

product type designation

product description

PROFIBUS M12-Cable

Flexible plug-in cable (2-core), preferred length, preassembled with two 5-pole M12 male/female connectors (B-coded)

PROFIBUS M12 plug-in cable (ET 200), Pre-assembled PB FC Trailing Cable with 2 M12 connectors, B-coded, 5-pole; 2.0 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1830-3DH20>

suitability for use

Cable for connecting PROFIBUS stations (e.g. SIMATIC ET 200) to IP 65 degree of protection

cable designation

02YY (ST) C11Y 1x2x0,65/2,56-150 LI KF 40 FR petrol

wire length

2 m

electrical data

number of electrical connections

2

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

133 mΩ/m

shield resistance per length / maximum

14 Ω/km

capacity per length / at 1 kHz

28 pF/m

operating voltage

- RMS value 80 V

mechanical data

number of electrical cores

2

design of the shield

Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires

type of electrical connection / FastConnect

Yes

outer diameter

- of inner conductor 0.67 mm
- of the wire insulation 2.56 mm
- of the inner sheath of the cable 5.4 mm
- of cable sheath 8 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.4 mm

| | |
|---|---|
| material | |
| <ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath | <p>polyethylene (PE)</p> <p>PVC</p> <p>PUR (TPE-U)</p> |
| color | |
| <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath | <p>red/green</p> <p>petrol</p> |
| bending radius | |
| <ul style="list-style-type: none"> • with single bend / minimum permissible • with continuous bending | <p>40 mm</p> <p>120 mm</p> |
| number of bending cycles | 3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 120 mm (15x D) and an acceleration of 4 m/s ² |
| tensile load / maximum | 100 N |
| weight per length | 77 kg/km |
| ambient conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation | <p>-40 ... +60 °C</p> <p>-40 ... +60 °C</p> <p>-40 ... +60 °C</p> <p>-40 ... +60 °C</p> |
| ambient condition / for operation | Limited segment length (see manual for PROFIBUS networks) |
| fire behavior | flame resistant according to IEC 60332-1-2 |
| chemical resistance | |
| <ul style="list-style-type: none"> • to mineral oil • to grease • to water | <p>oil resistant according to IEC 60811-2-1 (7x24h/90°C)</p> <p>resistant</p> <p>conditional resistance</p> |
| radiological resistance / to UV radiation | resistant |
| protection class IP | IP65, IP67 |
| product features, product functions, product components / general | |
| product feature | |
| <ul style="list-style-type: none"> • halogen-free • silicon-free | <p>No</p> <p>Yes</p> |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes; CMX |
| UL/ETL style / 600 V Rating | No |
| certificate of suitability | UL2238 E300110 |
| <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity | <p>Yes</p> <p>Yes</p> <p>Yes</p> |
| Marine classification association | |
| <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) | <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> |
| further information / internet links | |
| internet link | |
| <ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support | <p>https://support.industry.siemens.com/cs/ww/en/view/109766358</p> <p>https://www.siemens.com/tstcloud</p> <p>https://sieportal.siemens.com/</p> <p>https://www.automation.siemens.com/bilddb</p> <p>https://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p> |
| 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, |

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Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



[Manufacturer Declaration](#)

[China RoHS](#)

General Product Approval

other



[Miscellaneous](#)

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