

# PROFIBUS-DP CABLES ACC. TO EN 50170



**SABIX® PB 630** Halogen-free Profibus-DP cable  
**PB 630** PVC Profibus-DP cable for fixed installation

**SABIX® PB 630 FRNC** Halogen-free, flame retardant Profibus-DP cable  
**PB 631** Halogen-free PE Profibus-DP cable for fixed installation



Marking for SABIX® PB 630 FRNC 66302341:

SAB BRÖCKSKES · D-VIERSEN · SABIX® PB 630 FRNC 2 x 0,34 mm² CE

Profibus-DP: This Profibus variation, optimizing velocity and low installation costs, is especially developed for the communication between automation systems and decentralized peripheral equipment in the field area. Profibus-DP cable substitutes for conventional parallel transmission of signals with 24 V or 0-20 mA. The job profile for Profibus-DP type A according to EN 50170 is kept.

item no.	type	no. of conductors	AWG	nominal outer- $\phi$ inch	mm	cable weight $\approx$ lbs/ft
▶ 56302341	SABIX® PB 630	2	22 ( $\approx$ 7/30)	0.295	7.5	34
▶ 66302341	SABIX® PB 630 FRNC	2	22 ( $\approx$ 7/30)	0.295	7.5	42
▶ 06302331	PB 630	2	22	0.280	7.1	33
▶ 06312331	PB 631	2	22	0.280	7.1	30

Other dimensions and colors are possible on request.

## General construction:

<b>Insulation:</b>	acc. to DIN VDE 0819 part 103 (02Y11)
<b>Color code:</b>	red, green
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	alu foil
<b>Screen:</b>	tinned copper braiding

## Technical data:

<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	1500 V
<b>Min. bending radius:</b>	12 x O.D.
<b>Characteristic impedance 3 - 20 MHz:</b>	150 $\Omega \pm 10\%$
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

	SABIX® PB 630	SABIX® PB 630 FRNC	PB 630	PB 631
▶ <b>Conductor:</b>	bare copper strands acc. to DIN VDE 0812	bare copper strands acc. to DIN VDE 0812	bare copper wire AWG 22, solid wire	bare copper wire AWG 22, solid wire
▶ <b>Outer jacket (purple):</b>	SABIX® 322	SABIX® 230 FRNC DIN VDE 0207 part 5	PVC, YM1 acc. to DIN VDE 0207 part 3	PE, 2YM1 acc. to
▶ <b>Radiation resistance:</b>	5 x 10 <sup>5</sup> cJ/kg	–	8 x 10 <sup>7</sup> cJ/kg	7 x 10 <sup>6</sup> cJ/kg
▶ <b>Temperature range</b> <i>static:</i> <i>flexing:</i>	-40/+80°C -40/+80°C	-40/+80°C -30/+80°C	-30/+70°C -5/+70°C	-40/+70°C -40/+70°C
▶ <b>Zero halogen:</b>	acc. to DIN VDE 0472 part 815 + IEC60754-1	acc. to DIN VDE 0472 part 815 + IEC60754-1	–	acc. to DIN VDE 0472 part 815 + IEC60754-1
▶ <b>Burning characteristics:</b> no flame propagation acc. to IEC 60332-3 + EN 60332-3 Cat. C resp. D	–	X	–	–
▶ <b>Burning characteristics:</b> flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2	–	X	X	–
▶ <b>Corrosivity:</b> in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	X	X	–	X
▶ <b>Smoke density:</b>	low	very low	–	low
▶ <b>Oil resistance:</b>	very good - TM5 acc. to DIN VDE 0281 part 1	–	acc. to internal standard	–
▶ <b>For fixed installation:</b>	X	X	X	X
▶ <b>For flexible application:</b>	X	–	–	–
▶ <b>Weather resistance:</b>	good	good	medium	good
▶ <b>Outdoor installation:</b>	–	–	–	–
▶ <b>Direct burial:</b>	–	–	–	–
▶ <b>UL Style:</b>	–	–	–	–

Profibus-DP and Profibus-FMS apply the same transmission technology and a uniform bus access log. Therefore, both types can be used simultaneously on one cable.