

Product type designation

Product description

FO Ground Cable

Glass fiber-optic cable, sold by the meter, unassembled
SIMATIC NET FO GROUND CABLE, (50/125), OUTDOOR CABLE
W. PROT. AGAINST RODENTS, SPLITTABLE, W/O CONNECT.,
SOLD BY THE METER MIN. ORDER LENGTH: 20 M, MAX.
LENGTH: 2000 M



Suitability for use	Waterproof cable (lengthwise and sideways) with non-metallic protection against rodents for use outdoors as well as for direct routing underground
Version of the assembled FO cable	For assembly with four BFOC or SC connectors
Cable designation	AT-WQ(ZN)Y(ZN)B2Y 2G 50/125
Optical data	
Damping ratio per length	
• at 850 nm / maximum	2.7 dB/km
• at 1300 nm / maximum	0.7 dB/km
Bandwidth length product	
• at 850 nm	600 GHz·m
• at 1300 nm	1200 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	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	50 µm
• 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	0.1 mm
Outer diameter / of the cable	10.5 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	Quartz glass
• of the FOC core sheath	PVC
• of the fiber-optic cable sheath	PE
• of the strain relief	Aramid fibers
Color	
• of the FOC core sheath	orange/black
• of cable sheath	Black
Bending radius	
• with single bend / minimum permissible	105 mm
• with multiple bends / minimum permissible	155 mm
Tensile load	
• during installation / short-term	2000 N
• during operation / maximum	800 N
Short-term shear force per length	500 N/cm
Continuous lateral force per length	300 N/cm
Weight per length	90 kg/km

Permitted ambient conditions

Ambient temperature	
• during operation	-40 ... +85 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
• during installation	-5 ... +50 °C
Burning behavior	flammable
Chemical resistance	
• to mineral oil	resistant
• to grease	resistant
• to water	resistant
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product feature	
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• halogen-free • silicon-free	No Yes
Product component / Rodent protection	Yes
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 / with PROFIBUS / maximum	3000 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/industry/infocenter
• 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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