SIEMENS

Data sheet

6XV1820-7AH10

product type designation

product description

suitability for use

Indoor fiber optic indoor cable

Glass fiber-optic cable, sold by the meter, unassembled

Indoor Fiber Optic (62.5/125), halogen-free, non-crush, flame-retardant internal fiber-optic cable, Sold by the meter Delivery unit max. 2000 m minimum order quantity 20 m.

Non-crush, halogen-free and flame-retardant cable for indoor installation



cable designation	I-V(ZN)HH 2x1 G 62,5/125 OM1
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	
 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 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)
class of burning behaviour / according to EN 13501-6	Eca
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
 to water 	conditional resistance
radiological resistance / to UV radiation	not resistant
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 	500 m
 for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum 	1000 m
 for glass FOC / for 10GBaseLX4 / for Industrial Ethernet / maximum 	300 m
 for glass FOC / with PROFIBUS / maximum 	3000 m
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
reference code	
 according to IEC 81346-2 	WH
 according to IEC 81346-2:2019 	WHA
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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