

product type designation

product description



IE FC TP FRNC Cable GP 2x2 (Type B)

Flexible halogen-free bus cable acc. to IEC 60754-1/2 (4-core), sold by the meter, unassembled

Industrial Ethernet FC TP FRNC GP cable TP installation cable for connection to FC outlet RJ45, 4-core, shielded, Cat5e, sold by the meter, delivery unit max. 4000 m, minimum order quantity 20 m .

suitability for use

For occasionally moved machine parts

cable designation

SF/UTP, L-9YH (ST) CH 2x2x0,34/1,5-100 GN VZN FRNC

wire length

sold by the meter

electrical data

attenuation factor per length

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

0.06 dB/m
0.22 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 mΩ/m

loop resistance per length / maximum

120 mΩ/m

operating voltage

- RMS value

80 V

NVP value in percent

69 %

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

0.75 mm

outer diameter

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

0.75 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

PP
FRNC
FRNC

color

- of the insulation of data wires
- of cable sheath

white/yellow/blue/orange
green

bending radius	
• with single bend / minimum permissible	39 mm
• with multiple bends / minimum permissible	97.5 mm
tensile load / maximum	150 N
weight per length	68 kg/km
ambient conditions	
ambient temperature	
• during operation	-25 ... +70 °C
• during storage	-40 ... +75 °C
• during transport	-40 ... +75 °C
• during installation	0 ... 50 °C
• note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-3-22 (Category A/F), IEC 61034-2
class of burning behaviour / according to EN 13501-6	Cca S1a d0 a1
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
• halogen-free	Yes; halogen-free according to IEC 60754-1/2
• PoE capability	Yes
• PoE+ capability	Yes
• silicon-free	Yes
• low-emission according to IEC 61034-2	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes; cRUus AWM 22375 AWM I A/B 60°C 600V FT2
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

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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval	Environment	Industrial Communication
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[Fire safety / Physical security](#)



[Environmental Conformations](#)

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