SIEMENS

## Data sheet 6XV1878-5GN15

**Product type designation**
**IE TP Cord M12-90/M12-90**

Product description
Flexible plug-in cable (8-wire), preferred length, prefabricated with two IE FC M12 connectors 4X2 (X-coded)
IE TP Cord M12-90/M12-90 Pre-assembled IE Flexible Cable with 2 M12 connectors (X-coded); 90 degrees cable outlet; Length 15.0 m



| | |
|---|---|
| Suitability for use | For connecting Industrial Ethernet stations with an M12 interface (e.g. SCALANCE W and XP-200) |
| Wire length | 15 m |

| Electrical data | |
|---|---|
| Damping ratio per length | |
| • at 10 MHz / maximum | 0.086 dB/m |
| • at 100 MHz / maximum | 0.28 dB/m |
| • at 300 MHz / maximum | 0.402 dB/m |
| • at 600 MHz / maximum | 0.735 dB/m |
| Impedance | |
| • at 1 MHz ... 100 MHz | 100 Ω |
| Near-end crosstalk per length | |
| • at 100 MHz | 0.724 dB/m |
| • at 300 MHz | 0.653 dB/m |
| • at 600 MHz | 0.608 dB/m |
| Loop resistance per length / maximum | 290 mΩ/m |


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| | |
|---|---|
| Insulation resistance coefficient | 5000 GΩ·m |
| Operating voltage | |
| • RMS value | 80 V |
| NVP value in percent | 68 % |

## Mechanical data

| | |
|---|---|
| Number of electrical cores | 8 |
| Design of the shield | Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires |
| Type of electrical connection / FastConnect | No |
| Core diameter | |
| • of AWG26 core | 0.48 mm |
| Outer diameter | |
| • of the wire insulation | 1 mm |
| • of the inner sheath of the cable | 5.4 mm |
| • of cable sheath | 6.5 mm |
| Symmetrical tolerance of the outer diameter / of cable sheath | 0.3 mm |
| Material | |
| • of the wire insulation | polyethylene (PE) |
| • of cable sheath | PUR |
| Color | |
| • of the insulation of data wires | white/blue, white/orange, white/green, white/brown |
| • of cable sheath | green |
| Bending radius | |
| • with single bend / minimum permissible | 32.5 mm |
| • with multiple bends / minimum permissible | 65 mm |
| Tensile load / maximum | 100 N |
| Weight per length | 45 kg/km |

## Ambient conditions

| | |
|---|---|
| Ambient temperature | |
| • during operation | -30 ... +80 °C |
| • during storage | -40 ... +80 °C |
| • during transport | -40 ... +80 °C |
| • during installation | -40 ... +80 °C |
| Burning behavior | flame resistant according to IEC 60332-1-2 |
| Chemical resistance | |
| • to mineral oil | oil resistant according to DIN EN 60811-2-1 |
| • to grease | Conditional resistance |
| • to water | conditional resistance |
| Radiological resistance / to UV radiation | resistant |
| Protection class IP | IP65/67 |


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| Product features, product functions, product components / general | |
|---|---|
| Product feature | |
| • halogen-free | Yes |
| • silicon-free | Yes |

| Standards, specifications, approvals | |
|---|---|
| UL/ETL listing / 300 V Rating | Yes; AWM Style 21815 |
| UL/ETL style / 600 V Rating | No |
| Certificate of suitability | |
| • CE marking | Yes |
| • RoHS conformity | Yes |
| Standard for structured cabling | Cat6A |
| Marine classification association | |
| • American Bureau of Shipping Europe Ltd. (ABS) | No |
| • Bureau Veritas (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 |

| 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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