

SIMATIC NET, ITP STANDARD CABLE 9/15 FOR INDUSTRIAL ETHERNET ITP STANDARD CABLE, PREASSEMBLED WITH 1X 9-PIN AND 1 X 15-PIN ITP CONNECTOR, FOR CONNECTING TERMINALS W. ITP INTERF. TO ACT. ITP NETWORK COMPONENTS, LENGTH: 15 M



Acceptability for application

Used in the construction of Industrial Twisted Pair (ITP) networks

Cable length

15 m

### Electrical data

Damping ratio per length

|                        |            |
|------------------------|------------|
| • at 10 MHz / maximum  | 0.057 dB/m |
| • at 100 MHz / maximum | 0.18 dB/m  |
| • at 300 MHz / maximum | 0.31 dB/m  |

Impedance

|                                           |              |
|-------------------------------------------|--------------|
| • for frequency range 1 MHz ... 100 MHz   | 100 $\Omega$ |
| • for frequency range 100 MHz ... 300 MHz | 100 $\Omega$ |

Relative symmetrical tolerance

|                                               |      |
|-----------------------------------------------|------|
| • of the surge impedance at 1 MHz ... 100 MHz | 15 % |
| • of surge impedance at 100 MHz ... 300 MHz   | 45 % |

Transfer impedance / at 10 MHz

2 m $\Omega$ /m

Loop resistance per length / maximum

124  $\Omega$ /km

Insulation resistance coefficient

5000 G $\Omega$ ·m

Operating voltage

|             |       |
|-------------|-------|
| • RMS value | 165 V |
| • Maximum   | 225 V |

### Mechanical data

Number of electrical wires

4

|                                                            |                                                                                                                 |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Design of shield                                           | Overlapped aluminum-clad foil (for each core), sheathed in an overall braided shield of tin-plated copper wires |
| Core diameter                                              |                                                                                                                 |
| • of the AWG22 core                                        | 0.64 mm                                                                                                         |
| Outer diameter                                             |                                                                                                                 |
| • of the inner conductor                                   | 0.64 mm                                                                                                         |
| • of the wire insulation                                   | 1.5 mm                                                                                                          |
| Width / of the cable sheath                                | 9.2 mm                                                                                                          |
| Symmetrical tolerance of width / of cable sheath           | 0.5 mm                                                                                                          |
| Thickness / of the cable sheath                            | 6 mm                                                                                                            |
| Symmetrical tolerance of thickness / of cable sheath       | 0.5 mm                                                                                                          |
| Material                                                   |                                                                                                                 |
| • of the wire insulation                                   | PE                                                                                                              |
| • of the cable sheath                                      | PVC                                                                                                             |
| Color                                                      |                                                                                                                 |
| • of the insulation of data wires                          | white/blue, white/orange                                                                                        |
| • of the cable sheath                                      | green                                                                                                           |
| Bending radius                                             |                                                                                                                 |
| • with single bend / minimum permissible                   | 30 mm                                                                                                           |
| • with multiple bends / minimum permissible                | 45 mm                                                                                                           |
| Traction stress / maximum                                  | 80 N                                                                                                            |
| Weight per length                                          | 96 kg/km                                                                                                        |
| <b>Permitted ambient conditions</b>                        |                                                                                                                 |
| Ambient temperature                                        |                                                                                                                 |
| • during operating                                         | -40 ... +70 °C                                                                                                  |
| • during storage                                           | -40 ... +70 °C                                                                                                  |
| • during transport                                         | -40 ... +70 °C                                                                                                  |
| • during installation                                      | -40 ... +70 °C                                                                                                  |
| Protection class IP                                        | IP20                                                                                                            |
| Burning behaviour                                          | flame resistant according to IEC 60332-1                                                                        |
| Chemical resistance                                        |                                                                                                                 |
| • to mineral oil                                           | oil resistant according to IEC 60811-2-1 (4 h / 70°C)                                                           |
| • to grease                                                | Conditional resistance                                                                                          |
| <b>Product properties, functions, components / general</b> |                                                                                                                 |
| Product feature                                            |                                                                                                                 |
| • halogen-free                                             | No                                                                                                              |
| • silicon-free                                             | Yes                                                                                                             |
| <b>Standards, specifications, approvals</b>                |                                                                                                                 |
| UL/ETL listing / with 300 V rating                         | No                                                                                                              |
| UL/ETL style / with 600 V rating                           | No                                                                                                              |

Marine classification association

- American Bureau of Shipping Europe Ltd. (ABS)
- Bureau Veritas (BV)
- Det Norske Veritas (DNV)
- Germanische Lloyd (GL)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NK)
- Polski Rejestr Statkow (PRS)

No

No

No

No

No

No

No

**letzte Änderung:**

Aug 6, 2014