

Product type designation

Product description

PROFIBUS FC Trailing Cable

Highly flexible bus cable (2-core), sold by the meter, unassembled SIMATIC NET, PB FC TRAILING CABLE, PROFIBUS TRAILING CABLE MAX. ACCELERATION:4M/QS MIN. OF 3 MILL. BENDING CYCLES MIN. BENDING RADIUS: APPROX.120 MM, 2-WIRE SHIELDED, SOLD BY THE METER MAX. CONSIGNMENT: 1000 M MIN. ORDERING QUANTITY: 20 M



Suitability for use

Continuous motion control in a cable carrier

Cable designation

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

Electrical data

Damping ratio 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 %

<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <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), a speed of 4 m/s 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 °C, 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

Product properties, functions, 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; c(UL)us, CMX
UL/ETL style / 600 V Rating	No
Certificate of suitability <ul style="list-style-type: none"> • CE marking • RoHS conformity 	Yes Yes
Marine classification association <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • Bureau Veritas (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

Further Information / Internet Links

Internet-Link <ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support 	http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
last modified:	08/03/2017