

# PB PA FC 1x2xAWG18/1 PVC

## PROFIBUS PA FC INST PVC Cable



### Application

Spur and trunk cable for fixed installation indoor and outdoor on racks in dry conduits, FastConnect-Assembly

- UV-resistant
- Silicon free
- Oil and grease resistant

### Standards

- IEC 61158 and IEC 61784
- Cable type A acc. to Profibus PA

### Fire Rating

- IEC 60332-1

### Construction

<b>Conductor</b>	bare copper wire, $\varnothing$ 1.05 mm, (cross-section AWG18)
<b>Insulation</b>	foam-skin-PE, $\varnothing$ 2.55 mm
<b>Stranding</b>	two cores gn / rd to the Pair
<b>Bedding</b>	PVC, filling the interstices
<b>Static screen</b>	PET-Al-Foil longitudinally applied
<b>Braid</b>	tinned copper Braid Coverage approx. 70%
<b>Sheath</b>	PVC, $\varnothing$ 8.0 mm
<b>Colour</b>	black
<b>Outer Diameter</b>	Nom. 8.0 mm
<b>Weight</b>	Nom. 87 kg/km
<b>Tensile force N</b>	175

### Mechanical Properties

<b>Bending radius</b>	
<b>single bending</b>	$\geq 40$ mm
<b>repeated bending</b>	$\geq 80$ mm
<b>Temperature range</b>	- 40°C to + 70°C
<b>Transport and storage</b>	- 40°C to + 70°C
<b>Installation</b>	- 5°C to + 50°C

### Electrical Properties at 20°C

<b>Loop resistance</b>	$\leq 46$ $\Omega$ /km
<b>Screen resistance nominal</b>	12 $\Omega$ /km
<b>Characteristic impedance (at 31.25 kHz)</b>	100 $\Omega \pm 20$ $\Omega$
<b>Mutual capacitance (at 1 kHz)</b>	approx. 60 nF/km
<b>Capacitance unbalance to earth max.</b>	2 nF/km
<b>Insulation resistance</b>	$\geq 5$ G $\Omega$ km
<b>Test Voltage (DC, 1 min) Core/Core and Core/Screen</b>	1 kV
<b>Operating voltage (RMS)</b>	$\leq 100$ V
<b>Inductance (nominal)</b>	0.70 mH/km

### Electrical Data at 20°C

Frequency (kHz)	Impedance (Ohm)	Attenuation (dB/100m)	Propagation delay change ( $\mu$ s/km)
7.9-39	-	-	$\leq 1.7$
31.25	100 $\pm$ 20	-	-
39	-	$\leq 0.3$	-

### Ordering Information

P/N	Product Description	P.U
1025051	PROFIBUS PA FC INST PVC Cable, PB PA FC 1x2xAWG18/1 PVC	1000m/drum