SIEMENS

Data sheet

6XV1850-0AH10

product type designation product description

ITP Standard Cable GP for Industrial Ethernet

Industrial twisted pair cable (4-core), sold by the meter, unassembled

ITP Standard Cable for Industrial Ethernet J-02YSCY 2x2X0.64/1.5 PIMF F, installation cable 2x2-core for on-site assembly of connector, non-assembled, Sold by the meter Minimum order quantity: 20 m delivery unit: max. 1000 m.



suitability for use	Used in the construction of Industrial Twisted Pair (ITP) networks
cable designation	
electrical data	
attenuation factor 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
• 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 insulated conductor 	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	polyethylene (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	
ambient conditions		
ambient temperature		
during operation	-40 +70 °C	
during storage	-40 +70 °C	
during transport	-40 +70 °C	
during installation	-40 +70 °C	
fire 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	
product features, product functions, product 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	
certificate of suitability		
 EAC approval 	Yes	
CE marking	Yes	
Marine classification association		
 American Bureau of Shipping Europe Ltd. (ABS) 	No	
 French marine classification society (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	
reference code		
 according to IEC 81346-2 	WG	
 according to IEC 81346-2:2019 	WGB	
further information / internet-Links		
Internet-Link		
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool	
• 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: Selection guide for cables and connectors 	https://sie.ag/2QdlxcP	
 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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