chanhvinh.com

SIEMENS

Data sheet 6XV1870-2J

product description	Hybrid cable (data and energy wires), product sold by meter, unassembled
	Industrial Ethernet Hybrid Cable 2x2+4x 0.34, flexible Cable, 4x CU CAT5, shielded (0.75 mm) and 4x CU (0.34 mm2) for IE FC modular outlet with Power insert and IP67 hybrid plug-in connector Sold by the meter max. delivery unit 1000 m, minimum order quantity 20 m.



suitability for use	Ethernet hybrid cable for transfer of data and power
cable designation	2YH (ST) C 2x2x0.75/1.5LI LIH H 2x2x0.34/1.6GN FRNC
electrical data	
attenuation factor per length	
● at 10 MHz / maximum	0.075 dB/m
● at 100 MHz / maximum	0.26 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	0.353 dB/m
transfer impedance per length / at 10 MHz	10 mΩ/m
loop resistance per length / maximum	120 Ω/km
insulation resistance coefficient	500 GΩ·m
operating voltage / maximum	80 V
operating voltage / RMS value	100 V
conductor cross section / of the power line	0.34 mm²
continuous current / of the power lines	5 A
mechanical data	
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
number of electrical cores	8
type of electrical connection / FastConnect	No
core diameter / of AWG22 insulated conductor	0.76 mm
outer diameter	
● of inner conductor	0.76 mm
● of the wire insulation	1.5 mm
● of the inner sheath of the cable	3.9 mm
● of cable sheath	8.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	
● of the wire insulation	polyethylene (PE)
● of the inner sheath of the cable	FRNC
● of cable sheath	FRNC
color	
● of the insulation of data wires	white / yellow / blue / orange
● of the power line insulation	Black/brown
● of cable sheath	green
bending radius	

Subject to change without notice
© Copyright Siemens

chanhvinh.com

● with single bend / minimum permissible	42.5 mm
● with multiple bends / minimum permissible	85 mm
tensile load / maximum	260 N
weight per length	105 kg/km
ambient conditions	
ambient temperature	
● during operation	-25 ... +70 °C
● during storage	-25 ... +70 °C
● during transport	-25 ... +70 °C
● during installation	-25 ... +70 °C
● note	Electrical properties measured at 20 Cel, verification according to DIN 47250 part 4 respectively DIN VDE 0490
fire behavior	flame-retardant according to IEC 60332-3-24 (Category C)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
● to mineral oil	Conditional resistance
● 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	Yes
● silicon-free	Yes
wire length / with 100BaseTX / for Industrial Ethernet	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; CMG / PLTC / SunRes
UL/ETL style / 600 V Rating	Yes
certificate of suitability	
● EAC approval	Yes
● RoHS conformity	Yes
standard for structured cabling	Cat 5e (data cores), AWG 22 (power cores)
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

last modified: 9/12/2023

Subject to change without notice
© Copyright Siemens