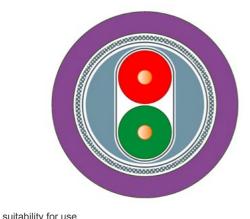
## **SIEMENS**

Data sheet 6XV1830-0EN50

## product type designation

product description



## PROFIBUS FC Standard Cable GP

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

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

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
lectrical 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	
rated value	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	
<ul> <li>RMS value</li> </ul>	100 V
nechanical 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
of cable sheath	PVC

color	
<ul> <li>of the insulation of data wires</li> </ul>	red/green
of cable sheath	Violet
bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	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	
during operation	-40 +75 °C
during storage	-40 +75 °C
during transport	-40 +75 °C
during installation	-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 / gen	eral
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	100, 01(000711111111111111111111111111111111
EAC approval	Yes
CE marking	Yes
· ·	Yes
UL approval     Dall's conformity	Yes
RoHS conformity  Marina classification acceptation	res
Marine classification association	Al-
American Bureau of Shipping Europe Ltd. (ABS)      French marine place if setting positive (P) ()	No No
French marine classification society (BV)	No 
Det Norske Veritas (DNV)     Ormania la Hand (OL)	No
Germanische Lloyd (GL)	No
Lloyds Register of Shipping (LRS)	No
Nippon Kaiji Kyokai (NK)	No 
Polski Rejestr Statkow (PRS)	No
reference code	
<ul><li>according to IEC 81346-2</li></ul>	WG
• according to IEC 81346-2:2019	WGB
further information / internet links	
internet link	
	http://www.siemens.com/tia-selection-tool
internet link	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net
internet link • to web page: selection aid TIA Selection Tool	
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internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP
internet link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb
internet link  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to website: Industry Mall  to website: Information and Download Center  to website: Selection guide for cables and connectors	http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP

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