

Product type designation

Product description

PROFIBUS ECOFAST Hybrid Cable GP

ECOFAST Hybrid cable (data and energy wires), preferred length, assembled with ECOFAST connector and socket
SIMATIC NET, PROFIBUS ECOFAST HYBRID CABLE GP, 2XCU 0.64 MM, 4XCU 1.5 SQMM, CABLE PREASSEMBLED WITH ECOFAST CONNECTOR AND SOCKET, TRAILING TYPE, LENGTH 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
Cable length	20 m

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> • at 9.6 kHz / maximum • at 38.4 kHz / maximum • at 4 MHz / maximum • at 16 MHz / maximum 	<p>0.003 dB/m</p> <p>0.004 dB/m</p> <p>0.025 dB/m</p> <p>0.049 dB/m</p>
Impedance	
<ul style="list-style-type: none"> • Rated value • at 9.6 kHz • at 38.4 kHz • at 3 MHz ... 20 MHz 	<p>150 Ω</p> <p>270 Ω</p> <p>185 Ω</p> <p>150 Ω</p>
Relative symmetrical tolerance	
<ul style="list-style-type: none"> • of the characteristic impedance at 9.6 kHz • of the characteristic impedance at 38.4 kHz • of the characteristic impedance at 3 MHz ... 20 MHz 	<p>10 %</p> <p>10 %</p> <p>10 %</p>
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	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 <ul style="list-style-type: none"> • of inner conductor • of the wire insulation • of cable sheath 	0.67 mm 2.56 mm 11 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
Material <ul style="list-style-type: none"> • of the wire insulation • of cable sheath 	PE PVC
Color <ul style="list-style-type: none"> • of the insulation of data wires • of the power wire insulation • of cable sheath 	red / green Black Violet
Bending radius <ul style="list-style-type: none"> • 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

Permitted ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-30 ... +80 °C -30 ... +80 °C -30 ... +80 °C -30 ... +80 °C Electrical properties measured at 20 Cel, verification according to DIN 47250 part 4 respectively DIN VDE 0490
Burning behavior	flame-retardant according to IEC 60332-3-24 (Category C)
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease 	Conditional resistance Conditional resistance
Radiological resistance / to UV radiation	resistant
Protection class IP	IP65

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>

last modified:

16.03.2015