

Data sheet

6XV1878-5HN10

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 10.0 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1878-5HN10>

suitability for use

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

cable designation

S/FTP

wire length

10 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

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

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

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

0.48 mm

• of AWG26 insulated conductor

outer diameter

1 mm

• of the wire insulation

5.4 mm

• of the inner sheath of the cable

6.5 mm

• of cable sheath

0.3 mm

symmetrical tolerance of the outer diameter / of cable sheath

material

• of the wire insulation	polyethylene (PE)
• of cable sheath	PUR
color	
• of the insulation of data wires	white/blue, white/orange, white/green, white/brown
• of cable sheath	green
bending radius	
• with single bend / minimum permissible	32.5 mm
• with multiple bends / minimum permissible	65 mm
tensile load / maximum	100 N
weight per length	45 kg/km
plug	
type of plug interlock	screwed
design of plug-in connection	M12-180
connector coding	M12
• of the M12 circular connector	X-coded
ambient conditions	
ambient temperature	
• during operation	-30 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-40 ... +80 °C
fire behavior	flame resistant according to IEC 60332-1-2, smoke density according to IEC 61034
chemical resistance	
• to mineral oil	oil resistant according to DIN EN 60811-2-1
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP65, IP67
product features, product functions, product components / general	
product feature	
• halogen-free	Yes
• PoE capability	Yes
• PoE+ capability	Yes
• PoE++ capability	Yes
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	No
certificate of suitability	ISO/IEC 11801-1, IEC 61035
• EAC approval	Yes
• CE marking	Yes
• RoHS conformity	Yes
standard for structured cabling	Cat6A
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statków (PRS)	No
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax

security information

security information

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Approvals / Certificates

General Product Approval



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