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## Data sheet 6XV1821-0BN80

**Product type designation**
**PROFIBUS Plastic Fiber Optic standard cable**

Product description
Fiber-optic cable with polyoptical fiber, preferred length, preassembled
PROFIBUS Plastic Fiber Optic, Standard cable with 4 BFOC connectors, Length 80 m



| | |
|---|---|
| Suitability for use | Cable for indoor applications |
| Version of the assembled FO cable | Assembled with four BFOC connectors |
| Cable designation | I-V4Y(ZN)Y 2P 980/1000 |
| Wire length | 80 m |

| Optical data | |
|---|---|
| Damping ratio per length | |
| • at 650 nm / maximum | 160 dB/km |
| • at 660 nm / maximum | 230 dB/km |
| Bandwidth length product | |
| • at 650 nm | 1 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 | Step index fiber 980/1000 µm |
| Outer diameter | |
| • of the optical fibers | 980 µm |


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| | |
|---|---|
| • of the optical fiber sheath | 1000 µm |
| • of the FOC core sheath | 2.2 mm |
| Symmetrical deviation / of the outer diameter of the FOC core sheath | 0.1 mm |
| Outer diameter / of the cable | 7.8 mm |
| Symmetrical deviation / of the outer diameter of the line | 0.3 mm |
| Material | |
| • of the fiber-optic cable core | Polymethylmethacrylate (PMMA) |
| • of the optical fiber sheath | Fluoridated special polymer |
| • of the FOC core sheath | PA |
| • of the fiber-optic cable sheath | PVC |
| • of the strain relief | Kevlar fibers |
| Color | |
| • of the FOC core sheath | orange/black |
| • of cable sheath | Violet |
| Bending radius | |
| • with single bend / minimum permissible | 100 mm |
| • with multiple bends / minimum permissible | 150 mm |
| Tensile load | |
| • during installation / short-term | 100 N |
| • during operation / maximum | 100 N |
| Short-term shear force per length | 100 N/cm |
| Weight per length | 65 kg/km |

## Ambient conditions

| | |
|---|---|
| Ambient temperature | |
| • during operation | -30 ... +70 °C |
| • during storage | -30 ... +70 °C |
| • during transport | -30 ... +70 °C |
| • during installation | 50 °C |
| Burning behavior | flame-resistant acc. to IEC 60332-1-2 |
| Chemical resistance | |
| • to mineral oil | conditional resistance |
| • to grease | conditional resistance |
| Radiological resistance / to UV radiation | not resistant |
| Protection class IP | IP20 |

## Product features, product functions, product components / general

| | |
|---|---|
| Product feature | |
| • halogen-free | No |
| • silicon-free | Yes |
| Product component / Rodent protection | No |
| Wire length | |


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| | |
|---|---|
| • for POF FOC / with PROFIBUS / maximum | 80 m |

## Standards, specifications, approvals

| | |
|---|---|
| Certificate of suitability | UL approval: cULus OFN FT1 (NEC Article 770, UL 1651) / CSA approvl: OFN (CSA-Standard C22.2 No232) |
| • RoHS conformity | Yes |

## Further information / Internet-Links

| | |
|---|---|
| Internet-Link | |
| • to website: Selector SIMATIC NET SELECTION TOOL | http://www.siemens.com/snst |
| • 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: 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 |
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