UNITRONIC® FD CP plus

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



- Single halogen-free cable
- Cold-resistant
- Mechanical resistance
- Oil-resistant
- Power chain
- Interference signals
- Torsion-resistant
- Wind Energy

Info

Flexible at low temperatures
Low capacitance
Single halogen-free cable

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 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)

©2016 Lapp Group - Technical changes reserved

UNITRONIC® FD CP plus

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 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

Technical Data

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

Note

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.

©2016 Lapp Group - Technical changes reserved

UNITRONIC® FD CP plus

Part 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	31.0	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	11.0	101.0	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	6.0	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	155.0	314

©2016 Lapp Group - Technical changes reserved