



M12 L-coded & K-coded 16 A power cordset

M12 L-coded / K-coded

High-Current Power Cordset Assembly

IEC 61076-2-111 M12 L-coded (63 V DC / 16 A) & K-coded (630 V AC / 16 A) power cordset

IEC 61076-2-111

16 A / 63 V DC & 630 V AC

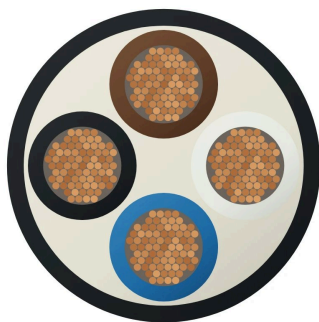
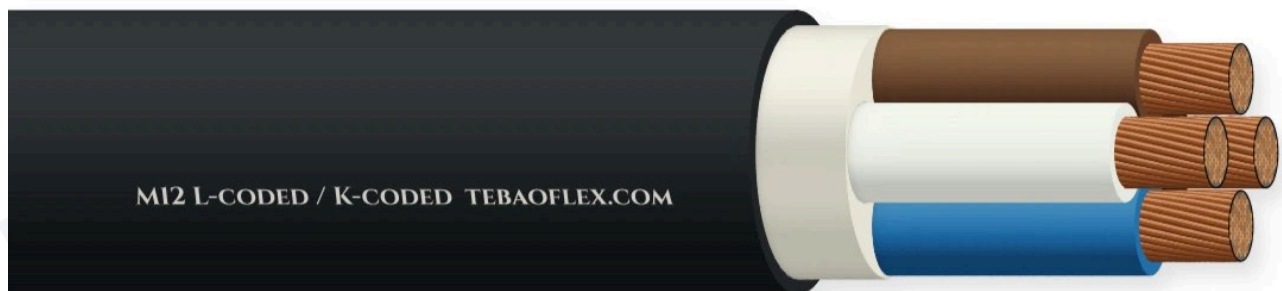
1.5 & 2.5 mm² PUR

Application

High-current M12 power cordset to IEC 61076-2-111 in 4+FE L-coded (63 V DC, 16 A for 24 V DC I/O blocks) and 4+PE K-coded (630 V AC, 16 A for AC motors and VFDs), overmoulded on 1.5 mm² and 2.5 mm² drag-chain PUR cable.

Typical uses: PROFINET & EtherCAT Distributed I/O Blocks, Decentralised 400/480 V AC Motor Starters, Automotive Body-in-White Welding Lines, Intralogistics Roller & Sortation Conveyors, Cabinetless Machine Tool Automation

Construction



Cross-section, not to scale

- 1 Extra-fine Class 6 power conductors
- 2 High-temperature PP / TPM core insulation
- 3 Optional EMC tinned copper braid
- 4 Halogen-free drag-chain PUR outer jacket

Technical data

Typical values

L-coded rated voltage / current	63 V DC / 16 A per contact at 40 °C	K-coded rated voltage / current	630 V AC / 16 A per contact at 40 °C
Rated impulse voltage	1.5 kV (L-coded) · 6.0 kV (K-coded, pollution degree 3)	Contact resistance	≤ 3 mΩ (gold/silver-plated turned contacts)
Conductor resistance (20 °C)	≤ 13.3 Ω/km (1.5 mm²) · ≤ 7.98 Ω/km (2.5 mm²)	Operating temperature (fixed)	−40 °C to +90 °C (connector +105 °C)
Operating temperature (drag chain)	−25 °C to +80 °C	Conductor cross-section	4×1.5 mm², 5×1.5 mm² (4+FE/PE), 4×2.5 mm², 5×2.5 mm²
Min. bend radius (fixed / chain)	4 × OD fixed · 7.5 × OD drag chain	Drag-chain endurance	≥ 5,000,000 cycles at 3 m/s, 5 m/s²
Mating durability	≥ 100 mating cycles (IEC 61076-2-111)	Ingress protection	IP65 / IP67 / IP69K (mated at 0.6 Nm)
Oil & coolant resistance	UL Oil Res I & II / EN 60811-404	Flame retardancy & halogen	UL 94 V-0 TPU head · UL VW-1 / IEC 60332-1-2 · IEC 60754-1
Standards	IEC 61076-2-111	Standard packing	Individually bagged with captive clip-on label sleeves on both ends

Sizes

12 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Coding & Poles	Cores × Size mm² (AWG)	Connector Configuration	Rating V / A	Cable OD mm	Cable Wt kg/km	Chain R mm
M12 L-Coded Power Cordsets — 63 V DC / 16 A (4-Pin & 4+FE for 24 V DC I/O) 8 sizes							
☐ M12L-4P-150-FS-PUR	L-code 4-pin	4×1.5 (16 AWG)	Female Straight → Open	63V DC / 16A	7.4	88	56
☐ M12L-4P-250-FS-PUR	L-code 4-pin	4×2.5 (14 AWG)	Female Straight → Open	63V DC / 16A	8.8	132	66
☐ M12L-5P-150-FS-PUR	L-code 4+FE	5×1.5 (16 AWG)	Female Straight → Open	63V DC / 16A	8.1	108	61
☐ M12L-5P-150-FA-PUR	L-code 4+FE	5×1.5 (16 AWG)	Female 90° Angled → Open	63V DC / 16A	8.1	108	61
☐ M12L-5P-150-MSFS-PUR	L-code 4+FE	5×1.5 (16 AWG)	Male Str ↔ Female Str	63V DC / 16A	8.1	108	61
☐ M12L-5P-250-FS-PUR	L-code 4+FE	5×2.5 (14 AWG)	Female Straight → Open	63V DC / 16A	9.6	162	72
☐ M12L-5P-250-MSFS-PUR	L-code 4+FE	5×2.5 (14 AWG)	Male Str ↔ Female Str	63V DC / 16A	9.6	162	72
☐ M12L-5P-250-SH-MSFS	L-code 4+FE Shielded	5×2.5 (14 AWG)	Shielded Male ↔ Female	63V DC / 16A	10.4	198	78
M12 K-Coded Power Cordsets — 630 V AC / 16 A (4+PE for 3-Phase AC Drives) 4 sizes							
☐ M12K-5P-150-FS-PUR	K-code 4+PE	5G1.5 (16 AWG)	Female Straight → Open	630V AC / 16A	8.6	118	65
☐ M12K-5P-150-MSFS-PUR	K-code 4+PE	5G1.5 (16 AWG)	Male Str ↔ Female Str	630V AC / 16A	8.6	118	65
☐ M12K-5P-250-FS-PUR	K-code 4+PE	5G2.5 (14 AWG)	Female Straight → Open	630V AC / 16A	10.2	176	77
☐ M12K-5P-250-SH-MSFS	K-code 4+PE Shielded	5G2.5 (14 AWG)	Shielded Male ↔ Female	630V AC / 16A	11.0	215	83

– Standard cordset lengths: 0.5 m, 1.0 m, 1.5 m, 2.0 m, 3.0 m, 5.0 m, 7.5 m, 10.0 m, 15.0 m, and 20.0 m; T-splitters and H-splitters available for L-code daisy-chaining.

Standards and approvals

- ✓ IEC 61076-2-111 M12 L-Coded & K-Coded Compliant
- ✓ cULus Listed UL 2238 & PNO PROFINET Power

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/m12-l-coded-and-k-coded-high-current-fieldbus-power-cordset-assembly



Typical values for this cable type, based on IEC 61076-2-111 / PNO 2.002 / UL 2238 / UL 758 Style 20939. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.