



More power in less space

Get amped about the new M12 Power connectors

M12 Power series

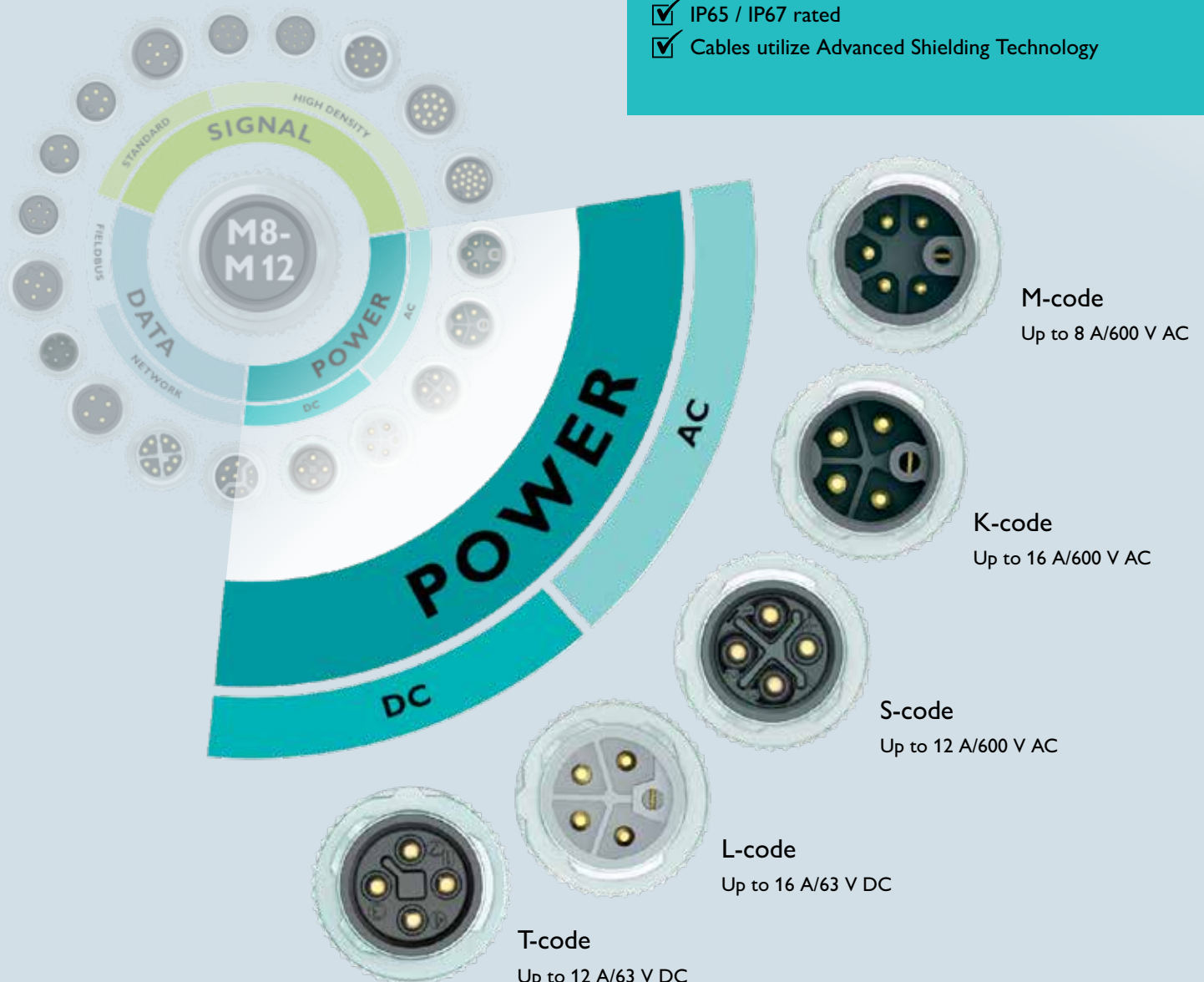
Maximum power and minimum size

Device connection technology not only needs to be powerful, it also has to be compact and flexible.

The innovative M12 Power connector series from Phoenix Contact offers maximum power in a compact size. Solutions include molded cables and cordsets, device and panel feed-through connectors, and field-wired connectors and distributors.

Your advantages

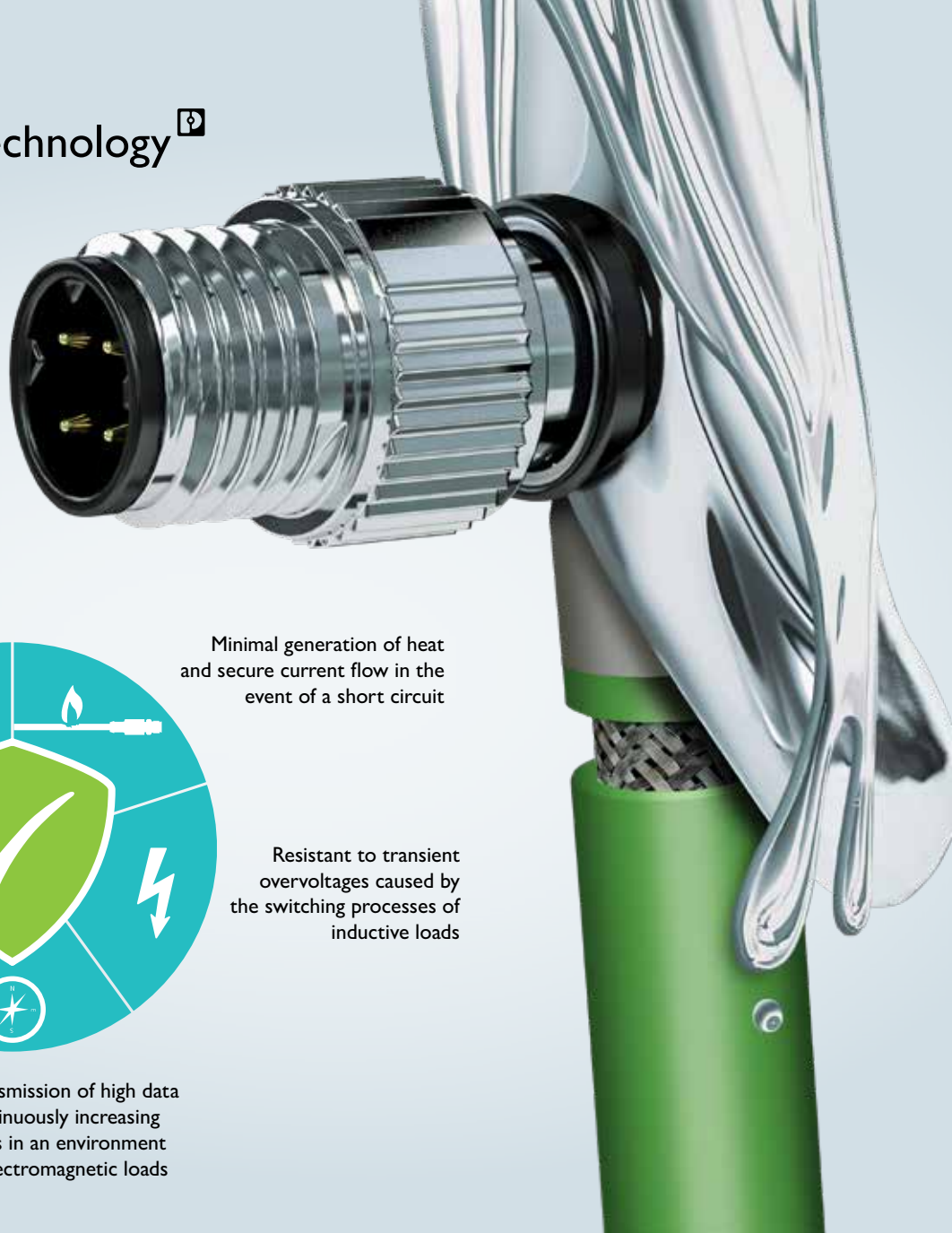
- ✓ IEC 61076-2-111 compliant
- ✓ UL listed, Category PVVA, file E468743
- ✓ Tested under UL2237 for power connectors
- ✓ IP65 / IP67 rated
- ✓ Cables utilize Advanced Shielding Technology



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-long flying leads
- ✓ 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

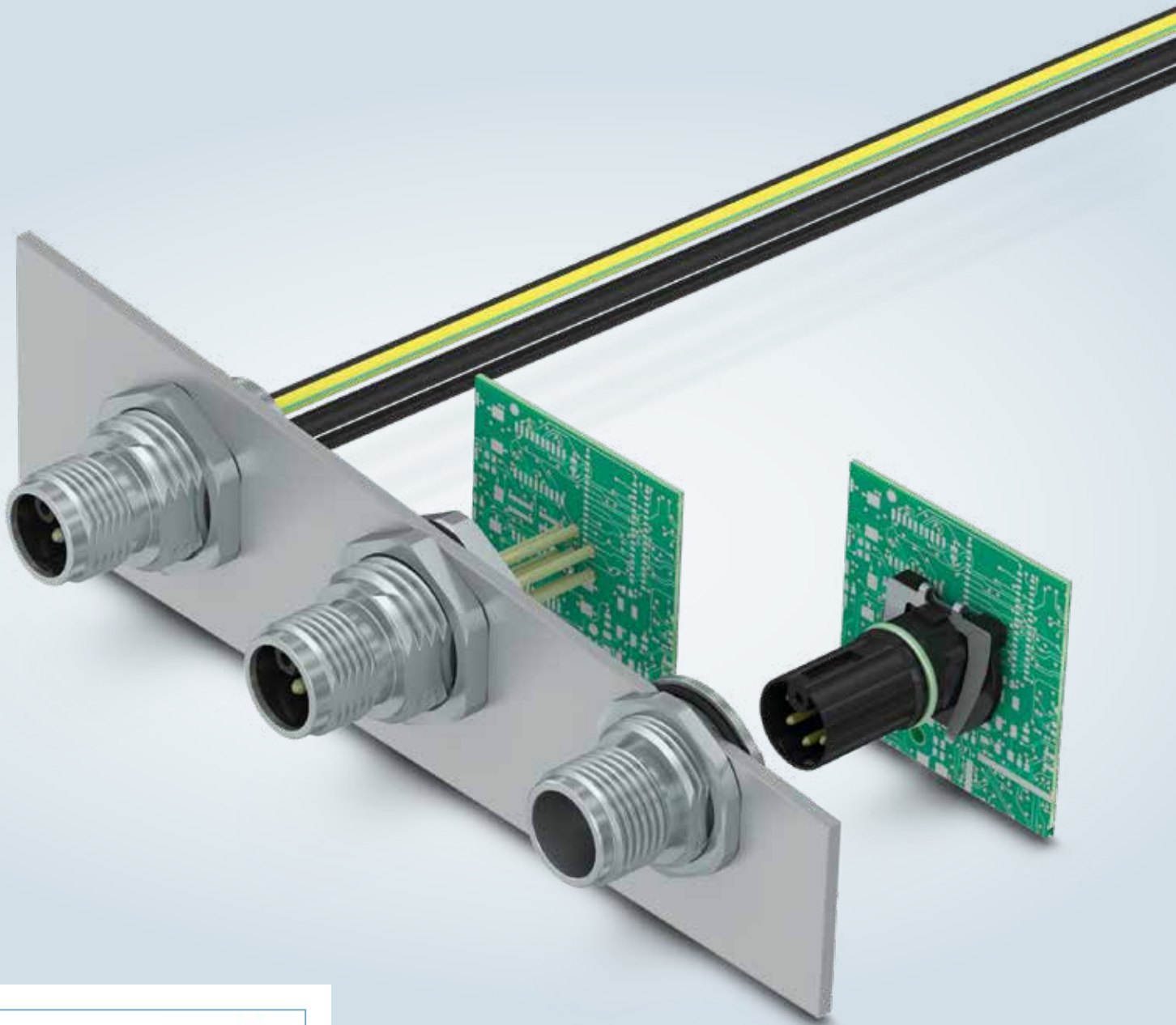


K- and L-coded connectors with 1.5 mm² (16 AWG) flying leads, with all other variants featuring 2.5 mm² (14 AWG) flying leads in 0.2- and 0.5-meter lengths



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.

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



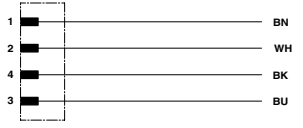

DC Power					
Coding	Positions	Wire Gauge	UL rated current	UL rated voltage	See page
T	4	16 AWG	12 A	63 V DC	Page 12-13
L*	4	16 AWG	12 A	63 V DC	Page 14-15
		14 AWG	16 A	63 V DC	Page 14-15
	4+FE	16 AWG	12 A	63 V DC	Page 16-17
		14 AWG	16 A	63 V DC	Page 16-17



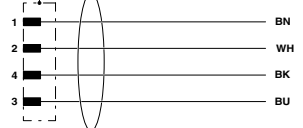

* Coding options with multiple pin counts are not designed to be intermateable.



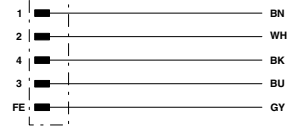

General specifications



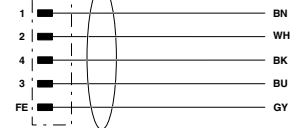

Product	PUR Cordset	PVC Cordset	Device Connector
Standards and regulations			
Standard designation	M12 connector		
UL Certification	Listed: UL2237, File Number E468743		
Standards/regulations	IEC 61076-2-111		
Flammability rating according to UL 94	V0		
Ambient conditions			
Ambient temperature (operation)	-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	CuZn
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/s ²	10 m/s ²	-
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"		



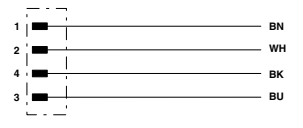

Wiring guide



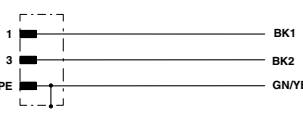

Coding	Pins	Cross-section	Wiring	
T	4	 Female	 Unshielded	 1 ——— BN 2 ——— WH 4 ——— BK 3 ——— BU
		 Male		



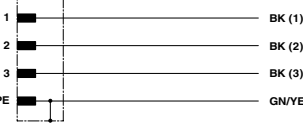

Coding	Pins	Cross-section	Wiring	
T	4	 Female	 Shielded	 1 ——— BN 2 ——— WH 4 ——— BK 3 ——— BU
		 Male		



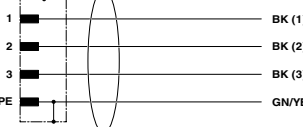

Coding	Pins	Cross-section	Wiring	
L	4+FE	 Female	 Unshielded	 1 ——— BN 2 ——— WH 4 ——— BK 3 ——— BU FE ——— GY
		 Male		



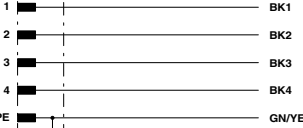

Coding	Pins	Cross-section	Wiring	
L	4+FE	 Female	 Shielded	 1 ——— BN 2 ——— WH 4 ——— BK 3 ——— BU FE ——— GY
		 Male		



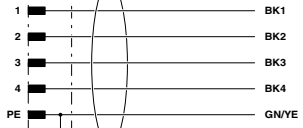

Coding	Pins	Cross-section	Wiring	
L	4	 Female	 Unshielded	 1 ——— BN 2 ——— WH 4 ——— BK 3 ——— BU
		 Male		



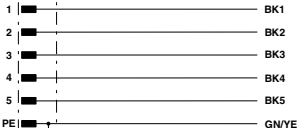

Coding	Pins	Cross-section	Wiring	
S	2+PE	 Female	 Unshielded	 1 ——— BK1 3 ——— BK2 PE ——— GN/YE
		 Male		



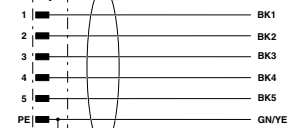

Coding	Pins	Cross-section	Wiring	
S	3+PE	 Female	 Unshielded	 1 ——— BK (1) 2 ——— BK (2) 3 ——— BK (3) PE ——— GN/YE
		 Male		

Coding	Pins	Cross-section	Wiring	
S	3+PE	 Female	 Shielded	 1 ——— BK (1) 2 ——— BK (2) 3 ——— BK (3) PE ——— GN/YE
		 Male		

Coding	Pins	Cross-section	Wiring	
K	4+PE	 Female	 Unshielded	 1 ——— BK1 2 ——— BK2 3 ——— BK3 4 ——— BK4 PE ——— GN/YE
		 Male		

Coding	Pins	Cross-section	Wiring	
K	4+PE	 Female	 Shielded	 1 ——— BK1 2 ——— BK2 3 ——— BK3 4 ——— BK4 PE ——— GN/YE
		 Male		

Coding	Pins	Cross-section	Wiring	
M	5+PE	 Female	 Unshielded	 1 ——— BK1 2 ——— BK2 3 ——— BK3 4 ——— BK4 5 ——— BK5 PE ——— GN/YE
		 Male		

Coding	Pins	Cross-section	Wiring	
M	5+PE	 Female	 Shielded	 1 ——— BK1 2 ——— BK2 3 ——— BK3 4 ——— BK4 5 ——— BK5 PE ——— GN/YE
		 Male		





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 VAC 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.	
	Female Straight	Screw	6-8 mm	18-16 AWG	No	1419640
	Female 90°	Screw	6-8 mm	18-16 AWG	No	1419642
	Male Straight	Screw	6-8 mm	18-16 AWG	No	1419639
	Male 90°	Screw	6-8 mm	18-16 AWG	No	1419641

Device connectors

S-Code: 3pos (2+PE)						
Configuration	Mounting	Leads	Packaging	Article No.	Additional Components	
	16 mm Front Mount Thread	0.5 m, 16 AWG, Flying leads	Bulk	1411655	Hex Nut 1504097	
	16 mm Rear Mount Thread	0.5 m, 16 AWG, Flying leads	Bulk	1411653	Hex Nut Included	
	16 mm Front Mount Thread	0.5 m, 16 AWG, Flying leads	Bulk	1411654	Hex Nut 1504097	
	16 mm Rear Mount Thread	0.5 m, 16 AWG, Flying leads	Bulk	1411652	Hex Nut Included	



AC Power – S-code

3+PE products for up to 12 A, 600 VAC 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
	Female Straight / Open End	Black PUR	No	16 AWG	1408843	-	1408844	-	1408845	1408846
		Orange PUR	Yes	16 AWG	-	1424096	-	1424097	1424098	1424099
	Female 90° / Open End	Black PUR	No	16 AWG	1408848	-	1408852	-	1408853	1408854
		Orange PUR	Yes	16 AWG	-	1424100	-	1424101	1424102	1424103
	Male Straight / Open End	Black PUR	No	16 AWG	1408835	-	1408836	-	1408837	1408838
		Orange PUR	Yes	16 AWG	-	1424104	-	1424105	1424245	1424107
	Male 90° / Open End	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 Contact	PE Contact
	Female Straight	Screw	8-10mm	18-16 AWG	No	1404642	-	-
	Female 90°	Screw	8-10mm	18-16 AWG	No	1408987	-	-
	Male Straight	Screw	8-10mm	18-16 AWG	No	1404641	-	-
	Male 90°	Screw	8-10mm	18-16 AWG	No	1408985	-	-
	Female Straight	Crimp	6.5-11mm	14 AWG	Yes	1027469 *	1029390	1029391
	Male Straight	Crimp	6.5-11mm	14 AWG	Yes	1027467 *	1029388	1029389

* Coming soon. Check website for availability.

Device connectors





		S-Code: 4pos (3+PE)					
Configuration		Mounting	Leads	Packaging	Article No.	Additional Components	
	Male, Black Insert, XL	16mm Front Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1411607	Hex Nut 1504097	
		16mm Rear Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1411603	Hex Nut Included	
	Male, Black Insert, Standard	16mm Front Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1424139	Hex Nut 1504097	
		16mm Rear Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1424132	Hex Nut Included	
		25mm Front Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1424129	Flange 1424131	
	Male, Black Insert	PCB	Through-Hole	T & R	1418343	See Housing Table on Page 18	
		PCB	Through-Hole	Tray/Blister Pack	1406410	See Housing Table on Page 18	
	Female, Black Insert, XL	16mm Front Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1411605	Hex Nut 1504097	
		16mm Rear Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1411598	Hex Nut Included	
	Female, Black Insert, Standard	16mm Front Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1424137	Hex Nut 1504097	
		16mm Rear Mount Thread	0.5m, 16 AWG, Flying leads	Bulk	1424133	Hex Nut Included	
	Female, Black Insert	PCB	Through-Hole	T & R	1418344	See Housing Table on Page 18	
		PCB	Through-Hole	Tray/Blister Pack	1406409	See Housing Table on Page 18	




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
 Female Straight / Open End	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
	Orange PVC	Yes	14 AWG	1414781	1414797	1414813	1414830
 Female 90° / Open End	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
 Male Straight / Open End	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
	Orange PVC	Yes	14 AWG	1414869	1414874	1414878	1414882
 Male 90° / Open End	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 Contact	PE Contact
 Female Straight	Crimp	8-13 mm	14 AWG	Yes	1027476 *	1029392	1029389
	Crimp	8-13 mm	14 AWG	Yes	1027474 *	1029388	1029393

* Coming soon. Check website for availability.

Device connectors





K-Code: 5pos (4+PE)						
Configuration	Mounting	Leads	Packaging	Article No.	Additional Components	
 Male, Black Insert, XL	16mm Front Mount Thread	0.2m, 14 AWG, Flying leads	Bulk	1415291	Hex Nut 1504097	
	16mm Front Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1425635	Hex Nut 1504097	
	16mm Rear Mount Thread	0.2m, 14 AWG, Flying leads	Bulk	1415293	Hex Nut Included	
	16mm Rear Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1425637	Hex Nut Included	
 Male, Black Insert	PCB	Through-Hole	T & R	1420830	See Housing Table on Page 18	
	PCB	Through-Hole	Tray/Blister Pack	1420819	See Housing Table on Page 18	
 Female, Black Insert, XL	16mm Front Mount Thread	0.2m, 14 AWG, Flying leads	Bulk	1415292	Hex Nut 1504097	
	16mm Front Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1425636	Hex Nut 1504097	
	16mm Rear Mount Thread	0.2m, 14 AWG, Flying leads	Bulk	1415294	Hex Nut Included	
	16mm Rear Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1425638	Hex Nut Included	
 Female, Black Insert	PCB	Through-Hole	T & R	1420831	See Housing Table on Page 18	
	PCB	Through-Hole	Tray/Blister Pack	1420821	See Housing Table on Page 18	







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		Mounting	Leads	Packaging	Article No.	Additional Components	
	Male, Black Insert, XL	16mm Front Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1415300	Hex Nut 1504097	
		16mm Rear Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1415302	Hex Nut Included	
	Male, Black Insert	PCB	Through-Hole	T & R	1420832	See Housing Table on Page 18	
		PCB	Through-Hole	Tray/Blister Pack	1420822	See Housing Table on Page 18	
	Female, Black Insert, XL	16mm Front Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1415301	Hex Nut 1504097	
		16mm Rear Mount Thread	0.2m, 16 AWG, Flying leads	Bulk	1415303	Hex Nut Included	
	Female, Black Insert	PCB	Through-Hole	T & R	1420833	See Housing Table on Page 18	
		PCB	Through-Hole	Tray/Blister Pack	1420823	See Housing Table on Page 18	



DC Power – T-code

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

Cordsets








T-Code: Black, 16 AWG, Unshielded, 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
	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	-	-
	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	-	-
	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	-	-
	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	-	-
	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	-	-
	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 Contact	PE Contact	
	Female Straight	Screw	8-10mm	18-16 AWG	No	1404644	-	-
	Female 90°	Screw	8-10mm	18-16 AWG	No	1408989	-	-
	Male Straight	Screw	8-10mm	18-16 AWG	No	1404643	-	-
	Male 90°	Screw	8-10mm	18-16 AWG	No	1408988	-	-
	Female Straight	Crimp	6.5-11mm	14 AWG	Yes	1027466 *	1029390	1029391
	Male Straight	Crimp	6.5-11mm	14 AWG	Yes	1027465 *	1029388	1029389

* Coming soon. Check website for availability.

Device connectors

T-code: 4pos						
Configuration	Mounting	Leads	Packaging	Article No.	Additional Components	
	Male, Black Insert, XL	16mm Front Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1411608	Hex Nut 1504097
		16mm Rear Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1411604	Hex Nut Included
	Male, Black Insert, Standard	16mm Front Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1424140	Hex Nut 1504097
		16mm Rear Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1424136	Hex Nut Included
		25mm Front Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1424130	Flange 1424131
	Male, Black Insert, Shielded	PCB	Through-Hole	T & R	1418341	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1406397	See Housing Table on Page 18
	Male, Black Insert	PCB	Surface Mount	T & R	1411989	See Housing Table on Page 18
		PCB	Surface Mount	Tray/Blister Pack	1411931	See Housing Table on Page 18
		PCB	Through-Hole	T & R	1418339	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1406396	See Housing Table on Page 18
	Female, Black Insert, XL	16mm Front Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1411606	Hex Nut 1504097
		16mm Rear Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1411599	Hex Nut Included
	Female, Black Insert, Standard	16mm Front Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1424138	Hex Nut 1504097
		16mm Rear Mount Thread	0.5m, 16AWG, Flying leads	Bulk	1424134	Hex Nut Included
		PCB	Surface Mount	T & R	1412019	See Housing Table on Page 18
		PCB	Surface Mount	Tray/Blister Pack	1411967	See Housing Table on Page 18
		PCB	Through-Hole	T & R	1418342	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1406412	See Housing Table on Page 18
	Female, Black Insert	PCB	Surface Mount	T & R	1411981	See Housing Table on Page 18
		PCB	Surface Mount	Tray/Blister Pack	1411918	See Housing Table on Page 18
		PCB	Through-Hole	T & R	1418340	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1406411	See Housing Table on Page 18



DC Power – L-code

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

Cordsets






L-Code: Black, 16 AWG, Unshielded, 4pos										
Configuration		Cable	Shielded	Wire	0.3 m	0.6 m	1.5 m	3 m	5 m	10 m
	Female Straight / Open End	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
	Female 90° / Open End	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
	Male Straight / Open End	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
	Male 90° / Open End	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
	Male Straight / Female Straight	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 Contact	
	Female Straight	Crimp	8-13mm	14 AWG	Yes	1027480 *	1029392
	Male Straight	Crimp	8-13mm	14 AWG	Yes	1027479 *	1029388

* Coming soon. Check website for availability.

Device connectors

L-code: 4pos						
Configuration	Mounting	Leads	Packaging	Article No.	Additional Components	
	Male, Black Insert, XL	16mm Front Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425586	Hex Nut 1504097
		16mm Front Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425631	Hex Nut 1504097
		16mm Rear Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425588	Hex Nut Included
		16mm Rear Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425633	Hex Nut Included
	Male, Black Insert, Shielded	PCB	Through-Hole	T & R	1425641	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425639	See Housing Table on Page 18
	Male, Black Insert	PCB	Through-Hole	T & R	1425605	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425603	See Housing Table on Page 18
		PCB, Rear Mount	Through-Hole	Tray/Blister Pack	1425592	Included
	Female, Black Insert, XL	16mm Front Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425587	Hex Nut 1504097
		16mm Front Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425632	Hex Nut 1504097
		16mm Rear Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425589	Hex Nut Included
		16mm Rear Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425634	Hex Nut Included
	Female, Black Insert, Shielded	PCB	Through-Hole	T & R	1425642	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425640	See Housing Table on Page 18
	Female, Black Insert	PCB	Through-Hole	T & R	1425606	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425604	See Housing Table on Page 18
		PCB, Rear Mount	Through-Hole	Tray/Blister Pack	1425593	Included



DC Power – L-code

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

Cordsets

L-Code: Gray, 16 AWG, Unshielded, 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 Contact	FE Contact	
	Female Straight	Crimp	8-13mm	14 AWG	Yes	1027478	1029392	1029389
	Male Straight	Crimp	8-13mm	14 AWG	Yes	1027477	1029388	1029393

Device connectors

L-code: 5pos (4+FE)						
Configuration		Mounting	Leads	Packaging	Article No.	Additional Components
	Male, Gray Insert, XL	16mm Front Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425582	Hex Nut 1504097
		16mm Front Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425627	Hex Nut 1504097
		16mm Rear Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425584	Hex Nut Included
		16mm Rear Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425629	Hex Nut Included
	Male, Gray Insert, Shielded	PCB	Through-Hole	T & R	1425601	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425597	See Housing Table on Page 18
	Male, Gray Insert	PCB	Through-Hole	T & R	1425599	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425594	See Housing Table on Page 18
		PCB, Rear Mount	Through-Hole	Tray/Blister Pack	1415337	Included
	Male, Black Insert, XL	16mm Front Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1415295	Hex Nut 1504097
		16mm Rear Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1415297	Hex Nut Included
	Male, Black Insert, Shielded	PCB	Through-Hole	T & R	1421317	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1421314	See Housing Table on Page 18
	Male, Black Insert	PCB	Through-Hole	T & R	1420828	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1420817	See Housing Table on Page 18
		PCB, Rear Mount	Through-Hole	Tray/Blister Pack	1415337	Included
	Female, Gray Insert, XL	16mm Front Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425583	Hex Nut 1504097
		16mm Front Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425628	Hex Nut 1504097
		16mm Rear Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1425585	Hex Nut Included
		16mm Rear Mount Thread	0.2m, 16AWG, Flying leads	Bulk	1425630	Hex Nut Included
	Female, Gray Insert, Shielded	PCB	Through-Hole	T & R	1425602	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425598	See Housing Table on Page 18
	Female, Gray Insert	PCB	Through-Hole	T & R	1425600	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1425595	See Housing Table on Page 18
		PCB, Rear Mount	Through-Hole	Tray/Blister Pack	1415338	Included
	Female, Black Insert, XL	16mm Front Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1415296	Hex Nut 1504097
		16mm Rear Mount Thread	0.2m, 14AWG, Flying leads	Bulk	1415299	Hex Nut Included
	Female, Black Insert, Shielded	PCB	Through-Hole	T & R	1421318	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1421315	See Housing Table on Page 18
	Female, Black Insert	PCB	Through-Hole	T & R	1420829	See Housing Table on Page 18
		PCB	Through-Hole	Tray/Blister Pack	1420818	See Housing Table on Page 18
		PCB, Rear Mount	Through-Hole	Tray/Blister Pack	1415338	Included



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	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

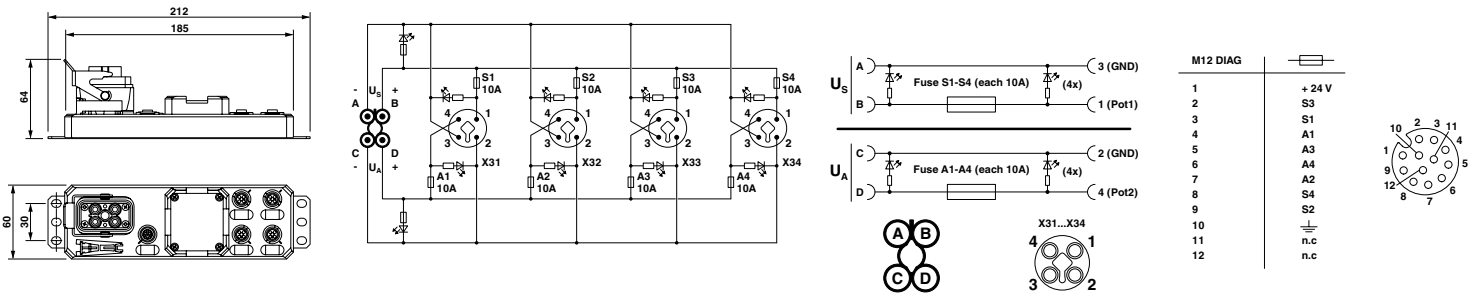
Accessories


	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

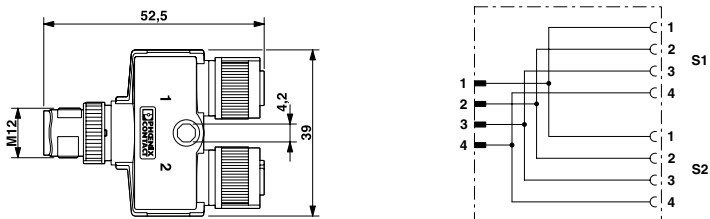
	Power Distribution Boxes - T-code, 4pos Includes LED status displays Number of Slots: 4, single throw Master cable connection – HEAVYCON Compact	With M12 A-coded Diagnostics Port	1411048
		Without Diagnostics Port	1413929

Dimensions and wiring specifications



	Y-Distributor - T-code	Straight Male split to 2x Female connectors	1410632
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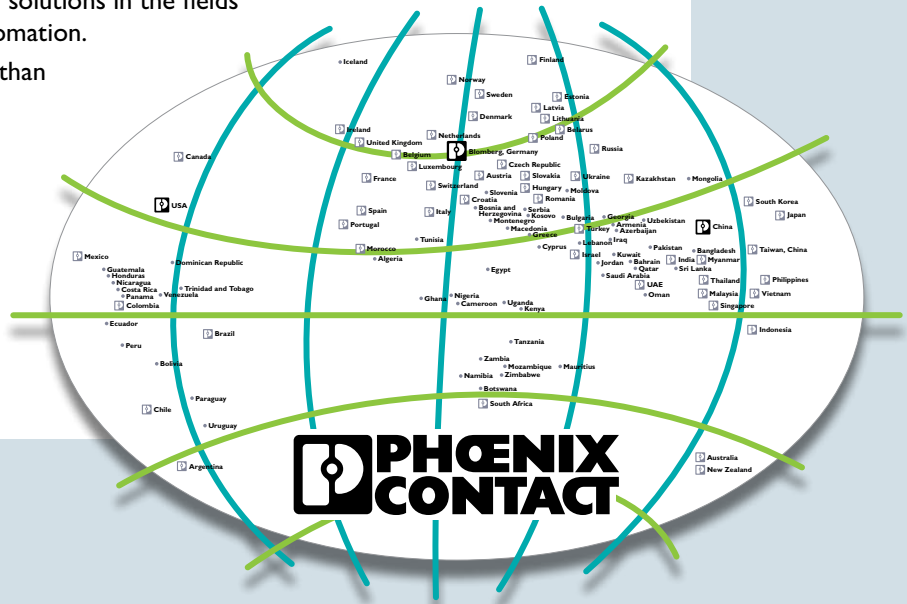
Dimensions and wiring specifications



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