

Product type designation

Product description

IE FC TP Trailing Cable 2 x 2 (Type C)

Highly flexible bus cable (4-core), sold by the meter, unassembled Industrial Ethernet FC TP Trailing Cable, 2x2 (PROFINET Type C), TP installation cable for Connection to FC outlet RJ45, for cable carrier applications, 4-core, shielded CAT. 5, Sold by the meter (4 million bending cycles), delivery unit max. 2000 m, Minimum order 20 m



Suitability for use

Continuous motion control in a cable carrier

Cable designation

2YH (ST) C11Y 2x2x0,75/1,5-100 LI GN VZN FRNC SF/UTP

Electrical data

Damping ratio per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.06 dB/m

0.22 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

10 m Ω /m

Loop resistance per length / maximum

120 m Ω /m

Operating voltage

- RMS value

80 V

NVP value in percent	66 %
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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 <ul style="list-style-type: none"> • of AWG22 core 	0.75 mm
Outer diameter <ul style="list-style-type: none"> • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath 	0.75 mm 1.5 mm 3.9 mm 6.5 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 	polyethylene (PE) FRNC PUR (TPE-U)
Color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white/yellow/blue/orange green
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible • with continuous bending 	19.5 mm 49 mm 100 mm
Number of bending cycles	4000000; Drag chain suitable for 4 million bending cycles at a bending radius of 100 mm, a speed of 4 m/s and an acceleration of 4 m/s ²
Tensile load / maximum	150 N
Weight per length	63 kg/km

Ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-40 ... +75 °C -50 ... +75 °C -50 ... +75 °C -20 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
Burning behavior	flame resistant according to IEC 60332-1-2
Class of burning behaviour / according to EN 13501-6	Eca

Chemical resistance	oil resistant according to IEC 60811-2-1 (7x24h/90°C) resistant resistant
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	
Radiological resistance / to UV radiation	resistant

Product features, product functions, product components / general

Product feature	
<ul style="list-style-type: none"> • halogen-free • silicon-free 	Yes Yes
Wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	85 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; cULus / CMX
UL/ETL style / 600 V Rating	Yes; cRU AWM I A/B 80°C 600V
Certificate of suitability	
<ul style="list-style-type: none"> • CE marking • RoHS conformity 	Yes Yes
Standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	No No No No No No No

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support 	http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
last modified:	10/26/2019