

## UNITRONIC® FD P plus

Highly flexible data cable with PUR jacket and AWM certification for US & Canadian use

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 low temperatures  
Low capacitance  
Halogen-free



Halogen-free



Cold-resistant



Mechanical resistance



Oil-resistant



Power chain

### 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, per NFPA 79, Section 12.9.2 (condition 3 under 12.9.2: Thru 1 mm<sup>2</sup> and <16 AWG)

### Application range

Last Update (19.09.2019)

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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.

PN 0456 / 02\_03.16

## UNITRONIC® FD P plus

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

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

### 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, has low capacitance and is flexible down to -40°C

Oil-resistant

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

### Norm references / Approvals

Based on VDE 0812

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

Outer sheath made of special PUR compound

Outer sheath colour: grey (RAL 7001)

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000830 ETIM 6.0 Class-Description: Data cable
Core identification code:	DIN 47100, refer to Appendix T9
Mutual capacitance:	C/C approx. 60 nF/km
Inductivity:	approx. 0.65 mH/km
Conductor stranding:	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 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 ≤ 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 and graphics are not to scale and do not represent detailed images of the respective products.

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## UNITRONIC® FD P plus

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

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Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD P plus				
0028647	2 x 0.14	3.7	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	4.8	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	5.9	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	4.1	5	27
0028659	3 x 0.25	4.3	7.5	32
0028660	4 x 0.25	4.7	10	35
0028661	5 x 0.25	5	12.5	49
0028679	6 x 0.25	5.4	15	55
0028662	7 x 0.25	5.8	17.5	43
0028663	10 x 0.25	7	25	72
0028680	12 x 0.25	6.7	30	87
0028664	14 x 0.25	7.1	35	73
0028665	18 x 0.25	8	45	104
0028666	25 x 0.25	9.8	62.5	133
0028667	2 x 0.34	4.5	6.8	33
0028668	3 x 0.34	4.8	10.2	39
0028669	4 x 0.34	5.2	13.6	41
0028670	5 x 0.34	5.6	17	44
0028671	7 x 0.34	6.5	23.8	55
0028672	10 x 0.34	8	34	85
0028673	14 x 0.34	8.2	47.6	94
0028674	18 x 0.34	9	61.2	131
0028675	25 x 0.34	11	85	200

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