

UNITRONIC® FD P plus

Highly flexible data cable with PUR sheath and AWM certification for use in the US and Canada

UNITRONIC® FD P plus: Low-frequency PUR data cable UL AWM 1000V VW-1 halogen-free highly flexible, energy/ drag chain constant flex, low capacitance, -40°C/90°C

Info

Flexible at cold temperatures
Low capacitance
Halogen-free



Power chain



Oil-resistant



Mechanical resistance



Halogen-free



Cold-resistant

Benefits

Well-proven and reliable

Wide temperature range for applications in harsh climatic environments

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, according to NFPA 79, 2015 ed., 12.9.2 (exception 3 under 12.9.2: Up to 1 mm² and <16 AWG)

Last Update (25.02.2017)

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Product Management www.lappkabel.de

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

PN 0456 / 02_03.16

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Application range

Highly flexible data cable with PUR outer sheath, meets the highest service life requirements, even under harsh climatic conditions.

Multifunctional use, e.g. in the 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.

...No use inside drag chains in the USA since the UL AWM Style 21576 does not allow external wiring/ interconnection

For use in drag chains: Please observe the assembly guidelines in table T3

Product features

PUR outer sheath, tear- and notch-resistant, resistant to mineral oils and abrasion when used in power chains

Flame retardance: ratings: IEC 60332-1-2, FT2 (Horizontal Flame Test)

Halogen-free, low capacitance and flexible at temperatures as low as -40 °C

Oil-resistant

Low-adhesive surface, resistant to hydrolysis and microbes, oil-resistant

Norm references / approvals

Based on VDE 0812

cULus AWM/ Recognized certification (by UL/UL file no. for U.I. Lapp GmbH: E63634): UL AWM Style 21576 according to UL 758 and AWM A/B I/II according to CSA C22.2 no. 210-11

Design

Extra-fine wire strand made of bare copper wires

Polyolefin-based core insulation

Fleece wrapping

Outer sheath made of special PUR compound

Outer sheath colour: grey (RAL 7001)

Technical Data

Classification:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Core identification code:	DIN 47100, refer to appendix T9
Operating capacitance:	C/C approx. 60 nF/km
Peak operating voltage:	Peak: 250 V (not for power use or continuous operating voltage to ground above 49 VAC or 74 VDC)
Inductance:	approx. 0.65 mH/km
Conductor design:	Stranded, extra-fine wire
Minimum bending radius:	Flexing: 5 x outer diameter Fixed installation: 3 x outer diameter
Test voltage:	1500 V
Temperature range:	Flexing: -40 °C to +80 °C Fixed installation: -40 °C to +80 °C

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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; see catalogue appendix T17 for the application and definition of "Metal price basis" and "Metal index"

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging: Ring ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred packaging (e.g. 1 x 500 m drum or 5 x 100 m rings)

Photographs 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.

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Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
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0028647	2 x 0.14	3.4	2.8	20
0028650	3 x 0.14	3.9	4.1	25
0028651	4 x 0.14	4.2	5.6	30
0028652	5 x 0.14	4.5	7	34
0028677	6 x 0.14	5.1	8.4	42
0028653	7 x 0.14	5.1	9.8	48
0028654	10 x 0.14	6.1	14	60
0028678	12 x 0.14	6.3	16.8	67
0028656	18 x 0.14	6.8	25.2	87
0028657	25 x 0.14	8.3	35	120
0028658	2 x 0.25	4.3	5	27
0028659	3 x 0.25	4.5	7.5	32
0028660	4 x 0.25	4.9	10	39
0028661	5 x 0.25	5.3	12.5	49
0028679	6 x 0.25	6.1	15	55
0028662	7 x 0.25	6.1	17.5	61
0028663	10 x 0.25	7.4	25	80
0028680	12 x 0.25	7.5	30	87
0028664	14 x 0.25	7.5	35	103
0028665	18 x 0.25	8.5	45	125
0028666	25 x 0.25	10.4	62.5	171
0028667	2 x 0.34	4.7	6.8	33
0028668	3 x 0.34	5	10.2	41
0028669	4 x 0.34	5.4	13.6	55
0028670	5 x 0.34	5.9	17	62
0028671	7 x 0.34	6.8	23.8	80
0028672	10 x 0.34	8.5	34	110
0028673	14 x 0.34	8.6	47.6	144
0028674	18 x 0.34	9.7	61.2	175
0028675	25 x 0.34	11.9	85	239

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