

product description



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

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.

suitability for use	Continuous motion control when using robots
cable designation	SF/UTP, 2YH(ST)D11Y 4X2X0.6/1.04-100 LI VZN GN
wire length	sold by the meter
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	SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned 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	

<ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	<p>polyethylene (PE) FRNC PUR</p>
<p>color</p> <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	<p>white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green</p>
<p>bending radius</p> <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	<p>32 mm 64 mm</p>
<p>number of torsion cycles / with torsion by $\pm 180^\circ$ on 1 m cable length</p>	<p>5000000</p>
<p>tensile load / maximum</p>	<p>100 N</p>
<p>weight per length</p>	<p>77 kg/km</p>
ambient conditions	
<p>ambient temperature</p> <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • note 	<p>-30 ... +80 °C -40 ... +80 °C -40 ... +80 °C -30 ... +80 °C In fixed installation -40 °C to 80 °C</p>
<p>fire behavior</p>	<p>flame resistant according to IEC 60332-1-2</p>
<p>class of burning behaviour / according to EN 13501-6</p>	<p>Eca</p>
<p>chemical resistance</p> <ul style="list-style-type: none"> • to mineral oil • to grease • to water 	<p>oil resistant according to IEC 60811-404 (7x24h/90°C) Conditional resistance conditional resistance</p>
<p>radiological resistance / to UV radiation</p>	<p>resistant</p>
product features, product functions, product components / general	
<p>product feature</p> <ul style="list-style-type: none"> • halogen-free • PoE capability • PoE+ capability • PoE++ capability • silicon-free 	<p>Yes; halogen-free according to IEC 61754-1 Yes Yes Yes Yes</p>
<p>wire length / for Industrial Ethernet</p> <ul style="list-style-type: none"> • with 100BaseTX • with 1000BaseT • for 10GBase T 	<p>100 m 100 m 90 m</p>
standards, specifications, approvals	
<p>UL/ETL listing / 300 V Rating</p>	<p>Yes; c(ETL)us CMX, AWM-Style 21329</p>
<p>UL/ETL style / 600 V Rating</p>	<p>Yes</p>
<p>certificate of suitability</p> <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	<p>Yes Yes Yes</p>
<p>product conformity</p> <ul style="list-style-type: none"> • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) 	<p>Yes Yes</p>
<p>standard for structured cabling</p>	<p>Cat6A</p>
<p>Marine classification association</p> <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	<p>No No No No No No No</p>
<p>reference code</p> <ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	<p>WG WGB</p>
further information / internet links	

internet link

- to website: Selection guide for cables and connectors
- to web page: selection aid TIA Selection Tool
- to web page: SiePortal
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

- <https://support.industry.siemens.com/cs/ww/en/view/109766358>
- <https://www.siemens.com/tstcloud>
- <https://sieportal.siemens.com/>
- <https://www.automation.siemens.com/bilddb>
- <https://www.siemens.com/cax>
- <https://support.industry.siemens.com>

security information

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Approvals / Certificates

General Product Approval



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Environment

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