

## Data sheet

6XV1820-5BT15

|                                    |                                                                                                                                                                                         |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product type designation</b>    | <b>Fiber optic standard cable</b>                                                                                                                                                       |
| Product description                | Flexible glass fiber-optic cable, preferred length, preassembled SIMATIC NET, FIBER OPTIC CABLE (62.5/125)STANDARD CABLE, SPLITTABLE PREASSEMBLED WITH 4 BFOC CONNECTORS, LENGTH: 150 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                                                                                                                                                               |
| Wire length                        | 150 m                                                                                                                                                                                   |
| <b>Optical data</b>                |                                                                                                                                                                                         |
| Damping ratio per length           |                                                                                                                                                                                         |
| • at 850 nm / maximum              | 3.1 dB/km                                                                                                                                                                               |
| • at 1300 nm / maximum             | 0.8 dB/km                                                                                                                                                                               |
| Bandwidth length product           |                                                                                                                                                                                         |
| • at 850 nm                        | 200 GHz·m                                                                                                                                                                               |
| • at 1300 nm                       | 600 GHz·m                                                                                                                                                                               |
| <b>Mechanical data</b>             |                                                                                                                                                                                         |
| 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                     |                                                                                                                                                                                         |

|                                                                                                                                                 |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul> | 80 mm<br>80 mm   |
| Tensile load                                                                                                                                    |                  |
| <ul style="list-style-type: none"> <li>• during installation / short-term</li> <li>• during operation / maximum</li> </ul>                      | 1500 N<br>1500 N |
| Continuous lateral force per length                                                                                                             | 150 N/cm         |
| Weight per length                                                                                                                               | 70 kg/km         |

#### Permitted ambient conditions

|                                                                                                                                                           |                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Ambient temperature                                                                                                                                       |                                                                     |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul> | -40 ... +85 °C<br>-40 ... +85 °C<br>-40 ... +85 °C<br>-5 ... +50 °C |
| Burning behavior                                                                                                                                          | flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)   |
| Chemical resistance                                                                                                                                       |                                                                     |
| <ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> </ul>                                                                   | not resistant<br>not resistant                                      |
| Radiological resistance / to UV radiation                                                                                                                 | resistant                                                           |
| Protection class IP                                                                                                                                       | IP20                                                                |

#### Product properties, functions, components / general

|                                                                                                                                                                                                                                                                                                                                      |                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Product feature                                                                                                                                                                                                                                                                                                                      |                                    |
| <ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>                                                                                                                                                                                                                                             | No<br>Yes                          |
| Product component / Rodent protection                                                                                                                                                                                                                                                                                                | No                                 |
| Wire length                                                                                                                                                                                                                                                                                                                          |                                    |
| <ul style="list-style-type: none"> <li>• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum</li> <li>• for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum</li> <li>• for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum</li> <li>• for glass FOC / with PROFIBUS / maximum</li> </ul> | 4000 m<br>350 m<br>550 m<br>3000 m |

#### Standards, specifications, approvals

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| Certificate of suitability                                          |     |
| <ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul> | Yes |

#### Further Information / Internet Links

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|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Internet-Link                                                                                                                                       |                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> <li>• to website: Industrial communication</li> </ul> | <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a><br><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> |

- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<https://mall.industry.siemens.com>

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

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