

**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 5 m.



product brand name

SIMATIC NET

Technical Product Detail Page

<https://l.siemens.com/1P6XV1821-0BH50>

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

5 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

<ul style="list-style-type: none"> <li>during installation / short-term</li> </ul>	100 N
<ul style="list-style-type: none"> <li>during operation / maximum</li> </ul>	100 N
short-term shear force per length	100 N/cm
weight per length	65 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-30 ... +70 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-30 ... +70 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-30 ... +70 °C
<ul style="list-style-type: none"> <li>during installation</li> </ul>	50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2
chemical resistance	
<ul style="list-style-type: none"> <li>to mineral oil</li> </ul>	conditional resistance
<ul style="list-style-type: none"> <li>to grease</li> </ul>	conditional resistance
radiological resistance / to UV radiation	not resistant
protection class IP	IP20
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>halogen-free</li> </ul>	No
<ul style="list-style-type: none"> <li>silicon-free</li> </ul>	Yes
product component / rodent protection	No
wire length	
<ul style="list-style-type: none"> <li>for POF FOC / with PROFIBUS / maximum</li> </ul>	80 m
<b>standards, specifications, approvals</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>UL approval</li> </ul>	Yes; (UL) OFN
<ul style="list-style-type: none"> <li>RoHS conformity</li> </ul>	Yes
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>to website: CAX-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information / header</b>	
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<b>Approvals / Certificates</b>	
<b>General Product Approval</b>	



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