

## Data sheet

6XV1871-2F

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 .

Technical Product Detail Page

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

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 0.06 dB/m
- at 100 MHz / maximum 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 0.75 mm
- of the wire insulation 1.5 mm
- of the inner sheath of the cable 3.9 mm
- of cable sheath 6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

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

color

• of the insulation of data wires	white/yellow/blue/orange
• of cable sheath	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
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
<b>product features, product functions, product components / general</b>	
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
test voltage	
• at AC / core-to-core	2000 V
• at AC / core shield	2000 V
<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; cRUs 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
• resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
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 Statków (PRS)	No
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

## security information

### security information

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## Approvals / Certificates

### General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

### General Product Approval

[Fire safety / Physical security](#)



[Environmental Confirmations](#)

[PROFINET](#)

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