

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
Industrial Ethernet FC TP Standard Cable GP, TP installation cable
for Connection to IE FC RJ45 2x2, for universal use, 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 SF/UTP
Wire length	1000 m
Electrical data	
Damping ratio per length	
• at 10 MHz / maximum	0.052 dB/m
• at 100 MHz / maximum	0.195 dB/m
Impedance	
• at 1 MHz ... 100 MHz	100 Ω
Relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	15 %
Transfer impedance per length / at 10 MHz	10 m Ω /m
Loop resistance per length / maximum	115 m Ω /m
Operating voltage	
• RMS value	80 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 	0.64 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) PVC PVC
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 	19.5 mm 49 mm
Tensile load / maximum	150 N
Weight per length	61 kg/km

Ambient conditions	
Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -40 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
Burning behavior	flame resistant according to UL 1685 (CSA FT 4)
Class of burning behaviour / according to EN 13501-6	Eca
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water 	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance 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

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us / CMG / (ETL)us PLTC/ ITC / Sun Res
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
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/industry/infocenter
• 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:	05/07/2020