

Product type designation

Product description

PROFIBUS FC Standard Cable IS GP

Standard bus cable for fast installation, sold by the meter, unassembled

PROFIBUS FC Standard Cable IS GP, bus cable 2-wire, shielded

Special setup for quick assembly, Delivery unit: max. 1000 m,

Minimum order 20 m Sold by the meter



Suitability for use

Used for intrinsically safe distributed I/O systems for permanent installation

Cable designation

02YSY (ST) CY 1x2x0,64/2,55 BL KF40 FR

Electrical data

Damping ratio per length

• at 9.6 kHz / maximum	0.0025 dB/m
• at 38.4 kHz / maximum	0.004 dB/m
• at 4 MHz / maximum	0.022 dB/m
• at 16 MHz / maximum	0.042 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 %
--	------

<ul style="list-style-type: none"> • 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	110 mΩ/m
Shield resistance per length / maximum	9.5 Ω/km
Insulation resistance coefficient	16000 GΩ·m
Capacity per length / at 1 kHz	28.5 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
Core diameter	
<ul style="list-style-type: none"> • of AWG22 core 	0.64 mm
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 	0.64 mm 2.55 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) PVC PVC
Color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green blue
Bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	37.5 mm 75 mm
Tensile load / maximum	100 N
Weight per length	80 kg/km

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation 	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -40 ... +75 °C

<ul style="list-style-type: none"> Note 	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C)
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 (4 h / 70°C) Conditional resistance 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 	No Yes
--	-----------

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; CMG / CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes
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: 11/08/2019