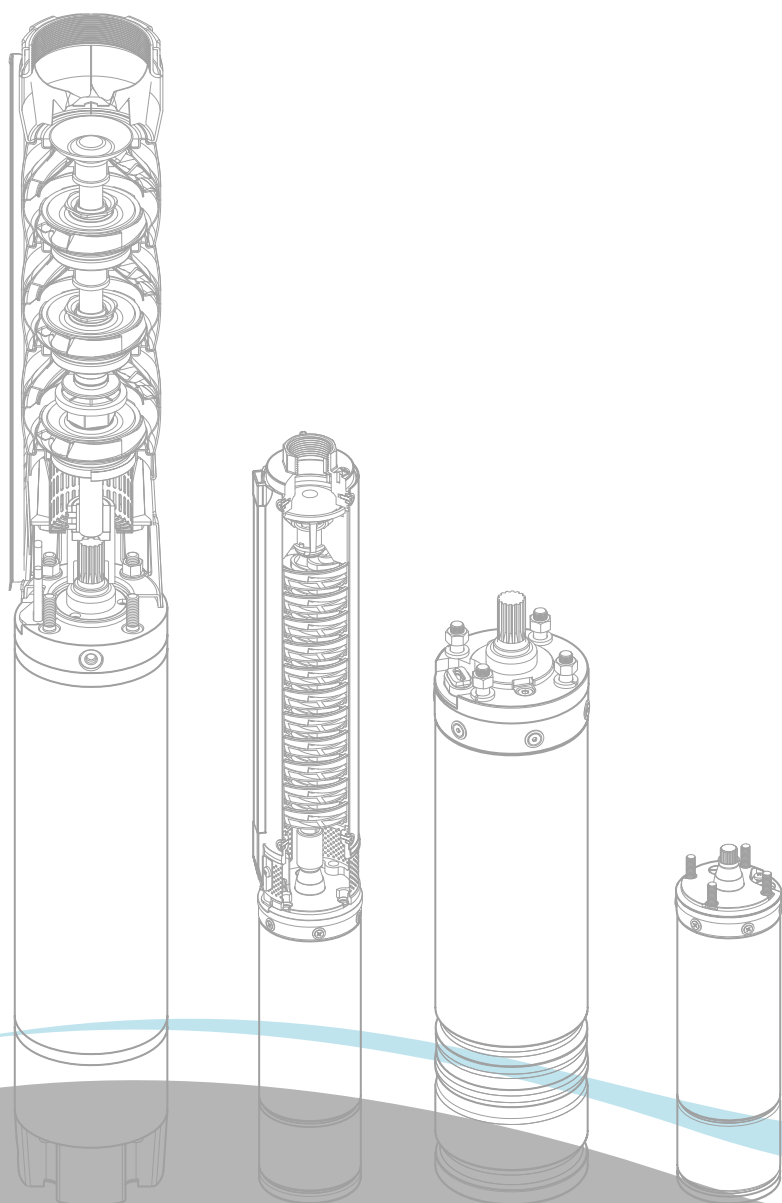


Elettropompe Sommerse

Submersed Electropump

Technical Catalogue

Catalogo Tecnico(50Hz)



IRCEM
WATER PUMPS

BH SERIES 4" SUBMERSIBLE ELECTRIC PUMPS



- State-of-art hydraulic design and the choice of best material ensure high efficiency, best performance and reliability.

APPLICATIONS

- Water supply from deep well.
- Agricultural irrigation.
- Pressure boosting.
- Fire-fighting.
- Industrial application.

SPECIFICATIONS

- Delivery: up to 22 m³/h at 2850 rpm.
- Head: up to 347 m at 2850 rpm.
- Maximum pump overall diameter (cable cover included): 99 mm.
- Maximum permissible quantity of sand: 150 g/m³.
- 1BH , 2BH , 3BH, 4BH , 6BH versions: delivery port Rp1"1/4.
- 8BH , 12BH , 16BH versions: delivery port Rp2" .

MOTOR

- 4OS single-phase version:
from 0,25 to 2,2 kW, 220 V, 50 Hz.
- 4OS three-phase version:
from 0,37 to 2,2 kW, 220 V, 50 Hz.
from 0,37 to 7,5 kW, 380 V, 50 Hz.
- Horizontal operation: 4OS up to 2,2 kW.
- Maximum temperature of water in contact with motor: 35 °C .

CONSTRUCTION & CHARACTERISTICS

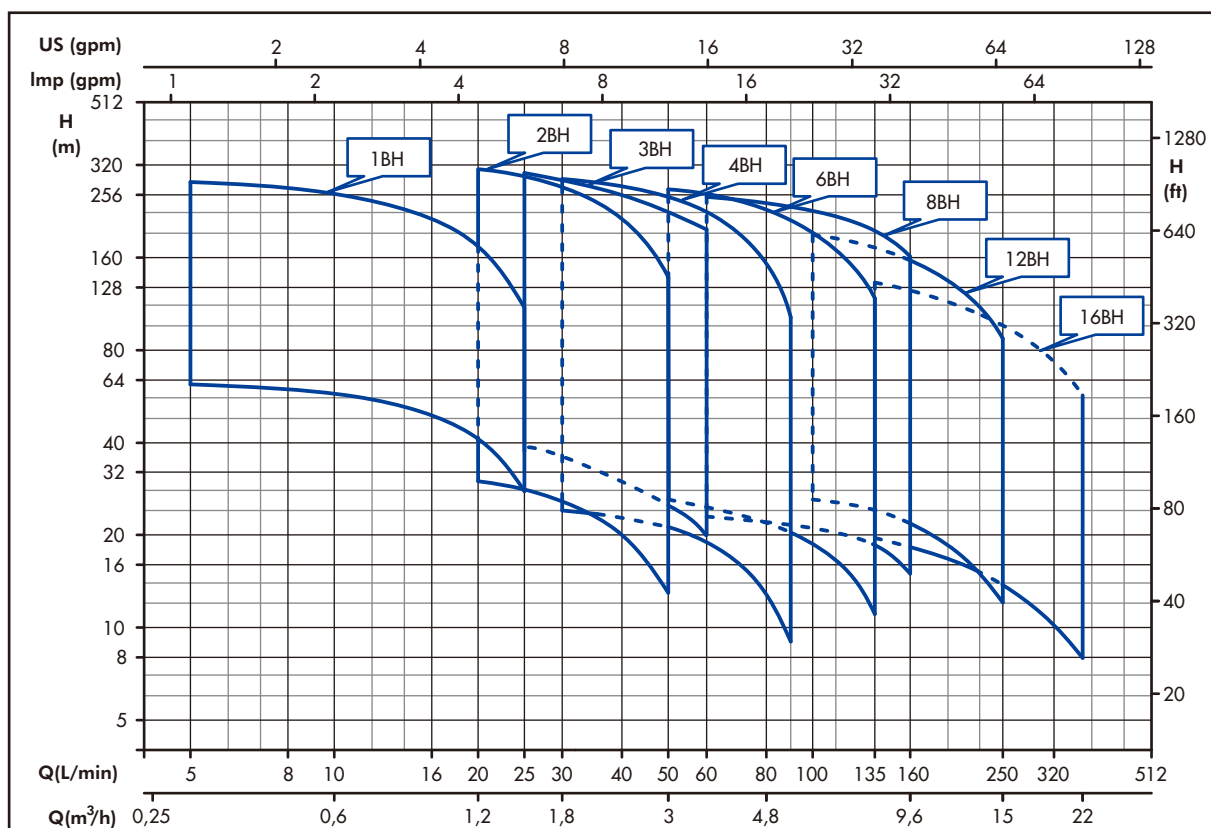
- Easy to maintain and rapid to install.
- Abrasion resistant construction, floating impellers ensure optimum resistance to abrasion.
- The delivery port and suction support are made of precision-cast stainless steel, guarantee resistance to corrosion, durability and a sturdy coupling to the motor.
- The hexagonal pump shaft guarantees an effective impeller driving.
- A stainless steel non-return valve is fitted at the discharge to prevent back flow of water and alleviate water hammer to the pump, safeguarding impellers and diffusers.
- The BH series pumps can be coupled with the 4OS motors.
- Vertical and horizontal installation.
- Standard and special versions available.

OPTIONAL FEATURES

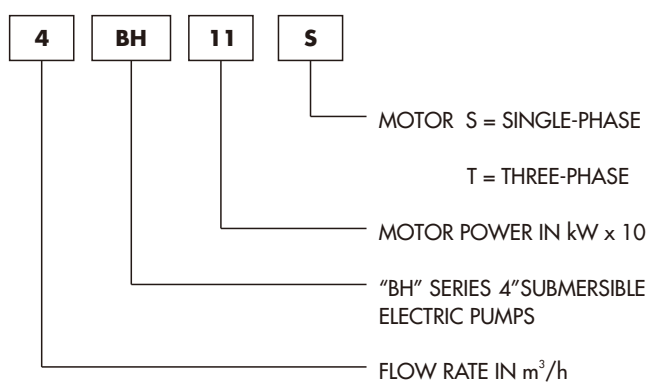
- Different voltage and frequency.
- Different materials.

BH SERIES

HYDRAULIC PERFORMANCE RANGE AT 50 Hz



IDENTIFICATION CODE



EXAMPLE OF PUMP TYPE

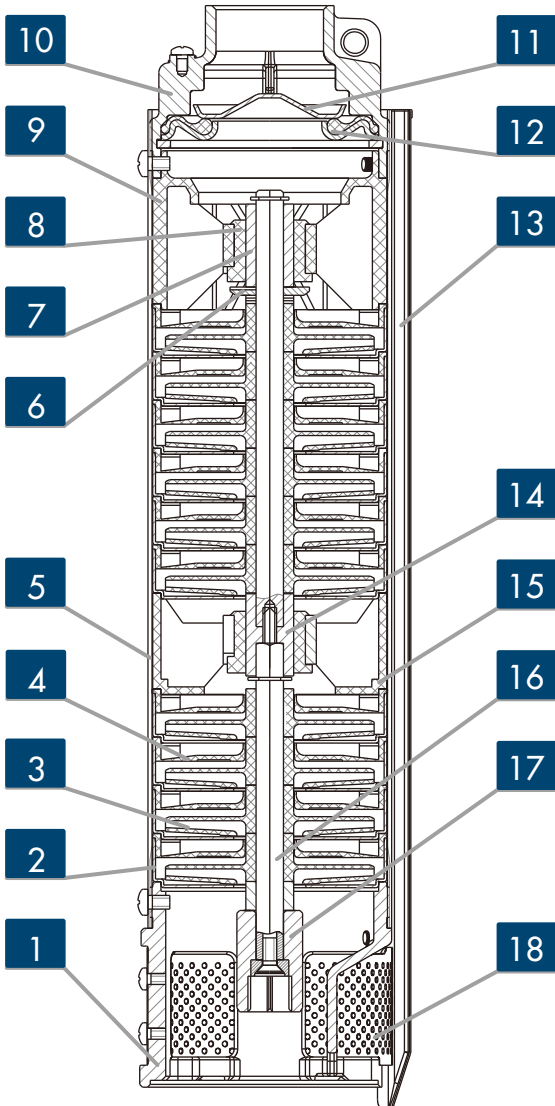
4BH11S

BH series 4" submersible electric pump with flow rate of $4 m^3/h$; and single-phase 1,1 kW (1,5 Hp) motor.



1BH-4BH SERIES

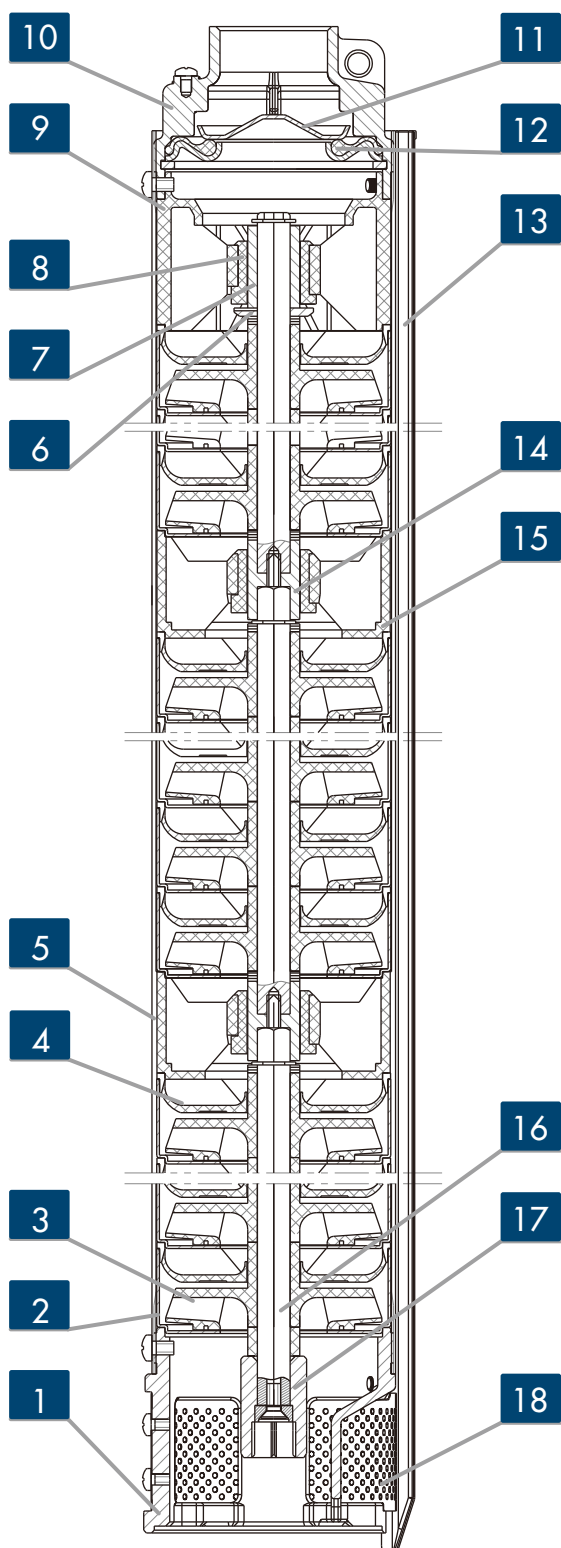
PUMP SECTION AND LIST OF MAIN COMPONENTS MATERIAL



REF.N.	PART	MATERIAL	STANDARD
1	Lower support	Precision-cast stainless steel	AISI 304
2	Stage housing	Stainless steel	AISI 304
3	Impeller	Noryl® PPO	-----
4	Diffuser	Noryl® PPO	-----
5	Outer sleeve	Stainless steel	AISI 304
6	Thrust bearing	Stainless steel	AISI 304
7	Shaft sleeve	Stainless steel	AISI 304
8	Bush bearing	TPU	-----
9	Upper support	Noryl® PPO	-----
10	Delivery port	Precision-cast stainless steel	AISI 304
11	Non-return valve	Stainless steel	AISI 304
12	Valve support with gasket	Stainless steel & NBR	AISI 304 & -----
13	Cable guard	Stainless steel	AISI 304
14	Intermediate shaft sleeve	Stainless steel	AISI 304
15	Intermediate support	Noryl® PPO	-----
16	Shaft	Stainless steel	AISI 420
17	Coupling	Stainless steel	AISI 304
18	Filter	Stainless steel	AISI 304

6BH-8BH SERIES

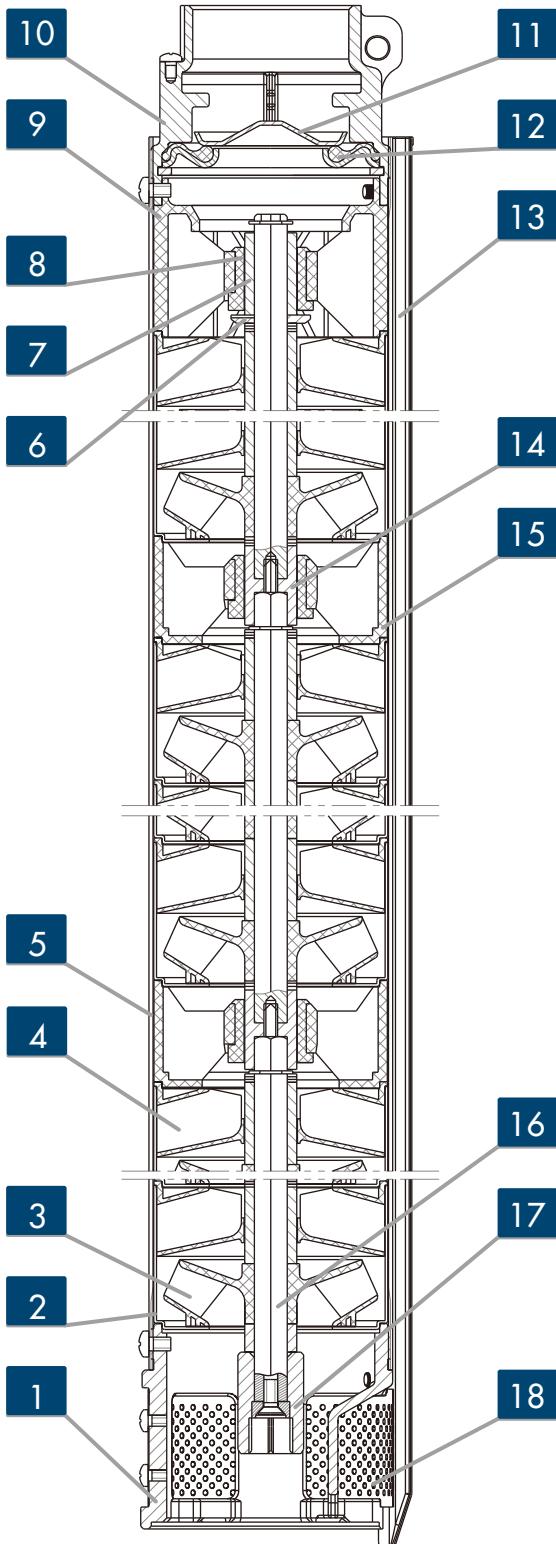
PUMP SECTION AND LIST OF MAIN COMPONENTS MATERIAL



REF.N.	PART	MATERIAL	STANDARD
1	Lower support	Precision-cast stainless steel	AISI 304
2	Stage housing	Stainless steel	AISI 304
3	Impeller	Noryl® PPO	-----
4	Diffuser	Noryl® PPO	-----
5	Outer sleeve	Stainless steel	AISI 304
6	Thrust bearing	Stainless steel	AISI 304
7	Shaft sleeve	Stainless steel	AISI 304
8	Bush bearing	TPU	-----
9	Upper support	Noryl® PPO	-----
10	Delivery port	Precision-cast stainless steel	AISI 304
11	Non-return valve	Stainless steel	AISI 304
12	Valve support with gasket	Stainless steel & NBR	AISI 304 & -----
13	Cable guard	Stainless steel	AISI 304
14	Intermediate shaft sleeve	Stainless steel	AISI 304
15	Intermediate support	Noryl® PPO	-----
16	Shaft	Stainless steel	AISI 420
17	Coupling	Stainless steel	AISI 304
18	Filter	Stainless steel	AISI 304

12BH SERIES

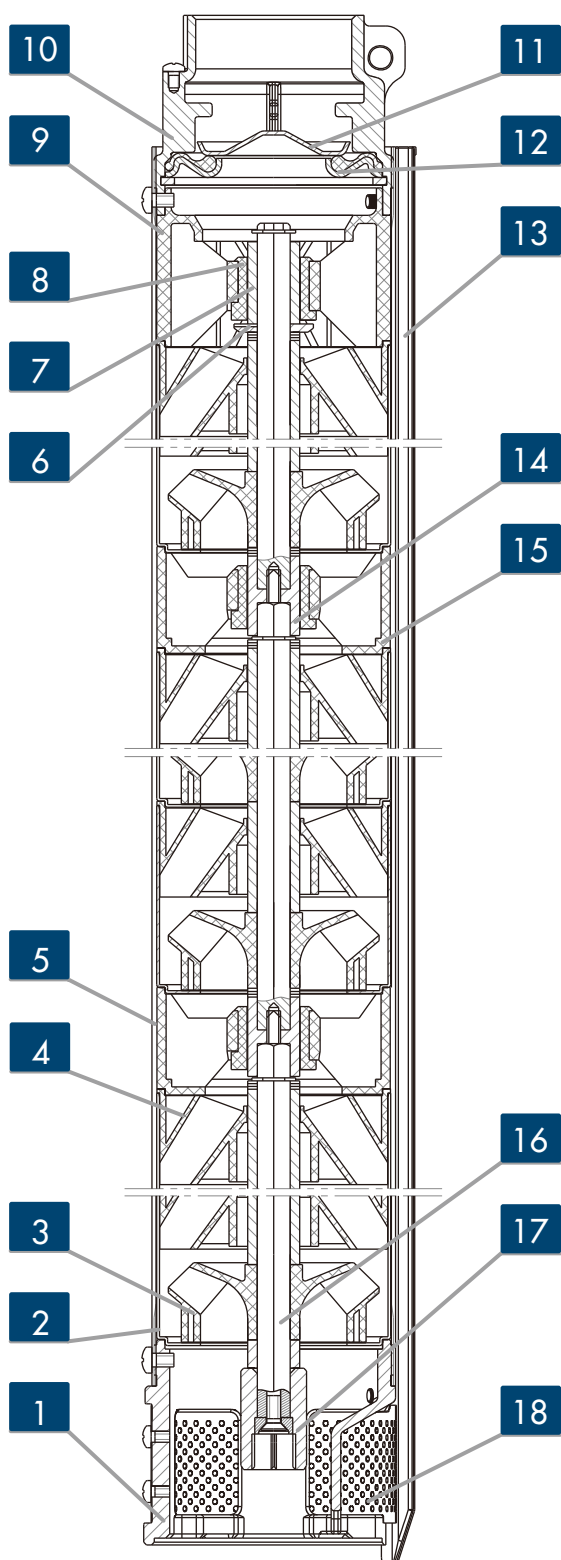
PUMP SECTION AND LIST OF MAIN COMPONENTS MATERIAL



REF.N.	PART	MATERIAL	STANDARD
1	Lower support	Precision-cast stainless steel	AISI 304
2	Stage housing	Stainless steel	AISI 304
3	Impeller	Noryl® PPO	-----
4	Diffuser	Noryl® PPO	-----
5	Outer sleeve	Stainless steel	AISI 304
6	Thrust bearing	Stainless steel	AISI 304
7	Shaft sleeve	Stainless steel	AISI 304
8	Bush bearing	TPU	-----
9	Upper support	Noryl® PPO	-----
10	Delivery port	Precision-cast stainless steel	AISI 304
11	Non-return valve	Stainless steel	AISI 304
12	Valve support with gasket	Stainless steel & NBR	AISI 304 & -----
13	Cable guard	Stainless steel	AISI 304
14	Intermediate shaft sleeve	Stainless steel	AISI 304
15	Intermediate support	Noryl® PPO	-----
16	Shaft	Stainless steel	AISI 420
17	Coupling	Stainless steel	AISI 304
18	Filter	Stainless steel	AISI 304

16BH SERIES

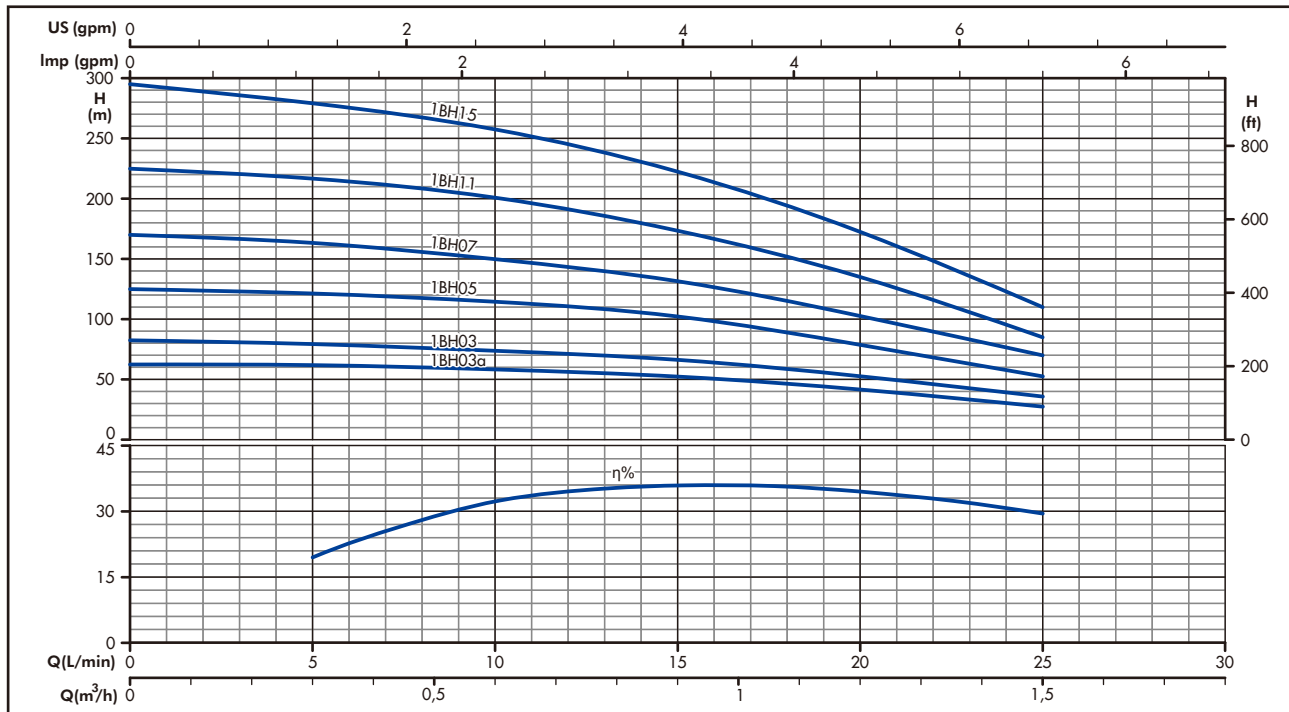
PUMP SECTION AND LIST OF MAIN COMPONENTS MATERIAL



REF.N.	PART	MATERIAL	STANDARD
1	Lower support	Precision-cast stainless steel	AISI 304
2	Stage housing	Stainless steel	AISI 304
3	Impeller	Noryl® PPO	-----
4	Diffuser	Noryl® PPO	-----
5	Outer sleeve	Stainless steel	AISI 304
6	Thrust bearing	Stainless steel	AISI 304
7	Shaft sleeve	Stainless steel	AISI 304
8	Bush bearing	TPU	-----
9	Upper support	Noryl® PPO	-----
10	Delivery port	Precision-cast stainless steel	AISI 304
11	Non-return valve	Stainless steel	AISI 304
12	Valve support with gasket	Stainless steel & NBR	AISI 304 & -----
13	Cable guard	Stainless steel	AISI 304
14	Intermediate shaft sleeve	Stainless steel	AISI 304
15	Intermediate support	Noryl® PPO	-----
16	Shaft	Stainless steel	AISI 420
17	Coupling	Stainless steel	AISI 304
18	Filter	Stainless steel	AISI 304

1BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

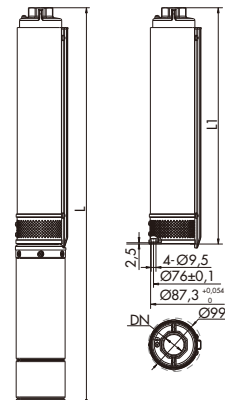


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY					
				l/min 0	5	10	15	20	25
				H=TOTAL HEAD METERS COLUMN OF WATER					
				m³/h 0	0,3	0,6	0,9	1,2	1,5
1BH03Sa	10	0,37	0,5	64	62	57	52	40	28
1BH03S	13	0,37	0,5	82	80	73	68	52	36
1BH03T									
1BH05S									
1BH05T	19	0,55	0,75	125	120	110	102	76	54
1BH07S	26	0,75	1	169	163	149	131	100	70
1BH07T									
1BH11S									
1BH11T	37	1,1	1,5	225	218	200	172	135	85
1BH15S	48	1,5	2	291	282	259	223	175	110
1BH15T									

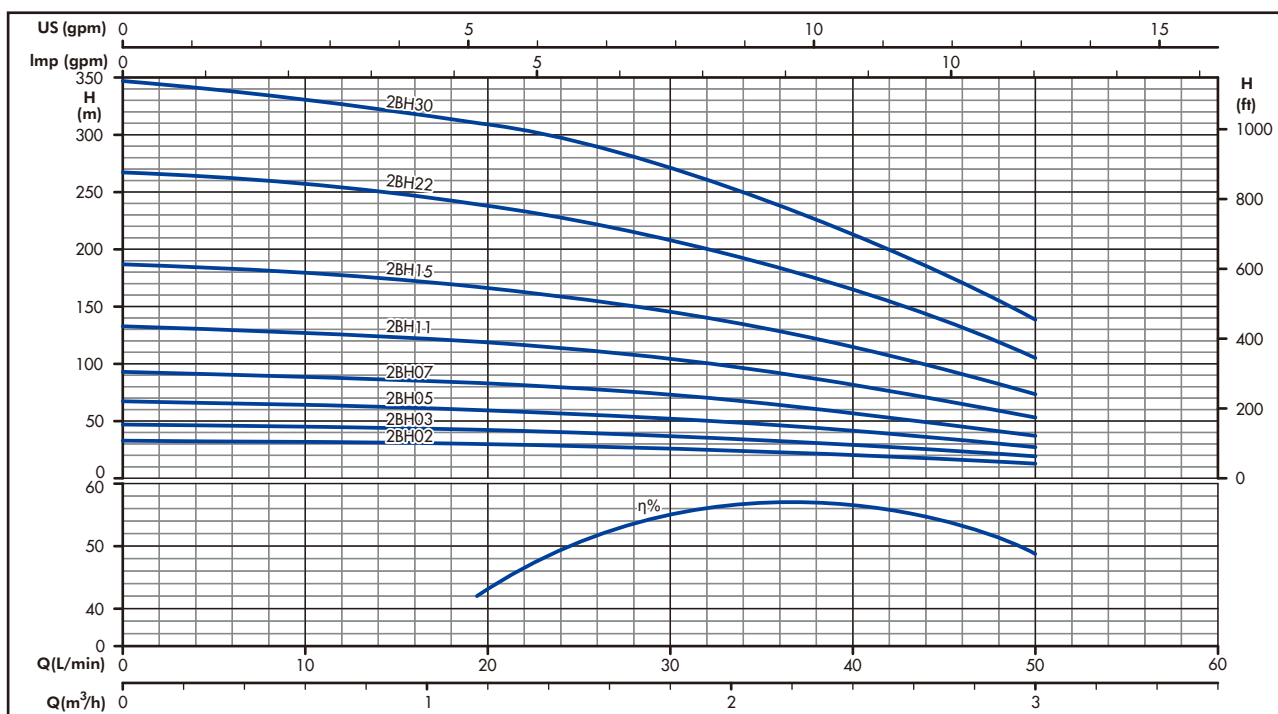
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
1BH03Sa	10	Rp1"1/4	321	647	3,5	11,7
1BH03S	13		367	693	4	12,2
1BH03T						
1BH05S						
1BH05T	19		460	796	5,1	13,1
1BH07S						
1BH07T						
1BH11S	37		774	1166	8,6	19,7
1BH11T						
1BH15S						
1BH15T	48		943	1360	10,6	22,1



2BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

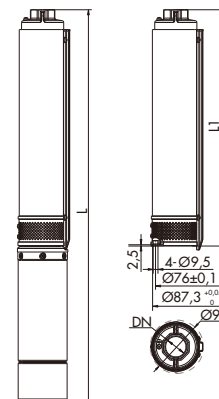


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY					
				l/min 0	20	25	30	40	50
				m3/h 0	1,2	1,5	1,8	2,4	3
				H=TOTAL HEAD METERS COLUMN OF WATER					
2BH02S	5	0,25	0,33	33	30	28	26	20	13
2BH03S	7	0,37	0,5	47	42	40	36	29	19
2BH03T									
2BH05S	10	0,55	0,75	67	60	56	52	41	27
2BH05T									
2BH07S	14	0,75	1	93	83	79	73	57	37
2BH07T									
2BH11S	20	1,1	1,5	133	119	113	104	82	53
2BH11T									
2BH15S	28	1,5	2	187	167	158	146	115	74
2BH15T									
2BH22S	40	2,2	3	267	238	226	208	164	106
2BH22T									
2BH30T	52	3	4	347	309	294	271	213	138

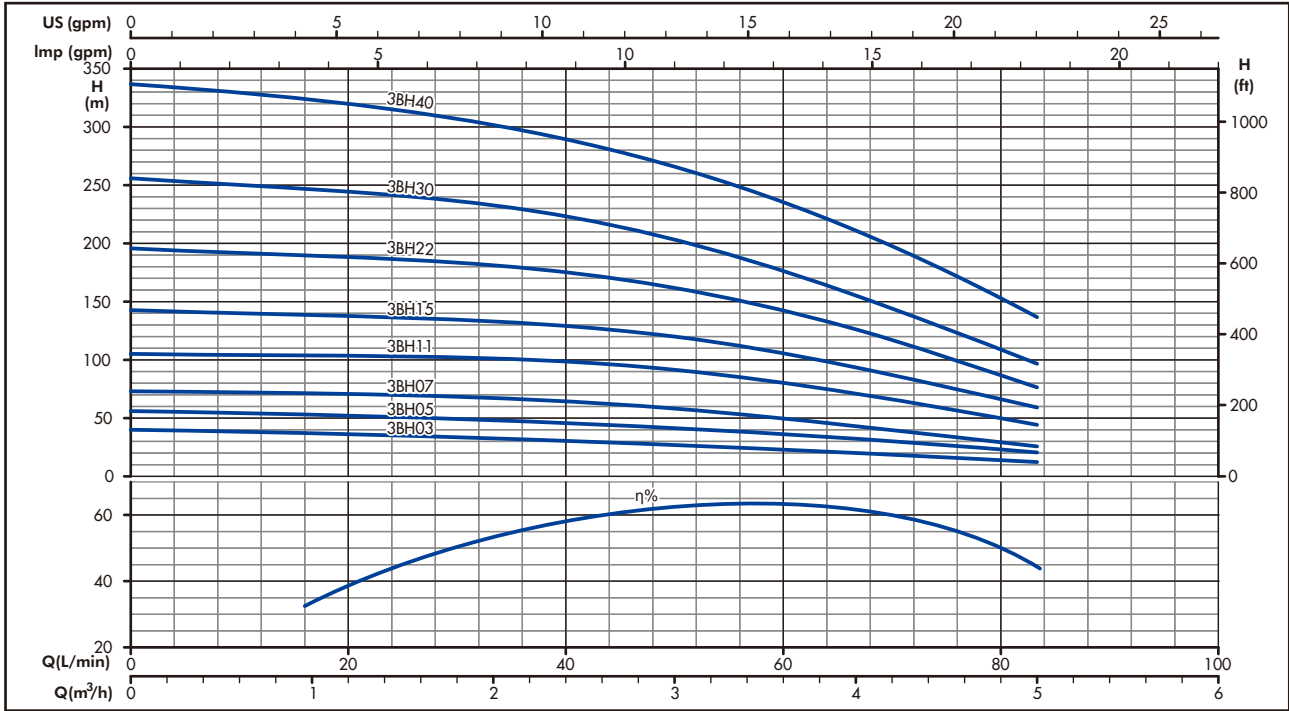
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
2BH02S	5	Rp1"1/4	258	574	2,3	10,1
2BH03S	7		294	620	2,7	10,9
2BH03T			620	10,5		
2BH05S	10		348	689	3,2	12,1
2BH05T				684		11,2
2BH07S	14		421	782	3,9	13,7
2BH07T				777		12,8
2BH11S	20		529	921	5	16,1
2BH11T				921		15,4
2BH15S	28		673	1105	6,4	19,4
2BH15T				1090		17,9
2BH22S	40		927	1472	9,1	26,8
2BH22T				1397		23,2
2BH30T	52		1143	1663	11,2	27,7



3BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

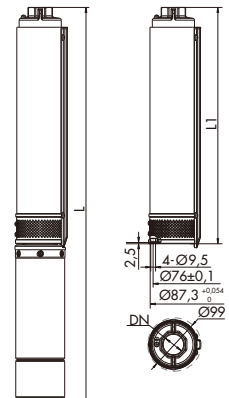


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY					
				l/min 0	17	33	50	67	84
				m³/h 0	1	2	3	4	5
				H=TOTAL HEAD METERS COLUMN OF WATER					
3BH03S	6	0,37	0,5	40	39	37	33	25	15
3BH03T									
3BH05S	8	0,55	0,75	53	52	50	43	33	19
3BH05T									
3BH07S	11	0,75	1	72	71	67	59	44	24
3BH07T									
3BH11S	16	1,1	1,5	108	107	103	90	69	43
3BH11T									
3BH15S	21	1,5	2	142	141	136	121	96	63
3BH15T									
3BH22S	30	2,2	3	196	195	185	164	126	78
3BH22T									
3BH30T	40	3	4	253	251	237	208	155	87
3BH40T	53	4	5,5	337	335	317	278	212	126

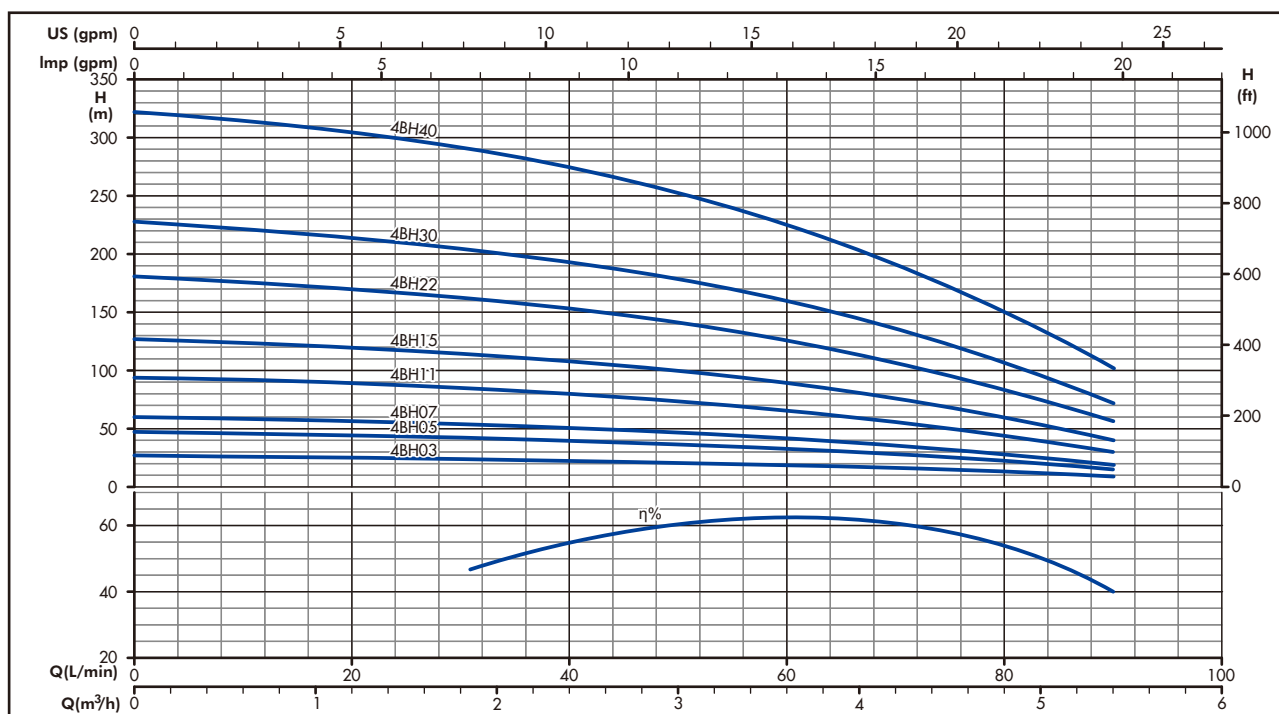
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
3BH03S	6	Rp1"1/4	298	624	2,7	10,9
3BH03T				624		10,5
3BH05S	8		341	682	3,2	12,1
3BH05T				677		11,2
3BH07S	11		406	767	4	13,8
3BH07T				762		12,9
3BH11S	16		515	907	4,9	16
3BH11T				907		15,3
3BH15S	21		623	1055	5,9	18,9
3BH15T				1040		17,4
3BH22S	30		855	1400	8,1	25,8
3BH22T				1325		22,2
3BH30T	40		1072	1592	10,3	26,8
3BH40T	53		1355	1949	12,9	33,3



4BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

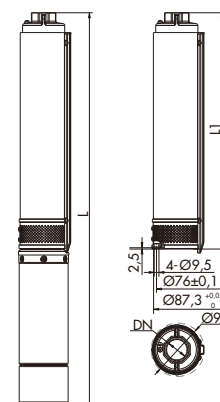


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY						
				l/min 0	30	40	50	60	80	90
				m ³ /h 0	1,8	2,4	3	3,6	4,8	5,4
				H=TOTAL HEAD METERS COLUMN OF WATER						
4BH03S	4	0,37	0,5	27	24	23	21	19	13	9
4BH03T										
4BH05S	7	0,55	0,75	47	42	40	37	33	22	15
4BH05T										
4BH07S	9	0,75	1	60	54	51	47	42	28	19
4BH07T										
4BH11S	14	1,1	1,5	94	84	80	74	66	44	30
4BH11T										
4BH15S	19	1,5	2	127	114	108	100	89	60	40
4BH15T										
4BH22S	27	2,2	3	181	162	154	142	127	85	57
4BH22T										
4BH30T	35	3	4	228	204	194	179	160	107	72
4BH40T	48	4	5,5	322	288	274	252	226	151	102

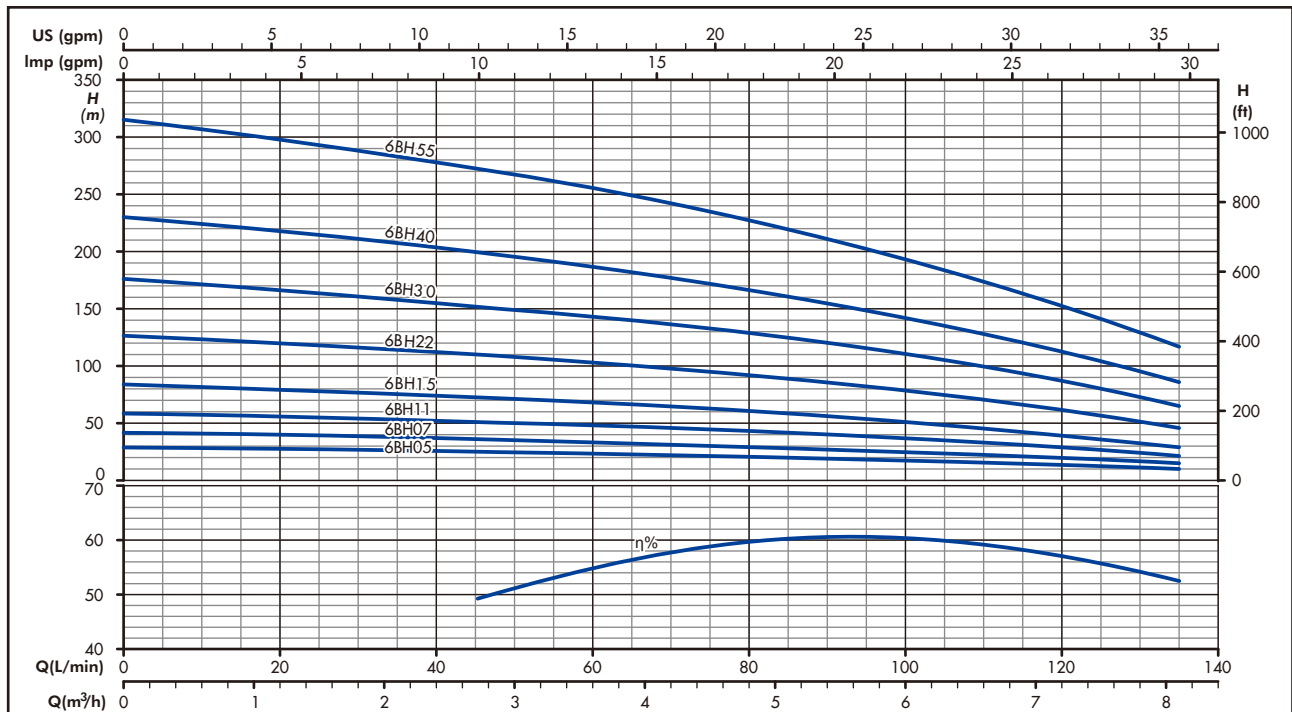
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
4BH03S	4	Rp1"1/4	254	580	2,2	10,4
4BH03T				580		10
4BH05S	7		319	660	2,8	11,7
4BH05T				655		10,8
4BH07S	9		362	723	3,2	13
4BH07T				718		12,1
4BH11S	14		471	863	4,2	15,3
4BH11T				863		14,6
4BH15S	19		579	1011	5,2	18,2
4BH15T				996		16,7
4BH22S	27		790	1335	7,4	25,1
4BH22T				1260		21,5
4BH30T	35		964	1484	9	25,5
4BH40T	48		1246	1840	11,6	33



6BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

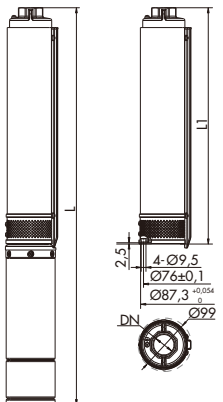


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY						
				l/min 0	60	75	90	105	120	135
				m3/h 0	3,6	4,5	5,4	6,3	7,2	8,1
				H=TOTAL HEAD METERS COLUMN OF WATER						
6BH05S	5	0,55	0,75	30	25	23	20	18	15	11
6BH05T										
6BH07S	7	0,75	1	43	35	32	28	24	20	15
6BH07T										
6BH11S	10	1,1	1,5	61	49	46	41	35	30	22
6BH11T										
6BH15S	14	1,5	2	85	69	64	57	50	41	31
6BH15T										
6BH22S	21	2,2	3	128	104	97	87	76	61	47
6BH22T										
6BH30T	29	3	4	177	143	132	119	105	85	66
6BH40T	38	4	5	232	188	172	156	136	112	86
6BH55T	52	5,5	7,5	317	257	235	213	185	152	118

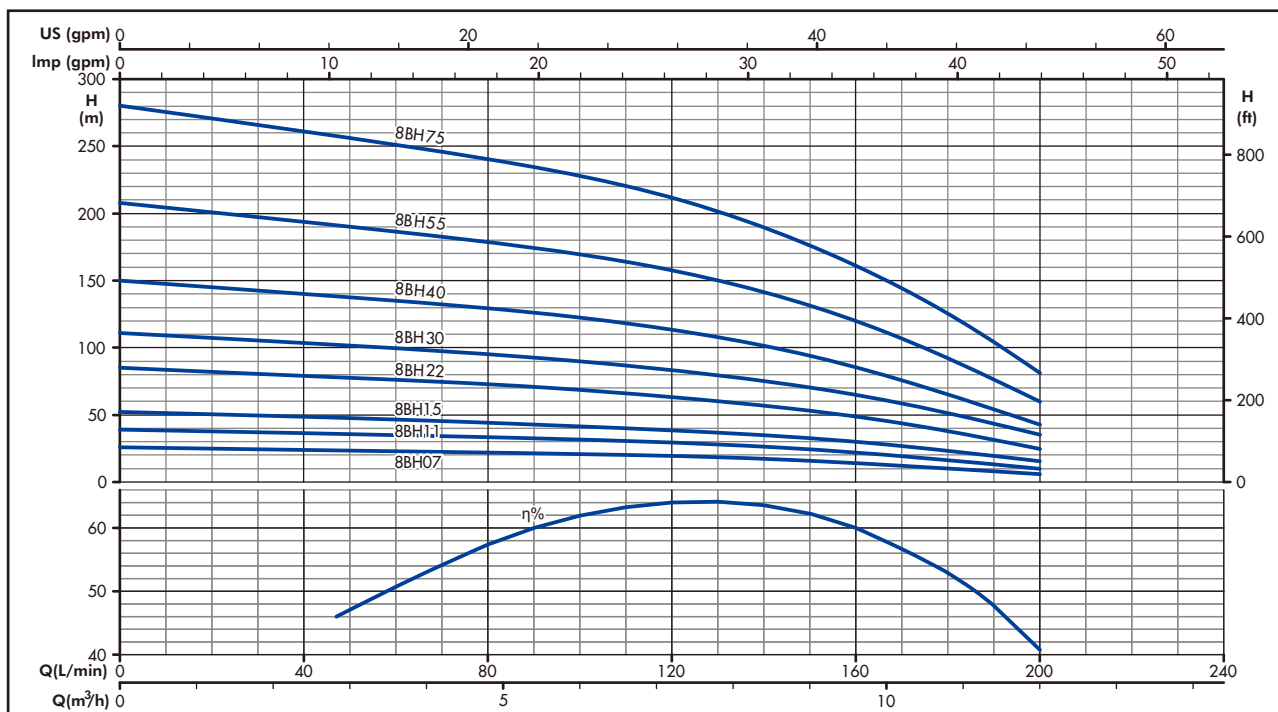
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
6BH05S	5	Rp1"1/4	322	663	2,8	11,7
6BH05T				658		10,8
6BH07S	7		384	745	3,4	13,2
6BH07T				740		12,3
6BH11S	10		477	869	4,2	15,3
6BH11T				869		14,6
6BH15S	14		601	1033	5,2	18,2
6BH15T				1018		16,7
6BH22S	21		856	1401	7,6	25,3
6BH22T				1326		21,7
6BH30T	29		1104	1624	9,7	26,2
6BH40T	38		1383	1977	12,1	33,5
6BH55T	52		1854	2558	16,3	44



8BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

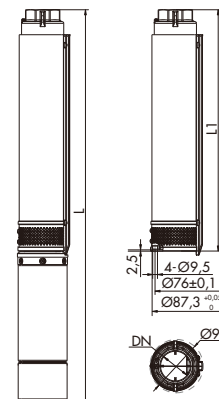


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY					
				l/min 0	40	80	120	160	200
				m ³ /h 0	2,4	4,8	7,2	9,6	12
H=TOTAL HEAD METERS COLUMN OF WATER									
8BH07S	4	0,75	1	26	24	22	20	15	6
8BH07T									
8BH11S	6	1,1	1,5	39	36	34	29	22	10
8BH11T									
8BH15S	8	1,5	2	52	49	45	39	30	15
8BH15T									
8BH22S	13	2,2	3	85	79	73	64	49	25
8BH22T									
8BH30T	17	3	4	111	103	95	83	64	35
8BH40T	23	4	5,5	150	140	129	113	86	43
8BH55T	32	5,5	7,5	208	194	179	157	120	60
8BH75T	43	7,5	10	280	260	241	211	161	81

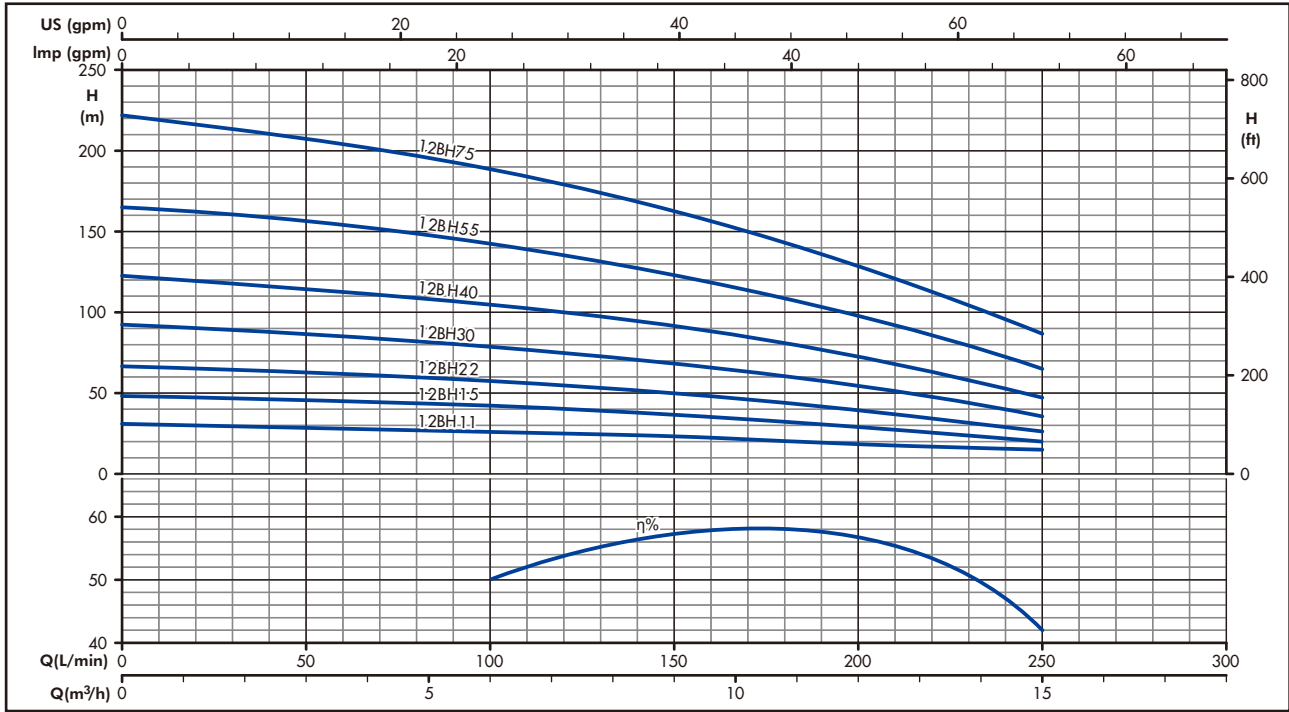
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
8BH07S	4	Rp2"	301	662	2,7	12,5
8BH07T				657		11,6
8BH11S	6		363	755	3,2	14,3
8BH11T				755		13,6
8BH15S	8		425	857	3,8	16,8
8BH15T				842		15,3
8BH22S	13		580	1125	5,2	22,9
8BH22T				1050		19,3
8BH30T	17		704	1224	6,3	22,8
8BH40T	23		928	1522	8,4	29,8
8BH55T	32		1207	1911	11	38,7
8BH75T	43		1585	2374	14,5	47,1



12BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz

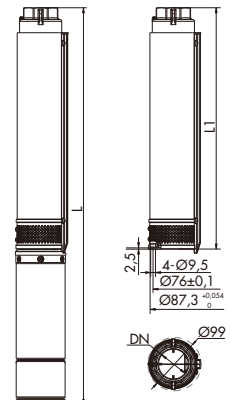


OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY						
				l/min 0	100	120	140	160	200	250
				m3/h 0	6	7,2	8,4	9,6	12	15
				H=TOTAL HEAD METERS COLUMN OF WATER						
12BH11S	5	1,1	1,5	31	26	25	24	21	18	12
12BH11T										
12BH15S	8	1,5	2	49	42	40	38	34	29	19
12BH15T										
12BH22S	11	2,2	3	67	58	55	52	47	40	26
12BH22T										
12BH30T	15	3	4	92	79	75	71	65	54	36
12BH40T	20	4	5,5	122	105	100	94	87	72	48
12BH55T	27	5,5	7,5	165	142	135	127	117	98	65
12BH75T	36	7,5	10	221	189	180	169	156	130	87

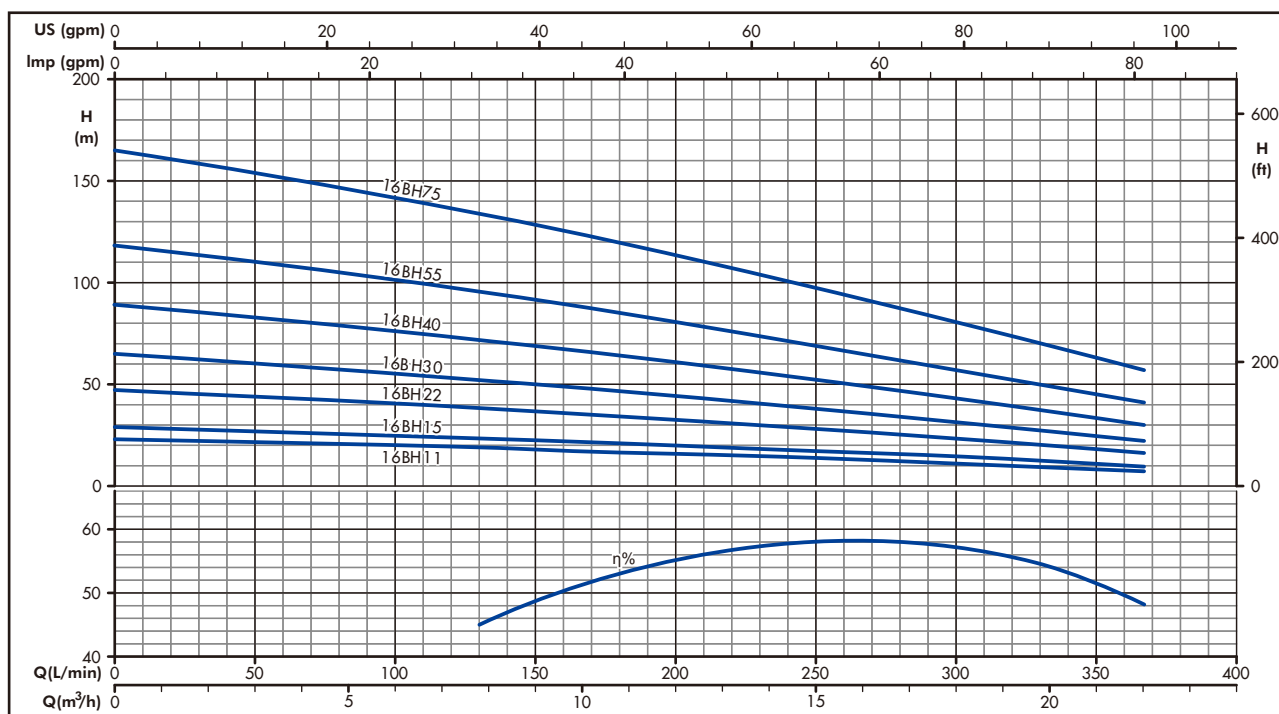
DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
12BH11S	5	Rp2"	437	829	3,2	14,3
12BH11T				829		13,6
12BH15S	8		593	1025	4,7	17,7
12BH15T				1010		16,2
12BH22S	11		749	1294	6,1	23,8
12BH22T				1219		20,2
12BH30T	15		994	1514	8,5	25
12BH40T	20		1254	1848	10,8	32,2
12BH55T	27		1655	2359	14,7	42,4
12BH75T	36		2123	2912	19	51,6



16BH SERIES

OPERATING CHARACTERISTICS AT 50 Hz



OPERATING CHARACTERISTICS AT 50 Hz

PUMP TYPE	N.OF STAGES	kW	Hp	Q=DELIVERY						
				l/min 0	140	160	200	250	300	367
				m ³ /h 0	8,4	9,6	12	15	18	22
H=TOTAL HEAD METERS COLUMN OF WATER										
16BH11S	4	1,1	1,5	23	19	18	16,5	14	11	8
16BH11T										
16BH15S	5	1,5	2	29	23	22	20	17	14	10
16BH15T										
16BH22S	8	2,2	3	47	37	36	32	27	23	16
16BH22T										
16BH30T	11	3	4	65	51	49	44	38	31	22
16BH40T	15	4	5,5	89	70	67	60	51	43	30
16BH55T	20	5,5	7,5	118	97	89	80	69	57	41
16BH75T	28	7,5	10	165	131	125	112	96	80	57

DIMENSIONS AND WEIGHTS AT 50 Hz

PUMP TYPE	N.OF STAGES	DN	L1 mm	L mm	PUMP WEIGHT kg	ELECTRIC PUMP WEIGHT kg
16BH11S	4	Rp2"	449	841	3,5	14,6
16BH11T				841		13,9
16BH15S	5		517	949	4,1	17,1
16BH15T				934		15,6
16BH22S	8		721	1266	6	23,7
16BH22T				1191		20,1
16BH30T	11		962	1482	8,4	24,9
16BH40T	15		1234	1828	10,9	32,3
16BH55T	20		1611	2315	13,7	41,4
16BH75T	28		2155	2944	18,8	51,4

