



FOUNDATION FIELDBUS CABLE;
 BUS CABLE FOR IEC61158-2;
 SHEATH COLOR BLUE FOR EX- APPLICATIONS.;
 2-WIRE SHIELDED;
 DRAIN WIRE;
 SOLD BY THE M;
 MAX. ORDER QUANTITY: 1000 M MIN. ORDER
 QUANTITY: 20 M

Acceptability for application

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

Damping ratio per length

- at 38.4 kHz / maximum

0.0030 dB/m

Impedance

- Nominal value
- at 31.25 kHz
- at 38.4 kHz

100 Ω
 100 Ω
 100 Ω

Relative symmetrical tolerance

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

20 %
 20 %

Loop resistance per length / maximum

46 Ω/km

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 wires

2

Design of shield	Overlapped aluminum-clad foil, sheathed in a braided shield of tin-plated copper wires with shield wire
Design of the electrical connection / FastConnect	No
Outer diameter	
• of the inner conductor	1.17 mm
• of the wire insulation	2.85 mm
• of the inner sheath of the cable	6.4 mm
• of the cable sheath	8.5 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.3 mm
Material	
• of the wire insulation	PE
• of the cable sheath	PVC
Color	
• of the insulation of data wires	blue / brown
• of the cable sheath	Blue
Bending radius	
• with single bend / minimum permissible	34 mm
• with multiple bends / minimum permissible	68 mm
Traction stress / maximum	100 N
Weight per length	98 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operating	-40 ... +105 °C
• during storage	-40 ... +105 °C
• during transport	-40 ... +105 °C
• during installation	-40 ... +105 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN 47250 Part 4 or DIN VDE 0472
Ambient condition / for (standard) operation mode	Transfer rate of cable: 31.25 Kbit/s
Burning behaviour	flame resistant according to IEC 60332-1-2
Chemical resistance	
• to mineral oil	Conditional resistance
• to grease	Conditional resistance
• to water	Conditional resistance
Radiological resistance / to UV radiation	Resistant
Product properties, functions, components / general	
Product feature	
• halogen-free	No
• silicon-free	Yes
Standards, specifications, approvals	

UL/ETL listing / with 300 V rating

Yes: c(UL)us, CMG / PLTC / Sun Res

UL/ETL style / with 600 V rating

no

Verification of suitability

- RoHS conformity

Yes

Marine classification association

- American Bureau of Shipping Europe Ltd. (ABS)
- Bureau Veritas (BV)
- Det Norske Veritas (DNV)
- Germanische Lloyd (GL)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NK)
- Polski Rejestr Statkow (PRS)

No

No

No

No

No

No

No

Further Information / Internet Links

Internet-Link

- to website: Industry Mall
- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<https://www.siemens.com/industrymall>

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>

<http://www.siemens.com/automation/net/catalog>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<http://support.automation.siemens.com>

letzte Änderung:

Aug 9, 2014