SIEMENS

Data sheet	6XV1871-2S

product description	Flexible bus cable (4-core), sold by the meter, unassembled
	Industrial Ethernet FC TP Festoon cable 2x2 (PROFINET Type B), TP installation cable for Festoon suspension, 4-core CAT5E, sold by the meter, min. 5 million bending cycles, delivery unit max. 1000 m, minimum order quantity 20 m.

suitability for use	For continuous motion in a trailing cable, festoon mounting
cable designation	2YY (ST) CY 2x2x0,75/1,5 LI GN SF/UTP
electrical data	
attenuation factor per length	
● at 10 MHz / maximum	0.063 dB/m
● at 100 MHz / maximum	0.213 dB/m
impedance	
● at 1 MHz ... 100 MHz	100 Ω
relative symmetrical tolerance	
● of the characteristic impedance at 1 MHz … 100 MHz	5 %
near-end crosstalk per length	
● at 1 MHz ... 100 MHz	0.5 dB/m
transfer impedance per length / at 10 MHz	100 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	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	polyethylene (PE)
● of the inner sheath of the cable	PVC
● of cable sheath	PVC
color	
● of the insulation of data wires	white/yellow/blue/orange
● of cable sheath	green

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bending radius	
● with single bend / minimum permissible	30 mm
● with multiple bends / minimum permissible	70 mm
● with continuous bending	70 mm
number of bending cycles	5000000; 5 million bending cycles at a bending radius of 70 mm and an acceleration of 4 m/s²
tensile load / maximum	150 N
weight per length	68 kg/km

ambient conditions

ambient temperature	
● during operation	-40 ... +75 °C
● during storage	-50 ... +75 °C
● during transport	-50 ... +75 °C
● during installation	-20 ... +60 °C
● note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
● to mineral oil	conditional resistance
● 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	No
● silicon-free	Yes
wire length / for Industrial Ethernet	
● with 100BaseTX	85 m

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)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: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
● 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
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