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Data sheet **6XV1830-5EH10**
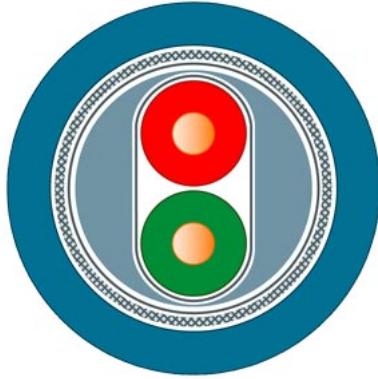
product type designation	**FC PROFIBUS Process Cable GP / Ethernet-APL Cable GP 2-WISE (IEC TS 60079-47) APL Type A**
product description	Bus cable (2-core), sold by the meter, unassembled
	PB FC Process Cable GP/ Ethernet-APL cable GP, bus cable for IEC 61158-2 (PB) and IEC TS 60079-47 (2-WISE) sheath 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	100 Ω
● at 31.25 kHz	100 Ω
● at 3 MHz … 20 MHz	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	1.05 mm
● of the wire insulation	2.55 mm
● of the inner sheath of the cable	5.4 mm
● of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	
● of the wire insulation	polyethylene (PE)
● of the inner sheath of the cable	PVC

● of cable sheath	PVC
color	
● of the insulation of data wires	red/green
● of cable sheath	blue
bending radius	
● with single bend / minimum permissible	40 mm
● with multiple bends / minimum permissible	80 mm
tensile load / maximum	150 N
weight per length	103 kg/km

ambient conditions	
ambient temperature	
● during operation	-40 ... +80 °C
● during storage	-40 ... +80 °C
● during transport	-40 ... +80 °C
● during installation	-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	
● to mineral oil	conditional resistance
● to grease	Conditional resistance
● to water	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
product conformity	
● IEC TS 60079-47 (2-WISE) / for APL (cable type A)	Yes
● resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	No
● French marine classification society (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: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax
● 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

CE EG-Konf.	Manufacturer Declaration	UK CA	Declaration of Conformity	CCC — China RoHS

General Product Approval	other	Environment
Fire safety / Physical security — RCM	Miscellaneous	Environmental Confirmations

last modified: 1/12/2026 ↗