

product description

Standard bus cable (4 wires), preferred length, not assembled

IE FC TP Standard Cable GP 2x2 (PROFINET Type A), CAT5E bus cable 4-wire, shielded, special configuration for quick assembly to IE FC RJ45 plug 2x2, 500 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	500 m
<b>electrical data</b>	
attenuation factor 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 %
near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.5 dB/m
transfer impedance per length / at 10 MHz	10 mΩ/m
loop resistance per length / maximum	115 mΩ/m
operating voltage	
• RMS value	80 V
NVP value in percent	69 %
<b>mechanical data</b>	
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 insulated conductor	0.64 mm
outer diameter	
• of inner conductor	0.64 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"> <li>with single bend / minimum permissible</li> </ul>	19.5 mm
<ul style="list-style-type: none"> <li>with multiple bends / minimum permissible</li> </ul>	49 mm
tensile load / maximum	150 N
weight per length	61 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-40 ... +75 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +75 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +75 °C
<ul style="list-style-type: none"> <li>during installation</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>note</li> </ul>	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> <li>to mineral oil</li> </ul>	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
<ul style="list-style-type: none"> <li>to grease</li> </ul>	Conditional resistance
<ul style="list-style-type: none"> <li>to water</li> </ul>	conditional resistance
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>halogen-free</li> </ul>	No
<ul style="list-style-type: none"> <li>silicon-free</li> </ul>	Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>with 100BaseTX</li> </ul>	100 m
<b>standards, specifications, approvals</b>	
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	
<ul style="list-style-type: none"> <li>EAC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>RoHS conformity</li> </ul>	Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul style="list-style-type: none"> <li>French marine classification society (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>Germanische Lloyd (GL)</li> </ul>	No
<ul style="list-style-type: none"> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul style="list-style-type: none"> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul style="list-style-type: none"> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No
reference code	
<ul style="list-style-type: none"> <li>according to IEC 81346-2</li> </ul>	WG
<ul style="list-style-type: none"> <li>according to IEC 81346-2:2019</li> </ul>	WGB
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a> . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available

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## Approvals / Certificates

General Product Approval

Industrial Communication

[Manufacturer Declaration](#)



[Declaration of Conformity](#)

[PROFINET](#)

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