

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; 0.5 m.



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

0.5 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

- of the wire insulation polyethylene (PE)

<ul style="list-style-type: none"> • of the inner sheath of the cable • of cable sheath 	PVC PUR (TPE-U)
color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green petrol
bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with continuous bending 	40 mm 120 mm
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 • note 	-40 ... +60 °C -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
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 	oil resistant according to IEC 60811-2-1 (7x24h/90°C) resistant conditional resistance
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 	No Yes
--	-----------

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; CMX
UL/ETL style / 600 V Rating	No
certificate of suitability <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	UL2238 E300110 Yes Yes Yes
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) 	No No No No No No No
reference code <ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	WG WGB

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 	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com
---	--

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, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



[Manufacturer Declaration](#)



Environment

[Confirmation](#)

last modified:

8/8/2024 