

Data sheet

6XV1840-2AN20

Product type designation	IE FC TP Standard Cable GP 2 x 2 (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
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

Damping ratio 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 m Ω /m
Loop resistance per length / maximum	115 m Ω /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 core	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 • of the inner sheath of the cable • of cable sheath	polyethylene (PE) PVC PVC
Color • of the insulation of data wires • of cable sheath	white/yellow/blue/orange green
Bending radius • with single bend / minimum permissible • with multiple bends / minimum permissible	19.5 mm 49 mm
Tensile load / maximum	150 N
Weight per length	61 kg/km

Ambient conditions

Ambient temperature • during operation • during storage • during transport • during installation • Note	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -40 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
Burning 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 • to grease • to water	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant

Product features, product functions, product components / general

Product feature • halogen-free • silicon-free	No 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 • CE marking • RoHS conformity	Yes Yes
Standard for structured cabling	Cat5e
Marine classification association	

- American Bureau of Shipping Europe Ltd. (ABS)
- Bureau Veritas (BV)
- Det Norske Veritas (DNV)
- Germanische Lloyd (GL)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NK)
- Polski Rejestr Statkow (PRS)

No
No
No
No
No
No
No

Further information / Internet-Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>
<https://mall.industry.siemens.com>
<http://www.siemens.com/industry/infocenter>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

last modified:

01/20/2020