

product type designation

FC PROFIBUS Process Cable GP / Ethernet-APL Cable GP 2-WISE (IEC TS 60079-47) APL Type A

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.

Technical Product Detail Page

<https://i.siemens.com/1P6XV1830-5EH10>

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

wire length

sold by the meter

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

20 %

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

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

polyethylene (PE)

PVC

<ul style="list-style-type: none"> • of cable sheath 	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 • 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 	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -20 ... +80 °C
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 • 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	
<ul style="list-style-type: none"> • halogen-free • silicon-free 	No 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 • CE marking • RoHS conformity 	Yes Yes 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) • French marine classification society (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	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support 	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax 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

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Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval

other

Environment

[Fire safety / Physical security](#)



[Miscellaneous](#)

[Environmental Confirmations](#)

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