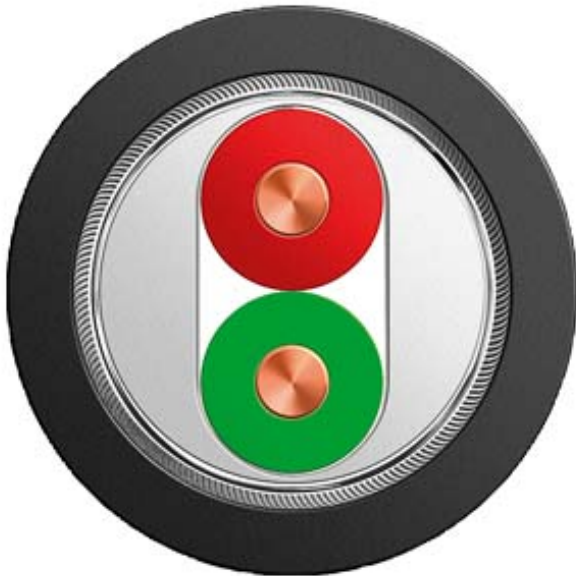


Product type designation

Product description

PROFIBUS FC Process Cable GP

Bus cable (2-core), sold by the meter, unassembled
SIMATIC NET, PB FC PROCESS CABLE BUS CABLE FOR IEC
61158-2 BLACK SHEATH FOR NON-EX APPLICATIONS, 2-WIRE
SHIELDED, SOLD BY THE METER MAX. CONSIGNMENT: 1000 M
MIN. ORDERING QUANTITY: 20 M



Suitability for use	For use in fieldbus systems according to IEC 61158-2 (e.g. PROFIBUS PA), suitable for non-Ex applications
Cable designation	02YSY (ST) CY 1x2x1,0/2,55-100 SW OE FR

Electrical data

Damping ratio per length	
• at 38.4 kHz / maximum	0.003 dB/m
Impedance	
• Rated value	100 Ω
• at 31.25 kHz	100 Ω
Relative symmetrical tolerance	
• of the characteristic impedance at 31.25 kHz	20 %
Loop resistance per length / maximum	44 m Ω /m
Shield resistance per length / maximum	6.5 Ω /km
Capacity per length / at 1 kHz	92 pF/m
Inductance per length	0.65 μ H/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	1.05 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	PE PVC PVC
Color • of the insulation of data wires • of cable sheath	red/green Black
Bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	40 mm 80 mm
Tensile load / maximum	150 N
Weight per length	103 kg/km

Permitted ambient conditions	
Ambient temperature • during operation • during storage • during transport • during installation • Note	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -20 ... +80 °C Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Ambient condition / for operation	Transfer rate of cable: 31.25 Kbit/s
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C)
Chemical resistance • to mineral oil • to grease • to water	conditional resistance Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general	
Product feature • halogen-free	No

- silicon-free

Yes

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG / CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes
Certificate of suitability	
• CE marking	Yes
• 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/industry/infocenter
• 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

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