

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 and 1x RJ45 plug; 180-degree cable outlet; length 0.5 m.



suitability for use

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

wire length

0.5 m

electrical data

number of electrical connections

2

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum
- at 300 MHz / maximum
- at 600 MHz / maximum

0.086 dB/m
0.28 dB/m
0.402 dB/m
0.735 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

near-end crosstalk per length

- at 100 MHz
- at 300 MHz
- at 600 MHz

0.724 dB/m
0.653 dB/m
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 tin-plated copper wires

type of electrical connection / FastConnect

No

core diameter

- of AWG26 insulated conductor

0.48 mm

outer diameter

- of the wire insulation
- of the inner sheath of the cable
- of cable sheath

1 mm
5.4 mm
6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

material

- of the wire insulation
- of cable sheath

polyethylene (PE)
PUR

color

• of the insulation of data wires • of cable sheath	white/blue, white/orange, white/green, white/brown green
bending radius	
• 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	
• 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	
• 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	
• 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	
• EAC approval • CE marking • RoHS conformity	Yes Yes Yes
standard for structured cabling	Cat6A
Marine classification association	
• 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	
• according to IEC 81346-2 • according to IEC 81346-2:2019	WG WGB
further information / internet links	
internet link	
• 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: 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 https://support.industry.siemens.com

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