SIEMENS

Data sheet	6XV1843-2R

product type designation	**SM FO robust cable GP**
product description	Glass fiber-optic cable, sold by the meter, unassembled

SM FO robust cable GP (4E9/125) Outdoor cable; with Rodent protection; splittable; without connector; sold by the meter; minimum order quantity 20 m; max. length 2000 m;

suitability for use	Waterproof cable (lengthwise and sideways) with non-metallic protection against rodents for use indoors and outdoors as well as for direct routing underground
version of the assembled FO cable	For assembly with two BFOC, SC and LC duplex connectors
cable designation	AT-V(ZN)H(ZN)BH 4E9/125

optical data

attenuation factor per length	
● at 1300 nm / maximum	0.5 dB/km
● at 1550 nm / maximum	0.5 dB/km

mechanical data

number of fibers / per FOC core	1
number of FO cores / per FOC cable	4
version of the FO conductor fiber	Single mode fiber 4E9/125/900, OS1 and OS2
design of the FOC core	Solid core, diameter 900 µm
design of the fiber-optic cable	segmentable
outer diameter	
● of the optical fibers	9 µm
● of the optical fiber sheath	125 µm
● of the FOC core sheath	2.2 mm
outer diameter / of the cable	9 mm
material	
● of the fiber-optic cable core	Quartz glass
● of the optical fiber sheath	Quartz glass
● of the FOC core sheath	PE flame retardant
● of the fiber-optic cable sheath	PE flame retardant
● of the strain relief	Aramid fibers, also central support element and glass roving
color	
● of the FOC core sheath	orange/black, with direction arrow (core pairs numbered with 1 and 2)
● of cable sheath	Black
bending radius	
● with single bend / minimum permissible	90 mm
● with multiple bends / minimum permissible	135 mm
tensile load	
● during installation / short-term	2000 N
● during operation / maximum	1000 N
short-term shear force per length	600 N/cm
continuous shear force per length	200 N/cm
weight per length	87 kg/km

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ambient conditions	
ambient temperature	
● during operation	-40 ... +70 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
● during installation	-20 ... +60 °C
fire behavior	flame-resistant acc. to IEC 60332-3-24
class of burning behaviour / according to EN 13501-6	Ccas1a,d0,a1
chemical resistance	
● to mineral oil	conditional resistance
● to grease	conditional resistance
● to water	resistant
radiological resistance / to UV radiation	resistant

product features, product functions, product components / general	
product feature	
● halogen-free	Yes
● silicon-free	Yes
product component / rodent protection	Yes
wire length	
● for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum	26000 m
● for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum	5000 m
● for glass FOC / for 10GBaseLR / for Industrial Ethernet / maximum	10000 m
● for glass FOC / with 10GBaseER / for Industrial Ethernet / maximum	40000 m
● for glass FOC / with PROFIBUS / maximum	15000 m

standards, specifications, approvals	
certificate of suitability	
● UL approval	Yes
● 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
● 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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