

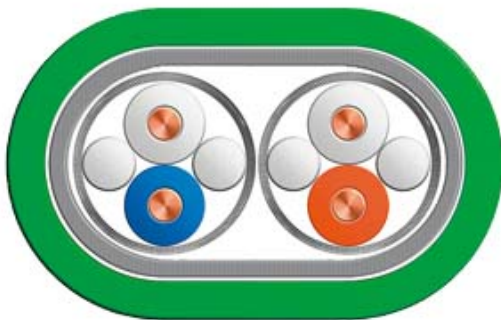
Product type designation

Product description

ITP FRNC Cable GP for Industrial Ethernet

Halogen-free industrial twisted pair cable (4-core), sold by the meter, unassembled

SIMATIC NET, ITP FRNC CABLE FOR INDUSTRIAL ETHERNET CAT5, 2X2-CORE, HALOGEN-FREE INSTALLATION CABLE FOR CONNECTOR ASSEMBLY ON SITE, NOT PREASS., SOLD BY THE METER MIN. QUANTITY ORDERED: 20 M MAX. CONSIGNMENT: 1000 M



Suitability for use	Used in the construction of Industrial Twisted Pair (ITP) networks
Cable designation	J-02YSCH 2x2x0,64/1,5 PIMF F GN FRNC

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum at 300 MHz / maximum 	<p>0.057 dB/m</p> <p>0.18 dB/m</p> <p>0.31 dB/m</p>
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz at 100 MHz ... 300 MHz 	<p>100 Ω</p> <p>100 Ω</p>
Relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 1 MHz ... 100 MHz of the characteristic impedance at 100 MHz ... 300 MHz 	<p>15 %</p> <p>45 %</p>
Transfer impedance per length / at 10 MHz	2 mΩ/m
Loop resistance per length / maximum	124 mΩ/m
Insulation resistance coefficient	5000 GΩ·m
Operating voltage	
<ul style="list-style-type: none"> RMS value 	165 V

Mechanical data

Number of electrical cores	4
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Design of the shield	Overlapped aluminum-clad foil (for each core), sheathed in an overall braided shield of tin-plated copper wires
Core diameter <ul style="list-style-type: none"> • of AWG22 core 	0.64 mm
Outer diameter <ul style="list-style-type: none"> • of inner conductor • of the wire insulation 	0.64 mm 1.5 mm
Width / of cable sheath	9.4 mm
Symmetrical tolerance of width / of cable sheath	0.5 mm
Thickness / of cable sheath	6 mm
Symmetrical tolerance of thickness / of cable sheath	0.5 mm
Material <ul style="list-style-type: none"> • of the wire insulation • of cable sheath 	PE FRNC
Color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white/blue, white/orange green
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	60 mm 90 mm
Tensile load / maximum	80 N
Weight per length	98 kg/km

Permitted ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation 	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -25 ... +80 °C
Burning behavior	flame resistant according to IEC 60332-3-23 (Category B) and IEC 60332-3-24 (Category C)
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease 	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance
Radiological resistance / to UV radiation	conditional resistance

Product properties, functions, components / general

Product property <ul style="list-style-type: none"> • halogen-free • silicon-free 	Yes Yes
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Standards, specifications, approvals

Certificate of suitability <ul style="list-style-type: none"> • CE marking 	Yes
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Marine classification association

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|---|----|
| • American Bureau of Shipping Europe Ltd. (ABS) | No |
| • Bureau Veritas (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 |

Further Information / Internet Links

Internet-Link

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|---|---|
| • 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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