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Data sheet 6XV1840-2AN20

product type designation	**IE FC TP Standard Cable GP 2x2 (Type A)**
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.



product brand name	SIMATIC NET
Technical Product Detail Page	https://i.siemens.com/1P6XV1840-2AN20
suitability for use	Standard cable with rigid cores for fast installation
cable designation	SF/UTP, 2YY (ST) CY 2x2x0,64/1,5-100 GN
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	69 %
mechanical data	
number of electrical cores	4
design of the shield	SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned 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

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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
fire behavior	flame resistant according to IEC 60332-3-24 (Category C) and 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
● PoE capability	Yes
● PoE+ capability	Yes
● silicon-free	Yes
wire length / for Industrial Ethernet	
● with 100BaseTX	100 m
test voltage	
● at AC / core-to-core	2000 V
● at AC / core shield	2000 V
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
● resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
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
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
● total	0.9 kg
● during manufacturing	0.81 kg
● during operation	0.02 kg

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● after end of life	0.07 kg

further information / internet links

internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com

security information

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Approvals / Certificates

General Product Approval

CE EG-Konf.	Manufacturer Declaration	UKCA	Declaration of Conformity	Fire safety / Physical security	UL

General Product Approval	other	Environment	Industrial Communication
CE EG-Konf. Declaration of Conformity	Miscellaneous	EPD	PROFINET

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