

### Product type designation

Product description

### FO Standard Cable GP

Glass fiber-optic cable, preferred length, preassembled  
SIMATIC NET FO STANDARD CABLE GP (50/125),  
PREASSEMBLED WITH 2X2 SC CONNECTORS, LENGTH 2.0 M



Suitability for use	Cable for installation indoors and outdoors, UL approval
Version of the assembled FO cable	Preassembled with four SC connectors
Cable designation	AT-W(ZN)YY 2x1 G 50/125
Cable length	2 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

Width / of cable sheath	7.4 mm
Thickness / of cable sheath	4.5 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 PVC Aramid fibers
Color	
<ul style="list-style-type: none"> <li>• of the FOC core sheath</li> <li>• of cable sheath</li> </ul>	Orange/black green
Bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	45 mm 65 mm
Tensile load / during operation / maximum	500 N
Short-term shear force per length	600 N/cm
Continuous lateral force per length	400 N/cm
Weight per length	40 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>	-25 ... +80 °C -25 ... +80 °C -25 ... +80 °C -5 ... +50 °C
Burning behavior	Flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
Chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> </ul>	Conditional resistance Conditional resistance
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	No
Cable length	
<ul style="list-style-type: none"> <li>• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum</li> <li>• for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum</li> </ul>	5000 m 750 m

- for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum
- for glass FOC / with PROFIBUS / maximum

2000 m

3000 m

### Standards, specifications, approvals

Certificate of suitability

- RoHS conformity

UL approval: OFN (NEC Article 770, UL 1651) / CSA approval: OFN 90 °C, FT1, FT4 (CSA standard C22.2 No. 232-M1988)  
Yes

### Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>

<https://mall.industry.siemens.com>

<http://www.siemens.com/automation/net/catalog>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

**last modified:**

16.03.2015