

product description



Flexible bus cable (4-core), preferred length, unassembled

Industrial Ethernet FC TP Flexible cable GP 2x2; (PROFINET type B); TP installation cable with flexible cores, 4-core; shielded; CAT5 for connection to IE FC RJ45 Plug 2x 2, AWG22; 1000 m.

suitability for use
cable designation
wire length

For occasionally moved machine parts
2YY (ST) CY 2x2x0,75/1,5-100 LI GN SF/UTP
1000 m

electrical data

attenuation factor 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 tinned copper wires
type of electrical connection / FastConnect	Yes
core diameter	
• of AWG22 insulated conductor	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	

<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	32.5 mm
tensile load / maximum	52 mm
weight per length	150 N
	68 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • note 	-25 ... +75 °C -25 ... +75 °C -25 ... +75 °C -10 ... +60 °C
fire behavior	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
class of burning behaviour / according to EN 13501-6	flame resistant according to UL 1685 (CSA FT 4)
chemical resistance	Eca
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	oil resistant according to IEC 60811-404 (7x24h/90°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 • silicon-free 	No 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"> • EAC approval • CE marking • RoHS conformity 	Yes Yes Yes
standard for structured cabling	Cat5e
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 web page: selection aid 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/tia-selection-tool 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
last modified:	10/30/2021 