## **SIEMENS**

Data sheet 6XV1821-0BH20

## 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 2



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	2 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 FOC cable	2
version of the FO conductor fiber	Step index fiber 980/1000 µm
outer diameter	
<ul> <li>of the optical fibers</li> </ul>	980 μm
<ul> <li>of the optical fiber sheath</li> </ul>	1000 μm
<ul> <li>of the FOC core sheath</li> </ul>	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	
<ul> <li>of the fiber-optic cable core</li> </ul>	Polymethylmethacrylate (PMMA)
<ul> <li>of the optical fiber sheath</li> </ul>	Fluoridated special polymer
<ul> <li>of the FOC core sheath</li> </ul>	PA
<ul> <li>of the fiber-optic cable sheath</li> </ul>	PVC
of the strain relief	Kevlar fibers
color	
<ul> <li>of the FOC core sheath</li> </ul>	orange/black
of cable sheath	Violet
bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	100 mm
<ul> <li>with multiple bends / minimum permissible</li> </ul>	150 mm
tensile load	
<ul> <li>during installation / short-term</li> </ul>	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	
<ul> <li>during operation</li> </ul>	-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	
<ul><li>for POF FOC / with PROFIBUS / maximum</li></ul>	80 m
standards, specifications, approvals	
certificate of suitability	
UL approval	Yes; UL approval: cULus OFN FT1 (NEC Article 770, UL 1651) / CSA approval: OFN (CSA standard C22.2 No. 232)
RoHS conformity	Yes
reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	WH
• according to IEC 81346-2:2019	WHA
further information / internet links	
internet link	
<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	http://www.siemens.com/tia-selection-tool
<ul> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
• to website: Image database	http://automation.siemens.com/bilddb
<ul> <li>to website: CAx-Download-Manager</li> </ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com

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