SIEMENS

Data sheet

6XV1821-0AT10

product type designation

product description

PROFIBUS Plastic Fiber Optic standard cable

Fiber-optic cable with polyoptical fiber, 100m ring, unassembled PROFIBUS Plastic Fiber Optic (980/1000), standard cable, 100 m ring.



suitability for use	Cable for indoor applications
version of the assembled FO cable	For assembly with four Simplex connectors
cable designation	I-V4Y(ZN)Y 2P 980/1000
wire length	100 m
optical data	
attenuation factor per length	
• at 650 nm / maximum	160 dB/km
• at 660 nm / maximum	230 dB/km
bandwidth length product	
• at 650 nm	1 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	Step index fiber 980/1000 µm
outer diameter	
 of the optical fibers 	980 µm
 of the optical fiber sheath 	1000 µm
 of the FOC core sheath 	2.2 mm
symmetrical deviation / of the outer diameter of the FOC core sheath	0.1 mm
outer diameter / of the cable	7.8 mm
symmetrical deviation / of the outer diameter of the line	0.3 mm
material	
 of the fiber-optic cable core 	Polymethylmethacrylate (PMMA)
 of the optical fiber sheath 	Fluoridated special polymer
 of the FOC core sheath 	PA
 of the fiber-optic cable sheath 	PVC
 of the strain relief 	Kevlar fibers
color	
 of the FOC core sheath 	orange/black
 of cable sheath 	Violet
bending radius	
 with single bend / minimum permissible 	100 mm
 with multiple bends / minimum permissible 	150 mm
tensile load	
 during installation / short-term 	100 N
 during operation / maximum 	100 N

short-term shear force per length	100 N/cm
weight per length	65 kg/km
ambient conditions	
ambient temperature	
 during operation 	-30 +70 °C
 during storage 	-30 +70 °C
 during transport 	-30 +70 °C
 during installation 	50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	conditional resistance
• to grease	conditional resistance
radiological resistance / to UV radiation	not resistant
product features, product functions, product components	/ general
product feature	
 halogen-free 	No
silicon-free	Yes
product component / rodent protection	No
wire length	
 for POF FOC / with PROFIBUS / maximum 	80 m
standards, specifications, approvals	
certificate of suitability	
 UL approval 	Yes
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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