

product description



shielded, halogen-free TP installation cable according to IEC 60754-1/2 (8-core), sold by the meter, unassembled

IE FC TP FRNC Cable GP 4x2; halogen-free TP cable for fixed routing; for connection to FC RJ45 plug 4x2; 8-core, shielded; CAT 6A, sold by the meter; delivery unit max. 4000 m, minimum order quantity 20 m .

suitability for use

Standard cable with rigid cores for fast, permanent installation

cable designation

2YH (ST)CH 4x2x0,5/1,0-100 GN

wire length

sold by the meter

electrical data

attenuation factor per length

• at 10 MHz / maximum	0.058 dB/m
• at 100 MHz / maximum	0.191 dB/m
• at 250 MHz / maximum	0.311 dB/m
• at 300 MHz / maximum	0.343 dB/m
• at 500 MHz / maximum	0.453 dB/m

impedance

• at 1 MHz ... 100 MHz	100 Ω
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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

190 mΩ/m

operating voltage

• RMS value	80 V
• maximum	80 V

NVP value in percent

67 %

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
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outer diameter

• of inner conductor	0.51 mm
• of the wire insulation	1 mm
• of the inner sheath of the cable	6.1 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)
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• of the inner sheath of the cable • of cable sheath	FRNC FRNC
color • of the insulation of data wires • of cable sheath	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green
bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	40 mm 80 mm
tensile load / maximum	100 N
weight per length	86 kg/km
ambient conditions	
ambient temperature • during operation • during storage • during transport • during installation	-50 ... +70 °C -50 ... +70 °C -50 ... +70 °C -40 ... +70 °C
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Cca
chemical resistance • to mineral oil • to grease • to water	oil resistant according to EN 50290-2-22 (VDE 0819), compound (4h/70 °C) Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature • halogen-free • silicon-free • low-emission according to IEC 61034-2	Yes; halogen-free according to IEC 61754-1/2 Yes Yes
wire length / for Industrial Ethernet • with 100BaseTX • with 1000BaseT • for 10GBase T	100 m 100 m 90 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us 3047254 CMG 75°C
UL/ETL style / 600 V Rating	Yes; E502506-LFR cRUus AWM 22375 I A/B 60°C 600V FT2
certificate of suitability • EAC approval • CE marking • RoHS conformity	Yes Yes Yes
product conformity • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP)	Yes Yes
standard for structured cabling	Cat6A
Marine classification association • 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)	No No No No No No No
reference code • according to IEC 81346-2 • according to IEC 81346-2:2019	WG WGB
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	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

- to website: CAX-Download-Manager
- to website: Industry Online Support

<https://www.siemens.com/cax>
<https://support.industry.siemens.com>

security information

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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



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