

### 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 yellow for non- Ex applications; 2-core shielded; stranded drain wire sold by the meter; delivery length max. 1000 m minimum order 20 m



suitability for use	For use in fieldbus systems according to IEC 61158-2 (e.g. Foundation Fieldbus), suitable for non-Ex applications
cable designation	2X(ST)CY 1X2X1.1/2.85-100 LI GE FR OE
<b>electrical data</b>	
damping ratio per length	
• at 38.4 kHz / maximum	0.003 dB/m
impedance	
• rated value	100 Ω
• at 31.25 kHz	100 Ω
• at 38.4 kHz	100 Ω
relative symmetrical tolerance	
• of the characteristic impedance at 31.25 kHz	20 %
• of the characteristic impedance at 38.4 kHz	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	
<ul style="list-style-type: none"> <li>• RMS value</li> </ul>	300 V
<b>mechanical data</b>	
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	
<ul style="list-style-type: none"> <li>• of inner conductor</li> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	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	
<ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of cable sheath</li> </ul>	polyethylene (PE) PVC
color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	blue/brown yellow
bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	34 mm 68 mm
tensile load / maximum	100 N
weight per length	98 kg/km

<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• note</li> </ul>	-40 ... +105 °C -40 ... +105 °C -40 ... +105 °C -40 ... +105 °C 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
burning behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	conditional resistance Conditional resistance 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
• Bureau Veritas (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

### further information / internet-Links

Internet-Link	
• to website: Selector TIA Selection Tool	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

**last modified:** 10/12/2020