

### 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  
200 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                      | 200 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<br>Quartz glass<br>PVC<br>PE<br>Aramid fibers |
| Color <ul style="list-style-type: none"> <li>• of the FOC core sheath</li> <li>• of cable sheath</li> </ul>  | Orange/black<br>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<br>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<br>-40 ... +75 °C<br>-40 ... +75 °C<br>-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<br>resistant<br>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<br>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    |

- |  |        |
|--|--------|
| • 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 | <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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