

product description

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, Cat5, sold by the meter, delivery unit max. 2500 m minimum order quantity 20 m.

suitability for use  
cable designation

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

### 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	
• with single bend / minimum permissible	32.5 mm

<ul style="list-style-type: none"> <li>with multiple bends / minimum permissible tensile load / maximum weight per length</li> </ul>	52 mm 150 N 68 kg/km
<b>ambient conditions</b>	
ambient temperature <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>during installation</li> <li>note</li> </ul> fire behavior class of burning behaviour / according to EN 13501-6 chemical resistance <ul style="list-style-type: none"> <li>to mineral oil</li> <li>to grease</li> <li>to water</li> </ul> radiological resistance / to UV radiation	-25 ... +75 °C -25 ... +75 °C -25 ... +75 °C -10 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472 flame resistant according to UL 1685 (CSA FT 4) Eca oil resistant according to IEC 60811-404 (7x24h/90°C) Conditional resistance conditional resistance resistant
<b>product features, product functions, product components / general</b>	
product feature <ul style="list-style-type: none"> <li>halogen-free</li> <li>silicon-free</li> </ul> wire length / for Industrial Ethernet <ul style="list-style-type: none"> <li>with 100BaseTX</li> </ul>	No Yes 85 m
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating certificate of suitability <ul style="list-style-type: none"> <li>EAC approval</li> <li>CE marking</li> <li>RoHS conformity</li> </ul> standard for structured cabling Marine classification association <ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>French marine classification society (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Germanische Lloyd (GL)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (NK)</li> <li>Polski Rejestr Statkow (PRS)</li> </ul> reference code <ul style="list-style-type: none"> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	Yes; c(ETL)us, CMG / (ETL)us PLTC / Sun Res / OIL RES Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2 Yes Yes Yes Cat5e No No No No No No No No WG WGB
<b>further information / internet-Links</b>	
Internet-Link <ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Selection guide for cables and connectors</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="https://sie.ag/2QdlxcP">https://sie.ag/2QdlxcP</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>last modified:</b>	10/30/2021 