SIEMENS

product type designation	**IE FC TP Standard Cable GP 4x2 (AWG 24, Type C)**
product description	Shielded TP installation cable (8-core), sold by the meter, unassembled

Industrial Ethernet FastConnect TP standard cable GP 4x 2, TP installation CAT6A cable for connection to IE FC RJ45 plug 4x 2, AWG24, sold by the meter, delivery unit max. 2000 m minimum order quantity 20 m.

suitability for use	Standard cable with rigid cores for fast, permanent installation
cable designation	2YH (ST) CY 4x2x0,5/1,0 GN
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
transfer impedance per length / at 10 MHz	20 mΩ/m
loop resistance per length / maximum	190 mΩ/m
insulation resistance coefficient	5000 GΩ·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
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	

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● of the wire insulation	polyethylene (PE)
● of the inner sheath of the cable	FRNC
● of cable sheath	PVC
color	
● of the insulation of data wires	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
● of cable sheath	green
bending radius	
● with single bend / minimum permissible	24 mm
● with multiple bends / minimum permissible	40 mm
tensile load / maximum	100 N
weight per length	74.5 kg/km

ambient conditions	
ambient temperature	
● during operation	-40 ... +85 °C
● during storage	-40 ... +80 °C
● during transport	-40 ... +80 °C
● during installation	-40 ... +80 °C
ambient condition / for operation	Temperature range for permanent installation -40 °C to +85 °C
fire behavior	flame resistant according to IEC 60332-3-24 (Category C)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
● to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
● to grease	Conditional resistance
● to water	conditional resistance
radiological resistance / to UV radiation	resistant

product features, product functions, product components / general	
product feature	
● halogen-free	No
● silicon-free	Yes
wire length / for Industrial Ethernet	
● with 100BaseTX	100 m
● with 1000BaseT	100 m
● for 10GBase T	90 m

standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG, AWM-Style 21500, cRU AWM I A/B 60°C 300V FT2
UL/ETL style / 600 V Rating	No
certificate of suitability	
● EAC approval	Yes
● CE marking	Yes
● RoHS conformity	Yes
product conformity	
● ANSI/TIA-EIA 568-B.2 Cat.5e	Yes
● IEC 61784-5-2-CP 2/2 (Ethernet/IP)	Yes
standard for structured cabling	Cat6A
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
reference code	
● according to IEC 81346-2	WG
● according to IEC 81346-2:2019	WGB

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
- to website: Industry Mall
- to website: Information and Download Center
- to website: Selection guide for cables and connectors
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

http://www.siemens.com/simatic-net
https://mall.industry.siemens.com
http://www.siemens.com/industry/infocenter
https://sie.ag/2QdlxcP

http://automation.siemens.com/bilddb
http://www.siemens.com/cax
https://support.industry.siemens.com

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