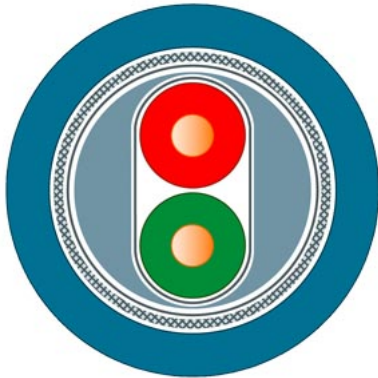


product description

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	
<ul style="list-style-type: none"> at 38.4 kHz / maximum 	0.003 dB/m
return loss	
<ul style="list-style-type: none"> at 3 MHz 	19 dB
impedance	
<ul style="list-style-type: none"> rated value at 31.25 kHz at 3 MHz ... 20 MHz 	100 Ω
relative symmetrical tolerance	
<ul style="list-style-type: none"> 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	
<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 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: SiePortal 	https://sieportal.siemens.com/
<ul style="list-style-type: none"> to website: Image database 	https://www.automation.siemens.com/bilddb
<ul style="list-style-type: none"> to website: Industry Online Support 	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available

and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)



[Declaration of Conformity](#)



other

Environment

[Confirmation](#)

[Confirmation](#)

last modified:

6/3/2024