

Product type designation

Product description

FO Ground Cable

Glass fiber-optic cable, preferred length, preassembled
SIMATIC NET FO GROUND CABLE 50/ 125, PREASSEMBLED
WITH 2X2 BFOC CONNECTORS, INSERTION GUIDE, LENGTH
100 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	Assembled with four BFOC connectors
Cable designation	AT-WQ(ZN)Y(ZN)B2Y 2G 50/125
Wire length	100 m

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 • of the optical fiber sheath • of the FOC core sheath	50 µm 125 µm 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 • of the optical fiber sheath • of the FOC core sheath • of the fiber-optic cable sheath • of the strain relief	Quartz glass Quartz glass PVC PE Aramid fibers
Color • of the FOC core sheath • of cable sheath	orange/black Black
Bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	105 mm 155 mm
Tensile load • during installation / short-term • during operation / maximum	2000 N 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 • during storage • during transport • during installation	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -5 ... +50 °C
Burning behavior	flammable
Chemical resistance • to mineral oil • to grease • to water	resistant resistant resistant
Radiological resistance / to UV radiation	resistant
Protection class IP	IP20

Product properties, functions, components / general

Product feature	
• halogen-free	No
• silicon-free	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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