## **SIEMENS**

Data sheet 6XV1830-7BH50

product type designation	PROFIBUS ECOFAST Hybrid Cable
product description	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 preassembled 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	
• 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 <sup>2</sup>
continuous current / of the power lines	12 A
nechanical data	12.71
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated
design of the shield	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 <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	
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 components / 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	
• 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: 9/12/2023 🖸