

product description

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

FO FRNC Cable (50/125/OM2), 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/1P6XV1873-2B>

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-W(ZN)HH 2G 50/125 UV OM2++

### optical data

attenuation factor per length

- at 850 nm / maximum 2.7 dB/km
- at 1300 nm / maximum 0.7 dB/km

bandwidth length product

- at 850 nm 600 GHz·m
- at 1300 nm 1200 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 2

design of the FOC core

Hollow core, filled, diameter 1400 µm

design of the fiber-optic cable

segmentable

outer diameter

- of the optical fibers 50 µm
- of the optical fiber sheath 125 µm
- of the FOC core sheath 2.9 mm

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

0.1 mm

outer diameter / of the cable

9.2 mm

symmetrical deviation / of the outer diameter of the line

0.3 mm

material

- of the fiber-optic cable core Quartz glass
- of the optical fiber sheath Quartz glass
- of the FOC core sheath FRNC
- of the fiber-optic cable sheath FRNC
- of the strain relief Aramid fibers

color

- of the FOC core sheath orange/black
- of cable sheath green

bending radius

- with single bend / minimum permissible 90 mm
- with multiple bends / minimum permissible 135 mm

tensile load

<ul style="list-style-type: none"> <li>during installation / short-term</li> </ul>	1200 N
<ul style="list-style-type: none"> <li>during operation / maximum</li> </ul>	500 N
short-term shear force per length	500 N/cm
weight per length	85 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-40 ... +85 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +85 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +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	Eca
chemical resistance	
<ul style="list-style-type: none"> <li>to mineral oil</li> </ul>	acc. to IEC 60811-404 with test oil IRM 902 (acc. to ISO 1817), +70 °C, 4 h and +25 °C, 168 h
<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	resistant
<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>	5000 m
<ul style="list-style-type: none"> <li>for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum</li> </ul>	750 m
<ul style="list-style-type: none"> <li>for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum</li> </ul>	2000 m
<ul style="list-style-type: none"> <li>for glass FOC / for 1000BaseLSX / for Industrial Ethernet / maximum</li> </ul>	2000 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 PROFIBUS / maximum</li> </ul>	3000 m
<b>standards, specifications, approvals</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>UL approval</li> </ul>	Yes; c(UL)us OFN 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>	
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Environment

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