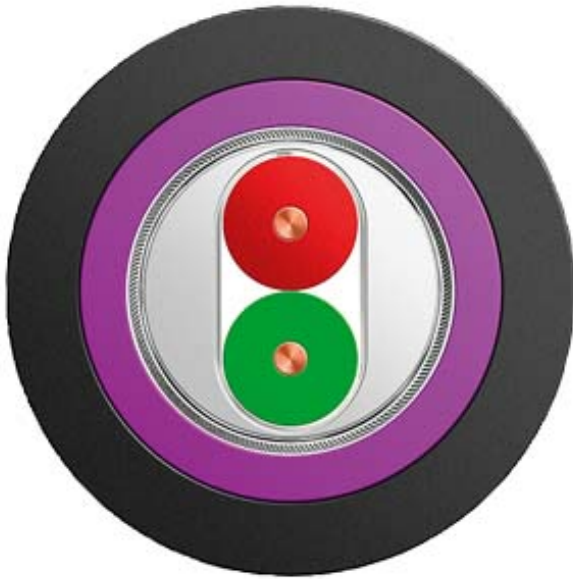


Product type designation

Product description

PROFIBUS FC Ground Cable

Special bus cable (2-core) with additional protective jacket, sold by the meter, unassembled
SIMATIC NET, PROFIBUS FC UNDERGROUND CABLE,
UNDERGROUND LAYING CABLE 2-WIRE, SHIELDED, SOLD BY
METER MAX. CONSIGNMENT: 1000M MIN. ORDERING
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	
Damping ratio per length	
<ul style="list-style-type: none"> at 9.6 kHz / maximum 	0.0025 dB/m
<ul style="list-style-type: none"> at 38.4 kHz / maximum 	0.004 dB/m
<ul style="list-style-type: none"> at 4 MHz / maximum 	0.022 dB/m
<ul style="list-style-type: none"> at 16 MHz / maximum 	0.042 dB/m
Impedance	
<ul style="list-style-type: none"> Rated value 	150 Ω
<ul style="list-style-type: none"> at 9.6 kHz 	270 Ω
<ul style="list-style-type: none"> at 38.4 kHz 	185 Ω
<ul style="list-style-type: none"> at 3 MHz ... 20 MHz 	150 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 9.6 kHz 	10 %
<ul style="list-style-type: none"> of the characteristic impedance at 38.4 kHz 	10 %

<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath • of cable sheath / Note 	0.65 mm 2.55 mm 5.4 mm 10.8 mm The cable (diameter 8.0 mm +0.4 mm) has an additional black outer cover (diameter 10.8 mm +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	
<ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PE 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

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation 	-40 ... +60 °C -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C

• Note	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	inflammable
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water 	oil resistant according to IEC 60811-2-1 (4 hours / 70°C) Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant / Sunlight resistant acc. to UL 444 Sec. 7.12

Product properties, functions, components / general

Product property <ul style="list-style-type: none"> • halogen-free • silicon-free 	No Yes
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Standards, specifications, approvals

UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
Certificate of suitability <ul style="list-style-type: none"> • CE marking • RoHS conformity 	Yes Yes
Marine classification association <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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
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