## **SIEMENS**

Data sheet 6XV1870-2B

## 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	
attenuation factor per length	
<ul><li>at 10 MHz / maximum</li></ul>	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 insulated conductor	0.75 mm
outer diameter	
<ul> <li>of inner conductor</li> </ul>	0.75 mm
<ul> <li>of the wire insulation</li> </ul>	1.5 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	3.9 mm
of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
<ul> <li>of cable sheath</li> </ul>	PVC

color	
<ul> <li>of the insulation of data wires</li> </ul>	white/yellow/blue/orange
of cable sheath	green
bending radius	
<ul><li>with single bend / minimum permissible</li></ul>	32.5 mm
with multiple bends / minimum permissible	52 mm
tensile load / maximum	150 N
weight per length	68 kg/km
ambient conditions	
ambient temperature	
<ul><li>during operation</li></ul>	-25 +75 °C
<ul><li>during storage</li></ul>	-25 +75 °C
<ul> <li>during transport</li> </ul>	-25 +75 °C
<ul> <li>during installation</li> </ul>	-10 +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire 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 features, product functions, product components	/ general
product feature	
halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
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	
EAC approval	Yes
CE marking	Yes
RoHS conformity	Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul> <li>French marine classification society (BV)</li> </ul>	No
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	No
Germanische Lloyd (GL)	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No
further information / internet-Links	
Internet-Link	
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
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
<ul> <li>to website: Image database</li> </ul>	http://automation.siemens.com/bilddb
<ul><li>to website: Image database</li><li>to website: CAx-Download-Manager</li></ul>	http://automation.siemens.com/bilddb http://www.siemens.com/cax

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