SIEMENS

Data sheet 6XV1878-2D

product description

suitability for use



highly flexible bus cable (8-wire), sold by the meter, unassembled

Continuous motion control when using robots

IE FC TP torsion cable 4x2; (PROFINET type C), Cat6A; TP installation cable, 8-core, for use in highly flexible applications (torsion), sold by the meter, max. delivery unit 1000 m, minimum order quantity 20 m.

cable designation	2YH(ST)D11Y 4X2X0.6/1.04-100 LI VZN GN
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.089 dB/m
at 100 MHz / maximum	0.287 dB/m
• at 250 MHz / maximum	0.466 dB/m
• at 300 MHz / maximum	0.514 dB/m
• at 500 MHz / maximum	0.679 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
near-end crosstalk per length	
• at 1 MHz 100 MHz	0.453 dB/m
• at 1 MHz 250 MHz	0.393 dB/m
• at 1 MHz 300 MHz	0.381 dB/m
• at 1 MHz 500 MHz	0.348 dB/m
coupling loss / at 30 MHz 100 MHz / minimum	80 dB
transfer impedance per length / at 10 MHz	80 mΩ/m
loop resistance per length / maximum	180 mΩ/m
insulation resistance coefficient	5000 GΩ·m
operating voltage	
RMS value	80 V
• maximum	80 V
NVP value in percent	69 %
mechanical data	
number of electrical cores	8
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 AWG24 insulated conductor 	0.51 mm
outer diameter	
 of inner conductor 	0.58 mm
 of the wire insulation 	1.04 mm
 of the inner sheath of the cable 	6.4 mm
of cable sheath	8 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 	FRNC
of cable sheath	PUR
color	
of the insulation of data wires	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
of cable sheath	green
bending radius	
with single bend / minimum permissible	32 mm
with multiple bends / minimum permissible	64 mm
number of torsion cycles / with torsion by ± 180° on 1 m cable length	5000000
tensile load / maximum	100 N
weight per length	77 kg/km
ambient conditions	
ambient temperature	
during operation	-30 +80 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
during installation	-30 +80 °C
• note	In fixed installation -40 °C to 80 °C
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-404 (7x24h/90°C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / ge	
	ilei ai
product feature	Vacabelescon free according to IEC 64754.4
• halogen-free	Yes; halogen-free according to IEC 61754-1
silicon-free sign att / fee to de third Feb are at	Yes
wire length / for Industrial Ethernet	400
• with 100BaseTX	100 m
• with 1000BaseT	100 m
• for 10GBase T	90 m
standards, specifications, approvals	V (FTI) ONV ANNA OLI OAAOO
UL/ETL listing / 300 V Rating	Yes; c(ETL)us CMX, AWM-Style 21329
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating	Yes; c(ETL)us CMX, AWM-Style 21329 Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability	Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval	Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking	Yes Yes
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity	Yes
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UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e	Yes Yes Yes Yes Yes Yes
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UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability	Yes Yes Yes Yes Yes Yes Cat6A
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability • EAC approval • CE marking • RoHS conformity product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) standard for structured cabling Marine classification association • American Bureau of Shipping Europe Ltd. (ABS)	Yes Yes Yes Yes Yes Yes Cat6A No
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security information

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Approvals / Certificates

General Product Approval

Test Certificates

Manufacturer Declara-

Manufacturer Declara-

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last modified:

4/24/2024