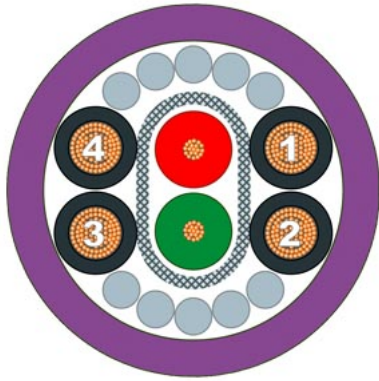


### product type designation

product description



### PROFIBUS ECOFAST Hybrid Cable

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 mm<sup>2</sup>, Cable pre-assembled with ECOFAST plug and socket, trailable, length 0.5 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

0.5 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

### 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)
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<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	PUR
color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of the power line insulation</li> <li>• of cable sheath</li> </ul>	red / green Black Violet
bending radius	
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	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	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• note</li> </ul>	-40 ... +60 °C -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C 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	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> </ul>	Conditional resistance Conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP65

#### product features, product functions, product components / general

product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	Yes Yes

#### standards, specifications, approvals

UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> <li>• RoHS conformity</li> </ul>	Yes Yes

#### further information / internet links

internet link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Selection guide for cables and connectors</li> <li>• to website: Image database</li> <li>• to website: CAX-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

#### Approvals / Certificates

General Product Approval	Test Certificates
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[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[Manufacturer Declaration](#)

Marine / Shipping

Environment



[Confirmation](#)

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3/12/2024

