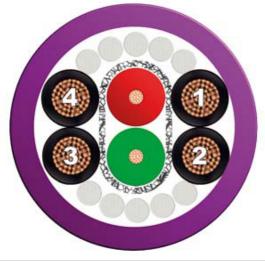
SIEMENS

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 SIMATIC NET,PROFIBUS ECOFAST HYBRID CABLE, 2XCU 0.64 MM, 4XCU 1.5 SQMM, CABLE PREASSEMBLED WITH ECOFAST CONNECTOR AND SOCKET, TRAILING TYPE, 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
Cable length	1 m

Electrical data	
Damping ratio 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	10 %
MHz	
Loop resistance per length / maximum	138 Ω/km
Shield resistance per length / maximum	15 Ω/km
Insulation resistance coefficient	20 GΩ·m

Capacity per length / at 1 kHz	30 pF/m
Operating voltage / RMS value	100 V
Conductor cross section / of the power wire	1.5 mm²
Continuous current / of the power wires	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 	PE
• of cable sheath	PUR
Color	
 of the insulation of data wires 	red / green
 of the power wire 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 temperature -40 ... +60 °C • during operation -40 ... +60 °C • during storage -40 ... +60 °C • during transport -40 ... +60 °C • during installation Electrical properties measured at 20 Cel, verification according to Note DIN 47250 part 4 respectively DIN VDE 0472 Burning behavior flame-retardant according to IEC 60332-1 Chemical resistance Conditional resistance • to mineral oil Conditional resistance • to grease Radiological resistance / to UV radiation resistant

Protection class IP	IP65		
Product properties, functions, components / general	Product properties, functions, components / general		
Product property			
• halogen-free	Yes		
• silicon-free	Yes		
Standards, specifications, approvals			
Certificate of suitability			
RoHS conformity	Yes		
Further Information / Internet Links			
Internet-Link			
 to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst		
• 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/automation/net/catalog		
• 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		

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