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Data sheet 6XV1878-5HE50

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 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	
Damping ratio 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

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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 core	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	
• 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

Ambient conditions

Ambient temperature	
• during operation	-30 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-40 ... +80 °C
Burning behavior	flame resistant according to IEC 60332-1-2
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	IP65/67

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Product features, product functions, product components / general	
Product feature	
• halogen-free	Yes
• silicon-free	Yes

Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; AWM Style 21815
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• CE marking	Yes
• RoHS conformity	Yes
Standard for structured cabling	Cat6A
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No

Further information / Internet-Links	
Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

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