

FieldLink[®]

Industrial Ethernet Cat 5e ES



Design

Wire:

Stranded tinned wire 7 X 0.25 (AWG 22)
Insulation of Polypropylene (PP)

ø 0.75 mm
ø 1.5 mm

Core:

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

ø 3.9 mm
ø 4.7 mm

Jacket:

Thermoplastic copolymer (FRNC) GN
Wall thickness about 0.9 mm

ø (6.5 ±0.4) mm

Printing: "sequential length in metres" INDUSTRIAL ETHERNET ES ITP MARINE CABLE CAT 5
PLUS * 22AWG (SHIELDED) (UL) E119100 Verified CAT 5E Patch Cable CMG
75°C or PLTC FT4 Sun Res * LEONI L L-9YH(ST)CH 2X2X0.75/1.5-100 GN VZN FRNC 60V

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
Surface transfer impedance of screen 10 MHz	≤	10	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 50288-2-1

Mechanical and thermal characteristics

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

Insulating material acc. to specification ITP K02-E

Jacket material acc. to specification ITP K02-E

Flame test acc. to IEC 332-3 category A/F

UL-File E119100 Vol.1 Sec. 11 Page 1

UL-File E119100 Vol.3 Sec. 1 Verified CAT 5E

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Other characteristics:

Approved for Marine and Offshore Applications

Germanischer Lloyd

Lloyds Register of Shipping

ABS Europe LTD

Bureau Veritas

Det Norske Veritas

Limited oil resistance

UV-resistant

Tensile loading: ≤ 150 N

Permissible temperature range : -40°C up to +75°C

During laying : - 0°C up to +50°C

Transport temperature range : -40°C up to +75°C

Min. bending radius allowed : repeated 7,5X \varnothing , single 3X \varnothing

Weight about : 68 Kg/km

Application

Cable for marine application

Designation of order:

L45467-J16-B26

202280

L-9YH(ST)CH 2X2X0.34/1.5-100 GN VZN FRNC

1000 m on non-returnable reel