

BOREHOLE RANGE

6VMP



TRACER PUMPS

LEADING IN MOTION

2023 V1

6VP BOREHOLE RANGE (6")

Pump features

This borehole pump's key feature is its high pressure and delivery ratio.

The reduced stages ensure extended pump life and ease of operation.

Operating range

These pumps are for domestic, agricultural, mining and industrial use.

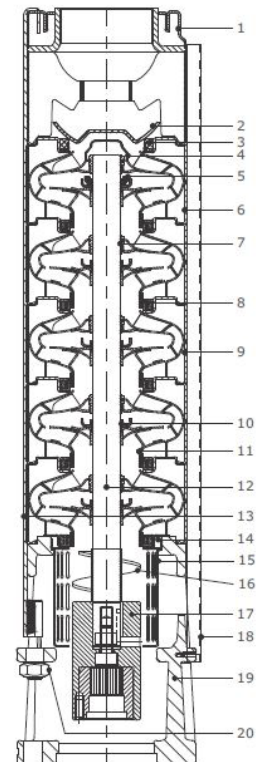
Head range:	4m - 489m
Flow rate:	70 l/m - 1300 l/m
Minimum immersion:	1m
Maximum sand content:	50g/m ³

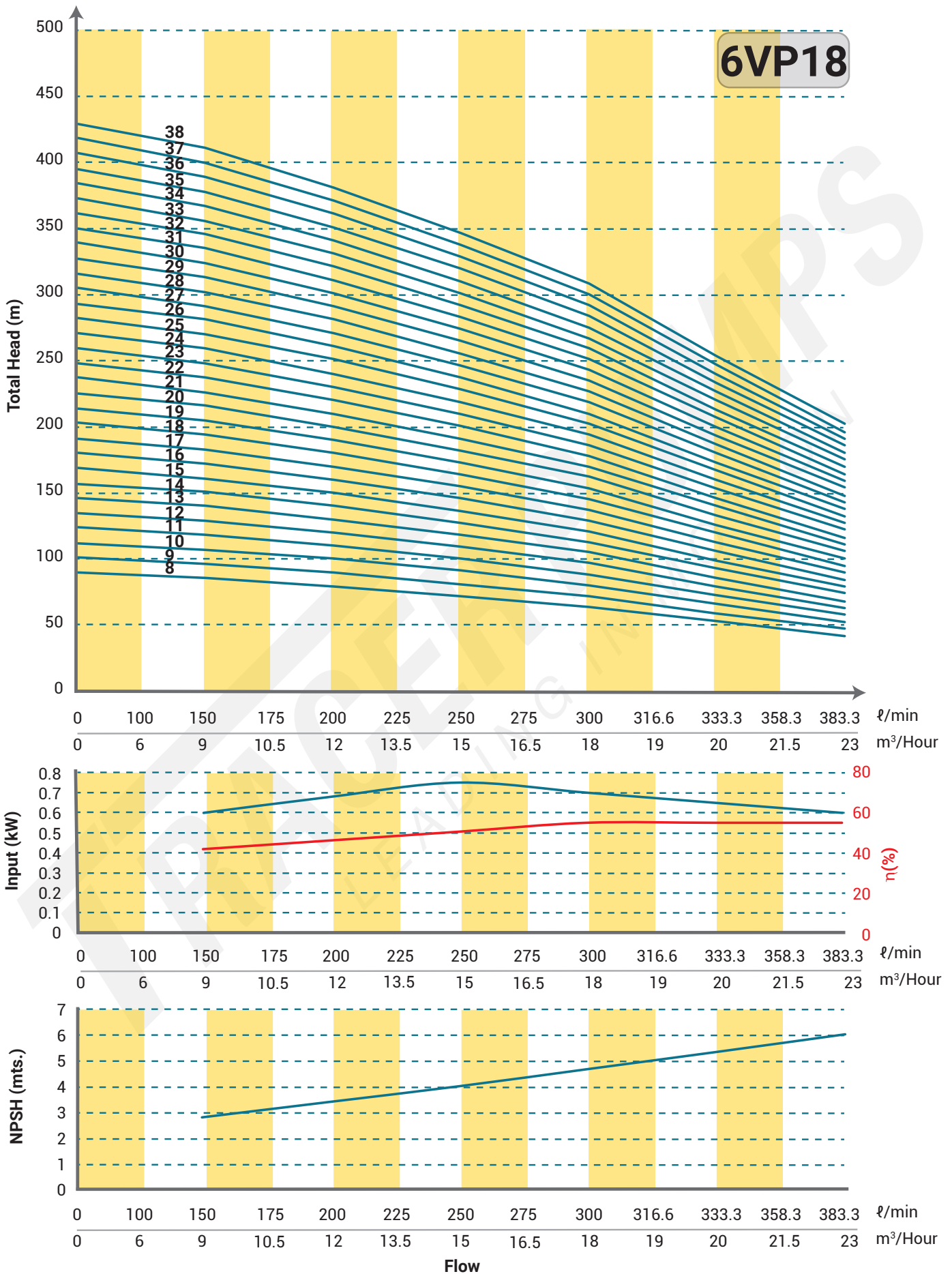
Key materials

Suction, stage casing and discharge outlets:	stainless steel 304
Impellers:	stainless steel 304
Pump shaft:	SS AISI 431
Bearing bush:	anti friction rubber
Non return valve:	stainless steel 304
Cable guard and strainer:	stainless steel 304
Pump and motor couplings are as per NEMA standards.	



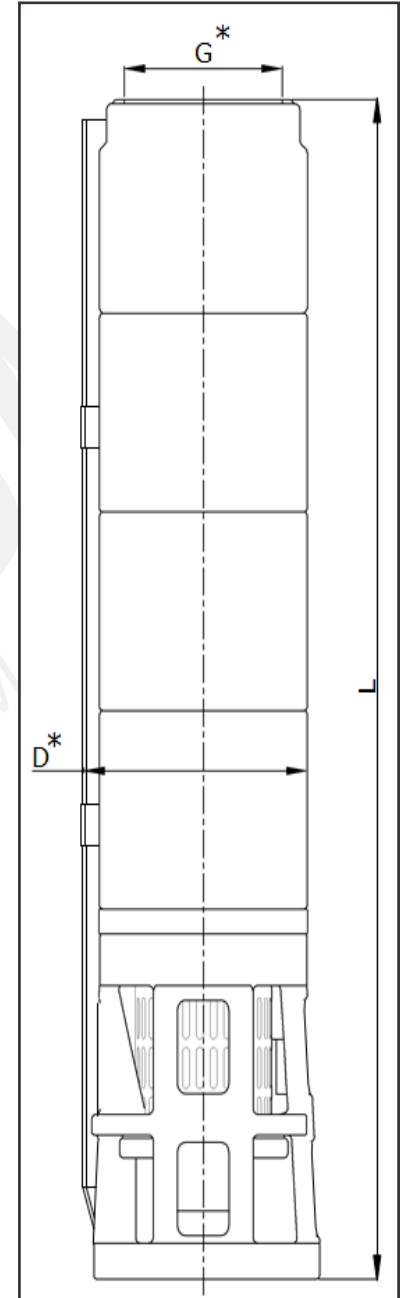
NO.	PART NAME	MATERIAL
1	N.R.V. 2.5"	S.S.304
2	Valve	S.S.304
3	Valve Seat	N.B.R. + S.S.304
4	Top Cap	S.S.304
5	Spacing Washer	25% CFT
6	Intermediate Chamber Top	S.S.304
7	Bearing Bush	N.B.R.
8	Neckring	N.B.R. + NYLON
9	Intermediate chamber	S.S.304
10	Collet & Collet Nut	S.S.304
11	Impeller	S.S.304
12	Pump Shaft	S.S.431
13	Clamping strip	S.S.304
14	Suction Connector	S.S.304
15	Strainer	S.S.304
16	Priming Screw	S.S.304
17	NEMA Coupling	S.S.304
18	Cable Guard	S.S.304
19	Suction	S.S.304
20	HEX Nut	S.S.316

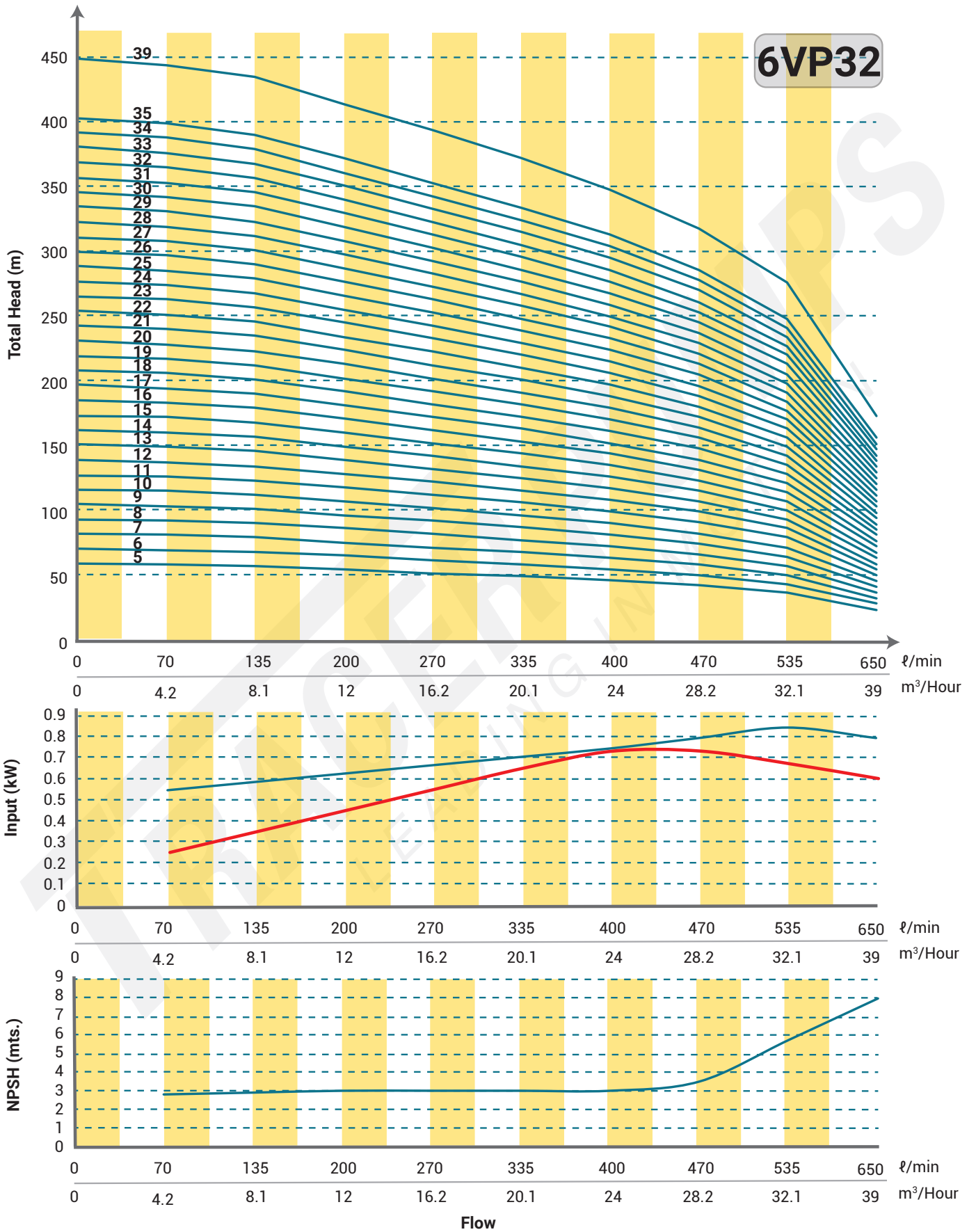




MODELNAME		RATING		DISCHARGE							
Three-Phase	Stage	kW	HP	l/min	0	150	200	250	300	333	383
				m³/h	0	9	12	15	18	20	23
VP-18 A 08	8	5.5	7.5	Head (m)	91	87	80	73	65	54	43
VP-18 A 09	9	5.5	7.5		102	97	91	82	73	60	48
VP-18 A 10	10	5.5	7.5		113	108	101	92	81	67	53
VP-18 A 11	11	7.5	10		125	119	111	101	89	74	59
VP-18 A 12	12	7.5	10		136	130	121	110	98	80	64
VP-18 A 13	13	7.5	10		147	141	131	119	106	87	69
VP-18 A 14	14	9.3	12.5		158	152	141	128	114	94	75
VP-18 A 15	15	9.3	12.5		170	162	151	137	122	100	80
VP-18 A 16	16	9.3	12.5		181	173	161	147	130	107	85
VP-18 A 17	17	9.3	12.5		192	184	171	156	138	114	91
VP-18 A 18	18	11	15		204	195	181	165	146	121	96
VP-18 A 19	19	11	15		215	206	191	174	154	127	101
VP-18 A 20	20	11	15		226	217	201	183	163	134	107
VP-18 A 21	21	13	17.5		238	227	211	192	171	141	112
VP-18 A 22	22	13	17.5		249	238	221	202	179	147	117
VP-18 A 23	23	13	17.5		260	249	231	211	187	154	123
VP-18 A 24	24	13	17.5		272	260	241	220	195	161	128
VP-18 A 25	25	15	20		283	271	252	229	203	168	133
VP-18 A 26	26	15	20		294	282	262	238	211	174	139
VP-18 A 27	27	15	20		306	292	272	247	220	181	144
VP-18 A 28	28	18.5	25		317	303	282	256	228	188	149
VP-18 A 29	29	18.5	25		328	314	292	266	236	194	155
VP-18 A 30	30	18.5	25		340	325	302	275	244	201	160
VP-18 A 31	31	18.5	25		351	336	312	284	252	208	165
VP-18 A 32	32	18.5	25		362	347	322	293	260	214	171
VP-18 A 33	33	18.5	25		374	357	332	302	268	221	176
VP-18 A 34	34	22	30		385	368	342	311	276	228	181
VP-18 A 35	35	22	30		396	379	352	321	285	234	187
VP-18 A 36	36	22	30		408	390	362	330	293	241	192
VP-18 A 37	37	22	30		419	401	372	339	301	248	197
VP-18 A 38	38	22	30		430	412	382	348	309	255	203

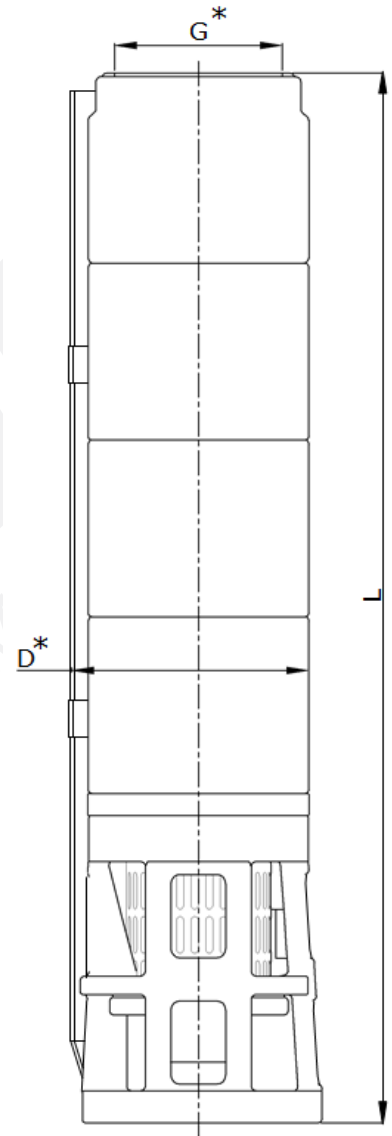
SPECIFICATIONS					
MODEL NAME	D (mm)	L (mm)	G (mm)	Pump Weight (kg)	Total Weight [incl packaging] (kg)
VP-18 A 08	142	755	63	17	19
VP-18 A 09	142	815	63	18	20
VP-18 A 10	142	876	63	19	22
VP-18 A 11	142	936	63	21	23
VP-18 A 12	142	997	63	22	24
VP-18 A 13	142	1057	63	23	26
VP-18 A 14	142	1118	63	24	27
VP-18 A 15	142	1178	63	26	28
VP-18 A 16	142	1239	63	27	30
VP-18 A 17	142	1299	63	28	31
VP-18 A 18	142	1360	63	29	32
VP-18 A 19	142	1420	63	31	34
VP-18 A 20	142	1481	63	32	35
VP-18 A 21	142	1541	63	33	37
VP-18 A 22	142	1602	63	34	38
VP-18 A 23	142	1662	63	36	39
VP-18 A 24	142	1723	63	37	40
VP-18 A 25	142	1783	63	38	42
VP-18 A 26	142	1844	63	39	43
VP-18 A 27	142	1904	63	41	44
VP-18 A 28	142	1965	63	42	45
VP-18 A 29	142	2025	63	43	47
VP-18 A 30	142	2086	63	44	48
VP-18 A 31	142	2146	63	46	50
VP-18 A 32	142	2207	63	47	51
VP-18 A 33	142	2267	63	48	52
VP-18 A 34	142	2328	63	49	53
VP-18 A 35	142	2388	63	51	55
VP-18 A 36	142	2449	63	52	56
VP-18 A 37	142	2509	63	53	57
VP-18 A 38	142	2570	63	54	58

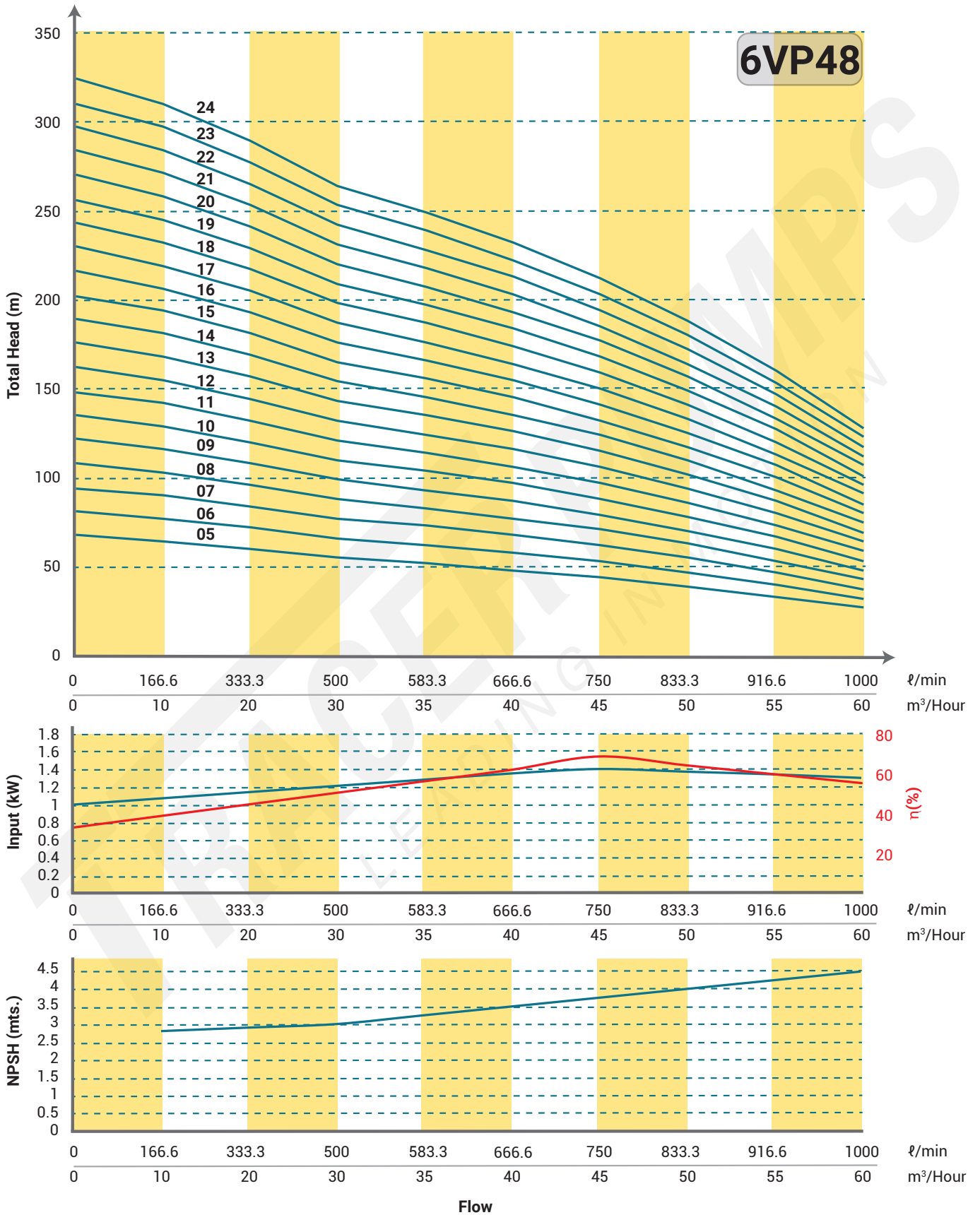




MODEL NAME		RATING		DISCHARGE										
Three-Phase	Stage	kW	HP	l/min	0	70	135	200	270	335	400	470	535	650
				m ³ /h	0	4.2	8.1	12.0	16.2	20.1	24.0	28.2	32.1	39.0
VP32A-05	5	5.50	7.50	Head (m)	58	57	56	53	50	48	45	41	35	22
VP32A-06	6	5.50	7.50		69	68	67	64	60	57	53	49	42	27
VP32A-07	7	7.50	10.00		80.5	80	78	74	70	67	62	57	49	31
VP32A-08	8	7.50	10.00		92	91	89	85	81	76	71	65	56	35
VP32A-09	9	9.30	12.50		104	102	100	95	91	86	80	73	63	40
VP32A-10	10	9.30	12.50		115	114	111	106	101	95	89	81	70	44
VP32A-11	11	9.30	12.50		126	125	122	117	111	105	98	90	78	49
VP32A-12	12	11.00	15.00		138	136	133	127	121	114	107	98	85	53
VP32A-13	13	11.00	15.00		150	148	145	138	131	124	116	106	92	57
VP32A-14	14	13.00	17.50		161	159	156	148	141	133	125	114	99	62
VP32A-15	15	13.00	17.50		172	171	167	159	151	143	134	122	106	66
VP32A-16	16	15.00	20.00		184	182	178	170	161	152	143	130	113	71
VP32A-17	17	15.00	20.00		196	193	189	180	171	162	151	138	120	75
VP32A-18	18	18.50	25.00		207	205	200	191	181	171	160	147	127	80
VP32A-19	19	18.50	25.00		218	216	211	201	191	181	169	155	134	84
VP32A-20	20	18.50	25.00		230	227	222	212	201	190	178	163	141	88
VP32A-21	21	18.50	25.00		242	239	234	223	211	200	187	171	148	93
VP32A-22	22	22.00	30.00		253	250	245	233	222	209	196	179	155	97
VP32A-23	23	22.00	30.00		264	262	256	244	232	219	205	187	162	102
VP32A-24	24	22.00	30.00		276	273	267	254	242	228	214	195	169	106
VP32A-25	25	22.00	30.00		288	284	278	265	252	238	223	204	176	110
VP32A-26	26	22.00	30.00		299	296	289	276	262	247	232	212	183	115
VP32A-27	27	26.00	35.00		310	307	300	286	272	257	241	220	190	119
VP32A-28	28	26.00	35.00		322	318	311	297	282	266	249	228	197	124
VP32A-29	29	26.00	35.00		334	330	322	307	292	276	258	236	204	128
VP32A-30	30	26.00	35.00		345	341	334	318	302	285	267	244	212	133
VP32A-31	31	26.00	35.00		356	352	345	329	312	295	276	252	219	137
VP32A-32	32	30.00	40.00		368	364	356	339	322	304	285	260	226	141
VP32A-33	33	30.00	40.00		380	375	367	350	332	314	294	269	233	146
VP32A-34	34	30.00	40.00		391	387	378	360	342	323	303	277	240	150
VP32A-35	35	30.00	40.00		402	398	389	371	352	333	312	285	247	155
VP32A-39	39	37.00	50.00		448	443	434	413	393	371	347	317	275	172

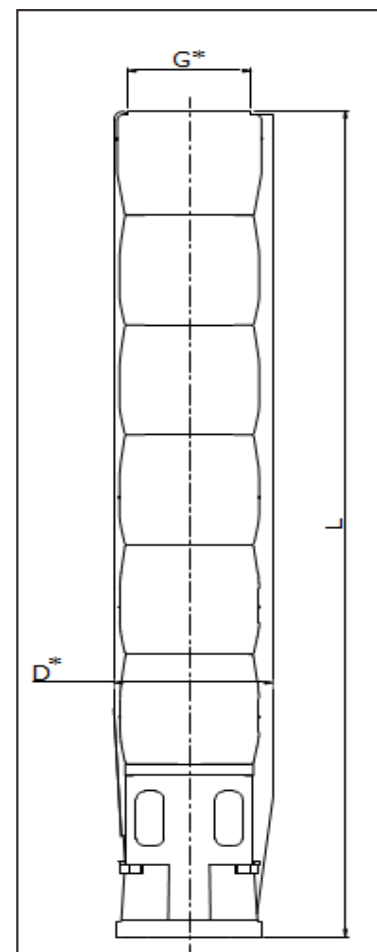
SPECIFICATIONS					
MODEL NAME	D (mm)	L (mm)	G (mm)	Pump Weight (kg)	Total Weight [incl packaging] (kg)
VP32A-05	142	751	75	11	16
VP32A-06	142	847	75	19	24
VP32A-07	142	943	75	21	26
VP32A-08	142	1039	75	23	28
VP32A-09	142	1135	75	25	30
VP32A-10	142	1231	75	27	32
VP32A-11	142	1327	75	29	34
VP32A-12	142	1423	75	31	36
VP32A-13	142	1519	75	33	38
VP32A-14	142	1615	75	35	40
VP32A-15	142	1711	75	37	47
VP32A-16	142	1807	75	39	49
VP32A-17	142	1903	75	41	51
VP32A-18	142	1999	75	43	53
VP32A-19	142	1095	75	45	55
VP32A-20	142	2191	75	47	57
VP32A-21	142	2287	75	49	59
VP32A-22	142	2383	75	51	63
VP32A-23	142	2479	75	53	65
VP32A-24	142	2575	75	55	67
VP32A-25	142	2671	75	57	69
VP32A-26	142	2767	75	59	71
VP32A-27	142	2863	75	61	73
VP32A-28	142	2959	75	63	75
VP32A-29	142	3055	75	65	77
VP32A-30	142	3151	75	67	79
VP32A-31	142	3247	75	69	81
VP32A-32	142	3343	75	71	83
VP32A-33	142	3439	75	73	85
VP32A-34	142	3535	75	75	87
VP32A-35	142	3631	75	77	89
VP32A-39	182	4450	75	105	117

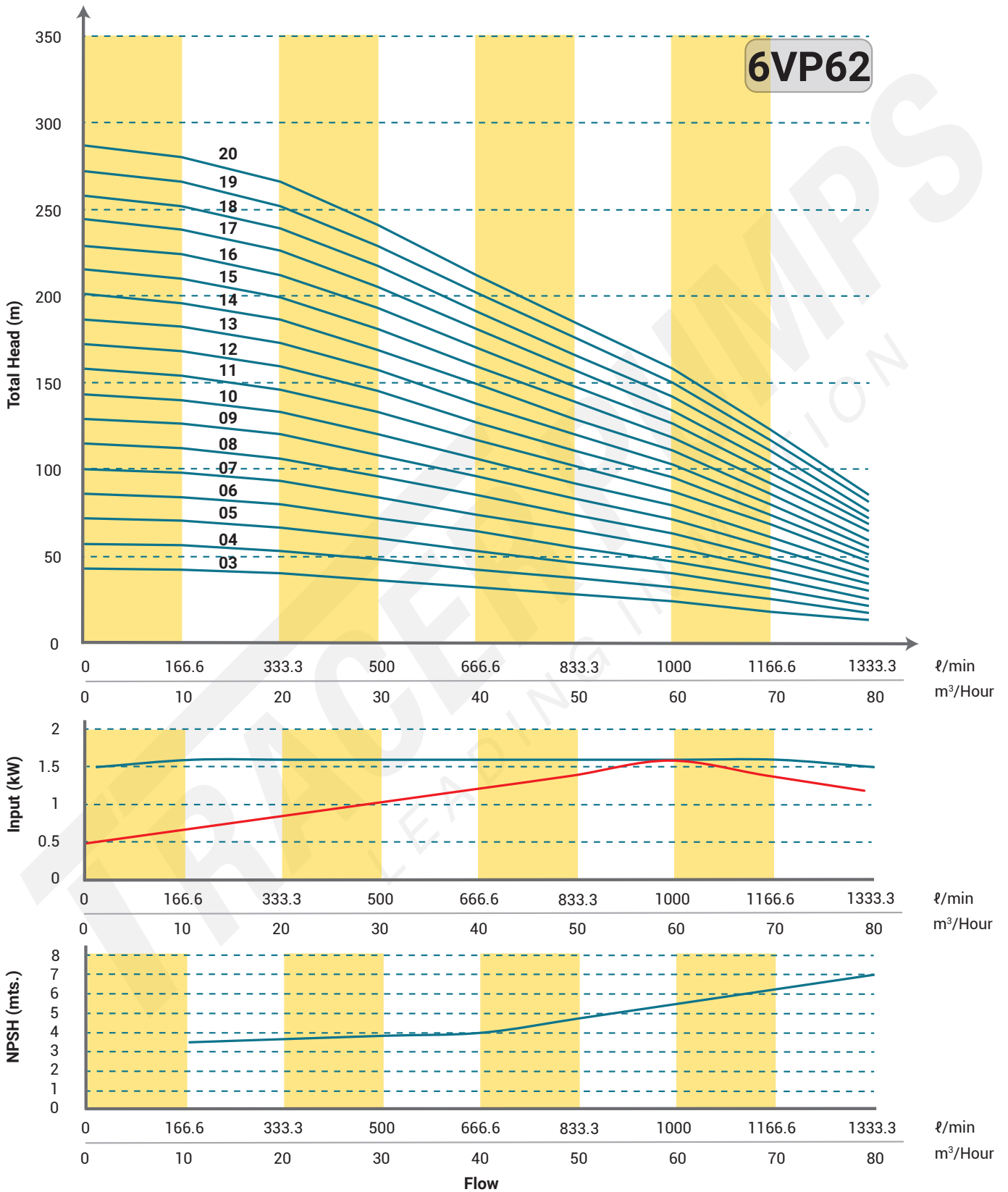




MODEL NAME		RATING		DISCHARGE										
Three-Phase	Stage	kW	HP	l/min m³/h	0	167	335	500	585	670	750	835	917	1000
					0	10.0	20.1	30.0	35.1	40.2	45.0	50.1	55.0	60.0
VP48A-05	5	7.50	10.00	Head (m)	68	64	60	55	52	48	44	39	33	27
VP48A-06	6	9.30	12.50		81	77	72	66	62	58	53	47	40	32
VP48A-07	7	11.00	15.00		94	90	84	77	73	68	62	55	47	37
VP48A-08	8	13.00	17.50		108	103	96	88	83	77	71	63	53	43
VP48A-09	9	15.00	17.50		122	116	108	99	93	87	79	70	60	48
VP48A-10	10	15.00	17.50		135	129	120	110	104	97	88	78	67	53
VP48A-11	11	18.50	25.00		148	142	132	121	114	106	97	86	73	59
VP48A-12	12	18.50	25.00		162	155	144	132	124	116	106	94	80	64
VP48A-13	13	22.00	30.00		176	168	157	143	135	126	115	102	87	69
VP48A-14	14	22.00	30.00		189	181	169	154	145	135	124	110	93	75
VP48A-15	15	22.00	30.00		202	194	181	165	156	145	132	117	100	80
VP48A-16	16	26.00	35.00		216	206	193	176	166	155	141	125	107	85
VP48A-17	17	26.00	35.00		230	219	205	187	176	164	150	133	113	91
VP48A-18	18	30.00	40.00		243	232	217	198	187	174	159	141	120	96
VP48A-19	19	30.00	40.00		256	245	229	209	197	184	168	149	127	101
VP48A-20	20	30.00	40.00		270	258	241	220	207	193	177	157	133	107
VP48A-21	21	37.00	50.00		284	271	253	231	218	203	185	164	140	112
VP48A-22	22	37.00	50.00		297	284	265	242	228	213	194	172	147	117
VP48A-23	23	37.00	50.00		310	297	277	253	239	222	203	180	153	123
VP48A-24	24	37.00	50.00		324	310	289	264	249	232	212	188	160	128

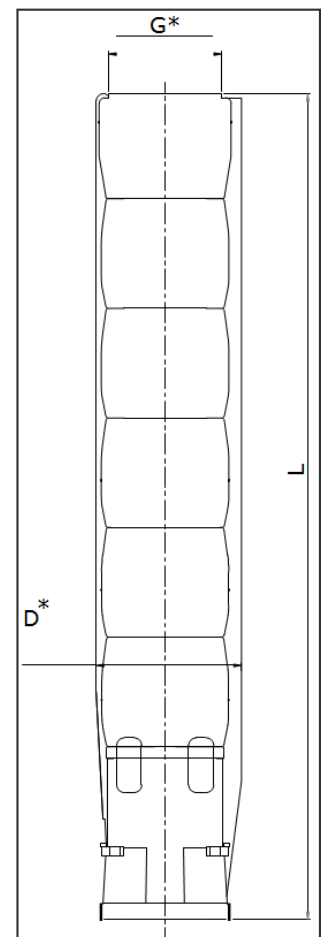
MODEL NAME	SPECIFICATIONS				
	D (mm)	L (mm)	G (mm)	Pump Weight (kg)	Total Weight [incl packaging] (kg)
VP48A-05	147	848	100	20	24
VP48A-06	147	961	100	18	23
VP48A-07	147	1074	100	20	25
VP48A-08	147	1187	100	22	28
VP48A-09	147	1300	100	24	29
VP48A-10	147	1413	100	26	34
VP48A-11	147	1526	100	28	36
VP48A-12	147	1639	100	32	42
VP48A-13	147	1752	100	34	44
VP48A-14	147	1865	100	36	46
VP48A-15	147	1987	100	38	48
VP48A-16	147	2091	100	40	50
VP48A-17	147	2204	100	42	52
VP48A-18	147	2317	100	44	54
VP48A-19	147	2430	100	46	56
VP48A-20	147	2543	100	48	58
VP48A-21	147	2656	100	55	60
VP48A-22	147	2769	100	57	62
VP48A-23	147	2882	100	60	65
VP48A-24	147	2995	100	62	67





MODEL NAME		RATING		DISCHARGE									
Three-Phase	Stage	kW	HP	l/min m ³ /h	0	170	335	500	670	835	1000	1167	1300
					0	10.2	20.1	30.1	40.2	50.1	60.0	70.0	78.0
VP62A-03	3	5.50	7.50	Head (m)	43	42	40	36	32	28	24	18	13
VP62A-04	4	7.50	10.00		57	56	53	48	42	37	32	25	17
VP62A-05	5	9.30	12.50		72	70	66	60	53	46	40	31	21
VP62A-06	6	11.00	15.00		86	84	80	72	64	55	47	37	25
VP62A-07	7	13.00	17.50		100	98	93	84	74	65	55	43	30
VP62A-08	8	15.00	20.00		115	112	106	96	85	74	63	49	34
VP62A-09	9	18.50	25.00		129	126	120	108	96	83	71	55	38
VP62A-10	10	18.50	25.00		143	140	133	120	106	92	79	61	42
VP62A-11	11	22.00	30.00		158	154	146	133	117	102	87	68	47
VP62A-12	12	22.00	30.00		172	168	159	145	127	111	95	74	51
VP62A-13	13	26.00	35.00		186	182	173	157	138	120	103	80	55
VP62A-14	14	26.00	35.00		201	196	186	169	149	129	111	86	59
VP62A-15	15	26.00	35.00		215	210	199	181	159	139	118	92	64
VP62A-16	16	30.00	40.00		229	224	212	193	170	148	126	98	68
VP62A-17	17	30.00	40.00		244	238	226	205	181	157	134	104	72
VP62A-18	18	37.00	50.00		258	252	239	217	191	166	142	111	76
VP62A-19	19	37.00	50.00		272	266	252	229	202	176	150	117	81
VP62A-20	20	37.00	50.00		287	280	266	241	212	185	158	123	85
VP62A-21	21	37.00	50.00		301	294	279	253	223	194	166	129	89

MODEL NAME	SPECIFICATIONS				
	D (mm)	L (mm)	G (mm)	Pump Weight (kg)	Total Weight [incl packaging] (kg)
VP62A-03	147	622	100	16	14
VP62A-04	147	735	100	18	21
VP62A-05	147	848	100	20	24
VP62A-06	147	961	100	18	23
VP62A-07	147	1074	100	20	25
VP62A-08	147	1187	100	22	28
VP62A-09	147	1300	100	24	29
VP62A-10	147	1413	100	26	34
VP62A-11	147	1526	100	28	36
VP62A-12	147	1639	100	32	42
VP62A-13	147	1752	100	34	44
VP62A-14	147	1865	100	36	46
VP62A-15	147	1978	100	38	48
VP62A-16	147	2091	100	40	50
VP62A-17	147	2204	100	42	52
VP62A-18	147	2317	100	44	54
VP62A-19	147	2430	100	46	56
VP62A-20	147	2543	100	48	58
VP62A-21	147	2656	100	50	60



Motor range

Three phase 5.5 to 30kW (7.5~ 40HP) 380V ~ 415V

Applications

This motor is designed for reliable operation in wells, dams, canals, rivers and boreholes (with a minimum diameter of 6 inches).

Basic features

IEC34-1 standard squirrel motor - hermetically sealed
All stainless steel support and double flange design

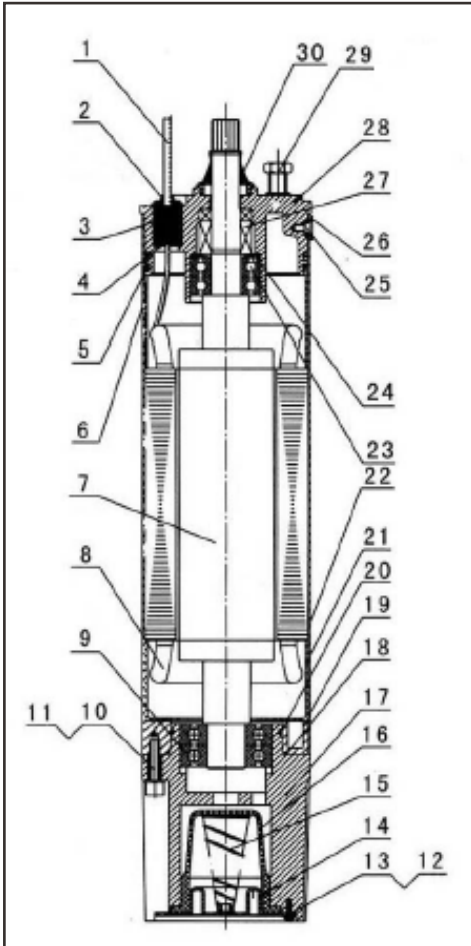
Thrust load:	2500N
Degree of protection:	IP68
Maximum ambient temperature:	40°C
Water pH range:	6.5 - 8.0
Maximum submerged depth:	250m
Insulation:	Class F
Mounting:	Vertical/horizontal
Minimum cooling flow along the motor:	8cm/s
Maximum starts per hour:	10-30 (dependent on motor size)

Flat, waterproof lead out cable with separate earth wire.

Designed for **vertical and horizontal installation.**



Motor parts



NO.	DESCRIPTION	NO.	DESCRIPTION
1	Cable: YQSB	16	O-ring
2	Cable holder	17	Flange
3	Cable protector	18	O-ring
4	Cable protector washer	19	Insulation paper
5	O-ring	20	Lower motor cover
6	Insulation paper	21	Ball bearing
7	Rotor	22	Insulation paper
8	Stator and wire	23	Mechanical seal
9	Bearing	24	Ball bearing
10	Screw	25	Leaf spring
11	Washer	26	Screw
12	Screw	27	Pin
13	Spring	28	Top motor cover
14	Cup ring	29	Screw
15	Motor base	30	Washer

Performance data

MODEL	POWER		CURRENT	COS ϕ	SPEED RPM	LENGTH mm	WEIGHT kg
	kW	HP					
HTY6-5.5	5.5	7.5	12.3	0.83	2835	580	42
HTY6-7.5	7.5	10	16.5	0.85	2835	620	46
HTY6-9.2	9.2	12.3	20.2	0.86	2835	655	50
HTY6-11	11	15	23.6	0.86	2835	685	53
HTY6-13	13	17.5	27.6	0.86	2850	715	56
HTY6-15	15	20	31.8	0.86	2850	755	59
HTY6-18.5	18.5	25	38.2	0.86	2850	820	66
HTY6-22	22	30	45.2	0.86	2850	880	73
HTY6-26	26	35	53.5	0.86	2850	930	80
HTY6-30	30	40	61.6	0.86	2850	980	86

MOTOR TECHNICAL DATA

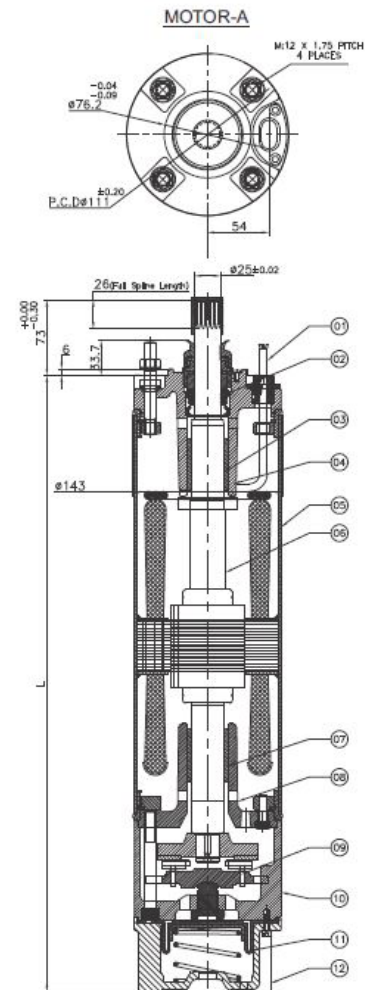
Winding wire:	Polywrapped / PVC winding available on specific demand
Degree of protection:	IP68
Maximum water temperature:	35°C
Maximum starts per hour:	10 - 30 depending on kW size
Allowable voltage variation:	+6% - 10%
Motor shaft:	Stainless steel
Stator shell:	Stainless steel
Maximum immersion depth:	350m
Mounting:	Vertical/Horizontal
Motor cable length:	3m/3 Core with separate earthcable and 4 Core
Cooling flow:	V=0.2 m/s
Coolant:	Clear water
Stator replaceable	

MOTOR TECHNICAL DATA

Three phase 5.5kW - 37.5kW



NO.	PART NAME	MATERIAL
1	Cable 3 Core/ 4 Core	EPR
2	Mech/Seal	Ceramic/Carbon
3	Bearing Bush	Carbon
4	Upper Housing	Cast Iron
5	Motor Shell	S.S.304
6	Rotor Shaft	S.S.431
7	Bearing Bush	Carbon
8	Lower Housing	Cast Iron
9	Thrust Bearing Set	Carbon/S.S.420
10	Lower Part-2	Cast Iron
11	Pressure Cup	H.B.R.
12	Motor Base	Cast Iron
13	All Hardware	S.S.304



Motor specifications

MOTOR POWER		PWL C.I.	PWL S.S.	WEIGHT (MOTOR ONLY)		WEIGHT (INCL PACKAGING)	
(kW)	(HP)	(mm)	(mm)	S.S. 304 (kg)	Cast Iron (kg)	S.S. 304 (kg)	Cast Iron (kg)
5.5	7.5	747	727	46.0	49.0	51.2	54.2
7.5	10	777	757	50.0	54.0	54.2	57.8
9.3	12.5	803	787	53.0	59.0	56.8	63.0
11	15	847	827	61.0	63.0	64.8	66.6
13	17.5	897	877	64.0	67.0	67.7	70.7
15	20	937	917	70.0	71.0	74.6	75.2
18.5	25	992	972	76.0	80.0	79.8	83.5
22	30	1067	1047	90.0	90.0	94.2	94.3
26	35	1127	1107	94.0	97.0	98.0	101.
30	40	1247	1227	102.0	100.0	108.0	105.0
37.5	50	1347	1347	127.5	125.5	133.5	130.5

PERFORMANCE DATA OF 6" THREE PHASE SUBMERSIBLE MOTOR / 50HZ - 380V

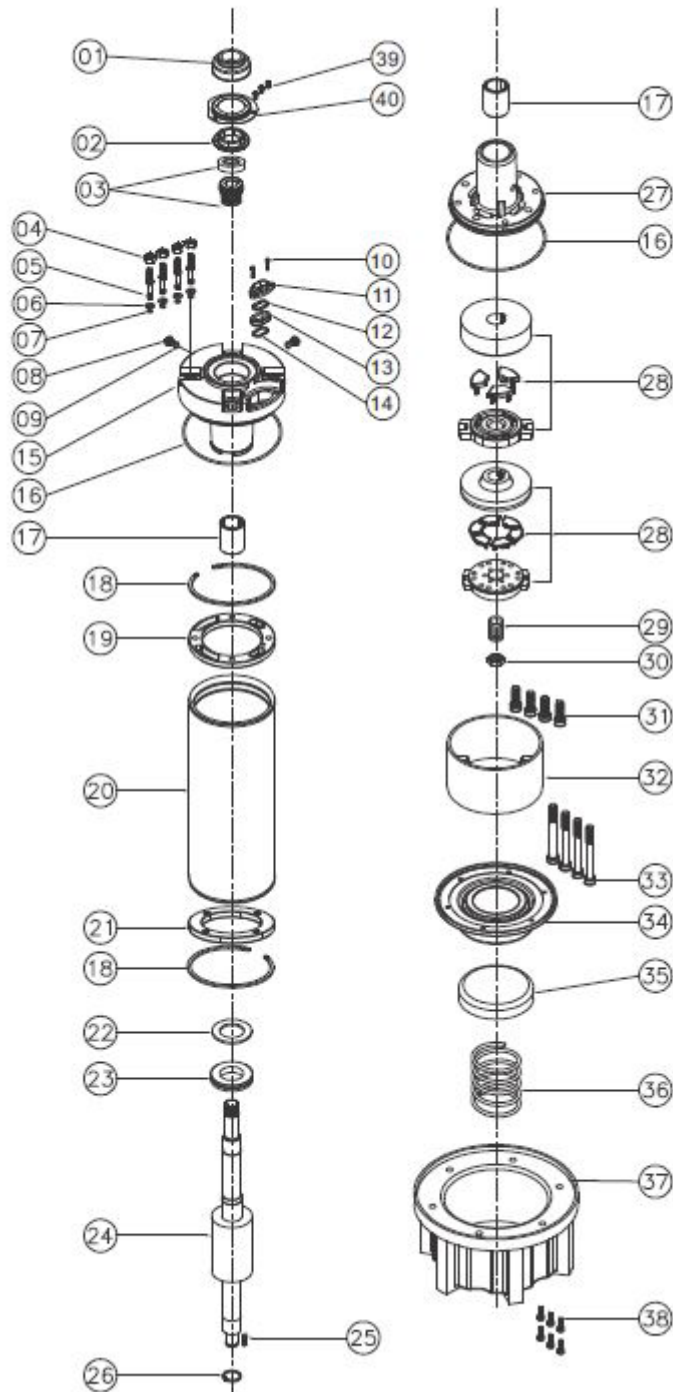
P _N		THRUST LOAD	U _N	n _N	I _N	I _A	η (%)			COSφ			T _N	T _A
(kW)	(HP)	F(N)	(V)	(min-1)	(A)	(A)	50	75	100	50	75	100	(Nm)	(Nm)
5.5	7.5	15500	380	2865	13.71	47	73	76	76	0.68	0.79	0.83	18.31	15.40
7.5	10	15500	380	2870	18.29	58	77	78	78	0.70	0.80	0.83	25.10	19.2
9.3	12.5	15500	380	2855	22.00	75	79	80	79	0.70	0.80	0.83	31.11	25.91
11	15	15500	380	2865	25.79	93	77	80	78	0.71	0.80	0.84	36.60	31.50
13	17.5	15500	380	2885	30.11	117	79	81	80	0.69	0.79	0.83	43.20	45.00
15	20	15500	380	2880	33.91	140	80	82	81	0.72	0.82	0.85	49.71	53.80
18.5	25	15500	380	2870	42.31	171	80	82	81	0.68	0.79	0.84	61.72	75.21
22	30	15500	380	2875	49.11	217	82	83	84	0.69	0.78	0.83	72.62	91.10
26	35	15500	380	2890	57.49	267	82	84	83	0.69	0.79	0.85	86.10	120.40
30	40	27500	380	2895	66.39	329	81	84	83	0.68	0.77	0.84	98.82	135.00
37.5	50	27500	380	2890	82.00	406	82	83	83	0.68	0.79	0.83	122.00	192.70

P _N	-	Rated Output	η	-	Motor Efficiency
U _N	-	Rated Voltage	cosφ	-	Power Factor
n _N	-	RPM	T _N	-	Full Load Torque
I _N	-	Full Load Current	T _A	-	Starting Torque
I _A	-	Starting Current	F _[N]	-	Axial Thrust Load

PERFORMANCE DATA OF 6" THREE PHASE SUBMERSIBLE MOTOR / 50HZ - 525V

kW	HP	AMPS			Hz	RPM			COS φ			CONN.	THRUST LOAD	WIND	COOLING FLOW M/SEC	MAX WATER TEMP.	CLASS
		480	500	525		480	500	525	480	500	525						
22	30	36.4	35.6	35.6	50	2878	2878	2880	0.82	0.8	0.80	DELTA (1)	15500	PW	0.85	35	B
30	40	42.8	42	42	50	2880	2882	2885	0.85	0.85	0.84	DELTA (1)	27500	PW	0.5	35	B
37	50	54	53.2	53.2	50	2880	2882	2885	0.85	0.85	0.84	DELTA (1)	27500	PW	0.5	35	B

Exploded Drawing of 6" Motor-A



No.	PARTS NAME
1	SAND GUARD
2	UPPER COLLAR
3	MECH.SEAL
4	NUT
5	STUD
6	STUD WASHER
7	STUD "O" RING
8	DRAIN PLUG
9	DRAIN PLUG "O" RING
10	ALLEN BOLT
11	CABLE PROTECTOR CAP
12	PLASTIC GROMMET WASHER
13	RUBBER GROMMET
14	S.S. GROMMET WASHER
15	UPPER HOUSING
16	"O" RING(UPPER & LOWER)
17	BEARING BUSH
18	CIR CLIP
19	UPPER FLANGE
20	STATOR BODY
21	LOWER FLANGE
22	TEFLON WASHER
23	THRUST RING
24	ROTOR SHAFT
25	ROTOR KEY
26	CIR CLIP BEARING SIDE
27	LOWER HOUSING
28	THRUST BEARING SET (UP TO 10.0 HP)
28	THRUST BEARING SET (ABOVE 10.0 HP)
29	ROCKER
30	ROCKER LOCK NUT
31	ALLEN BOLT LOWER SIDE
32	LOWER PART-2
33	ALLEN BOLT LOWER PART-2 SIDE
34	PRESSURE CLIP
35	SPRING JACKET
36	SPRING
37	MOTOR BASE
38	ALLEN BOLT MOTOR BASE SIDE
39	UPPER CAP
40	UPPER CAP SCREW