SIEMENS

Data sheet   **6XV1830-7BN15**

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 pre-assembled with ECOFAST plug and socket, trailable, length 15 m.
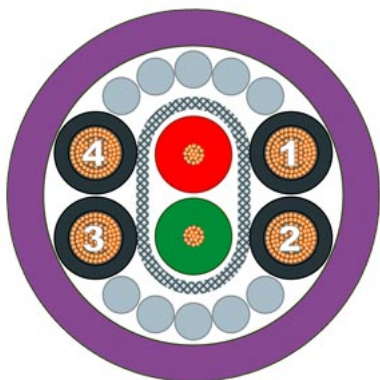
Technical Product Detail Page	https://i.siemens.com/1P6XV1830-7BN15
suitability for use	Hybrid cable for connection of ECOFAST stations
cable designation	02Y (ST)C 1 x 2 x 0.65/2.56 - 150 LI LIH-Z 11Y 4 x 1 x 1.5 VI FRNC
wire length	15 m
electrical data	
attenuation factor per length	
● at 9.6 kHz / 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 mm²
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/s²
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	
• EAC approval	Yes
• RoHS conformity	Yes
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase

customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval

CE EG-Konf.	Declaration of Conformity	UKCA	CCC	Manufacturer Declaration	China RoHS

General Product Approval	Maritime application
RCM	BUREAU VERITAS

last modified:	1/12/2026

Approvals / Certificates

General Product Approval