

Product type designation

Product description

PROFIBUS FC Standard Cable GP

Standard bus cable (2 wires), preferred length, not assembled
PROFIBUS FC Standard, bus cable 2-wire, shielded special
configuration for Quick assembly 20 m



Suitability for use	Standard cable specially designed for fast, permanent installation
Cable designation	02YSY (ST) CY 1x2x0,64/2,55-150 VI KF 40 FR
Wire length	20 m

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 %
• of the characteristic impedance at 38.4 kHz	10 %

• 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
Capacity per length / at 1 kHz	28.5 pF/m
Operating voltage • 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 • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath	0.65 mm 2.55 mm 5.4 mm 8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
Material • of the wire insulation • of the inner sheath of the cable • of cable sheath	polyethylene (PE) PVC PVC
Color • of the insulation of data wires • of cable sheath	red/green Violet
Bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	37.5 mm 75 mm
Tensile load / maximum	100 N
Weight per length	78 kg/km

Ambient conditions

Ambient temperature • during operation • during storage • during transport • during installation • Note	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -40 ... +75 °C 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) and UL 1685 (CSA FT 4)

Class of burning behaviour / according to EN 13501-6	Eca
Chemical resistance • 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 • halogen-free • silicon-free	No Yes
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Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / (ETL)us CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
Certificate of suitability • CE marking • UL approval • RoHS conformity	Yes Yes Yes
Marine classification association • 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 • 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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