

product description



Standard bus cable (4 wires), preferred length, not assembled

IE FC TP Standard Cable GP 2x2 (PROFINET Type A), CAT5E, bus cable 4-wire, shielded, special configuration for quick assembly to IE FC RJ45 plug 2x2, 50 m.

suitability for use

Standard cable with rigid cores for fast installation

cable designation

2YY (ST) CY 2x2x0,64/1,5-100 GN SF/UTP

wire length

50 m

electrical data

attenuation factor per length

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

0.052 dB/m
0.195 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

relative symmetrical tolerance

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

15 %

near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.5 dB/m

transfer impedance per length / at 10 MHz

10 m Ω /m

loop resistance per length / maximum

115 m Ω /m

operating voltage

- RMS value

80 V

NVP value in percent

69 %

mechanical data

number of electrical cores

4

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

- 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

0.64 mm
1.5 mm
3.9 mm
6.5 mm

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
PVC

color

- of the insulation of data wires
- of cable sheath

white/yellow/blue/orange
green

bending radius

<ul style="list-style-type: none"> • with single bend / minimum permissible 	19.5 mm
<ul style="list-style-type: none"> • with multiple bends / minimum permissible 	49 mm
tensile load / maximum	150 N
weight per length	61 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-40 ... +75 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +75 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +75 °C
<ul style="list-style-type: none"> • during installation 	-40 ... +60 °C
<ul style="list-style-type: none"> • note 	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> • to mineral oil 	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
<ul style="list-style-type: none"> • to grease 	Conditional resistance
<ul style="list-style-type: none"> • to water 	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
<ul style="list-style-type: none"> • halogen-free 	No
<ul style="list-style-type: none"> • silicon-free 	Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us / CMG / (ETL)us PLTC/ ITC / Sun Res
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval 	Yes
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 	WG
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	WGB
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Image database 	https://www.automation.siemens.com/bilddb
<ul style="list-style-type: none"> • 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	Test Certificates	other	Environment
Manufacturer Declaration  	Manufacturer Declaration	Manufacturer Declaration	

Industrial Communication

[PROFINET](#)

last modified: 3/25/2024 