

### 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)  
SIMATIC NET, PROFIBUS M12 CONNECTING CABLE, (ET200),  
PREASSEMBLED PB FC TRAILING CABLE WITH 2 M12  
CONNECTORS, B-CODED, 5-PIN, 3 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
Cable length	3 m

### Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> <li>• at 9.6 kHz / maximum</li> <li>• at 38.4 kHz / maximum</li> <li>• at 4 MHz / maximum</li> <li>• at 16 MHz / maximum</li> </ul>	<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"> <li>• Rated value</li> <li>• at 9.6 kHz</li> <li>• at 38.4 kHz</li> <li>• at 3 MHz ... 20 MHz</li> </ul>	<p>150 Ω</p> <p>270 Ω</p> <p>185 Ω</p> <p>150 Ω</p>
Relative symmetrical tolerance	
<ul style="list-style-type: none"> <li>• of the characteristic impedance at 9.6 kHz</li> <li>• of the characteristic impedance at 38.4 kHz</li> <li>• of the characteristic impedance at 3 MHz ... 20 MHz</li> </ul>	<p>10 %</p> <p>10 %</p> <p>10 %</p>
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	
<ul style="list-style-type: none"> <li>• RMS value</li> </ul>	100 V
<b>Mechanical data</b>	
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	
<ul style="list-style-type: none"> <li>• of inner conductor</li> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	0.67 mm 2.56 mm 5.4 mm 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>	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>Permitted 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 Cel, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Ambient condition / for operation	Limited segment length (see manual for PROFIBUS networks)
Burning 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

### Product properties, functions, components / general

Product property	
• halogen-free	No
• silicon-free	Yes

### Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• RoHS conformity	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No

### Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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