

# 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 CM 75°C Verified (UL) CAT 5E Patch Cable or PLTC Sun Res \*  
 BizLink Special Cables Germany L-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)	=	1500	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 E352715 Vol.1 Sec. 1 Page 1 Verified CAT 5E

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

Approved for Marine and Offshore Applications

DNV

Certificate No. TAE 000048H

Lloyds Register

Certificate No. LR21251547TA

ABS

Certificate No. 17\_HG1606705\_PDA

Bureau Veritas

Certificate No. 10376/CO BV

## Other characteristics

Limited oil resistance

UV-resistant. Halogen free

Tensile loading :  $\leq 150$  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

BCA0183

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

1000 m on non-returnable reel

Product has not been tested and classified according to the CPR (EU/305/2011).

The product shall not be permanently installed in buildings in the EU.

Date of issue : 23.3.2001

Technical modification reserved

Creator : BSCG | R&D | SCHMIDT

Number : **L45467-J16-B26-EN**

Up-dating : 11.11.2022 Name: Langemeyer  
Supersedes : 10.11.2022 E: 11.11.2022 M: 10.11.2022

Page 2 / 2