


7038885	DATA SHEET	
valid from: 2023-01-11	UNITRONIC® SENSOR FD Lif9YC11Y	

Application

UNITRONIC® SENSOR FD Lif9YC11Y are sensor/actuator cables, designed for applications in power chains.

Design

Design	based on UL AWM Style 10493 (Insulation) and 20549 (Jacket), UL 758, CSA C22.2 No. 210 (80°C, 300 V)
Certification	UL AWM Style 20549 (File No. E63634), UL 758 RoHS AWM I/II A/B (File No. E63634)
Conductor	superfine wire strands of bare copper wires
Insulation	polypropylene
Core identification code	according to EN 60947-5-2 3-core: brown, blue, black 4-core: brown, white, blue, black 5-core: brown, white, blue, black, grey
Stranding	cores stranded to bundle, talced 5-core: central filler wrapping with non-woven tape
Screen	braid of tinned copper wires, coverage ca. 85 %
Outer sheath	PUR Colour: black (similar RAL 9005)

Diameter of the outer sheath

Article number	Dimension	Outer sheath \varnothing
7038885	3x0.34 mm ²	ca. 4.3 mm
7038886	4x0.34 mm ²	ca. 4.6 mm
7038887	5x0.34 mm ²	ca. 5.0 mm

Electrical properties at 20 °C

Conductor resistance	0.34 mm ² : max. 57 Ω /km
Specific volume resistivity	7x10 ¹⁵ Ω x cm
Maximum operating voltage	300 V (not for power applications) Must not be connected to the mains supply voltage.
Test voltage	C/C: 2000 V C/S: 2000 V

Mechanical and thermal properties

Minimum bending radius	Flexing: 10 x outer diameter Fixed installation: 5 x outer diameter
Temperature range	EN: Flexing: -25 °C up to +80 °C max. conductor temperature Fixed installation: -40 °C up to +80 °C max. conductor temperature UL AWM: up to +80 °C max. conductor temperature
Number of cycles	min. 4 mio. alternating bending cycles (max. 60 °C)
Travel distance	10 m length, min. 10 x cable \varnothing , max. 3 m/s, max. 10 m/s ²
Flammability	flame retardant acc. to UL 1581 FT-2
Halogen free	acc. to VDE 0472-815

General requirements

These cables are conform to
EU-Directive 2014/35/EU (Low Voltage Directive) and to
EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain
hazardous substances).

Environmental information

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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