

## UNITRONIC® FD Li2YCY (TP) A BA

Shielded, low-capacitance, twisted-pair PE/PVC data cable for power chain/cable carrier, UL AWM for USA+CAN

UNITRONIC® FD Li2YCY (TP) A B: Shielded, low-capacitance, twisted-pair PVC signal/data cable for power chain/cable carrier, UL AWM for USA and Canada

### Info

Better priced than UNITRONIC® FD CP (TP) plus

Low capacitance, AWM by UL for USA+CAN

UNITRONIC® FD Li2YCY (TP) A BA: North-American Core Identification Colors



Mechanical and plant engineering



Suitable for outdoor use



Flame-retardant



Oil-resistant



Power chain



Interference signals



UV-resistant

### Benefits

Improved transmission characteristics thanks to low-capacitance core insulation and twisted pairs

Cable specification optimized for use in power chain/cable carrier in the USA, on the basis of NFPA 79, Section 12.9.2

Last Update (04.05.2024)

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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 Li2YCY (TP) A BA

### Application range

Suitable for use in measuring, control and regulating circuits

Linear robots, automated handling equipment

Use in drag chain/cable carrier/power track - in case of horizontal installation travel distances up to 50 m

For use in chain/carrier: Please respect the assembly guidelines listed in Appendix T3

### Product features

Low capacitance

EMC optimized thanks to overall copper braid shielding

Flexibility for use inside power chain/cable carrier

Oil-resistant according to DIN EN 50290-2-22 (TM54)

Flame-retardant acc. to IEC 60332-1-2,

UL VW-1, Cable Flame Test, CSA FT 1

### Norm references / Approvals

Based on VDE 0812

UL AWM Style 2570 80°C 1000V (external interconnection) for USA (UL File No.: E63634) and in line with NFPA 79, Section 12.9.2

AWM I/II A/B 80°C 1000V acc. to CSA C22.2 No. 210-15 and certified by UL (cRU) for Canada

EU conformity and mark with regard to the European RoHS Directive

### Product Make-up

Flexible conductor made of bare copper strands

Low-capacitance PE core insulation

Non-woven wrapping

Tinned-copper braiding

Outer sheath made of PVC

Outer sheath colour: black (similar to RAL 9005)

### Technical Data

Classification ETIM 5:

ETIM 5.0 Class-ID: EC000830

ETIM 5.0 Class-Description: Data cable

Core identification code:

**UNITRONIC®**

**FD Li2YCY (TP) A BA:**

- Pair 01: Black, Red;
- Pair 02: Black, White;
- Pair 03: Black, Green;
- Pair 04: Black, Blue;
- Pair 05: Black, Yellow;
- Pair 06: Black, Brown;
- Pair 07: Black, Orange;
- Pair 08: Red, White;
- Pair 09: Red, Green;
- Pair 10: Red, Blue;
- Pair 11: Red, Yellow;
- Pair 12: Red, Brown;
- Pair 13: Red, Orange;
- Pair 14: Green, White;
- Pair 15: Green, Blue;
- Pair 16: Green, Yellow;
- Pair 17: Green, Brown;
- Pair 18: Green, Orange;
- Pair 19: White, Blue;

## UNITRONIC® FD Li2YCY (TP) A BA

	<ul style="list-style-type: none"> <li>- Pair 20: White, Yellow;</li> <li>- Pair 21: White, Brown;</li> <li>- Pair 22: White, Orange;</li> <li>- Pair 23: Blue, Yellow;</li> <li>- Pair 24: Blue, Brown;</li> <li>- Pair 25: Blue, Orange;</li> <li>- Exception Single-paired/24 - 22 AWG: Black, White</li> </ul>
Mutual capacitance:	Up to 0.5 mm <sup>2</sup> : 60 nF/km Up to 1.0 mm <sup>2</sup> : 70 nF/km
Inductivity:	approx. 0.65 mH/km
Conductor stranding:	Fine wire From 0.5 mm <sup>2</sup> : Finest wire/Conductor class 6 acc. to IEC 60228
Minimum bending radius:	Flexing: 7.5 x outer diameter Fixed installation: 4 x outer diameter
Loop resistance:	Ohmic (DC) and loop/bidirectional @ 20 °C 0.14 mm <sup>2</sup> (26 AWG): 276.0 Ω/km; 0.25 mm <sup>2</sup> (24 AWG): 158.0 Ω/km; 0.34 mm <sup>2</sup> (22 AWG): 110.8 Ω/km; 0.5 mm <sup>2</sup> (21 AWG): 78.0 Ω/km; 0.75 mm <sup>2</sup> (19 AWG): 52.0 Ω/km; 1 mm <sup>2</sup> (18 AWG): 39.0 Ω/km
Temperature range:	Flexing: VDE: -5 °C to 70 °C UL AWM: -5 °C to 80 °C Stationary use: VDE: -40 °C to 70 °C UL AWM: -5 °C to 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.

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

**UNITRONIC® FD Li2YCY (TP) A BA**

Article number	Number of pairs and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0031431	5 x 2 x 0.14	7.3	37.4	68