

### product description



Halogen-free bus cable acc. to IEC 60754-1/2 (4-core), sold by the meter, unassembled

Industrial Ethernet FC TP Marine Cable, TP installation cable for connection to FC outlet RJ45, shipbuilding certified, 4-core, shielded, Cat5, sold by the meter, delivery unit max. 1000 m, minimum order quantity 20 m.

### suitability for use

For marine and offshore use

### cable designation

L-9YH (ST) CH 2 x 2 x 0,34/1,5-100 GN VZN FRNC SF/UTP

### electrical data

#### attenuation factor per length

- at 10 MHz / maximum 0.06 dB/m
- at 100 MHz / maximum 0.22 dB/m

#### impedance

- at 1 MHz ... 100 MHz 100  $\Omega$

#### relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz 15 %

#### near-end crosstalk per length

- at 1 MHz ... 100 MHz 0.5 dB/m

#### transfer impedance per length / at 10 MHz

10 m $\Omega$ /m

#### loop resistance per length / maximum

120 m $\Omega$ /m

#### operating voltage

- RMS value 80 V

#### NVP value in percent

66 %

### mechanical data

#### number of electrical cores

4

#### design of the shield

Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires

#### type of electrical connection / FastConnect

Yes

#### core diameter

- of AWG22 insulated conductor 0.75 mm

#### outer diameter

- of inner conductor 0.75 mm
- of the wire insulation 1.5 mm
- of the inner sheath of the cable 3.9 mm
- of cable sheath 6.5 mm

#### symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

#### material

- of the wire insulation PP
- of the inner sheath of the cable FRNC
- of cable sheath FRNC

#### color

- of the insulation of data wires white/yellow/blue/orange
- of cable sheath green

#### bending radius

<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	39 mm
tensile load / maximum	97.5 mm
weight per length	150 N
	68 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• note</li> </ul>	-25 ... +70 °C -40 ... +85 °C -40 ... +85 °C 0 ... 50 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
ambient condition / for operation	Temperature range for permanent installation -40 °C to 85 °C
fire behavior	flame resistant according to IEC 60332-3-22 (Category A/F), smoke density according to IEC 61034-1/2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	conditional resistance, IEC 60811-2-1 (4 hours / 70 °C) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	Yes Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> </ul>	85 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; cULus / CMG / PLTC / Sun Res
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	Yes Yes Yes Yes Yes No No
reference code	
<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> <li>• according to IEC 81346-2:2019</li> </ul>	WG WGB
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Selection guide for cables and connectors</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a>  <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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