

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	SF/UTP, 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
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	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	0.51 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)

<ul style="list-style-type: none"> • of the inner sheath of the cable • of cable sheath 	FRNC FRNC
color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green
bending radius <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 (S1a d1 a1)
chemical resistance <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • halogen-free • PoE capability • PoE+ capability • PoE++ capability • silicon-free • low-emission according to IEC 61034-2 	Yes; halogen-free according to IEC 61754-1/2 Yes Yes Yes Yes Yes
wire length / for Industrial Ethernet <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	Yes Yes Yes
product conformity <ul style="list-style-type: none"> • 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 <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) 	No No No No No No No
reference code <ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	WG WGB
further information / internet links	
internet link <ul style="list-style-type: none"> • to website: Selection guide for cables and connectors 	https://support.industry.siemens.com/cs/ww/en/view/109766358

- 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://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

Environment

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EG-Konf.

[Environmental Conformations](#)

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