

### product type designation

### product description

### PROFIBUS Plastic Fiber Optic standard cable

Fiber-optic cable with polyoptical fiber, preferred length, preassembled

PROFIBUS Plastic Fiber Optic, Standard cable with 4 BFOC connectors, length 20 m.



### Technical Product Detail Page

<https://l.siemens.com/1P6XV1821-0BN20>

### 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

20 m

### optical data

#### attenuation factor per length

- at 650 nm / maximum
- at 660 nm / maximum

160 dB/km  
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 FOC cable

2

#### version of the FO conductor fiber

Step index fiber 980/1000 µm

#### outer diameter

- of the optical fibers
- of the optical fiber sheath
- of the FOC core sheath

980 µm  
1000 µm  
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
- of the optical fiber sheath
- of the FOC core sheath
- of the fiber-optic cable sheath
- of the strain relief

Polymethylmethacrylate (PMMA)  
Fluoridated special polymer  
PA  
PVC  
Kevlar fibers

#### color

- of the FOC core sheath
- of cable sheath

orange/black  
Violet

#### bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible

100 mm  
150 mm

#### tensile load

- during installation / short-term

100 N

• during operation / maximum	100 N
short-term shear force per length	100 N/cm
weight per length	65 kg/km
<b>ambient conditions</b>	
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
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	No
• silicon-free	Yes
product component / rodent protection	No
wire length	
• for POF FOC / with PROFIBUS / maximum	80 m
<b>standards, specifications, approvals</b>	
certificate of suitability	
• UL approval	Yes; (UL) OFN
• RoHS conformity	Yes
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information / header</b>	
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 <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a> . 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 <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a> . (V4.7)
<b>Approvals / Certificates</b>	
<b>General Product Approval</b>	



[Declaration of Conformity](#)



[Manufacturer Declaration](#)

[China RoHS](#)

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



[Confirmation](#)

last modified:

11/11/2025 