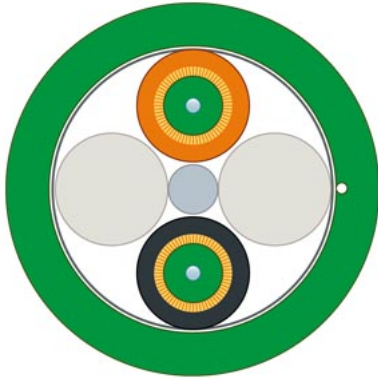


product description

Glass fiber-optic cable, sold by the meter, unassembled

FO FRNC Cable GP (50/ 125/OM4), halogen-free cable, splittable, for permanent routing, max. length 1000 m minimum order quantity 20 m sold by the meter



Technical Product Detail Page

<https://i.siemens.com/1P6XV1873-2E>

suitability for use

Halogen-free cable (acc. to IEC 61034-1 / 61034-2 and IEC 60754-1 / IEC 60754-2) for use indoors and outdoors with permanent installation, UL approval

version of the assembled FO cable

sold by the meter

cable designation

AT-V(ZN)HH 2G 50/125 OM4BI TB900L 2,2

### optical data

attenuation factor per length

- at 850 nm / maximum
- at 1300 nm / maximum

2.5 dB/km  
0.7 dB/km

bandwidth length product

- at 850 nm
- at 1300 nm

3500 GHz·m  
500 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 4

design of the FOC core

fixed core (TB900L)

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  
2.2 mm

symmetrical deviation / of the outer diameter of the FOC core sheath

0.1 mm

outer diameter / of the cable

7.2 mm

symmetrical deviation / of the outer diameter of the line

0.3 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  
FRNC  
FRNC  
Aramid fibers

color

- of the FOC core sheath
- of cable sheath

orange/black  
green

bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible

70 mm  
105 mm

tensile load

<ul style="list-style-type: none"> <li>• during installation / short-term</li> </ul>	800 N
<ul style="list-style-type: none"> <li>• during operation / maximum</li> </ul>	250 N
short-term shear force per length	1000 N/cm
continuous shear force per length	500 N/cm
weight per length	57 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-30 ... +85 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-30 ... +85 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-30 ... +85 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-5 ... +50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
class of burning behaviour / according to EN 13501-6	B2ca - s1a d1 a1
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> </ul>	no resistance
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	conditional resistance
<ul style="list-style-type: none"> <li>• to water</li> </ul>	conditional resistance
radiological resistance / to UV radiation	conditional resistance
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	Yes
product component / rodent protection	No
wire length	
<ul style="list-style-type: none"> <li>• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum</li> </ul>	3000 m
<ul style="list-style-type: none"> <li>• for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum</li> </ul>	1040 m
<ul style="list-style-type: none"> <li>• for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum</li> </ul>	600 m
<ul style="list-style-type: none"> <li>• for glass FOC / for 1000BaseLSX / for Industrial Ethernet / maximum</li> </ul>	1000 m
<ul style="list-style-type: none"> <li>• for glass FOC / with 10GBaseSR / for Industrial Ethernet / maximum</li> </ul>	550 m
<ul style="list-style-type: none"> <li>• for glass FOC / for 10GBaseLX4 / for Industrial Ethernet / maximum</li> </ul>	300 m
<ul style="list-style-type: none"> <li>• for glass FOC / with 25GBaseSR / for Industrial Ethernet / maximum</li> </ul>	100 m
<b>standards, specifications, approvals</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>• UL approval</li> </ul>	Yes; c(UL)us OFNR FT4
<ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul>	Yes
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>• to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>• to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>• to website: CAx-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information / header</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit

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## Approvals / Certificates

### General Product Approval



[China RoHS](#)

[Fire safety / Physical security](#)

[Manufacturer Declaration](#)



### General Product Approval

#### Environment

#### Industrial Communication



[Environmental Conformations](#)

[Environmental Conformations](#)

[PROFINET](#)

last modified:

3/10/2026