

Product type designation

Product description

IE Hybrid Cable 2x2 + 4x0.34

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 (0.75mm) 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 length 1000 m, Minimum order 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

Damping ratio 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 wire	0.34 mm ²
Continuous current / of the power wires	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 core	0.76 mm
Outer diameter • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath	0.76 mm 1.5 mm 3.9 mm 8.5 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
Material • of the wire insulation • of the inner sheath of the cable • of cable sheath	polyethylene (PE) FRNC FRNC
Color • of the insulation of data wires • of the power wire insulation • of cable sheath	white / yellow / blue / orange Black/brown green
Bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	42.5 mm 85 mm
Tensile load / maximum	260 N
Weight per length	105 kg/km
Ambient conditions	
Ambient temperature • during operation • during storage • during transport • during installation • Note	-25 ... +70 °C -25 ... +70 °C -25 ... +70 °C -25 ... +70 °C Electrical properties measured at 20 Cel, verification according to DIN 47250 part 4 respectively DIN VDE 0490
Burning 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 • to grease	Conditional resistance 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	
• RoHS conformity	Yes
Standard for structured cabling	Cat 5e (data cores), AWG 22 (power cores)
Further information / Internet-Links	
Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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: 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:	11/11/2019