SIEMENS

Data sheet 6XV1820-7BH20

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 assembled with 4 BFOC connectors Length 2 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	2 m
Optical data	
Damping ratio per length	
• at 850 nm / maximum	3.1 dB/km
• at 1300 nm / maximum	0.8 dB/km
Bandwidth length product	
• at 850 nm	200 GHz·m
• at 1300 nm	600 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

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Design of the fiber-optic cable	Segmentable inner conductor
Outer diameter	
• of the optical fibers	62.5 µm
• of the optical fiber sheath	125 µm
• of the FOC core sheath	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	
• of the fiber-optic cable core	Quartz glass
• of the optical fiber sheath	Quartz glass
• of the FOC core sheath	FRNC
• of the fiber-optic cable sheath	FRNC
• of the strain relief	Aramid fibers
Color	
• of the FOC core sheath	gray
• of cable sheath	orange
Bending radius	
• with single bend / minimum permissible	30 mm
• with multiple bends / minimum permissible	50 mm
Tensile load	
• during installation / short-term	800 N
• during operation / maximum	200 N
Short-term shear force per length	300 N/cm
Continuous lateral 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
Burning 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 °C, 4 h and +25 °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

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Product feature	
• halogen-free	Yes
• silicon-free	Yes
Product component / Rodent protection	No
Wire length	
• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum	4000 m
• for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum	350 m
• for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum	550 m
• for glass FOC / with PROFIBUS / maximum	3000 m

Standards, specifications, approvals

Certificate of suitability	
• RoHS conformity	Yes

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	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: 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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