SIEMENS

## Data sheet 6XV1830-3DH10

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| **product type designation** | **PROFIBUS M12-Cable** |
| product description | Flexible plug-in cable (2-core), preferred length, preassembled with two 5-pole M12 male/female connectors (B-coded) |
| | PROFIBUS M12 plug-in cable (ET 200) Pre-assembled PB FC Trailing Cable with 2 M12 connectors, B-coded, 5-pole; 1.0 m. |



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| suitability for use | Cable for connecting PROFIBUS stations (e.g. SIMATIC ET 200) to IP 65 degree of protection |
| cable designation | 02YY (ST) C11Y 1x2x0,65/2,56-150 LI KF 40 FR petrol |
| wire length | 1 m |
| **electrical data** | |
| number of electrical connections | 2 |
| attenuation factor per length | |
| ● at 9.6 kHz / maximum | 0.003 dB/m |
| ● at 38.4 kHz / maximum | 0.004 dB/m |
| ● at 4 MHz / maximum | 0.025 dB/m |
| ● at 16 MHz / maximum | 0.049 dB/m |
| impedance | |
| ● rated value | 150 Ω |
| ● at 9.6 kHz | 270 Ω |
| ● at 38.4 kHz | 185 Ω |
| ● at 3 MHz … 20 MHz | 150 Ω |
| relative symmetrical tolerance | |
| ● of the characteristic impedance at 9.6 kHz | 10 % |
| ● of the characteristic impedance at 38.4 kHz | 10 % |
| ● of the characteristic impedance at 3 MHz … 20 MHz | 10 % |
| loop resistance per length / maximum | 133 mΩ/m |
| shield resistance per length / maximum | 14 Ω/km |
| capacity per length / at 1 kHz | 28 pF/m |
| operating voltage | |
| ● RMS value | 80 V |
| **mechanical data** | |
| number of electrical cores | 2 |
| design of the shield | Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires |
| type of electrical connection / FastConnect | Yes |
| outer diameter | |
| ● of inner conductor | 0.67 mm |
| ● of the wire insulation | 2.56 mm |
| ● of the inner sheath of the cable | 5.4 mm |
| ● of cable sheath | 8 mm |
| symmetrical tolerance of the outer diameter / of cable sheath | 0.4 mm |
| material | |
| ● of the wire insulation | polyethylene (PE) |


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| ● of the inner sheath of the cable | PVC |
| ● of cable sheath | PUR (TPE-U) |
| color | |
| ● of the insulation of data wires | red/green |
| ● of cable sheath | petrol |
| bending radius | |
| ● with single bend / minimum permissible | 40 mm |
| ● with continuous bending | 120 mm |
| number of bending cycles | 3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 120 mm (15x D) and an acceleration of 4 m/s² |
| tensile load / maximum | 100 N |
| weight per length | 77 kg/km |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -40 ... +60 °C |
| ● during storage | -40 ... +60 °C |
| ● during transport | -40 ... +60 °C |
| ● during installation | -40 ... +60 °C |
| ● note | Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472 |
| ambient condition / for operation | Limited segment length (see manual for PROFIBUS networks) |
| fire behavior | flame resistant according to IEC 60332-1-2 |
| chemical resistance | |
| ● to mineral oil | oil resistant according to IEC 60811-2-1 (7x24h/90°C) |
| ● to grease | resistant |
| ● to water | conditional resistance |
| radiological resistance / to UV radiation | resistant |
| protection class IP | IP65, IP67 |
| **product features, product functions, product components / general** | |
| product feature | |
| ● halogen-free | No |
| ● silicon-free | Yes |
| **standards, specifications, approvals** | |
| UL/ETL listing / 300 V Rating | Yes; CMX |
| UL/ETL style / 600 V Rating | No |
| certificate of suitability | |
| ● EAC approval | Yes |
| ● CE marking | Yes |
| ● RoHS conformity | Yes |
| Marine classification association | |
| ● American Bureau of Shipping Europe Ltd. (ABS) | No |
| ● French marine classification society (BV) | No |
| ● Det Norske Veritas (DNV) | No |
| ● Germanische Lloyd (GL) | No |
| ● Lloyds Register of Shipping (LRS) | No |
| ● Nippon Kaiji Kyokai (NK) | No |
| ● Polski Rejestr Statkow (PRS) | No |
| reference code | |
| ● according to IEC 81346-2 | WG |
| ● according to IEC 81346-2:2019 | WGB |
| **further 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 |
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