

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 50.0 m.



suitability for use

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

wire length

50 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

coupling loss / at 30 MHz ... 100 MHz / minimum

80 dB

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

<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
plug	
type of plug interlock	screwed
connector coding	
<ul style="list-style-type: none"> of the M12 circular connector 	X-coded
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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