

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)

ø 3.9 mm

Alulaminat foil overlapped

Shield braiding of tinned copper wires 0.13 mm dia

Coverage about 85%

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 CMG 75°C Verified (UL) CAT 5E Patch Cable or PLTC FT4 Sun Res * LEONI LL-9YH(ST)CH 2X2X0.34/1.5-100 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

LEONI Special Cables GmbH

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 E352715 Vol.1 Sec. 1 Page 1 Verified CAT 5E

UL-File E116441 Vol.1 Sec. 6 Page 4

Other characteristics:

Approved for Marine and Offshore Applications

DNV - GL Certificate No. 15814-00 HH

Lloyds Register of Shipping

ABS Europe LTD

Bureau Veritas

Limited oil resistance

UV-resistant

Halogen free

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 : 64 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