SIEMENS

Data sheet 6XV1830-7AH10

product type designation

product description



PROFIBUS ECOFAST Hybrid Cable

ECOFAST Hybrid cable (data and energy wires), product sold by meter, unassembled

PROFIBUS ECOFAST Hybrid Cable, Trailable cable with 4x Cu (1.5 mm2) and 2xCU (0.64mm) shielded sold by the meter, Delivery length max. 1000 m Minimum order quantity: 20 m

suitability for use	Hybrid cable for connection of ECOFAST stations
cable designation	02Y (ST)C 1 x 2 x 0.65/2.56 - 150 LI LIH-Z 11Y 4 x 1 x 1.5 VI FRNC
electrical data	
attenuation factor per length	
• at 9.6 kHz / maximum	0.004 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	138 Ω/km
shield resistance per length / maximum	15 Ω/km
insulation resistance coefficient	20 GΩ·m
operating voltage / maximum	80 V
capacity per length / at 1 kHz	30 pF/m
operating voltage / RMS value	100 V
conductor cross section / of the power line	1.5 mm ²
continuous current / of the power lines	12 A
mechanical data	
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin- plated copper wires
number of electrical cores	6
type of electrical connection / FastConnect	No
outer diameter	
 of inner conductor 	0.67 mm
 of the wire insulation 	2.56 mm
of cable sheath	11 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
material	

of the wire insulation	polyethylene (PE)
of cable sheath	PUR
color	FUIX
of the insulation of data wires	red / green
of the insulation of data wires of the power line insulation	Black
of cable sheath	Violet
bending radius	VIOICE
with multiple bends / minimum permissible	82.5 mm
number of bending cycles	5000000; For use in cable carriers, for 5 million bending cycles with a
Humber of behaling cycles	bending radius of 82.5 mm (7.5x D) and an acceleration of 2.5 m/s ²
tensile load / maximum	300 N
weight per length	150 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 Cel, verification according to DIN 47250 part 4 respectively DIN VDE 0472
fire behavior	flame-retardant according to IEC 60332-1
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	Conditional resistance
• to grease	Conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product component	s / general
product feature	
halogen-free	Yes
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
 EAC approval 	Yes
 RoHS conformity 	Yes
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: Information and Download Center	http://www.siemens.com/industry/infocenter
 to website: Selection guide for cables and connectors 	https://sie.ag/2QdlxcP
• to website: Image database	http://automation.siemens.com/bilddb
to website: CAx-Download-Manager	http://www.siemens.com/cax
to website: Industry Online Support	https://support.industry.siemens.com
•	

last modified: 5/21/2021 🖸