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| product description | Glass fiber-optic cable, sold by the meter, unassembled |
| suitability for use | 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 |
| 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 material | 0.3 mm |
| • 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 | |
| • during installation / short-term | 1200 N |
| • during operation / maximum | 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
 conditional resistance
 conditional resistance
 resistant

- to grease
- to water

radiological resistance / to UV radiation

product features, product functions, product components / general

product feature

- halogen-free
- silicon-free

Yes
 Yes

product component / rodent protection

No

wire length

- for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum
- for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum
- for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum
- for glass FOC / for 1000BaseLSX / for Industrial Ethernet / maximum
- for glass FOC / for 10GBaseLX4 / for Industrial Ethernet / maximum
- for glass FOC / with PROFIBUS / maximum

5000 m
 750 m
 2000 m
 2000 m
 300 m
 3000 m

standards, specifications, approvals

certificate of suitability

- UL approval
- RoHS conformity

Yes; UL approval: UL OFN (NEC Article 770, UL 1651) / CSA approval: OFN FT4 (CSA standard C22.2 No. 232)
 Yes

reference code

- according to IEC 81346-2
- according to IEC 81346-2:2019

WH
 WHA

further information / internet-Links

Internet-Link

- to web page: selection aid TIA Selection Tool
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Selection guide for cables and connectors
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

<http://www.siemens.com/tia-selection-tool>
<http://www.siemens.com/simatic-net>
<https://mall.industry.siemens.com>
<http://www.siemens.com/industry/infocenter>
<https://sie.ag/2QdlxcP>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

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