

Data sheet

6XV1821-0BN50

product type designation	PROFIBUS Plastic Fiber Optic standard cable
product description	Fiber-optic cable with polyoptical fiber, preferred length, preassembled PROFIBUS Plastic Fiber Optic, Standard cable with 4 BFOC connectors, length 50 m.
	
<p>Technical Product Detail Page https://i.siemens.com/1P6XV1821-0BN50</p>	
suitability for use	Cable for indoor applications
version of the assembled FO cable	Assembled with four BFOC connectors
cable designation	I-V4Y(ZN)Y 2P 980/1000
wire length	50 m
optical data	
attenuation factor per length	
• at 650 nm / maximum	160 dB/km
• at 660 nm / maximum	230 dB/km
bandwidth length product	
• at 650 nm	1 GHz·m
mechanical data	
number of fibers / per FOC core	1
number of FO cores / per FO cable	2
version of the FO conductor fiber	Step index fiber 980/1000 µm
outer diameter	
• of the optical fibers	980 µm
• of the optical fiber sheath	1000 µm
• of the FOC core sheath	2.2 mm
symmetrical deviation / of the outer diameter of the FOC core sheath	0.1 mm
outer diameter / of the cable	7.8 mm
symmetrical deviation / of the outer diameter of the line	0.3 mm
material	
• of the fiber-optic cable core	Polymethylmethacrylate (PMMA)
• of the optical fiber sheath	Fluoridated special polymer
• of the FOC core sheath	PA
• of the fiber-optic cable sheath	PVC
• of the strain relief	Kevlar fibers
color	
• of the FOC core sheath	orange/black
• of cable sheath	Violet
bending radius	
• with single bend / minimum permissible	100 mm
• with multiple bends / minimum permissible	150 mm
tensile load	
• during installation / short-term	100 N

• during operation / maximum short-term shear force per length weight per length	100 N 100 N/cm 65 kg/km
ambient conditions	
ambient temperature	
• during operation	-30 ... +70 °C
• during storage	-30 ... +70 °C
• during transport	-30 ... +70 °C
• during installation	50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2
chemical resistance	
• to mineral oil	conditional resistance
• to grease	conditional resistance
radiological resistance / to UV radiation	not resistant
protection class IP	IP20
product features, product functions, product components / general	
product feature	
• halogen-free	No
• silicon-free	Yes
product component / rodent protection	No
wire length	
• for POF FOC / with PROFIBUS / maximum	80 m
standards, specifications, approvals	
certificate of suitability	
• UL approval	Yes; (UL) OFN
• RoHS conformity	Yes
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 website: Industrial communication	https://www.siemens.com/simatic-net
• 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 / header	
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	



EG-Konf.

[Declaration of Conformity](#)



[Manufacturer Declaration](#)

[China RoHS](#)

General Product Approval	Maritime application	other
--------------------------	----------------------	-------



[Confirmation](#)

last modified:

11/11/2025 