

Data sheet

6XV1851-0AH10

Product type designation

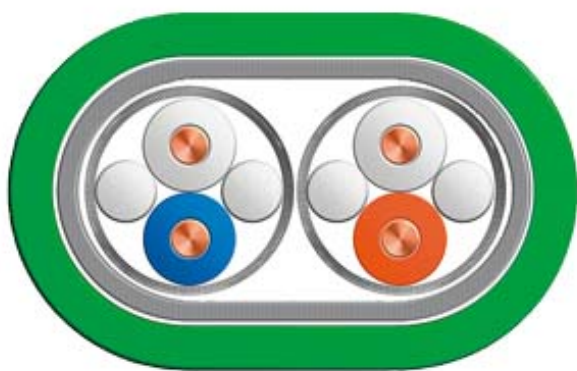
Product description

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	
• at 10 MHz / maximum	0.057 dB/m
• at 100 MHz / maximum	0.18 dB/m
• at 300 MHz / maximum	0.31 dB/m
Impedance	
• at 1 MHz ... 100 MHz	100 Ω
• at 100 MHz ... 300 MHz	100 Ω
Relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	15 %
• of the characteristic impedance at 100 MHz ... 300 MHz	45 %
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	
• RMS value	165 V

Mechanical data

Number of electrical cores	4
Design of the shield	Overlapped aluminum-clad foil (for each core), sheathed in an overall braided shield of tin-plated copper wires
Core diameter	
• of AWG22 core	0.64 mm
Outer diameter	
• of inner conductor	0.64 mm
• of the wire insulation	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	
• of the wire insulation	PE
• of cable sheath	FRNC
Color	
• of the insulation of data wires	white/blue, white/orange
• of cable sheath	green
Bending radius	
• with single bend / minimum permissible	60 mm
• with multiple bends / minimum permissible	90 mm
Tensile load / maximum	80 N
Weight per length	98 kg/km

Permitted ambient conditions

Ambient temperature	
• during operation	-40 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-25 ... +80 °C
Burning behavior	flame resistant according to IEC 60332-3-23 (Category B) and IEC 60332-3-24 (Category C)
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
Radiological resistance / to UV radiation	conditional resistance

Product properties, functions, components / general

Product feature	
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- halogen-free
- silicon-free

Yes

Yes

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; CMG / CL3 / Sun Res
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• CE marking	Yes
Marine classification association	
• 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	
• 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

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