Low frequency data transmission cables • Highly flexible and UL/CSA-certified

























UNITRONIC® FD CP plus

Screened highly flexible data transmission cable with PUR outer sheath - UL/CSA-listed

LAPP KABEL STUTTGART UNITRONIC® FD CP plus

Benefits

- Wide temperature range for applications in harsh climatic environments
- Overall braid minimises electrical interference
- UL AWM voltage rating 1000V in case of internal wiring allows for internal laying next to power cables with applied UL rating of 1kV
- In the USA inside of industrial machines, per NFPA 79, 2015 Ed., 12.9.2 (condition 3 under 12.9.2: Through 1 mm² and <16 AWG), but not inside drag chains or on machines since AWM style is limited to internal wiring
- ATTENTION: 3rd condition acc. to NFPA 79, 2015 Ed., 12.9.2, not applicable for this product before May 2016

Application range

- Multifunctional-use, e.g. for packaging industry and storage and retrieval units
- Suitable for use in measuring, control and regulating circuits
- Drag chain use in case of horizontal installation travel distances up to 100 m
- For use in drag chains: Please respect the assembly guidelines listed in Appendix T3
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Product features

- Halogen-free, has low capacitance and is flexible down to -40°C
- PUR outer sheath, tear and notchresistant, resistant to mineral oils and abrasion when used in power chains
- Low-adhesive surface, resistant to hydrolysis and microbes, oil resistant
- Flame retardance ratings: IEC 60332-1-2,
 VW-1 acc. UL 1581, FT2 (Horizontal Flame Test)
- Designed for 5 up to 10 million bending/ unbending cycles (constant flex) in drag chains

Norm references / Approvals

- CULus CMX (Communications Cable listing) acc. to UL 444 and CSA C22.2 No.214, certified by UL (UL file no. for Stuttgart-based U.I. Lapp GmbH: E236660)
- CULus AWM/ Recognized certification (by UL/ UL file no. for Stuttgart-based U.I. Lapp GmbH: E63634): UL AWM Style 21576 acc. to UL 758 and AWM A/B I/II to CSA C22.2 No. 210-11

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation: Based on Polyolefin
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of special PUR compound

Outer sheath colour: grey (RAL 7001)

Info

- · Flexible at low temperatures
- Low capacitance
- · Halogen-free

Technical data



Classification

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



Core identification code
DIN 47100, refer to Appendix T9



Mutual capacitance C/C approx. 60 nF/km



Peak operating voltage

Peak: 250 V (not for power current use or continuous operating voltage to ground above 49VAC or 74VDC)



Inductivity

approx. 0.65 mH/km
Conductor stranding



Stranded, extra-fine wire

Torsion movement in WTG



TW-0 & TW-2, refer to Appendix T0



Minimum bending radiusFlexing: 7.5 x outer diameter

Fixed installation: 4 x outer diameter



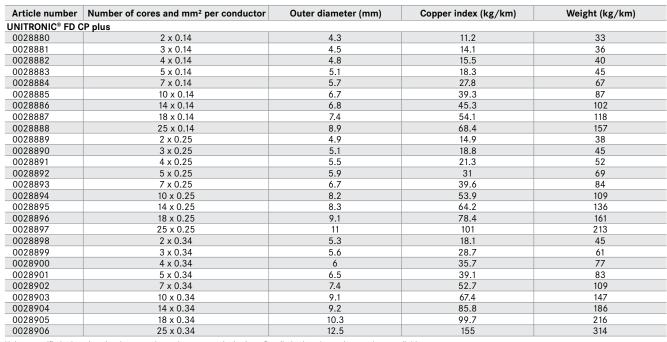
Test voltage

Core/core: 1500 V rms Core/screen: 500 V

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Temperature range Flexing: -40°C to +80°C Fixed installation: -40°C to +80°C

UL/CSA CMX: +75°C UL AWM: +80 °C



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 4 30 kg or 4 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils). Photographs are not to scale and do not represent detailed images of the respective products.