SIEMENS

Data sheet

product type designation

product description

6XV1830-0GH10

PROFIL	BUS	FC	Food	Cable

Bus cable (2-core), sold by the meter, unassembled

PROFIBUS FC FOOD bus cable with PE outer sheath for use in the food and beverage industry 2-core shielded Sold by the meter Delivery length max. 1000 m Minimum order 20 m

suitability for use	For use in the food, beverages and tobacco industries		
cable designation	02YSY (ST) C2Y 1x2x0,64/2,55-150 KF 40		
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			
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			
 of the characteristic impedance at 9.6 kHz 	10 %		
 of the characteristic impedance at 38.4 kHz 	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	80 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		
 of the wire insulation 	2.55 mm		
 of the inner sheath of the cable 	5.4 mm		
of cable sheath	8 mm		
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm		
material			
 of the wire insulation 	polyethylene (PE)		
 of the inner sheath of the cable 	PVC		
 of cable sheath 	PE; Outer cover made of PE is especially suitable for the food		

	processing industry
color	
 of the insulation of data wires 	red/green
of cable sheath	Black
bending radius	
with single bend / minimum permissible	30 mm
 with multiple bends / minimum permissible 	60 mm
tensile load / maximum	100 N
weight per length	67 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +60 °C
during storage	-40 +60 °C
during transport	-40 +60 °C
during installation	-40 +60 °C
• note	Electrical properties measured at 20 °C, tests according to DIN 47250
	part 4 respectively DIN VDE 0472
fire behavior	inflammable
class of burning behaviour / according to EN 13501-6	Fca
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	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
 EAC approval 	Yes
CE marking	Yes
RoHS conformity	Yes
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	
• acc. 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
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