



M12 Power connectors

Get amped with more power in less space



M12 Power cabling

More power in less space

Device connection technology does not just have to be powerful; it also needs to be compact and flexible. Phoenix Contact is setting new standards with the introduction of the new M12 Power design. This innovative cabling system provides maximum power in an extremely space-saving form factor. With connectors for assembly on devices, cordsets, field-wired connectors, and distribution solutions, we provide the ideal solution for any application with our expansive product range.

Your advantages

- ✓ High power transmission in DC or AC applications up to 16 A and 600 V
- ✓ Protection against mismatching with coded pin connector patterns
- ✓ Reliable EMC protection with optional 360° shielding
- ✓ PROFINET-conforming color scheme with L-coding versions
- ✓ Standardized in accordance with IEC 61076-2-111
- ✓ Approval in accordance with UL 2237

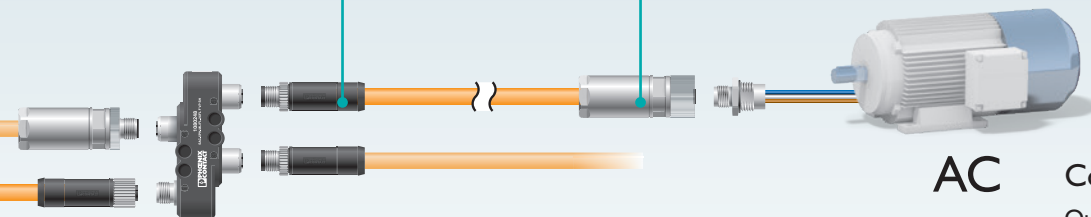


Easy power transmission

Choose from a range of preassembled cordsets in varying configurations and lengths.

Flexible field cabling

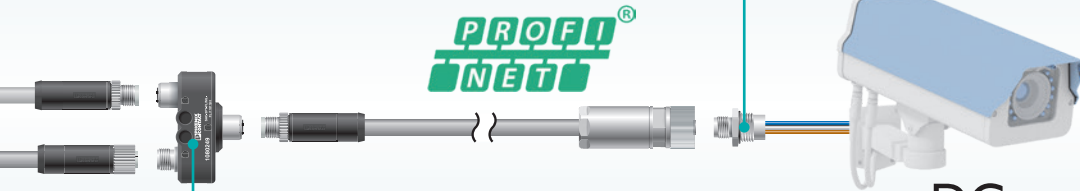
You can easily wire different cable lengths on-site with connectors for field assembly.



AC

Cost-effective design-in

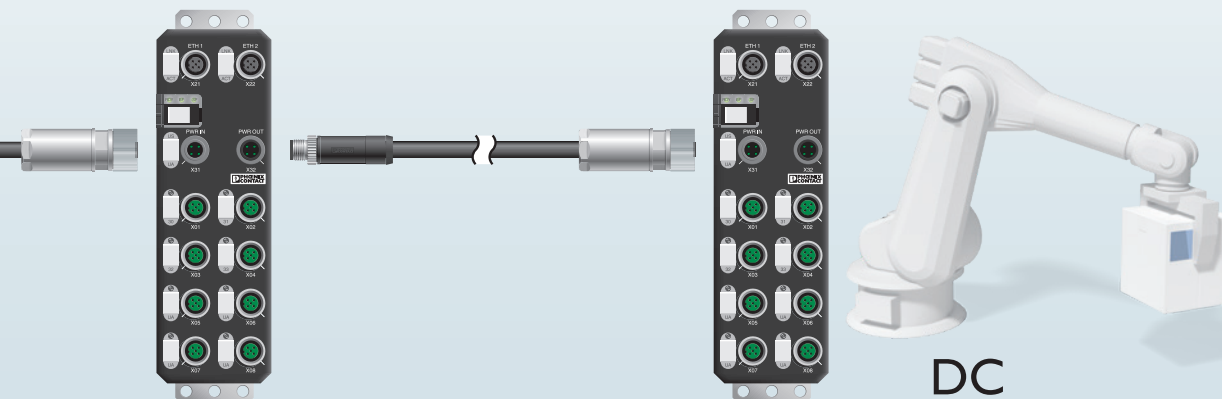
Our M12 Power device connectors enable a consistent architecture for simple mounting.



DC

Clear power distribution

With the M12 Power distributors, you can bundle and distribute power easily and efficiently.



DC

M12 Power series

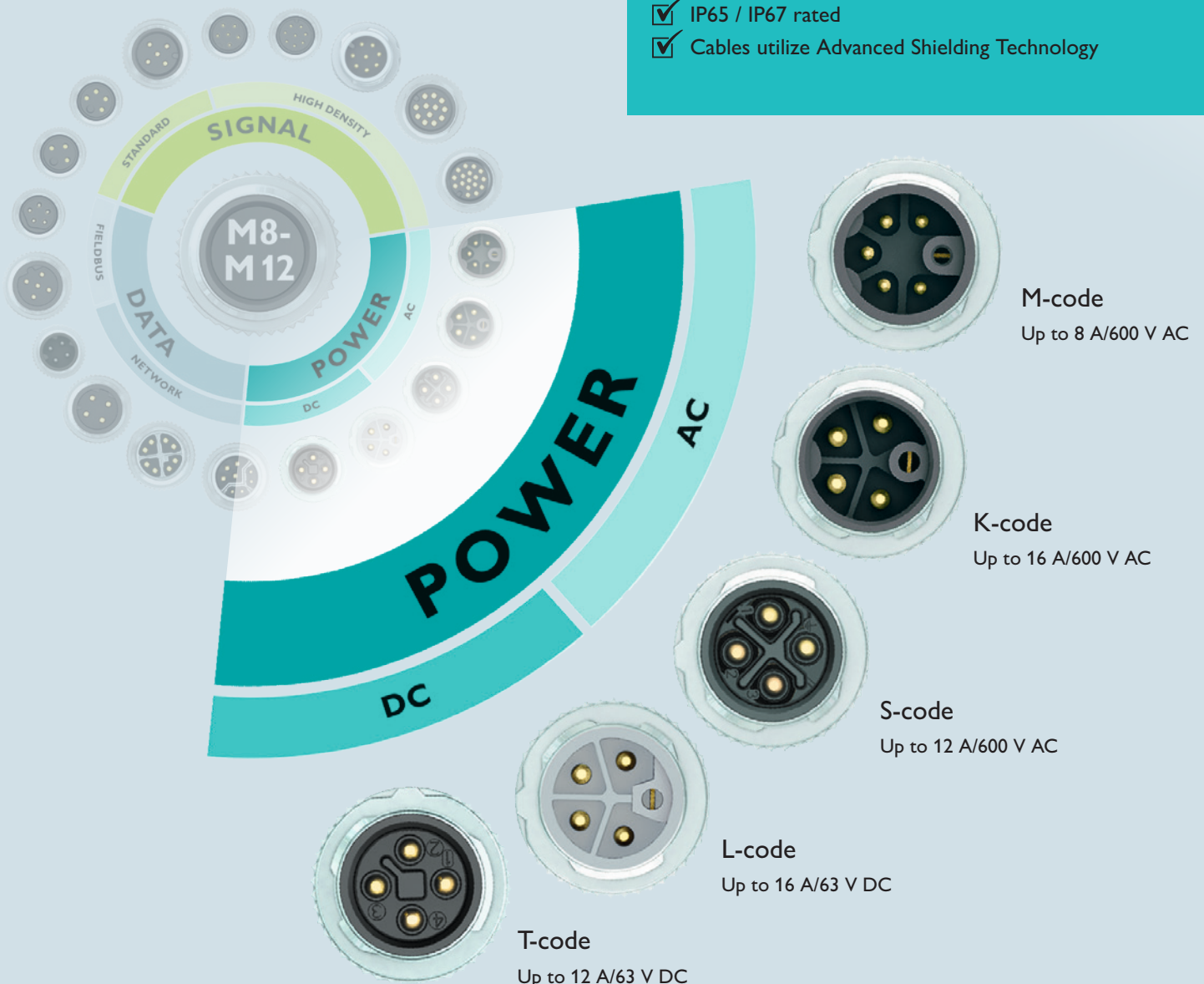
Safe power transfer built in

With power distribution comes a heightened need for preventing mismatching of connectors, especially with so many different types of electrical transmissions now flowing under a single form factor.

Not only does M12 Power have its own set of coding options to differentiate itself from signal and data lines, but it also provides protection against swapping AC and DC voltages.

Your advantages

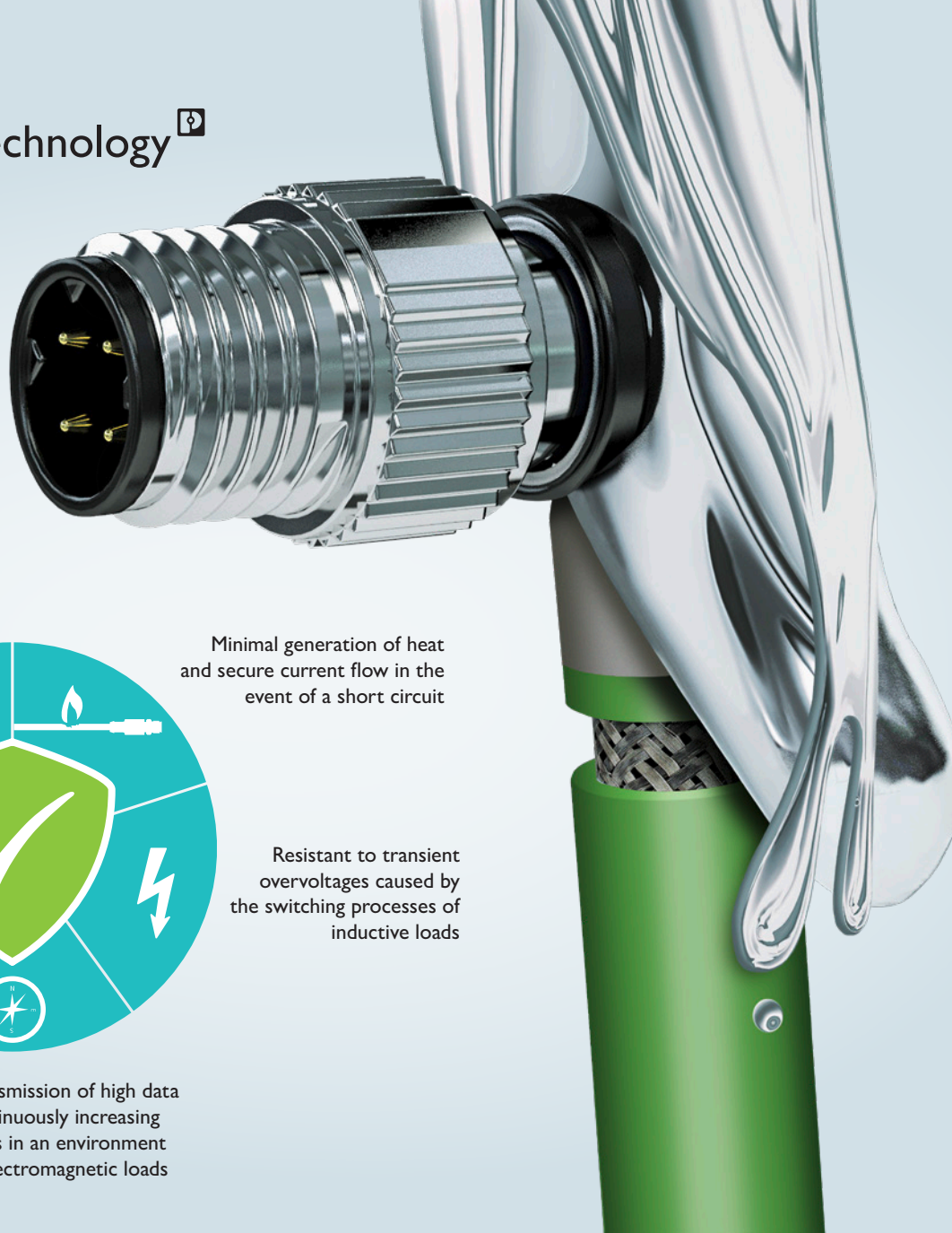
- ✓ IEC 61076-2-111 compliant
- ✓ UL listed, Category PVVA, file E468743
- ✓ Tested under UL2237 for power connectors
- ✓ IP65 / IP67 rated
- ✓ Cables utilize Advanced Shielding Technology



Advanced Shielding Technology[®]

Designed by PHOENIX CONTACT

Advanced Shielding Technology from Phoenix Contact is an innovative protective concept for sensor/actuator cabling. The comprehensive, positive 360° shield connection is unique on the market and further optimizes the advanced design of M8 and M12 connectors.



Reliable at high mechanical loads including shock and vibration

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

Robust even when exposed to extreme environmental influences, such as lightning strike



Resistant to transient overvoltages caused by the switching processes of inductive loads

Future-proof transmission of high data volumes and continuously increasing transmission rates in an environment subject to high electromagnetic loads

Totally protected – even under extreme environmental influences



Liquid metal that completely encloses the cable shielding during the manufacturing process guarantees a totally protected shield connection and thus enables the reliable and interference-free transmission of data, signals, and power in future factory automation.

By opting for Advanced Shielding Technology, you are investing in future-proof cabling.

Device connector design options

Industrial devices are becoming ever more compact, and at the same time, their interfaces must take on greater functionality.

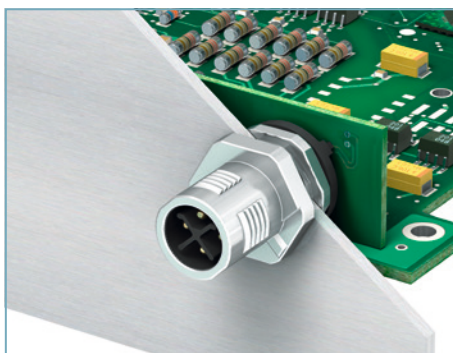
Phoenix Contact's extensive line of device connectors allows you to power your device in a multitude of styles.

Your advantages

- ✓ Front and rear panel mounting with 0.2 and 0.5 meter flying leads, with longer lead lengths now available
- ✓ One- or two-piece versions for wave, THR, and surface-mount soldering
- ✓ PROFINET-certified L-coded connectors for THR and wave soldering, as well as with flying leads
- ✓ K- and L-coded connectors with 2.5 mm² (14 AWG) flying leads

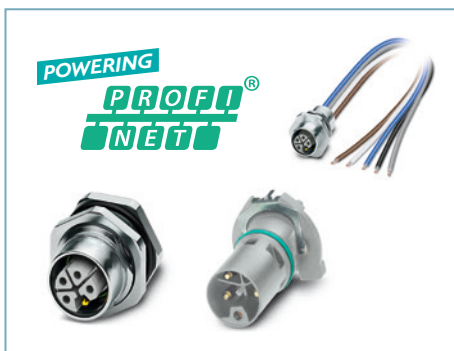
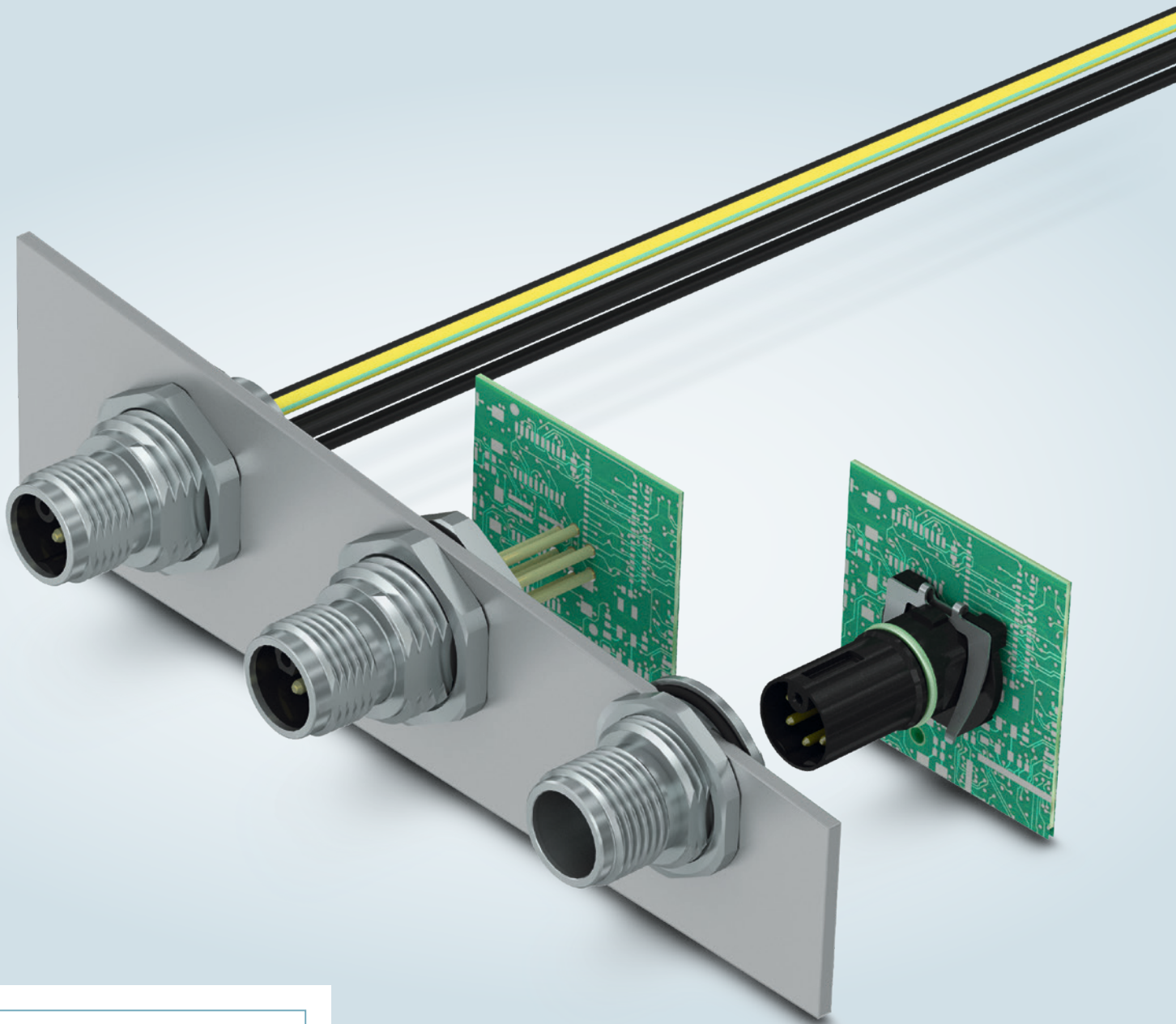


K- and L-coded connectors with 1.5 mm² (16 AWG) flying leads, with all other variants featuring 2.5 mm² (14 AWG) flying leads in 0.2- and 0.5-meter lengths



One- or two-piece versions for wave, THR, and surface-mount soldering



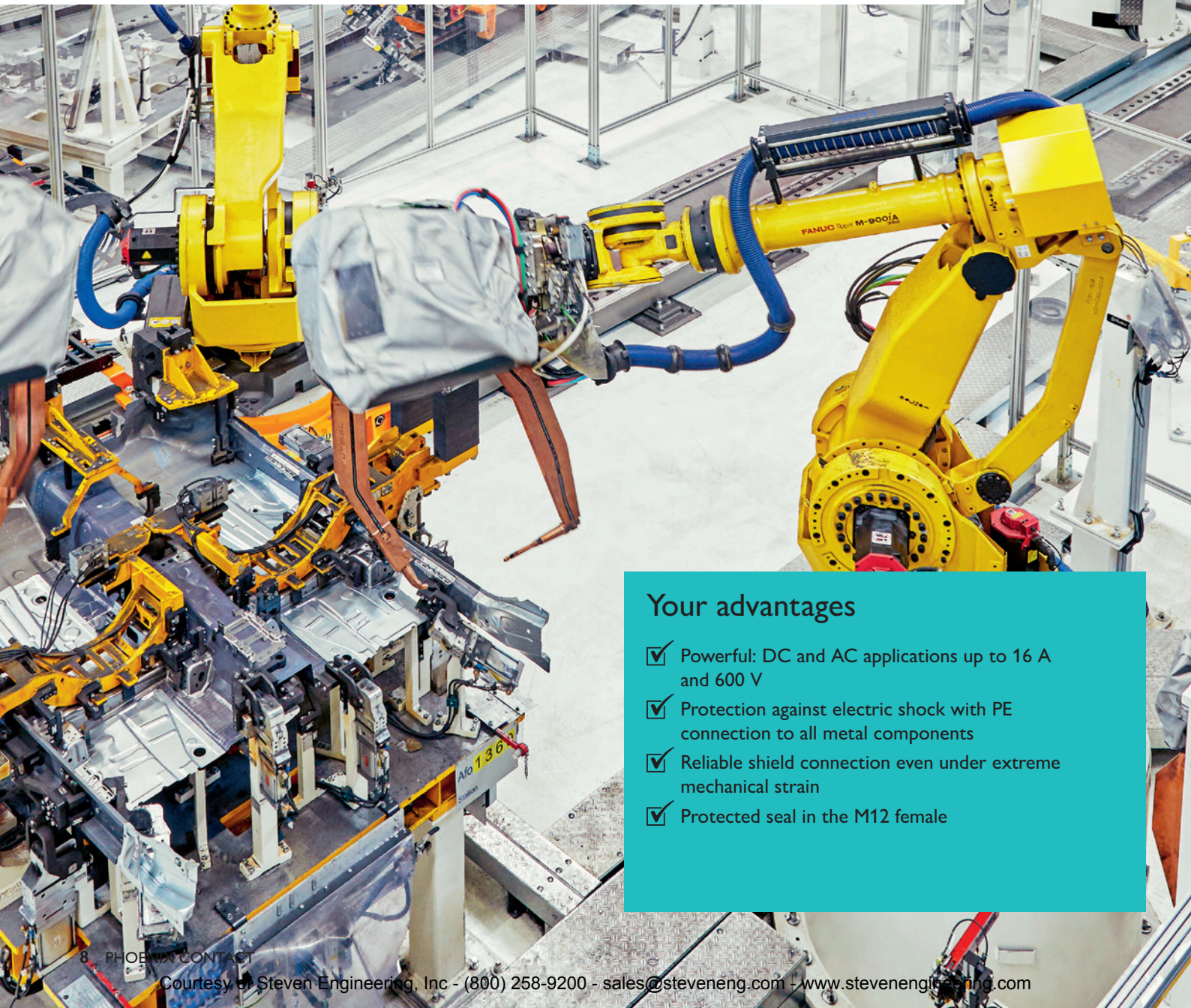


PROFINET-certified L-coded connectors for THR and wave soldering, as well as with flying leads.

M12 Power connectors

Flexible field cabling

Wire different cable lengths flexibly on-site with connectors for assembly. Shielded and unshielded M12 Power connectors are available in straight and angled versions for reliable power transmission. Choose between the quick and easy Push-Lock connection technology, the proven screw connection, or compact crimp connection.



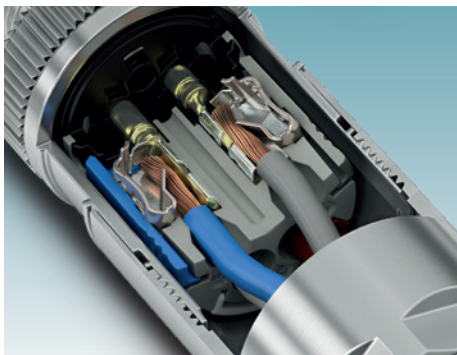
Your advantages

- ✓ Powerful: DC and AC applications up to 16 A and 600 V
- ✓ Protection against electric shock with PE connection to all metal components
- ✓ Reliable shield connection even under extreme mechanical strain
- ✓ Protected seal in the M12 female

Always the best connection technology

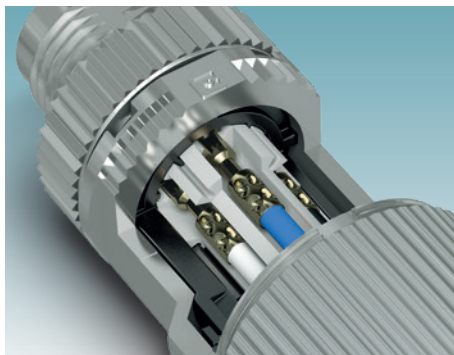
Push-Lock connection

Wire both solid and stranded conductors easily and without tools with the Push-Lock connection. The clamping chambers are opened and closed effortlessly via a lever. This means the user has both hands free to insert the conductor, significantly simplifying installation. The color-coding and numerical marking make it a breeze to find the proper position for individual litz wires.



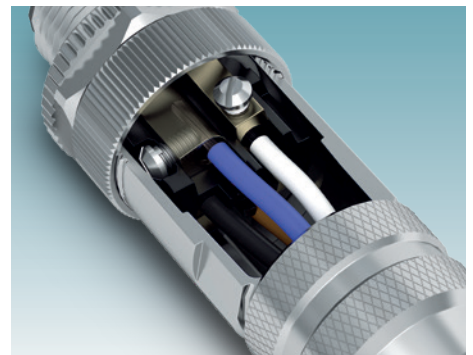
Push-Lock connection

The Push-Lock technology enables fast and convenient power cabling without tools. The proven spring-force technology guarantees a secure and reliable connection.



Crimp connection

Crimp connection technology enables a fast, automated connection wherever cables have to be assembled in large volumes. The extremely compact connector is suitable for numerous applications, including railway.



Screw connection

The screw connection is one of the classic connection technology solutions. You can assemble a variety of cables and cable qualities universally on-site.

Technical specification guide

AC Power					
Coding	Positions	Wire gauge	UL rated current	UL rated voltage	See page
S*	2+PE	16 AWG	12 A	300 V AC	Page 8
	3+PE	16 AWG	12 A	600 V AC	Page 9
K	4+PE	14 AWG	16 A	600 V AC	Page 10
M	5+PE	16 AWG	8 A	600 V AC	Page 11

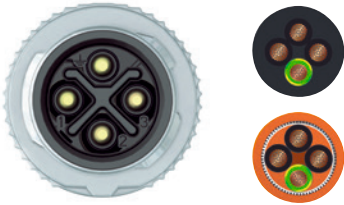
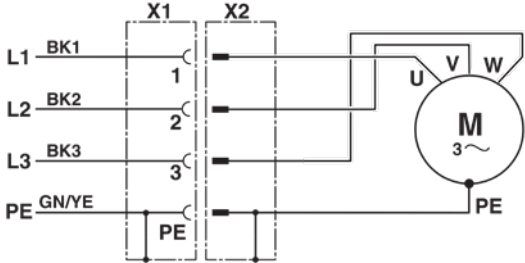
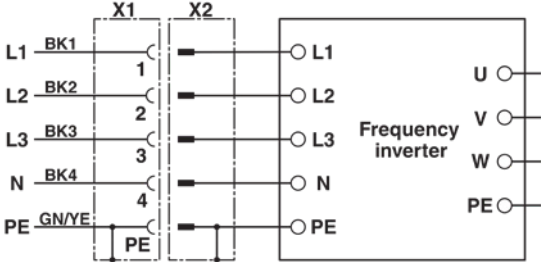
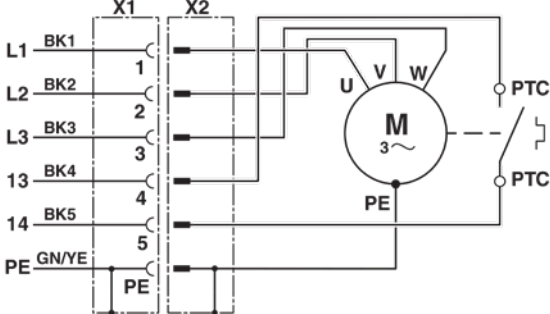
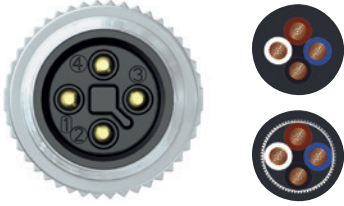
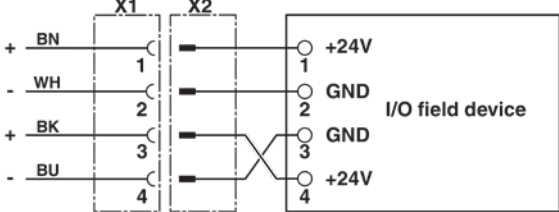
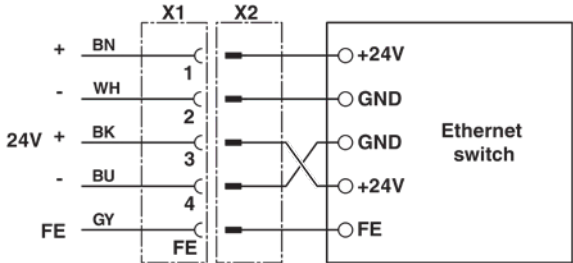
DC Power					
Coding	Positions	Wire Gauge	UL rated current	UL rated voltage	See page
T	4	16 AWG	12 A	63 V DC	Page 12-13
L*	4	16 AWG	12 A	63 V DC	Page 14-15
		14 AWG	16 A	63 V DC	Page 14-15
	4+FE	16 AWG	12 A	63 V DC	Page 16-17
		14 AWG	16 A	63 V DC	Page 16-17

* Coding options with multiple pin counts are not designed to be intermateable.

General specifications

Product	PUR Cordset	PVC Cordset	Device Connector
Standards and regulations			
Standard designation	M12 connector		
UL Certification	Listed: UL2237, File Number E468743		
Standards/regulations	IEC 61076-2-111		
Flammability rating according to UL 94	V0		
Ambient conditions			
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)		
Degree of protection	IP65 / IP67		
General			
Insulation resistance	≥ 100 MΩ		
Overvoltage category	III		
Degree of pollution	3		
Connection method	-	-	Individual wires, PCB Solder
Insertion/withdrawal cycles	≥ 100	≥ 100	> 100
Material			
Flammability rating according to UL 94	V0	V0	V0
Contact material	CuSn	CuSn	CuSn
Contact surface material	Ni/Au	Ni/Au	Ni/Au
Contact carrier material	PA	PA	PA
Material of grip body	PA	PA	-
Material, knurls	Zinc die-cast, nickel-plated	Zinc die-cast, nickel-plated	Nickel-plated alloy
Cable			
Cable type	PUR	PVC	-
External sheath, color	Black-gray RAL 7021 Orange RAL 2003 Gray RAL 7001	Black-gray RAL 7021 Orange RAL 2003 Gray RAL 7001	-
Minimum bending radius, fixed installation	5 x D	5 x D	-
Minimum bending radius, flexible installation	10 x D	10 x D	-
Number of bending cycles	4,000,000 (unshielded) 2,000,000 (shielded)	2,000,000 (unshielded) 1,000,000 (shielded)	-
Minimum bending radius, drag chain applications	10 x D	10 x D	-
Traversing path	10 m	10 m	-
Traversing rate	3 m/s	3 m/s	-
Acceleration	10 m/s²	10 m/s²	-
Conductor material	Bare Cu litz wires		
Insulation resistance (outer jacket)	≥ 1 GΩ*km (at 20 °C)	≥ 100 MΩ*km (at 20 °C)	-
Flame resistance	According to UL 758/1581 (Cable Flame) According to UL 758/1581 FT1 According to DIN EN 60332-1-2	According to UL 758/1581 (Cable Flame) According to UL 758/1581 FT1 According to DIN EN 60332-1-2	In acc. to UL 1581 VW1
Halogen-free	Yes	No	Yes
Resistance to oil	According to DIN EN 60811-404, 168 h at 100 °C	According to DIN EN 60811-404, 168 h at 60 °C	-
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion Abrasion-resistant Resistant to salt water	-	-
Environmental Product Compliance			
REACH SVHC	Lead 7439-92-1		
China RoHS	Environmentally Friendly Use Period = 50 For details about hazardous substances, go to tab "Downloads," Category "Manufacturer's declaration"		

Wiring guide

Coding		Example application wiring diagram
S-code		
K-code		
M-code		
T-code		
L-code		

Note: Cables with multiple black wires are continuously marked with the appropriate number. (i.e., BK1 is continuously marked “1” in white print, BK2 with “2”, etc.)



AC Power – S-code

2+PE products for up to 12 A/300 V AC requirements (single phase motor)

Cordsets

S-Code: 3pos (2+PE)								
Configuration	Cable	Shielded	Wire	1 m	2 m	5 m	10 m	
 Female Straight / Open End	Black PVC	No	16 AWG	1411644	1411645	1411646	1411647	
 Female 90° / Open End	Black PVC	No	16 AWG	1411648	1411649	1411650	1411651	
 Male Straight / Open End	Black PVC	No	16 AWG	1411636	1411637	1411638	1411639	
 Male 90° / Open End	Black PVC	No	16 AWG	1411640	1411641	1411642	1411643	

Field-wired connectors

S-Code: 3pos (2+PE)									
Configuration	Termination	Cable OD	Wire	Shielded	Article no.	Power contacts		PE contacts	
						16 AWG	14 AWG	16 AWG	14 AWG
	Female Straight	Push-Lock	6-11 mm	16-14 AWG	Yes	1080227	-	-	-
	Male Straight					1080225	-	-	-
	Female Straight	Crimp	6.5-11 mm	16-14 AWG	Yes	1027469	1029395	1029390	1029400
	Male Straight					1027467	1029394	1029388	1029398
	Female Straight	Screw	6-8 mm	18-16 AWG	No	1419640	-	-	-
	Female 90°					1419642	-	-	-
	Male Straight					1419639	-	-	-
	Male 90°					1419641	-	-	-

Device connectors

S-Code: 3pos (2+PE)							
Configuration	Leads		0.5 m	1.0 m	1.5 m	Note	
	Male, Black Insert, Standard	Front Mount M16x1.5 Thread	16 AWG Flying leads	1411655	-	1068167	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying leads	1411653	1162589	1162590	
	Female, Black Insert, Standard	Front Mount M16x1.5 Thread	16 AWG Flying leads	1411654	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying leads	1411652	1162597	1162598	

(1) Hex nut 1504097 sold separately.



AC Power – S-code

3+PE products for up to 12 A, 600 V AC requirements (3-phase Delta system)

Cordsets

S-Code: 4pos (3+PE)									
Configuration	Cable	Shielded	Wire	1 m	1.5 m	2 m	3 m	5 m	10 m
	Black PUR	No	16 AWG	1408843	-	1408844	-	1408845	1408846
	Orange PUR	Yes	16 AWG	-	1424096	-	1424097	1424098	1424099
	Black PUR	No	16 AWG	1408848	-	1408852	-	1408853	1408854
	Orange PUR	Yes	16 AWG	-	1424100	-	1424101	1424102	1424103
	Black PUR	No	16 AWG	1408835	-	1408836	-	1408837	1408838
	Orange PUR	Yes	16 AWG	-	1424104	-	1424105	1424245	1424107
	Black PUR	No	16 AWG	1408839	-	1408840	-	1408841	1408842
	Orange PUR	Yes	16 AWG	-	1424108	-	1424109	1424110	1424111

Field-wired connectors

S-Code: 4pos (3+PE)									
Configuration	Termination	Cable OD	Wire	Shielded	Article no.	Power contacts		PE contacts	
						16 AWG	14 AWG	16 AWG	14 AWG
	Female Straight	Push-Lock	6-11mm	16-14 AWG	Yes	1080222	-	-	-
	Male Straight					1080220	-	-	-
	Female Straight	Crimp	6.5-11mm	16-14 AWG	Yes	1027469	1029395	1029390	1029400
	Male Straight					1027467	1029394	1029388	1029398
	Female Straight	Screw	8-10mm	18-16 AWG	No	1404642	-	-	-
	Female 90°					1408987	-	-	-
	Male Straight					1404641	-	-	-
	Male 90°					1408985	-	-	-

Device connectors

S-Code: 4pos (3+PE)								
Configuration	Leads			PCB	0.5 m	1.0 m	1.5 m	Note
	Male, Black Insert, XL	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1411607	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1411603	1108623	1162623	
	Male, Black Insert, Standard	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1424139	1037070	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1424132	-	-	
		25mm Square Flange	16 AWG Flying Leads	-	1424129	1162569	1162571	(3)
	Male, Black Insert for PCB	Tape and Reel	Through-Hole	1418343	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1406410	-	-	-	(2)
	Female, Black Insert, XL	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1411605	1036790	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1411598	1162635	1162636	
	Female, Black Insert, Standard	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1424137	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1424133	1178143	-	
	Female, Black Insert for PCB	Tape and Reel	Through-Hole	1418344	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1406409	-	-	-	(2)

(1) Hex nut 1504097 sold separately.

(2) See table on page 22 for available housings.

(3) Flange 1424131 sold separately.



AC Power – K-code

4+PE products for up to 16 A, 600 V AC requirements (3-phase Wye System)

Cordsets

K-Code: 5pos (4+PE)								
Configuration	Cable	Shielded	Wire	1.5 m	3 m	5 m	10 m	
	Black PUR	No	14 AWG	1414770	1414788	1414804	1414821	
	Black PVC	No	14 AWG	1414780	1414796	1414812	1414829	
	Orange PUR	Yes	14 AWG	1414771	1414789	1414805	1414822	
	Black PUR	No	14 AWG	1414766	1414784	1414800	1414817	
	Black PVC	No	14 AWG	1414774	1414792	1414808	1414825	
	Orange PUR	Yes	14 AWG	1414767	1414785	1414801	1414818	
	Black PUR	No	14 AWG	1414866	1414870	1414875	1414879	
	Black PVC	No	14 AWG	1414868	1414872	1414877	1414881	
	Orange PUR	Yes	14 AWG	1414867	1414871	1414876	1414880	
	Black PUR	No	14 AWG	1414833	1414837	1414841	1414846	
	Black PVC	No	14 AWG	1414835	1414839	1414843	1414848	
	Orange PUR	Yes	14 AWG	1414834	1414838	1414842	1414847	

Field-wired connectors

K-Code: 5pos (4+PE)									
Configuration	Termination	Cable OD	Wire	Shielded	Article no.	Power contacts		PE contacts	
						16 AWG	14 AWG	16 AWG	14 AWG
	Female Straight	Push-Lock	8-13mm	16-14 AWG	Yes	1080228	-	-	-
	Male Straight					1080231	-	-	-
	Female Straight	Crimp	8-13mm	16-14 AWG	Yes	1027476	1029396	1029392	1029398
	Male Straight					1027474	1029394	1029388	1029401

Device connectors

K-code: 5pos (4+PE)									
Configuration				PCB	0.2 m	0.5 m	1.0 m	1.5 m	Note
	Male, Black Insert, XL	Front Mount M16x1.5 Thread		14 AWG Flying Leads	-	1415291	-	-	(1)
		Front Mount M16x1.5 Thread		16 AWG Flying Leads	-	1425635	-	-	(1)
		Rear Mount M16x1.5 Thread		14 AWG Flying Leads	-	1415293	1097959	1162234	1162243
		Rear Mount M16x1.5 Thread		16 AWG Flying Leads	-	1425637	-	-	
	Male, Black Insert	Tape and Reel		Through-Hole	1420830	-	-	-	(2)
		Tray/Blister Pack		Through-Hole	1420819	-	-	-	(2)
	Female, Black Insert, XL	Front Mount M16x1.5 Thread		14 AWG Flying Leads	-	1415292	-	-	(1)
		Front Mount M16x1.5 Thread		16 AWG Flying Leads	-	1425636	-	-	(1)
		Rear Mount M16x1.5 Thread		14 AWG Flying Leads	-	1415294	1162464	1162474	1162476
		Rear Mount M16x1.5 Thread		16 AWG Flying Leads	-	1425638	-	1178140	-
	Female, Black Insert	Tape and Reel		Through-Hole	1420831	-	-	-	(2)
		Tray/Blister Pack		Through-Hole	1420821	-	-	-	(2)

(1) Hex nut 1504097 sold separately. (2) See table on page 22 for available housings.



AC Power – M-code

5+PE products for up to 8 A, 600 V AC requirements (3-phase system + auxiliary/break contacts)

Cordsets

M-Code: 6pos (5+PE)								
Configuration	Cable	Shielded	Wire	1.5 m	3 m	5 m	10 m	
 Female Straight / Open End	Black PUR	No	16 AWG	1414901	1414910	1414918	1414926	
	Black PVC	No	16 AWG	1414905	1414914	1414922	1414930	
	Orange PUR	Yes	16 AWG	1414902	1414911	1414919	1414927	
	Orange PVC	Yes	16 AWG	1414906	1414915	1414923	1414931	
 Female 90° / Open End	Black PUR	No	16 AWG	1414899	1414907	1414916	1414924	
	Black PVC	No	16 AWG	1414903	1414912	1414920	1414928	
	Orange PUR	Yes	16 AWG	1414900	1414908	1414917	1414925	
	Orange PVC	Yes	16 AWG	1414904	1414913	1414921	1414929	
 Male Straight / Open End	Black PUR	No	16 AWG	1414949	1414953	1414957	1414961	
	Black PVC	No	16 AWG	1414951	1414955	1414959	1414963	
	Orange PUR	Yes	16 AWG	1414950	1414954	1414958	1414962	
	Orange PVC	Yes	16 AWG	1414952	1414956	1414960	1414964	
 Male 90° / Open End	Black PUR	No	16 AWG	1414932	1414936	1414941	1414945	
	Black PVC	No	16 AWG	1414934	1414939	1414943	1414947	
	Orange PUR	Yes	16 AWG	1414933	1414937	1414942	1414946	
	Orange PVC	Yes	16 AWG	1414935	1414940	1414944	1414948	

Device connectors

M-code: 6pos (5+PE)									
Configuration			Leads	PCB	0.2 m	0.5 m	1.0 m	1.5 m	Note
	Male, Black Insert, XL	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1415300	-	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1415302	1162502	1162503	1162505	
	Male, Black Insert	Tape and Reel	Through-Hole	1420832	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1420822	-	-	-	-	(2)
	Female, Black Insert, XL	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1415301	-	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1415303	1162517	1162519	1162524	
	Female, Black Insert	Tape and Reel	Through-Hole	1420833	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1420823	-	-	-	-	(2)

(1) Hex nut 1504097 sold separately. (2) See table on page 22 for available housings.



DC Power – T-code

4-position products for up to 12 A, 63 V DC requirements

Cordsets

T-code: 4pos													
Configuration		Cable	Shielded	Wire	0.5 m	1 m	1.5 m	2 m	3 m	5 m	10 m	15 m	20 m
	Female Straight / Open End	Black PUR	No	16 AWG	-	1408823	-	1408824	-	1408825	1408826	-	1421305
		Black PVC	No	16 AWG	-	1089970	-	1089971	-	1089972	1089973	-	-
		Black PUR	Yes	16 AWG	-	-	1424112	-	1424113	1424114	1424115	-	-
	Female 90° / Open End	Black PUR	No	16 AWG	-	1408827	-	1408828	-	1408829	1408830	-	1420494
		Black PVC	No	16 AWG	-	1089977	-	1089981	-	1089984	1089987	-	-
		Black PUR	Yes	16 AWG	-	-	1424116	-	1424117	1424118	1424128	-	-
	Male Straight / Open End	Black PUR	No	16 AWG	-	1408812	-	1408813	-	1408814	1408815	-	-
		Black PVC	No	16 AWG	-	1089952	-	1089953	-	1089955	1089956	-	-
		Black PUR	Yes	16 AWG	-	-	1424120	-	1424121	1424122	1424123	-	-
	Male 90° / Open End	Black PUR	No	16 AWG	-	1408816	-	1408819	-	1408820	1408822	-	-
		Black PVC	No	16 AWG	-	1089958	-	1089961	-	1089965	1089968	-	-
		Black PUR	Yes	16 AWG	-	-	1424124	-	1424125	1424126	1424127	-	-
	Male Straight / Female Straight	Black PUR	No	16 AWG	1413210	1408808	-	1408809	-	1408810	1408811	1413530	1411366
		Black PVC	No	16 AWG	-	1089988	-	1089997	-	1089998	1089999	-	-
		Black PUR	Yes	16 AWG	-	-	1409255	-	1416447	1417687	1421788	-	-
	Male 90° / Female 90°	Black PUR	No	16 AWG	-	1415196	-	1415197	-	1415198	1415199	-	-
		Black PUR	Yes	16 AWG	-	-	1415202	-	1415203	1415204	1415205	-	-

Field-wired connectors

T-code: 4pos									
Configuration	Termination	Cable OD	Wire	Shielded	Article no.	Power contacts		PE contacts	
						16 AWG	14 AWG	16 AWG	14 AWG
	Female Straight	Push-Lock	6-11 mm	16-14 AWG	No	1151366	-	-	-
	Male Straight					1151362	-	-	-
	Female Straight	Push-Lock	6-11 mm	16-14 AWG	Yes	1080218	-	-	-
	Male Straight					1080215	-	-	-
	Female Straight	Crimp	6.5-11 mm	16-14 AWG	Yes	1027466	1029395	1029390	1029400
	Male Straight					1027465	1029394	1029388	1029398
	Female Straight	Screw	8-10 mm	18-16 AWG	No	1404644	-	-	-
	Female 90°					1408989	-	-	-
	Male Straight					1404643	-	-	-
	Male 90°					1408988	-	-	-



DC Power – T-code

4-position products for up to 12 A, 63 V DC requirements

Device connectors

T-code: 4pos									
Configuration			Leads	PCB	0.2 m	0.5 m	1.0 m	1.5 m	Note
	Male, Black Insert, XL	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1411608	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1411604	1162539	1162541	
	Male, Black Insert, Standard	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1424140	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1424136	1037080	1420794	
		25mm Square Flange	16 AWG Flying Leads	-	-	1424130	1162530	1162531	(3)
	Male, Black Insert, Shielded	Tape and Reel	Through-Hole	1418341	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1406397	-	-	-	-	(2)
	Male, Black Insert	Tape and Reel	Surface Mount	1411989	-	-	-	-	(2)
		Tray/Blister Pack	Surface Mount	1411931	-	-	-	-	(2)
		Tape and Reel	Through-Hole	1418339	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1406396	-	-	-	-	(2)
	Female, Black Insert, XL	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1411606	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1426488	1411599	1162552	1162554	
	Female, Black Insert, Standard	Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1424138	-	-	(1)
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	-	1424134	-	1420501	
		Tape and Reel	Surface Mount	1412019	-	-	-	-	(2)
		Tray/Blister Pack	Surface Mount	1411967	-	-	-	-	(2)
		Tape and Reel	Through-Hole	1418342	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1406412	-	-	-	-	(2)
	Female, Black Insert	Tape and Reel	Surface Mount	1411981	-	-	-	-	(2)
		Tray/Blister Pack	Surface Mount	1411918	-	-	-	-	(2)
		Tape and Reel	Through-Hole	1418340	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1406411	-	-	-	-	(2)

(1) Hex nut 1504097 sold separately.

(2) See table on page 22 for available housings.

(3) Flange 1424131 sold separately.



DC Power – L-code

4-position products for up to 16 A, 63 V DC requirements



Cordsets

L-code: 4pos										
Configuration	Cable	Shielded	Wire	0.3 m	0.6 m	1.5 m	3 m	5 m	10 m	
	Black PUR	No	14 AWG	-	-	1425073	1425074	1425075	1425076	
	Black PUR	No	16 AWG	-	-	1425033	1425034	1425035	1425036	
	Black PVC	No	14 AWG	-	-	1425093	1425094	1425095	1425096	
	Black PVC	No	16 AWG	-	-	1425053	1425054	1425055	1425056	
	Black PUR	No	14 AWG	-	-	1425077	1425078	1425079	1425080	
	Black PUR	No	16 AWG	-	-	1425037	1425038	1425039	1425040	
	Black PVC	No	14 AWG	-	-	1425097	1425098	1425099	1425100	
	Black PVC	No	16 AWG	-	-	1425057	1425058	1425059	1425060	
	Black PUR	No	14 AWG	-	-	1425065	1425066	1425067	1425068	
	Black PUR	No	16 AWG	-	-	1425025	1425026	1425027	1425028	
	Black PVC	No	14 AWG	-	-	1425085	1425086	1425087	1425088	
	Black PVC	No	16 AWG	-	-	1425045	1425046	1425047	1425048	
	Black PUR	No	14 AWG	-	-	1425069	1425070	1425071	1425072	
	Black PUR	No	16 AWG	-	-	1425029	1425030	1425031	1425032	
	Black PVC	No	14 AWG	-	-	1425089	1425090	1425091	1425092	
	Black PVC	No	16 AWG	-	-	1425049	1425050	1425051	1425052	
	Black PUR	No	14 AWG	1425081	1425082	1425083	1425084	-	-	
	Black PUR	No	16 AWG	1425041	1425042	1425043	1425044	-	-	
	Black PVC	No	14 AWG	1425101	1425102	1425103	1425104	-	-	
	Black PVC	No	16 AWG	1425061	1425062	1425063	1425064	-	-	

Field-wired connectors

L-Code: 4pos									
Configuration	Termination	Cable OD	Wire	Shielded	Article no.	Power contacts		PE contacts	
						16 AWG	14 AWG	16 AWG	14 AWG
	Female Straight	Push-Lock	6-11 mm	16-14 AWG	Yes	1080237	-	-	-
	Male Straight					1080239	-	-	-
	Female Straight	Crimp	8-13 mm	16-14 AWG	Yes	1027480	1029396	1029392	-
	Male Straight					1027479	1029394	1029388	-



DC Power – L-code

4-position products for up to 16 A, 63 V DC requirements



Device connectors

L-code: 4pos									
Configuration			Leads	PCB	0.2 m	0.5 m	1.0 m	1.5 m	Note
	Male, Black Insert, XL	Front Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425586	-	-	-	(1)
		Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425631	-	-	-	(1)
		Rear Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425588	1163033	1163034	1163035	
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425633	-	-	-	
	Male, Black Insert, Shielded	Tape and Reel	Through-Hole	1425641	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425639	-	-	-	-	(2)
	Male, Black Insert	Tape and Reel	Through-Hole	1425605	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425603	-	-	-	-	(2)
	Male, Black Insert, Standard	Rear Mount M16x1.5 Thread	Wave Solder	1425592	-	-	-	-	
	Female, Black Insert, XL	Front Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425587	-	-	-	(1)
		Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425632	-	-	-	(1)
		Rear Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425589	1163053	1163054	1163055	
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425634	-	-	-	
	Female, Black Insert, Shielded	Tape and Reel	Through-Hole	1425642	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425640	-	-	-	-	(2)
	Female, Black Insert	Tape and Reel	Through-Hole	1425606	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425604	-	-	-	-	(2)
	Female, Black Insert, Standard	Rear Mount M16x1.5 Thread	Wave Solder	1425593	-	-	-	-	

(1) Hex nut 1504097 sold separately.

(2) See table on page 22 for available housings.



DC Power – L-code

4+FE products for up to 16 A, 63 V DC requirements



Cordsets

L-code: 5pos (4+FE)										
Configuration		Cable	Shielded	Wire	0.3 m	0.6 m	1.5 m	3 m	5 m	10 m
	Female Straight / Open End	Gray PUR	No	14 AWG	-	-	1414772	1414790	1414806	1414823
		Gray PUR	No	16 AWG	-	-	1424601	1424602	1424603	1424604
		Gray PVC	No	14 AWG	-	-	1414782	1414798	1414814	1414831
		Gray PVC	No	16 AWG	-	-	1424617	1424618	1424619	1424620
		Gray PUR	Yes	14 AWG	-	-	1414773	1414791	1414807	1414824
	Female 90° / Open End	Gray PUR	No	14 AWG	-	-	1414768	1414786	1414802	1414819
		Gray PUR	No	16 AWG	-	-	1424605	1424606	1424607	1424608
		Gray PVC	No	14 AWG	-	-	1414777	1414794	1414810	1414827
		Gray PVC	No	16 AWG	-	-	1424621	1424622	1424623	1424624
		Gray PUR	Yes	14 AWG	-	-	1414769	1414787	1414803	1414820
		Gray PVC	Yes	14 AWG	-	-	1414778	1414795	1414811	1414828
	Male Straight / Open End	Gray PUR	No	14 AWG	-	-	1414883	1414887	1414891	1414895
		Gray PUR	No	16 AWG	-	-	1424593	1424594	1424595	1424596
		Gray PVC	No	14 AWG	-	-	1414885	1414889	1414893	1414897
		Gray PVC	No	16 AWG	-	-	1424609	1424610	1424611	1424612
		Gray PUR	Yes	14 AWG	-	-	1414884	1414888	1414892	1414896
	Male 90° / Open End	Gray PUR	No	14 AWG	-	-	1414850	1414854	1414858	1414862
		Gray PUR	No	16 AWG	-	-	1424597	1424598	1424599	1424600
		Gray PVC	No	14 AWG	-	-	1414852	1414856	1414860	1414864
		Gray PVC	No	16 AWG	-	-	1424613	1424614	1424615	1424616
		Gray PUR	Yes	14 AWG	-	-	1414851	1414855	1414859	1414863
		Gray PVC	Yes	14 AWG	-	-	1414853	1414857	1414861	1414865
	Male Straight / Female Straight	Gray PUR	No	14 AWG	1425009	1425010	1425011	1425012	-	-
		Gray PUR	No	16 AWG	1425017	1425018	1425019	1425020	-	-
		Gray PVC	No	14 AWG	1425013	1425014	1425015	1425016	-	-
		Gray PVC	No	16 AWG	1425021	1425022	1425023	1425024	-	-

Field-wired connectors

L-code: 5pos (4+FE)										
Configuration		Termination	Cable OD	Wire	Shielded	Article no.	Power contacts		PE contacts	
							16 AWG	14 AWG	16 AWG	14 AWG
	Female Straight	Push-Lock	8-13mm	16-14 AWG	No	1151390	-	-	-	-
	Male Straight					1151368	-	-	-	-
	Female Straight	Push-Lock	8-13mm	16-14 AWG	Yes	1080233	-	-	-	-
	Male Straight					1080235	-	-	-	-
	Female Straight	Crimp	8-13mm	16-14 AWG	Yes	1027478	1029396	1029392	1029398	1029389
	Male Straight					1027477	1029394	1029388	1029401	1029393



DC Power – L-code

4+FE products for up to 16 A, 63 V DC requirements



Device connectors

L-code: 5pos (4+FE)									
Configuration			Leads	PCB	0.2 m	0.5 m	1.0 m	1.5 m	Note
	Male, Gray Insert, XL	Front Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425582	-	-	-	(1)
		Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425627	-	-	-	(1)
		Rear Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425584	1163083	1163085	1163087	
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425629	-	-	-	
	Male, Gray Insert, Shielded	Tape and Reel	Through-Hole	1425601	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425597	-	-	-	-	(2)
	Male, Gray Insert	Tape and Reel	Through-Hole	1425599	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425594	-	-	-	-	(2)
	Male, Gray Insert, Standard	Rear Mount M16x1.5 Thread	Wave Solder	1425590	-	-	-	-	
	Male, Black Insert, XL	Front Mount M16x1.5 Thread	14 AWG Flying Leads	-	1415295	-	-	-	(1)
		Rear Mount M16x1.5 Thread	14 AWG Flying Leads	-	1415297	1163063	1163064	1163066	
	Male, Black Insert, Shielded	Tape and Reel	Through-Hole	1421317	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1421314	-	-	-	-	(2)
	Male, Black Insert	Tape and Reel	Through-Hole	1420828	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1420817	-	-	-	-	(2)
	Male, Black Insert, Standard	Rear Mount M16x1.5 Thread	Wave Solder	1415337	-	-	-	-	
	Female, Gray Insert, XL	Front Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425583	-	-	-	(1)
		Front Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425628	-	-	-	(1)
		Rear Mount M16x1.5 Thread	14 AWG Flying Leads	-	1425585	1163099	1163100	1163101	
		Rear Mount M16x1.5 Thread	16 AWG Flying Leads	-	1425630	-	-	-	
	Female, Gray Insert, Shielded	Tape and Reel	Through-Hole	1425602	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425598	-	-	-	-	(2)
	Female, Gray Insert	Tape and Reel	Through-Hole	1425600	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1425595	-	-	-	-	(2)
	Female, Gray Insert, Standard	Rear Mount M16x1.5 Thread	Wave Solder	1425591	-	-	-	-	
	Female, Black Insert, XL	Front Mount M16x1.5 Thread	14 AWG Flying Leads	-	1415296	-	-	-	(1)
		Rear Mount M16x1.5 Thread	14 AWG Flying Leads	-	1415299	1163111	1163112	1163114	
	Female, Black Insert, Shielded	Tape and Reel	Through-Hole	1421318	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1421315	-	-	-	-	(2)
	Female, Black Insert	Tape and Reel	Through-Hole	1420829	-	-	-	-	(2)
		Tray/Blister Pack	Through-Hole	1420818	-	-	-	-	(2)
	Female, Black Insert, Standard	Rear Mount M16x1.5 Thread	Wave Solder	1415338	-	-	-	-	

(1) Hex nut 1504097 sold separately.

(2) See table on page 22 for available housings.

Additional M12 Power products

Housings for PCB-mounted device connectors

		Coding:	L, K, M		S and T		T			
		Solder Type:	THR		THR		SMD			
		Orientation:	Pin	Socket	Pin	Socket	Pin	Socket	Tolerance Compensating Housings	Socket
Front Mounting	M12 x 1	SPEEDCON	-	-	1551493	1552243	-	-	For Housing Panel Thickness 0.9...1.6 mm	1419569
	M12 x 1	Standard	-	-	1416145	1416144	-	-	For Housing Panel Thickness 1.6...2.3 mm	1419570
	M14 x 1	SPEEDCON	-	-	1436709	1432460	-	-	For Housing Panel Thickness 2.3...3.0 mm	1419571
	M14 x 1	Standard	1420824 *	1420825 *	1417984	1417989	1412078	1412079	Black Fixing Sleeve	1419568
	Press-In	Standard	-	-	1437892	1437889	1412080	1412081	Water Blue Fixing Sleeve	1419565
Rear Mounting	M14 x 1	Standard	1420826	1420827	-	-	-	-	Green Fixing Sleeve	1419566
	M15 x 1	SPEEDCON	-	-	1413999	1414020	1414002	1414023	Violet Fixing Sleeve	1419567
	M15 x 1	Standard	-	-	1413997	1414004	1414000	1414021		

* Flat nut 1412077 sold separately

Adapter cables for Mini 7/8" to M12 Power

4 and 5 pin, DC cordsets		Gender					
Configuration		Cable	Shielded	Mini 7/8"	M12	1 m	1.5 m
	Mini 7/8" T-code Adapter Cable	Black PUR	No	Male	Female	1141427	-
		Black PUR	No	Female	Male	1141426	-
	Mini 7/8" L-code Adapter Cable	Black PUR	No	Male	Female	-	1141425
		Black PUR	No	Female	Male	-	1141424

Mini 7/8" field-wired connectors for use on M12 cordsets

Configuration	Termination	Positions	Cable OD	Wire	Shielded	Current	Voltage	Article No.
	Screw	4	10 - 12 mm	22 - 16 AWG	No	9 A	300 V	1521355
	Screw		6 - 8 mm	22 - 16 AWG	No	9 A	300 V	1521342
	Screw	5	10 - 12 mm	22 - 14 AWG	No	9 A	300 V	1456284
	Screw		10 - 12 mm	22 - 16 AWG	No	9 A	300 V	1521397
	Screw		12 - 14 mm	22 - 14 AWG	No	9 A	300 V	1456268
	Screw		12 - 14 mm	22 - 16 AWG	No	9 A	300 V	1559071
	Screw		6 - 8 mm	22 - 16 AWG	No	9 A	300 V	1521384
	Screw		8 - 10 mm	22 - 14 AWG	No	9 A	300 V	1456271
	Screw		8 - 10 mm	22 - 14 AWG	No	9 A	300 V	1456226
	Screw	4	10 - 12 mm	22 - 16 AWG	No	9 A	300 V	1521339
	Screw		6 - 8 mm	22 - 16 AWG	No	9 A	300 V	1521326
	Screw	5	10 - 12 mm	22 - 14 AWG	No	9 A	300 V	1456213
	Screw		10 - 12 mm	22 - 16 AWG	No	9 A	300 V	1521371
	Screw		12 - 14 mm	22 - 14 AWG	No	9 A	300 V	1456239
	Screw		12 - 14 mm	22 - 16 AWG	No	9 A	300 V	1559039
	Screw		6 - 8 mm	22 - 16 AWG	No	9 A	300 V	1521668
	Screw		8 - 10 mm	22 - 14 AWG	No	9 A	300 V	1456226
	Screw		8 - 10 mm	22 - 14 AWG	No	9 A	300 V	1456226

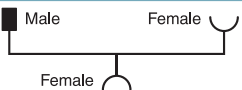
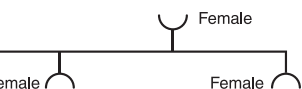
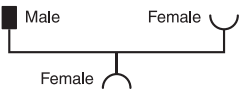
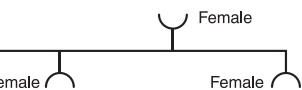
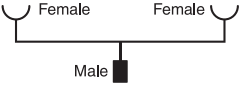
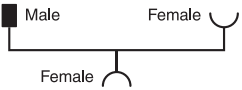
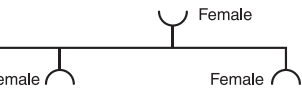
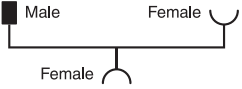
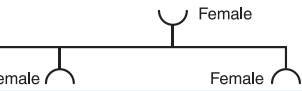
Additional M12 Power products

Accessories

	Description	Material	Coding	Order No.
	Sealing cap for Male connectors	Plastic	S/K/M/T/L	1560251
	Sealing cap for Male connectors	Metal	S/K/M/T/L	1430488
	Screw plug for Female connectors	Plastic	S/T	1680539
	Screw plug for Female connectors	Plastic	K/M/L	1092802

Power distribution

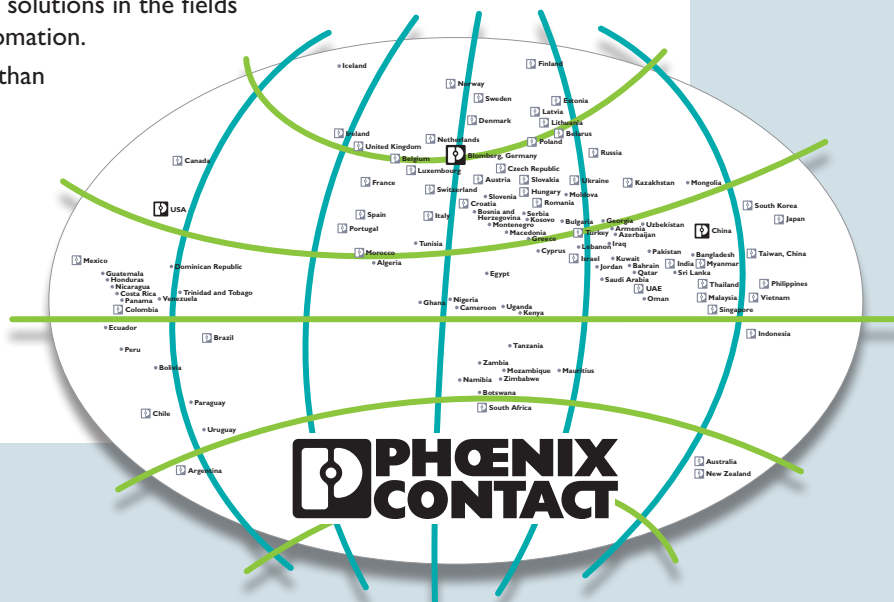
Power distribution boxes			
Configuration			Article No.
	Power Distribution Boxes – T-code, 4pos Includes LED status displays Number of Slots: 4, single throw Master cable connection – HEAVYCON Compact	With M12 A-coded diagnostics port	1411048
		Without diagnostics port	1413929

Y and H distributors					
		Configuration	Positions	Coding	Article No.
	Y-Distributor		3+PE	S-code	1080243
	H-Distributor				1080242
	Y-Distributor		4+PE	K-code	1080247
	H-Distributor				1080246
	Y-Distributor		4	T-code	1410632
	Y-Distributor				1410632
	H-Distributor				1410632
	Y-Distributor		4+FE	L-code	1080249
	H-Distributor				1080248

Ongoing communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. Our group is known for its future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation.

With a global network reaching across more than 100 countries and 17,400 employees, we can stay in close contact with our customers, something we believe is essential to success. The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for multiple applications and industries. We especially focus on the fields of energy, infrastructure, process, and factory automation.



You will find our complete product range at:
www.phoenixcontact.com

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