SIEMENS

Data sheet 6XV1873-2D

product description

suitability for use

Glass fiber-optic cable, sold by the meter, unassembled

FO Trailing Cable GP (50/125), UL approval, Trailing cable, splittable, without connector, Sold by the meter, max. length 1000 m Minimum order quantity: 20 m.

Flexible cable for use in cable carriers for high mechanical loading, UL approval



attenuation factor per length attenuation factor per length att 850 mn / maximum at 1300 nm / maximum mechanical data number of Fibers / per FOC core number of FPo cores / per FOC cable version of the FOC core / Multi-mode gradient fiber 50/125 µm, OM 2 design of the FOC core / Hollow core, filled, diameter 1400 µm design of the fiber-optic cable segmentable outer diameter of the optical fibers of the optical fibers of the optical fiber sheath 125 µm of the FOC core sheath 2.9 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 of the fiber-optic cable core of the polical fiber sheath of the FOC core sheath of the FOC c	cable designation	AT-W(ZN)Y(ZN)Y 2G 50/125 OM2++
at 850 nm / maximum bandwidth length product at 850 nm at 300 nm / maximum bandwidth length product at 850 nm at 300 nm nmechanical data number of Fibers / per FOC core number of FO cores / per FOC cable 2 version of the FO conductor fiber design of the FOC core design of the FOC core design of the fiber-optic cable segmentable outer diameter of the optical fibers of the optical fibers of the optical fiber sheath 2.9 nm symmetrical 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 optical fiber sheath Quartz glass of the fiber-optic cable sheath PVC of the strain relief color of the FOC core sheath proc of the fiber-optic cable sheath for the FOC core sheath fo	optical data	
e at 1300 nm / maximum bandwidth length product e at 850 nm e at 1300 nm 1200 GHz/m mechanical data number of Fibers / per FOC core 1 number of FDC cores / per FOC cable 2 version of the FO conductor fiber design of the FOC core Hollow core, filled, diameter 1400 µm segmentable outer diameter of the optical fibers sheath of the optical fiber sheath 125 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 FOC core sheath outer diameter / of the cable of the FOC core sheath 2.9 mm symmetrical deviation / of the outer diameter of the line material of the fiber-optic cable core of the sheath Quartz glass of the FOC core sheath PVC of the fiber-optic cable sheath of the FOC core 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 FOC core sheath of the FOC	attenuation factor per length	
bandwidth length product at 850 nm at 1300 nm bechanical data number of fibers / per FOC core number of FO cores / per FOC cable version of the FO cores / per FOC cable design of the FOC core design of the FOC core design of the fiber-optic cable outer diameter of the optical fibers of the optical fibers of the optical fiber sheath of the FOC core sheath outer diameter / of the color diameter of the fiber-optic cable outer diameter / of the optical fiber sheath of the fOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the fiber-optic 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 of the fiber-optic cable core of the optical fiber sheath Quartz glass of the optical fiber sheath of the FOC core sheath PVC of the fiber-optic cable sheath of the FOC core sheath of the FOC core sheath of the FOC core sheath of the strain relief color of the strain relief color of the FOC core sheath orange/black green bending radius with single bend / minimum permissible with multiple bends / minimum permissible owth multiple bends / minimum permissible of during installation / short-term outer diameter / 2000 N	• at 850 nm / maximum	2.7 dB/km
at 850 nm at 1300 nm 1200 GHz·m mechanical data number of fibers / per FOC core number of FO cores / per FOC cable 2 version of the FO conductor fiber Multi-mode gradient fiber 50/125 μm, OM 2 design of the FOC core design of the fiber-optic cable outer diameter of the optical fibers of the optical fibers of the optical fibers outer diameter / of the cable symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable outer diameter / of the cable outer diameter of the FOC core sheath of the FOC core sheath 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 fiber-optic cable core of the fiber-optic cable sheath of the FOC core sheath of the splical fiber sheath of the fiber-optic cable sheath of the FOC core sheath of cable sheath of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible of the filer-opting cycles tensile load of during installation / short-term 2000 N	• at 1300 nm / maximum	0.7 dB/km
• at 1300 nm 1200 GHz·m	bandwidth length product	
mechanical data number of fibers / per FOC core 1 number of FO cores / per FOC cable 2 version of the FOC core Multi-mode gradient fiber 50/125 μm, OM 2 design of the FOC core Hollow core, filled, diameter 1400 μm design of the fiber-optic cable segmentable outer diameter 50 μm • of the optical fibers 50 μm • of the FOC core sheath 2.9 mm symmetrical deviation / of the outer diameter of the FOC core 0.1 mm sheath 10.5 mm symmetrical deviation / of the outer diameter of the line 0.5 mm material 0 of the fiber-optic cable core Quartz glass • of the optical fiber sheath Quartz glass • of the FOC core sheath PVC • of the FOC core sheath PVC • of the FOC core sheath pVC • of the FOC core sheath green bending radius • with single bend / minimum permissible 150 mm • with single bends / minimum permissible 200 mm • uning installation / short-term 2000 N	• at 850 nm	600 GHz·m
number of fibers / per FOC cable number of FO cores / per FOC cable version of the FO conductor fiber design of the FOC core design of the fiber-optic cable outer diameter of the optical fibers of the optical fiber sheath of the POC core sheath of the FOC core sheath symmetrical deviation / of the outer diameter of the FOC core sheath symmetrical deviation / of the outer diameter of the line 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 FOC core sheath of the Social fiber sheath of the Boc core sheath of the Social fiber sheath of cable sheath of cable sheath orange/black orange	• at 1300 nm	1200 GHz·m
number of FO cores / per FOC cable version of the FO conductor fiber design of the FOC core Hollow core, filled, diameter 1400 µm design of the fiber-optic cable 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 Ilne 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 of the fiber-optic cable core of the fiber-optic cable sheath of the FOC core sheath of the STOC core sheath of cable sheath orange/black orange/bl	mechanical data	
version of the FO conductor fiber design of the FOC core design of the fiber-optic cable outer diameter of the optical fibers of the optical fiber sheath of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the FOC core sheath outer diameter / of the cable symmetrical deviation / of the outer diameter of the Iine material of the fiber-optic cable core of the optical fiber sheath Quartz glass of the potical fiber sheath Quartz glass of the FOC core sheath PVC of the fiber-optic cable sheath of the fiber-optic cable sheath of the FOC core sheath of the strain relief color of the SC core sheath orange/black of able sheath orange/black of cable sheath orange/black of able sheath mumber of bending cycles tensile load of during installation / short-term 2000 N	number of fibers / per FOC core	1
design of the FOC core design of the fiber-optic cable outer diameter • of the optical fibers	number of FO cores / per FOC cable	2
design of the fiber-optic cable outer diameter • of the optical fibers • 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 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 avairus glass of the pCC core sheath pVC of the FOC core sheath PVC of the fiber-optic cable sheath PVC of the strain relief color of the FOC core sheath orange/black green bending radius with single bend / minimum permissible with single bend / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible avairus diameter / of the cable segmentation / short-term 2000 N	version of the FO conductor fiber	Multi-mode gradient fiber 50/125 μm, OM 2
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 outer diameter / of the cable 10.5 mm symmetrical deviation / of the outer diameter of the line outer diameter / of the cable 10.5 mm material • of the fiber-optic cable core of the optical fiber sheath of the optical fiber sheath of the FOC core sheath PVC of the fiber-optic cable sheath of the FOC core sheath volume fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath orange/black orange/black orange/black of cable sheath bending radius with multiple bends / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible owth multiple bends / minimum permissible owth single load owthing installation / short-term 2000 N	design of the FOC core	Hollow core, filled, diameter 1400 µm
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 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	design of the fiber-optic cable	segmentable
of the optical fiber sheath of the FOC core sheath 2.9 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 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 Quartz glass of the FOC core sheath PVC of the fiber-optic cable sheath PVC of the strain relief color of the FOC core sheath orange/black of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible number of bending cycles tensile load oduring installation / short-term 2000 N	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 FOC core sheath of the strain relief color of the FOC core sheath of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible number of bending cycles tensile load of during installation / short-term 2000 N	 of the optical fibers 	50 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 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 the strain relief color of the FOC core sheath orange/black of cable sheath sheath orange/black orange/black of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible owith multiple bends / minimum permissible owith single load owith short-term 2000 N	 of the optical fiber sheath 	125 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 Ouartz glass of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the fiber-optic cable sheath PVC of the strain relief Aramid fibers color of the FOC core sheath orange/black of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible output number of bending cycles tensile load output during installation / short-term 10.5 mm Ouartz glass Ouartz gla	of the FOC core sheath	2.9 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 with multiple bends / minimum permissible output authorized substant output substant outp	,	0.1 mm
material of the fiber-optic cable core of the optical fiber sheath Ouartz glass of the FOC core sheath Of the FOC core sheath Of the fiber-optic cable sheath Of the strain relief Of the strain relief color of the FOC core sheath Orange/black of cable sheath Orange/black of cable sheath Orange/black Or	outer diameter / of the cable	10.5 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 fiber-optic cable sheath of the strain relief of the strain relief 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 owith multiple bending cycles tensile load during installation / short-term Quartz glass pvC of the FOC core sheath orange/black orange/black green bending radius owith single bend / minimum permissible of cable sheath orange/black green bending radius owith single bends / minimum permissible	symmetrical deviation / of the outer diameter of the line	0.5 mm
 of the optical fiber sheath 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 of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible number of bending cycles tensile load during installation / short-term Quartz glass PVC Aramid fibers orange/black green 150 mm 3500000 	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 green bending radius with single bend / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible 150 mm with multiple bends / minimum permissible a 3500000 tensile load during installation / short-term 2000 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 with multiple bends / minimum permissible omm number of bending cycles 3500000 tensile load during installation / short-term 2000 N	 of the optical fiber sheath 	Quartz glass
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 output number of bending cycles tensile load output during installation / short-term orange/black green 150 mm 2000 mm 2000 mm	 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 with multiple bends / minimum permissible number of bending cycles tensile load during installation / short-term corange/black green 150 mm 200 mm 200 mm 200 N 	of the strain relief	Aramid fibers
of cable sheath bending radius with single bend / minimum permissible with multiple bends / minimum permissible with multiple bends / minimum permissible vimber of bending cycles tensile load during installation / short-term green 150 mm 2000 mm 3500000 tensile load during installation / short-term 2000 N	color	
bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible number of bending cycles tensile load • during installation / short-term	 of the FOC core sheath 	orange/black
with single bend / minimum permissible with multiple bends / minimum permissible umber of bending cycles solution tensile load during installation / short-term 2000 N	of cable sheath	green
 with multiple bends / minimum permissible number of bending cycles tensile load during installation / short-term 2000 N 	bending radius	
number of bending cycles 3500000 tensile load • during installation / short-term 2000 N	 with single bend / minimum permissible 	150 mm
tensile load • during installation / short-term 2000 N	 with multiple bends / minimum permissible 	200 mm
• during installation / short-term 2000 N	number of bending cycles	3500000
	tensile load	
• during operation / maximum 800 N	 during installation / short-term 	2000 N
	 during operation / maximum 	800 N

short-term shear force per length	700 N/cm
continuous shear force per length	400 N/cm
weight per length	90 kg/km
ambient conditions	
ambient temperature	
during operation	-25 +80 °C
during storage	-25 +80 °C
during transport	-25 +80 °C
during installation	-5 +50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	acc. to IEC 60811-404 with test oil IRM 902 (acc. to ISO 1817), +70 °C, 4 h
• to grease	conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / gene	eral
product feature	
halogen-free	No
• silicon-free	Yes
product component / rodent protection	No
wire length	
for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum	5000 m
 for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum 	750 m
 for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum 	2000 m
• for glass FOC / for 1000BaseLSX / for Industrial Ethernet / maximum	2000 m
 for glass FOC / for 10GBaseLX4 / for Industrial Ethernet / maximum 	300 m
for glass FOC / with PROFIBUS / maximum	3000 m
standards, specifications, approvals	
certificate of suitability	
UL approval	Yes; UL approval: OFN (NEC Article 770, UL 1651) / CSA approval: OFN FT4 (CSA standard C22.2 No. 232)
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
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