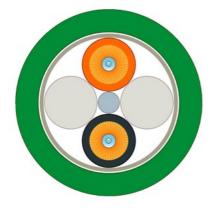
SIEMENS

Data sheet 6XV1861-3AT20

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 BFOC plugs, insertion aid, length 200 m.

version of the assembled FO cable cable designation AT-V(ZN)YY 2K 200/230 AT-V(ZN)YY 2K 200/230 potical data attenuation factor per length a 1650 mn / maximum 10 dB/km bandwidth length product a 1660 nm / maximum 10 dB/km bandwidth length product a 17 GHz/m mechanical data number of fibers / per FOC core 1 number of FO cores / per FOC cable version of the FO conductor fiber 0 of the optical fibers of the optical fiber sheath 22 mm ymmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable ymmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the fiber-optic cable sheath of the FOC core sheath of the fiber-optic cable sheath of the FOC core sheat	suitability for use	Cable for permanent installation indoors and outdoors, UL approval
wire length optical data attenuation factor per length • at 650 nm / maximum • at 650 nm / for duct number of FDC cores / per FOC cable 2 version of the FOC core short • of the optical fibers • of the optical fibers • of the optical fibers heath 230 µm • of the FOC core sheath 22 nm symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable 7.2 mm symmetrical deviation / of the outer diameter of the line material • of the fiber-optic cable core • of the optical fiber sheath Special polymer • of the FOC core sheath • of the strain relief color • of the FOC core sheath • of able sheath bending radius • with single bend / minimum permissible • with single bend / minimum permissible • with multiple bends / minimum permissible • with single bend / minimum permissible • with multiple bends / minimum permissible • during installation / short-term • during operation / maximum 100 N	version of the assembled FO cable	Assembled with four BFOC connectors
attenuation factor per length • at 650 nm / maximum • at 650 nm / maximum bandwidth length product • at 650 nm	cable designation	AT-V(ZN)YY 2K 200/230
attenuation factor per length at 650 nm / maximum at 660 nm / maximum bandwidth length product at 550 nm 17 GHz-m mochanical data number of FD cores / per FOC core number of FO cores / per FOC cable version of the FO conductor fiber of the optical fibers of the optical fibers of the optical fibers of the optical fiber sheath of the FOC core sheath vuer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the fiber-optic cable core of the fiber-optic cable core of the fiber-optic cable sheath of the FOC core sheath of the FOC core sheath PVC of the fiber-optic cable sheath of the FOC core sheath of the fiber-optic cable sheath of the FOC core she	wire length	200 m
at 650 nm / maximum bandwidth length product at 650 nm 17 GHz/m mechanical data number of fibers / per FOC core number of FOC cores / per FOC cable 2 version of the FO conductor fiber of the optical fibers of the optical fiber sheath of the FOC core sheath 2 2 mm symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable 7.2 mm symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath Special polymer of the fiber optic acble sheath of the fiber-optic cable sheath of the foc core sheath	optical data	
• at 660 nm / maximum bandwidth length product • at 650 nm nechanical data number of fibers / per FOC core 1 number of FO cores / per FOC cable 2 version of the FO conductor fiber • of the optical fibers • of the optical fibers • of the optical fiber sheath • of the FOC core sheath • of the FOC core sheath 9 cymmetrical deviation / of the outer diameter of the line symmetrical deviation / of the outer diameter of the line attention	attenuation factor per length	
e at 650 nm 17 GHz·m mochanical 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 optical fiber sheath 220 μm • of the optical fiber sheath 220 μm • of the FOC core sheath 22 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 fiber-optic cable sheath PVC • of the strain rellef Aramid fibers color • of the FOC core 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	• at 650 nm / maximum	10 dB/km
• 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 optical fiber sheath 22 mm symmetrical deviation / of the outer diameter of the FOC core sheath 22 mm symmetrical deviation / of the outer diameter of the FOC core sheath 0.5 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 fiber-optic cable sheath PVC • of the strain relief Aramid fibers color • of the FOC core 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	at 660 nm / maximum	10 dB/km
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 potical fiber sheath 230 µm symmetrical deviation / of the outer diameter of the FOC core sheath 0.1 mm symmetrical deviation / of the outer diameter of the FOC core sheath 0.5 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 fiber-optic cable sheath PVC • of the fiber-optic cable sheath PVC • of the strain relief Aramid fibers color • of the FOC core 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	bandwidth length product	
number of fibers / per FOC core number of FO cores / per FOC cable version of the FO conductor fiber outer diameter of the optical fibers of the optical fiber sheath of the FOC core sheath symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable 7.2 mm symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath PVC of the fiber-optic cable sheath of the strain relief color of the FOC core sheath orange/black of cable sheath preen bending radius with single bend / minimum permissible with single bend / minimum permissible with utiliple bends / minimum permissible of during installation / short-term during operation / maximum 100 N	• at 650 nm	17 GHz·m
number of FO cores / per FOC cable version of the FO conductor fiber outer diameter of the optical fibers of the optical fiber sheath of the FOC core sheath 2.2 mm symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line material outer diameter / of the cable symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath FVC of the fiber-optic cable sheath of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath orange/black green bending radius with single bend / minimum permissible of cable sheath / minimum permissible with multiple bends / minimum permissible of during installation / short-term of during operation / maximum 100 N	mechanical data	
version of the FO conductor fiber outer diameter of the optical fibers of the optical fiber sheath of the optical fiber sheath of the pCC core sheath symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable 7.2 mm Symmetrical deviation / of the outer diameter of the line outer diameter / of the cable 7.2 mm Outer diameter / of the outer diameter of the line O.5 mm material of the fiber-optic cable core of the pCC core sheath PVC of the fiber-optic cable sheath PVC Aramid fibers color of the FOC core sheath orange/black green bending radius with single bend / minimum permissible of cable sheath with single bend / minimum permissible of uting installation / short-term with multiple bends / minimum permissible tensile load of during installation / short-term 800 N of during operation / maximum	number of fibers / per FOC core	1
outer diameter • of the optical fibers • of the optical fiber sheath • of the FOC core sheath 2.2 mm symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable 7.2 mm symmetrical deviation / of the outer diameter of the line outer diameter / of the cable 7.2 mm symmetrical deviation / of the outer diameter of the line material • of the fiber-optic cable core • of the optical fiber sheath • of the FOC core sheath • of the FOC core sheath • of the fiber-optic cable sheath • of the fiber-optic cable sheath • of the strain relief color • of the FOC core sheath • of cable sheath • of cable sheath • of cable sheath • of cable sheath • of manage/black • of cable sheath with single bend / minimum permissible • with single bend / minimum permissible • with multiple bends / minimum permissible 105 mm tensile load • during installation / short-term • during operation / maximum 100 N	number of FO cores / per FOC cable	2
of the optical fibers of the optical fiber sheath of the FOC core sheath symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable outer diameter of the line outer diameter / of the cable outer diameter of the line outer diameter of the line outer diameter of the symmetrical deviation / of the outer diameter of the line outer diameter of the line outer diameter of the line outer diameter of the FOC one outer diameter of the line outer diameter of the line outer diameter of the FOC one outer diameter of the line outer diameter of the FOC one outer diameter of the line outer diameter of the FOC one outer diameter of the line outer diameter of the FOC one outer diameter of the line outer diameter of the FOC one of the fiber-optic cable sheath of the FOC one sheath of the	version of the FO conductor fiber	Step index fiber 200/230 µm
of the optical fiber sheath of the FOC core sheath symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the outer diameter of the line outer diameter / of the cable symmetrical deviation / of the outer diameter of the line outer diameter / of the cable outer diameter / of the outer diameter of the line outer diameter / of the line	outer diameter	
outer diameter / of the cuble symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath of cable sheath orange/black green bending radius with single bend / minimum permissible tensile load oduring installation / short-term during operation / maximum 2.2 mm 0.1 mm 4.2 mm Cuartz glass Quartz glass Special polymer PVC Aramid fibers orange/black green 7.2 mm Outer diameter / of the Guera diameter of the FOC core sheath PVC of the FOC core sheath green 105 mm 800 N during operation / maximum 100 N	 of the optical fibers 	200 μm
symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath of cable sheath of cable sheath of cable sheath with single bend / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible of during installation / short-term during operation / maximum outer diameter / of the FOC core Quartz glass Special polymer PVC Aramid fibers orange/black green 105 mm 800 N during operation / maximum	 of the optical fiber sheath 	230 μm
sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath orange/black of cable sheath of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible tensile load of during installation / short-term outer diameter of the line 7.2 mm Quartz glass Special polymer PVC Aramid fibers orange/black green 70 mm 105 mm 800 N during operation / maximum	of the FOC core sheath	2.2 mm
symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath orange/black of cable sheath orange/black with single bend / minimum permissible with multiple bends / minimum permissible tensile load of during installation / short-term of the surface of the outer diameter of the line and unimpulsed outer diameter of the line Outer glass Special polymer Aramid fibers orange/black green orange/black green bending radius with single bend / minimum permissible 105 mm tensile load of during installation / short-term of the fiber-optic cable core Aramid fibers orange/black green bending radius orange/black green		0.1 mm
material of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the FOC core sheath of the fiber-optic cable sheath PVC of the strain relief color of the FOC core sheath orange/black of cable sheath of cable sheath orange/black with single bend / minimum permissible with multiple bends / minimum permissible of during installation / short-term of the fiber-optic cable sheath orange/black green 70 mm 800 N of uring operation / maximum	outer diameter / of the cable	7.2 mm
of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath orange/black of cable sheath orange/black of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible our minimum permiss	symmetrical deviation / of the outer diameter of the line	0.5 mm
of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the strain relief of the strain relief of the FOC core sheath orange/black of cable sheath orange/black of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible out of the FOC core sheath support of the FOC core sheath orange/black fundamental orange/black fundament	material	
of the FOC core sheath of the fiber-optic cable sheath of the strain relief Aramid fibers color of the FOC core sheath of cable sheath of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible of during installation / short-term during operation / maximum PVC Aramid fibers orange/black green 70 mm 105 mm 800 N	 of the fiber-optic cable core 	Quartz glass
of the fiber-optic cable sheath 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 with multiple bends / minimum permissible out the single bend / minimum permissible with multiple bends / minimum permissible tensile load ouring installation / short-term ouring operation / maximum 100 N	 of the optical fiber sheath 	Special polymer
of the strain relief color of the FOC core sheath	 of the FOC core sheath 	PVC
color of the FOC core sheath orange/black of cable sheath green bending radius with single bend / minimum permissible with multiple bends / minimum permissible 105 mm tensile load of during installation / short-term of during operation / maximum 100 N	 of the fiber-optic cable sheath 	PVC
 of the FOC core sheath of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible tensile load during installation / short-term during operation / maximum orange/black green 70 mm 105 mm 800 N during operation / maximum 100 N 	of the strain relief	Aramid fibers
of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible tensile load during installation / short-term during operation / maximum 100 N	color	
bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible 105 mm tensile load • during installation / short-term • during operation / maximum 100 N	 of the FOC core sheath 	orange/black
 with single bend / minimum permissible with multiple bends / minimum permissible tensile load during installation / short-term during operation / maximum 100 N 	of cable sheath	green
 with multiple bends / minimum permissible tensile load during installation / short-term during operation / maximum 100 N 	bending radius	
tensile load • during installation / short-term 800 N • during operation / maximum 100 N	 with single bend / minimum permissible 	70 mm
 during installation / short-term during operation / maximum 100 N 	with multiple bends / minimum permissible	105 mm
• during operation / maximum 100 N	tensile load	
3-1	 during installation / short-term 	800 N
short-term shear force per length 500 N/cm	during operation / maximum	100 N
	short-term shear force per length	500 N/cm

continuous shear force per length	300 N/cm
	45 kg/km
weight per length mbient conditions	40 kg/kiii
ambient temperature	40 105 °C
during operation	-40 +85 °C
during storage	-25 +75 °C
during transport	-25 +75 °C
during installation	-5 +50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
chemical resistance	192
• 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 / ger	neral
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
tandards, specifications, approvals	
certificate of suitability	
UL approval	Yes; c(UL)us OFN FT4
RoHS conformity	Yes
reference code	
according to IEC 81346-2	WH
 according to IEC 81346-2:2019 	WHA
urther 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
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General Product Approval



Declaration of Conformity





Manufacturer Declaration



Confirmation Confirmation

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