SIEMENS

Data sheet

6XV1870-2F

product description	Highly flexible bus cable (4-core), sold by the meter, unassembled	
	Industrial Ethernet TP torsion cable, 2x2 (PROFINET Type C), TP installation cable, 4-core, shielded Cat5e, for use in highly flexible applications (torsion), sold by the meter, delivery length max. 1000 m, minimum order quantity 20 m.	
suitability for use	Continuous motion control when using robots	
cable designation	02YS C11Y 1x4x0,75/1,5-100 LI VZN FRNC GN SF/UTP	
electrical data		
attenuation factor per length		
• at 10 MHz / maximum	0.081 dB/m	
• at 100 MHz / maximum	0.41 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	100 mΩ/m	
loop resistance per length / maximum	120 mΩ/m	
operating voltage		
RMS value	80 V	
NVP value in percent	77 %	
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	No	
core diameter		
 of AWG22 insulated conductor 	0.76 mm	
outer diameter		
of inner conductor	0.76 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 cable sheath	PUR (TPE-U)	
color		
 of the insulation of data wires 	white/yellow/blue/orange	
of cable sheath	green	
bending radius		
with single bend / minimum permissible	32.5 mm	
 with multiple bends / minimum permissible 	65 mm	
number of bending cycles	Not suitable for garland usage	

number of torsion cycles / with torsion by \pm 180° on 1 m cable	500000
length	120 N
tensile load / maximum	130 N
weight per length	54 kg/km
ambient conditions	
ambient temperature	40
during operation	-40 +80 °C
during storage	-40 +80 °C
during transport	-40 +80 °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 IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	all registerst apporting to IEC 60911.2.1 $(7x24b)00^{\circ}C$
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	Conditional resistance conditional resistance
to water	resistant
radiological resistance / to UV radiation product features, product functions, product components / gen	
product feature	
halogen-free	Yes
silicon-free	Yes
wire length / for Industrial Ethernet	75 m
• with 100BaseTX	75 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; UL Style 21161
UL/ETL style / 600 V Rating	No
certificate of suitability	No.
EAC approval	Yes
CE marking Del IS conformity	Yes
RoHS conformity	Yes
standard for structured cabling Marine classification association	Cat5e
	No
American Bureau of Shipping Europe Ltd. (ABS)	No
 French marine classification society (BV) Det Norske Veritas (DNV) 	No
	No
 Germanische Lloyd (GL) Lloyds Register of Shipping (LRS) 	No
Nippon Kaiji Kyokai (NK)	No
Polski Rejestr Statkow (PRS)	No
reference code	NU
according to IEC 81346-2	WG
according to IEC 81346-2:2019	WGB
further information / internet links	
internet link	
to website: Image database	https://www.automation.siemens.com/bilddb
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security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions
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other	Environment	Industrial Communication	
<u>Manufacturer Declara-</u> tion	<u>Confirmation</u>	<u>PROFINET</u>	

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