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Data sheet   **6XV1821-2AN50**

product type designation	**PROFIBUS Plastic Fiber Optic Duplex Core**
product description	Fiber-optic cable with polyoptical fiber (flat dual cores), 50m ring, unassembled
	PROFIBUS Plastic Fiber Optic, duplex core 50 m ring.

suitability for use	Indoor applications with low mechanical loads (e.g. laboratory set-ups or inside cabinets), cable lengths up to 50 m
version of the assembled FO cable	For assembly with four Simplex connectors
cable designation	V-2Y 2x1 P 980/1000
wire length	50 m
optical data	
attenuation factor per length	
● at 650 nm / maximum	10 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
material	
● of the fiber-optic cable core	Polymethylmethacrylate (PMMA)
● of the optical fiber sheath	Fluoridated special polymer
● of the FOC core sheath	PE
color	
● of the FOC core sheath	gray
bending radius	
● with single bend / minimum permissible	25 mm
● with multiple bends / minimum permissible	25 mm
tensile load	
● during operation / maximum	10 N
short-term shear force per length	30 N/cm
continuous shear force per length	4 N/cm
weight per length	7.6 kg/km
ambient conditions	
ambient temperature	
● during operation	-55 ... +85 °C
● during storage	-55 ... +85 °C

1/16/2025

● during transport	-55 ... +85 °C
● during installation	-5 ... +50 °C
fire behavior	flame-resistant in accordance with the VW-1 flame test acc. to UL 1581
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	Yes
● silicon-free	Yes
product component / rodent protection	No
wire length	
● for POF FOC / with PROFIBUS / maximum	80 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

CE
EG-Konf.

Declaration of Conformity

UKCA

CCC
CCC

Manufacturer Declaration

RCM

Marine / Shipping	Environment
BUREAU VERITAS	Confirmation

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