

FieldLink® MC

LI9Y2Y	3X2X0.14 (D)
LI9Y	1X4X0.14
LI9Y	1X4X0.22
LI9Y CY	1X2X0.5 VZN GN



Design

Screened pair LI9Y(D)2Y 1X2X0.14 VZN

Wire

Stranded tinned copper wire 7 X 0.16 (26 AWG)
Insulation of Polypropylen (PP)

∅ 0.48 mm (0,019 in dia)
∅ 0.83 mm (0,033 in dia)

2 wires twisted to a pair
Stranded tinned copper drain wire (26 AWG) 0.14 mm²
Served shield tinned copper wire 0.1 mm dia (38 AWG)
Coverage about 90%
Plastic tape, overlapped

Jacket: Polyethylene (PE) BK

∅ (2.4 +0.1 -0.05) mm (0,094 +0,004 -0,002 in dia)

Pair LI9Y 2X0.5 VZN

Wire

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

∅ 0.9 mm (0,035 in dia)
∅ 1.3 mm (0,051 in dia)

2 wires, BNRD and BNBU twisted to a pair

Quad LI9Y 4X0.14 VZN

Wire

Stranded tinned copper wire 7 X 0.16 (26 AWG)

∅ 0.48 mm (0,019 in dia)

Insulation of Polypropylen (PP)

∅ 0.83 mm (0,033 in dia)

Core:

4 wires twisted

Sequence of colors: GY-BU-WHYE-WHBK

Quad LI9Y 4X0.22 VZN

Wire

Stranded tinned copper wire 7 X 0.2 (24 AWG)

∅ 0.6 mm (0,024 in dia)

Insulation of Polypropylen (PP)

∅ 1.0 mm (0,039 in dia)

Core:

4 wires twisted

Sequence of colors: BNYE-BNGY-GNBK-GNRD

Core:

Filler as central element

3 pairs LI9Y(D)2Y 1X2X0.14 VZN

YE/GN-BK/BN-RD/OG

1 quad LI9Y 4X0.14 VZN

GY-BU-WHYE-WHBK

1 quad LI9Y 4X0.22 VZN

BNYE-BNGY-GNBK-GNRD

1 pair LI9Y 2X0.5 VZN

BNRD-BNBU

Plastic tape, overlapped

Shield braiding of tinned copper wires 0.13 mm dia (36 AWG) (≥ 1mm²)

Coverage about 85%

Plastic tape, overlapped

Jacket:

Polyvinylchloride (PVC) GN - RAL 6018

∅ (9.4 ±0.4) mm (0.370 ±0.016 in dia)

Printing: LEONI L * FIELDLINK MC FLEXIBLE * c^{AWM}us AWM 2502 AWM I/II A/B 80 °C 30V FT1

3X(2X0.14) + 4x0.14 + 4x0.22 + 2x0.5 "internal lot number"

Electrical data at 20°C

Conductor resistance (0.14mm²)

≤ 148.9 Ohm/km

Conductor resistance (0.22mm²)

≤ 95.0 Ohm/km

Conductor resistance (0.5mm²)

≤ 43.3 Ohm/km

Insulation resistance

≥ 1000 MOhm*km

Capacitance (1 kHz) @ screened pair

nom. 80 ±20 nF/km

Characteristic impedance (3 MHz) @ screened pair

nom. 80 Ohm

Operating voltage

30 V

Test voltage (wire/wire/screen rms 50Hz 1min)

500

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. to DIN VDE 0281-1, compound type TM5 (HD 21.1) (Nonsticking material)
Oil resistant acc. to DIN VDE 0281-1 (TM5) (HD 21.1)
Flame retardant acc. to IEC 60332-1-2

UL-Style 2502 (80°C/30V)
CSA C22.2 No. 210 I/II A/B FT1

Reversed bending strength

- Bendings	2 million
- Maximum acceleration	5 m/s ²
- Maximum horizontal speed	180 m/min
- Minimum bending radius	94 mm
- Minimum static radius	5 x Out. Ø
- Maximum length horizontal of cable	5m (traverse path)
- Torque angle	≤ ± 30°/ m

Other characteristics:

RoHS compliant (Directive 2011/65/EC)
Silicone-free, FCKW-free

Temperature range:

- Stock temperature	-20°C (-4 °F) up to 80 °C (176 °F)
- Operating temperature (static)	-20°C (-4 °F) up to 80 °C (176 °F)
- Operating temperature (dynamic)	-0°C (32 °F) up to 60 °C (140 °F)

Max. pulling force (dynamic)	20 N/mm ²
Max. pulling force (static)	50 N/mm ²

PVC weight with Phthalate	30.6 Kg/km
PVC weight without Phthalate	3.8 Kg/km
Weight about	123 kg/km (82,4 lb/1000ft)

Designation of order:

L45551-W169-K15
214784
LI9Y2Y 3X2X0.14 (D)
LI9Y 1X4X0.14
LI9Y 1X4X0.22
LI9Y CY 1X2X0.5 VZN GN
| 2000 m (6562 ft) on non-returnable reel