

3" BOREHOLE CENTRIFUGAL PUMPS

in AISI 304



3" borehole centrifugal pumps in AISI 304.

APPLICATIONS

- Moving clear water in wells
- Pressure boosting of clean water for agricultural, domestic or industrial use
- Irrigation and moving water in general

TECHNICAL DETAILS

- Silent
- They can work horizontally

PUMP TECHNICAL DATA

- Maximum immersion: 60 m
- Maximum temperature of the liquid: 30°C
- Maximum presence of sand: 50 ppm
- Discharge connection: G1

MOTOR TECHNICAL DATA

- Insulation class: F
- Protection degree: IP 68
- 230V (+6 -10%) 50 Hz single phase voltage
- 400V (+6 -10%) 50 Hz three phase voltage
- Incorporated non-return valve
- For cables dimensioning please see page 58 or our Data Book on the web site www.ebara-europe.com

MATERIALS

- Casing, discharge outlet and motor connection in AISI 304
- Diffuser in POM polyacetalic resin
- Impeller in PPO reinforced with fibreglass

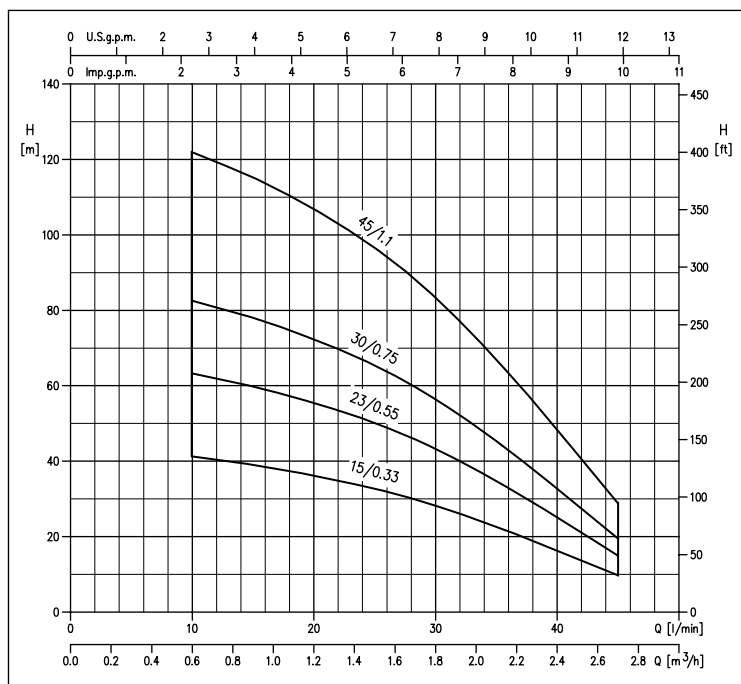
CONTROL PANELS

- Q Series
- 1EPBH

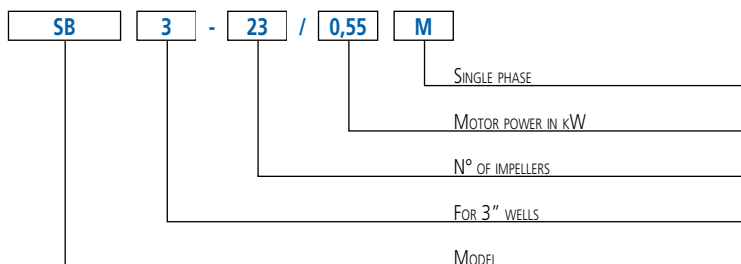
ACCESSORIES (on request)

- Junction for cable GPS-1 (for 4x1.5 and 4x2.5 cables)
- Casting resin cable junction 92A1 (section 1.5÷10 mm²)
- PVC 5 m key float with counter-weight
- PVC 10 m key float with counter-weight
- PVC 20 m key float with counter-weight
- Capacitor MF 16 450V L=150
- Capacitor MF 20,450V L=150
- Capacitor MF 25,450V L=150

PERFORMANCE RANGE (according to ISO 9906 Attachment A)



IDENTIFICATION CODE



3" BOREHOLE CENTRIFUGAL PUMPS

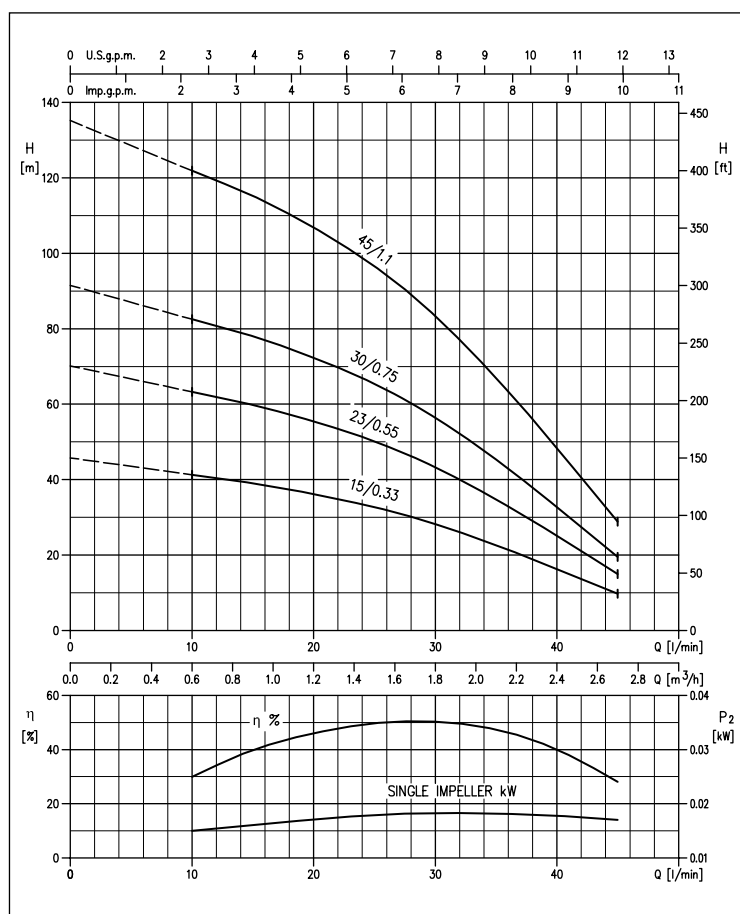
in AISI 304

PERFORMANCE TABLE

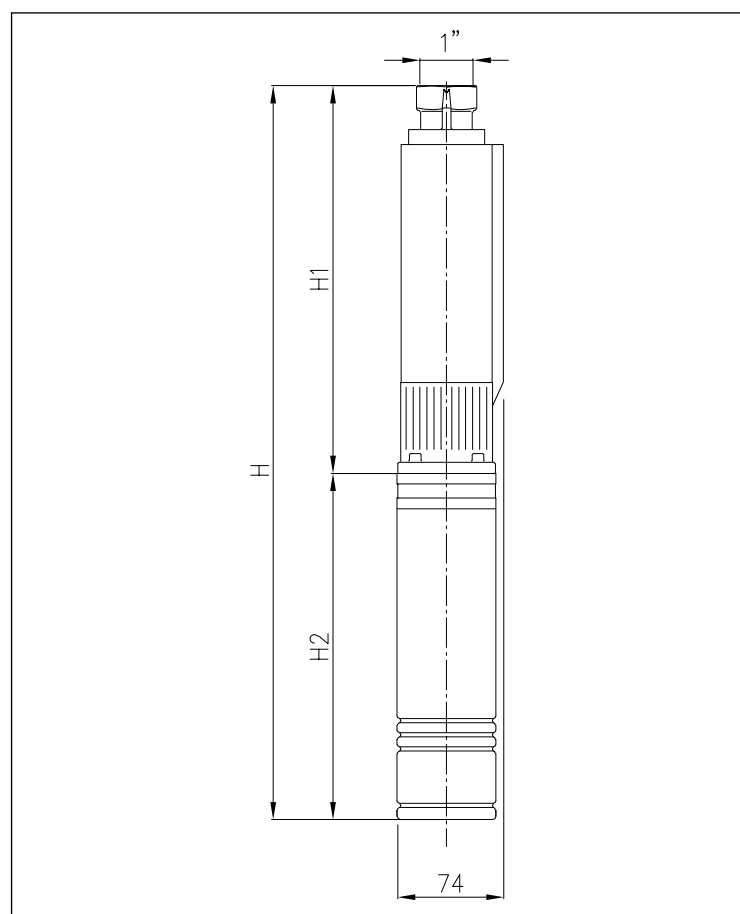
Model	Motor size	P ₂		Q=Flow rate									
		[HP]	[kW]	l/min m³/h	10 0,6	15 0,9	20 1,2	25 1,5	30 1,8	35 2,1	40 2,4	45 2,7	
H=Head [m]													
SB3-15	3"	0,5	0,37	41,5	39,0	36,2	32,7	28,2	22,7	16,5	9,8		
SB3-23	3"	0,75	0,55	63,5	60,0	55,5	50,0	43,5	34,7	25,1	15,0		
SB3-30	3"	1	0,75	82,5	78,0	72,5	65,5	56,5	45,5	32,7	19,5		
SB3-45	3"	1,5	1,1	122,0	115,0	107,0	96,5	83,5	67,0	48,5	28,8		

PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



DIMENSIONS

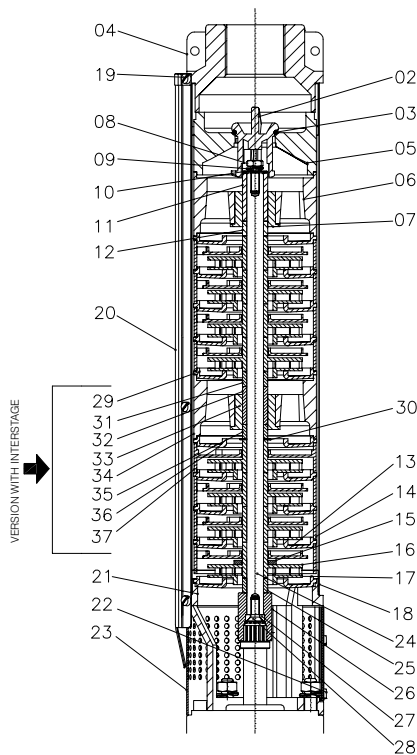


DIMENSIONAL TABLE

Model	P ₂		Pump without motor H1 [mm]	Pump + single phase motor		Pump + three phase motor		Weight pump [kg]	Weight 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	377	957	377	957	3,3	9,3	9,3
SB3-23	0,75	0,55	780	397	1177	377	1157	4,4	10,8	10,5
SB3-30	1	0,75	1000	416	1416	397	1397	5,6	12,4	12,0
SB3-45	1,5	1,1	1380	-	-	416	1796	7,6	-	14,4

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SECTIONAL VIEW



MATERIALS TABLE

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

ELECTRIC DATA TABLE

Model	P ₂		P ₁	Voltage	I _n	I _s	Efficiency	Power factor	Ts/T _n	Capacitor Single phase
	[HP]	[kW]	[kW]	[V]	[A]	[A]	[%]		n	μF
Single phase	0,5	0,37	0,72	230	3,75	8,8	51	0,96	0,58	16
	0,75	0,55	1	230	4,5	12,2	55	0,98	0,54	20
	1	0,75	1,31	230	5,85	14,5	57	0,98	0,55	25
Three phase	0,5	0,37	0,72	400	2	8	51	0,71	2,1	-
	0,75	0,55	0,98	400	2,1	9,1	56	0,75	2	-
	1	0,75	1,19	400	2,5	11,7	63	0,75	2	-
	1,5	1,1	1,75	400	3,2	14	63	0,75	2	-