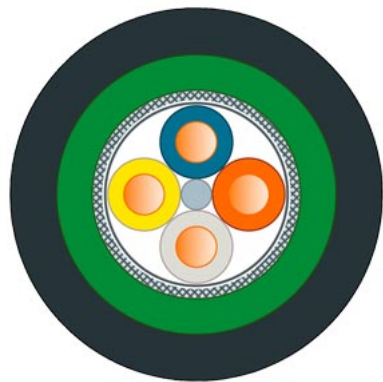


product type designation

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.

suitability for use

Standard cable with rigid cores for fast installation

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

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
- of cable sheath

polyethylene (PE)
PVC
PE/PVC

color

- of the insulation of data wires
- of cable sheath

white/yellow/blue/orange
Black

bending radius

• with single bend / minimum permissible	80 mm
• with multiple bends / minimum permissible	80 mm
tensile load / maximum	150 N
weight per length	97 kg/km
ambient conditions	
ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
• during installation	-5 ... +50 °C
• note	Electrical properties measured at 20 °C, tests according to EN50288-2-1
fire behavior	inflammable
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	
• to mineral oil	conditional resistance
• to grease	Conditional resistance
• to water	Resistant
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
• halogen-free	No
• PoE capability	Yes
• PoE+ capability	Yes
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
• EAC approval	Yes
• CE marking	Yes
• RoHS conformity	Yes
standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (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
reference code	
• according to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
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 solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is

necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[Fire safety / Physical security](#)

General Product Approval	Environment	Industrial Communication
--------------------------	-------------	--------------------------

[China RoHS](#)

[Environmental Conformations](#)

[PROFINET](#)

last modified:

6/27/2025