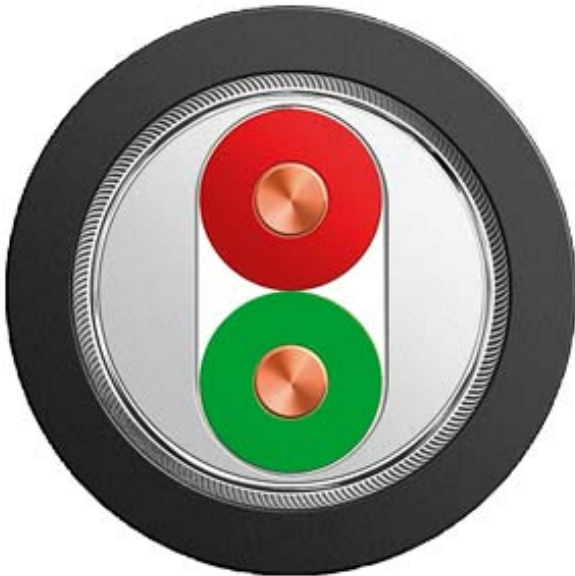


### Product type designation

Product description

### PROFIBUS FC Process Cable GP

Bus cable (2-core), sold by the meter, unassembled  
 PROFIBUS FC Process Cable Bus cable for IEC 61158-2 Sheath  
 color black for non- Ex applications, 2-core shielded Sold by the  
 meter Delivery length max. 1000 m Minimum order 20 m



Suitability for use	For use in fieldbus systems according to IEC 61158-2 (e.g. PROFIBUS PA), suitable for non-Ex applications
Cable designation	02YSY (ST) CY 1x2x1,0/2,55-100 SW OE FR
<b>Electrical data</b>	
Damping ratio per length	
<ul style="list-style-type: none"> <li>at 38.4 kHz / maximum</li> </ul>	0.003 dB/m
Return loss	
<ul style="list-style-type: none"> <li>at 3 MHz</li> </ul>	19 dB
Impedance	
<ul style="list-style-type: none"> <li>Rated value</li> </ul>	100 Ω
<ul style="list-style-type: none"> <li>at 31.25 kHz</li> </ul>	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> <li>of the characteristic impedance at 31.25 kHz</li> </ul>	20 %
Loop resistance per length / maximum	44 mΩ/m
Shield resistance per length / maximum	6.5 Ω/km
Capacity per length / at 1 kHz	92 pF/m
Inductance per length	0.65 μH/m

Operating voltage	
<ul style="list-style-type: none"> <li>• RMS value</li> </ul>	80 V
<b>Mechanical data</b>	
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> </ul>	1.05 mm
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	2.55 mm
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	5.4 mm
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
Material	
<ul style="list-style-type: none"> <li>• of the wire insulation</li> </ul>	polyethylene (PE)
<ul style="list-style-type: none"> <li>• of the inner sheath of the cable</li> </ul>	PVC
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	PVC
Color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> </ul>	red/green
<ul style="list-style-type: none"> <li>• of cable sheath</li> </ul>	Black
Bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> </ul>	40 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	80 mm
Tensile load / maximum	150 N
Weight per length	103 kg/km
<b>Ambient conditions</b>	
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-20 ... +80 °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
Ambient condition / for operation	Transfer rate of cable: 31.25 Kbit/s
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C)
Class of burning behaviour / according to EN 13501-6	Eca
Chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> </ul>	conditional resistance
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	Conditional resistance
<ul style="list-style-type: none"> <li>• to water</li> </ul>	conditional resistance

Radiological resistance / to UV radiation	resistant
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### Product features, product functions, product components / general

Product feature	
• halogen-free	No
• silicon-free	Yes

### Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG / CL3 / Sun Res
UL/ETL style / 600 V Rating	Yes
Certificate of suitability	
• CE marking	Yes
• RoHS conformity	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (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

### Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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