

## Data sheet

## 6XV1870-2B

### 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 tin-plated 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

• with multiple bends / minimum permissible tensile load / maximum weight per length	52 mm 150 N 68 kg/km
<b>ambient conditions</b>	
ambient temperature	-25 ... +75 °C
• during operation	-25 ... +75 °C
• during storage	-25 ... +75 °C
• during transport	-10 ... +60 °C
• during installation	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
• note	
fire behavior	flame resistant according to UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	oil resistant according to IEC 60811-404 (7x24h/90°C)
• to mineral oil	Conditional resistance
• to grease	conditional resistance
• to water	resistant
radiological resistance / to UV radiation	
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	85 m
<b>standards, specifications, approvals</b>	
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; cRUs 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	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statków (PRS)	No
reference code	
• according to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
<b>further information / internet-Links</b>	
Internet-Link	
• to web page: selection aid TIA Selection Tool	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Selection guide for cables and connectors	<a href="https://sie.ag/2QdIxcP">https://sie.ag/2QdIxcP</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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