

## Data sheet

6XV1821-0AN50

product type designation	PROFIBUS Plastic Fiber Optic standard cable
product description	Fiber-optic cable with polyoptical fiber, 50m ring, unassembled PROFIBUS Plastic Fiber Optic (980/1000), standard cable, 50 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	50 m
<b>optical data</b>	
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
<b>mechanical data</b>	
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
<b>ambient conditions</b>	
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
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	No
• silicon-free	Yes
product component / rodent protection	No
wire length	
• for POF FOC / with PROFIBUS / maximum	80 m
<b>standards, specifications, approvals</b>	
certificate of suitability	
• UL approval	Yes; UL approval: cULus OFN FT1 (NEC Article 770, UL 1651) / CSA approval: OFN (CSA standard C22.2 No. 232)
• RoHS conformity	Yes
reference code	
• according to IEC 81346-2	WH
• according to IEC 81346-2:2019	WHA
<b>further information / internet links</b>	
internet link	
• to web page: selection aid TIA Selection Tool	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Selection guide for cables and connectors	<a href="https://sie.ag/2QdIxcP">https://sie.ag/2QdIxcP</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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