SIEMENS

Data sheet 6XV1820-7AH10

product type designation	**Indoor fiber optic indoor cable**
product description	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.

Technical Product Detail Page	https://i.siemens.com/1P6XV1820-7AH10
suitability for use	Non-crush, halogen-free and flame-retardant cable for indoor installation
version of the assembled FO cable	sold by the meter
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 °C, 4 h and +25 °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
further information / internet links	
internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to website: Industrial communication	https://www.siemens.com/simatic-net
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com
security information / header	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase

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Approvals / Certificates

General Product Approval

CE EG-Konf.	Manufacturer Declaration	UKCA	Declaration of Conformity	CCC	Fire safety / Physical security

General Product Approval		Maritime application	Environment		Industrial Communication
China RoHS	RCM	BUREAU VERITAS	Environmental Confirmations	Environmental Confirmations	PROFINET

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