


0031427	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® FD Li2YCY (TP) A BA	

Application

UNITRONIC® FD Li2YCY (TP) A BA is a high flexible, screened and twisted pair data cable with an outer sheath of PVC. The cable with low capacitance is designed especially for use in power chains, automatic manipulators, in permanently moved machine parts. Decoupling by means of twisted pair cable design and the screen protects against interference.


Design

Design	based on UL AWM Style 11117 and 2570, UL 758, CSA C22.2 No. 210 and according to VDE 0812
Certification	UL AWM Style 2570 (File No. E63634), UL 758 RU AWM I/II A/B (File No. E63634) cRU AWM I/II A/B (File No. E63634)
Conductor	superfine wire strands of bare copper wires
Insulation	special Polyolefin-based compound
Core identification code	Pair 1: black, red Pair 2: black, white Pair 3: black, green Pair 4: black, blue Pair 5: black, yellow Pair 6: black, brown Pair 7: black, orange Pair 8: red, white Pair 9: 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 Pair 20: white, yellow Pair 21: white, brown Pair 22: white, orange Pair 23: blue, yellow Pair 24: blue, brown Pair 25: blue, orange Exception single-paired, 24-22 AWG: black, white
Stranding	cores twisted to pairs, pairs are stranded in layers, wrapping with fleece on the outer layer
Screen	Braiding with tinned copper wires, wrapping with fleece on the screen
Outer sheath	special PVC-based compound colour: black (similar RAL 9005)

Electrical properties at 20°C

Specific volume resistivity	> 5 G Ω x km
Mutual capacitance	up to 0.5 mm ² : approx. 60 nF/km up to 1 mm ² : approx. 70 nF/km
Inductance	approx. 0.65 mH/km
Peak operating voltage	VDE: 0.14 mm ² : 350 V (not for power applications) ≥ 0.25 mm ² : 500 V (not for power applications) UL: 1000 V
Test voltage	C/C: 1500 V C/S: 1500 V

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Mechanical and thermal properties

Minimum bending radius	Flexing: 7.5 x cable Ø Fixed installation: 4 x cable Ø
Temperature range	Flexing: VDE: - 5 °C up to +70 °C UL AWM: - 5 °C up to +80 °C Fixed installation: VDE/UL AWM: - 5 °C up to +80 °C
Number of cycles	2 mio. cycles
Travel distance	up to 10 m
Flammability	flame retardant acc. to IEC 60332-1-2 UL: VW-1 CSA: FT1
Oil resistance	EN 50290-2-22 resp. VDE 0819-102, TM54
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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