

TURCK

Your Global Automation Partner

Overview M12 Power Product Series



Products are linked with further information.

M12 Power – Products

Power for your applications

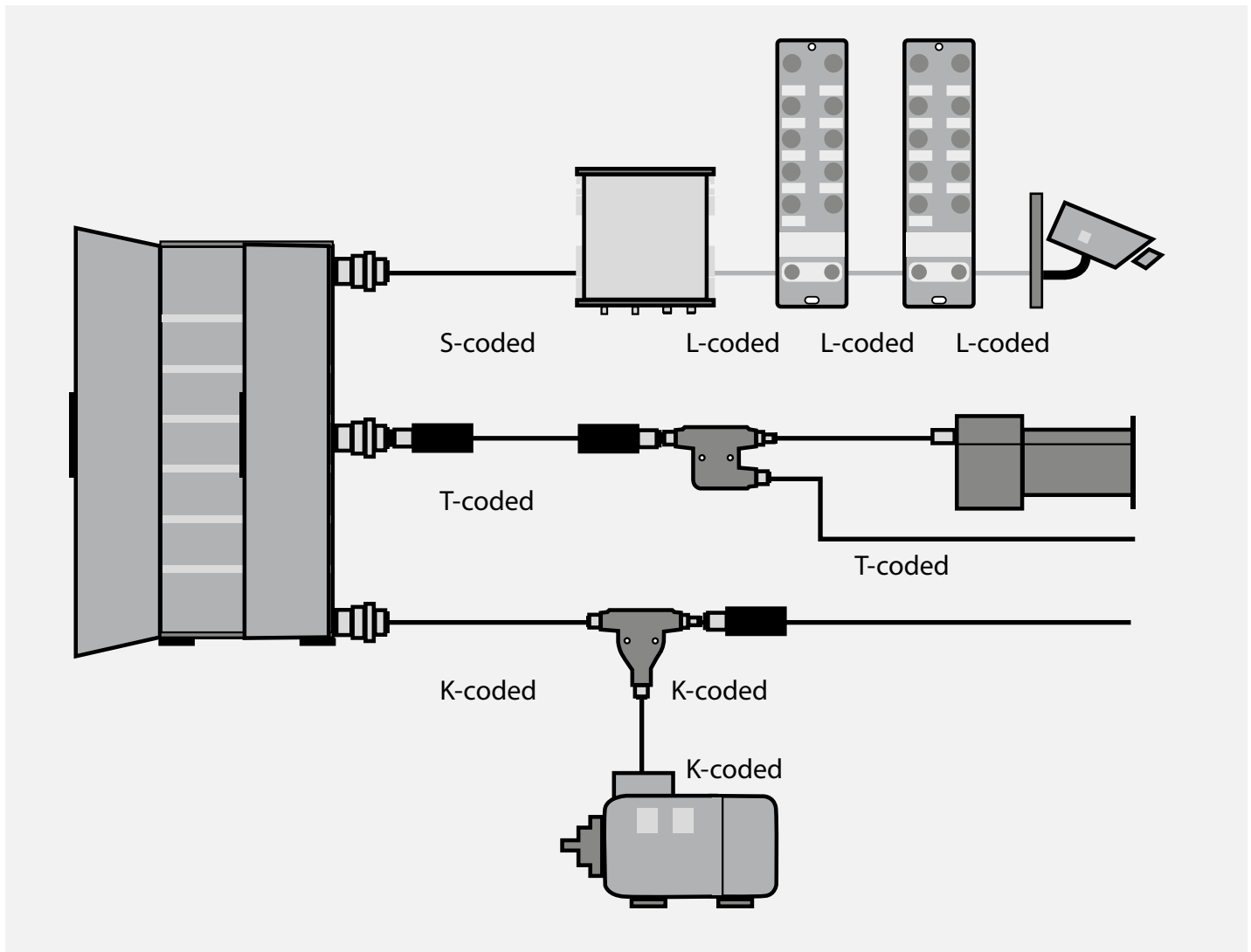
The M12 Power product series consists of cordsets, connectors, receptacles, splitters and adapter cables M12 to 7/8". The combination of connection and extension cables, field-wireable connectors, splitters and receptacles enables a structured and decentralized power supply, from the PSU via the control cabinet to any end device. The products offer maximum performance in an extremely space-saving design.

Benefits of M12 Power

- Safe to operate: M12 Power has been developed according to DIN EN 61076-2-111 and offers outstanding power transfer performance while meeting global standards such as UL
- Reliable: extremely powerful energy transmission, even at high ambient temperatures. Extended derating ensures maximum operating times
- Extensive: wide range of codings (S, L, K, T), overmolded cables, and field-wireable connectors, receptacles, T-splitters and adapter cables - ideal solutions for almost all industries and applications



Power Supply – Compact and Reliable



The 4- and 5-pin L-coded and 4-pin T-coded M12 Power connectors are specifically designed for use on power supplies up to 63 VDC/16 A. Low-voltage applications with moving parts in dusty, damp or hot environments are mastered with flying colors by the new connectors. Motors and drives, network devices and fieldbus Ethernet

components are optimally supplied thanks to the innovative L-coded M12 power connectors.

The 5-pin K-coded and 4-pin S-coded versions are designed for voltage supplies up to 63 VAC/16 A and are particularly suitable for supplying power to AC motors

and drives, frequency converters and motor starters as well as emergency power supplies of control systems.

K		L 5-pin		L 4-pin		S		T	
4	1	4	1	4	1	3	1	3	1
PE	PE	FE	FE	PE	PE	PE	PE	4	4
3	2	3	2	3	2	2	2	2	2
2	3	2	3	2	3	2	2	2	2

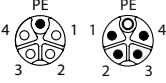
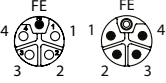
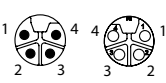
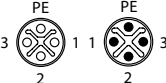
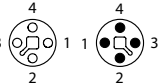
M12 Power – Cordsets



- UL 2237 approved
- Cables with core cross-section of 2.5 mm² or 1.5 mm²
- Withstand high mechanical stresses
- Robust: Resistant to UV and ozone, extended temperature range
- Customized length variants possible
- Reliable EMC protection through optional shielding
- PUR cable jacket: oil resistant, halogen free, suitable for drag chain use
- Meet the requirements of the PNO (Profibus User Organization)
- Designed according to IEC 61076-2-111
- Use in the wet areas of machine tools and transfer lines possible
- Reliable use due to high protection classes IP65, IP67, IP68, IP69K

Type code

R	K	P	56	P	L	A	-	2	-*	/TXG									
R	K	P	56	P	Grip body				L	B	Coding		-	2	Cable length				
					Power designation							Design		Cable length [m]					
					Terminal cross-section							A		Design A		2		2 m	
					46		4 × 16 AWG 1.5 mm ²							B		Design B			
					44		4 × 14 AWG 2.5 mm ²							Coding					
					56		5 × 16 AWG 1.5 mm ²							K		K-coded			
					54		5 × 14 AWG 2.5 mm ²							L		L-coded			
					Housing							S		S-coded					
					P		Plastic housing							T		T-coded			
					S		Shielded												
					Design														
					K		Female												
					S		Male												
					Alignment														
					R		M12, straight												
					W		M12, angled												
-*					Placeholder for extension cable					TXG					Cable Quality				
					Placeholder for extension cable										Cable Quality				
					* Female connector mentioned first, Male receptacle mentioned second, example: RSP56PLA										TXG PUR, gray, halogen-free (only for L-coded, 5-pin)				
															TXL PUR, black, halogen-free				

		K-coded 12 A/16 A A 630 VAC		L-coded 16 A 63 VDC		S-coded 12 A/16 A A 630 VAC		T-coded 12 A/16 A 16 A 63 VDC	
									
Female Open  	Unshielded*	Length	ID	ID	ID	ID	ID	ID	ID
		05	100038810	100038704	100038764	100038834	100038834	100003329	100003329
		1	100038811	100038705	100038765	100038835	100038835	100003330	100003330
		2	100038812	100038706	100038766	100038836	100038836	100003332	100003332
	Shielded*	Length	ID	ID	ID	ID	ID	ID	ID
		0.5	100023967	100023717	x	100023984	100023984	100024001	100024001
		1	100023968	100023934	x	100023985	100023985	100024002	100024002
		2	100023969	100023935	x	100023986	100023986	100024003	100024003
	Unshielded*	Length	ID	ID	ID	ID	ID	ID	ID
		0.5	100038817	100038697	100038759	100038831	100038831	100031201	100031201
Male Open  		1	100038818	100038698	100038760	100038832	100038832	100031371	100031371
		2	100038819	100038699	100038761	100038833	100038833	100031372	100031372
	Shielded*	Length	ID	ID	ID	ID	ID	ID	ID
		0.5	100031374	100031459	x	100031466	100031466	100031470	100031470
		1	100031375	100031463	x	100031467	100031467	100031471	100031471
		2	100031376	100031464	x	100031468	100031468	100031473	100031473
	Unshielded*	Length	ID	ID	ID	ID	ID	ID	ID
		0.3	100038820	100038717	100038772	100038841	100038841	100003337	100003337
		0.5	100038821	100038718	100038773	100038842	100038842	100031373	100031373
		1	100038823	100038720	100038775	100038845	100038845	100003340	100003340
Female Male  		2	100038825	100038722	100038777	100038847	100038847	100004536	100004536
		5	100038828	100038725	100038780	100038850	100038850	100004539	100004539
		10	100038830	100038727	100038782	100038852	100038852	100004541	100004541
	Shielded*	Length	ID	ID	ID	ID	ID	ID	ID
		0.3	100023974	100023940	x	100023991	100023991	100024008	100024008
		0.5	100031456	100031465	x	100031469	100031469	100031474	100031474
		1	100023976	100023942	x	100023993	100023993	100024010	100024010
		2	100023978	100023944	x	100023995	100023995	100024012	100024012
		5	100023981	100023947	x	100023998	100023998	100024015	100024015
		10	100023983	100023949	x	100024000	100024000	100024017	100024017

* Other cable lengths and versions are also available, 5-pin L-coded cables also available in 2.5 mm².



Products are linked with further information.

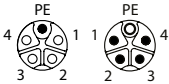
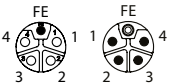
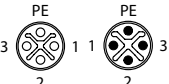
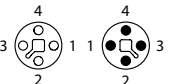
M12 Power – Field-wireable Connectors



- Powerful: DC and AC applications up to 12 A and 63 V or 630 V
- Reliable and established connection technology
- Cable feedthrough from 8 to 13 mm
- Allows flexible and individual connector solutions
- Protected seal in the M12 female connector
- Reliable use ensured by protection class IP67
- Designed acc. to IEC 61076-2-111
- Available in straight and angled version
- Designed for industrial applications in the field of factory automation
- Connection cross-section 1.5 mm² with wire end sleeve and 2.5 mm² without wire end sleeve

Type code

FW	-	E	R	S	P	M	0514	-	P	L	-	S	-	0813	
FW	-	E	R	S	P	M	Design	0514	Number of pins × wire cross-section	-	P	Power designation			
							- Coupling nut - M Metal - P plastic - Housing - P Plastic housing - M Metal housing - S Metal housing, shieldable - Design - K Female - S Male - Alignment - R M12 straight - W M12, angled - Mounting thread - E M12 - FW Field-wireable connector	- Number of pins × wire cross-section 0414 04 × 14 AWG 2.5 mm² 0514 05 × 14 AWG 2.5 mm²	Power designation						
L	Coding										S	Connectivity		0813	Cable feedthrough
	- Coding - K K-coded - L L-coded - S S-coded - T T-coded											- Connectivity - S Screw terminals - I Cutting clamps (IDC) - P Push-In			- Cable feedthrough 0810 8...10 mm cable diameter 0813 8...13 mm cable diameter 0613 6...13 mm cable diameter

	K-coded 12 A 630 VAC	L-coded 12 A 63 VDC	S-coded 12 A 630 VAC	T-coded 12 A 63 VDC
				
Female	ID	ID	ID	ID
	 100008137	 100008139	 100026332	 100026334
	 100036616	 100036618	 100036620	 100036622
	 100045545	 100036741	 100045552	 100045554
		 100045549		
		 100045547		
Male	ID	ID	ID	ID
	 100008138	 100008140	 100026333	 100026335
	 100008138	 100036619	 100036621	 100036623
	 100045546	 100036742	 100045553	 100045555
		 100045551		
		 100045548		



Products are linked with further information.

M12 Power – Receptacles



- Powerful: DC and AC applications up to 12 A or 16 A and 63 V or 630 V
- Anti-twist protection with SW 13.5 mm for secure fixation
- Core cross-sections of 1.5 mm² (S-, T-coded) and 2.5 mm² (K-, L-coded) available
- 16A for front and rear wall mounting
- Designed acc. to IEC 61076-2-111
- Fastening thread M16 × 1.5
- Reliable use thanks to IP68 protection class

Type code

F K FD 54 P L - * / M16

F	K	FD	54	Design	P	L	Coding	*	Cable length	/
				Number of pins × wire cross-section 46 4 × 16 AWG 1.5 mm ² 54 5 × 14 AWG 2.5 mm ²			Coding K Power, K-coded L Power, L-coded S Power, S-coded T Power, T-coded			Cable length [m] 0.5 0.5 m P* Print connection
				Mounting Blank Front-panel mounting FD Back-panel mounting			Power designation			
				Design K Female S Male			M16 Mounting thread			
				Receptacle			Mounting thread 16 M16 × 1.5 20* M20 × 1.5			

* Realizable

		K-coded 12 A 630 VAC	L-coded 16 A 63 VDC	S-coded 12 A 630 VAC	T-coded 12 A 63 VDC
Front-panel mounting Female	Length	ID	ID	ID	ID
	0.5	100003940	100003949	U2-28509	U2-28491
	1	100003941	100003950	U2-28510	U2-28492
	2	100003942	100003951	U2-29265	U2-29258
Front-panel mounting Male	Length	ID	ID	ID	ID
	0.5	100003943	100003946	U2-28500	U2-28482
	1	100003944	100003947	U2-28501	U2-28483
	2	100003945	100003948	U2-29262	U2-29254
Back-panel mounting Female	Length	ID	ID	ID	ID
	0.5	100028358	100028352	U2-28512	U2-28494
	1	100028359	100028353	U2-28513	U2-28495
	2	100028360	100028354	U2-29266	U2-29259
Back-panel mounting Male	Length	ID	ID	ID	ID
	0.5	100028361	100028355	U2-28503	U2-28485
	1	100028362	100028356	U2-28504	U2-28486
	2	100028363	100028357	U2-29263	U2-29255



Products are linked with further information.

M12 Power – Splitters



- Powerful: DC and AC applications up to 12 A and 63 V or 630 V
- Various designs to suit the use in confined spaces
- UL 2237 approved
- Secure flexible through mounting hole
- Enables serial cabling structure at the field level
- Designed acc. to IEC 61076-2-111
- Reliable use thanks to high protection classes (IP65, IP67, IP68)

Type code

VT2 – **M12** **L** – **M5** – **2F5**

VT2	Design	–	M12	Connection thread	L	Coding	–
------------	---------------	---	------------	--------------------------	----------	---------------	---

T-splitters

VT2 T-splitter
VH2 h-splitter
VH3 H-splitter

Connection thread
M12 M12 × 1

Coding

K K-coded
L L-coded
S S-coded
T T-coded

M5	Trunk	–	2F5	Trunk and drop
-----------	--------------	---	------------	-----------------------

Trunk

M4 Male, 4-pin
M5 Male, 5-pin

Trunk and drop

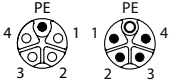
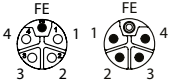
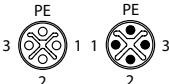
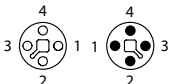
2F4 Female trunk, female drop, 4-pin
2F5 Female trunk, female drop, 5-pin
3F4 Female trunk, 2 × female drop, 4-pin
3F5 Female trunk, 2 × female drop, 5-pin

	K-coded 12 A 630 VAC	L-coded 16 A 63 VDC	S-coded 12 A 630 VAC	T-coded 12 A 63 VDC
H-splitter	ID	ID	ID	ID
	100028590	100028591	100028592	100028593
h-splitter	ID	ID	ID	ID
	100028585	100028587	100028588	100028589
T-splitter	ID	ID	ID	ID
	100029331	100028579	100028580	100028581

Wall ducts/Adapters



- Powerful: DC and AC applications up to 12 A and 63 V or 630 V
- Designed according to IEC 61076-2-111
- Robust and space-saving
- Enables maximum flexibility for installation in automation technology

	K-coded 12 A 630 VAC	L-coded 12 A 63 VDC	S-coded 12 A 630 VAC	T-coded 12 A 63 VDC
				
Wall ducts/adapters	ID	ID	ID	ID
	 100048190	 100048192	 100048189	 100048191
			 100048188	

M12 Power Bulk Cable



- Suitable yard goods as accessories for flexible assemblies in the field
- Cross-sections 1.5 mm² and 2.5 mm²
- UL Style 21223
- PUR cable sheath

Type code

CABLE **5** **6** **PL** **100** **TXG**

CABLE	Design	5	Number of wires	6	Terminal cross-section
	Design		Number of wires		Terminal cross section
		5	5 wires	6	16 AWG 1.5 mm ²
		4	4 wires	4	14 AWG 2.5 mm ²
PL	Coding	100	Cable lenght in meter	TXG	Cable quality
	Coding		Cable lenght in meter		Cable quality
	PL L-coded			TXG PUR, grey	
	PLT L- & T-coded			TXL PUR, black	
	PK K-coded				
	PS S-coded				

	K-coded	L-coded	L/T-coded	S-coded
Cross section	5-wire	5-wire	4-wire	4-wire
1.5 mm ²	100049064	100049059	100049062	100049067
2.5 mm ²	100049065	100049061	100049063	x



Products are linked with further information.

TURCK

Your Global Automation Partner

Over 30 subsidiaries and
60 representatives worldwide!

100029537 | 2024/03



#turck | www.turck.com