## SIEMENS

## Data sheet

product type designation

product description

## 6XV1830-0EN50

Standard bus cable (2 wires), preferred length, not assembled

PROFIBUS FC Standard, bus cable 2-wire, shielded special configuration for Quick assembly 50 m

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suitability for use	Standard cable specially designed for fast, permanent installation
cable designation	02YSY (ST) CY 1x2x0,64/2,55-150 VI KF 40 FR
wire length	50 m
electrical data	
attenuation factor per length	
• at 9.6 kHz / maximum	0.0025 dB/m
• at 38.4 kHz / maximum	0.004 dB/m
• at 4 MHz / maximum	0.022 dB/m
• at 16 MHz / maximum	0.042 dB/m
impedance	
<ul> <li>rated value</li> </ul>	150 Ω
• at 9.6 kHz	270 Ω
• at 38.4 kHz	185 Ω
• at 3 MHz 20 MHz	150 Ω
relative symmetrical tolerance	
<ul> <li>of the characteristic impedance at 9.6 kHz</li> </ul>	10 %
<ul> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	10 %
• of the characteristic impedance at 3 MHz 20 MHz	10 %
loop resistance per length / maximum	110 mΩ/m
shield resistance per length / maximum	9.5 Ω/km
capacity per length / at 1 kHz	28.5 pF/m
operating voltage	
RMS value	100 V
mechanical data	
number of electrical cores	2
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin- plated copper wires
type of electrical connection / FastConnect	Yes
outer diameter	
of inner conductor	0.65 mm
<ul> <li>of the wire insulation</li> </ul>	2.55 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	5.4 mm
of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 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	
of the insulation of data wires	red/green
• of cable sheath	Violet
bending radius	
with single bend / minimum permissible	37.5 mm
with multiple bends / minimum permissible	75 mm
tensile load / maximum	100 N
weight per length	78 kg/km
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +75 °C
<ul> <li>during storage</li> </ul>	-40 +75 °C
<ul> <li>during transport</li> </ul>	-40 +75 °C
<ul> <li>during installation</li> </ul>	-40 +75 °C
note	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
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
silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG / (ETL)us CL3 / 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
• UL approval	Yes
RoHS conformity	Yes
Marine classification association	Ne
American Bureau of Shipping Europe Ltd. (ABS)      Events a second	No
French marine classification society (BV)     Dat Name (DNN)	No
Det Norske Veritas (DNV)	No
Germanische Lloyd (GL)	No
Lloyds Register of Shipping (LRS)	No
Nippon Kaiji Kyokai (NK)     Polski Polostr Statkow (PPS)	No
Polski Rejestr Statkow (PRS)     reference code	No
ererence code     acc. to IEC 81346-2	WG
<ul> <li>acc. to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	WG
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further information / internet-Links	
Internet-Link	http://www.sigmons.com/tig.cologtion.tool
<ul> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net
to website: Industrial communication     to website: Industry Mall	https://www.siemens.com/simauc-net
to website: Information and Download Center	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and</li> </ul>	https://sie.ag/2QdlxcP
connectors	http://automation.siemens.com/bilddb
to website: Image database     to website: CAx-Download-Manager	http://automation.siemens.com/bilddb http://www.siemens.com/cax
<ul> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	https://www.siemens.com/cax https://support.industry.siemens.com
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