

Submersible Pumps

6RPR 61B, 6RPR 64B, 6RPR 610, 6RPR 620, 6RPR 640, 6RPR 650 SERIES PUMP DESIGN

Product advantages and specification

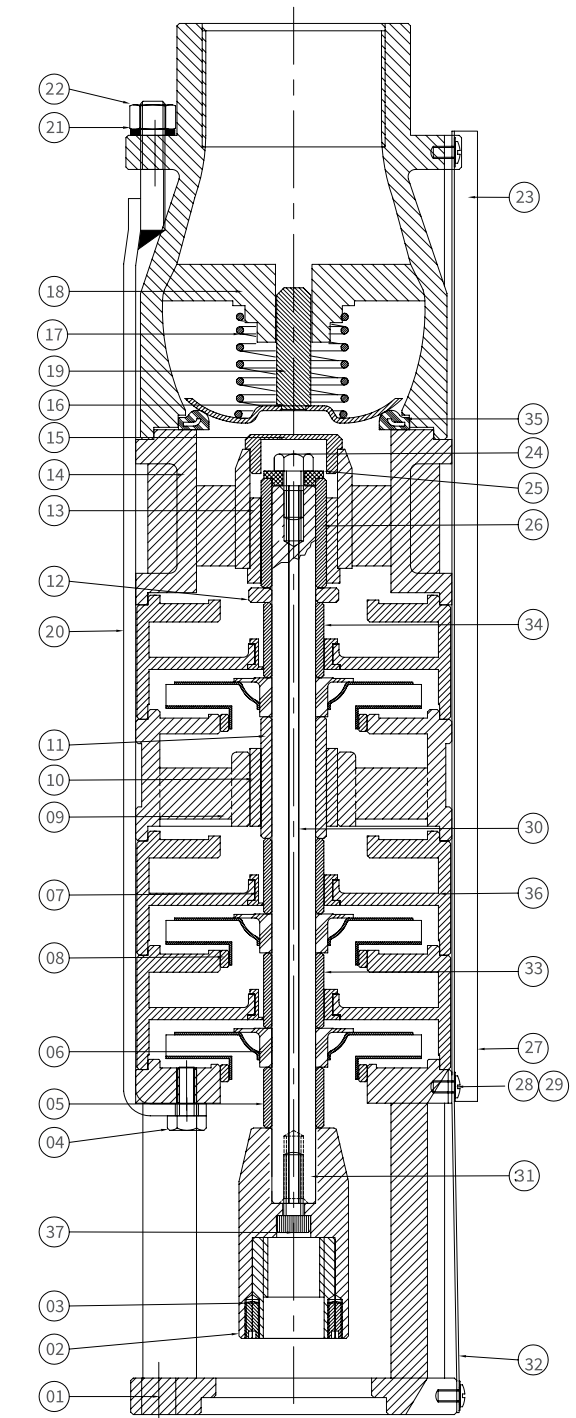
A. The specific features of Raindrop 6" Radial Submersible Pump are its high ratio of working pressure to delivery. Due to efficient design these pumps have reduced stages resulting in overall length. On account of this efficiency, adequately required journal bearing increases the pump life and ensures trouble free operations.

SPECIFICATIONS & ADVANTAGES:

1. Suction, stage casing and discharge outlets are made of Cast Iron.
2. Impellers of radial flow is available in bronze or Stainless Steel.
3. Sleeves are made of Stainless Steel reinforced with chromium to increase wear resistance against sand.
4. Pump shaft is of Stainless Steel.
5. Bearing bush for shaft is made of anti friction rubber to withstand wear resistance.
6. Non return valve is of Stainless Steel.
7. Cable guard and strainer are of Stainless Steel.
8. Pump motor coupling is according to NEMA standard.
9. Minimum of water on aspiration one meter.
10. 4" and 6" motor connection are also available.
11. Complete Stainless Steel pump is available on request
12. Operating range:
Head range : 13 mtr to 439 mtr
Flow rate : 20 lpm to 360 lpm
Immersion : 1 meter minimum
13. Minimum level of sand content: 50 gm /m³
14. Application: These pumps are for domestic, agriculture & industrial usage.

Material Specification

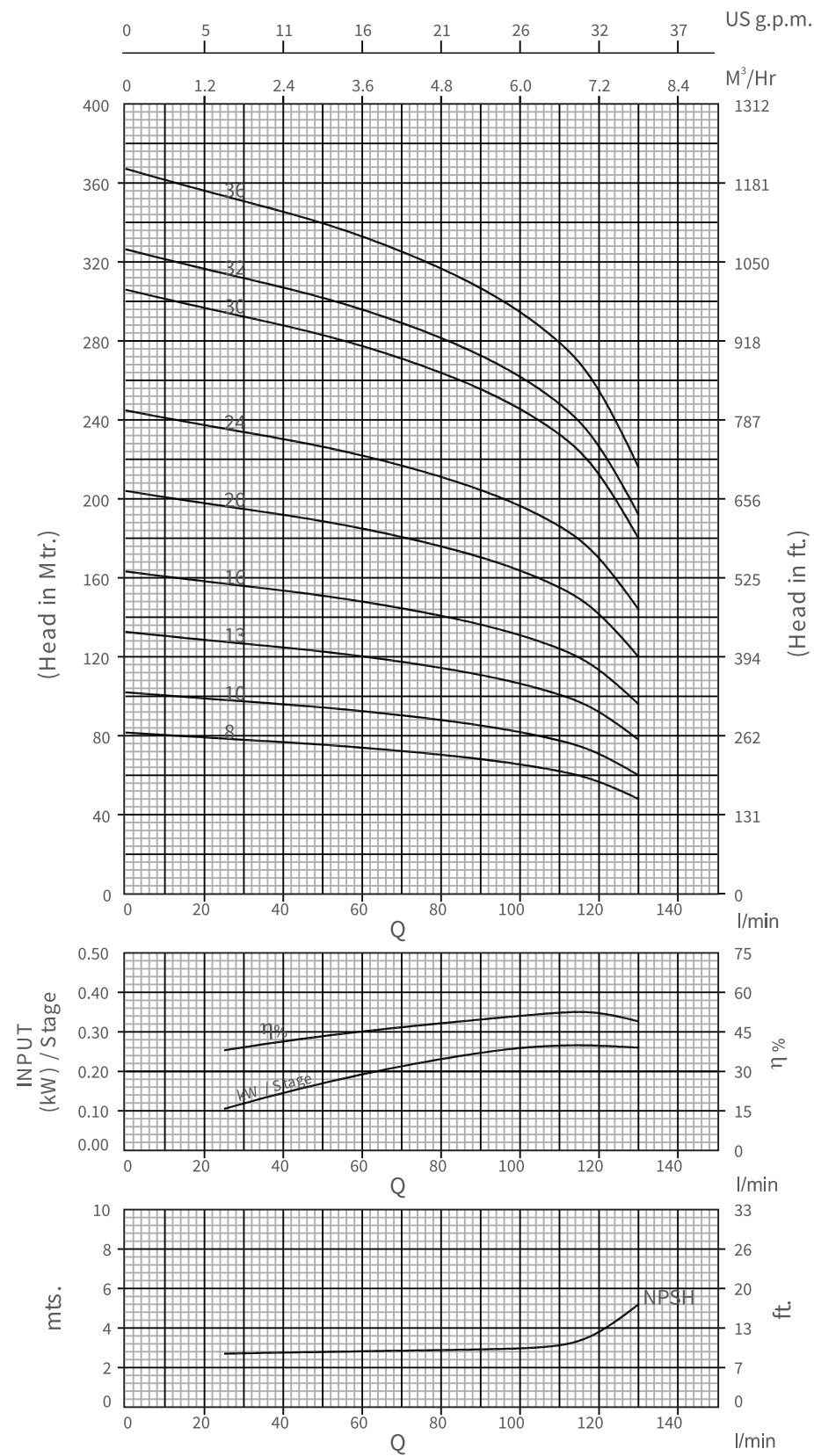
NO	PART NAME	MATERIAL	QTY
1	SUCTION (DOMESTIC) 65N	C.I. (FG 200)	01
2	COUPLING EXPORT	S.S.304	01
3	GRUB SCREW	S.S. 304	01
4	HEX BOLT (PUMP PATTI)(DOMESTIC)	S.S.304	04
5	DIST. SLEEVE	S.S. 410	01
6	IMPELLER	S.S. 304	REQ.
7	BEARING BUSH	N.B.R.	REQ.
8	BOWL & SUCTION NECKRING	P.V.C.	REQ.
9	MIDDLE	C.I. (FG 200)	REQ
10	MIDDLE BUSH	LTB 4(2% NI)	REQ
11	MIDDLE SLEEVE	S.S. 410	REQ
12	THRUST COLLAR	S.S.304	01
13	DOL BUSH	LTB 4(2% NI)	01
14	D.O.L.	C.I. (FG 200)	01
15	DOL CAP	P.V.C.	01
16	CONE PLATE	S.S. 202	01
17	NRV CONE SPRING	SPRING STEEL	01
18	N.R.V	C.I. (FG 200)	01
19	CONE STUD	S.S. 304	01
20	PUMP PATTI	S.S. 304	04
21	WASHER (PATTI)	S.S. 304	04
22	HEX NUT	S.S.304	04
23	CABLE GUARD	S.S. 202	REQ.
24	HEX BOLT	S.S.304	01
25	TOP COLLAR	S.S.304	01
26	DOL SLEEVE	S.S. 410	01
27	CABLE CLIP	S.S. 202	REQ
28	SCREW WASHER	S.S.304	10
29	SCREW	S.S.304	10
30	KEY	S.S. 410	REQ
31	PUMP SHAFT	S.S.410	01
32	STRAINER	S.S. 202	01
33	BOWL SLEEVE	S.S. 410	REQ
34	TOP SLEEVE	S.S. 410	01
35	NRV NECKRING	M.S. / N.B.R.	01
36	BOWL	C.I. (FG 200)	REQ.
37	ALLEN BOLT	S.S.304	01



Performance Curves

6RPR 61B, 50Hz

ISO 9906 Annexure A



Performance Chart

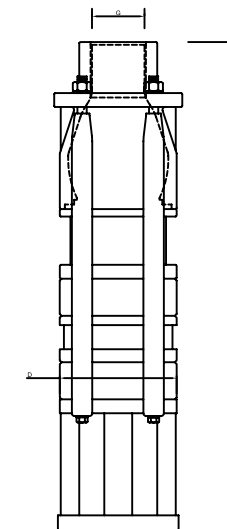
6RPR 61B, 50Hz

ISO 9906 Annexure A

Model Name	Three Phase	Stage	Rating		Discharge						
			kW	HP	l/min m ³ /h	0	25	50	90	110	120
					0	1.5	3.0	5.4	6.6	7.2	7.8

Model Name	Stage	Rating kW	Rating HP	HEAD IN Mtrs.	82	78	76	69	62	58	48
					6RPR 61B-08	8	2.20	3.00	82	78	76
6RPR 61B-10	10	3.00	4.00	102	98	95	86	78	72	60	
6RPR 61B-13	13	4.00	5.50	133	127	124	112	101	94	78	
6RPR 61B-16	16	4.50	6.00	163	157	152	138	125	115	96	
6RPR 61B-20	20	5.50	7.50	204	196	190	172	156	144	120	
6RPR 61B-24	24	7.50	10.00	245	235	228	206	187	173	144	
6RPR 61B-30	30	9.30	12.50	306	294	285	258	234	216	180	
6RPR 61B-32	32	9.30	12.50	326	314	304	275	250	230	192	
6RPR 61B-36	36	11.00	15.00	367	353	342	310	281	259	216	

Dimensions & Weights



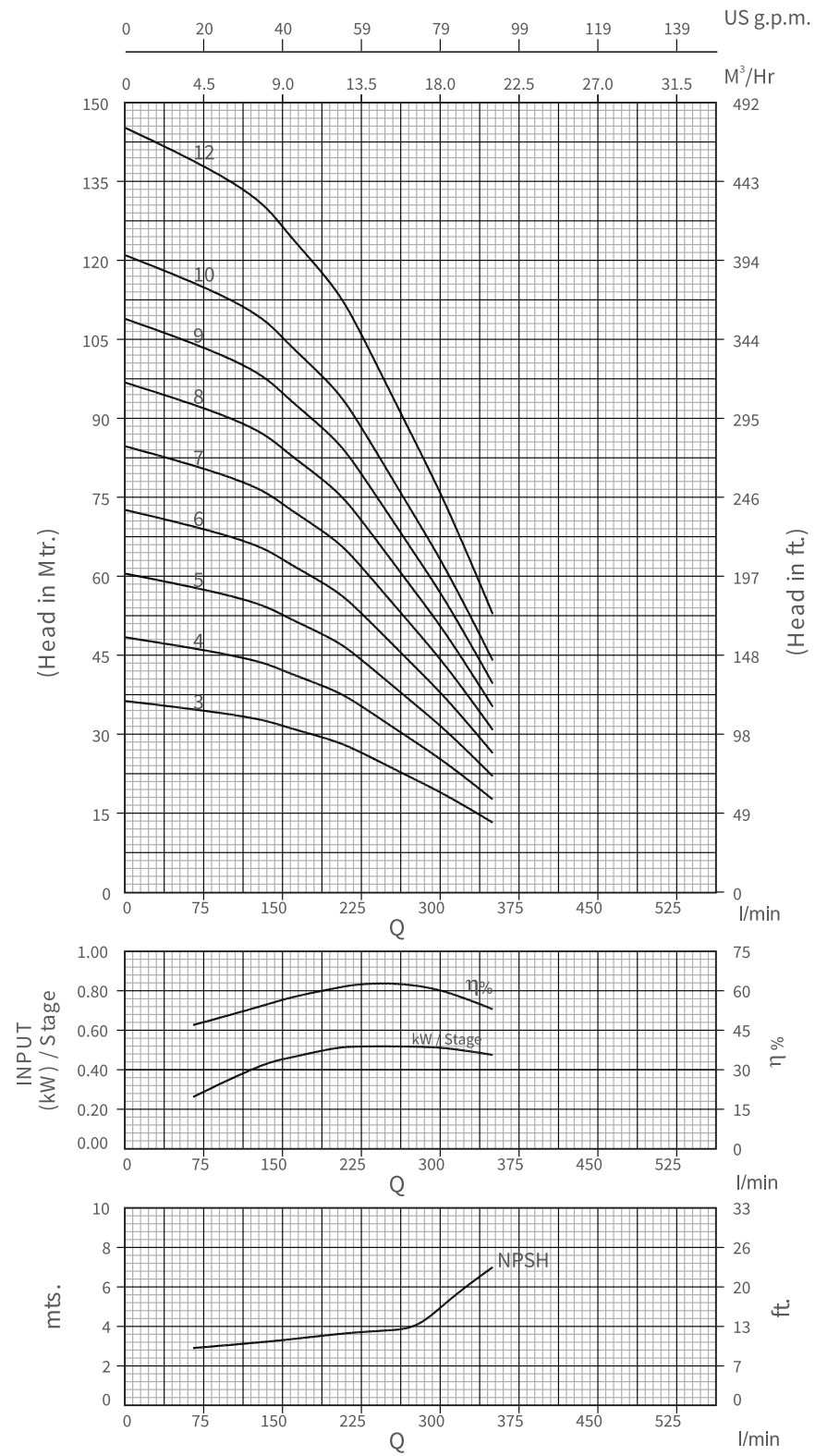
Model name	Specification			
	Stage	D	L	G
6RPR 61B-08	08	140	677	50
6RPR 61B-10	10	140	807	50
6RPR 61B-13	13	140	927	50
6RPR 61B-16	16	140	1047	50
6RPR 61B-20	20	140	1207	50
6RPR 61B-24	24	140	1417	50
6RPR 61B-30	30	140	1657	50
6RPR 61B-32	32	140	1787	50
6RPR 61B-36	36	140	2047	50

*G: Available Outlet Size 2"
*D: With Cable Guard

Performance Curves

6RPR 64B, 50Hz

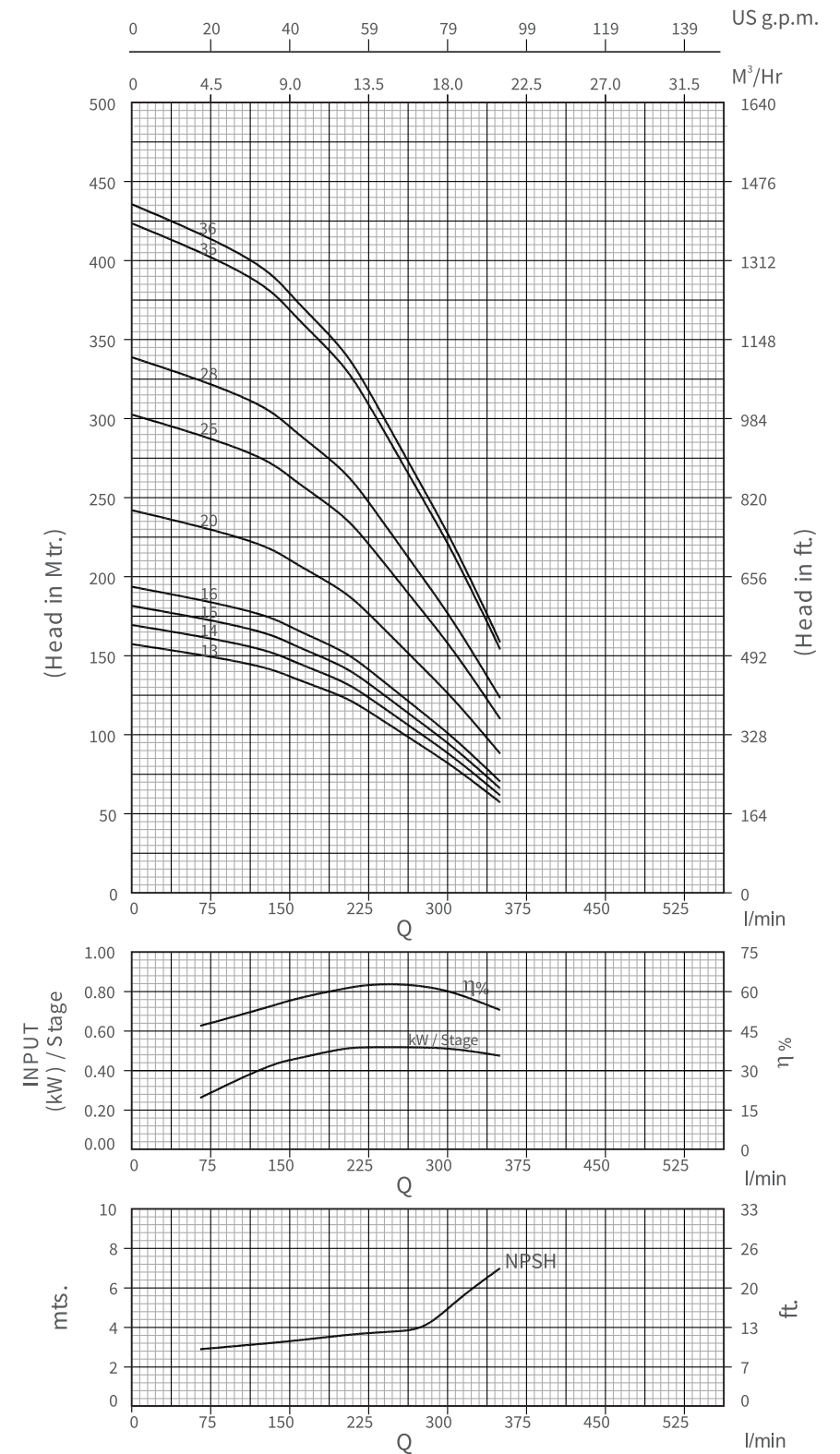
ISO 9906 Annexure A



Performance Curves

6RPR 64B, 50Hz

ISO 9906 Annexure A



Performance Chart

6RPR 64B, 50Hz

ISO 9906 Annexure A

Model Name	Three Phase	Stage	Rating		Discharge									
			kW	HP	l/min m ³ /h	0	65	130	150	200	220	250	280	310

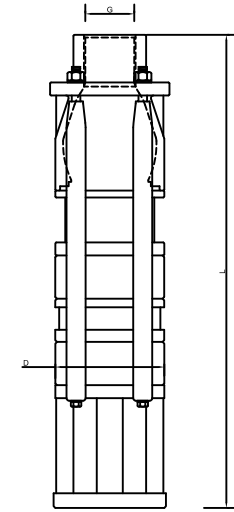
Model Name	Stage	kW	HP	HEAD IN Mtrs.	36	35	33	32	29	27	24	21	18	13
6RPR 64B-03	3	2.20	3.00		36	35	33	32	29	27	24	21	18	13
6RPR 64B-04	4	2.20	3.00		48	46	44	42	38	36	32	28	24	18
6RPR 64B-05	5	3.00	4.00		60	58	55	52	48	45	40	35	30	22
6RPR 64B-06	6	4.00	5.50		73	70	66	63	58	54	48	42	36	26
6RPR 64B-07	7	4.00	5.50		85	81	77	74	67	63	56	49	42	31
6RPR 64B-08	8	4.50	6.00		97	93	88	84	77	72	64	56	48	35
6RPR 64B-09	9	5.50	7.50		109	104	99	94	86	81	72	63	54	40
6RPR 64B-10	10	5.50	7.50		121	116	110	105	96	90	80	70	60	44
6RPR 64B-12	12	7.50	10.00		145	139	132	126	115	108	96	84	72	53
6RPR 64B-13	13	7.50	10.00		157	151	143	136	125	117	104	91	78	57
6RPR 64B-14	14	9.30	12.50		169	162	154	147	134	126	112	98	84	62
6RPR 64B-15	15	9.30	12.50		182	174	165	158	144	135	120	105	90	66
6RPR 64B-16	16	9.30	12.50		194	186	176	168	154	144	128	112	96	70
6RPR 64B-20	20	11.00	15.00		242	232	220	210	192	180	160	140	120	88
6RPR 64B-25	25	15.00	20.00		302	290	275	262	240	225	200	175	150	110
6RPR 64B-28	28	18.50	25.00		339	325	308	294	269	252	224	196	168	123
6RPR 64B-35	35	22.00	30.00		424	406	385	368	336	315	280	245	210	154
6RPR 64B-36	36	22.00	30.00		436	418	396	378	346	324	288	252	216	158

Submersible Pumps

6RPR 64B, 50Hz

ISO 9906 Annexure A

Dimensions & Weights



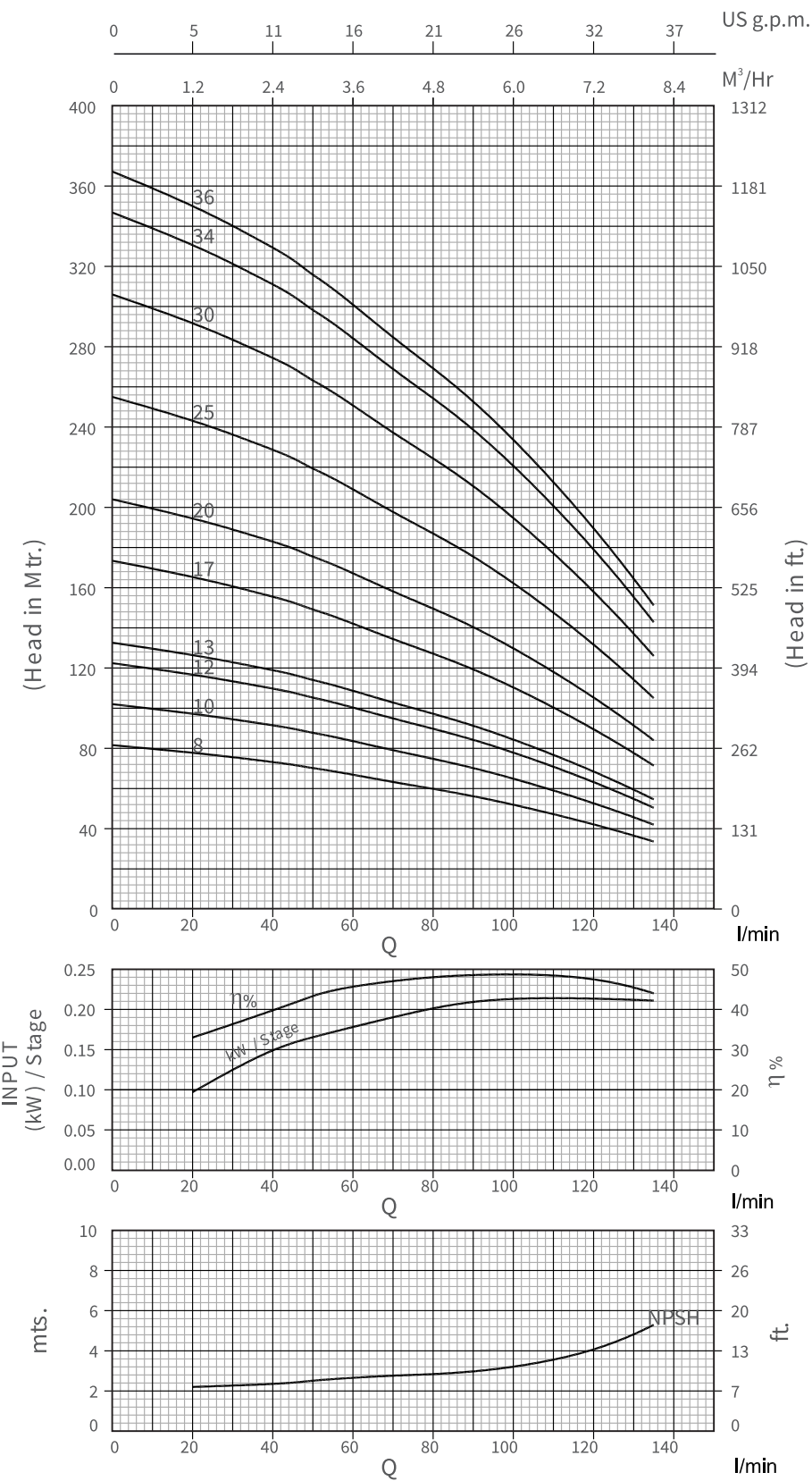
Model name	Specification			
	D	D	L	G
6RPR 64B-03	03	140	565	50
6RPR 64B-04	04	140	615	50
6RPR 64B-05	05	140	665	50
6RPR 64B-06	06	140	715	50
6RPR 64B-07	07	140	765	50
6RPR 64B-08	08	140	815	50
6RPR 64B-09	09	140	865	50
6RPR 64B-10	10	140	915	50
6RPR 64B-12	12	140	1065	50
6RPR 64B-13	13	140	1115	50
6RPR 64B-14	14	140	1165	50
6RPR 64B-15	15	140	1215	50
6RPR 64B-16	16	140	1265	50
6RPR 64B-20	20	140	1465	50
6RPR 64B-25	25	140	1765	50
6RPR 64B-28	28	140	1915	50
6RPR 64B-35	35	140	2415	50
6RPR 64B-36	36	140	2465	50

*G: Available Outlet Size 2"
*D: With Cable Guard

Performance Curves

6RPR 610, 50Hz

ISO 9906 Annexure A



Performance Chart

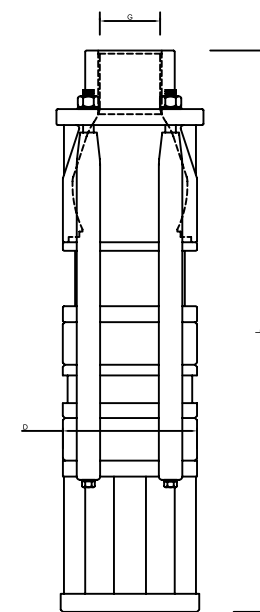
6RPR 610, 50Hz

ISO 9906 Annexure A

Model Name	Rating	Discharge												
Three Phase	Stage	kW	HP	l/min	0	20	35	45	49	55	72	92	122	135
				m ³ /h	0	1.2	2.1	2.7	2.94	3.3	4.5	5.52	7.32	8.1

Model Name	Stage	kW	HP	HEAD IN Mtrs.	82	78	74	72	70	69	62	56	42	34
6RPR 610-08	8	2.20	3.00		102	98	93	90	88	86	78	70	52	42
6RPR 610-10	10	2.20	3.00		122	117	112	108	106	103	94	84	62	50
6RPR 610-12	12	3.00	4.00		133	127	121	117	114	112	101	91	68	55
6RPR 610-13	13	3.00	4.00		173	166	158	153	150	146	133	119	88	71
6RPR 610-17	17	4.00	5.50		204	195	186	180	176	172	156	140	104	84
6RPR 610-20	20	4.50	6.00		255	244	232	225	220	215	195	175	130	105
6RPR 610-25	25	5.50	7.50		306	292	279	270	264	258	234	210	156	126
6RPR 610-30	30	7.50	10.00		347	332	316	306	299	292	265	238	177	143
6RPR 610-34	34	9.30	12.50		367	351	335	324	317	310	281	252	187	151
6RPR 610-36	36	9.30	12.50											

Dimensions & Weights



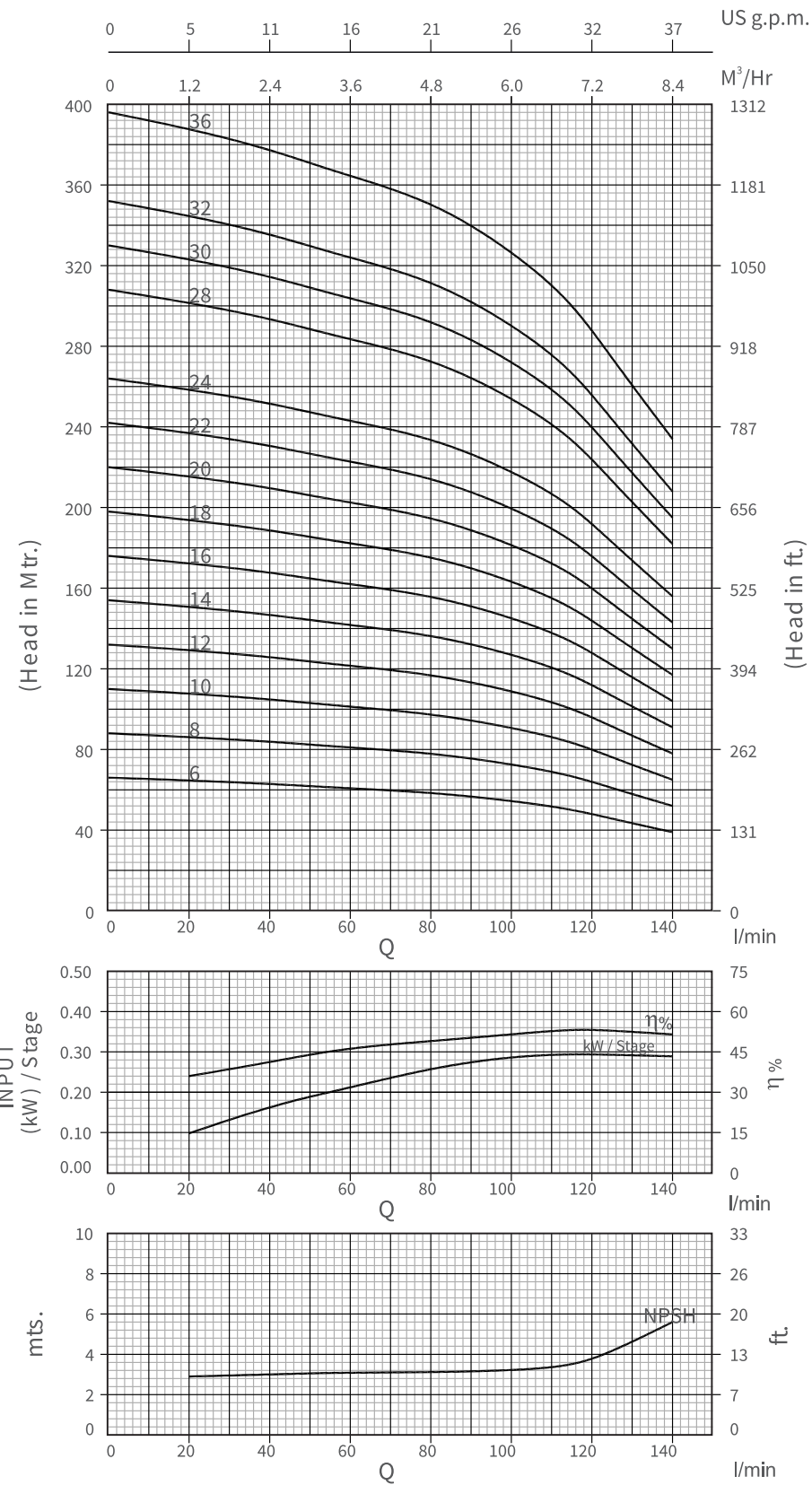
Model name	Specification			
	STAGE	D	L	G
6RPR 610-08	08	140	677	50
6RPR 610-10	10	140	807	50
6RPR 610-12	12	140	887	50
6RPR 610-13	13	140	927	50
6RPR 610-17	17	140	1087	50
6RPR 610-20	20	140	1207	50
6RPR 610-25	25	140	1457	50
6RPR 610-30	30	140	1657	50
6RPR 610-34	34	140	1917	50
6RPR 610-36	36	140	2047	50

*G: Available Outlet Size 2"
*D: With Cable Guard

Performance Curves

6RPR 620, 50Hz

ISO 9906 Annexure A



Performance Chart

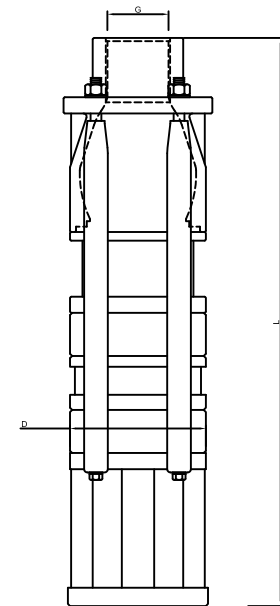
6RPR 620, 50Hz

ISO 9906 Annexure A

Model Name		Rating		Discharge									
Three Phase	Stage	kW	HP	l/min m³/h	0	20	40	55	80	100	115	125	140
					0	1.2	2.4	3.3	4.8	6.0	6.9	7.5	8.4

Model Name	Stage	kW	HP	66	65	63	61	59	55	50	46	39
6RPR 620-06	6	2.20	3.00	88	86	84	82	78	73	67	61	52
6RPR 620-08	8	3.00	4.00	110	108	105	102	98	91	84	76	65
6RPR 620-10	10	4.00	5.50	132	129	126	122	118	109	101	91	78
6RPR 620-12	12	4.00	5.50	154	151	147	143	137	127	118	106	91
6RPR 620-14	14	4.50	6.00	176	172	168	163	157	146	134	122	104
6RPR 620-16	16	5.50	7.50	198	194	189	184	176	164	151	137	117
6RPR 620-18	18	7.50	10.00	220	216	210	204	196	182	168	152	130
6RPR 620-20	20	7.50	10.00	242	237	231	224	216	200	185	167	143
6RPR 620-22	22	9.30	12.50	264	259	252	245	235	218	202	182	156
6RPR 620-24	24	9.30	12.50	308	302	294	286	274	255	235	213	182
6RPR 620-28	28	9.30	12.50	330	323	315	306	294	273	252	228	195
6RPR 620-30	30	11.00	15.00	352	345	336	326	314	291	269	243	208
6RPR 620-32	32	13.00	17.50	396	388	378	367	353	328	302	274	234

Dimensions & Weights

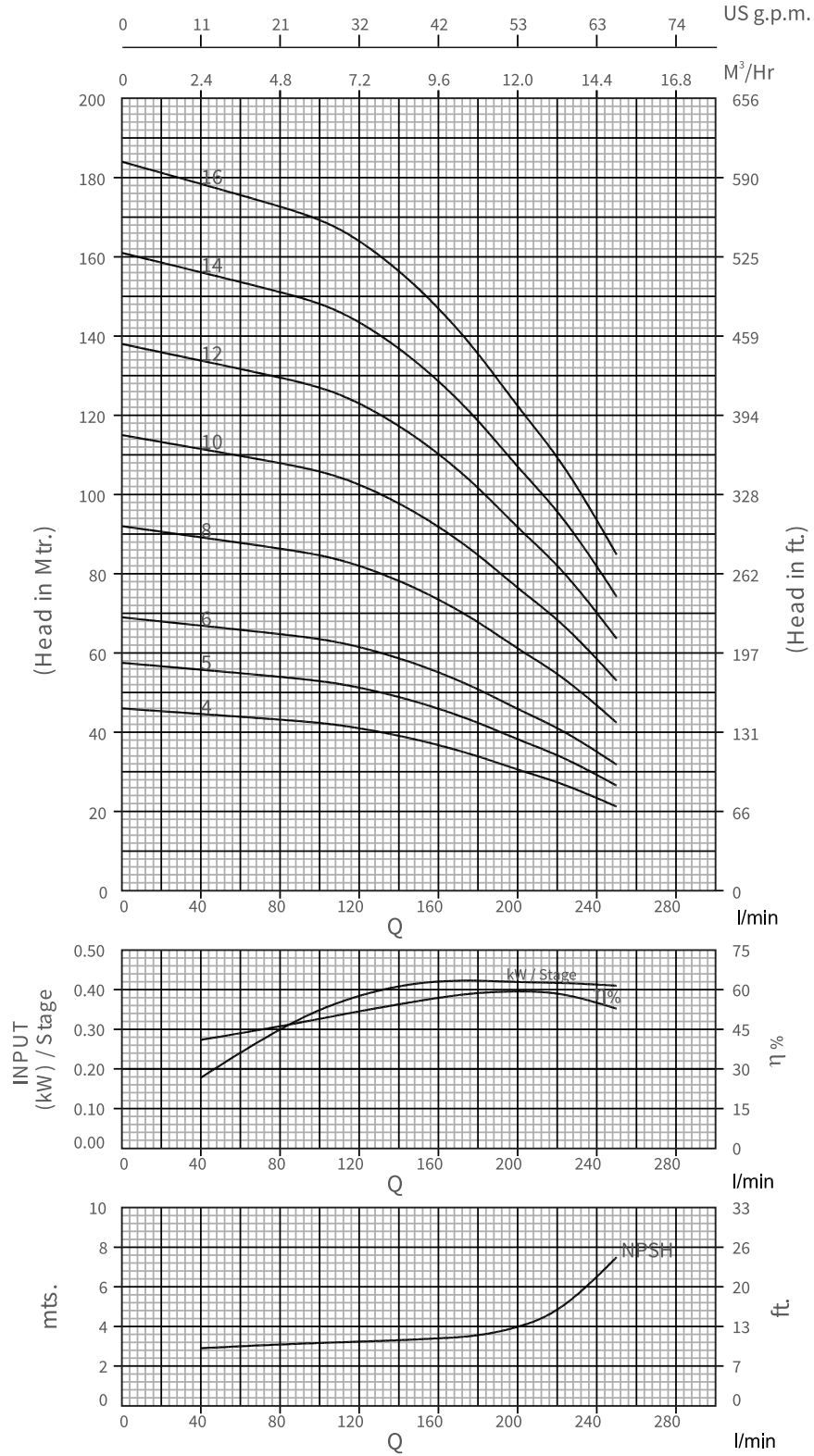


Model name	Specification			
	Stage	D	L	G
6RPR 620-06	06	140	637	50
6RPR 620-08	08	140	677	50
6RPR 620-10	10	140	807	50
6RPR 620-12	12	140	887	50
6RPR 620-14	14	140	967	50
6RPR 620-16	16	140	1047	50
6RPR 620-18	18	140	1127	50
6RPR 620-20	20	140	1207	50
6RPR 620-22	22	140	1337	50
6RPR 620-24	24	140	1417	50
6RPR 620-28	28	140	1577	50
6RPR 620-30	30	140	1657	50
6RPR 620-32	32	140	1787	50
6RPR 620-36	36	140	2047	50

*G: Available Outlet Size 2"
*D: With Cable Guard

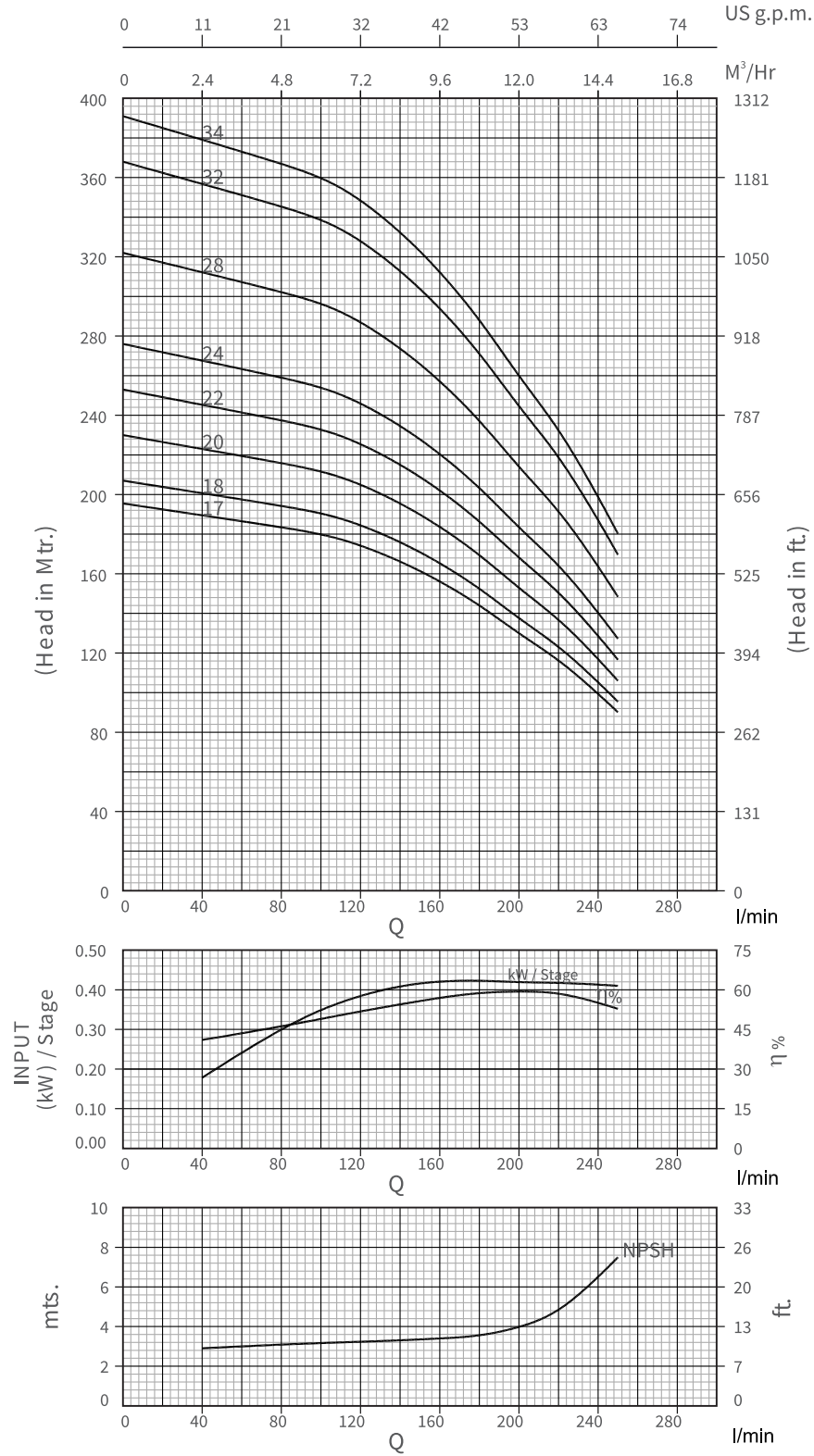
Performance Curves

6RPR 640, 50Hz
ISO 9906 Annexure A



Performance Curves

6RPR 640, 50Hz
ISO 9906 Annexure A



Performance Chart

6RPR 640, 50Hz

ISO 9906 Annexure A

Model Name	Three Phase	Stage	Rating		Discharge									
			kW	HP	l/min	0	40	80	110	140	160	180	203	225

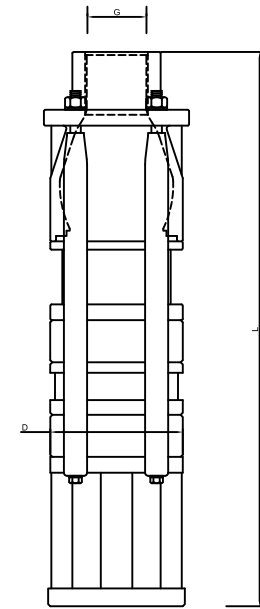
Model Name	Stage	kW	HP	HEAD IN Mtrs.	0	40	80	110	140	160	180	203	225	250
					0	2.4	4.8	6.6	8.4	9.6	10.8	12.18	13.5	15.0
6RPR 640-04	4	2.20	3.00	46	45	43	42	39	37	34	30	27	21	
6RPR 640-05	5	2.20	3.00	58	56	54	52	49	46	42	38	34	26	
6RPR 640-06	6	3.00	4.00	69	67	65	63	59	55	51	45	40	32	
6RPR 640-08	8	4.00	5.50	92	89	86	84	78	74	68	60	54	42	
6RPR 640-10	10	4.50	6.00	115	112	108	105	98	92	85	75	67	53	
6RPR 640-12	12	5.50	7.50	138	134	130	126	118	110	102	90	80	64	
6RPR 640-14	14	7.50	10.00	161	156	151	147	137	129	119	105	94	74	
6RPR 640-16	16	7.50	10.00	184	178	173	168	157	147	136	120	107	85	
6RPR 640-17	17	9.30	12.50	196	190	184	178	167	156	144	128	114	90	
6RPR 640-18	18	9.30	12.50	207	201	194	189	176	166	153	135	121	95	
6RPR 640-20	20	9.30	12.50	230	223	216	210	196	184	170	150	134	106	
6RPR 640-22	22	11.00	15.00	253	245	238	231	216	202	187	165	147	117	
6RPR 640-24	24	11.00	15.00	276	268	259	252	235	221	204	180	161	127	
6RPR 640-28	28	13.00	17.50	322	312	302	294	274	258	238	210	188	148	
6RPR 640-32	32	15.00	20.00	368	357	346	336	314	294	272	240	214	170	
6RPR 640-34	34	18.50	25.00	391	379	367	357	333	313	289	255	228	180	

Submersible Pumps

6RPR 640, 50Hz

ISO 9906 Annexure A

Dimensions & Weights



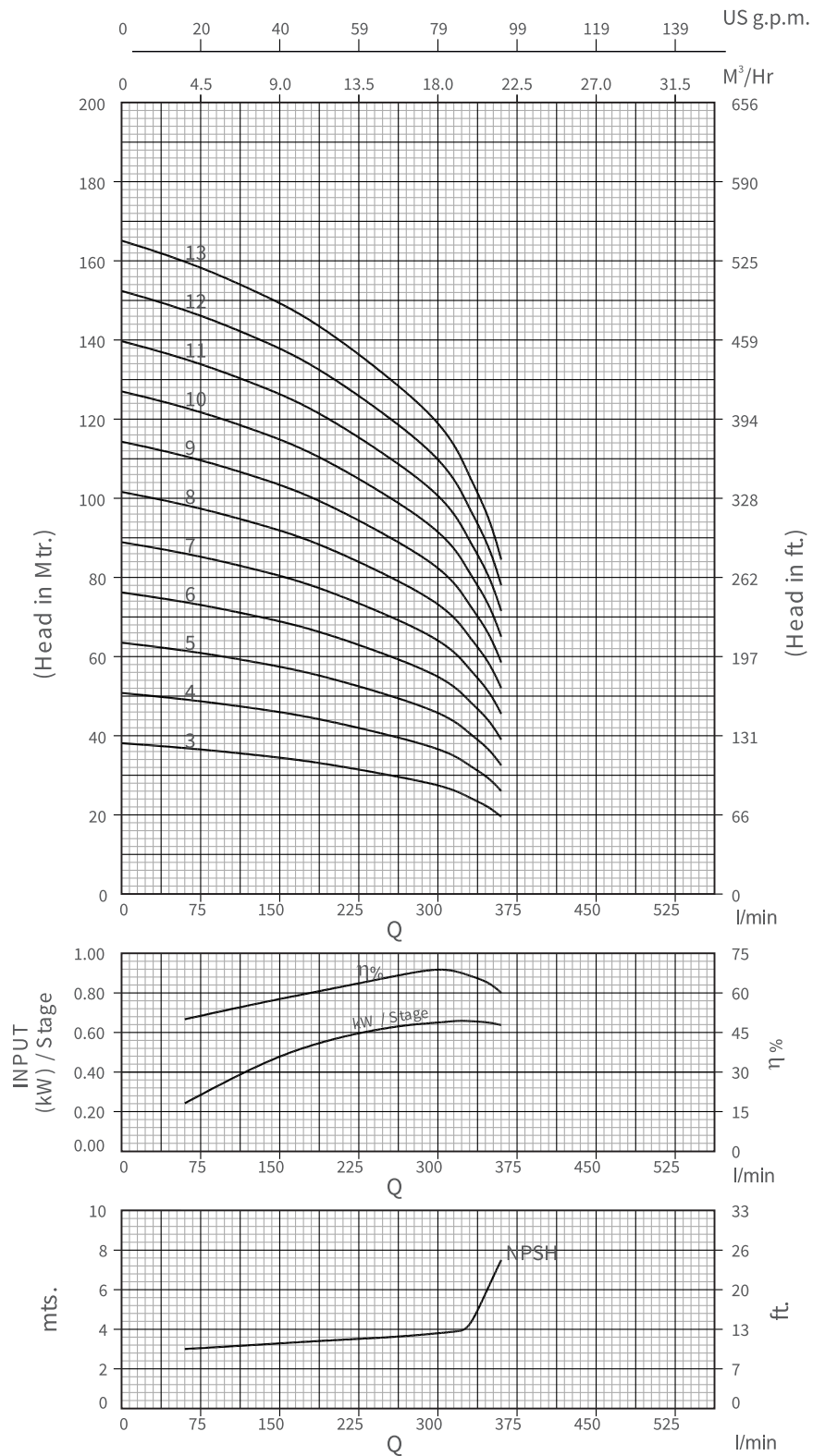
Model name	Specification			
	Stage	D	L	G
6RPR 640-04	04	140	615	50
6RPR 640-05	05	140	665	50
6RPR 640-06	06	140	715	50
6RPR 640-08	08	140	815	50
6RPR 640-10	10	140	915	50
6RPR 640-12	12	140	1065	50
6RPR 640-14	14	140	1165	50
6RPR 640-16	16	140	1265	50
6RPR 640-17	17	140	1315	50
6RPR 640-18	18	140	1365	50
6RPR 640-20	20	140	1465	50
6RPR 640-24	24	140	1715	50
6RPR 640-28	28	140	1915	50
6RPR 640-32	32	140	2165	50
6RPR 640-34	34	140	2365	50

*G: Available Outlet Size 2"

*D: With Cable Guard

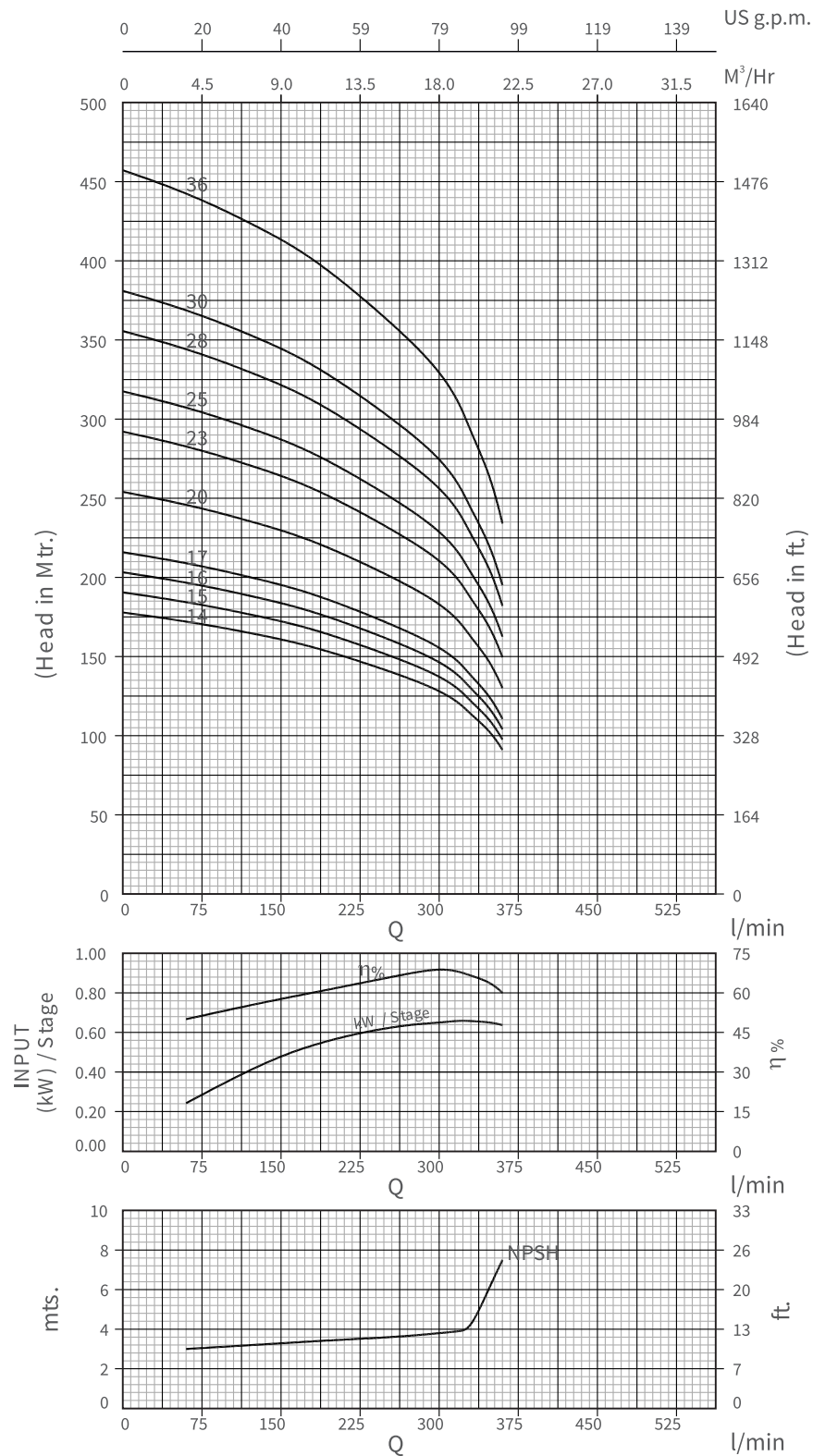
Performance Curves

6RPR 650, 50Hz
ISO 9906 Annexure A



Performance Curves

6RPR 650, 50Hz
ISO 9906 Annexure A



Performance Chart

6RPR 650, 50Hz

ISO 9906 Annexure A

Model Name	Three Phase	Stage	Rating		Discharge									
			kW	HP	l/min m ³ /h	0	60	125	180	260	300	320	330	350

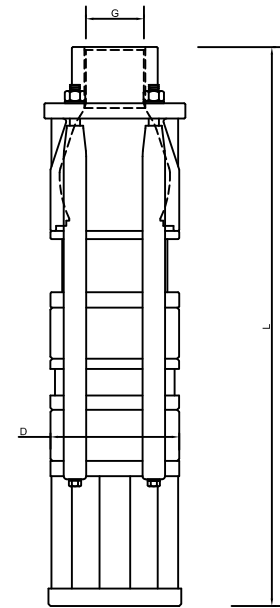
Model Name	Stage	kW	HP	HEAD IN Mtrs.	0	60	125	180	260	300	320	330	350	360
6RPR 650-03	3	2.20	3.00		38	37	35	34	30	28	26	24	22	20
6RPR 650-04	4	3.00	4.00	51	49	47	45	40	37	34	32	29	26	
6RPR 650-05	5	4.00	5.50	64	62	59	56	50	46	43	40	36	32	
6RPR 650-06	6	4.50	6.00	76	74	70	67	60	55	52	49	44	39	
6RPR 650-07	7	5.50	7.50	89	86	82	78	70	64	60	57	51	46	
6RPR 650-08	8	5.50	7.50	102	99	94	90	80	74	69	65	58	52	
6RPR 650-09	9	7.50	10.00	114	111	106	101	90	83	77	73	66	58	
6RPR 650-10	10	7.50	10.00	127	123	117	112	100	92	86	81	73	65	
6RPR 650-11	11	9.30	12.50	140	136	129	123	109	101	95	89	80	72	
6RPR 650-12	12	9.30	12.50	152	148	141	134	119	110	103	97	88	78	
6RPR 650-13	13	9.30	12.50	165	160	153	146	129	120	112	105	95	84	
6RPR 650-14	14	11.00	15.00	178	173	164	157	139	129	120	113	102	91	
6RPR 650-15	15	11.00	15.00	190	185	176	168	149	138	129	122	110	98	
6RPR 650-16	16	13.00	17.50	203	197	188	179	159	147	138	130	117	104	
6RPR 650-17	17	13.00	17.50	216	210	200	190	169	156	146	138	124	110	
6RPR 650-20	20	15.00	20.00	254	247	235	224	199	184	172	162	146	130	
6RPR 650-23	23	18.50	25.00	292	284	270	258	229	212	198	186	168	150	
6RPR 650-25	25	18.50	25.00	318	308	294	280	249	230	215	203	182	162	
6RPR 650-28	28	22.00	30.00	356	345	329	314	279	258	241	227	204	182	
6RPR 650-30	30	22.00	30.00	381	370	352	336	298	276	258	243	219	195	
6RPR 650-36	36	30.00	40.00	457	444	423	403	358	331	310	292	263	234	

Submersible Pumps

6RPR 650, 50Hz

ISO 9906 Annexure A

Dimensions & Weights



Model name	Specification			
	Stage	D	L	G
6RPR 650-03	03	140	565	50
6RPR 650-04	04	140	615	50
6RPR 650-05	05	140	665	50
6RPR 650-06	06	140	715	50
6RPR 650-07	07	140	765	50
6RPR 650-08	08	140	815	50
6RPR 650-09	09	140	865	50
6RPR 650-10	10	140	915	50
6RPR 650-11	11	140	1015	50
6RPR 650-12	12	140	1065	50
6RPR 650-13	13	140	1115	50
6RPR 650-14	14	140	1165	50
6RPR 650-15	15	140	1215	50
6RPR 650-16	16	140	1265	50
6RPR 650-17	17	140	1315	50
6RPR 650-20	20	140	1465	50
6RPR 650-23	23	140	1665	50
6RPR 650-25	25	140	1765	50
6RPR 650-28	28	140	1915	50
6RPR 650-30	30	140	2015	50
6RPR 650-36	36	140	2465	50

*G: Available Outlet Size 2"
*D: With Cable Guard