

## UNITRONIC® FD CP plus

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

UNITRONIC® FD CP plus: Low-frequency PUR data cable UL AWM 1000V VW-1 Halogen-free, Highly flexible, energy/ drag chain, low capacitance, screened, -40°C/ +90°C

### Info

Flexible at low temperatures  
Low capacitance  
Halogen-free



Torsion-resistant



Interference signals



Power chain



Oil-resistant



Mechanical resistance



Halogen-free



Wind Energy



Cold-resistant

Last Update (13.06.2018)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

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## 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 mm<sup>2</sup> and <16 AWG)

### Application range

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 chain/carrier: 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: IEC 60332-1-2, VW-1, FT2

Designed for 5 up to 10 million bending/unbending cycles (constant flex) in drag chains

### Norm references / Approvals

cULus CMX certified by UL (UL: E236660)

cRUus AWM certified by UL (UL: E63634): UL AWM Style 21576 and AWM A/B I/II

### 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)

## UNITRONIC® FD CP plus

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control 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 cULus CMX: max. +75°C cRUus AWM: max. +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](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil  $\leq$  30 kg or  $\leq$  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 and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

**UNITRONIC® FD CP plus**

Article number	Number of cores and mm <sup>2</sup> 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	51
0028885	10 x 0.14	6.7	39.3	59
0028886	14 x 0.14	6.8	45.3	62
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	4.7	14.9	38
0028890	3 x 0.25	4.9	18.8	45
0028891	4 x 0.25	5.3	21.3	52
0028892	5 x 0.25	5.6	31	69
0028893	7 x 0.25	6.4	39.6	76
0028894	10 x 0.25	7.6	53.9	98
0028895	14 x 0.25	7.9	64.2	120
0028896	18 x 0.25	8.6	78.4	142
0028897	25 x 0.25	10.4	101	213
0028898	2 x 0.34	5.1	18.1	40
0028899	3 x 0.34	5.4	28.7	50
0028900	4 x 0.34	5.8	35.7	60
0028901	5 x 0.34	6.2	39.1	70
0028902	7 x 0.34	7.1	52.7	109
0028903	10 x 0.34	8.6	67.4	147
0028904	14 x 0.34	8.8	85.8	166
0028905	18 x 0.34	9.8	99.7	190
0028906	25 x 0.34	11.8	155	260

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