

7038882	DATA SHEET	
valid from: 01.10.2020	UNITRONIC® SENSOR Li9Y11Y 3x1.0 + 16x0.5	

Application

UNITRONIC® SENSOR Li9Y11Y is a cable for high flexible applications in power chains. It is intended for combined usage for power supply and sensor/actuator signal transmission. The PP-insulation and the PUR sheath are halogen free.

Design

Design	based on UL AWM Style 10493 (Insulation) and 21198 (Jacket), UL 758, CSA C22.2 No. 210 (80°C, 300 V)
Certification	UL AWM Style 21198 (File No. E63634), UL 758 cRUus AWM I/II A/B (File No. E63634)
Conductor	data core 0.5 mm ² : bare copper, fine-wire stranded, Ø ca. 0.9 mm
	power supply core 1 mm ² : bare copper, fine-wire stranded, ca. 1.3 mm Ø
Insulation	data core 0.5 mm ² : polypropylene, wall thickness ca. 0.25 mm, core Ø ca. 1.4 mm
	Energieversorgungsader 1 mm ² : polypropylene, wall thickness ca. 0.3 mm, core Ø ca. 1.9 mm
Core identification code	data cores 0.5 mm ² : 7 data cores (1st layer): brown/green, yellow, white/green, green, red/blue, white, grey/pink 9 data cores (2nd layer): violet, grey/brown, black, white/grey, red, yellow/brown, pink, white/yellow, grey
	Energieversorgungsadern 1 mm ² : brown, blue, green/yellow
Stranding	- 7 data cores stranded around central PP-filler stranding Ø: ca. 4.6 mm - 3 cores for power supply and 9 data cores stranded around 7 central data cores stranding Ø: ca. 7.9 mm
Outer sheath	wrapping: 1 layer non-woven tape PUR, black (similar to RAL 9005), wall thickness: ca. 0.8 mm outer Ø: ca. 9.8 mm

Electrical properties at 20°C

Conductor resistance	0.5 mm ² : max. 39.0 Ω/km 1 mm ² : max. 18.7 Ω/km
Peak operating voltage	UL: 300 V
Test voltage	C/C: 2000 V

Mechanical and thermal properties

Minimum bending radius	moved: 10 x cable Ø fixed installation: 5 x cable Ø
Temperature range	Moved: - 5 °C up to +80 °C Fixed installation: - 40 °C up to +80 °C
Flammability	flame retardant acc. to UL 1581 FT-2
Halogen free	acc. to VDE 0472-815
General requirements	This cable is conform to the 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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