SIEMENS

Data sheet 6XV1820-7BT10

product description

suitability for use

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 100 m

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	100 m
optical data	
attenuation factor 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
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

short-term shear force per length continuous shear force per length weight per length ambient conditions ambient temperature during operation during storage during transport 300 N/cm 100 N/cm 30 kg/km 20 +60 °C -25 +70 °C	
weight per length ambient conditions ambient temperature • during operation • during storage • during transport -20 +60 °C -25 +70 °C	
ambient conditions ambient temperature • during operation • during storage • during transport -20 +60 °C -25 +70 °C • during transport	
ambient temperature • during operation • during storage • during transport -25 +70 °C -25 +70 °C	
 during operation during storage during transport -20 +60 °C -25 +70 °C -25 +70 °C 	
 during storage during transport -25 +70 °C -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 4 h and +25 °C, 168 h 	°C,
• to grease not resistant	
radiological resistance / to UV radiation not resistant	
protection class IP IP20	
product features, product functions, product components / general	
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 web page: selection aid TIA Selection Tool http://www.siemens.com/tia-selection-tool	
• 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: 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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