

Product type designation

Product description

PROFIBUS FC Flexible Cable

Flexible bus cable (2-core), sold by the meter, unassembled
 PROFIBUS FC flexible Cable GP, 2-core, shielded special
 configuration for quick assembly supply item max. 1000 m minimum
 order 20 m sold by the meter



Suitability for use

For occasionally moved machine parts

Cable designation

02YH (ST) C11Y 1x2x0,65/2,56-150 LI KF40 FRNC FC VI

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	15 Ω/km
Insulation resistance coefficient	16000 GΩ·m
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 	polyethylene (PE) FRNC PUR (TPE-U)
Color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green Violet
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	40 mm 120 mm
Tensile load / maximum	100 N
Weight per length	70 kg/km

Ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-20 ... +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

Class of burning behaviour / according to EN 13501-6	Eca
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 features, product functions, product components / general

Product feature <ul style="list-style-type: none"> • halogen-free • silicon-free 	Yes Yes
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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
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