

# SeaLine

## EthernetLink-Cable

Cable type: 09YS(ST)C 2X2X0.75/1.5-100 LI  
LIH-Z CH 4X1X1.5 GN



### Design

#### **Wire LIH 1.5/2.4**

Stranded bare copper wire 84 X 0.15 (1,5 mm<sup>2</sup>)  
Insulation of Thermoplastic copolymer (FRNC) BK, number printed  
Wall thickness about 0.38 mm

∅ 1.65 mm (0,065 in)  
∅ 2.4 mm (0,094 in)

#### **09YS(ST)C 1X2X0.75/1.5-100 LI**

Wire 09YS 1X0.75/1.5 LI  
Stranded bare copper wire 7 X 0.25 (0,34 mm<sup>2</sup>)  
Insulation of foamed Polypropylen (PP) with skin

∅ 0.75 mm (0,030 in)  
∅ 1.5 mm (0,059 in)

2 wires twisted to a pair  
Plastic tape, overlapped  
Alulaminat foil overlapped, applied longitudinally  
Shield braiding of tinned copper wires 0.1 mm dia  
Coverage about 75%

∅ 3.7 mm (0,146 in)

#### **Core**

Filler as central element  
2 screened pairs WH/BU - YE/OG  
4 wires LIH 1.5/2.4 BK number 1-2-3-4  
Plastic tape, overlapped  
Stranded bare copper drain wire 24 X 0.2 (0.75 mm<sup>2</sup>)  
Shield braiding of bare copper wires 0.2 mm dia (35 AWG)  
Coverage about 90%

∅ 9.4 mm (0,370 in)

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## Jacket

Thermoplastic copolymer (FRNC) GN, RAL 6018  
Wall thickness about 2.0 mm

∅ (13.4 -0.5) mm (0.528 -0.020 in)

Printing: "sequential length in metres" BizLink **SeaLine** SCG EthernetLink-Cable TAE000018Z \*  
"internal lot number"

## Electrical data at 20°C

09YS(ST)C 1X2X0.75/1.5-100 LI

Loop resistance	≤	120	Ohm/km
Signal run time		4.4	ns/m
Insulation resistance	≥	500	MOhm*km
Characteristic impedance (1 - 100 MHz)		(100 ±15)	Ohm
Surface transfer impedance (1 MHz)	≤	50	mOhm/m
Surface transfer impedance (10 - 100 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
(dB - 100m) ≥	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3

## Attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
(dB / 100m) ≤	2.1	4.0	6.3	8.0	9.0	11.4	16.5	21.3

The electrical requirements acc. to EN 50288-2-1

## Wire LIH 1.5/2.4

Conductor resistance	≤	14	Ohm/km
Insulation resistance	≥	20	MOhm*km
Operating voltage (peak)	≤	100	V
Test voltage (wire/wire/screen rms 50Hz 1min)	=	1000	V

## Mechanical and thermal characteristics

Conductor material acc. to DIN EN 13602 Cu-ETP1-A...  
Screen material acc. to DIN EN 13602 Cu-ETP1-A...-B  
Insulating material acc. to DIN EN 50290-2-25 (09YS)  
Insulating material acc. to DIN EN 50290-2-26 (VDE 0819) (HD 624.6)  
Jacket material acc. to DIN EN 50290-2-27 (HD 624.7) (IEC 60092-359 / SHF1)  
Flame retardant acc. to IEC 60332-3-22 (Cat. A/F)  
Flame retardant acc. to IEC 60332-1-2

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## Other characteristics

Sunlight resistant acc. to UL 1581 Sec.1200  
Halogen-free acc. to IEC 60754-2  
Smoke-density acc. to IEC 61034-1/2

Approved for Marine and Offshore Applications

Germanischer Lloyd Certificate No. TAE000018Z  
Bureau Veritas Certificate No. 54851/A0 BV

Permissible temperature range : -20 °C (-4 °F) up to 70 °C (158 °F)  
Min. bending radius allowed : repeated 10X  $\varnothing$ , single 5X  $\varnothing$   
Tensile strength :  $\leq$  200 N  
Weight about : 281 Kg/km (188,3 lb/1000ft)

## Application / Special feature

PROFInet hybrid line to CAT 5 for use: flexible, occasional movement or vibration

## Designation of order

L45467-J217-W16  
212322  
09YS(ST)C 2X2X0.75/1.5-100 LI  
LIH-Z CH 4X1X1.5 GN  
500 m (1640 ft) 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.