# SIEMENS

**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, CAT5, 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 | 2YH (ST) C11Y 2x2x0,75/1,5-100 LI 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 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 | 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/s² |
| tensile load / maximum | 150 N |
| weight per length | 63 kg/km |

| **ambient conditions** | |
|---|---|
| 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 |

| **product features, product functions, product components / general** | |
|---|---|
| product feature | |
| ● halogen-free | Yes |
| ● silicon-free | Yes |
| wire length / for Industrial Ethernet | |
| ● with 100BaseTX | 85 m |

| **standards, specifications, approvals** | |
|---|---|
| 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 | |
| ● 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 Statkow (PRS) | No |
| reference code | |
| ● according to IEC 81346-2 | WG |
| ● according to IEC 81346-2:2019 | WGB |

| **further information / internet-Links** | |
|---|---|
| Internet-Link | |
| ● to web page: selection aid TIA Selection Tool | http://www.siemens.com/tia-selection-tool |
| ● to website: Industrial communication | http://www.siemens.com/simatic-net |
| ● to website: Industry Mall | https://mall.industry.siemens.com |
| ● to website: Information and Download Center | http://www.siemens.com/industry/infocenter |
| ● to website: Selection guide for cables and connectors | https://sie.ag/2QdlxcP |
| ● to website: Image database | http://automation.siemens.com/bilddb |
| ● to website: CAx-Download-Manager | http://www.siemens.com/cax |
| ● to website: Industry Online Support | https://support.industry.siemens.com |

| | |
|---|---|
| **last modified:** | 10/30/2021 ↗ |