SIEMENS

Data sheet

product type designation

product description

6XV1830-0ET50

Standard bus cable (2 wires), preferred length, not assembled

PROFIBUS FC Standard, bus cable 2-wire, shielded special configuration for Quick assembly 500 m

| None of the second seco | |
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| | |
| suitability for use | Standard cable specially designed for fast, permanent installation |
| cable designation | 02YSY (ST) CY 1x2x0,64/2,55-150 VI KF 40 FR |
| wire length | 500 m |
| electrical data | |
| attenuation factor per length | |
| • at 9.6 kHz / maximum | 0.0025 dB/m |
| • at 38.4 kHz / maximum | 0.004 dB/m |
| • at 4 MHz / maximum | 0.022 dB/m |
| • at 16 MHz / maximum | 0.042 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 | 110 mΩ/m |
| shield resistance per length / maximum | 9.5 Ω/km |
| capacity per length / at 1 kHz | 28.5 pF/m |
| operating voltage | |
| RMS value | 100 V |
| mechanical 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 | 0.65 mm |
| of the wire insulation | 2.55 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 | PVC |
|---|--|
| color | |
| of the insulation of data wires | red/green |
| • of cable sheath | Violet |
| bending radius | |
| with single bend / minimum permissible | 37.5 mm |
| with multiple bends / minimum permissible | 75 mm |
| tensile load / maximum | 100 N |
| weight per length | 78 kg/km |
| ambient conditions | |
| ambient temperature | |
| during operation | -40 +75 °C |
| during storage | -40 +75 °C |
| during transport | -40 +75 °C |
| during installation | -40 +75 °C |
| • note | Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472 |
| fire behavior | flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4) |
| class of burning behaviour / according to EN 13501-6 | Eca |
| chemical resistance | |
| • to mineral oil | oil resistant according to IEC 60811-2-1 (4 h / 70°C) |
| • to grease | Conditional resistance |
| • to water | conditional resistance |
| radiological resistance / to UV radiation | resistant |
| product features, product functions, product components | / general |
| product feature | |
| halogen-free | No |
| • silicon-free | Yes |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes; c(ETL)us, CMG / (ETL)us CL3 / Sun Res |
| UL/ETL style / 600 V Rating | Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2 |
| certificate of suitability | |
| EAC approval | Yes |
| CE marking | Yes |
| UL approval | Yes |
| RoHS conformity | Yes |
| 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 | |
| • acc. 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 |
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