


U.I. Lapp GmbH	PRODUCT INFORMATION	
	UNITRONIC® FD CP (TP) plus	14.11.2013

Screened highly flexible data transmission cable with PUR outer sheath and twisted pairs - UL/CSA-listed
 Wide temperature range for applications in harsh climatic environments
 Optimized cable construction for power chain use
 Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
 Overall braid minimises electrical interference



Halogen-free



Cold-resistant



Mechanical resistance



Oil-resistant



Power chain



Interference signals



Torsion-resistant



Wind Energy


Info

Flexible at low temperatures
 Low capacitance
 Halogen-free

Application range

In power chains or moving machine parts
 Suitable for use in measuring, control and regulating circuits
 Linear robots, automated handling equipment
 For the North American market
 Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Product Management	Document: LAPP_PRO241EN.pdf	1 / 4
--------------------	-----------------------------	-------

U.I. Lapp GmbH	PRODUCT INFORMATION	
	UNITRONIC® FD CP (TP) plus	14.11.2013

Design

Extra-fine wire strand made of bare copper wires
Core insulation: Based on PolyolefinTP structure
Non-woven wrapping
Tinned-copper braiding
Outer sheath made of special PUR compound
Outer sheath colour: grey (RAL 7001)

Norm references / Approvals

Approval: UL/CSA type CMX in accordance with UL 444 and CSA C22.2 no. 214
For travel distances up to 100 m (horizontal)
For use in power chains: Please comply with the assembly guidelines listed in Appendix T3

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-retardant according to IEC 60332-1-2 and VW-1 acc. to UL-1581
Designed for 5 up to 10 million bending/unbending cycles in the power chain.

Remark

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100kg. 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.

Technical Data

Core identification code:	DIN 47100, refer to Appendix T9
Mutual capacitance:	Up to 0.5 mm ² : 60 nF/km Up to 1.0 mm ² : 70 nF/km
Peak operating voltage:	(not for power applications) 250 V
Inductivity:	approx. 0.65 mH/km
Specific insulation resistance:	> 5 GOhm x km
Conductor stranding:	Stranded, extra-fine wire From 0.5 mm ² : extra-fine wire according to IEC 60228 class 6
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: up to +75 °C

Product Management	Document: LAPP_PRO241EN.pdf	2 / 4
--------------------	-----------------------------	-------

UNITRONIC® FD CP (TP) plus

14.11.2013

Part number	Number of pairs and mm ² per conductor	AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD CP (TP) plus					
0030910	2 x 2 x 0,14	26 AWG	5.9	19.4	42
0030911	3 x 2 x 0,14	26 AWG	6.2	23.4	53
0030912	4 x 2 x 0,14	26 AWG	6.7	27.1	59
0030913	5 x 2 x 0,14	26 AWG	7.3	37.4	75
0030914	6 x 2 x 0,14	26 AWG	7.5	49.4	91
0030915	8 x 2 x 0,14	26 AWG	8.8	54.8	109
0030916	10 x 2 x 0,14	26 AWG	10.1	60.1	120
0030962	1 x 2 x 0,25	24 AWG	4.9	14.0	27
0030919	2 x 2 x 0,25	24 AWG	7.0	32.0	60
0030920	3 x 2 x 0,25	24 AWG	7.4	38.4	72
0030921	4 x 2 x 0,25	24 AWG	8.3	43.2	85
0030922	5 x 2 x 0,25	24 AWG	9.0	51.5	103
0030923	6 x 2 x 0,25	24 AWG	9.3	71.8	131
0030924	8 x 2 x 0,25	24 AWG	10.9	74.4	155
0030925	10 x 2 x 0,25	24 AWG	12.6	90.0	186
0030926	14 x 2 x 0,25	24 AWG	12.8	111.2	219
0030963	1 x 2 x 0,34	22 AWG	5.3	20.0	36
0030928	2 x 2 x 0,34	22 AWG	7.9	41.0	81
0030929	3 x 2 x 0,34	22 AWG	8.4	52.0	101
0030930	4 x 2 x 0,34	22 AWG	9.2	59.0	119
0030932	6 x 2 x 0,34	22 AWG	10.6	86.2	165
0030933	8 x 2 x 0,34	22 AWG	12.4	107.3	221
0030934	10 x 2 x 0,34	22 AWG	14.5	131.1	274
0030964	1 x 2 x 0,5	20 AWG	5.9	22.0	47
0030937	2 x 2 x 0,5	20 AWG	9.0	50.0	99
0030938	3 x 2 x 0,5	20 AWG	9.8	71.8	130
0030939	4 x 2 x 0,5	20 AWG	10.7	74.4	148
0030940	5 x 2 x 0,5	20 AWG	11.9	84.5	168
0030941	6 x 2 x 0,5	20 AWG	12.3	99.6	194
0030942	8 x 2 x 0,5	20 AWG	14.7	144.3	284

Part number	Number of pairs and mm ² per conductor	AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
0030943	10 x 2 x 0,5	20 AWG	16.7	176.0	343
0030944	14 x 2 x 0,5	20 AWG	17.0	215.4	401
0030965	1 x 2 x 0,75	19 AWG	6.3	34.0	61
0030946	2 x 2 x 0,75	19 AWG	9.9	60.0	112
0030947	3 x 2 x 0,75	19 AWG	10.5	85.7	157
0030948	4 x 2 x 0,75	19 AWG	11.8	93.6	172
0030950	6 x 2 x 0,75	19 AWG	13.8	130.4	231
0030951	8 x 2 x 0,75	19 AWG	15.9	192.2	342
0030952	10 x 2 x 0,75	19 AWG	18.8	258.0	466
0030953	14 x 2 x 0,75	19 AWG	19.3	316.6	545
0030955	1 x 2 x 1	18 AWG	6.7	42.0	71
0030956	2 x 2 x 1	18 AWG	10.6	73.0	129
0030957	3 x 2 x 1	18 AWG	11.5	93.6	169
0030958	4 x 2 x 1	18 AWG	12.7	117.8	204
0030959	5 x 2 x 1	18 AWG	14.3	139.0	237