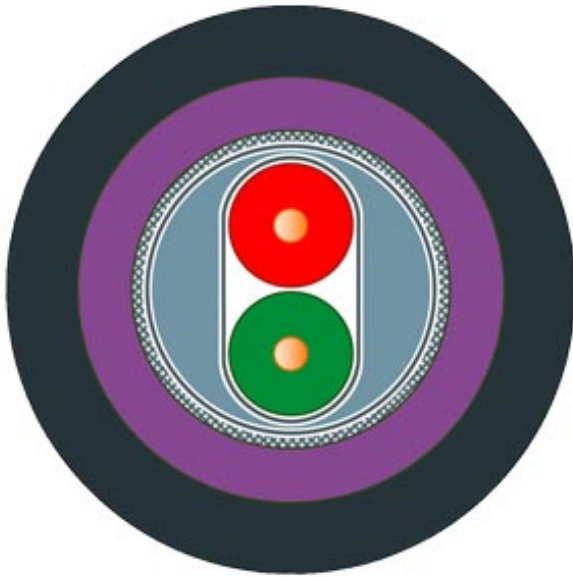


### Product type designation

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 length max. 1000 m Minimum order 20 m



Suitability for use	Used for buried cables
Cable designation	02YSY (ST) CY2Y 1x2x0,64/2,55-150 SW KF 40
<b>Electrical data</b>	
Damping ratio per length	
<ul style="list-style-type: none"> <li>at 9.6 kHz / maximum</li> </ul>	0.0025 dB/m
<ul style="list-style-type: none"> <li>at 38.4 kHz / maximum</li> </ul>	0.004 dB/m
<ul style="list-style-type: none"> <li>at 4 MHz / maximum</li> </ul>	0.022 dB/m
<ul style="list-style-type: none"> <li>at 16 MHz / maximum</li> </ul>	0.042 dB/m
Impedance	
<ul style="list-style-type: none"> <li>Rated value</li> </ul>	150 Ω
<ul style="list-style-type: none"> <li>at 9.6 kHz</li> </ul>	270 Ω
<ul style="list-style-type: none"> <li>at 38.4 kHz</li> </ul>	185 Ω
<ul style="list-style-type: none"> <li>at 3 MHz ... 20 MHz</li> </ul>	150 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> <li>of the characteristic impedance at 9.6 kHz</li> </ul>	10 %
<ul style="list-style-type: none"> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	10 %

<ul style="list-style-type: none"> <li>• of the characteristic impedance at 3 MHz ... 20 MHz</li> </ul>	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"> <li>• RMS value</li> </ul>	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 <ul style="list-style-type: none"> <li>• of inner conductor</li> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> <li>• of cable sheath / Note</li> </ul>	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"> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	polyethylene (PE) PVC PE/PVC; PVC (sheath of the cable), PE (additional outer sheath)
Color <ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	red/green Black
Bending radius <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	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"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	-40 ... +60 °C -40 ... +60 °C -40 ... +60 °C -40 ... +60 °C
---	--

<ul style="list-style-type: none"> <li>Note</li> </ul>	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	inflammable
Class of burning behaviour / according to EN 13501-6	Fca
Chemical resistance <ul style="list-style-type: none"> <li>to mineral oil</li> <li>to grease</li> <li>to water</li> </ul>	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"> <li>halogen-free</li> <li>silicon-free</li> </ul>	No Yes
--	-----------

### 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"> <li>CE marking</li> <li>RoHS conformity</li> </ul>	CE, FCC, IC, cULus Yes Yes
Marine classification association <ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>Bureau Veritas (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Germanische Lloyd (GL)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (NK)</li> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No No No No No No No

### Further information / Internet-Links

Internet-Link <ul style="list-style-type: none"> <li>to website: Selector SIMATIC NET SELECTION TOOL</li> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Image database</li> <li>to website: CAx Download Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>  <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
--	---

**last modified:** 07/22/2020