## **SIEMENS**

Data sheet 6XV1840-2AT20

product description



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

IE FC TP Standard Cable 2x2, (PROFINET Type A), CAT5E, bus cable 4-wire, shielded special configuration for quick assembly to IE FC RJ45 plug 2x2, 200 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	200 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	
<ul> <li>of AWG22 insulated conductor</li> </ul>	0.64 mm
outer diameter	
<ul> <li>of inner conductor</li> </ul>	0.64 mm
<ul> <li>of the wire insulation</li> </ul>	1.5 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	3.9 mm
of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
<ul><li>of cable sheath</li></ul>	PVC
color	
<ul> <li>of the insulation of data wires</li> </ul>	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 storage      during transport	-40 +75 °C
-	-40 +60 °C
during installation     note	
Hote	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	NO
acc. to IEC 81346-2	WG
• according to IEC 81346-2:2019	WGB
further information / internet-Links	1100
Internet-Link	
	http://www.sigmons.com/tip.salgetion.tegl
to web page: selection aid TIA Selection Tool     to website: Industrial communication	http://www.siemens.com/tia-selection-tool
to website: Industrial communication     to website: Industry Mell	http://www.siemens.com/simatic-net
to website: Industry Mall     to website: Information and Developed Center	https://mall.industry.siemens.com
to website: Information and Download Center     to website: Selection guide for eables and	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
to website: Image database	http://automation.siemens.com/bilddb
<ul><li>to website: CAx-Download-Manager</li></ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com
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