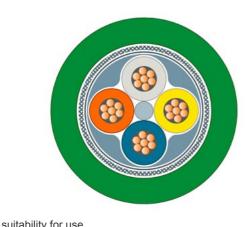
SIEMENS

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

suitability for use	For occasionally moved machine parts
cable designation	L-9YH (ST) CH 2x2x0,34/1,5-100 GN VZN FRNC SF/UTP
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	66 %
nechanical 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	green	
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	oo ng.mii	
ambient temperature ■ during operation	-25 +70 °C	
during storage	-40 +75 °C	
during storage during transport	-40 +75 °C	
during transport during installation	0 50 °C	
• note	Electrical properties measured at 20 °C, tests according to DIN VDE	
• Hote	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	
product features, product functions, product components	/ general	
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	
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 web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool	
to website: Industrial communication	http://www.siemens.com/simatic-net	
to website: Industry Mall	https://mall.industry.siemens.com	
to website: Information and Download Center	http://www.siemens.com/industry/infocenter	
to website: Mormation and Download Center to website: Selection guide for cables and	https://sie.ag/2QdlxcP	
connectors		
to website: Image database	http://automation.siemens.com/bilddb	
to website: CAx-Download-Manager	http://www.siemens.com/cax	
 to website: Industry Online Support 	https://support.industry.siemens.com	
last modified:	5/10/2022 🗗	