

**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 1 m.



product brand name

SIMATIC NET

Technical Product Detail Page

<https://l.siemens.com/1P6XV1821-0BH10>

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

1 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

#### 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	<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>

#### security information / header

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#### Approvals / Certificates

##### General Product Approval



[Declaration of Conformity](#)



[China RoHS](#)

[Manufacturer Declaration](#)



[Confirmation](#)

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