## **SIEMENS**

Data sheet 6XV1820-7BN20

## product type designation product description

## Indoor fiber optic indoor cable

Glass fiber-optic cable, preferred length, preassembled

Indoor Fiber Optic (62.5/125), halogen-free, non-crush and flame-retardant fiber-optic internal cable pre-assembled with 4 BFOC connectors, length 20 m.



suitability for use	Non-crush, halogen-free and flame-retardant cable for indoor installation
version of the assembled FO cable	Assembled with four BFOC connectors
cable designation	I-V(ZN)HH 2x1 G 62,5/125 OM1
wire length	20 m
optical data	
attenuation factor per length	
• at 850 nm / maximum	3 dB/km
• at 1300 nm / maximum	0.8 dB/km
bandwidth length product	
• at 850 nm	300 GHz·m
• at 1300 nm	800 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	Multimode graded-index fiber 62.5/125 μm, OM 1
design of the FOC core	Solid core, diameter 900 µm
design of the fiber-optic cable	Segmentable inner conductor
outer diameter	
<ul> <li>of the optical fibers</li> </ul>	62.5 µm
<ul> <li>of the optical fiber sheath</li> </ul>	125 µm
<ul> <li>of the FOC core sheath</li> </ul>	2.9 mm
symmetrical deviation / of the outer diameter of the FOC core sheath	0.1 mm
width / of cable sheath	6.8 mm
thickness / of cable sheath	3.9 mm
material	
<ul> <li>of the fiber-optic cable core</li> </ul>	Quartz glass
<ul> <li>of the optical fiber sheath</li> </ul>	Quartz glass
<ul> <li>of the FOC core sheath</li> </ul>	FRNC
<ul> <li>of the fiber-optic cable sheath</li> </ul>	FRNC
of the strain relief	Aramid fibers
color	
<ul> <li>of the FOC core sheath</li> </ul>	gray
of cable sheath	orange
bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	30 mm
<ul> <li>with multiple bends / minimum permissible</li> </ul>	50 mm

during installation / short-term	800 N
during operation / maximum	200 N
short-term shear force per length	300 N/cm
continuous shear force per length	100 N/cm
weight per length	30 kg/km
ambient conditions	
ambient temperature	
during operation	-20 +60 °C
during storage	-25 +70 °C
during transport	-25 +70 °C
during installation	-5 +50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
chemical resistance	
• to mineral oil	acc. to IEC 60811-404 with test oil IRM 902 (acc. to ISO 1817), +70 $^{\circ}\text{C},$ 4 h and +25 $^{\circ}\text{C},$ 168 h
• to grease	not resistant
radiological resistance / to UV radiation	not resistant
protection class IP	IP20
product features, product functions, product components / general	
product feature	
<ul><li>halogen-free</li></ul>	Yes
• silicon-free	Yes
product component / rodent protection	No
wire length	
<ul> <li>for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum</li> </ul>	4000 m
<ul> <li>for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum</li> </ul>	500 m
<ul> <li>for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum</li> </ul>	1000 m
<ul> <li>for glass FOC / with PROFIBUS / maximum</li> </ul>	3000 m
standards, specifications, approvals	
certificate of suitability	
<ul> <li>RoHS conformity</li> </ul>	Yes
reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	WH
<ul> <li>according to IEC 81346-2:2019</li> </ul>	WHA
further information / internet-Links	
Internet-Link	
• to web page: selection aid TIA Selection Tool	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
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx-Download-Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

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