

product type designation

product description

Foundation Fieldbus Cable

Bus cable (2-core), sold by the meter, unassembled

Foundation Fieldbus Cable; bus cable for IEC 61158-2; sheath color blue for Ex applications; 2-core shielded; stranded drain wire; Sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.



suitability for use

For use in fieldbus systems according to IEC 61158-2 (e.g. Foundation Fieldbus), suitable for Ex applications

cable designation

2X(ST)CY 1X2X1.1/2.85-100 LI BL FR OE

electrical data

attenuation factor per length

- at 38.4 kHz / maximum

0.003 dB/m

impedance

- rated value
- at 31.25 kHz
- at 38.4 kHz

100 Ω
100 Ω
100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 31.25 kHz
- of the characteristic impedance at 38.4 kHz

20 %
20 %

loop resistance per length / maximum

46 mΩ/m

shield resistance per length / maximum

10 Ω/km

capacity per length / at 1 kHz

65 pF/m

inductance per length

0.75 μH/m

operating voltage

- RMS value

300 V

mechanical data

number of electrical cores

2

design of the shield

Overlapped aluminum-clad foil, sheathed in a braided shield of tin-plated copper wires with shield wire

type of electrical connection / FastConnect

No

outer diameter

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

1.17 mm
2.85 mm
6.4 mm
8.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

material

- of the wire insulation
- of cable sheath

polyethylene (PE)
PVC

color


- of the insulation of data wires
- of cable sheath

blue/brown
blue

bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible

34 mm
68 mm

| | |
|--|--|
| tensile load / maximum | 100 N |
| weight per length | 98 kg/km |
| ambient conditions | |
| ambient temperature | |
| • during operation | -40 ... +105 °C |
| • during storage | -40 ... +105 °C |
| • during transport | -40 ... +105 °C |
| • during installation | -40 ... +105 °C |
| • note | Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472 |
| ambient condition / for operation | Transfer rate of cable: 31.25 Kbit/s |
| 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 | conditional resistance |
| • 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(UL)us, CMG / PLTC / Sun Res |
| UL/ETL style / 600 V Rating | No |
| certificate of suitability | |
| • EAC 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 | |
| • 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  |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Siemens:](#)

[6XV18305GH10](#)