

product type designation

product description

IE TP Cord M12-90/RJ45-180

Flexible plug-in cable (8-wire), preferred length, pre-assembled with 1 x IE M12 plug 4X2, X-coded, 90 degrees cable outlet and 1x RJ45 connector; 4x2, 180 degrees cable outlet

IE TP Cord M12-90/RJ45-180 pre-assembled IE Flexible Cable with 1x M12 plug (X-coded); 90-degree cable outlet; 1x RJ45 plug; 180-degree cable outlet; length 2.0 m.



Technical Product Detail Page

<https://l.siemens.com/1P6XV1878-5SH20>

suitability for use

For connecting Industrial Ethernet stations with an M12 interface (e.g. SCALANCE W and SCALANCE X)

cable designation

S/FTP

wire length

2 m

electrical data

number of electrical connections

2

attenuation factor 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

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

S/FTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires

type of electrical connection / FastConnect

No

core diameter

- of AWG26 insulated conductor 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

| | |
|---|--|
| <ul style="list-style-type: none"> • of the wire insulation • of cable sheath | polyethylene (PE) PUR |
| color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath | white/blue, white/orange, white/green, white/brown green |
| bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible | 32.5 mm 65 mm |
| tensile load / maximum | 100 N |
| weight per length | 45 kg/km |
| ambient conditions | |
| ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation | -30 ... +80 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C |
| fire behavior | flame resistant according to IEC 60332-1-2, smoke density according to IEC 61034 |
| chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water | oil resistant according to DIN EN 60811-2-1 Conditional resistance conditional resistance |
| radiological resistance / to UV radiation | resistant |
| protection class IP | IP65/67 (M12), IP20 (RJ45) |
| product features, product functions, product components / general | |
| product feature <ul style="list-style-type: none"> • halogen-free • PoE capability • PoE+ capability • PoE++ capability • silicon-free | Yes Yes Yes Yes Yes |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes |
| UL/ETL style / 600 V Rating | No |
| certificate of suitability <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity | ISO/IEC 11801-1, IEC 61035 Yes Yes Yes |
| standard for structured cabling | Cat6A |
| Marine classification association <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (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 |
| further information / internet links | |
| internet link <ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support | https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com |
| security information | |
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Approvals / Certificates

General Product Approval

[Declaration of Conformity](#)



[Manufacturer Declaration](#)

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