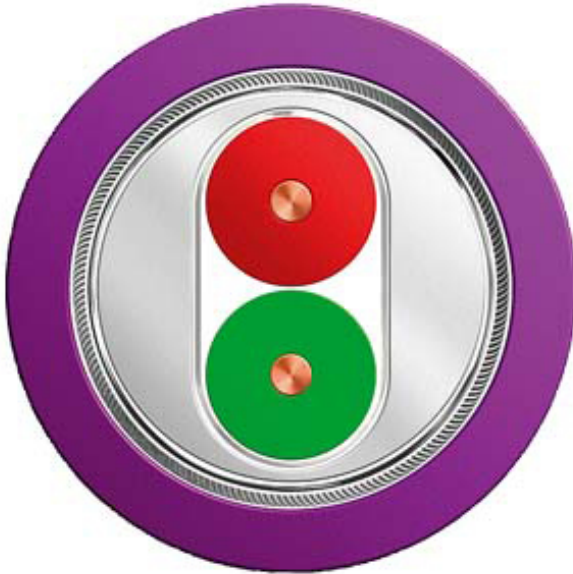


Product type designation

Product description

PROFIBUS FC Standard Cable GP

Standard bus cable (2 wires), preferred length, not assembled
SIMATIC NET, PB FC STANDARD, BUS CABLE, 2-WIRE,
SHIELDED, SPEC. DESIGN FOR RAPID INSTALL. 100 M



Suitability for use	Standard cable specially designed for fast, permanent installation
Cable designation	02YSY (ST) CY 1x2x0,64/2,55-150 VI KF 40 FR
Cable length	100 m

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> • at 9.6 kHz / maximum • at 38.4 kHz / maximum • at 4 MHz / maximum • at 16 MHz / maximum 	<p>0.0025 dB/m</p> <p>0.004 dB/m</p> <p>0.022 dB/m</p> <p>0.042 dB/m</p>
Impedance	
<ul style="list-style-type: none"> • Rated value • at 9.6 kHz • at 38.4 kHz • at 3 MHz ... 20 MHz 	<p>150 Ω</p> <p>270 Ω</p> <p>185 Ω</p> <p>150 Ω</p>
Relative symmetrical tolerance	
<ul style="list-style-type: none"> • of the characteristic impedance at 9.6 kHz • of the characteristic impedance at 38.4 kHz 	<p>10 %</p> <p>10 %</p>

<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 	0.65 mm 2.55 mm 5.4 mm 8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
Material <ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PE PVC PVC
Color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green Violet
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	37.5 mm 75 mm
Tensile load / maximum	100 N
Weight per length	80 kg/km

Permitted ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-40 ... +75 °C -40 ... +75 °C -40 ... +75 °C -40 ... +75 °C Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
Burning behavior	flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4)
Chemical resistance	

<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	<p>oil resistant according to IEC 60811-2-1 (4 hours / 70°C)</p> <p>Conditional resistance</p> <p>conditional resistance</p>
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property	
<ul style="list-style-type: none"> • halogen-free 	No
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • UL approval 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No

Further Information / Internet Links

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

last modified: 12.12.2015