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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.

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

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● 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
reference code	
● according to IEC 81346-2	WH
● according to IEC 81346-2:2019	WHA
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	
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Approvals / Certificates

General Product Approval

EG-Konf.	Manufacturer Declaration	UK CA	Declaration of Conformity	CCC	RCM

Marine / Shipping	Environment	Industrial Communication
BUREAU VERITAS	Confirmation	PROFINET

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