SIEMENS

Data sheet **6XV1841-2A**

product description	Standard bus cable (4-core), sold by the meter, unassembled
	Industrial Ethernet FastConnect TP robust Standard GP cable 2x2 (PROFINET Type A), TPE protective jacket, fixed installation for connection to FC RJ45 Plug and FC Outlet RJ45, for universal use, 4-core, shielded CAT 5, sold by the meter, delivery unit max. 2000 m minimum order quantity 20 m .

suitability for use	Standard cable with rigid cores for fast installation
cable designation	2YH (ST) C99Y 2x2x0,64/1,5-100 GN SF/UTP
electrical data	
attenuation factor per length	
● at 10 MHz / maximum	0.065 dB/m
● at 100 MHz / maximum	0.22 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	FRNC
● of cable sheath	TPE (FR-TPE)
color	
● of the insulation of data wires	white/yellow/blue/orange
● of cable sheath	green

bending radius	
● with single bend / minimum permissible	26 mm
● with multiple bends / minimum permissible	52 mm
tensile load / maximum	150 N
weight per length	59 kg/km

ambient conditions

ambient temperature	
● during operation	-40 ... +75 °C
● during storage	-40 ... +75 °C
● during transport	-40 ... +75 °C
● during installation	-20 ... +60 °C
● note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
● to mineral oil	oil resistant according to DIN EN 50290-2-22 (VDE 0819), (7x24h/90°C), UL13 Sec.40 (96h/100°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, CM, PLTC, SUN RES
UL/ETL style / 600 V Rating	No
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	
● 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
last modified:	10/30/2021 ↗