SIEMENS

Data sheet

6XV1830-7BH10

product type designation

product description



PROFIBUS ECOFAST Hybrid Cable

ECOFAST Hybrid cable (data and energy wires), preferred length, assembled with ECOFAST connector and socket

PROFIBUS ECOFAST Hybrid Cable, 2xCu 0.64 mm, 4x Cu 1.5 mm2, Cable pre-assembled with ECOFAST plug and socket, trailable, length 1.0 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
wire length	1 m
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	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	
 of the insulation of data wires 	red / green
 of the power line insulation 	Black
of cable sheath	Violet
bending radius	
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
	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
chemical resistance	
• to mineral oil	Conditional resistance
• to grease	Conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP65
product features, product functions, product componen	ts / 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://www.sieniens.com/cdx
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last modified:	5/21/2021 🖸