SIEMENS

Data sheet 6XV1830-5GH10

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
wire length	sold by the meter
electrical data	
attenuation factor 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	
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 	1.17 mm
 of the wire insulation 	2.85 mm
 of the inner sheath of the cable 	6.4 mm
of cable sheath	8.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
material	
 of the wire insulation 	polyethylene (PE)
of cable sheath	PVC
color	
 of the insulation of data wires 	blue/brown
of cable sheath	blue
bending radius	
with single bend / minimum permissible	34 mm

 with multiple bends / minimum permissible 	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 / gene	
product feature	
halogen-free	No
silicon-free	Yes
standards, specifications, approvals	160
	Vacca/III via CMC / DLTC / Cua Dag
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 website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax
to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions
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customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval





Manufacturer Declaration Declaration of Conformity





Test Certificates

Environment

Special Test Certificate

Confirmation

Environmental Confirmations

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