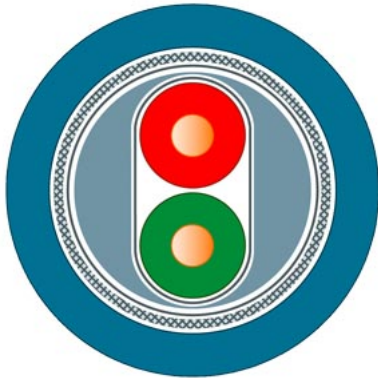


product description

Bus cable (2-core), sold by the meter, unassembled



PB FC Process Cable GP/ Ethernet-APL cable GP, bus cable for IEC 61158-2 (PB) and IEC TS 60079-47 (2-WISE) sheath color blue for Ex applications 2-core shielded, sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

suitability for use

Use in fieldbus systems according to IEC 61158-2 (e.g. PROFIBUS PA) and IEC TS 60079-47 (2-WISE) / for APL (cable type A), suitable for Ex applications

cable designation

02YSY (ST) CY 1x2x1,0/2,55-100 BL OE FR

electrical data

attenuation factor per length

- at 38.4 kHz / maximum

0.003 dB/m

return loss

- at 3 MHz

19 dB

impedance

- rated value
- at 31.25 kHz
- at 3 MHz ... 20 MHz

100 Ω

100 Ω

100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 31.25 kHz
- of the characteristic impedance at 3 MHz ... 20 MHz

20 %

15 %

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

- 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

- 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

polyethylene (PE)

PVC

PVC

color

- 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 	40 mm
<ul style="list-style-type: none"> • with multiple bends / minimum permissible 	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 	-40 ... +80 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +80 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +80 °C
<ul style="list-style-type: none"> • during installation 	-20 ... +80 °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
ambient condition / for operation	Transfer rate of cable: 31.25 Kbit/s
fire 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 	conditional resistance
<ul style="list-style-type: none"> • to grease 	Conditional resistance
<ul style="list-style-type: none"> • to water 	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 	No
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • EAC approval 	Yes
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
product conformity	
<ul style="list-style-type: none"> • IEC TS 60079-47 (2-WISE) / for APL (cable type A) 	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 	WG
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	WGB
further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors 	https://sie.ag/2QdlxcP
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

last modified:

7/7/2022 