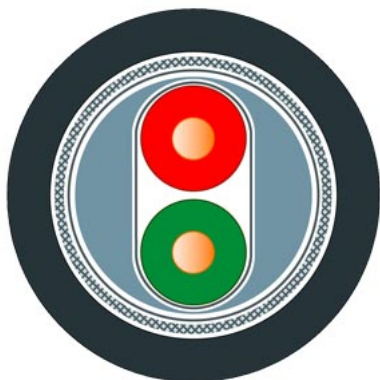


product type designation

product description



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

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 black 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/1P6XV1830-5FH10>

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 non-Ex applications

cable designation

02YSY (ST) CY 1x2x1,0/2,55-100 SW 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
- of the characteristic impedance at 3 MHz ... 20 MHz

20 %

15 %

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

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

polyethylene (PE)

| | |
|---|--|
| <ul style="list-style-type: none"> • of the inner sheath of the cable • of cable sheath | 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 | -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 |
| <ul style="list-style-type: none"> • resistance to air pollution / conformity according to ANSI/ISA-71.04 | Yes; G3 |
| 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. |

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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)


EG-Konf.

[Declaration of Conformity](#)




CCC

[China RoHS](#)

| General Product Approval | other | Environment |
|--------------------------|-------|-------------|
|--------------------------|-------|-------------|

[Fire safety / Physical security](#)


RCM

[Miscellaneous](#)

[Environmental Confirmations](#)

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12/20/2025 