

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, 2x Cu 0.64 mm, 4x Cu 1.5 mm², Cable pre-assembled with ECOFAST connector and socket, trailable, Length 25 m



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| 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 | 25 m |

Electrical data

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| 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 | |

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| <ul style="list-style-type: none"> • of the characteristic impedance at 9.6 kHz | 10 % |
| <ul style="list-style-type: none"> • of the characteristic impedance at 38.4 kHz | 10 % |
| <ul style="list-style-type: none"> • 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 wire | 1.5 mm ² |
| Continuous current / of the power wires | 12 A |

Mechanical data

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| 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 | polyethylene (PE) PUR |
| 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 | 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 conditions

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| Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport | -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C |
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| <ul style="list-style-type: none"> • during installation • Note | -40 ... +60 °C Electrical properties measured at 20 Cel, verification according to DIN 47250 part 4 respectively DIN VDE 0472 |
| Burning behavior | flame-retardant according to IEC 60332-1 |
| 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 features, product functions, product components / general

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| Product feature <ul style="list-style-type: none"> • halogen-free • silicon-free | Yes Yes |
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Standards, specifications, approvals

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

Further information / Internet-Links

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| Internet-Link <ul style="list-style-type: none"> • 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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