

# FieldLink<sup>®</sup>

## 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)  
Alulamine 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  
Signal run time  
Insulation resistance  
Characteristic impedance 1 – 100 MHz  
Surface transfer impedance of screen 10 MHz  
Test voltage (wire/wire/screen rms 50Hz 1min)

≤ 120 Ohm/km  
≤ 5.3 ns/m  
≥ 500 MOhm\*km  
(100 ±15) Ohm  
≤ 10 mOhm/m  
= 1500 V

Creator : BSCG | R&D | SCHMIDT

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

## 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 :  $-40^{\circ}\text{C}$  up to  $+75^{\circ}\text{C}$

During laying :  $- 0^{\circ}\text{C}$  up to  $+ 50^{\circ}\text{C}$

Transport temperature range :  $-40^{\circ}\text{C}$  up to  $+ 75^{\circ}\text{C}$

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.

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