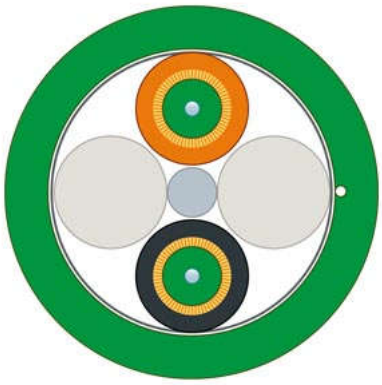
SIEMENS

Data sheet 6XV1843-2E

product description	single-mode glass fiber-optic cable, sold by the meter, unassembled
	SM FO FRNC cable GP (2E9/125), halogen-free cable, splittable, for permanent routing, max. length 1000 m minimum order quantity 20 m sold by the meter.



suitability for use	Halogen-free cable (acc. to IEC 61034-1 / 61034-2 and IEC 60754-1 / IEC 60754-2) for use indoors and outdoors with permanent installation, UL approval
version of the assembled FO cable	sold by the meter
cable designation	AT-V(ZN)HH 2E9/125 TB900L 2,2
optical data	
attenuation factor per length	
● at 1550 nm / maximum	0.22 dB/km
mechanical data	
number of fibers / per FOC core	1
number of FO cores / per FOC cable	2
design of the FOC core	fixed core (TB900L)
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
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	Quartz glass
● of the FOC core sheath	FRNC
● of the fiber-optic cable sheath	FRNC
● 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	250 N
short-term shear force per length	500 N/cm
weight per length	57 kg/km
ambient conditions	
ambient temperature	
● during operation	-30 ... +85 °C

Subject to change without notice
© Copyright Siemens

● during storage	-30 ... +85 °C
● during transport	-30 ... +85 °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	B2ca - s1a d1 a1
chemical resistance	
● to mineral oil	no resistance
● to grease	conditional resistance
● to water	conditional resistance
radiological resistance / to UV radiation	conditional resistance
product features, product functions, product components / general	
product feature	
● halogen-free	Yes
● silicon-free	Yes
product component / rodent protection	No
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; c(UL)us OFNR FT4
● 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	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval	Environment

Subject to change without notice
© Copyright Siemens

Manufacturer Declaration



Environmental Confirmations

last modified: 11/19/2024

Subject to change without notice
© Copyright Siemens