm ²			1064040	1064041	–	–	1423643	–	–	
		0.34 mm ² ... 1.0 mm ²			1423645	1423646	–	–	–	–	–	





¹⁾ No items yet available with reduced lead content below 0.1%.

Data – M12 connector, designed for assembly				4-pos.		5-pos.		8-pos.		
 Lead-free items available	Web code: #0249 Fieldbuses / networks	Coding	Design	Male	Female	Male	Female	Male	Female	
Crimp connection, shielded, with push-pull external locking										
	PROFINET	 D	Straight	1021830	1021832	–	–	–	–	
			Angled	1021831	1021834	–	–	–	–	
	PROFINET CAT6_A	 X	Straight	–	–	–	–	1021783	–	
			Angled	–	–	–	–	1021784	–	
	Crimp contacts	0.14 mm ² ... 0.34 mm ²			1064040	1064041	–	–	1423643	–
		0.34 mm ² ... 1.0 mm ²			1423645	1423646	–	–	–	–
Piercecon® connection, shielded										
	CAT6_A	 X	Straight	–	–	–	–	1417430	–	
			Angled	–	–	–	–	1417443	–	

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

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

POWER

M12 connector, designed for assembly			2+PE-pos.		3+PE-pos.		4-pos.					
 <p>Web code: #0252</p> <p>Lead-free items available</p>	Coding	Design	Male	Female	Male	Female	Male	Female				
												
			S		2+PE-pos.		4-pos.					
			Straight		1419639 ¹⁾	1419640 ¹⁾	1404641 ¹⁾	1404642 ¹⁾	–	–		
			Angled		1419641 ¹⁾	1419642 ¹⁾	1408985 ¹⁾	1408987 ¹⁾	–	–		
			T		2+PE-pos.		4-pos.					
			Straight		–	–	–	–	1404643 ¹⁾	1404644 ¹⁾		
			Angled		–	–	–	–	1408988 ¹⁾	1408989 ¹⁾		
Crimp connection, conductor cross-section 1.5 mm² ... 2.5 mm², shielded												
					2+PE-pos.		3+PE-pos.		4+PE-pos.			
			Coding	Design	Male	Female	Male	Female	Male	Female		
			S		Straight		1027467	1027469	1027467	1027469	–	–
			K		Straight		–	–	–	–	1027474	1027476
											4-pos.	
			T		Straight		–	–	–	–	1027465	1027466
			L		Straight		–	–	–	–	1027479	1007480
											4+FE-pos.	
L		Straight		–	–	–	–	1027477	1027478			
Crimp contacts												
					S-, T-coding		K-, L-coding					
			Connection cross-section		Male	Female	Male	Female				
			1.5 mm²		1029394	1029395	1029394	1029396				
			2.5 mm²		1029388	1029390	1029388	1029392				
			PE male, 1.5 mm²		1029398	–	–	1029398				
			PE male, 2.5 mm²		1029389	–	–	1029389				
			PE female, 1.5 mm²		–	1029400	1029401 ¹⁾	–				
			PE female, 2.5 mm²		–	1029391	1029393	–				

Please order crimp contacts separately.

¹⁾ No items yet available with reduced lead content below 0.1%.

Assembled cables with M8 or M12 connectors (PUR)

i Web code: #0283




Lead-free items available











Cable length	Signal cable M8, 3-pos.	Signal cable M8, 4-pos.	Signal cable M12, 3-pos.	Signal cable M12, 4-pos.	Signal cable M12, 5-pos.	Signal cable M12, 5-pos., shielded
Straight male connector, free cable end						
3 m	1681677 ¹⁾	1681790 ¹⁾	1668027	1668056	1669770	1682744
5 m	1681680 ¹⁾	1681800 ¹⁾	1668030	1668069	1669783	1682731
10 m	1693584 ¹⁾	1694143 ¹⁾	1682566	1682993	1683361	1500732
Straight female connector, free cable end						
3 m	1669725	1681855	1694499	1668111	1669835	1682948
5 m	1669628	1681868	1683510	1668124	1669848	1682951
10 m	1694101	1683484	1693034	1683002	1683374	1500758
Straight male connector, straight female connector						
0.3 m	1681907 ¹⁾	1682142 ¹⁾	1681509	1668357	1681583	1500884
0.6 m	1681910 ¹⁾	1682155 ¹⁾	1681512	1668360	1681596	1500897
1.5 m	1681923 ¹⁾	1682168 ¹⁾	1681525	1668373	1681606	1500907
3 m	1681936 ¹⁾	1682171 ¹⁾	1681538	1668386	1681619	1500910
Angled female connector, free cable end						
3 m	1669741	1681884	1694512	1668234	1669864	1682977
5 m	1669631	1681897	1694525	1668247	1669877	1682980
10 m	1694169	1694172	1694538	1681389	1694541	1500761

¹⁾ No items yet available with reduced lead content below 0.1%.

Assembled cables with M12 push-pull connectors (PUR)














<p>new</p> <p>i Web code: #2679</p> <p>RoHS</p> <p>Lead-free items available</p>							
	Cable length	Signal cable 3-pos.	Signal cable 4-pos.	Signal cable 5-pos.	Signal cable 3-pos., shielded	Signal cable 4-pos., shielded	Signal cable 5-pos., shielded
	Straight male connector, free cable end						
1.5 m	1384594	1392638	1393925	1476550	1476855	1476903	
3 m	1385536	1392698	1395703	1476806	1476854	1476902	
5 m	1385538	1392709	1395709	1476805	1476853	1476901	
10 m	1385625	1392713	1395710	1476803	1476851	1476900	
Angled male connector, free cable end							
1.5 m	1385626	1392735	1395742	1476802	1476850	1476899	
3 m	1385643	1392755	1395750	1476800	1476848	1476898	
5 m	1385646	1392829	1395803	1476798	1476846	1476897	
10 m	1385647	1392834	1395805	1476796	1476845	1476895	
Straight female connector, free cable end							
1.5 m	1385782	1392839	1395814	1476794	1476844	1476893	
3 m	1385791	1393005	1395817	1476792	1476843	1476892	
5 m	1385792	1393026	1395822	1476791	1476842	1476890	
10 m	1385968	1393032	1395827	1476788	1476841	1476889	
Angled female connector, free cable end							
1.5 m	1386380	1393038	1395830	1476786	1476840	1476888	
3 m	1386394	1393047	1395831	1476785	1476839	1476886	
5 m	1386513	1393072	1395834	1476784	1476838	1476885	
10 m	1386514	1393169	1395835	1476782	1476837	1476884	
Straight male connector, straight female connector							
0.3 m	1386723	1393188	1395841	1476834	1476881	1476912	
0.6 m	1386786	1393219	1395969	1476832	1476878	1476911	
1.5 m	1223960	1224019	1224208	1224012	1224173	1224249	
3 m	1386788	1393228	1396099	1476831	1476877	1476910	
Straight male connector, angled female connector							
0.3 m	1386796	1393235	1396479	1476829	1476875	1476909	
0.6 m	1392195	1393272	1396489	1476828	1476873	1476908	
1.5 m	1224008	1224166	1224223	1224014	1224179	1224252	
3 m	1392208	1393555	1396496	1476826	1476872	1476907	
Angled male connector, straight female connector							
0.3 m	1392235	1393583	1396499	–	–	–	
0.6 m	1392254	1393590	1396511	–	–	–	
1.5 m	1224009	1224169	1224229	1224018	1224204	1224256	
3 m	1392255	1393595	1396517	–	–	–	
Straight male connector, M12 female, straight for screwing in							
0.3 m	1392395	1393615	1396523	–	–	–	
0.6 m	1392562	1393900	1396533	–	–	–	
1.5 m	1392625	1393907	1396546	–	–	–	
3 m	1392628	1393910	1396550	–	–	–	

Assembled network cables with M8 connectors (PUR)

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

¹⁾ No items yet available with reduced lead content below 0.1%.
 Additional cable qualities and cables with connectors in sizes M8 to M40 for signals, data, and power can be found at phoenixcontact.com.















Assembled network cables with M12 connectors (PUR)

 Web code: #0284  Lead-free items available	 Ethernet	Ethernet	Ethernet	Ethernet	 PROFIBUS	 PROFIBUS	 DeviceNet CANopen
							
Cable length	X-coded	D-coded	Push-pull, D-coded	Y-coded	D-coded	B-coded	A-coded
Straight male connector, free cable end							
1 m	1407467	1407356	1476008	1407487 ¹⁾	1407495	–	–
2 m	1407468	1407357	1476012	1407488 ¹⁾	1407496	1507243	1507421
5 m	1407469	1407358	1476013	1407489 ¹⁾	1407497	1507256	1507434
10 m	1407470	1407359	1476014	1407490 ¹⁾	1407498	1507269	1507447
15 m	–	–	–	–	–	1507272	1507450
Variable	1408648	1408713	–	1408642 ¹⁾	1408640	1538047	1538102
Straight female connector, free cable end							
1 m	–	1407380	1476016	–	1407528	–	–
2 m	–	1407381	1476018	–	1407529	1507298	1507476
5 m	–	1407382	1476019	–	1407530	1507308	1507489
10 m	–	1407383	1476020	–	1407531	1507311	1507492
15 m	–	–	–	–	–	1507324	1507502
Variable	–	1408697	–	–	1408623	1538063	1538128
Straight male connector, straight female connector							
0.3 m	–	–	1224258	–	–	1507340	1507528
0.5 m	–	–	–	–	–	1507353	1507531
0.6 m	–	–	–	–	–	–	–
1 m	–	1407400	1476045	–	1407553	1507366	1507544
2 m	–	1407401	1476046	–	1407554	1507379	1507557
5 m	–	1407402	1476058	–	1407555	1507382	1507560
10 m	–	1407403	1476056	–	1407556	1507395	1507572
15 m	–	–	–	–	–	1507405	1507586
Variable	–	1408692	–	–	1408617	1538089	1538144
Straight male connector, straight male connector							
1 m	1407483	1407376	1476055	1407491 ¹⁾	1407524	–	–
2 m	1407484	1407377	1476054	1407492 ¹⁾	1407525	–	–
5 m	1407485	1407378	1476051	1407493 ¹⁾	1407526	–	–
10 m	1407486	1407379	1476048	1407494 ¹⁾	1407527	–	–
Variable	1408644	1408706	–	1408641 ¹⁾	1408634	–	–
Straight male connector, RJ45							
1 m	–	–	1476023	–	–	–	–
2 m	–	–	1476024	–	–	–	–
5 m	–	–	1476025	–	–	–	–
10 m	–	–	1476027	–	–	–	–
Straight female connector, RJ45							
1 m	–	–	1476029	–	–	–	–
2 m	–	–	1476030	–	–	–	–
5 m	–	–	1476031	–	–	–	–
10 m	–	–	1476032	–	–	–	–
Termination resistors, M12 male connector							
	–	–	–	–	–	1507803	1507816

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

¹⁾ No items yet available with reduced lead content below 0.1%.

Assembled network cables with M12 connectors (PUR)

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

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

Assembled cables with M12 connectors (PUR)

i Web code: #1081



Lead-free items available



Coding	S	T	L	L	K	M
Number of positions	3+PE	4	4	4+FE	4+PE	5+PE
Conductor cross-section	1.5 mm ²	1.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	1.5 mm ²
Cable length			PROFINET-specified	PROFINET-specified		

Straight male connector, free cable end, unshielded

2 m	1408836	1408813	–	–	–	–
3 m	–	–	1425066	1414887	1414870	1414953 ¹⁾
5 m	1408837	1408814	1425067	1414891	1414875	1414957 ¹⁾
10 m	1408838	1408815	1425028	1414895	1414879	1414961 ¹⁾

Straight female connector, free cable end, unshielded

2 m	1408844	1408824	–	–	–	–
3 m	–	–	1425074 ¹⁾	1414790	1414788	1414910 ¹⁾
5 m	1408845	1408825	1425075 ¹⁾	1414806	1414804	1414918 ¹⁾
10 m	1408846	1408826	1425076 ¹⁾	1414823	1414821	1414926 ¹⁾

Angled female connector, free cable end, unshielded

2 m	1408852	1408828	–	–	–	–
3 m	–	–	1425078 ¹⁾	1414786	1414784	1414907 ¹⁾
5 m	1408853	1408829	1425079 ¹⁾	1414802	1414800	1414916 ¹⁾
10 m	1408854	1408830	1425080 ¹⁾	1414819	1414817	1414924 ¹⁾

Straight male connector, free cable end, shielded

3 m	1424105	1424121	–	1414888	1414871	1414954 ¹⁾
5 m	1424245	1424122	–	1414892	1414876	1414958 ¹⁾
10 m	1424107	1424123	–	1414896	1414880	1414962 ¹⁾

Straight female connector, free cable end, shielded

3 m	1424097	1424113	–	1414791	1414789	1414911 ¹⁾
5 m	1424098	1424114	–	1414807	1414805	1414919 ¹⁾
10 m	1424099	1424115	–	1414824	1414822	1414927 ¹⁾

Angled female connector, free cable end, shielded

3 m	1424101	1424117	–	1414787	1414785	1414908 ¹⁾
5 m	1424102	1424118	–	1414803	1414801	1414917 ¹⁾
10 m	1424103	1424128	–	1414820	1414818	1414925 ¹⁾

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

¹⁾ No items yet available with reduced lead content below 0.1%.

Accessories


 Web code: #0559



Lead-free items available

Size	M8		M12	
	Male connectors	Female connectors	Male connectors	Female connectors

Screw plug

	Plastic	–	1682540	–	1680539
	Plastic for K-, L-, and M-coded versions	–	–	–	1092802
	Metal , with slotted screw head	–	–	–	1503302
	Metal , with hexagonal screw head	–	–	–	1320658
	Stainless steel V4A	–	–	–	1555538


Screw plug for SPEEDCON versions

	Plastic	–	–	–	1553129
---	----------------	---	---	---	---------


Sealing cap

	Plastic	–	–	1560251	–
	Metal	–	–	1430488 ¹⁾	–

Sealing elements for unused housing cutouts

	Sealing plug, plastic, for Pg9/Pg11			1670235
	Screw plug, metal, M16 x 1.5			1453368 ¹⁾

¹⁾ No items yet available with reduced lead content below 0.1%.

Accessories							
 Web code: #0559  Lead-free items available	Size	M5		M8		M12	
		Male connectors	Female connectors	Male connectors	Female connectors	Male connectors	Female connectors
Plastic sealing caps and locking screws, with retaining strap							
	For cables			1430857	1430860	1430873	1430899
	With Ø 3 mm fastening eye			–	1441105	–	–
	With Ø 8 mm fastening eye			1441082	–	–	–
	With Ø 12 mm fastening eye			–	1441095	1456187	–
	With Ø 15 mm fastening eye			–	–	1456190	1456200
Metal sealing caps and locking screws, with fastening chain							
	With Ø 16 mm fastening eye			–	–	1430491 ¹⁾	1320659
Seal for device connector							
	O-ring for M8 socket housing, green, 5 x 0.8						1098590
	O-ring for M8 socket housing, black, 7 x 1						1437070
	O-ring for M12 socket housing, green, 8 x 1.3						1426211
	O-ring for M12 fastening thread, black, 12 x 1.5						1424275
	Flat gasket for M16 fastening thread, black, 13 x 16.6 x 1.5						1430394
	Flat gasket for Pg9 fastening thread, black, 13 x 16.6 x 2						1556320

¹⁾ No items yet available with reduced lead content below 0.1%.

Accessories

i Web code: #0559



Lead-free items available

Size

M5

M8

M12

EMC hexagonal nut with fine tooting for device connectors



With fine tooting facing inwards. This prevents visible scratch marks from appearing on the device surface.

M12 x 1	–	–	1440151
M15 x 1	–	–	1104648 ¹⁾
M16 x 1.5	–	–	1440164
Pg9	–	–	1440177

Flat nuts for device connectors



Brass (nickel-plated)	M5 x 0.5	1535901	–	–
Brass (nickel-plated)	M8 x 0.5	–	1504071	–
Brass (nickel-plated)	M10 x 0.75	–	–	1412508
Brass (nickel-plated)	M12 x 1	–	–	1405639
Brass (nickel-plated)	M14 x 1	–	–	1412077
Brass (nickel-plated)	M16 x 1	–	–	1312511 ¹⁾
Brass (nickel-plated)	M16 x 1.5	–	–	1504097
Brass (nickel-plated)	M20 x 1	–	–	1411242
Plastic	M16 x 1.5	–	–	1640692
Stainless steel (1.4404)	M16 x 1.5	–	–	1404983

¹⁾ No items yet available with reduced lead content below 0.1%.

Pin assignments and wire colors

Pin assignments of M5 signal connectors

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

Pin assignments of M8 signal connectors

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

Pin assignments of M12 signal connectors

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

Wire colors Assignment: M5 male / female

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

Wire colors Assignment: M8 male / female

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

Wire colors Assignment: M12 male / female

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

Pin assignments and wire colors

Pin assignments of M12 signal connectors

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

Wire colors
Assignment: M12 male / female

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

Pin assignments of M8 data connectors

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

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

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

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

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

Assignment: Ethernet, 4-pos., A-coded

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

Pin assignments and wire colors

Pin assignments of M12 data connectors

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

Assignment: PROFIBUS, 5-pos., B-coded

Pin	Wire color	Signal PROFIBUS
1	–	–
2	GN	A cable
3	–	–
4	RD	B cable
5	Drain wire	–

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	WHOG	TD+
3	OG	TD–
4	n. c.	
5	WHGN	RD+
6	BU	
7	BN	
8	GN	RD–

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

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

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

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

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

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

Pin assignments and wire colors

Assignment: Ethernet, 8-pos., A-coded			
Pin	Wire color		Signal Ethernet
1	WHBU		D3-
2	WHBN		D4+
3	BN		D4-
4	OG		D1-
5	WHGN		D2+
6	WHOG		D1+
7	BU		D3+
8	GN		D2-

Assignment: Ethernet, 8-pos. X-coded			
Pin	Wire color		Signal Ethernet
1	WHOG		D1+
2	OG		D1-
3	WHGN		D2+
4	GN		D2-
5	WHBN		D4+
6	BN		D4-
7	WHBU		D3-
8	BU		D3+

Assignment: Ethernet Hybrid, 8-pos., Y-coded			
Pin	Wire color		Signal Ethernet
1	WHOG		D1+
2	OG		D1-
3	WHGN		D2+
4	GN		D2-
5	BU		D4+
6	WH		D4-
7	BN		D3-
8	BK		D3+

Pin assignments of M12 power connectors

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

Assignment: 2+PE, S-coded		
Pin	Wire color	
1	BK1	
3	BK2	
PE	GNYE	

Assignment: 3+PE, S-coded		
Pin	Wire color	
1	BK1	
2	BK2	
3	BK3	
PE	GNYE	

Assignment: 4-pos. T-coded		
Pin	Wire color	
1	BN	
2	WH	
3	BU	
4	BK	

Assignment: 4-pos., L-coded		
Pin	Wire color	
1	BN	
2	WH	
3	BU	
4	BK	

Assignment: 4+PE, K-coded		
Pin	Wire color	
1	BK1	
2	BK2	
3	BK3	
4	BK4	
PE	GNYE	

Assignment: 5+PE, M-coded		
Pin	Wire color	
1	BK1	
2	BK2	
3	BK3	
4	BK4	
5	BK5	
PE	GNYE	

Assignment: 4+FE, L-coded		
Pin	Wire color	
1	BN	
2	WH	
3	BU	
4	BK	
FE	PK	

Excellent services

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

The easy way to more choice

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

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

The easy way to more individuality

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

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

The easy way to more flexibility

Use our different procurement channels and benefit from worldwide availability:

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

The easy way to more expertise

Always stay up to date on technologies and trends with us as your reliable partner:

- Technology, industry, and design-in experts at your side
- We will provide you with custom training programs – either on site or digitally
- Free webinars, seminars, and video tutorials



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

i Web code: #2594



Simple selection using filters and technical data



There is a separate detail page for every product



A data sheet is available to download for every item



With our global network, Phoenix Contact is always nearby



Device connection technology can be comprehensively configured



Housing parts and connection technology are easy to configure



Cable and assembly systems can be matched easily



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



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



Find the desired product quickly with intuitive filters



Product samples are available with free shipping



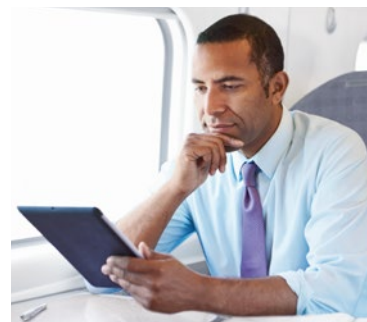
Reliable logistics worldwide



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



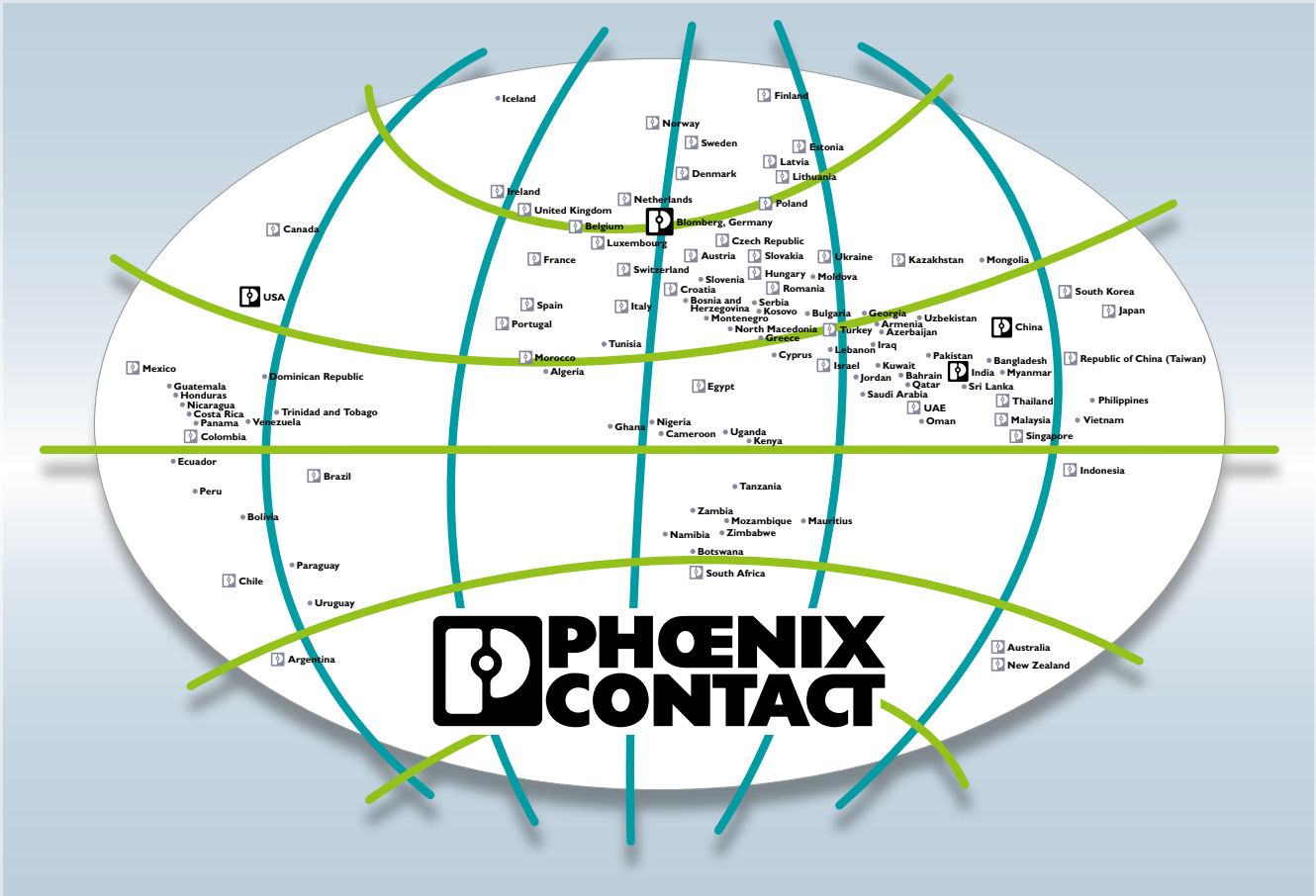
We will provide you with custom training programs – either on site or digitally



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



Remain reliably updated with the Phoenix Contact newsletter



Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented products and solutions for the electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network reaching across more than 100 countries with over 22,000 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide range of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. This especially applies to the target markets of energy, infrastructure, industry, and mobility.

You can find your local partner at

phoenixcontact.com