UNITRONIC® FD CP plus

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

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 notch-resistant, 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 radius
Flexing: 7.5 x outer diameter
Fixed installation: 4 x outer diameter

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

Temperature range
Flexing: -40°C to +80°C
Fixed installation: -40°C to +80°C
UL/CSA CMX: +75°C
UL AWM: +80 °C

Article number	Number of cores and mm² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD CP plus				
0028880	2 x 0.14	4.3	11.2	33
0028881	3 x 0.14	4.5	14.1	36
0028882	4 x 0.14	4.8	15.5	40
0028883	5 x 0.14	5.1	18.3	45
0028884	7 x 0.14	5.7	27.8	67
0028885	10 x 0.14	6.7	39.3	87
0028886	14 x 0.14	6.8	45.3	102
0028887	18 x 0.14	7.4	54.1	118
0028888	25 x 0.14	8.9	68.4	157
0028889	2 x 0.25	4.9	14.9	38
0028890	3 x 0.25	5.1	18.8	45
0028891	4 x 0.25	5.5	21.3	52
0028892	5 x 0.25	5.9	31	69
0028893	7 x 0.25	6.7	39.6	84
0028894	10 x 0.25	8.2	53.9	109
0028895	14 x 0.25	8.3	64.2	136
0028896	18 x 0.25	9.1	78.4	161
0028897	25 x 0.25	11	101	213
0028898	2 x 0.34	5.3	18.1	45
0028899	3 x 0.34	5.6	28.7	61
0028900	4 x 0.34	6	35.7	77
0028901	5 x 0.34	6.5	39.1	83
0028902	7 x 0.34	7.4	52.7	109
0028903	10 x 0.34	9.1	67.4	147
0028904	14 x 0.34	9.2	85.8	186
0028905	18 x 0.34	10.3	99.7	216
0028906	25 x 0.34	12.5	155	314

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 ≤ 30 kg or ≤ 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.