

IE TP CORD M12-180/M12-180 PREASSEM. IE FLEXIBLE CABLE,  
WITH 2 M12 PLUGS (X-CODED), LENGTH 0.5 M



Wire length	0.5 m
<b>Electrical data</b>	
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
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 <ul style="list-style-type: none"> <li>• of AWG26 core</li> </ul>	0.48 mm
Outer diameter <ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	1 mm 5.4 mm 6.5 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
Material <ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of cable sheath</li> </ul>	PE PUR
Color <ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	white/blue, white/orange, white/green, white/brown green
Bending radius <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	32.5 mm 65 mm
Tensile load / maximum	100 N
Weight per length	45 kg/km

Permitted ambient conditions	
Ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	-30 ... +80 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C
Burning behavior	flame resistant according to IEC 60332-1-2
Chemical resistance <ul style="list-style-type: none"> <li>• to grease</li> <li>• to water</li> </ul>	Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general	
Product feature <ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	Yes Yes

Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes

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	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

**last modified:** 09/13/2017