

Low frequency data transmission cables • UL/CSA-certified

























UNITRONIC® 300 STP

Screened control and signal cables with small cross sections and twisted pairs - UL/CSA listed

LAPP KABEL STUTTGART UNITRONIC® 300 STP



Benefits

- Overall braid minimises electrical interference
- · Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- Control and signal cables for internal and external wiring
- · Process control; electrical equipment; industrial machinery; low-voltage control interconnect
- Wiring of devices, machines and plants intended for export to the North American market or countries where UL-/CSA certified cables are used.
- · For the North American market
- Thanks to the DIRECT BURIAL approval, direct burial of versions with the nominal conductor cross section 18 AWG is normatively permitted in the USA

Product features

- · CMG (for USA and Canada) and PLTC (for USA) for tray use in North America (24 AWG has got no PLTC certification)
- PLTC-ER & ITC-ER ("-ER" = Exposed Run: In the USA, unprotected transitions of the cable outside of trays, each transition with a max. length of 1.8 m or 6 ft., according to NEC/ NFPA 70) for 18 AWG
- · UV-resistant UL SUN RES
- DIRECT BURIAL-Zertifizierung for 18 AWG for normatively permitted, direct burial in

Norm references / Approvals

- UL: CMG per UL 444; PLTC-ER per UL 13 (18 AWG); PLTC (not for 24 AWG); ITC-ER per UL 2250 (18 AWG); UL AWM Style
- According to NEC/NFPA 70, 2014 HANDBOOK, ARTICLE 501, II., 501.10, (B), (1), and apart from any kind of "Flexible Connections", suitability for Class I, Division 2 in the USA, and that for all versions with ITC-ER as per NEC 2014 ARTICLE 727.4 and in conjunction with additional UL listed components as well as for all versions with PLTC or PLTC-ER in line with the provisions of NEC 2014 ARTICLE 725 and in mandatory conjunction with tray use and additional, UL listed components
- Canada: c(UL) CMG FT4, CSA AWM I/II A/BFT1
- Oil-resistant according to UL OIL RES I

Product Make-up

- Fine-wire strand made of tinned-copper wires
- Core insulation made of PVC
- TP structure
- Overall foil tape wrapping, drain wire, tin-plated copper braiding (75 % coverage)
- Outer jacket: Specially Formulated PVC, dark gray (similar to RAL 7005)

Technical data



Classification

ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable



Core identification code Pair 1: black, red

Pair 2: black, white Pair 3: black, green

Pair 4: black, blue

Pair 5: black, vellow Pair 6: black, brown

Exception single-paired, 24-22 AWG: black, white



Peak operating voltage

(not for power applications) 300 V UL/CSA: 300 V



Minimum bending radius

Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter



Test voltage 1500 V



Temperature range

Occasional flexing: -25°C to +105°C (AWM for USA: +80°C) Fixed installation: -40°C to +105°C (AWM for USA: +80°C)

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® 300 ST	ТР			
302402STP	2 x 2 x 24 AWG	6.5	25.5	59
302403STP	3 x 2 x 24 AWG	6.8	31.1	65
302406STP	6 x 2 x 24 AWG	8.7	49.7	106
302201STP	1 x 2 x 22 AWG	5.1	19.1	39
302203STP	3 x 2 x 22 AWG	7.7	38.2	71
302206STP	6 x 2 x 22 AWG	9.6	70	125
302002STP	2 x 2 x 20 AWG	9.4	47.7	128
302003STP	3 x 2 x 20 AWG	10.5	68.2	161
302006STP	6 x 2 x 20 AWG	13.3	106.5	321
301801STP	1 x 2 x 18 AWG	6.8	37.8	106
301802STP	2 x 2 x 18 AWG	10.7	66.2	122
301806STP	6 x 2 x 18 AWG	14.6	153.1	324

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request. Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges. Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil 152 m; Drum 305 m Photographs are not to scale and do not represent detailed images of the respective products.

Similar products

• UNITRONIC® FD CP (TP) plus refer to page 309

Accessories

- SKINTOP® MS-SC-M refer to page 732
- DATA STRIP stripping tool refer to page 1001