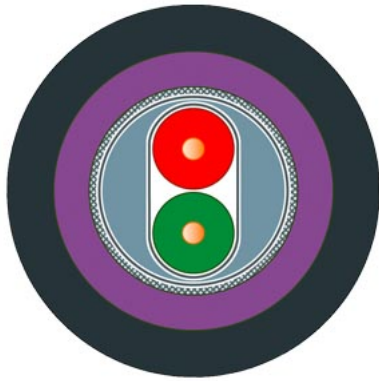


product type designation

product description



PROFIBUS FC Ground Cable

Special bus cable (2-core) with additional protective jacket, sold by the meter, unassembled

PROFIBUS FC UNDERGROUND Cable, Underground cable 2-core shielded, sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

suitability for use

Used for buried cables

cable designation

02YSY (ST) CY2Y 1x2x0,64/2,55-150 SW 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	10.8 mm
• of cable sheath / note	The cable (diameter 8.0 mm \pm 0.4 mm) has an additional black outer cover (diameter 10.8 mm \pm 0.5 mm) as protection against damage if laid in the ground, because of outer diameter > 8 mm: Bus connectors can only be connected after removing the outer cover.

symmetrical tolerance of the outer diameter / of cable sheath

0.5 mm

material

• of the wire insulation	polyethylene (PE)
--------------------------	-------------------

<ul style="list-style-type: none"> • of the inner sheath of the cable • of cable sheath 	PVC PE/PVC; PVC (sheath of the cable), PE (additional outer sheath)
color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green Black
bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	41 mm 81 mm
tensile load / maximum	100 N
weight per length	117 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • note 	-40 ... +60 °C -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C 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	
<ul style="list-style-type: none"> • 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 / Sunlight resistant acc. to UL 444 Sec. 7.12
product features, product functions, product components / general	
product feature	
<ul style="list-style-type: none"> • halogen-free • silicon-free 	No Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	CE, FCC, IC, cULus
<ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	Yes Yes Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (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
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	WG WGB
further information / internet links	
internet link	
<ul style="list-style-type: none"> • 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 • to website: CAx-Download-Manager • to website: Industry Online Support 	http://www.siemens.com/tia-selection-tool 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 http://www.siemens.com/cax https://support.industry.siemens.com

last modified:

10/30/2021 