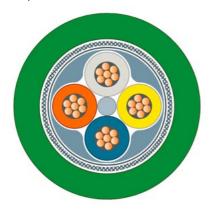
SIEMENS

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 shielded Cat5e, sold by the meter, min. 5 million bending cycles, delivery unit max. 1000 m, minimum order quantity 20 m.

cable designation 2YY (ST) CY 2x2x0,75/1,5 LI GN SF/UTP cited rate data 4 to MHz / maximum at 1 00 MHz / maximum 0.083 dB/m at 1 00 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 of the characteristic impedance at 1 MHz 100 MHz 0.5 dB/m transfer impedance per length / at 10 MHz 100 mΩ/m loop resistance per length / at 10 MHz 100 mΩ/m loop resistance per length / maximum 120 mΩ/m operating voltage 80 V NNP value in percent 66 % mochanical data 0.00 V number of electrical cores 4 design of the shield Overtapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires type of electrical connection / FastConnect Yes core diameter of AM/C22 insulated conductor 0.75 mm outer diameter of faste wire insulation 1.5 mm of the wire insulation 0.2 mm of the wire insulation <th>suitability for use</th> <th>For continuous motion in a trailing cable, festoon mounting</th>	suitability for use	For continuous motion in a trailing cable, festoon mounting
attenuation factor per length at 10 MHz / maximum at 100 MHz / maximum 0.213 dB/m impedance at 1 MHz 100 MHz relative symmetrical tolerance of the characteristic impedance at 1 MHz 100 MHz transfer impedance per length / at 10 MHz 100 m2/m ear-end crosstalk per length at 1 MHz 100 MHz transfer impedance per length / at 10 MHz 100 m2/m loop resistance per length / maximum operating voltage RMS value 80 V NVP value in percent 66 % muchanical data mumber of electrical cores design of the shield Overtapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires type of electrical connection / FastConnect very electrical connection / FastConnect of AWG22 insulated conductor of the wire insulation of the inner sheath of the cable of the wire insulation of the inner sheath of the cable of the wire insulation of the inner sheath of the cable of cable sheath polyethylene (PE) PVC color of the insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of cable sheath prove the wite insulation of data wires of c		2YY (ST) CY 2x2x0,75/1,5 LI GN SF/UTP
at 10 MHz / maximum at 100 MHz / maximum 0.213 dB/m impedance at 1 MHz 100 MHz 100 Q relative symmetrical tolerance of the characteristic impedance at 1 MHz 100 MHz for fire crosstalk per length at 1 MHz 100 MHz transfer impedance per length at 1 MHz 100 MHz 100 mQ/m operating voltage RMS value NVP value in percent design of the shield vortagped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires Vype of electrical corres 4 design of the shield vortagped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires vype of electrical corres 4 design of the shield vype of electrical cornection / FastConnect core diameter of NWC22 insulated conductor 0.75 mm outer diameter of the wire insulation 1.5 mm of the wire insulation 1.5 mm of the wire insulation of the cable symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the inner sheath of the cable of cable sheath pype of the insulation of data wires winter(PE) of the inner sheath of the cable of cable sheath pyCC color of the inner sheath of the cable of cable sheath pyCC color of the insulation of data wires of cable sheath precedure of the outer diameter of the insulation of data wires of cable sheath precedure of the outer diameter of the insulation of data wires of cable sheath precedure of the outer diameter of the insulation of data wires of cable sheath pyCC	electrical data	
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impedance	• at 10 MHz / maximum	0.063 dB/m
eat 1 MHz 100 MHz relative symmetrical tolerance • of the characteristic impedance at 1 MHz 100 MHz near-end crosstalk per length • at 1 MHz 100 MHz transfer impedance per length / at 10 MHz loop resistance per length / maximum operating voltage • RMS value 80 V NVP value in percent mechanical data number of electrical cores design of the shield Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires type of electrical connection / FastConnect • of AWG22 insulated conductor outer diameter • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath symmetrical tolerance of the outer diameter / of cable sheath polycethylene (PE) • of cable sheath of the insulation of data wires • of cable sheath of the insulation of data wires • of cable sheath bending radius	• at 100 MHz / maximum	0.213 dB/m
relative symmetrical tolerance	impedance	
of the characteristic impedance at 1 MHz 100 MHz near-end crosstalk per length	● at 1 MHz 100 MHz	100 Ω
near-end crosstalk per length	relative symmetrical tolerance	
• 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 • KMS value • KMS value 80 V NVP value in percent 66 % mochanical data 4 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 tinner conductor 0.75 mm • of the wire insulation 1.5 mm • of the wire insulation 1.5 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 able sheath PVC • of cable sheath PVC • of cable sheath white/yellow/blue/orange • of cable sheath green	• of the characteristic impedance at 1 MHz 100 MHz	5 %
transfer impedance per length / at 10 MHz 100 mΩ/m loop resistance per length / maximum 120 mΩ/m operating voltage • RMS value 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 the wire insulation 1.5 mm • of the inner sheath of the cable 3.9 mm • 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 • of cable sheath phiculation of data wires • of cable sheath price of the inner sheath of the cable pide the inner sheath of the cable polyethylene (PE) • of the inner sheath of the cable pide the inner sheath pide the cable pide the inner sheath pide the cable pide the inner sheath pide the inner sheath pide the inner sheath pide the inn	near-end crosstalk per length	
loop resistance per length / maximum operating voltage ● RMS value 80 V NVP value in percent mechanical data number of electrical cores design of the shield Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires type of electrical connection / FastConnect type of electrical connection / FastConnect or of AWG22 insulated conductor of AWG22 insulated conductor of inner conductor of the wire insulation of of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the inner sheath of the cable of the wire insulation of the inner sheath of the cable of the wire insulation of the inner sheath of the cable of the wire insulation white/yellow/blue/orange of cable sheath bending radius	• at 1 MHz 100 MHz	0.5 dB/m
operating voltage RMS value RMS value RMS value Rechanical data number of electrical cores 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 of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath polyethylene (PE) of cable sheath PVC color of the inner sheath of the inner sheath of the cable of cable sheath polyethylene (PE) of cable sheath of the inner sheath of the inner sheath of the inner sheath of the cable of cable sheath polyethylene (PE) of cable sheath pvC of cable sheath pvC of able sheath preen	transfer impedance per length / at 10 MHz	100 mΩ/m
RMS value NVP value in percent mechanical data number of electrical cores 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 outer diameter of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the wire insulation polyethylene (PE) of cable sheath color of the inner sheath of the cable of cable sheath pVC of cable sheath pVC of cable sheath bending radius	loop resistance per length / maximum	120 mΩ/m
NVP value in percent 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 bending radius	operating voltage	
number of electrical cores design of the shield Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires type of electrical connection / FastConnect type of electrical connection / FastConnect of AWG22 insulated conductor outer diameter of inner conductor of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath PVC color of the insulation of data wires of cable sheath bending radius	RMS value	80 V
number of electrical cores 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 of inner conductor of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath of the wire insulation polyethylene (PE) of cable sheath polyethylene (PE) of cable sheath polyethylene (PE) of cable sheath polyethylene of cable sheath	NVP value in percent	66 %
design of the shield Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires type of electrical connection / FastConnect Yes of AWG22 insulated conductor of aWG22 insulated conductor of inner conductor of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the wire insulation of the wire insulation of the wire insulation of the inner sheath of the cable of the wire insulation of the inner sheath of the cable of cable sheath PVC of cable sheath polyethylene (PE) of the insulation of data wires of cable sheath pvc of cable sheath pvc color of the insulation of data wires of cable sheath preen	mechanical data	
type of electrical connection / FastConnect Yes core diameter of AWG22 insulated conductor outer diameter of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the wire insulation polyethylene (PE) of the inner sheath of the cable of cable sheath of the wire insulation of the inner sheath of the cable of cable sheath pvc volume white/yellow/blue/orange of cable sheath bending radius	number of electrical cores	4
core diameter of AWG22 insulated conductor outer diameter of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation polyethylene (PE) of the wire insulation of the inner sheath of the cable of cable sheath PVC of cable sheath PVC color of the insulation of data wires of cable sheath procedure white/yellow/blue/orange of cable sheath green	design of the shield	
of AWG22 insulated conductor outer diameter of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath of cable sheath of the wire insulation of the inner sheath of the cable of cable sheath of the inner sheath of the cable of cable sheath of cable sheath pvc of cable sheath pvc color of the insulation of data wires of cable sheath bending radius	type of electrical connection / FastConnect	Yes
outer diameter of inner conductor of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath PVC of cable sheath polyethylene (PE) PVC of the insulation of data wires white/yellow/blue/orange of cable sheath bending radius	core diameter	
 of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath of cable sheath symmetrical tolerance of the outer diameter / of cable sheath of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath of cable sheath of the insulation of data wires of cable sheath of cable sheath green 	 of AWG22 insulated conductor 	0.75 mm
of the wire insulation of the inner sheath of the cable of cable sheath of cable sheath symmetrical tolerance of the outer diameter / of cable sheath of the wire insulation of the wire insulation of the inner sheath of the cable of cable sheath PVC color of the insulation of data wires of cable sheath bending radius	outer diameter	
of the inner sheath of the cable of cable sheath of cable sheath symmetrical tolerance of the outer diameter / of cable sheath of the wire insulation of the inner sheath of the cable of cable sheath PVC of cable sheath color of the insulation of data wires of cable sheath bending radius	 of inner conductor 	0.75 mm
of cable sheath symmetrical tolerance of the outer diameter / of cable sheath material of the wire insulation of the inner sheath of the cable of cable sheath color of the insulation of data wires of cable sheath bending radius 6.5 mm 6.2 mm 6.7 mm 6.5 mm 6.6 mm 6.7 mm 6.8 mm 6.8 mm 6.9 mm 6.9 mm 6.9 mm 6.9 mm 6.5 mm 6.9 mm 6.6 mm 6.5 mm 6.7 mm 6.8 mm 6.8 mm 6.9 mm 6.0 mm	 of the wire insulation 	1.5 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 PVC color of the insulation of data wires of cable sheath bending radius	 of the inner sheath of the cable 	3.9 mm
material of the wire insulation polyethylene (PE) of the inner sheath of the cable of cable sheath PVC color of the insulation of data wires of cable sheath green bending radius	of cable sheath	6.5 mm
 of the wire insulation of the inner sheath of the cable of cable sheath of cable sheath of the insulation of data wires of cable sheath white/yellow/blue/orange of cable sheath green 	symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
of the inner sheath of the cable of cable sheath PVC color of the insulation of data wires of cable sheath bending radius PVC white/yellow/blue/orange green	material	
of cable sheath color of the insulation of data wires of cable sheath bending radius PVC white/yellow/blue/orange green	 of the wire insulation 	polyethylene (PE)
color • of the insulation of data wires white/yellow/blue/orange • of cable sheath green bending radius	 of the inner sheath of the cable 	PVC
 of the insulation of data wires of cable sheath bending radius white/yellow/blue/orange green	of cable sheath	PVC
of cable sheath green bending radius	color	
bending radius	 of the insulation of data wires 	white/yellow/blue/orange
	of cable sheath	green
• with single bend / minimum permissible 30 mm	bending radius	
	with single bend / minimum permissible	30 mm

with multiple bends / minimum permissible	70 mm
with multiple bends / minimum permissible 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/s ²
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	conditional registance
• 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 / gene	
product feature	No
halogen-free silicon free	No Yes
silicon-free wire length / for Industrial Ethernet	100
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 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	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	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

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Approvals / Certificates

General Product Approval

Test Certificates



Manufacturer Declaration



Declaration of Conformity



Special Test Certificate

Environment	Industrial Communication
Environment	Industrial Communication

Confirmation PROFINET

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