

product type designation

product description

IE TP Cord M12-180/M12-180

Flexible plug-in cable (8-wire), preferred length, prefabricated with two IE FC M12 connectors 4X2 (X-coded)

IE TP Cord M12-180/M12-180 pre-assembled IE Flexible Cable, with 2 M12 connectors (X-coded), length 0.5 m.



suitability for use

For connecting Industrial Ethernet stations with an M12 interface (e.g. SCALANCE W and XP-200)

wire length

0.5 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

Overlapped aluminum-clad foil, sheathed in a braided screen 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

- of the wire insulation polyethylene (PE)
- of cable sheath 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 |
| product features, product functions, product components / general | |
| product feature | |
| <ul style="list-style-type: none"> • halogen-free • silicon-free | Yes Yes |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes; AWM Style 21815 |
| UL/ETL style / 600 V Rating | No |
| certificate of suitability | |
| <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity | 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 |
| reference code | |
| <ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 | WG WGB |
| further information / internet-Links | |
| Internet-Link | |
| <ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support | http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com |
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