

Data sheet

6XV1860-2P

Product type designation	PROFIBUS ECOFAST Hybrid Cable GP
Product description	ECOFAST Hybrid cable (data and energy wires), product sold by meter, unassembled PROFIBUS ECOFAST Hybrid Cable GP, trailable cable with 4x Cu (1.5 mm ²) and 2xCU (0.64mm) shielded sold by the meter, Delivery length max. 1000 m Minimum order quantity: 20 m
Suitability for use	Hybrid cable for connection of ECOFAST stations, UL approval
Cable designation	02Y (ST)C 1x2x0.65/2.56 -150 LI LIY-Z Y 4x1x1.5 VI

Electrical data

Damping ratio 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	
• 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	600 V
Conductor cross section / of the power wire	1.5 mm ²
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	polyethylene (PE)
• of cable sheath	PVC
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	110 mm
Number of bending cycles	1000000; For use in cable carriers, for 1 million bending cycles with a bending radius of 166 mm (15x D) and an acceleration of 4.0 m/s ²
Tensile load / maximum	300 N
Weight per length	154 kg/km

Ambient conditions

Ambient temperature	
• during operation	-30 ... +80 °C
• during storage	-30 ... +80 °C
• during transport	-30 ... +80 °C
• during installation	-30 ... +80 °C
• Note	Electrical properties measured at 20 Cel, verification according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	flame-retardant according to IEC 60332-3-24 (Category C)
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 / 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	Yes; CM / CL3 / SunRes / OilRes
Certificate of suitability	

- RoHS conformity

Yes

Further information / Internet-Links

Internet-Link

- to website: Selector SIMATIC NET
SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>

<https://mall.industry.siemens.com>

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

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