

## Data sheet

6XV1878-5HH50

product type designation	IE TP Cord M12-180/M12-180
product description	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 5.0 m.
	
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	5 m
<b>electrical data</b>	
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
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 %
<b>mechanical data</b>	
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	
• of the wire insulation	polyethylene (PE)
• of cable sheath	PUR

color	white/blue, white/orange, white/green, white/brown green
• of the insulation of data wires	
• of cable sheath	
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
<b>plug</b>	
type of plug interlock	screwed
design of plug-in connection	M12-180
connector coding	M12
• of the M12 circular connector	X-coded
<b>ambient conditions</b>	
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
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	Yes
• PoE capability	Yes
• PoE+ capability	Yes
• PoE++ capability	Yes
• silicon-free	Yes
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; AWM Style 21815
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
reference code	
• according to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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### security information

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## Approvals / Certificates

### General Product Approval



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