

FieldLink®

Industrial Ethernet Cat 5e ES (Festoon cable)



Design

Wire

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

∅ 0.75 mm (0,030 in)
 ∅ 1.56 mm (0,061 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%

∅ 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 FESTOON CABLE * PROFINET
 Type C ES CAT 5 PLUS * 22AWG (SHIELDED) (UL) E119100 CMG 75C or PLTC or AWM 20201
 600V FT4 SUN RES OIL RES I * "year/internal order number"
 (The gap between the text is filled out with lengthways line "-----")

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)		=	2000	V

LEONI Special Cables GmbH

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

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)	2,1 (0,6)	4 (1,2)	6,3 (1,9)	8 (2,4)	9 (2,7)	11,4 (3,5)	16,5 (5,0)	21,3 (6,5)

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

Mechanical and thermal characteristics

Conductor/Screen material acc. to DIN EN 13602 Cu-ETP-A...-B

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

Jacket material acc. to DIN EN 50290-2-22 (VDE 0819), compoundtype TM52 (HD 624.2)

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

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

UL File E119100 Vol.1 Sec. 16 Page 2

UL File E116441 Vol.1 Sec. 6 Page 2

Other characteristics:

Sunlight resistant acc. to UL 1581 Sec.1200

Festoon cable for following requirements

- 5 million bending cycles
- bending radius ≥ 70 mm
- acceleration 4 m/s^2
- min. bending radius allowed: single ≥ 30 mm

Permissible temperature range : -10 °C (14 °F) up to 80 °C (176 °F)

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

Designation of order:

L45467-J17-B85

207203

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

1000 m (3281 ft) on non-returnable reel