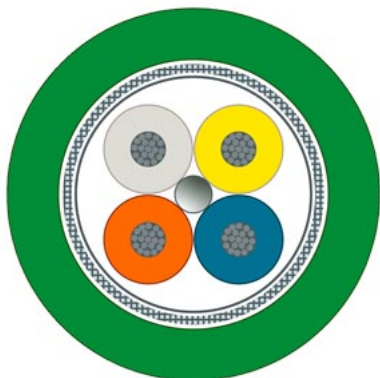


product type designation

product description



IE TP Torsion Cable 2 x 2 (Type C)

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, for use in highly flexible applications (torsion), sold by the meter, Max. delivery length 1000 m, Minimum order 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
- at 100 MHz / maximum

0.081 dB/m
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

70 %

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
- of the wire insulation
- of cable sheath

0.76 mm
1.5 mm
6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

- of the wire insulation
- of cable sheath

polyethylene (PE)
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 $\pm 180^\circ$ on 1 m cable length	5000000
tensile load / maximum	130 N
weight per length	54 kg/km
ambient conditions	
ambient temperature	
• 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	
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
• to water	resistant
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
• halogen-free	Yes
• silicon-free	Yes
wire length / for Industrial Ethernet	
• 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	
• 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
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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