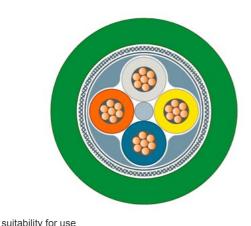
SIEMENS

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.

suitability for use	For occasionally moved machine parts	
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	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 	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 single bend / minimum permissible 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 operation during storage	-40 +75 °C
during storage 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 / gene	eral
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
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	We was
• 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 to website: CAy Daymland Manager	https://www.automation.siemens.com/bilddb
to website: CAx-Download-Manager to website: Individual Calling Surgery	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

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Approvals / Certificates

General Product Approval

Manufacturer Declaration





Declaration of Conformity



China RoHS

General Product Approval

Environment

Industrial Communication

Fire safety / Physical security



Environmental Confirmations **PROFINET**

last modified:

8/8/2024