

## FieldLink® MC

LI9Y 4X2X0.34  
LI9Y C11Y 1X4X0.5 VZN GN



### Design

#### Quad LI9Y 4X0.5/1.3 VZN

##### Wire

Stranded tinned copper wire 19 X 0.19 (20 AWG)  
Insulation of Polypropylene (PP)

ø 0.9 mm (0.035 in dia)  
ø 1.3 mm (0.051 in dia)

4 wires twisted to a quad  
Sequence of colors: WHBK-WHRD-WHYE-WHBU

#### Pair LI9Y 0.34/1.3 VZN

##### Wire

Stranded tinned copper wire 19 X 0.15 (22 AWG)  
Insulation of Polypropylene (PP)

ø 0.76 mm (0.030 in dia)  
ø 1.3 mm (0.051 in dia)

2 wires twisted to a pair

#### Core:

Filler as central element

4 pairs LI9Y 1X2X0.34/1.3 VZN RD/OG -GN/YE -BU/VT -BK/BN  
1 quad LI9Y 1X4X0.5/1.3 VZN WHBK/WHRD/WHYE/WHBU

Plastic tape, overlapped

Shield braiding of tinned copper wires 0.13 mm dia (36 AWG) (≥ 1mm<sup>2</sup>)

Coverage about 85%

Plastic tape, overlapped

## LEONI Special Cables GmbH

Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet

### Jacket:

Polyurethane (PUR) GN - RAL 6018

∅ (8.9 ± 0.4) mm (0.350 ± 0.016 in dia)

Printing: LEONI L \* FIELDLINK MC TRAILING \* c **UL**us AWM 20236 AWM I/II A/B 80 °C 30V FT1  
4x2x0.34 + 4x0.5 "internal lot number"

### Electrical data at 20°C

Conductor resistance (0.34mm <sup>2</sup> )	≤	58.6	Ohm/km
Conductor resistance (0.5mm <sup>2</sup> )	≤	43.3	Ohm/km
Insulation resistance	≥	1000	MOhm*km
Capacitance (1 kHz) @ Pair	nom.	70 ± 20	nF/km
Characteristic impedance (3 MHz) @ Pair	nom.	90	Ohm
Operating voltage		30	V
Test voltage (wire/wire/screen rms 50Hz 1min)		500	V

Frequency (MHz)	0.01	0.5	1	2	4	10	30
Shield transfer impedance (IEC 1196-1) (mOhm/m) ≤	20	20	20	20	20	50	150

### Mechanical and thermal characteristics

Conductor/Screen material acc. to DIN EN 13602 Cu-ETP-A...-B  
 Insulating material acc. to DIN EN 50290-2-25, compound type full PP (HD 624.5)  
 Jacket material acc. F45052-F5100 (similar to DIN VDE 0282) (Nonsticking material)  
 Stripping force of jacket 40 N up to 150 N, Samples 100mm, V = 100 mm/min  
 Oil resistant acc. to VDE 0282 Part 10 (HD 22.10 S1)  
 Flame retardant acc. to IEC 60332-1-2

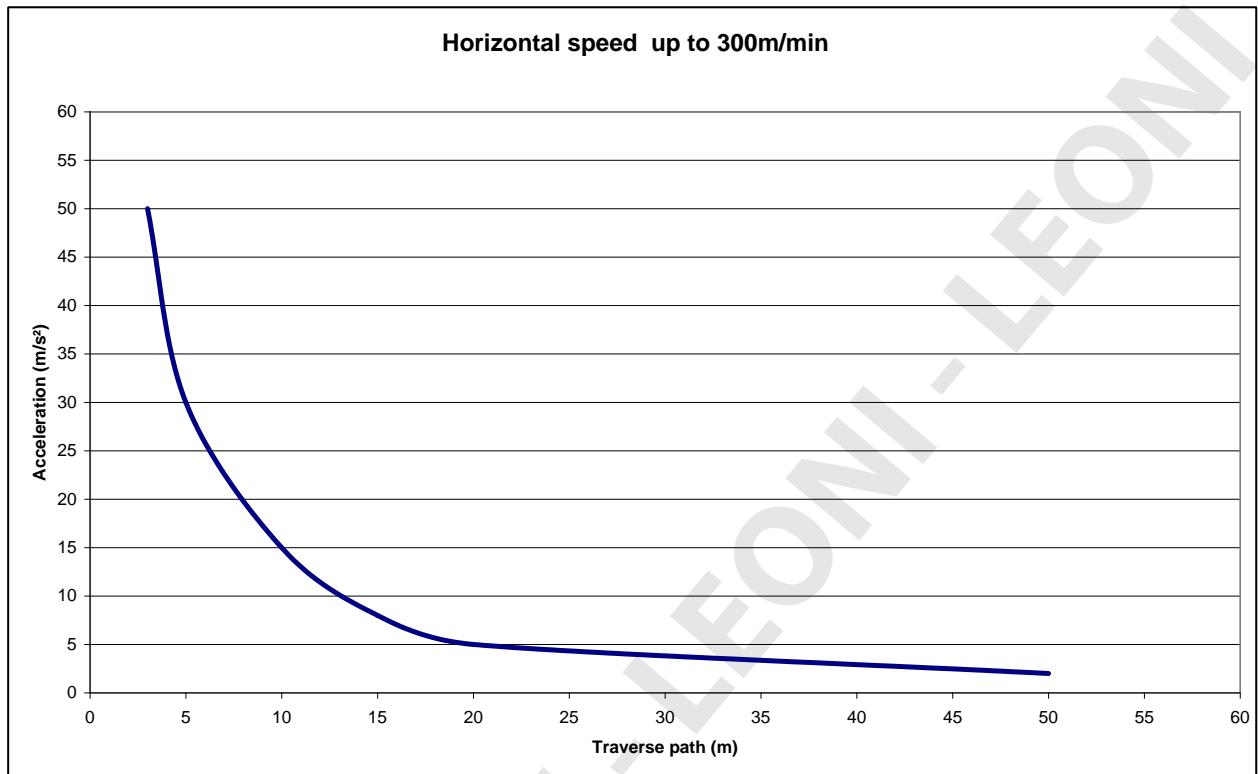
UL-Style 20236 (80°C/30V)  
 CSA C22.2 No. 210 I/II A/B FT1

### Reversed bending strength (TIC-TOC)

- bendings	200.000 cycles
- cycles in the minute	30
- angle	± 90 degree
- bending radius	75 mm
- weight	1 kg

### Trailing cable for the following requirements

- bendings	10 million
- acceleration	20 m/s <sup>2</sup>
- horizontal speed	300 m/min
- minimum bending radius	7.5 x outer diameter
- minimum static radius	4 x outer diameter
- torque angle	≤ ± 30°/ m



### Other characteristics:

RoHS compliant (Directive 2011/65/EC)  
 Halogen-free acc. to IEC 60754-1  
 Silicone-free  
 FCKW-free

### Temperature range:

- Stock temperature -50 °C (-58 °F) up to 80 °C (176 °F)
- Operating temperature -20°C (-4 °F) up to 60°C (140 °F)
- Short-time (≤ 1 sec) 150°C (305°F)

Max. pulling force (dynamic)	20 N/mm <sup>2</sup>
Max. pulling force (static)	50 N/mm <sup>2</sup>
Weight about	110 kg/km (73,7 lb/1000ft)

### Designation of order:

L45551-W129-K28  
 214727  
 LI9Y 4X2X0.34  
 LI9Y C11Y 1X4X0.5 VZN GN  
 2000 m (6562 ft) on non-returnable reel