SIEMENS

Data sheet

Product type designation Product description

SM FO robust cable GP

Glass fiber-optic cable, sold by the meter, unassembled SM FO ROBUST CABLE GP (4E9/125) OUTDOOR CABLE; WITH PROTECTION AGAIST RODENTS; SPLITTABLE; W/O CONNECTOR; SOLD BY THE METER; MIN. 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	
Damping ratio 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 operation / maximum	1000 N
Short-term shear force per length	600 N/cm
Continuous lateral force per length	200 N/cm
Weight per length	87 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operation	-40 +70 °C
• during storage	-40 +70 °C
during transport	-40 +70 °C
during installation	-20 +60 °C
Burning behavior	Flame-resistant acc. to IEC 60332-3-24
Chemical resistance	
● to mineral oil	Conditional resistance
● to grease	Conditional resistance
• to water	resistant
Radiological resistance / to UV radiation	resistant
Product properties, functions, components / genera Product property	
halogen-free	Yes
• silicon-free	Yes
Product component / Rodent protection	Yes
Cable 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		
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/automation/net/catalog	
• 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	
last modified:	09.03.2015	