SIEMENS

Data sheet 6XV1820-5BT12

product type designation
product description

Fiber optic standard cable

Flexible glass fiber-optic cable, preferred length, preassembled

fiber optic cable (62.5/125), standard cable, splittable, pre-assembled with 4 BFOC connectors, length 120 m.



| suitability for use | Cable for installation indoors and outdoors |
|--|--|
| version of the assembled FO cable | Assembled with four BFOC connectors |
| cable designation | AT-V(ZN)YY 2X1 G 62,5/125 OM1 |
| wire length | 120 m |
| optical data | |
| attenuation factor per length | |
| • at 850 nm / maximum | 3 dB/km |
| • at 1300 nm / maximum | 0.8 dB/km |
| bandwidth length product | |
| • at 850 nm | 300 GHz·m |
| • at 1300 nm | 800 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 | Multimode graded-index fiber 62.5/125 µm, OM 1 |
| design of the FOC core | Compact core, diameter 900 µm |
| design of the fiber-optic cable | Segmentable outer conductor |
| outer diameter | |
| of the optical fibers | 62.5 µm |
| of the optical fiber sheath | 125 µm |
| of the FOC core sheath | 3.5 mm |
| width / of cable sheath | 9.8 mm |
| thickness / of cable sheath | 6.3 mm |
| material | |
| of the fiber-optic cable core | Quartz glass |
| of the optical fiber sheath | Quartz glass |
| of the FOC core sheath | PVC |
| of the fiber-optic cable sheath | PVC |
| of the strain relief | Aramid fibers and glass roving |
| color | |
| of the FOC core sheath | gray |
| of cable sheath | Black |
| bending radius | |
| with single bend / minimum permissible | 80 mm |
| with multiple bends / minimum permissible | 80 mm |
| tensile load | |
| during installation / short-term | 1500 N |
| during operation / maximum | 1500 N |

| continuous shear force per length | 150 N/cm |
|--|---|
| weight per length | 70 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) |
| chemical resistance | |
| • to mineral oil | not resistant |
| • to grease | not resistant |
| radiological resistance / to UV radiation | resistant |
| protection class IP | IP20 |
| product features, product functions, product components / gene | eral |
| product feature | |
| halogen-free | No |
| • silicon-free | Yes |
| product component / rodent protection | No |
| wire length | |
| for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum | 4000 m |
| for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum | 500 m |
| for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum | 1000 m |
| for glass FOC / with PROFIBUS / maximum | 3000 m |
| standards, specifications, approvals | |
| certificate of suitability | |
| RoHS conformity | Yes |
| reference code | |
| according to IEC 81346-2 | WH |
| according to IEC 81346-2:2019 | WHA |
| urther information / internet links | |
| internet link | |
| to web page: selection aid TIA Selection Tool | http://www.siemens.com/tia-selection-tool |
| • to website: Industrial communication | http://www.siemens.com/simatic-net |
| • to website: Industry Mall | https://mall.industry.siemens.com |
| to website: Information and Download Center | http://www.siemens.com/industry/infocenter |
| • to website: Selection guide for cables and connectors | https://sie.ag/2QdlxcP |
| • to website: Image database | http://automation.siemens.com/bilddb |
| • to website: CAx-Download-Manager | http://www.siemens.com/cax |
| | |
| to website: Industry Online Support | https://support.industry.siemens.com |

General Product Approval

Manufacturer Declaration



Declaration of Conformity







Test Certificates Marine / Shipping other Environment

Manufacturer Declaration



Confirmation

Confirmation

last modified: 3/12/2024 **C**