

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
300 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
Cable length	300 m

Optical data

Damping ratio per length	
<ul style="list-style-type: none"> at 850 nm / maximum at 1300 nm / maximum 	<p>2.7 dB/km</p> <p>0.7 dB/km</p>
Bandwidth length product	
<ul style="list-style-type: none"> at 850 nm at 1300 nm 	<p>600 GHz·m</p> <p>1200 GHz·m</p>

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	
<ul style="list-style-type: none"> of the optical fibers of the optical fiber sheath of the FOC core sheath 	<p>50 μm</p> <p>125 μm</p> <p>2.9 mm</p>

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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • of the FOC core sheath • of cable sheath 	Orange/black Black
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	105 mm 155 mm
Tensile load / 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 property <ul style="list-style-type: none"> • halogen-free • silicon-free 	No Yes
Product component / Rodent protection	Yes
Cable length <ul style="list-style-type: none"> • for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum 	5000 m

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|--|--------|
| • 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

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|---|---|
| • 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 |

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