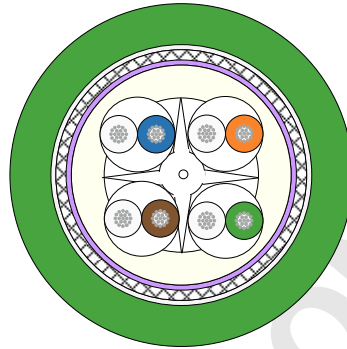


FieldLink®

Industrial Ethernet Cat 6 ES



Design

Wire

Stranded tinned copper wire 19 X 0.1
Insulation of Polypropylene (PP)

∅ 0.55 mm (0.022 in)
∅ 0.98 mm (0,039 in)

Pair

2 wires twisted to a pair

Core:

Filler as central element
1. layer: 4 pairs twisted
Sequence of colors: WH/BU-WH/OG-WH/GN-WH/BN
Inner-Jacket: Thermoplastic copolymer (FRNC)
Alulminate foil overlapped
Shield braiding of tinned copper wires 0.1 mm dia (38 AWG)
Coverage about 85%
Plastic tape, overlapped

∅ 5.7 mm (0.224 in)
∅ 6.3 mm (0.248 in)

Jacket:

Polyurethane (PUR) GN
Wall thickness about 0.75 mm

∅ (7.8 ±0.2) mm (0.307 ±0.008 in)

Printing: "sequential length in metres" LEONI L TRAILING Cable * 4X2X26AWG Cat6 (SHIELDED) c(UL)us
E119100 CMX * "internal lot number"

Electrical data at 20°C

Loop resistance	≤	280	Ohm/km
Signal run time	≤	5.34	ns/m
Insulation resistance	≥	500	MOhm*km
Capacitance (1 kHz)	nom.	52	nF/km
Time delay skew (Pair to Pair)	≤	30	ns/100m
Transfer impedance (10 MHz)	≤	30	mOhm/m
Characteristic impedance (100 MHz)		(100 ±5)	Ohm
Operating voltage (peak)	≤	100	V
Test voltage (wire/wire/screen rms 50Hz 1min)		700	V

Frequency	1	4	10	16	20	31.25	62.5	100	155	200	250
Next (dB)	66.0	65.3	59.3	56.2	54.8	51.9	47.4	44.3	41.4	39.8	38.3
PSNext (dB)	64.0	63.3	57.3	54.2	52.8	49.9	45.4	42.3	39.4	37.8	36.3
ELFext (dB)	66.0	58	50.0	45.9	44.0	40.1	34.1	30.0	26.2	24.0	22.0
PSELfext (dB)	64.0	55.0	47.0	43.0	41.0	37.1	31.1	27.0	23.2	21.0	19.0
Attenuation (dB/100m)	3.1	5.8	9.0	11.4	12.8	16.1	23.2	29.9	38.0	43.7	49.5
Frequency	4	8	10	16	20	31.25	62.5	100	155	200	250
Return loss (dB)	23.1	24.5	25.0	25.0	25.0	23.6	21.5	20.1	18.8	18.0	17.3

Electrical requirements acc. to. EN 50288-5-2

Mechanical and thermal characteristics

- Conductor material acc. to DIN EN 13602 Cu-ETP-A...
- Screen material acc. to DIN EN 13602 Cu-ETP-A...-B
- Flame retardant acc. to IEC 60332-1-2
- Flame retardant acc. to UL 1581, Sec. 1080 (VW-1)
- Flame retardant acc. UL 1581, Sec. 1060 (CSA FT-1)
- Oil resistance acc. to CSA-C22.2 (4 x 24 hours / 100°C)

UL E119100 Vol. 1 Sec. 17 Page 1A (CMX)

Other characteristics:

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

Trailing cable for following requirements

- 1 million bending cycles
- bending radius 7.5 x max. \emptyset
- at a speed of 4 m/s
- acceleration 4 m/s²
- travel distance 10 m
- standard atmospheres (20°C)

Temperature range

- fixed installation : -40 °C (-40 °F) up to 80 °C (176 °F)
- flexing : -30 °C (-22 °F) up to 70 °C (158 °F)

- Max. pull force : \leq 100 N
- Min. bending radius allowed: repeated 7.5X \emptyset , single 4X \emptyset
- Weight about : 63 Kg/km (42 lb/1000ft)

Designation of order:

L45467-J415-C48
217325
9YH(ST)C11Y 4X2X0.55/0.98-100 LI GN
3000 m (9843 ft) on non-returnable reel