

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

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
- at 1300 nm / maximum

2.7 dB/km
0.7 dB/km

bandwidth length product

- at 850 nm
- at 1300 nm

600 GHz·m
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
- of the optical fiber sheath
- of the FOC core sheath

50 µm
125 µm
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
- 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

90 mm
135 mm

tensile load

- during installation / short-term
- during operation / maximum

1200 N
500 N

short-term shear force per length	500 N/cm
weight per length	85 kg/km
ambient conditions	
ambient temperature	
• during operation	-40 ... +85 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
• during installation	-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	
• to mineral oil	acc. to IEC 60811-404 with test oil IRM 902 (acc. to ISO 1817), +70 °C, 4 h and +25 °C, 168 h
• to grease	conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
• halogen-free	Yes
• silicon-free	Yes
product component / rodent protection	No
wire length	
• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum	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 / for 1000BaseLSX / for Industrial Ethernet / maximum	2000 m
• for glass FOC / for 10GBaseLX4 / for Industrial Ethernet / maximum	300 m
• for glass FOC / with PROFIBUS / maximum	3000 m
standards, specifications, approvals	
certificate of suitability	
• UL approval	Yes; c(UL)us OFN FT4
• RoHS conformity	Yes
reference code	
• according to IEC 81346-2	WH
• according to IEC 81346-2:2019	WHA
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information / header	
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Approvals / Certificates

General Product Approval



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[Declaration of Conformity](#)



Environment	Industrial Communication
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[Confirmation](#)

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last modified: 11/19/2024 