® LAPP GROUP

Low frequency data transmission cables • Highly flexible and UL/CSA-certified

















UNITRONIC® FD P plus

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

Info

- · Flexible at low temperatures
- Low capacitance
- · Halogen-free

LAPP KABEL STUTTGART UNITRONIC® FD P plus



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, 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

Application range

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

Product features

- · PUR outer sheath, tear and notchresistant, 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
- 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 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 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable



Core identification code DIN 47100, refer to Appendix T9 Mutual capacitance

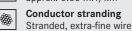


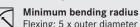
C/C approx. 60 nF/km Peak operating voltage

Peak: 250 V (not for power current use or continuous operating voltage to ground above 49VAC or 74VDC)



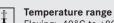
Inductivity approx. 0.65 mH/km





Flexing: 5 x outer diameter Fixed installation: 3 x outer diameter





Flexing: -40°C to +80°C Fixed installation: -40°C to +80°C

| Article number | Number of cores and mm² per conductor | Outer diameter (mm) | Copper index (kg/km) | Weight (kg/km) |
|-----------------|---------------------------------------|---------------------|----------------------|----------------|
| UNITRONIC® FD F | P plus | | | |
| 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 |
| 0028653 | 7 x 0.14 | 5.1 | 9.8 | 48 |
| 0028654 | 10 x 0.14 | 6.1 | 14 | 60 |
| 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 |
| 0028662 | 7 x 0.25 | 6.1 | 17.5 | 61 |
| 0028663 | 10 x 0.25 | 7.4 | 25 | 80 |
| 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 |

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 \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 are not to scale and do not represent detailed images of the respective products.

Similar products

- ÖLFLEX® CLASSIC FD 810 P refer to page 131
- UNITRONIC® FD CP plus refer to page 308

Accessories

- SILVYN® CHAIN
- SMART STRIP stripping tool