

FieldLink®

INDUSTRIAL ETHERNET CAT.5e FIRE RESISTANT



Design

Wire

Stranded tinned copper wire (22 AWG) (0.34mm²)
 Insulation of Polyethylene (PE)
 Fire resistant tape, overlapped

ø 0.75 mm (0.030 in dia)
 ø 1.56 mm (0.061 in dia)

Core:

4 wires twisted WH-YE-BU-OG
 Plastic tape overlapped
 Alulaminare foil overlapped
 Shield braiding of tinned copper wires
 Coverage about 85%
 Fire resistant tape, overlapped, overlapped

ø 5.6 mm (0.220 in dia)

Jacket:

Thermoplastic copolymer (FRNC) BK

ø (6.5 ±0.2) mm (0.256 ±0.008 in dia)

Printing: "sequential length in metres" LEONI L INDUSTRIAL ETHERNET FIRE RESISTANT FE90 CABLE * PROFINET TYP C CAT5e * 22AWG * IEC 60331-23 * AWM STYLE 21281 80°C 300V * "internal lot number"

Electrical data at 20°C

Loop resistance	≤	120	Ohm/km
Insulation resistance	≥	500	MOhm*km
Signal run time	≤	5.3	ns/m
Characteristic impedance 100 MHz		(100 ± 5)	Ohm
Operating voltage (effective value)	≤	80	V
Test voltage (wire/wire/screen rms 50Hz 1min)		700	V

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Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
Next (dB)	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3
PSNext (dB)	62.3	53.3	47.3	44.2	42.8	39.9	35.4	32.3
ELFext (dB)	63.8	51.8	43.8	39.7	37.8	33.9	27.9	23.8
PSELFext (dB)	60.8	48.8	40.8	36.7	34.8	30.9	24.9	20.8
Attenuation (dB/100m)	2.1	4.0	6.3	8.0	9.0	11.4	16.5	21.3
Frequency	4	8	10	16	20	31.25	62.5	100
Return loss (dB)	23.0	24.5	25	25	25	23.6	21.5	20.1

Electrical requirements acc. to EN 50288-2-1

Mechanical and thermal characteristics

Jacket material acc. to DIN EN 50290-2-27 (HD 624.7)

Fire resistant acc. to IEC 60331-23 (90 min.)

UL-Style 21281 (80°C/300V)

Other characteristics:

RoHS compliant (Directive 2011/65/EC)

Halogen-free acc. to IEC 60754-2

Permissible temperature range

Transport, installation and operating: -25 °C (-13 °F) up to 80 °C (176 °F)

Min. bending radius allowed: repeated 15X \varnothing , single 5X \varnothing

Weight about : 62 kg/km (41 lb/1000ft)

Designation of order:

L45467-J17-B46

220145

2Y(FE)(ST)C(FE)H 2X2X0.75/1.9-100 LI SW

2000 m (6562 ft) on non-returnable reel

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