

### product type designation

### product description

### PROFIBUS Plastic Fiber Optic standard cable

Fiber-optic cable with polyoptical fiber, preferred length, preassembled

PROFIBUS Plastic Fiber Optic, Standard cable with 4 BFOC connectors, length 50 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

50 m

### optical data

#### attenuation factor per length

- at 650 nm / maximum
- at 660 nm / maximum

160 dB/km  
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
- of the optical fiber sheath
- of the FOC core sheath

980 µm  
1000 µm  
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
- of the optical fiber sheath
- of the FOC core sheath
- of the fiber-optic cable sheath
- of the strain relief

Polymethylmethacrylate (PMMA)  
Fluoridated special polymer  
PA  
PVC  
Kevlar fibers

#### color

- of the FOC core sheath
- of cable sheath

orange/black  
Violet

#### bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible

100 mm  
150 mm

#### tensile load

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

100 N  
100 N

#### short-term shear force per length

100 N/cm

|                                                                          |                                                                                                             |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| weight per length                                                        | 65 kg/km                                                                                                    |
| <b>ambient conditions</b>                                                |                                                                                                             |
| ambient temperature                                                      |                                                                                                             |
| • during operation                                                       | -30 ... +70 °C                                                                                              |
| • during storage                                                         | -30 ... +70 °C                                                                                              |
| • during transport                                                       | -30 ... +70 °C                                                                                              |
| • during installation                                                    | 50 °C                                                                                                       |
| fire 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                                                                                                        |
| <b>product features, product functions, product components / general</b> |                                                                                                             |
| product feature                                                          |                                                                                                             |
| • halogen-free                                                           | No                                                                                                          |
| • silicon-free                                                           | Yes                                                                                                         |
| product component / rodent protection                                    | No                                                                                                          |
| wire length                                                              |                                                                                                             |
| • for POF FOC / with PROFIBUS / maximum                                  | 80 m                                                                                                        |
| <b>standards, specifications, approvals</b>                              |                                                                                                             |
| certificate of suitability                                               |                                                                                                             |
| • UL approval                                                            | Yes; UL approval: cULus OFN FT1 (NEC Article 770, UL 1651) / CSA approval: OFN (CSA standard C22.2 No. 232) |
| • RoHS conformity                                                        | Yes                                                                                                         |
| reference code                                                           |                                                                                                             |
| • according to IEC 81346-2                                               | WH                                                                                                          |
| • according to IEC 81346-2:2019                                          | WHA                                                                                                         |
| <b>further information / internet links</b>                              |                                                                                                             |
| internet link                                                            |                                                                                                             |
| • to web page: selection aid TIA Selection Tool                          | <a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>           |
| • to website: Industrial communication                                   | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                         |
| • to website: Industry Mall                                              | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                           |
| • to website: Information and Download Center                            | <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>         |
| • to website: Selection guide for cables and connectors                  | <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a>                                                 |
| • to website: Image database                                             | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>                     |
| • to website: CAX-Download-Manager                                       | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                         |
| • to website: Industry Online Support                                    | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>                     |

last modified:

2/3/2023 