

## Data sheet

6XV1840-3AH10

### 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, Cat5e, sold by the meter (4 million bending cycles), max. delivery unit 2000 m, minimum order quantity 20 m.

### suitability for use

Continuous motion control in a cable carrier

### cable designation

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

### wire length

sold by the meter

### 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 Ω

#### relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz 5 %

#### 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

69 %

### mechanical data

#### number of electrical cores

4

#### design of the shield

SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned 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 polyethylene (PE)
- of the inner sheath of the cable FRNC
- of cable sheath PUR (TPE-U)

#### color

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

#### bending radius

• with single bend / minimum permissible	19.5 mm
• with multiple bends / minimum permissible	49 mm
• with continuous bending	100 mm
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	
• during operation	-40 ... +75 °C
• during storage	-50 ... +75 °C
• during transport	-50 ... +75 °C
• during installation	-20 ... +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
• to water	resistant
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	Yes
• PoE capability	Yes
• PoE+ capability	Yes
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	85 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; cULus / CMX
UL/ETL style / 600 V Rating	Yes; cRUS AWM I A/B 80°C 600V
certificate of suitability	
• EAC approval	Yes
• CE marking	Yes
• RoHS conformity	Yes
standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statków (PRS)	No
reference code	
• according to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and

solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit [www.siemens.com/cybersecurity-industry](http://www.siemens.com/cybersecurity-industry). Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

## Approvals / Certificates

### General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

#### General Product Approval

#### Test Certificates

#### Environment

#### Industrial Communication

[Fire safety / Physical security](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

[PROFINET](#)

last modified:

9/13/2025