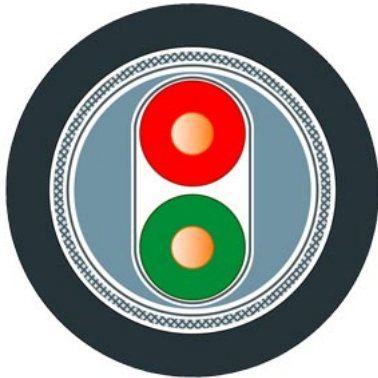


product description



Bus cable (2-core), sold by the meter, unassembled

PB FC Process Cable GP/ Ethernet-APL cable GP, bus cable for IEC 61158-2 (PB) and IEC TS 60079-47 (2-WISE) sheath color black for Ex applications 2-core shielded, sold by the meter delivery unit max. 1000 m minimum order quantity 20 m.

suitability for use

Use in fieldbus systems according to IEC 61158-2 (e.g. PROFIBUS PA) and IEC TS 60079-47 (2-WISE) / for APL (cable type A), suitable for non-Ex applications

cable designation

02YSY (ST) CY 1x2x1,0/2,55-100 SW OE FR

electrical data

attenuation factor per length	
<ul style="list-style-type: none"> at 38.4 kHz / maximum 	0.003 dB/m
return loss	
<ul style="list-style-type: none"> at 3 MHz 	19 dB
impedance	
<ul style="list-style-type: none"> rated value at 31.25 kHz at 3 MHz ... 20 MHz 	100 Ω 100 Ω 100 Ω
relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 31.25 kHz of the characteristic impedance at 3 MHz ... 20 MHz 	20 % 15 %
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"> 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	
<ul style="list-style-type: none"> of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath 	1.05 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 	polyethylene (PE) PVC PVC
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 	<p>40 mm</p> <p>80 mm</p>
tensile load / maximum	150 N
weight per length	103 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport during installation note 	<p>-40 ... +80 °C</p> <p>-40 ... +80 °C</p> <p>-40 ... +80 °C</p> <p>-20 ... +80 °C</p> <p>Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472</p>
ambient condition / for operation	Transfer rate of cable: 31.25 Kbit/s
fire 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"> to mineral oil to grease to water 	<p>conditional resistance</p> <p>Conditional resistance</p> <p>conditional resistance</p>
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
<ul style="list-style-type: none"> halogen-free silicon-free 	<p>No</p> <p>Yes</p>
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"> EAC approval CE marking RoHS conformity 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
product conformity	
<ul style="list-style-type: none"> IEC TS 60079-47 (2-WISE) / for APL (cable type A) 	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) 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2 according to IEC 81346-2:2019 	<p>WG</p> <p>WGB</p>
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 	<p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/simatic-net</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>https://sie.ag/2QdlxcP</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>

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