

Profibus-DP Cables acc. to IEC 61158-2



SABIX® PB 630

Halogen-free
Profibus-DP cable

PB 631

Halogen-free PE Profibus-DP
cable for fixed installation

SABIX® PB 630 FRNC

Halogen-free flame
retardant Profibus-DP cable

PB 633

Halogen-free, flexible
PE Profibus-DP cable

SKES · D-VIERSEN · SABIX® PB 630 FRNC 2x0.34mm² CE



Marking for SABIX® PB 630 FRNC 66302341:

SAB BRÖCKSKES · D-VIERSEN · SABIX® PB 630 FRNC 2x0.34mm² CE

Construction:	SABIX® PB 630 <i>Halogen-free</i>	SABIX® PB 630 FRNC <i>Halogen-free & flame retardant</i>	PB 631 <i>for fixed installations</i>	PB 633 <i>for flexible applications</i>
Item numbers:	56302341	66302341	6312331	6332341 / 6334341
Dimensions:	2 x 0.34 mm ²	2 x 0.34 mm ²	2 x 22 AWG	2 x 0.34 mm ² 2 x 0.34 mm ² + 3 x 1.00 mm ²
Conductor:	bare copper strands, acc. to VDE 0812	bare copper strands, acc. to VDE 0812	bare copper wire AWG 22, single wire	0.34 mm ² : bare copper strands acc. to VDE 0812 1.00 mm ² : bare copper strands acc. to IEC 60228, VDE 0295, class 5
Pairwise wrapping:	—	—	—	alu foil
Insulation:	acc. to EN 50290-2-23 + VDE 0819-103 (02Y11)	acc. to EN 50290-2-23 + VDE 0819-103 (02Y11)	acc. to EN 50290-2-23 + VDE 0819-103 (02Y11)	0.34 mm ² : EN 50290-2-23 + VDE 0819-103 (02Y11) 1.00 mm ² : PE 2Y11 acc. to EN 50290-2-23
Color code:	red, green	red, green	red, green	red, green (0.34 mm ²), brown, light blue and green/yellow ground (1.0 mm ²)
Stranding:	in layers	in layers	in layers	—
Shielding:	alu foil + tinned copper braiding		alu foil + tinned copper braiding	tinned copper braiding (pairwise)
Jacket material:	SABIX®	SABIX®	PE, 2YM1 acc. to EN 50290-2-24	
Jacket color:	red lilac (RAL 4001)	red lilac (RAL 4001)	red lilac (RAL 4001)	red lilac (RAL 4001)

Technical data:	SABIX® PB 630 <i>Halogen-free</i>	SABIX® PB 630 FRNC <i>Halogen-free & flame retardant</i>	PB 631 <i>for fixed installations</i>	PB 633 <i>for flexible applications</i>
Peak operating voltage:	max. 350 V	max. 350 V	max. 350 V	max. 350 V
Testing voltage: conductor/conductor: conductor/shielding:	1500 V 1500 V	1500 V 1500 V	1500 V 1500 V	1500 V 1500 V
Min. bending radius:	12 x O.D.	12 x O.D.	12 x O.D.	12 x O.D.
Radiation resistance:	—	—	7 x 10 ⁸ cJ/kg	—
Temperature range: static: flexible:	-40/+80°C -40/+80°C	-40/+80°C -30/+80°C	-40/+70°C -40/+70°C	-40/+70°C -40/+70°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	acc. to IEC 60754-1 + VDE 0482-754-1	acc. to IEC 60754-1 + VDE 0482-754-1	—
Burning characteristics: no flame propagation acc. to IEC 60332-3-24 + IEC 60332-3-25 Cat. C resp. D, Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	—	X	—	—
Corrosiveness of conflagration gases:	IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases			
Smoke density:	—	very low	low	—
Oil resistance:	very good acc. to EN 50363-4-1	—	—	—
Characteristic impedance 3 - 20 MHz:	150 Ω ± 10%	150 Ω ± 10%	150 Ω ± 10%	—
For fixed installation:	suitable	suitable	suitable	suitable
For flexible application:	suitable	not suitable	not suitable	suitable
Weather resistance:	good	good	good	good
Absence of harmful substances:	acc. to RoHS directive of the European Union, see page O/30			

item no.	type	no. of conductors	dimensions AWG	outer-ø		cable weight ≈lbs/mft
				±10% inch	±10% mm	
▶ 56302341	SABIX® PB 630	2	22 (≈ 7/30)	0.295	7.5	34
▶ 66302341	SABIX® PB 630 FRNC	2	22 (≈ 7/30)	0.295	7.5	34
▶ 6312331	PB 631	2	22	0.280	7.1	30
▶ 6332341	PB 633	2	22 (≈ 7/30)	0.295	7.5	34
▶ 6334341	PB 633	2+3	22 (≈ 7/30) + 18 (≈ 30/32)	0.398	10.1	68

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.

Other dimensions and colors are available on request

