

### product description



shielded halogen-free TP installation cable (8-core), sold by the meter, unassembled

IE FC TP FRNC Cable GP 4x2; halogen-free TP cable for fixed routing; for connection to FC RJ45 plug 4x2; 8-core, shielded; CAT 6A, sold by the meter; delivery unit max. 4000 m, minimum order quantity 20 m .

### suitability for use

Standard cable with rigid cores for fast, permanent installation

### electrical data

attenuation factor per length	
<ul style="list-style-type: none"> <li>at 10 MHz / maximum</li> <li>at 100 MHz / maximum</li> <li>at 250 MHz / maximum</li> <li>at 300 MHz / maximum</li> <li>at 500 MHz / maximum</li> </ul>	<p>0.058 dB/m</p> <p>0.191 dB/m</p> <p>0.311 dB/m</p> <p>0.343 dB/m</p> <p>0.453 dB/m</p>
impedance	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> </ul>	100 Ω
near-end crosstalk per length	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> <li>at 1 MHz ... 250 MHz</li> <li>at 1 MHz ... 300 MHz</li> <li>at 1 MHz ... 500 MHz</li> </ul>	<p>0.453 dB/m</p> <p>0.393 dB/m</p> <p>0.381 dB/m</p> <p>0.348 dB/m</p>
coupling loss / at 30 MHz ... 100 MHz / minimum	80 dB
transfer impedance per length / at 10 MHz	80 mΩ/m
loop resistance per length / maximum	190 mΩ/m
operating voltage	
<ul style="list-style-type: none"> <li>RMS value</li> <li>maximum</li> </ul>	<p>80 V</p> <p>80 V</p>
NVP value in percent	67 %

### 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	Yes
core diameter	
<ul style="list-style-type: none"> <li>of AWG24 insulated conductor</li> </ul>	0.51 mm
outer diameter	
<ul style="list-style-type: none"> <li>of inner conductor</li> <li>of the wire insulation</li> <li>of the inner sheath of the cable</li> <li>of cable sheath</li> </ul>	<p>0.51 mm</p> <p>1 mm</p> <p>6.1 mm</p> <p>8 mm</p>
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
<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>	<p>polyethylene (PE)</p> <p>FRNC</p> <p>FRNC</p>

color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	white-blue/blue, white-orange/orange, white-green/green, white-brown/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>	40 mm 80 mm
tensile load / maximum	100 N
weight per length	86 kg/km
<b>ambient conditions</b>	
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>	-50 ... +70 °C -50 ... +70 °C -50 ... +70 °C -40 ... +70 °C
fire behavior	flame resistant according to IEC 60332-1-2
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	oil resistant according to EN 50290-2-22 (VDE 0819), compound (4h/70 °C) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> <li>• low-emission according to IEC 61034-2</li> </ul>	Yes; halogen-free according to IEC 61754-1/2 Yes Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> <li>• with 1000BaseT</li> <li>• for 10GBase T</li> </ul>	100 m 100 m 90 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	Yes
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes Yes
product conformity	
<ul style="list-style-type: none"> <li>• ANSI/TIA-EIA 568-B.2 Cat.5e</li> <li>• IEC 61784-5-2-CP 2/2 (Ethernet/IP)</li> </ul>	Yes Yes
standard for structured cabling	Cat6A
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No No No No No No No
reference code	
<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> <li>• according to IEC 81346-2:2019</li> </ul>	WG WGB
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Selection guide for cables and connectors</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>

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