SIEMENS

Data sheet 6XV1830-3EH10

| product type designation | PROFIBUS FC Trailing Cable | |
|---|--|--|
| product description | Highly flexible bus cable (2-core), sold by the meter, unassembled | |
| | PROFIBUS FC Trailing Cable, PROFIBUS trailing cable, max. Acceleration 4 m/QS min. 3 million bending cycles min. Bending radius approx. 120 mm 2-wire shielded, sold by the meter delivery unit max. 1000 m minimum order quantity 20 m. | |
| suitability for use | Continuous motion control in a cable carrier | |
| cable designation | 02YY (ST) C11Y 1x2x0,65/2,56-150 LI KF 40 FR petrol | |
| electrical data | | |
| attenuation factor per length | | |
| • at 9.6 kHz / maximum | 0.003 dB/m | |
| • at 38.4 kHz / maximum | 0.004 dB/m | |
| at 4 MHz / maximum | 0.025 dB/m | |
| • at 16 MHz / maximum | 0.049 dB/m | |
| impedance | | |
| rated value | 150 Ω | |
| ● at 9.6 kHz | 270 Ω | |
| ● at 38.4 kHz | 185 Ω | |
| • at 3 MHz 20 MHz | 150 Ω | |
| relative symmetrical tolerance | | |
| of the characteristic impedance at 9.6 kHz | 10 % | |
| of the characteristic impedance at 38.4 kHz | 10 % | |
| of the characteristic impedance at 3 MHz 20 MHz | 10 % | |
| loop resistance per length / maximum | 133 mΩ/m | |
| shield resistance per length / maximum | 14 Ω/km | |
| capacity per length / at 1 kHz | 28 pF/m | |
| operating voltage | | |
| • RMS value | 80 V | |
| nechanical data | | |
| number of electrical cores | 2 | |
| design of the shield | Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires | |
| type of electrical connection / FastConnect | Yes | |
| outer diameter | | |
| of inner conductor | 0.67 mm | |
| of the wire insulation | 2.56 mm | |
| of the inner sheath of the cable | 5.4 mm | |
| of cable sheath | 8 mm | |
| symmetrical tolerance of the outer diameter / of cable sheath | 0.4 mm | |
| material | | |
| of the wire insulation | polyethylene (PE) | |
| of the inner sheath of the cable | PVC | |
| of cable sheath | PUR (TPE-U) | |
| color | | |
| of the insulation of data wires | red/green | |
| of cable sheath | petrol | |
| bending radius | | |
| with single bend / minimum permissible | 40 mm | |
| with continuous bending | 120 mm | |
| number of bending cycles | 3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 120 mm (15x D), a speed of 4 m/s and an acceleration of 4 m/s ² | |
| tensile load / maximum | 100 N | |
| | | |
| weight per length | 77 kg/km | |

| ambient temperature | |
|--|--|
| during operation | -40 +60 °C |
| during storage | -40 +60 °C |
| during transport | -40 +60 °C |
| during installation | -40 +60 °C |
| • note | Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472 |
| ambient condition / for operation | Limited segment length (see manual for PROFIBUS networks) |
| 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 | conditional resistance |
| radiological resistance / to UV radiation | resistant |
| product features, product functions, product components / ge | eneral |
| product feature | |
| halogen-free | No |
| • silicon-free | Yes |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes; c(UL)us / CMX |
| UL/ETL style / 600 V Rating | Yes; cRU AWM I A/B 80°C 600V FT2 |
| certificate of suitability | 100, 0100 70000 1700 00 0 0000 1 12 |
| EAC approval | Yes |
| CE marking | Yes |
| RoHS conformity | Yes |
| Marine classification association | 165 |
| | No |
| American Bureau of Shipping Europe Ltd. (ABS) Franch marine classification assists (PV) | No |
| French marine classification society (BV) Det Norako Voritas (DN)() | |
| Det Norske Veritas (DNV) | No No |
| Germanische Lloyd (GL) | No 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 |

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