

FieldLink®

Industrial Ethernet Cat 5+



Design

Wire:

Stranded tinned copper wire 7 X 0.25 (22 AWG)
Insulation of Polyethylene (PE)

∅ 0.75 mm (0,030 in)
∅ 1.5 mm (0,059 in)

Core:

Filler as central element
1. layer: 4 wires
Sequence of colors: WH-YE-BU-OG
Plastic tape, overlapped
Inner-Jacket: Polyvinylchloride (PVC)
Alulaminat foil overlapped
Shield braiding of tinned copper wires 0.13 mm dia
Coverage about 85%

∅ 3.7 mm (0,146 in)
∅ 3.9 mm (0,154 in)
∅ 4.7 mm (0,185 in)

Jacket:

Polyvinylchloride (PVC) GN
Wall thickness about 0.9 mm

∅ (6.5 ±0.2) mm (0,256 ±0,008 in)

Printing: "sequential length in metres" LEONI L INDUSTRIAL ETHERNET TRAILING CABLE * PROFINET
Type C ES CAT 5 PLUS * 22AWG (SHIELDED) (UL) E119100 CMG 75C or PLTC or AWM 21694
600V FT4 SUN RES OIL RES I "year/internal order number"
Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance		≤	120	Ohm/km
Signal run time		≤	5.3	ns/m
Insulation resistance		≥	500	MOhm*km
Characteristic impedance	1 – 100 MHz		(100 ± 15)	Ohm
UL-Rating			600	V
Surface transfer impedance	10 MHz	≤	100	mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)		=	700	V

Near-end crosstalk attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
typ. value (dB - 100m)	80	76	70	65	63	60	55	50

Attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
typ. value (dB/100m) (dB/100ft)	1,8 (0,5)	3,6 (1,1)	6,0 (1,8)	7,6 (2,3)	8,7 (2,7)	11 (3,4)	16 (4,9)	21 (6,4)

The electrical requirements acc. to EN 50288-2-2

Mechanical and thermal characteristics

Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table L/MD (HD 624.3)

Jacket material acc. to DIN VDE 0207, compound type YM5

Flame retardant acc. to UL 1685 (CSA FT 4)

Oil resistant acc. to 1581 Sec. 480 (60°)

Sunlight resistant acc. to UL 1581 Sec.1200

UL File E119100 Vol.1 Sec.16 Page 2

UL File E116441 Vol.1 Sec.6 Page 2

UL-Style 21694

Other characteristics:

Trailing cable for following requirements (in work)

- 3 million bending cycles
- diameter 200 mm

Permissible temperature range : -10 °C (14 °F) up to 70 °C (158 °F)

Min. bending radius allowed : repeated 8X ø, single 5X ø

PVC weight with Phthalate : 31.4 Kg/km

PVC weight without Phthalate : 0.0 Kg/km

Tensile strength : ≤ 150 N

Weight about : 68 Kg/km (45 lb/1000ft)

Designation of order:

L45467-J17-B65

206744

2YY(ST)CY 2X2X0.75/1.5-100 LI GN

1000 m (3281 ft) on non-returnable reel