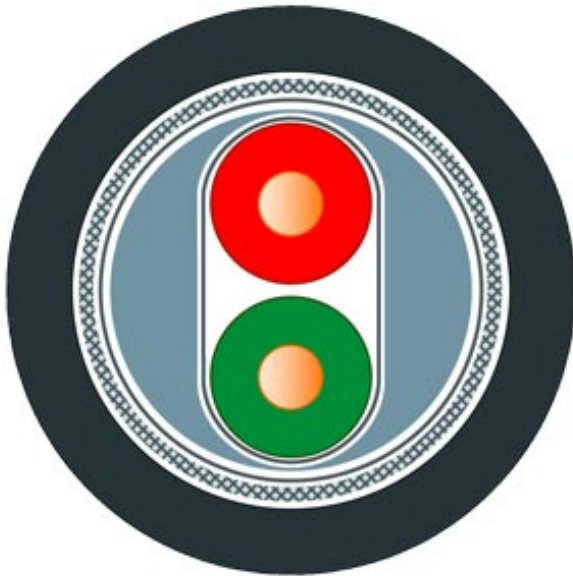


product type designation
product description

PROFIBUS FC Process Cable GP

Bus cable (2-core), sold by the meter, unassembled
PROFIBUS FC Process Cable Bus cable for IEC 61158-2 Sheath
color black for non- Ex applications, 2-core shielded Sold by the
meter Delivery length max. 1000 m Minimum order 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
return loss	
• at 3 MHz	19 dB
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 mΩ/m
shield resistance per length / maximum	6.5 Ω/km
capacity per length / at 1 kHz	92 pF/m
inductance per length	0.65 μH/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 	1.05 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 Black
bending radius	
<ul style="list-style-type: none"> • 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
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • 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)
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 	conditional resistance Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant

product features, product functions, product 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

- EAC approval Yes
- 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 TIA 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>

last modified: 10/05/2020