

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, 2.0 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
Cable length	2 m

Electrical data

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	
<ul style="list-style-type: none"> • of the characteristic impedance at 9.6 kHz • of the characteristic impedance at 38.4 kHz • of the characteristic impedance at 3 MHz ... 20 MHz 	<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"> • RMS value 	100 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	
<ul style="list-style-type: none"> • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath 	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"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PE 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
Permitted 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 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"> • 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 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	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

last modified: 13.05.2015