

Product type designation

Product description

IE Hybrid Cable 2x2 + 4x0.34

Hybrid cable (data and energy wires), product sold by meter, unassembled

SIMATIC NET, IE HYBRID CABLE 2X2 + 4X0.34, FLEXIBLE CABLE, 4XCU CAT5, 4XCU(0.75MM) AND 4XCU(0.34SQMM) SHIELDED, WITH IE FC MODULAR OUTLET FOR POWER INSERT AND IP67 HYBRID CONNECTOR, SOLD BY THE METER, MAX. CONSIGNMENT: 1000 M, MIN. ORDER LENGTH: 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	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	<p>0.075 dB/m</p> <p>0.26 dB/m</p>
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> 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 / 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PE FRNC FRNC
Color <ul style="list-style-type: none"> • of the insulation of data wires • of the power wire insulation • of cable sheath 	white / yellow / blue / orange Black/brown green
Bending radius <ul style="list-style-type: none"> • 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

Permitted ambient conditions

Ambient temperature <ul style="list-style-type: none"> • 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)
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water 	Conditional resistance Conditional resistance Conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property <ul style="list-style-type: none"> • halogen-free • silicon-free 	Yes Yes
Cable length / with 100BaseTX / for Industrial Ethernet	100 m

Standards, specifications, approvals

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/automation/net/catalog
• 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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