SIEMENS

Data sheet   **6XV1870-2E**

product type designation	**IE FC TP Standard Cable GP 4x2 (AWG 22)**
product description	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	
● of AWG22 insulated conductor	0.64 mm
outer diameter	
● of inner conductor	0.64 mm
● of the wire insulation	1.25 mm
● of the inner sheath of the cable	7.6 mm
● of cable sheath	9.6 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 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/blue, white/orange, white/green, white/brown
● of cable sheath	green

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bending radius	
● with single bend / minimum permissible	38 mm
● with multiple bends / minimum permissible	80 mm
tensile load / maximum	180 N
weight per length	117 kg/km
ambient conditions	
ambient temperature	
● during operation	-40 ... +80 °C
● during storage	-40 ... +80 °C
● during transport	-40 ... +80 °C
● during installation	-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 / general	
product feature	
● halogen-free	No
● silicon-free	Yes
wire length / for Industrial Ethernet	
● 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	
● EAC approval	Yes
● CE marking	Yes
● RoHS conformity	Yes
standard for structured cabling	Cat6A
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 Statkow (PRS)	No
reference code	
● acc. to IEC 81346-2	WG
● according to IEC 81346-2:2019	WGB
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
● to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx-Download-Manager	http://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com
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