

Product type designation

Product description

IE FC TP Standard Cable GP 2 x 2 (Type A)

Standard bus cable (4 wires), preferred length, not assembled
SIMATIC NET, IE FC TP STANDARD CABLE GP, TP
INSTALLATION CABLE FOR CONNECTION TO FC OUTLET RJ 45,
FOR UNIVERSAL APPLICATIONS, CAT 5, 1000 M



Suitability for use	Standard cable with rigid cores for fast installation
Cable designation	2YY (ST) CY 2x2x0,64/1,5-100 GN
Cable length	1000 m

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	<p>0.052 dB/m</p> <p>0.195 dB/m</p>
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 1 MHz ... 100 MHz 	15 %
Transfer impedance per length / at 10 MHz	10 mΩ/m
Loop resistance per length / maximum	115 mΩ/m
Operating voltage	
<ul style="list-style-type: none"> RMS value 	100 V
NVP value in percent	66 %

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 	0.64 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 	<p>0.64 mm</p> <p>1.5 mm</p> <p>3.9 mm</p> <p>6.5 mm</p>
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 	<p>PE</p> <p>PVC</p> <p>PVC</p>
Color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	<p>white / yellow / blue / orange</p> <p>green</p>
Bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	<p>19.5 mm</p> <p>49 mm</p>
Tensile load / maximum	150 N
Weight per length	67 kg/km

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	<p>-40 ... +75 °C</p> <p>-40 ... +75 °C</p> <p>-40 ... +75 °C</p> <p>-20 ... +60 °C</p> <p>electrical properties measured at 20 Cel, tests according to DIN VDE 0472</p>
Burning behavior	flame resistant according to UL 1685 (CSA FT4)
Chemical resistance	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	<p>oil resistant according to IEC 60811-2-1 (4 h / 70°C)</p> <p>Conditional resistance</p> <p>Conditional resistance</p>
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property	
<ul style="list-style-type: none"> • halogen-free • silicon-free 	<p>No</p> <p>Yes</p>
Cable length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	100 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	Yes
Certificate of suitability	
• CE marking	Yes
Standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (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 website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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/automation/net/catalog
• 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

last modified: 16.04.2015