

product description

Highly flexible bus cable (4-core), sold by the meter, unassembled

Industrial Ethernet FC TP Trailing Cable, 2x2 (PROFINET Type C), TP installation cable for Connection to FC outlet RJ45, for cable carrier applications, 4-core, shielded CAT. 5, Sold by the meter (4 million bending cycles), delivery unit max. 2000 m, Minimum order 20 m



suitability for use

Continuous motion control in a cable carrier

cable designation

2YH (ST) C11Y 2x2x0,75/1,5-100 LI GN VZN FRNC SF/UTP

### electrical data

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.06 dB/m

0.22 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

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 mΩ/m

loop resistance per length / maximum

120 mΩ/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
- of the wire insulation
- of the inner sheath of the cable
- of cable sheath

0.75 mm

1.5 mm

3.9 mm

6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

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

polyethylene (PE)

FRNC

PUR (TPE-U)

color

- of the insulation of data wires
- of cable sheath

white/yellow/blue/orange

green

bending radius	
<ul style="list-style-type: none"> <li>with single bend / minimum permissible</li> <li>with multiple bends / minimum permissible</li> <li>with continuous bending</li> </ul>	<p>19.5 mm</p> <p>49 mm</p> <p>100 mm</p>
number of bending cycles	4000000; Drag chain suitable for 4 million bending cycles at a bending radius of 100 mm, a speed of 4 m/s and an acceleration of 4 m/s <sup>2</sup>
tensile load / maximum	150 N
weight per length	63 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>	<p>-40 ... +75 °C</p> <p>-50 ... +75 °C</p> <p>-50 ... +75 °C</p> <p>-20 ... +60 °C</p> <p>Electrical properties measured at 20 °C, tests according to DIN VDE 0472</p>
fire behavior	flame resistant according to IEC 60332-1-2
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>	<p>oil resistant according to IEC 60811-2-1 (7x24h/90°C)</p> <p>resistant</p> <p>resistant</p>
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>	<p>Yes</p> <p>Yes</p>
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 / CMX
UL/ETL style / 600 V Rating	Yes; cRU AWM I A/B 80°C 600V
certificate of suitability	
<ul style="list-style-type: none"> <li>EAC approval</li> <li>CE marking</li> <li>RoHS conformity</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
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>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
reference code	
<ul style="list-style-type: none"> <li>acc. to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	<p>WG</p> <p>WGB</p>
<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>	<p><a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
last modified:	10/30/2021 

