

Product type designation

Product description

IE FC TP Flexible Cable GP 2 x 2 (Type B)

Flexible bus cable (4-core), sold by the meter, unassembled Industrial Ethernet FC TP flexible cable, GP 2x2 (PROFINET Type B), TP installation cable with flexible cores, PROFINET type B, 4-core, shielded Cat 5, sold by the meter, delivery length max. 2500 m minimum order 20 m



Suitability for use	For occasionally moved machine parts
Cable designation	2YY (ST) CY 2x2x0,75/1,5-100 LI GN SF/UTP
Electrical data	
Damping ratio per length	
• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.21 dB/m
Impedance	
• at 1 MHz ... 100 MHz	100 Ω
Relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	15 %
Near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.5 dB/m
Transfer impedance per length / at 10 MHz	20 mΩ/m
Loop resistance per length / maximum	120 mΩ/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	
• of AWG22 core	0.75 mm
Outer diameter	
• of inner conductor	0.75 mm
• of the wire insulation	1.5 mm
• of the inner sheath of the cable	3.9 mm
• of cable sheath	6.5 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	
• of the wire insulation	polyethylene (PE)
• of the inner sheath of the cable	PVC
• of cable sheath	PVC
Color	
• of the insulation of data wires	white/yellow/blue/orange
• of cable sheath	green
Bending radius	
• with single bend / minimum permissible	32.5 mm
• with multiple bends / minimum permissible	52 mm
Tensile load / maximum	150 N
Weight per length	68 kg/km

Permitted ambient conditions

Ambient temperature	
• during operation	-25 ... +75 °C
• during storage	-25 ... +75 °C
• during transport	-25 ... +75 °C
• during installation	-10 ... +60 °C
• Note	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	
• to mineral oil	oil resistant according to IEC 60811-404 (7x24h/90°C)
• to grease	Conditional resistance
• to water	conditional resistance

Radiological resistance / to UV radiation	resistant
---	-----------

Product properties, functions, components / general

Product feature	
<ul style="list-style-type: none"> • halogen-free 	No
<ul style="list-style-type: none"> • silicon-free 	Yes
Wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	85 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / (ETL)us PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
Certificate of suitability	
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
Standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No

Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

last modified: 10/08/2019