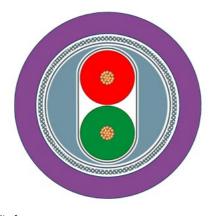
SIEMENS

Data sheet 6XV1831-2L

product type designation

product description



PROFIBUS FC Trailing Cable

Highly flexible bus cable (2-core), sold by the meter, unassembled

PROFIBUS FC Trailing Cable, PROFIBUS trailing cable, max. Acceleration 4 m/QS min. 3 million bending cycles min. Bending radius approx. 120 mm 2-wire shielded Sold by the meter Delivery length max. 1000 m Minimum order 20 m

suitability for use	Continuous motion control in a cable carrier
cable designation	02YY (ST) C11Y 1x2x0,65/2,56-150 LI KF 40 FR VT FC
electrical data	
attenuation factor per length	
at 9.6 kHz / maximum	0.003 dB/m
at 38.4 kHz / maximum	0.004 dB/m
at 4 MHz / maximum	0.025 dB/m
• at 16 MHz / maximum	0.049 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	133 mΩ/m
shield resistance per length / maximum	14 Ω/km
capacity per length / at 1 kHz	28 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 	0.67 mm
 of the wire insulation 	2.56 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)

e of the inner sheeth of the cable	PVC
of the inner sheath of the cable of cable sheath	
• of cable sheath	PUR (TPE-U)
color	radaraan
of the insulation of data wires	red/green
• of cable sheath	Violet
bending radius	
with single bend / minimum permissible	40 mm
with continuous bending	120 mm
number of bending cycles	3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 120 mm (15x D) and an acceleration of 4 m/s ²
tensile load / maximum	100 N
weight per length	77 kg/km
ambient conditions	
ambient temperature	
 during operation 	-40 +60 °C
during storage	-40 +60 °C
during transport	-40 +60 °C
during installation	-40 +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN 47250
	part 4 respectively DIN VDE 0472
ambient condition / for operation	Limited segment length (see manual for PROFIBUS networks)
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	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
• to water	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; CMX
UL/ETL style / 600 V Rating	No
certificate of suitability	110
EAC approval	Yes
• CE marking	Yes
_	
RoHS conformity Marine placeification apposition	Yes
Marine classification association	N-
American Bureau of Shipping Europe Ltd. (ABS) Franch marine along if action as a interest (B)()	No 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
further information / internet-Links	
Internet-Link	
 to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
to website: Industrial communication	http://www.siemens.com/simatic-net
to website: Industry Mall	https://mall.industry.siemens.com
to website: Industry Main to website: Information and Download Center	http://www.siemens.com/industry/infocenter
to website: Information and Download Center to website: Selection guide for cables and	https://sie.aq/2QdlxcP
connectors	
to website: Image database	http://automation.siemens.com/bilddb
• to website: CAy Download Manager	http://www.siemens.com/cax
to website: CAx-Download-Manager	
to website: CAX-Download-Manager to website: Industry Online Support	https://support.industry.siemens.com
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