

### Product type designation

Product description

### ITP XP Standard Cable 9/9

Industrial twisted pair cable (4-core), preferred length, preassembled with two 9-pole D-sub connectors  
SIMATIC NET, ITP XP STANDARD CABLE 9/9 FOR INDUSTR. ETHERNET ITP STANDARD CABLE, PREASSEMBLED WITH 2 X 9-PIN ITP CONNECTORS, FOR CASCADING OF ACTIVE ITP NETWORK COMPONENTS, LENGTH: 40 M



Suitability for use	Used in the construction of Industrial Twisted Pair (ITP) networks
Cable designation	J-02YSCY 2x2x0,64/1,5 PIM F GN
Wire length	40 m

Electrical data	
Damping ratio per length	
<ul style="list-style-type: none"> <li>• at 10 MHz / maximum</li> </ul>	0.057 dB/m
<ul style="list-style-type: none"> <li>• at 100 MHz / maximum</li> </ul>	0.18 dB/m
<ul style="list-style-type: none"> <li>• at 300 MHz / maximum</li> </ul>	0.31 dB/m
Impedance	
<ul style="list-style-type: none"> <li>• at 1 MHz ... 100 MHz</li> </ul>	100 Ω
<ul style="list-style-type: none"> <li>• at 100 MHz ... 300 MHz</li> </ul>	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> <li>• of the characteristic impedance at 1 MHz ... 100 MHz</li> </ul>	15 %
<ul style="list-style-type: none"> <li>• of the characteristic impedance at 100 MHz ... 300 MHz</li> </ul>	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
• maximum	225 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	9.2 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	PVC
Color	
• of the insulation of data wires	white/blue, white/orange
• of cable sheath	green
Bending radius	
• with single bend / minimum permissible	30 mm
• with multiple bends / minimum permissible	45 mm
Tensile load / maximum	80 N
Weight per length	96 kg/km

### Permitted ambient conditions

Ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
• during installation	-40 ... +70 °C
Burning behavior	flame resistant according to IEC 60332-1
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
Protection class IP	IP20

### Product properties, functions, components / general

Product feature	
• halogen-free	No
• silicon-free	Yes

### Standards, specifications, approvals

UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
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	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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