

Data sheet

6XV1861-7AN50

Product type designation

Product description

PCF Standard Cable GP

PCF fiber-optic cable with plastic cladding, preferred length, preassembled

PCF Standard Cable, pre-assembled with 2x2 simplex connectors, insertion aid, Length 50 m



Suitability for use	Cable for permanent installation indoors and outdoors, UL approval
Version of the assembled FO cable	Assembled with four Simplex connectors
Cable designation	AT-V(ZN)YY 2K 200/230
Wire length	50 m

Optical data

Damping ratio per length	
• at 650 nm / maximum	10 dB/km
• at 660 nm / maximum	10 dB/km
Bandwidth length product	
• at 650 nm	17 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 200/230 µm
Outer diameter	

• of the optical fibers	200 µm
• of the optical fiber sheath	230 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	7.2 mm
Symmetrical deviation / of the outer diameter of the line	0.5 mm
Material	
• of the fiber-optic cable core	Quartz glass
• of the optical fiber sheath	Special polymer
• of the FOC core sheath	PVC
• of the fiber-optic cable sheath	PVC
• of the strain relief	Aramid fibers
Color	
• of the FOC core sheath	orange/black
• of cable sheath	green
Bending radius	
• with single bend / minimum permissible	70 mm
• with multiple bends / minimum permissible	105 mm
Tensile load	
• during installation / short-term	800 N
• during operation / maximum	100 N
Short-term shear force per length	500 N/cm
Continuous lateral force per length	300 N/cm
Weight per length	45 kg/km

Ambient conditions

Ambient temperature	
• during operation	-40 ... +85 °C
• during storage	-25 ... +75 °C
• during transport	-25 ... +75 °C
• during installation	-5 ... +50 °C
Burning behavior	flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
Chemical resistance	
• to mineral oil	conditional resistance
• to grease	conditional resistance
Radiological resistance / to UV radiation	resistant
Protection class IP	IP20

Product features, product functions, product components / general

Product feature	
• halogen-free	No

• silicon-free	Yes
Product component / Rodent protection	No
Wire length	
• for PCF FOC / for Industrial Ethernet / maximum	100 m
• for PCF FOC / with PROFIBUS / maximum	400 m

Standards, specifications, approvals

Certificate of suitability	UL approval: OFN (NEC Article 770, UL 1651) / CSA approval: OFN 90 °C, FT1, FT4 (CSA standard C22.2 No. 232-M1988)
• RoHS conformity	Yes

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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: 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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