

### 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; 1.0 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

1 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 tinned 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"> <li>of the wire insulation</li> <li>of the inner sheath of the cable</li> <li>of cable sheath</li> </ul>	polyethylene (PE) PVC PUR (TPE-U)
color	<ul style="list-style-type: none"> <li>of the insulation of data wires</li> <li>of cable sheath</li> </ul>	red/green petrol
bending radius	<ul style="list-style-type: none"> <li>with single bend / minimum permissible</li> <li>with continuous bending</li> </ul>	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 <sup>2</sup>
tensile load / maximum		100 N
weight per length		77 kg/km
<b>ambient conditions</b>		
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 °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"> <li>to mineral oil</li> <li>to grease</li> <li>to water</li> </ul>	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
<b>product features, product functions, product components / general</b>		
product feature	<ul style="list-style-type: none"> <li>halogen-free</li> <li>silicon-free</li> </ul>	No Yes
<b>standards, specifications, approvals</b>		
UL/ETL listing / 300 V Rating		Yes; CMX
UL/ETL style / 600 V Rating		No
certificate of suitability	<ul style="list-style-type: none"> <li>EAC approval</li> <li>CE marking</li> <li>RoHS conformity</li> </ul>	Yes Yes Yes
Marine classification association	<ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>French marine classification society (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Germanische Lloyd (GL)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (NK)</li> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No No No No No No No
reference code	<ul style="list-style-type: none"> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	WG WGB
<b>further information / internet-Links</b>		
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> </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>

- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

<http://automation.siemens.com/bilddb>  
<http://www.siemens.com/cax>  
<https://support.industry.siemens.com>

**last modified:**

12/31/2021 