



## UNITRONIC® FD Li2YCY (TP) A BE

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

**i Info**

- Better priced than UNITRONIC® FD CP (TP) plus
- Low capacitance, AWM by UL for USA+CAN
- UNITRONIC® FD Li2YCY (TP) A BE: DIN 47100, refer to Appendix T9



- Benefits**
- Improved transmission characteristics thanks to low-capacitance core insulation and twisted pairs
  - Cable specification optimized for use in drag chain/cable carrier/power track in the USA, on the basis of NFPA 79, Section 12.9.2

- 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 drag chains: 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 drag chain/cable carrier/power track
  - 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 HDPE core insulation
  - Non-woven wrapping
  - Tinned-copper braiding
  - Outer sheath made of PVC  
Outer sheath colour: black (similar to RAL 9005)

**Technical data**

- Core identification code**  
UNITRONIC® FD Li2YCY (TP) A BE:  
DIN 47100, refer to Appendix T9
- 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 Ωkm;  
0.25 mm<sup>2</sup> (24 AWG): 158.0 Ωkm;  
0.34 mm<sup>2</sup> (22 AWG): 110.8 Ωkm;  
0.5 mm<sup>2</sup> (21 AWG): 78.0 Ωkm;  
0.75 mm<sup>2</sup> (19 AWG): 52.0 Ωkm;  
1 mm<sup>2</sup> (18 AWG): 39.0 Ωkm
- 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

Article number	Dimension and cross section in mm <sup>2</sup>	Outer diameter [mm]	Weight [kg/km]
<b>UNITRONIC® FD Li2YCY (TP) A BE</b>			
0031377	1 x 2 x 0.14	4.3	23
0031378	2 x 2 x 0.14	5.9	42
0031379	3 x 2 x 0.14	6.2	47
0031380	4 x 2 x 0.14	6.7	57
0031381	5 x 2 x 0.14	7.3	68
0031382	6 x 2 x 0.14	7.5	86
0031383	8 x 2 x 0.14	8.8	109
0031384	10 x 2 x 0.14	10.1	120
0031385	12 x 2 x 0.14	9.8	150
0031386	1 x 2 x 0.25	4.7	27
0031387	2 x 2 x 0.25	6.6	57
0031388	3 x 2 x 0.25	7	72
0031389	4 x 2 x 0.25	7.6	85
0031390	5 x 2 x 0.25	8.5	92
0031391	6 x 2 x 0.25	8.8	114
0031392	8 x 2 x 0.25	10.3	145
0031393	10 x 2 x 0.25	11.8	182
0031394	14 x 2 x 0.25	12	213
0031395	25 x 2 x 0.25	16.3	310
0031396	1 x 2 x 0.34	5.1	36
0031397	2 x 2 x 0.34	7.3	69
0031398	3 x 2 x 0.34	8	93
0031399	4 x 2 x 0.34	8.7	106
0031400	5 x 2 x 0.34	9.7	136
0031401	6 x 2 x 0.34	10	165
0031402	8 x 2 x 0.34	11.8	221
0031403	10 x 2 x 0.34	13.7	274
0031404	1 x 2 x 0.50	5.5	47
0031405	2 x 2 x 0.50	8.3	99
0031406	3 x 2 x 0.50	8.8	120
0031407	4 x 2 x 0.50	9.8	130
0031408	5 x 2 x 0.50	10.7	164

Article number	Dimension and cross section in mm <sup>2</sup>	Outer diameter [mm]	Weight [kg/km]
0031409	6 x 2 x 0.50	11.3	182
0031410	8 x 2 x 0.50	13.2	278
0031411	10 x 2 x 0.50	15.2	325
0031412	14 x 2 x 0.50	15.5	401
0031413	1 x 2 x 0.75	5.9	61
0031414	2 x 2 x 0.75	9	104
0031415	3 x 2 x 0.75	9.8	148
0031416	4 x 2 x 0.75	10.7	167
0031417	5 x 2 x 0.75	11.9	202
0031418	6 x 2 x 0.75	12.3	233
0031419	8 x 2 x 0.75	14.7	330
0031420	10 x 2 x 0.75	16.7	390
0031421	14 x 2 x 0.75	17	515
0031422	1 x 2 x 1.00	6.3	71
0031423	2 x 2 x 1.00	9.9	126
0031424	3 x 2 x 1.00	10.5	167
0031425	4 x 2 x 1.00	11.8	213
0031426	5 x 2 x 1.00	13.1	247

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.

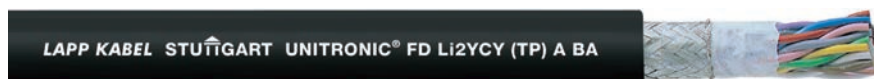
### Accessories

- SKINTOP® MS-HF-M SC refer to page 707
- SKINTOP® MS-SC-M refer to page 701
- STAR STRIP stripping tool refer to page 985



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- Low capacitance, AWM by UL for USA+CAN
- UNITRONIC® FD Li2YCY (TP) A BA: North-American Core Identification Colors

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