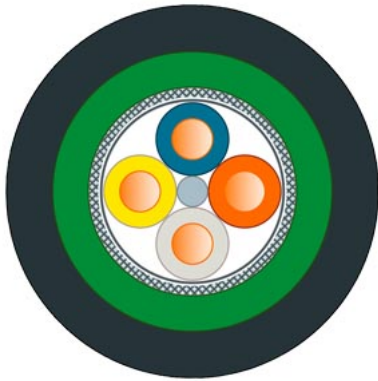


### product type designation

product description



### IE TP Ground Cable 2x2 (Type C)

Standard bus cable (4-core), for laying underground, sold by the meter, unassembled

IE ground cable 2x2 Underground cable 4-core shielded, Cat5e, sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

Technical Product Detail Page

<https://i.siemens.com/1P6XV1871-2G>

suitability for use

Standard cable with rigid cores for fast installation

cable designation

SF/UTP, 2YY(ST)CY2Y2x2x0.64/1.50-100

wire length

sold by the meter

### electrical data

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.063 dB/m  
0.213 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz

5 %

near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.5 dB/m

transfer impedance per length / at 10 MHz

10 mΩ/m

loop resistance per length / maximum

124 mΩ/m

operating voltage

- RMS value

100 V

NVP value in percent

65 %

### mechanical data

number of electrical cores

4

design of the shield

SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires

type of electrical connection / FastConnect

Yes

core diameter

- of AWG22 insulated conductor

0.64 mm

outer diameter

- of inner conductor
- of the wire insulation
- of the inner sheath of the cable
- of cable sheath
- of cable sheath / note

0.64 mm  
1.5 mm  
4 mm  
9 mm  
Cable diameter >6.5 mm because of additional PE outer cover. Cable can only be connected to RJ45/M12 connector after outer cover is removed.

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

- of the wire insulation
- of the inner sheath of the cable

polyethylene (PE)  
PVC

<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	PE/PVC
color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> </ul>	white/yellow/blue/orange
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	Black
bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> </ul>	80 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	80 mm
tensile load / maximum	150 N
weight per length	97 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-5 ... +50 °C
fire behavior	inflammable
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> </ul>	conditional resistance
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	Conditional resistance
<ul style="list-style-type: none"> <li>• to water</li> </ul>	Resistant
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> </ul>	No
<ul style="list-style-type: none"> <li>• PoE capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• PoE+ capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>• with 100BaseTX</li> </ul>	100 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul>	Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Germanische Lloyd (GL)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>• to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>• to website: CAX-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and

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**Approvals / Certificates**

**General Product Approval**



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[Fire safety / Physical security](#)

**General Product Approval**

**Environment**

**Industrial Communication**

[China RoHS](#)

[Environmental Confirmations](#)

[PROFINET](#)

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