

### product type designation

product description



### IE FC TP flexible cable GP 4x2, CAT7, sold by the meter

Shielded TP installation cable (8-core) with flexible cores, sold by the meter, unassembled

IE FC TP Flexible Cable GP 4x2 FastConnect Flexible Cable GP 4x 2, TP installation CAT7 cable for connection to IE FC RJ45 plug 4x 2 and IE FC M12 plug PRO 4x2, AWG26, sold by the meter, package item max. 2000 m minimum order quantity 20 m

suitability for use

Flexible cable for quick assembly, for occasionally moving machine parts

### 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 300 MHz / maximum</li> <li>at 600 MHz / maximum</li> </ul>	<p>0.088 dB/m</p> <p>0.285 dB/m</p> <p>0.513 dB/m</p> <p>751 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 10 MHz</li> <li>at 100 MHz</li> <li>at 300 MHz</li> <li>at 600 MHz</li> </ul>	<p>0.78 dB/m</p> <p>0.724 dB/m</p> <p>0.653 dB/m</p> <p>0.608 dB/m</p>
loop resistance per length / maximum	290 mΩ/m
operating voltage	
<ul style="list-style-type: none"> <li>RMS value</li> <li>maximum</li> </ul>	<p>100 V</p> <p>100 V</p>
NVP value in percent	68 %

### mechanical data

number of electrical cores	8
design of the shield	overlapped aluminum-laminated foil, sheathed in a protective braided shield of tinned copper wires, central shielding wire of the line must be connected to the shield contact during plug assembly (see assembly video)
type of electrical connection / FastConnect	Yes
core diameter	
<ul style="list-style-type: none"> <li>of AWG26 insulated conductor</li> </ul>	0.47 mm
outer diameter	
<ul style="list-style-type: none"> <li>of inner conductor</li> <li>of the wire insulation</li> <li>of cable sheath</li> </ul>	<p>0.47 mm</p> <p>1.15 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 cable sheath</li> </ul>	<p>polyethylene (PE)</p> <p>PVC</p>
color	
<ul style="list-style-type: none"> <li>of the insulation of data wires</li> <li>of cable sheath</li> </ul>	<p>white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green</p>

bending radius	
<ul style="list-style-type: none"> <li>with single bend / minimum permissible</li> <li>with multiple bends / minimum permissible</li> </ul>	<p>40 mm</p> <p>80 mm</p>
tensile load / maximum	100 N
weight per length	65 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>	<p>-30 ... +70 °C</p> <p>-40 ... +70 °C</p> <p>-40 ... +70 °C</p> <p>-30 ... +70 °C</p>
ambient condition / for operation	temperature range for permanent installation -40 °C to +70 °C
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> <li>to mineral oil</li> <li>to grease</li> <li>to water</li> </ul>	<p>oil resistant according to EN 50290-2-22 (VDE 0819), compound type TM55 (7x24h/90 °C)</p> <p>Conditional resistance</p> <p>conditional resistance</p>
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> </ul>	<p>No</p> <p>Yes</p>
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>	<p>90 m</p> <p>90 m</p> <p>75 m</p>
<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>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
standard for structured cabling	Cat7
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>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
reference code	
<ul style="list-style-type: none"> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	<p>WG</p> <p>WGB</p>
<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> <li>to website: Industry Online Support</li> </ul>	<p><a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>

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