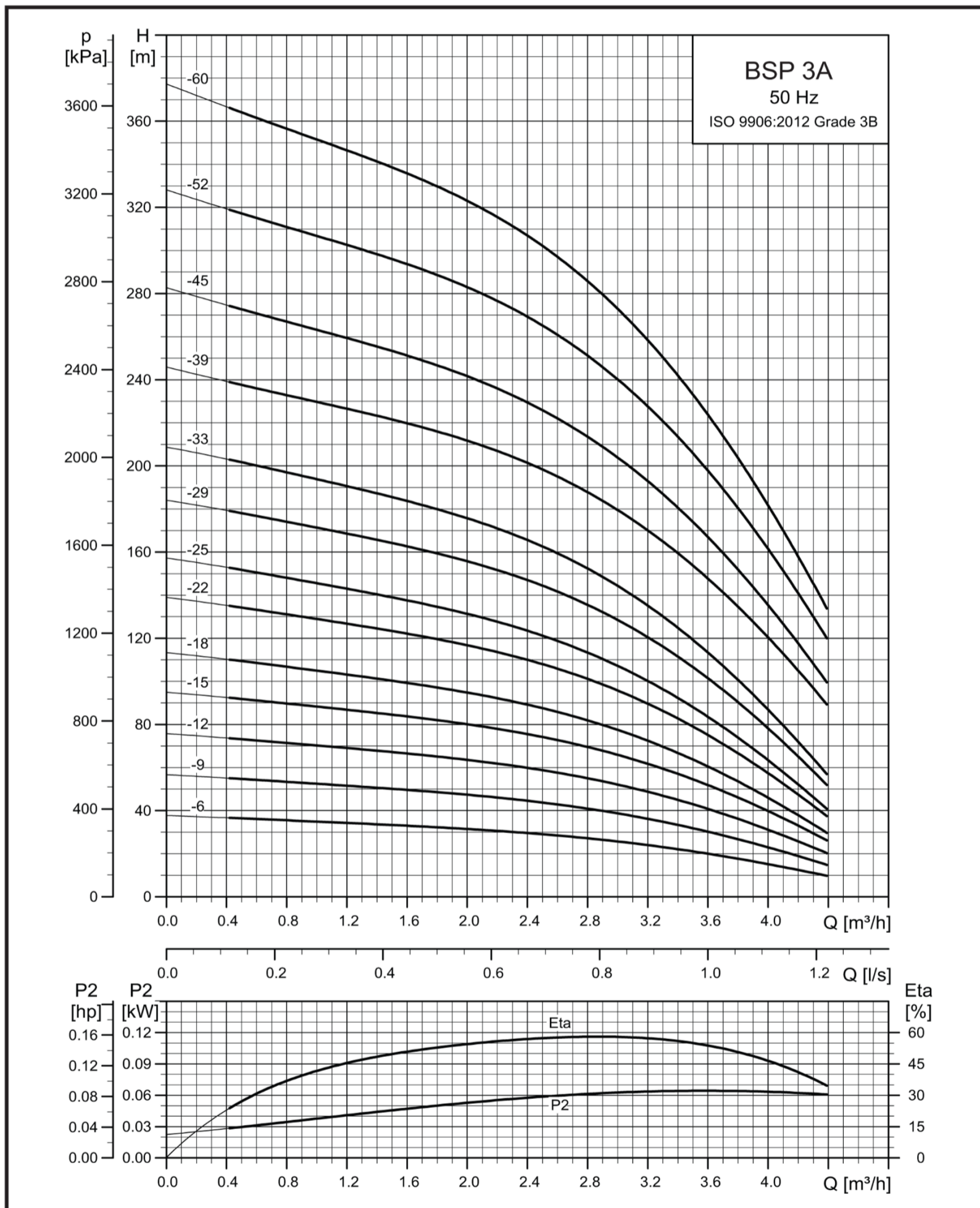


SUBMERSIBLE PUMP PERFORMANCE CHART

BORANA PUMPS PERFORMANCE CHART															
BSP-3A				DISCHARGE (Q)											
				m3/h		0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4
				l/min.		0	16.7	23.4	30.1	33.4	40.1	46.8	56.8	66.8	73.5
MODEL	CONNECTION	MOTOR RATING		I-	3-	TOTAL HEAD IN (m)									
		[kW]	[HP]	[A]	[A]										
BSP 3-06	RP11/4	0.37	0.5	2.9	1.4	38	35	34	32	31	30	27	22	15	12
BSP 3-09		0.55	0.75	4	2.2	57	54	51	49	47	45	41	33	23	19
BSP 3-12		0.75	1	5.5	2.3	76	70	68	65	64	60	55	45	31	26
BSP 3-15		1.1	1.5	8.2	3.4	95	87	85	82	80	76	70	57	40	33
BSP 3-18		1.1	1.5	8.2	3.4	113	105	101	97	95	89	82	67	46	38
BSP 3-22		1.5	2	10.2	4.2	139	129	125	120	117	110	101	83	57	47
BSP 3-25		1.5	2	10.2	4.2	157	145	140	135	131	124	113	92	63	52
BSP 3-29		2.2	3	14	5.5	184	171	166	159	156	147	136	111	78	65
BSP 3-33		2.2	3	14	5.5	209	194	187	180	176	166	152	125	87	72
BSP 3-39		3	4		7.9	246	230	223	216	212	201	188	160	120	105
BSP 3-45		3	4		7.9	283	264	255	247	242	229	214	181	135	118
BSP 3-52		4	5.5		9.6	328	308	298	289	283	269	251	214	161	141
BSP 3-60		4	5.5		9.6	377	350	341	330	323	307	286	242	182	158

SUBMERSIBLE PUMP PERFORMANCE CURVE

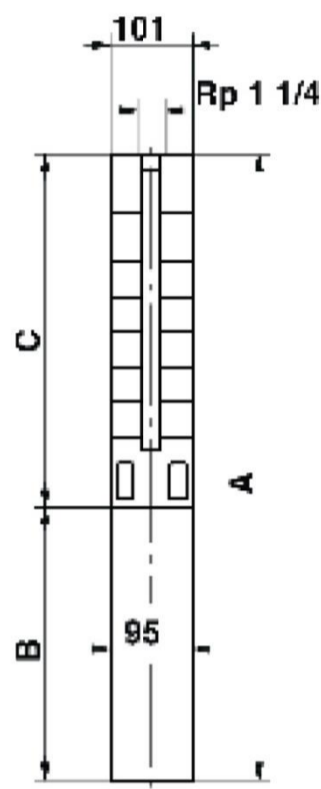
3.3 BSP 3A - Performance curve



SUBMERSIBLE PUMP TECHNICAL DATA

BSP 3A - Technical Data

Dimensions and weights



101 mm = Maximum diameter of pump inclusive of cable guard and motor.

Pump type	Motor			Dimensions [mm]				Net weight [kg]	
	Type	Power [kW]	C	B		A		1x230V	3x230V 3x400V
				1x230V	3x230V 3x400V	1x230V	3x230V 3x400V		
BSP 3A-6*	BM 4	0.37	281	256	226	537	507	10	9
BSP 3A-6N	BM 4	2.2	326	573		899		26	
BSP 3A-6N	BM 4	0.75	326		398		724		18
BSP 3A-9*	BM 4	0.55	344	291	241	635	585	12	10
BSP 3A-9N	BM 4	2.2	389	573		962		27	
BSP 3A-9N	BM 4	0.75	389		398		787		19
BSP 3A-12*	BM 4	0.75	407	306	276	713	683	13	12
BSP 3A-12N	BM 4	2.2	452	573		1025		28	
BSP 3A-12N	BM 4	0.75	452		398		850		20
BSP 3A-15*	BM 4	1.1	470	346	306	816	776	16	14
BSP 3A-15N	BM 4	2.2	515	573		1088		29	
BSP 3A-15N	BM 4	1.1	515		413		928		22
BSP 3A-18*	BM 4	1.1	533	346	306	879	839	16	15
BSP 3A-18N	BM 4	2.2	578	573		1151		30	
BSP 3A-18N	BM 4	1.1	578		413		991		23
BSP 3A-22*	BM 4	1.5	617	346	346	963	963	18	17
BSP 3A-22N	BM 4	2.2	662	573		1235		31	
BSP 3A-22N	BM 4	1.5	662		413		1075		24
BSP 3A-25*	BM 4	1.5	680	346	346	1026	1026	18	18
BSP 3A-25N	BM 4	2.2	725	573		1298		32	
BSP 3A-25N	BM 4	1.5	725		413		1138		25
BSP 3A-29*	BM 4	2.2	764	573		1337		29	
BSP 3A-29*	BM 4	2.2	764		346		1110		20
BSP 3A-29N	BM 4	2.2	809	573	453	1382	1262	33	28
BSP 3A-33*	BM 4	2.2	848	573		1421		30	
BSP 3A-33*	BM 4	2.2	848		346		1194		21
BSP 3A-33N	BM 4	2.2	893	573	453	1466	1346	34	29
BSP 3A-39	BM 4	3.0	1019		493		1512		32
BSP 3A-45	BM 4	3.0	1145		493		1638		34
BSP 3A-52	BM 4	4.0	1292		573		1865		41
BSP 3A-60	BM 4	4.0	1460		573		2033		43

* Pumps with spline shaft are only available in stainless steel AISI 304.

Note: All other pumps listed above are also available in N- and R-versions. See page 3.

Important Note:

- Performance May Vary Depending Upon Voltage, Frequency and Field Conditions.

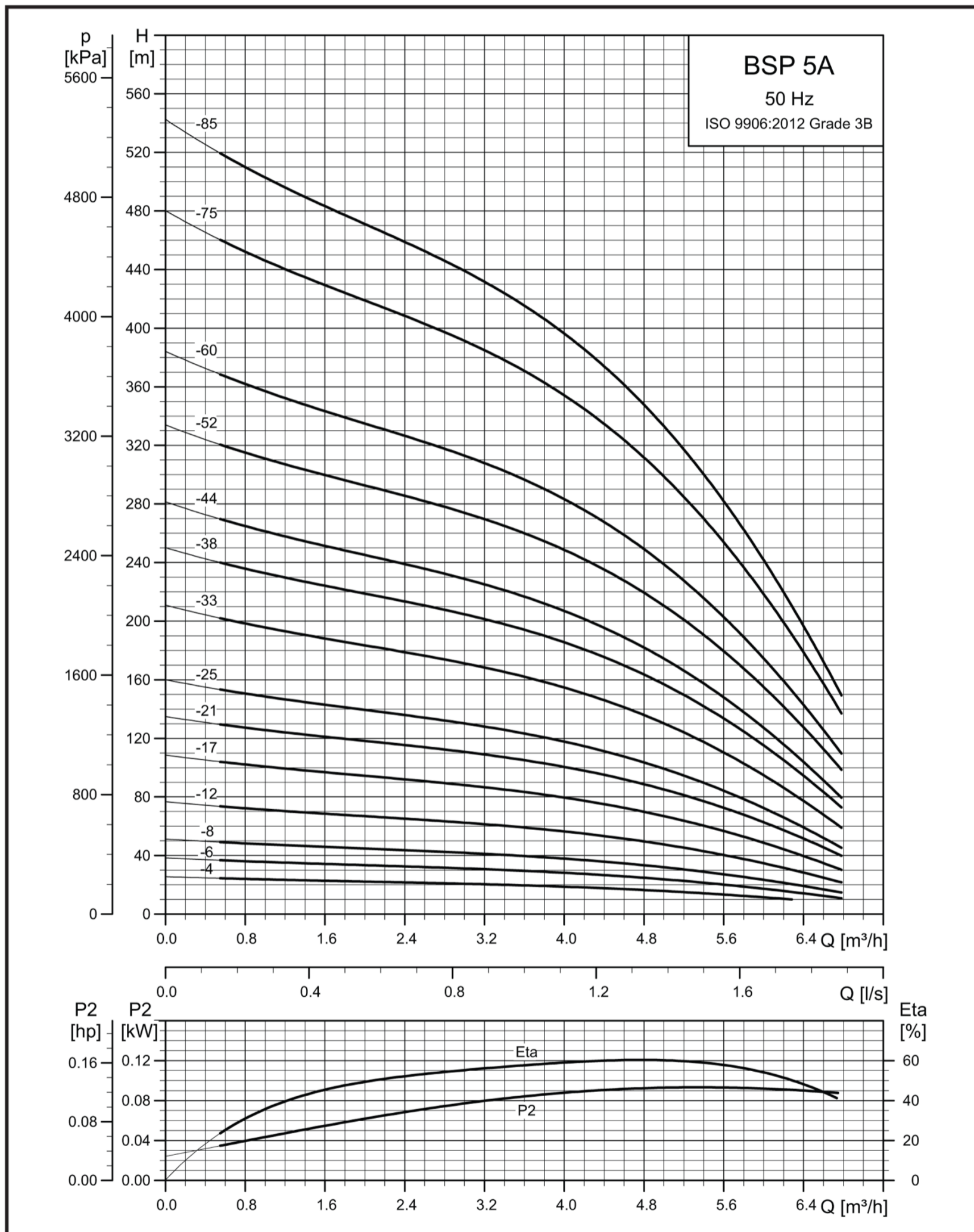
Price List & Technical Data May Change Without Prior Notice.

SUBMERSIBLE PUMP PERFORMANCE CHART

BORANA PUMPS PERFORMANCE CHART																		
BSP-5A				DISCHARGE (Q)														
				m3/h	0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4	5	6	6.7	
				l/min.	0	16.7	23.4	30.1	33.4	40.1	46.8	56.8	66.8	73.5	83.5	100.2	111.6	
MODEL	CONNECTION	MOTOR RATING		I-	3-	TOTAL HEAD IN (m)												
		[kW]	[HP]	[A]	[A]													
BSP 5-04	Rp 1½	0.37	0.5	2.9	1.4	26	24	23	23	22	22	21	20	19	18	16	11	9
BSP 5-06		0.55	0.75	4	2.2	38	36	35	34	33	33	32	30	28	26	24	17	11
BSP 5-08		0.75	1	5.5	2.3	51	48	47	46	45	44	43	40	38	36	32	23	15
BSP 5-12		1.1	1.5	8.2	3.4	77	72	70	68	67	65	63	60	56	54	47	35	23
BSP 5-17		1.5	2	10.2	4.2	109	100	97	96	94	92	90	85	80	75	67	49	32
BSP 5-21		2.2	3	14	5.5	135	126	122	120	118	115	112	106	100	95	85	63	42
BSP 5-25		2.2	3	14	5.5	160	150	145	141	139	135	131	125	118	112	99	72	48
BSP 5-33		3	4		7.9	211	195	190	186	183	179	173	166	155	148	130	95	62
BSP 5-38		4	5.5		9.6	250	233	229	221	219	215	209	199	186	177	157	115	76
BSP 5-44		4	5.5		9.6	281	260	257	250	245	240	232	220	207	195	174	127	84
BSP 5-52		5.5	7.5		13.6	334	310	302	296	293	285	280	267	249	238	210	155	110
BSP 5-60		5.5	7.5		13.6	384	360	345	339	335	325	319	303	283	269	238	175	130

SUBMERSIBLE PUMP PERFORMANCE CURVE

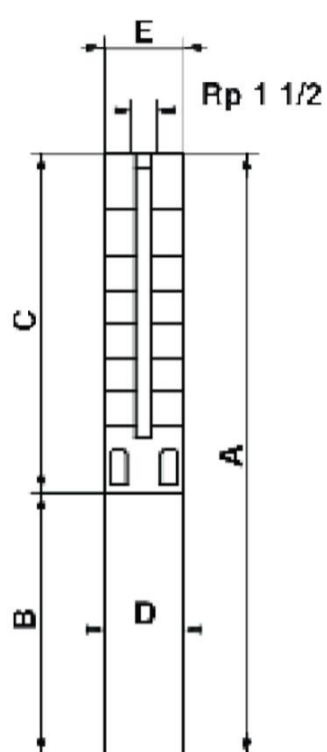
3.4 BSP 5A - Performance curve



SUBMERSIBLE PUMP TECHNICAL DATA

BSP 5A - Technical Data

Dimensions and weights



BSP 5A-75 and BSP 5A-85 are mounted in sleeve for R 1 1/2 connection.

Pump type	Motor		Dimensions [mm]						Net weight [kg]		
	Type	Power [kW]	C	B		A		D	E	1x230V	3x230V 3x400V
				1x230V	3x230V 3x400V	1x230V	3x230V 3x400V				
BSP 5A-4*	BM 4	0.37	240	256	226	496	466	95	101	10	8
BSP 5A-4N	BM 4	2.2	284	573		857		95	101	25	
BSP 5A-4N	BM 4	0.75	284		398		682	95	101		17
BSP 5A-6*	BM 4	0.55	282	291	241	573	523	95	101	11	10
BSP 5A-6N	BM 4	2.2	326	573		899		95	101	26	
BSP 5A-6N	BM 4	0.75	326		398		724	95	101		18
BSP 5A-8*	BM 4	0.75	324	306	276	630	600	95	101	13	11
BSP 5A-8N	BM 4	2.2	368	573		941		95	101	27	
BSP 5A-8N	BM 4	0.75	368		398		766	95	101		19
BSP 5A-12*	BM 4	1.1	408	346	306	754	714	95	101	15	13
BSP 5A-12N	BM 4	2.2	452	573		1025		95	101	28	
BSP 5A-12N	BM 4	1.1	452		413		865	95	101		21
BSP 5A-17*	BM 4	1.5	513	346	346	859	859	95	101	17	16
BSP 5A-17N	BM 4	2.2	557	573		1130		95	101	29	
BSP 5A-17N	BM 4	1.5	557		413		970	95	101		22
BSP 5A-21*	BM 4	2.2	597	573		1170		95	101	27	
BSP 5A-21*	BM 4	2.2	597		346		943	95	101		18
BSP 5A-21N	BM 4	2.2	641	573	453	1214	1094	95	101	30	25
BSP 5A-25*	BM 4	2.2	681	573		1254		95	101	28	
BSP 5A-25*	BM 4	2.2	681		346		1027	95	101		19
BSP 5A-25N	BM 4	2.2	725	573	453	1298	1178	95	101	32	27
BSP 5A-33*	BM 4	3.0	849		493		1342	95	101		26
BSP 5A-33N	BM 4	3.0	893		493		1386	95	101		30
BSP 5A-38	BM 4	4.0	998		573		1571	95	101		36
BSP 5A-44	BM 4	4.0	1124		573		1697	95	101		38
BSP 5A-52	BM 4	5.5	1292		673		1965	95	101		46
BSP 5A-60	BM 4	5.5	1460		673		2133	95	101		48
BSP 5A-52	BSF 6	5.5	1354		541		1895	138	138		60
BSP 5A-60	BSF 6	5.5	1522		541		2063	138	138		63
BSP 5A-75	BSF 6	7.5	2146		571		2717	138	140		86
BSP 5A-85	BSF 6	7.5	2356		571		2927	138	140		92

E = Maximum diameter of pump inclusive of cable guard and motor.

* Pumps with spline shaft are only available in stainless steel AISI 304.

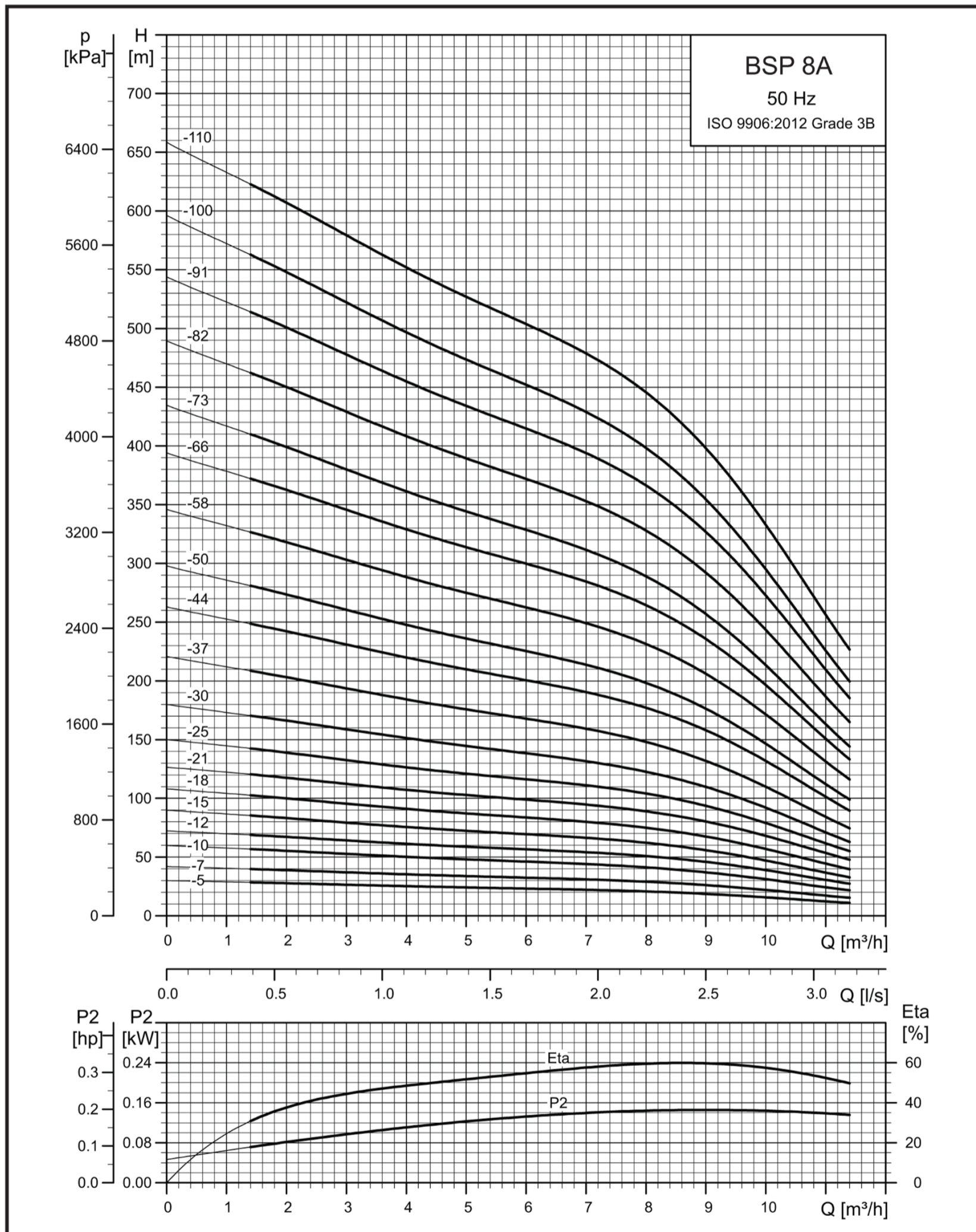
Note: All other pump listed above are also available in N- and R-versions. See page 3.
Pumps mounted in sleeve are only available in standard and N-versions.

SUBMERSIBLE PUMP PERFORMANCE CHART

BORANA PUMPS PERFORMANCE CHART														
BSP-8B		DISCHARGE (Q)												
		m'/h		0	1.4	2	4	6	8	9	10	11		
		1/min.		0	23.4	33.4	66.8	100.2	133.3	150	167	183.7		
MODEL	CONNECTION	MOTOR RATING		1-	3-	TOTAL HEAD IN (m)								
		[kW]	[HP]	[A]	[A]									
BSP 8-05	Rp 2	0.75	1	5.5	2.3	30	29	27	25	23	21	19	16	12
BSP 8-07		1.1	1.5	8.2	3.4	42	40	38	35	32	29	26	22	17
BSP 8-10		1.5	2	10.2	4.2	60	57	55	50	46	41	37	32	24
BSP 8-12		2.2	3	14	5.5	72	68	66	61	57	51	46	39	31
BSP 8-15		2.2	3	14	5.5	90	85	82	76	70	62	56	47	37
BSP 8-18		3	4		7.9	108	102	99	91	84	75	67	57	45
BSP 8-21		4	5.5		9.6	127	120	117	107	99	89	80	68	53
BSP 8-25		4	5.5		9.6	150	142	139	126	116	104	94	79	62
BSP 8-30		5.5	7.5		13.6	180	170	165	151	138	123	110	92	71
BSP 8-37		5.5	7.5		13.6	221	210	202	184	168	148	132	110	84

SUBMERSIBLE PUMP PERFORMANCE CURVE

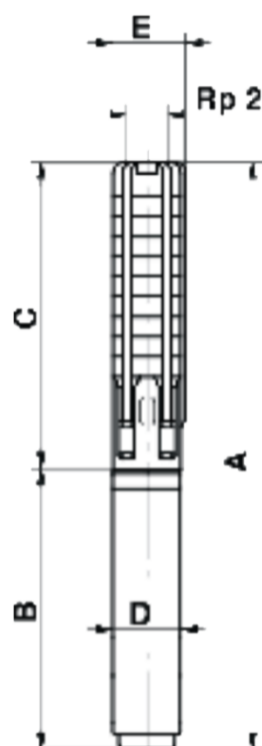
3.5 BSP 8A - Performance curve



SUBMERSIBLE PUMP TECHNICAL DATA

BSP 8A - Technical Data

Dimensions and weights



BSP 8A-58(B) to BSP 8A-110(N) are mounted in sleeve for R 2 connection.

Pump type	Motor		Dimensions [mm]						Net weight [kg]		
	Type	Power [kW]	C	B		A		D	E	Net weight [kg]	
				1x230V	3x230V 3x400V	1x230V	3x230V 3x400V			1x230V	3x230V 3x400V
BSP 8A-5	BM 4	0.75	409	306	276	715	685	95	101	15	13
BSP 8A-5	BM 4	2.2	409	573		982		95	101	27	
BSP 8A-5	BM 4	0.75	409		398		807	95	101		19
BSP 8A-7	BM 4	1.1	493	346	306	839	799	95	101	17	16
BSP 8A-7	BM 4	2.2	493	573		1066		95	101	28	
BSP 8A-7	BM 4	1.1	493		413		906	95	101		21
BSP 8A-10	BM 4	1.5	619	346	346	965	965	95	101	19	19
BSP 8A-10	BM 4	2.2	619	573		1192		95	101	30	
BSP 8A-10	BM 4	1.5	619		413		1032	95	101		23
BSP 8A-12	BM 4	2.2	703	573		1276		95	101	30	
BSP 8A-12	BM 4	2.2	703		346		1049	95	101		21
BSP 8A-12	BM 4	2.2	703	573	453	1276	1156	95	101	30	25
BSP 8A-15	BM 4	2.2	829	573		1402		95	101	32	
BSP 8A-15	BM 4	2.2	829		346		1175	95	101		23
BSP 8A-15	BM 4	2.2	829	573	453	1402	1282	95	101	32	27
BSP 8A-18	BM 4	3.0	955		493		1448	95	101		29
BSP 8A-21	BM 4	4.0	1081		573		1654	95	101		35
BSP 8A-25	BM 4	4.0	1249		573		1822	95	101		37
BSP 8A-30	BM 4	5.5	1459		673		2132	95	101		45
BSP 8A-37	BM 4	5.5	1753		673		2426	95	101		49
BSP 8A-30	BSF 6	5.5	1521		541		2062	138	138		56
BSP 8A-37	BSF 6	5.5	1521		541		2356	138	138		60
BSP 8A-44	BSF 6	7.5	1815		773		2824	95	101		60
BSP 8A-44	BSF 6	7.5	2109		571		2680	138	138		66
BSP 8A-50	BSF 6	7.5	2303		773		3076	95	101		64
BSP 8A-50	BSF 6	7.5	2361		571		2932	138	138		70
BSP 8A-58	BSF 6	9.2	3013		601		3614	138	140		104
BSP 8A-66	BSF 6	11.0	3349		631		3980	138	140		114
BSP 8A-73	BSF 6	11.0	3643		631		4274	138	140		120
BSP 8A-82	BSF 6	13.0	4021		661		4682	138	140		131
BSP 8A-91	BSF 6	15.0	4399		696		5095	138	140		143
BSP 8A-100	BSF 6	15.0	4777		696		5473	138	140		150
BSP 8A-110	BSF 6	18.5	5197		751		5948	138	140		164

E = Maximum diameter of pump inclusive of cable guard and motor.
 Note: The pump types above are also available in N- and R-versions. See page 3.
 Pumps mounted in sleeve are only available in standard and N-versions.

Important Note:

- Performance May Vary Depending Upon Voltage, Frequency and Field Conditions
- Price List & Technical Data May Change Without Prior Notice.