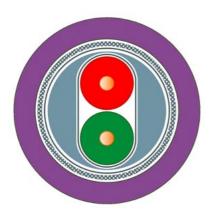
SIEMENS

Data sheet 6XV1830-0LH10

product type designation

product description



PROFIBUS FC FRNC Cable GP

Flame retardant, halogen-free bus cable (2-core), sold by the meter, unassembled

PROFIBUS FC FRNC Cable GP, flame-retardant bus cable and halogenfree bus cable with copolymer sheath, FRNC sold by the meter, delivery length max. 1000 m, Minimum order 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 cuine inculation	nelvethylene (DE)
• 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 60811-2-1 (4 h / 70°C)
• 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
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us, CM / CL3 / Sun Res
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating	Yes; c(UL)us, CM / CL3 / Sun Res Yes
UL/ETL style / 600 V Rating certificate of suitability	Yes
UL/ETL style / 600 V Rating	
UL/ETL style / 600 V Rating certificate of suitability • EAC approval	Yes
UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking	Yes Yes Yes
UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity	Yes Yes Yes
UL/ETL style / 600 V Rating certificate of suitability	Yes Yes Yes Yes Yes
UL/ETL style / 600 V Rating certificate of suitability	Yes Yes Yes Yes Yes No
UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV)	Yes Yes Yes Yes Yes No No
UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV)	Yes Yes Yes Yes Yes No No No
UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL)	Yes Yes Yes Yes Yes No No No No
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UL/ETL style / 600 V Rating certificate of suitability	Yes Yes Yes Yes No No No No No No No No No http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com
certificate of suitability EAC approval CE marking RoHS conformity Marine classification association American Bureau of Shipping Europe Ltd. (ABS) French marine classification society (BV) Det Norske Veritas (DNV) Germanische Lloyd (GL) Lloyds Register of Shipping (LRS) Nippon Kaiji Kyokai (NK) Polski Rejestr Statkow (PRS) further information / internet-Links Internet-Link to web page: selection aid TIA Selection Tool to website: Industrial communication to website: Industry Mall to website: Information and Download Center	Yes Yes Yes Yes No http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter
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