

FieldLink® MC

LI9Y(D)2Y 2X1X0.5 VZN
 LI9Y(D)2Y CY 3X2X0.14 VZN GN



Design

Screened pair LI9Y(D)2Y 2X0.14/0.8 VZN

Wire

Stranded tinned copper wire 7 X 0.16 (26 AWG)

∅ 0.48 mm (0,019 in dia)

Insulation of Polypropylen (UL-Style 1589, Shore D65±5)

∅ 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

∅ 1.94 mm (0,076 in dia)

Jacket: Polyethylene (PE)

Wall thickness about 0.23 mm

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

Screened wire LI9Y(D)2Y 0.5/1.6 VZN

Wire

Stranded tinned copper wire 19 X 0.19 (20 AWG)

∅ 0.9 mm (0.035 in dia)

Insulation of Polypropylen (UL-Style 1589, Shore D65±5)

∅ 1.6 mm (0,063 in dia)

Wall thickness about 0.34 mm

Served shield tinned copper wire 0.1 mm dia (38 AWG)

Coverage about 90%

Plastic tape, overlapped

∅ 1.88 mm (0,074 in dia)

Jacket: Polyethylene (PE)

Wall thickness about 0.26 mm

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

Core:

2 screened wires LI9Y(D)2Y 0.5/1.6 VZN BK, RD
 3 screened pair LI9Y(D)2Y 2X0.14/0.8 VZN YE/GN, BK/BN, RD/OG
 + fillers
 Plastic tape, overlapped
 Shield braiding of tinned copper wires 0.13 mm dia (36 AWG) ($\geq 1 \text{ mm}^2$)
 Coverage about 85%
 Plastic tape, overlapped $\varnothing 7.6 \text{ mm}$ (0.299 in dia)

Jacket:

Polyvinylchloride (PVC) GN – RAL 6018 $\varnothing (9.1 \pm 0.3) \text{ mm}$ (0.358 \pm 0.012 in dia)

Printing: LEONI L * FIELDLINK MC FLEXIBLE * c ~~9~~us AWM 2502 AWM I/II A/B 80 °C 30V FT1
 3x(2x0.14) + 2x(0.5) "internal lot number"
 Textintervals about 700 mm

Electrical data at 20°C

Conductor resistance (0.14mm ²)	\leq	148.9	Ohm/km
Conductor resistance (0.5mm ²)	\leq	43.3	Ohm/km
Insulation resistance	\geq	1000	MOhm*km
Capacitance (1 kHz) @ screened pair	nom.	80 \pm 20	nF/km
Capacitance (1 kHz) @ screened wire	nom.	220	nF/km
Characteristic impedance (3 MHz) @ screened wire	nom.	25	Ohm
Characteristic impedance (3 MHz) @ screened pair	nom.	80	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) \leq	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 / DIN EN 60811-1-1/2-1)
 Flame retardant acc. to IEC 60332-1-2

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

Trailing cable for the following requirements

- bendings	2 million
- acceleration	2 m/s ²
- horizontal speed	180 m/min
- minimum bending radius	12 x outer diameter
- minimum static radius	5 x outer diameter
- torque angle	≤ ± 30°/ m

Other characteristics:

Silicone-free, FCKW-free, RoHS compliant

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)
- Short-time (≤ 1 sec)	150°C (305°F)

Max. pulling force (dynamic)	20 N/mm ²
Max. pulling force (static)	50 N/mm ²
PVC weight with Phthalate	28.5 kg/km
PVC weight without Phthalate	0.0 kg/km
Weight about	116 kg/km (78 lb/1000ft)

Designation of order:

L45551-W89-K5
214783
LI9Y(D)2Y 2X1X0.5 VZN
LI9Y(D)2Y CY 3X2X0.14 VZN GN
2000 m (6562 ft) on non-returnable reel