

### 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 SC 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	Preassembled with four SC 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"> <li>at 850 nm / maximum</li> <li>at 1300 nm / maximum</li> </ul>	<p>2.7 dB/km</p> <p>0.7 dB/km</p>
Bandwidth length product	
<ul style="list-style-type: none"> <li>at 850 nm</li> <li>at 1300 nm</li> </ul>	<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"> <li>of the optical fibers</li> <li>of the optical fiber sheath</li> <li>of the FOC core sheath</li> </ul>	<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"> <li>• of the fiber-optic cable core</li> <li>• of the optical fiber sheath</li> <li>• of the FOC core sheath</li> <li>• of the fiber-optic cable sheath</li> <li>• of the strain relief</li> </ul>	Quartz glass Quartz glass PVC PE Aramid fibers
Color <ul style="list-style-type: none"> <li>• of the FOC core sheath</li> <li>• of cable sheath</li> </ul>	Orange/black Black
Bending radius <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	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"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -5 ... +50 °C
Burning behavior	Flammable
Chemical resistance <ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	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"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	No Yes
Product component / Rodent protection	Yes
Cable length <ul style="list-style-type: none"> <li>• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum</li> </ul>	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 | <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>                                     |
| • to website: Industrial communication            | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                       |
| • to website: Industry Mall                       | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                         |
| • to website: Information and Download Center     | <a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</a> |
| • to website: Image database                      | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>                   |
| • to website: CAx Download Manager                | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                       |
| • to website: Industry Online Support             | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>                   |

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