SIEMENS

Data sheet   **6XV1830-0LH10**

product type designation	**PROFIBUS FC FRNC Cable GP**
product description	flame-retardant and halogen-free bus cable acc. to IEC 60754-1/2 (2-core), sold by the meter, unassembled
	PROFIBUS FC FRNC Cable GP, flame-retardant bus cable and halogen-free bus cable with copolymer sheath, FRNC sold by the meter, delivery unit max. 1000 m, minimum order quantity 20 m .
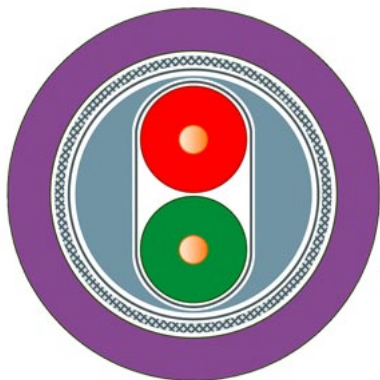
suitability for use	Halogen-free cable, suitable for use in buildings
cable designation	02YSH (ST) CH 1x2x0,64/2,55-150 VI KF 25 FRNC FC
electrical data	
attenuation factor per length	
● at 9.6 kHz / maximum	0.0025 dB/m
● at 38.4 kHz / maximum	0.004 dB/m
● at 4 MHz / maximum	0.022 dB/m
● at 16 MHz / maximum	0.042 dB/m
impedance	
● rated value	150 Ω
● at 9.6 kHz	270 Ω
● at 38.4 kHz	185 Ω
● at 3 MHz … 20 MHz	150 Ω
relative symmetrical tolerance	
● of the characteristic impedance at 9.6 kHz	10 %
● of the characteristic impedance at 38.4 kHz	10 %
● of the characteristic impedance at 3 MHz … 20 MHz	10 %
loop resistance per length / maximum	110 mΩ/m
shield resistance per length / maximum	9.5 Ω/km
capacity per length / at 1 kHz	28.5 pF/m
operating voltage	
● RMS value	80 V
mechanical data	
number of electrical cores	2
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
type of electrical connection / FastConnect	Yes
outer diameter	
● of inner conductor	0.65 mm
● of the wire insulation	2.55 mm
● of the inner sheath of the cable	5.4 mm
● of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	
● of the wire insulation	polyethylene (PE)
● of the inner sheath of the cable	FRNC
● of cable sheath	FRNC
color	

● of the insulation of data wires	red/green
● of cable sheath	Violet
bending radius	
● with single bend / minimum permissible	60 mm
● with multiple bends / minimum permissible	80 mm
tensile load / maximum	100 N
weight per length	72 kg/km

ambient conditions

ambient temperature	
● during operation	-25 ... +80 °C
● during storage	-25 ... +80 °C
● during transport	-25 ... +80 °C
● during installation	-25 ... +80 °C
● note	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-3-24 (Category C), IEC 60332-3-22 (Category A), EN 50267-2-1/2, IEC 61034
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
● to mineral oil	oil-resistant according to IEC 60811-401
● 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	Yes; halogen-free according to EN 60754-1-2
● silicon-free	Yes
● low-emission according to IEC 61034-2	Yes

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us, CM / CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes
certificate of suitability	
● EAC approval	Yes
● CE marking	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 that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected

to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase 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

CE
EG-Konf.

Declaration of Conformity

UK CA

CCC

RCM

Environment

Confirmation

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