# SIEMENS

### Data sheet

#### 6XV1870-2E

## product type designation product description

#### IE FC TP Standard Cable GP 4x2 (AWG 22)

Standard bus cable (8-core), sold by the meter, unassembled

Industrial Ethernet FC TP standard cable 4 x 2, TP installation cable CAT6 for connection to FC RJ45 Modular outlet, AWG22, sold by the meter, delivery length max. 1000 m minimum order 20 m



suitability for use	Standard cable with rigid cores for fast, permanent installation
cable designation	2YH (ST) C 4X2X0.64/1.25-100 GN 4x2xAWG22
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.19 dB/m
• at 250 MHz / maximum	0.33 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
near-end crosstalk per length	
• at 1 MHz 250 MHz	0.383 dB/m
transfer impedance per length / at 10 MHz	10 mΩ/m
loop resistance per length / maximum	118 mΩ/m
insulation resistance coefficient	5000 GΩ·m
operating voltage	
RMS value	80 V
NVP value in percent	63 %
mechanical data	
number of electrical cores	8
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	
<ul> <li>of AWG22 insulated conductor</li> </ul>	0.64 mm
outer diameter	
<ul> <li>of inner conductor</li> </ul>	0.64 mm
<ul> <li>of the wire insulation</li> </ul>	1.25 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	7.6 mm
of cable sheath	9.6 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
material	
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
of cable sheath	PVC
color	
<ul> <li>of the insulation of data wires</li> </ul>	white/blue, white/orange, white/green, white/brown
<ul> <li>of cable sheath</li> </ul>	green

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bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	38 mm
with multiple bends / minimum permissible	80 mm
tensile load / maximum	180 N
weight per length	117 kg/km
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +80 °C
<ul> <li>during storage</li> </ul>	-40 +80 °C
<ul> <li>during transport</li> </ul>	-40 +80 °C
<ul> <li>during installation</li> </ul>	-40 +80 °C
fire behavior	flame resistant according to IEC 60332-1
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components	s / general
product feature	
halogen-free	No
silicon-free	Yes
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wire length / for Industrial Ethernet	00
• with 100BaseTX	90 m
• with 1000BaseT	90 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(UL)us / CMG / cRU AWM I A/B 60°C 300V FT2 / Sun Res
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul> <li>EAC approval</li> </ul>	Yes
CE marking	Yes
RoHS conformity	Yes
standard for structured cabling	Cat6A
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
reference code	
• acc. to IEC 81346-2	WG
<ul> <li>according to IEC 81346-2:2019</li> </ul>	WGB
further information / internet-Links	
Internet-Link	
to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
<ul> <li>to web page: selection and that celection recipient</li> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
to website: Industrial communication	https://mall.industry.siemens.com
to website: Information and Download Center	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and</li> </ul>	https://sie.ag/2QdlxcP
connectors	
<ul> <li>to website: Image database</li> </ul>	http://automation.siemens.com/bilddb
<ul> <li>to website: CAx-Download-Manager</li> </ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com
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