SIEMENS

Data sheet 6XV1840-2AN20

product description



Standard bus cable (4 wires), preferred length, not assembled

IE FC TP Standard Cable GP 2x2 (PROFINET Type A), CAT5E, bus cable 4-wire, shielded special configuration for quick assembly to IE FC RJ45 PLUG 2x2, 20 m

suitability for use	Standard cable with rigid cores for fast installation
cable designation	2YY (ST) CY 2x2x0,64/1,5-100 GN SF/UTP
wire length	20 m
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.052 dB/m
• at 100 MHz / maximum	0.195 dB/m
impedance	
at 1 MHz 100 MHz	100 Ω
relative symmetrical tolerance	
of the characteristic impedance at 1 MHz 100 MHz	15 %
near-end crosstalk per length	
• at 1 MHz 100 MHz	0.5 dB/m
transfer impedance per length / at 10 MHz	10 mΩ/m
loop resistance per length / maximum	115 mΩ/m
operating voltage	
RMS value	80 V
NVP value in percent	66 %
mechanical data	
number of electrical cores	4
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin- plated copper wires
type of electrical connection / FastConnect	Yes
core diameter	
 of AWG22 insulated conductor 	0.64 mm
outer diameter	
 of inner conductor 	0.64 mm
 of the wire insulation 	1.5 mm
 of the inner sheath of the cable 	3.9 mm
of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
 of the wire insulation 	polyethylene (PE)
 of the inner sheath of the cable 	PVC
 of cable sheath 	PVC
color	
 of the insulation of data wires 	white/yellow/blue/orange

of cable sheath	green
bending radius	
with single bend / minimum permissible	19.5 mm
with multiple bends / minimum permissible	49 mm
tensile load / maximum	150 N
weight per length	61 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +75 °C
during storage	-40 +75 °C
during transport	-40 +75 °C
during installation	-40 +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN VDE
	0472
fire behavior	flame resistant according to UL 1685 (CSA FT 4)
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components	general
product feature	
halogen-free	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us / CMG / (ETL)us PLTC/ ITC / Sun Res
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
 EAC approval 	Yes
 CE marking 	Yes
RoHS conformity	Yes
standard for structured cabling	Cat5e
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	
• acc. 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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