## SIEMENS

## Data sheet

product description

product type designation

## 6XV1830-7AH10

PROFIBUS	<b>ECOFAST</b>	Hybrid Cable
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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 (0.64 mm) shielded, sold by the meter, delivery unit max. 1000 m minimum order quantity: 20 m.

suitability for use	Hybrid cable for connection of ECOFAST stations02Y (ST)C 1 x 2 x 0.65/2.56 - 150 LI LIH-Z 11Y 4 x 1 x 1.5 VI FRNC	
cable designation		
lectrical 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		
<ul> <li>rated value</li> </ul>	150 Ω	
• at 9.6 kHz	270 Ω	
• at 38.4 kHz	185 Ω	
• at 3 MHz 20 MHz	150 Ω	
relative symmetrical tolerance		
<ul> <li>of the characteristic impedance at 9.6 kHz</li> </ul>	10 %	
<ul> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	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 <sup>2</sup>	
continuous current / of the power lines	12 A	
nechanical 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)	
<ul> <li>of cable sheath</li> </ul>	PUR	

color	
<ul> <li>of the insulation of data wires</li> </ul>	red / green
<ul> <li>of the power line insulation</li> </ul>	Black
of cable sheath	Violet
bending radius	
<ul> <li>with multiple bends / minimum permissible</li> </ul>	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 <sup>2</sup>
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
<ul> <li>during installation</li> </ul>	-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 components / g	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	
<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	http://www.siemens.com/tia-selection-tool
<ul> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
<ul> <li>to website: Industry Mall</li> </ul>	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
<ul> <li>to website: Image database</li> </ul>	http://automation.siemens.com/bilddb
<ul> <li>to website: CAx-Download-Manager</li> </ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com

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