

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

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