

SB3

CENTRIFUGAL ELECTRIC BOREHOLE PUMPS, 3"

in AISI 304 stainless steel



Centrifugal electric borehole pumps, 3", in AISI 304.

APPLICATIONS

- Handling clear water in wells
- Pressurising clean water for agricultural, domestic and industrial applications
- Irrigation and water handling in general

TECHNICAL FEATURES

- Silent running
- Can work horizontally

PUMP TECHNICAL DATA

- Maximum immersion: 60 m
- Maximum fluid temperature: 30°C
- Maximum amount of sand: 50 ppm
- Delivery connection: G1

MOTOR TECHNICAL DATA

- Insulation class F
- Protection degree IP 58
- Single phase voltage 230V (+6 -10%) 50 Hz
- Three phase voltage 400V (+6 -10%) 50 Hz
- Integrated check valve
- For dimensioning the cables, see page 54 or refer to our Data Book on www.ebaraurope.com

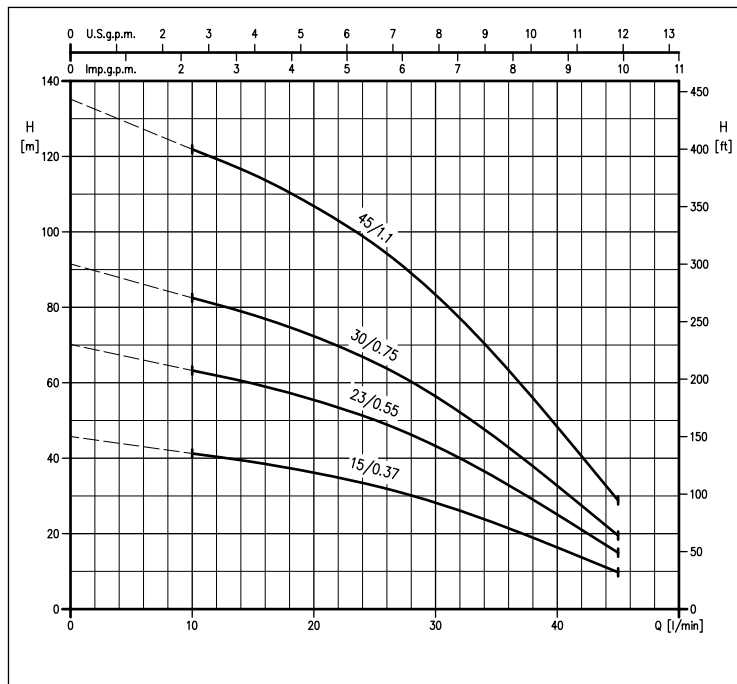
MATERIALS

- Casing, delivery port and motor mount in AISI 304
- Diffuser in polyacetyl POM
- Impeller in polypropylene reinforced with fibreglass

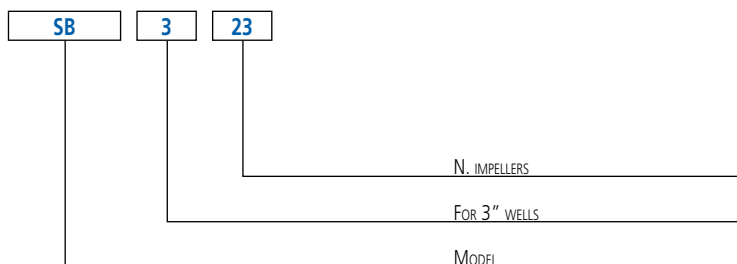
ACCESSORIES (on request)

- Couplings
- Floats
- Capacitors

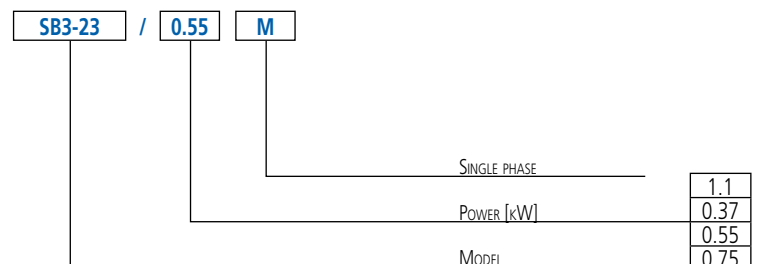
PERFORMANCE RANGE (per ISO 9906 Annex A)



IDENTIFICATION CODE - PUMP WITHOUT MOTOR



IDENTIFICATION CODE - PUMP WITH MOTOR



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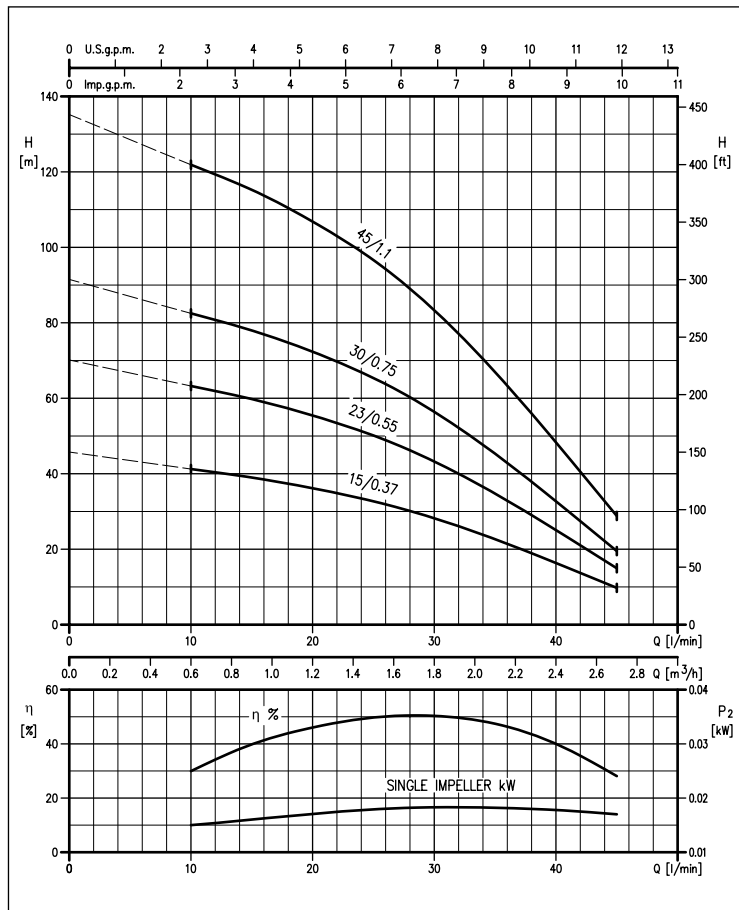
in AISI 304 stainless steel

PERFORMANCE TABLE

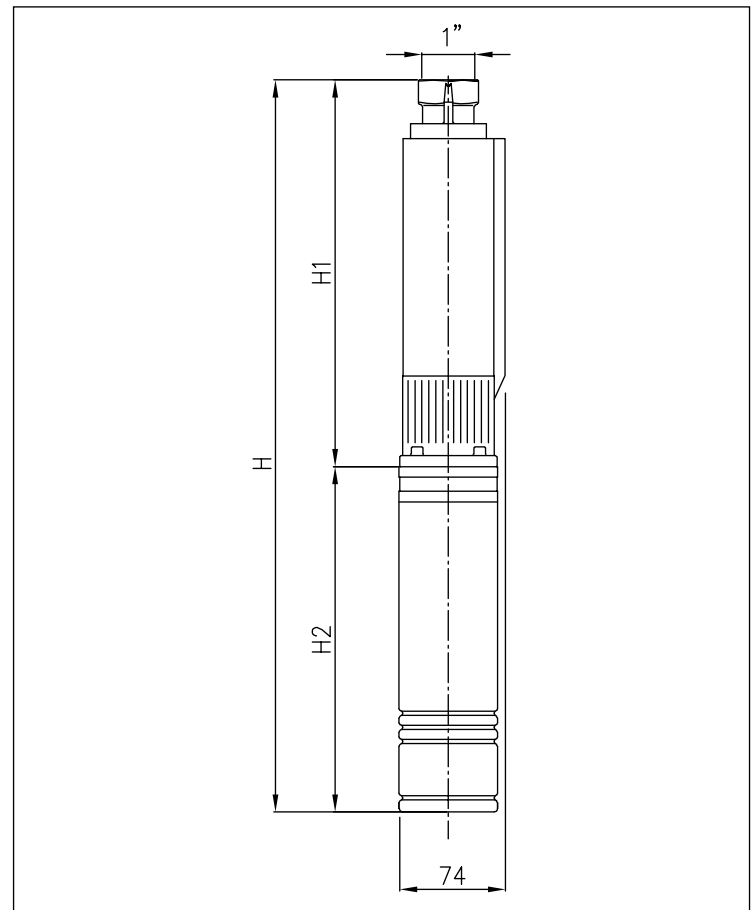
Model	Motor size	P ₂		Q=Flow rate							
		[HP]	[kW]	l/min m ³ /h	10 0.6	15 0.9	20 1.2	25 1.5	30 1.8	35 2.1	40 2.4
				H=Head [m]							
SB3-15	3"	0.5	0.37	41.5	39.0	36.2	32.7	28.2	22.7	16.5	9.8
SB3-23	3"	0.75	0.55	63.5	60.0	55.5	50.0	43.5	34.7	25.1	15.0
SB3-30	3"	1	0.75	82.5	78.0	72.5	65.5	56.5	45.5	32.7	19.5
SB3-45	3"	1.5	1.1	122.0	115.0	107.0	96.6	83.5	67.0	48.5	28.8

PERFORMANCE CURVES

(per ISO 9906 Annex A)



DIMENSIONS

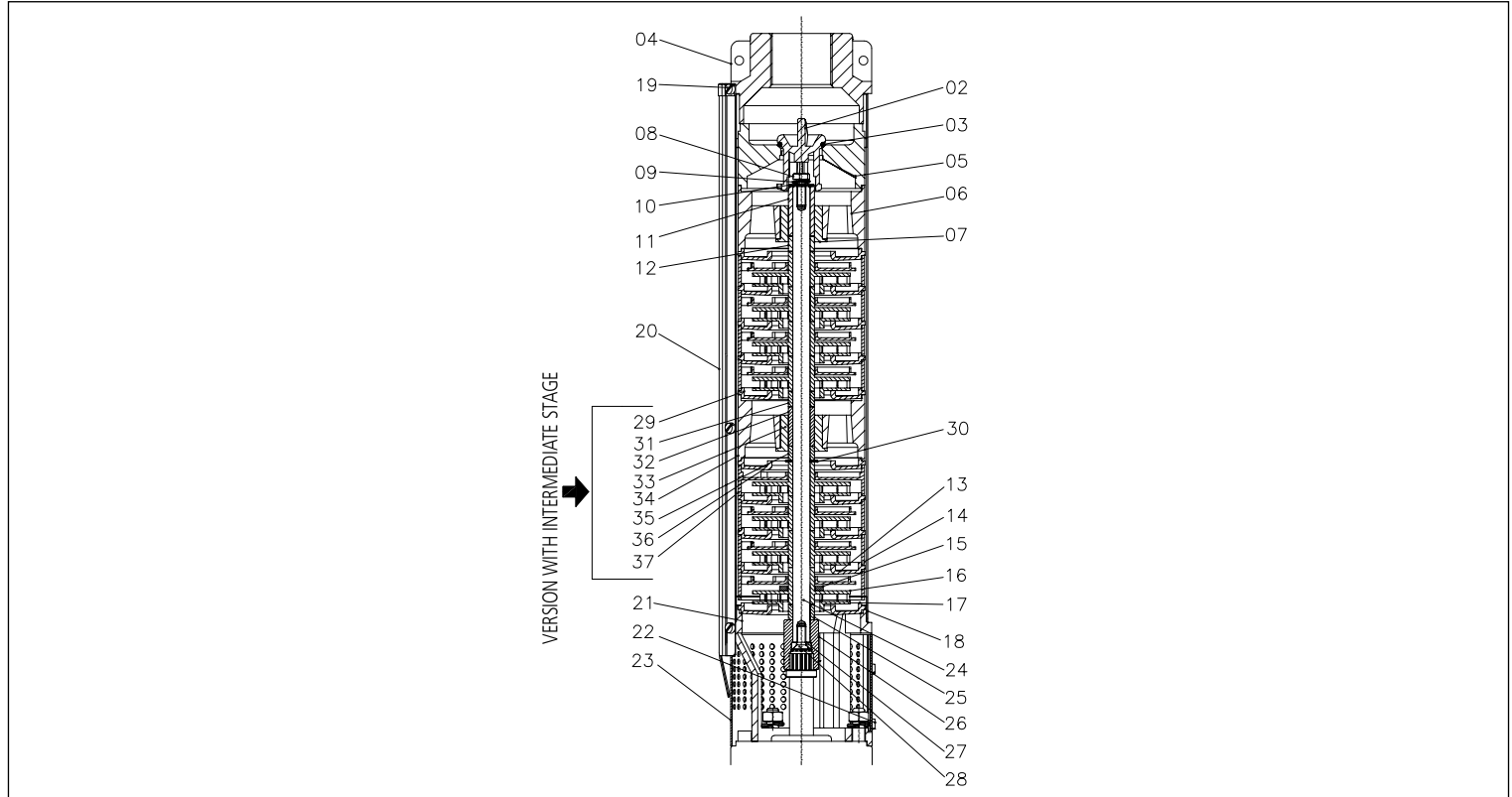


DIMENSIONAL TABLE

Model	P ₂		Pump without motor H1 [mm]	DNM	Pump + single phase motor		Pump + three phase motor		Weight of pump [kg]	Weight of pump + motor	
	[HP]	[kW]			H2 [mm]	H [mm]	H2 [mm]	H [mm]		single phase [kg]	three phase [kg]
SB3-15	0.5	0.37	580	G1	377	957	-	-	3.3	9.3	-
SB3-23	0.75	0.55	780	G1	397	1177	377	1157	4.4	10.8	10.5
SB3-30	1	0.75	1000	G1	416	4116	397	1397	5.6	12.4	12
SB3-45	1.5	1.1	1380	G1	-	-	416	1796	7.6	-	14.4

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SECTIONAL VIEW



MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
2	Valve	Polyacetyl POM	20	Cable cover	EN 1.4016 (AISI 430)
3	O-ring	NBR	21	Suction port	EN 1.4301 (AISI 304)
4	Delivery port	EN 1.4301 (AISI 304)	22	Screw	EN 1.4301 (AISI 304)
5	Valve seat	PPO mod. + G.F.	23	Filter	EN 1.4016 (AISI 430)
6	Bearing seat	PPO mod. + G.F.	24	Shaft	EN 1.4105 (AISI 430F)
7	Bearing	PUR polyurethane	25	Spacer	PPO mod. + G.F.
8	Screw	EN 1.4301 (AISI 304)	26	Coupling	EN 1.4401 (AISI 316)
9	Washer	EN 1.4301 (AISI 304)	27	Washer	EN 1.4401 (AISI 316)
10	Washer	EN 1.4401 (AISI 316)	28	Screw	EN 1.4301 (AISI 304)
11	Shaft casing (bearing)	EN 1.4401 (AISI 316)	29	Diffuser disk	Polyacetyl POM
12	Spacer	PPO mod. + G.F.	30	Compensation ring	EN 1.4301 (AISI 304)
13	Diffuser disk	Polyacetyl POM	31	Spacer	PPO mod. + G.F.
14	Diffuser	Polyacetyl POM	32	Shaft casing (bearing)	EN 1.4401 (AISI 316)
15	Washer	EN 1.4301 (AISI 304)	33	Bearing	PUR polyurethane
16	Impeller	PPO mod. + G.F.	34	Bearing seat	PPO mod. + G.F.
17	Diffuser disk	Polyacetyl POM	35	Spacer	PPO mod. + G.F.
18	External casing	EN 1.4301 (AISI 304)	36	Diffuser disk	Polyacetyl POM
19	Screw	EN 1.4301 (AISI 304)	37	Diffuser	Polyacetyl POM

ELECTRICAL DATA TABLE

P ₂		Hight thrust [N]	P ₁ [kW]	Single phase 230 V			Power factor	P ₁ [kW]	Three phase 400 V		
[HP]	[kW]			I _N [A]	I _A [A]				I _N [A]	I _A [A]	Power factor
0.5	0.37	1200	0.72	3.75	8.8	0.96	0.72	2.0	8.0	0.71	
0.75	0.55	1200	1	4.5	12.2	0.98	0.98	2.1	9.1	0.75	
1	0.75	1200	1.31	5.85	14.5	0.98	1.19	2.5	11.7	0.75	
1.5	1.1	1200	-	-	-	-	1.75	3.2	14.0	0.75	