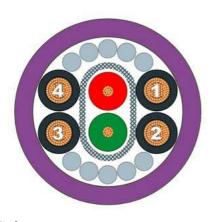
## **SIEMENS**

Data sheet 6XV1830-7BH50

## 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 5 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	5 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	
<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
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	
<ul> <li>of inner conductor</li> </ul>	0.67 mm
<ul> <li>of the wire insulation</li> </ul>	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 <sup>2</sup>
tensile load / maximum	300 N
weight per length	150 kg/km
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +60 °C
during storage	-40 +60 °C
<ul> <li>during transport</li> </ul>	-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
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 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	
<ul> <li>EAC approval</li> </ul>	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
to website: Industry Mall	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
• to website: CAx-Download-Manager	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com
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last modified: 5/21/2021 🖸