

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, Cat5, sold by the meter, delivery unit max. 4000 m, minimum order quantity 20 m .

suitability for use

cable designation

For occasionally moved machine parts

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

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

66 %

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

0.75 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  
0.2 mm

symmetrical tolerance of the outer diameter / of cable sheath

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
<b>ambient conditions</b>	
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
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
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	Yes; halogen-free according to IEC 60754-1/2
• silicon-free	Yes
• low-emission according to IEC 61034-2	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	100 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes
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
<b>further information / internet-Links</b>	
Internet-Link	
• to web page: selection aid TIA Selection Tool	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Selection guide for cables and connectors	<a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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