

  
**RAINFOS**<sup>®</sup>  
SUBMERSIBLE PUMP



*Together we Can do it  
Together we have always done it*



## ABOUT US

Rainfos was established at a 150 m workshop in 2016 by Mech. develops rapidly on the path of becoming a global trademark by bringing together its expert engineering, importance given on R&D activities and its customer-oriented working in policy with its approximately 65 employees working in 42 m open and 16.500 m closed area. Rainfos achieves to export its products 18 countries the world.



Rainfos offers wide range of pumps and for the water and other fluid solutions in local, agricultural and industrial areas, we produce submersible pumps and motors, vertical Multistage Inline Pumps, Centrifugal Pump, Double Suction Split Case Pumps, Special Design Pumps that are to offer Customized solutions to your needs.



## RS & RSP Product Range

Stainless steel submersible bore well pumps.

Pump outlet			
Type	Stainless steel AISI 304**	Connection*	Flange connection UNNATI flange
RSP1	•	Rp 1 <sup>1</sup> / <sub>4</sub>	
RSP2	•	Rp 1 <sup>1</sup> / <sub>4</sub> (Rp 2)	
RSP3	•	Rp 1 <sup>1</sup> / <sub>4</sub>	
RSP5	•	Rp 1 <sup>1</sup> / <sub>2</sub> (Rp 2)	
RSP8	•	Rp 2 (Rp 2)	
RSP14	•	Rp 2	
3RS6	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
4RS8	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
5RS10	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
6RS12	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
8RS16	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
10RS20	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
12RS22	•	Rp 2 <sup>1</sup> / <sub>2</sub>	
10HRS17	•	Rp 2 <sup>1</sup> / <sub>2</sub> (Rp 3)	
12HRS20	•	Rp 2 <sup>1</sup> / <sub>2</sub> (Rp 3)	
15HRS24	•	Rp 2 <sup>1</sup> / <sub>2</sub> (Rp 3)	
RSP17	•	Rp 2 <sup>1</sup> / <sub>2</sub> (Rp 3)	
RSP30	•	Rp 3 (Rp 3)	
RSP46	•	Rp 3 / Rp 4 (Rp 3)	
RSP60	•	Rp 3 / Rp 4	
RSP77	•	Rp 5	5"
RSP95	•	Rp 5	5"
RSP125	•	Rp 6	6"
RSP160	•	Rp 6	6"
RSP215	•	Rp6	6"

Knse8 \* Figures in brackets () indicate connection for pumps in sleeve.

\*\* Stainless steel AISI 316 is available on request.

## RS & RSP Design Features

Stainless steel submersible bore well pumps.

### Non-return valve

All pumps are equipped with a reliable nonreturn valve which prevents back flow in connection with pump stoppage.

Further more, the short closing time of the nonreturn valve means the risk of destructive water hammer is reduced to minimum.

The valve casing designed for optimum hydraulic properties, to minimize the pressure loss across the valve and thus contributes to the high efficiency of the pump

### Bearing with sand channels

All bearing are water-lubricated and have a squared shape enabling sand particles, if any, to leave the pump together with the pumped liquid.

### Stop ring

The stop ring prevents damage to the pump during transport and in case of up-thrust in connection with start-up.

The stop ring, which is designed as a thrust bearing, limits axial movement of the pump shaft.

The stationary part of the stop ring is secured in the upper intermediate chamber. The rotating part is fitted above the split cone.

### Inlet strainer

The inlet strainer prevents particles over a certain size from entering the pump



## 4" Product Data

Stainless steel submersible bore well pumps.



### Construction

- Submersible motor & pumps for deep wells of 4" (DN 150mm).
- Sized for connection to the motor according to NEMA standards.
- Delivery casing with built-in non-return valve.
- All standard pumps are completely manufactured out of stainless AISI 304 sheet metal.
- Impeller
  - Mixed flow impellers
  - RSP2, RSP3, RSP5
- Connection : Screwed pipe connection with BSP thread as standard.

### Applications

- Water Supply
- Irrigation
- Civil
- Industrial
- Fire Fighting

### Performance range

- Flow Range : Max. 18.8m<sup>3</sup>/h
- Head Range : Max. 547m

### Operating conditions

- Liquid temperature : 0°C to +45°C
- Max. sand content into the water : 50g/m<sup>3</sup>
- Max. starts per hour : 30 at regular intervals.
- Direction of rotation : Clockwise as seen from the pump coupling side.

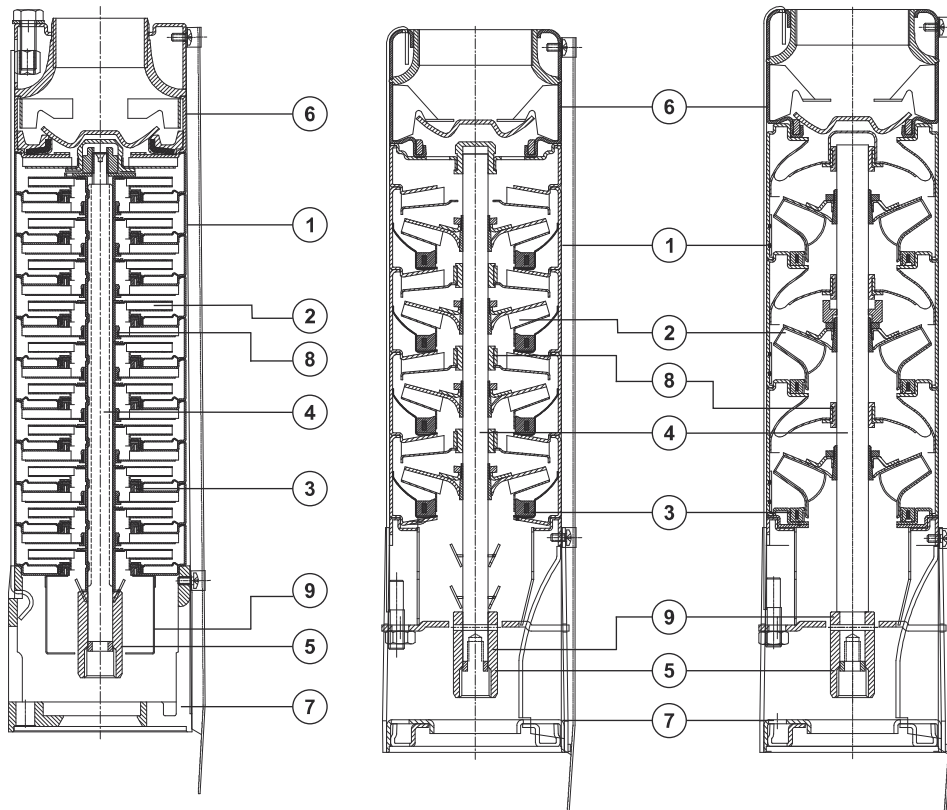
### Special construction on request

- Also available in stainless steel AISI 316 material (for sea water application).
- Also available with NPT thread pipe connection.

## 4" Construction

Stainless steel submersible bore well pumps.

### Sectional Drawing



RSP Type Pump  
RSP1, RSP2, RSP3, RSP5

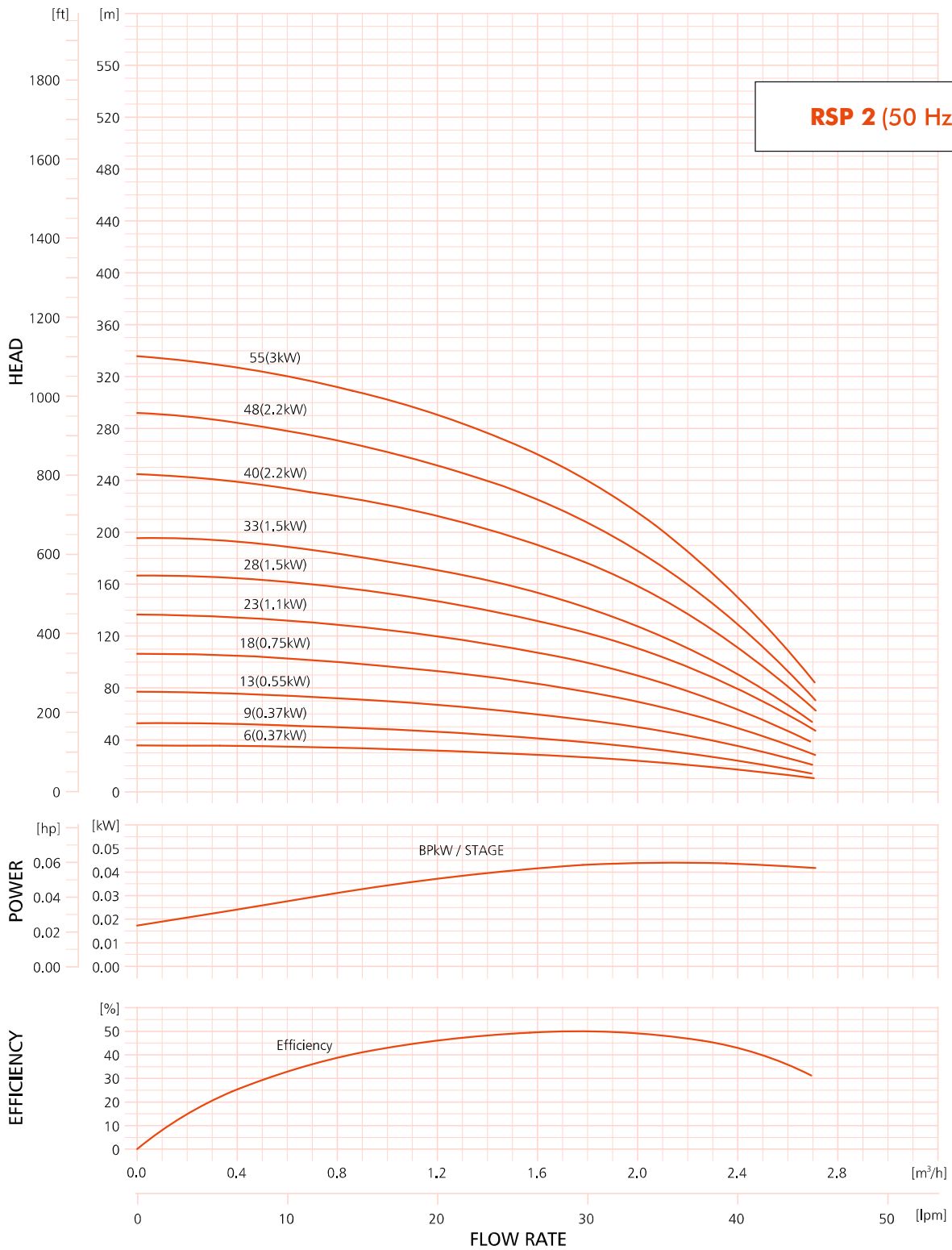
RSP Type Pump  
RSP8

RSP Type Pump  
RSP14

### Materials

Pos.	Component	Material
1	Bowl/Diffuser	Stainless steel AISI 304
2	Impeller	Stainless steel AISI 304
3	Neck ring	NBR
4	Shaft	Stainless steel AISI 316
5	Couple	Stainless steel AISI 316
6	Delivery casing	Stainless steel AISI 304
7	Suction case	Stainless steel AISI 304
8	Bearing bush	NBR
9	Strainer	Stainless steel AISI 304

## Performance Curve



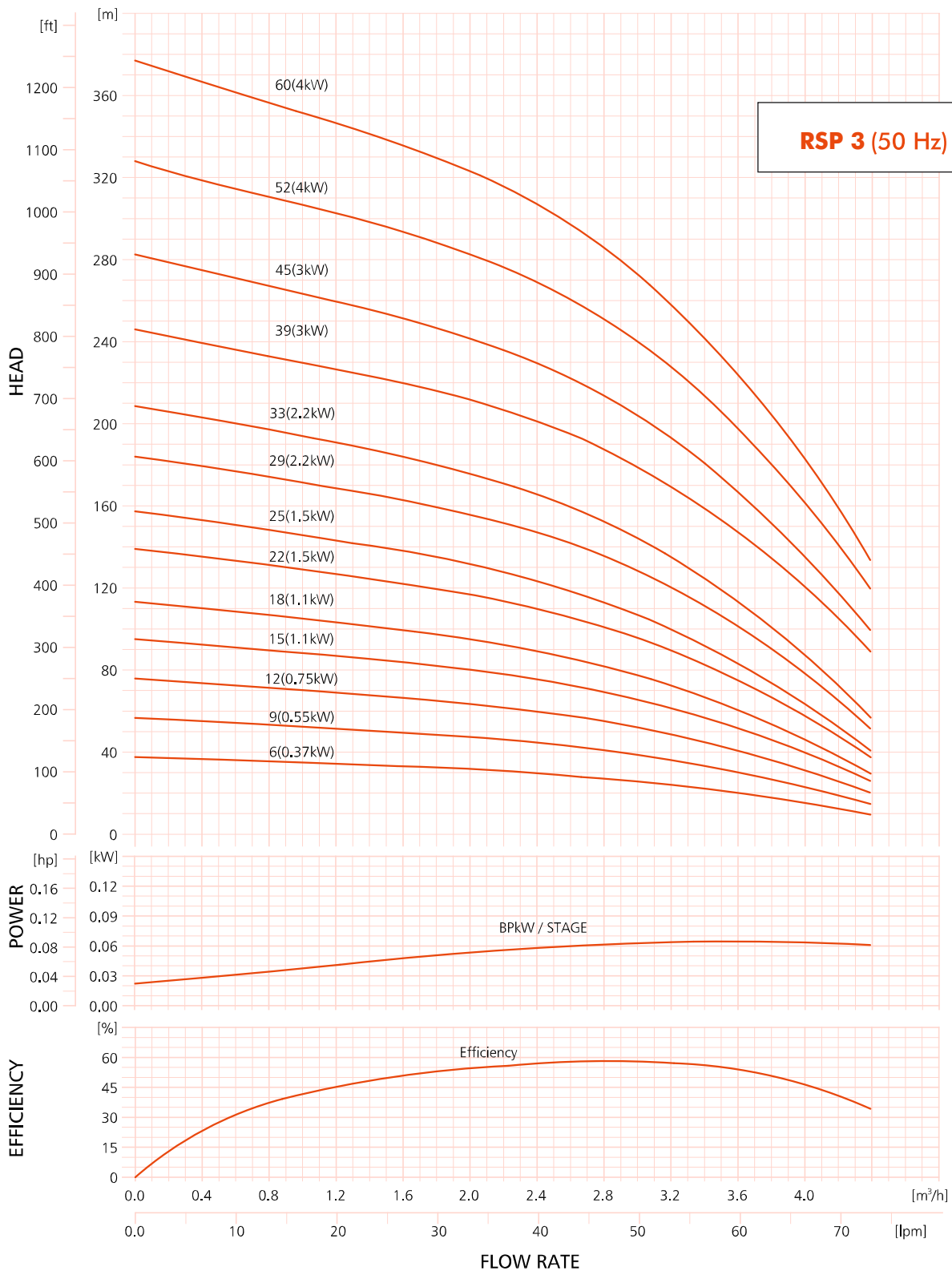
## Performance Table

### Radial Flow 4" Electric Submersible Pump

<b>RSP 2</b>		Q		n = 2900 rpm						
		m <sup>3</sup> /h		0	1	1.4	1.8	2	2.4	2.8
		l/min.		0	16.7	23.4	30.1	33.4	40.1	46.8
Model	Motor Rating		Total Head In Meters							
	[kW]	[HP]								
RSP2-6	0.37	0.5	36	33	30	26	24	17	13	
RSP2-9	0.37	0.5	53	48	44	38	34	24	17	
RSP2-13	0.55	0.75	77	70	64	55	50	35	26	
RSP2-18	0.75	1.0	107	97	89	77	69	49	36	
RSP2-23	1.1	1.5	137	124	114	99	90	64	47	
RSP2-28	1.5	2.0	167	152	140	122	110	79	59	
RSP2-33	1.5	2.0	196	178	163	142	128	90	66	
RSP2-40	2.2	3.0	245	221	203	176	158	111	81	
RSP2-48	2.2	3.0	292	262	240	207	186	129	93	
RSP2-55	3.0	4.0	336	302	277	240	215	150	109	



## Performance Curve

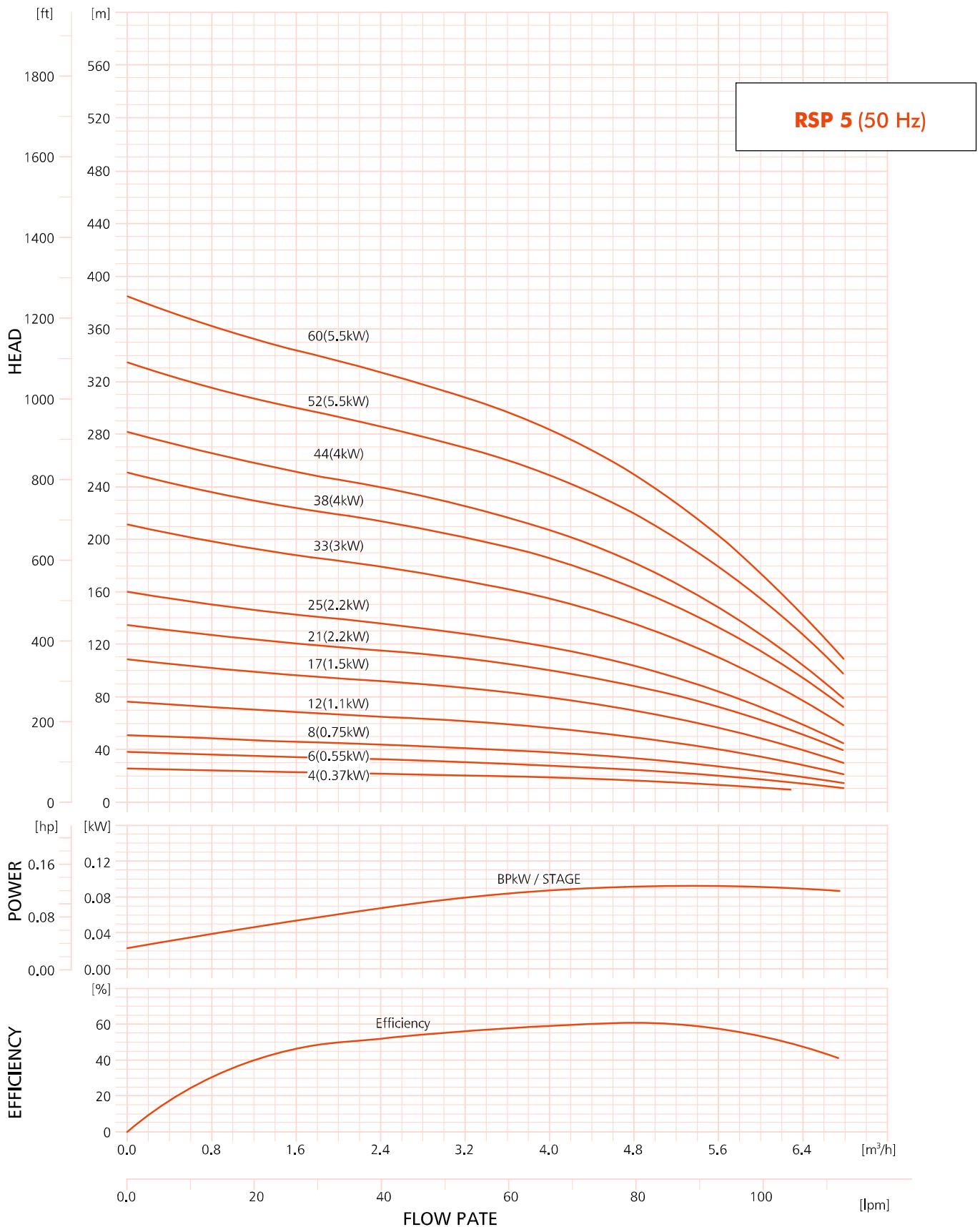


## Performance Table

### Radial Flow 4" Electric Submersible Pump

RSP 3		Q		n = 2900 rpm									
		m <sup>3</sup> /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	Motor Rating		Total Head In Meters										
	[kW]	[HP]											
RSP3-6	0.37	0.5	38	35	34	32	31	30	27	22	15	12	
RSP3-9	0.55	0.75	57	54	51	49	47	45	41	33	23	19	
RSP3-12	0.75	1	76	70	68	65	64	60	55	45	31	26	
RSP3-15	1.1	1.5	95	87	85	82	80	76	70	57	40	33	
RSP3-18	1.1	1.5	113	105	101	97	95	89	82	67	46	38	
RSP3-22	1.5	2.0	139	129	125	120	117	110	101	83	57	47	
RSP3-25	1.5	2.0	157	145	140	135	131	124	113	92	63	52	
RSP3-29	2.2	3.0	184	171	166	159	156	147	136	111	78	65	
RSP3-33	2.2	3.0	209	194	187	180	176	166	152	125	87	72	
RSP3-39	3.0	4.0	246	230	223	216	212	201	188	160	120	105	
RSP3-45	3.0	4.0	283	264	255	247	242	229	214	181	135	118	
RSP3-52	4.0	5.5	328	308	298	289	283	269	251	214	161	141	
RSP3-60	4.0	5.5	377	350	341	330	323	307	286	242	182	158	

## Performance Curve

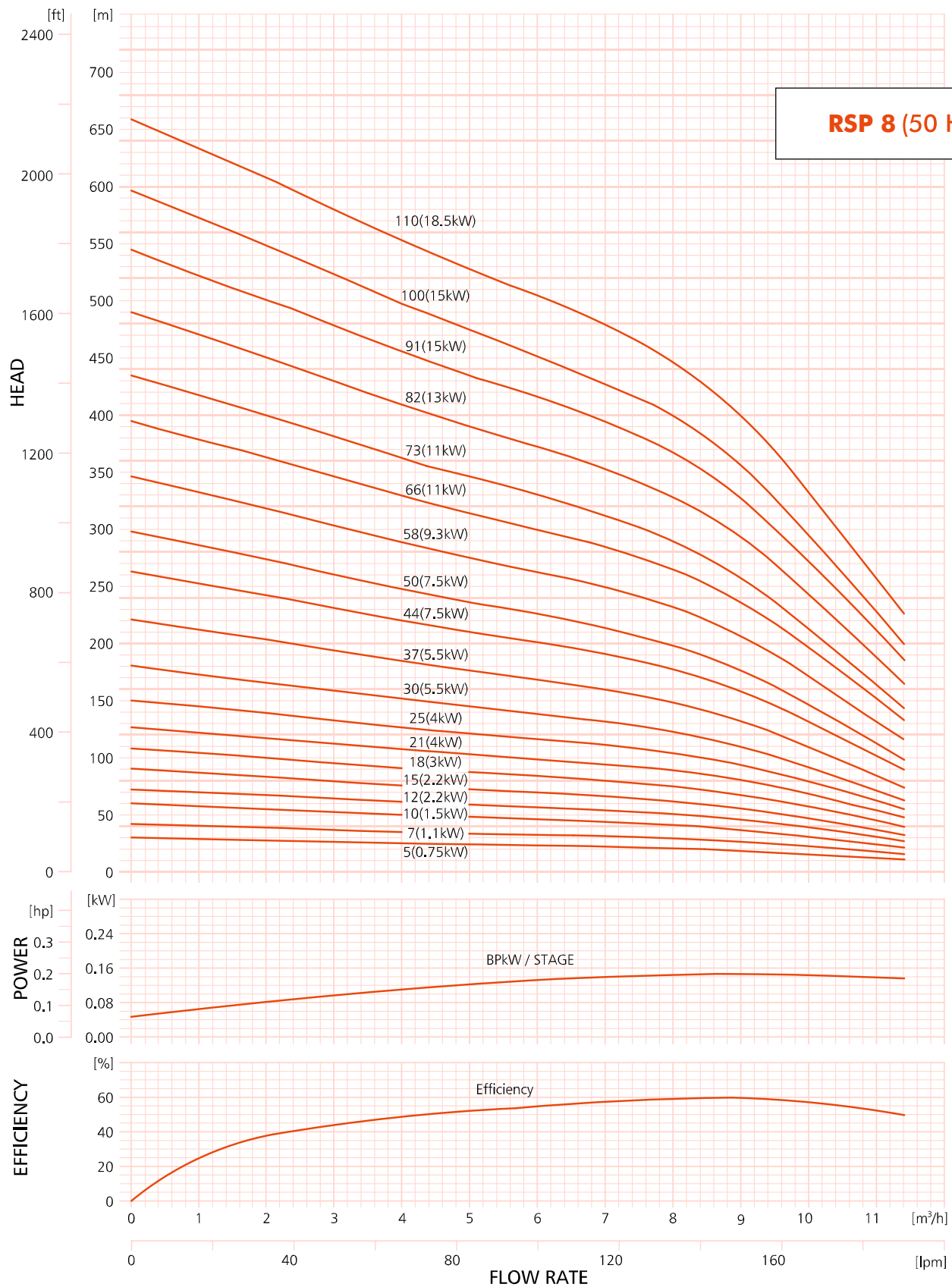


## Performance Table

### Radial Flow 4" Electric Submersible Pump

RSP 5		n = 2900 rpm														
		Q														
		m <sup>3</sup> /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	Motor Rating		Total Head In Meters													
	[kW]	[HP]														
RSP5-4	0.37	0.5	26	24	23	23	22	22	21	20	19	18	16	11	9	
RSP5-6	0.55	0.75	38	36	35	34	33	33	32	30	28	26	24	17	11	
RSP5-8	0.75	1	51	48	47	46	45	44	43	40	38	36	32	23	15	
RSP5-12	1.1	1.5	77	72	70	68	67	65	63	60	56	54	47	35	23	
RSP5-17	1.5	2	109	100	97	96	94	92	90	85	80	75	67	49	32	
RSP5-21	2.2	3	135	126	122	120	118	115	112	106	100	95	85	63	42	
RSP5-25	2.2	3	160	150	145	141	139	135	131	125	118	112	99	72	48	
RSP5-33	3	4	211	195	190	186	183	179	173	166	155	148	130	95	62	
RSP5-38	4	5.5	250	233	229	221	219	215	209	199	186	177	157	115	76	
RSP5-44	4	5.5	281	260	257	250	245	240	232	220	207	195	174	127	84	
RSP5-52	5.5	7.5	334	310	302	296	293	285	280	267	249	238	210	155	110	
RSP5-60	5.5	7.5	384	360	345	339	335	325	319	303	283	269	238	175	130	

## Performance Curve

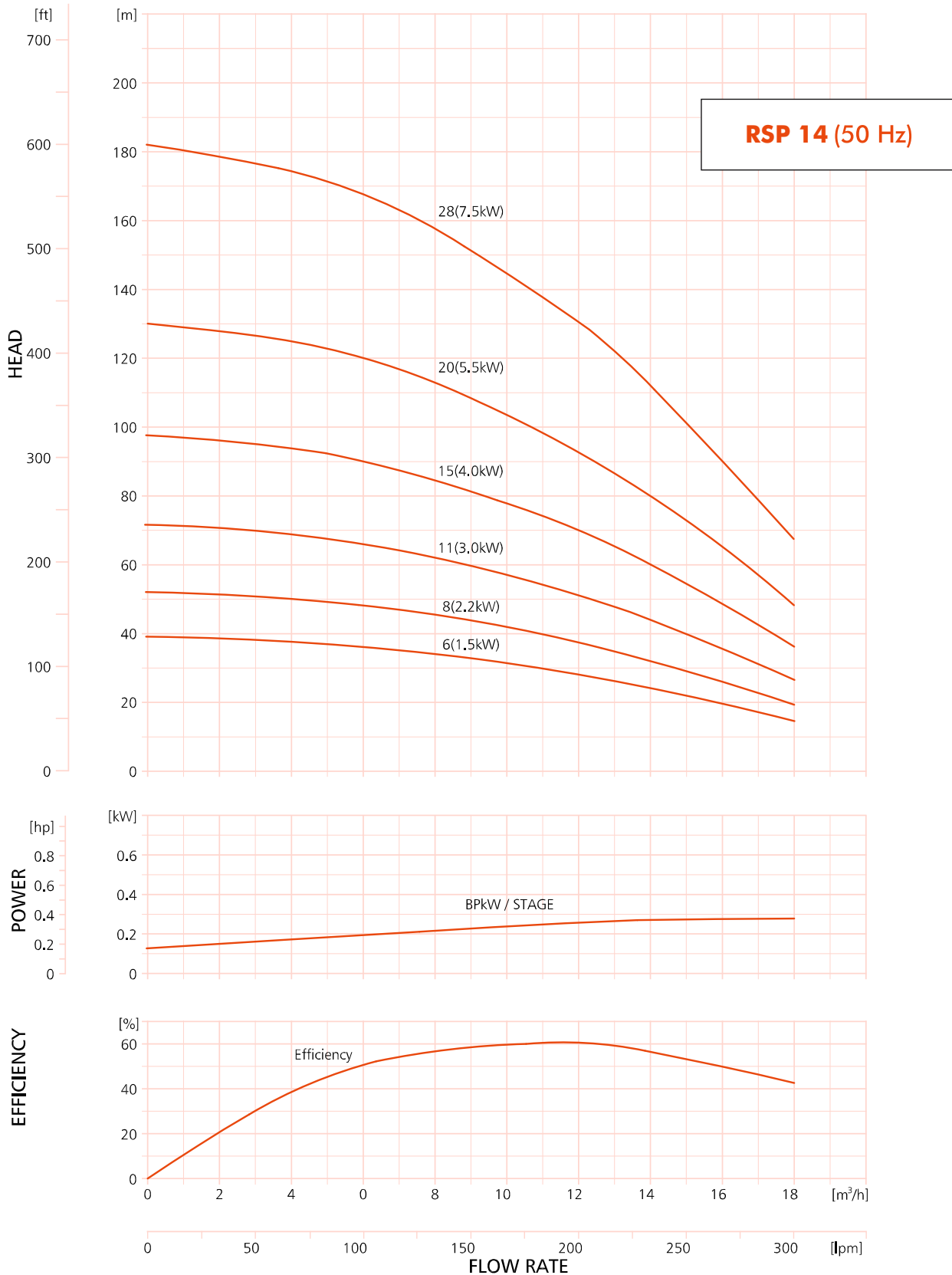


## Performance Table

### Mixed Flow 4" Electric Submersible Pump

<b>RSP 8</b>		Q		n = 2900 rpm								
		m <sup>3</sup> /h		0	1.4	2	4	6	8	9	10	11
		l/min.		0	23.4	33.4	66.8	100.2	133.3	150	167	183.7
Model	Motor Rating		Total Head In Meters									
	[kW]	[HP]										
RSP8-5	0.75	1.0	30	29	27	25	23	21	19	16	12	
RSP8-7	1.1	1.5	42	40	38	35	32	29	26	22	17	
RSP8-10	1.5	2.0	60	57	55	50	46	41	37	32	24	
RSP8-12	2.2	3.0	72	68	66	61	57	51	46	39	31	
RSP8-15	2.2	3.0	90	85	82	76	70	62	56	47	37	
RSP8-18	3.0	4.0	108	102	99	91	84	75	67	57	45	
RSP8-21	4.0	5.5	127	120	117	107	99	89	80	68	53	
RSP8-25	4.0	5.54	150	142	139	126	116	104	94	79	62	
RSP8-30	5.5	7.5	180	170	165	151	138	123	110	92	71	
RSP8-37	5.5	7.5	221	210	202	184	168	148	132	110	84	

## Performance Curve



## Performance Table

**Mixed Flow 4"** Electric Submersible Pump

<b>RSP 14</b>		Q	n = 2900 rpm						
		m <sup>3</sup> /h	0	6	9	11	12	14	18
		l/min.	0	100.2	150	183.7	200.4	233.8	300.6
Model	Motor Rating		Total Head In Meters						
	[k/W]	[HP]							
RSP14-6	1.5	2	39	36	32	29	28	24	14
RSP14-8	2.2	3	52	48	42	39	37	32	19
RSP14-11	3	4	72	66	58	54	51	44	26
RSP14-15	4	5.5	98	90	80	74	70	60	36
RSP14-20	5.5	7.5	130	120	106	98	93	80	48
RSP14-28	7.5	10	182	168	148	137	131	112	67



## 6" Product Data

Stainless steel submersible bore well pumps.

### Construction

- Submersible motor & pumps for deep wells of 6" (DN 150mm).
- Sized for connection to the motor according to NEMA standards.
- Delivery casing with built-in non-return valve.
- All standard pumps are completely manufactured out of stainless AISI 304 sheet metal.
- Impeller
  - Mixed flow impellers
  - RSP17, RSP30, RSP46, RSP60
- Connection : Screwed pipe connection with BSP thread as standard.

### Applications

- Water Supply
- Irrigation
- Civil
- Industrial
- Fire Fighting

### Performance range

- Flow Range : Max. 78m<sup>3</sup>/h
- Head Range : Max. 700m

### Operating conditions

- Liquid temperature : 0°C to +45°C
- Max. sand content into the water : 50g/m<sup>3</sup>
- Max. starts per hour : 20 at regular intervals.
- Direction of rotation : Clockwise as seen from the pump coupling side.

### Special construction on request

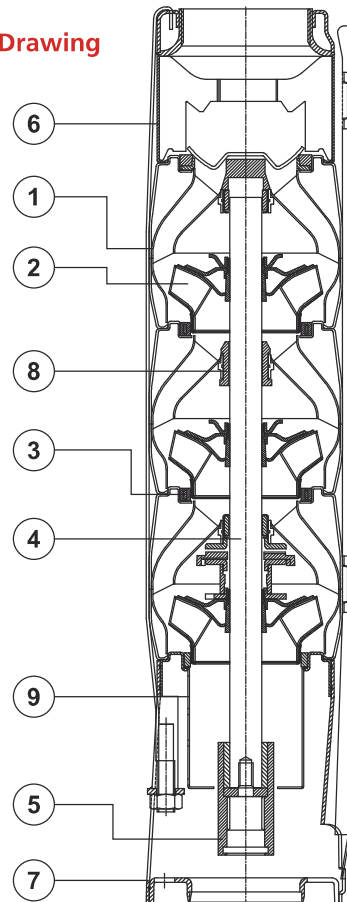
- Also available in stainless steel AISI 316 material.
- Also available with NPT thread pipe connection.



## 6" Construction

Stainless steel submersible bore well pumps.

Sectional Drawing

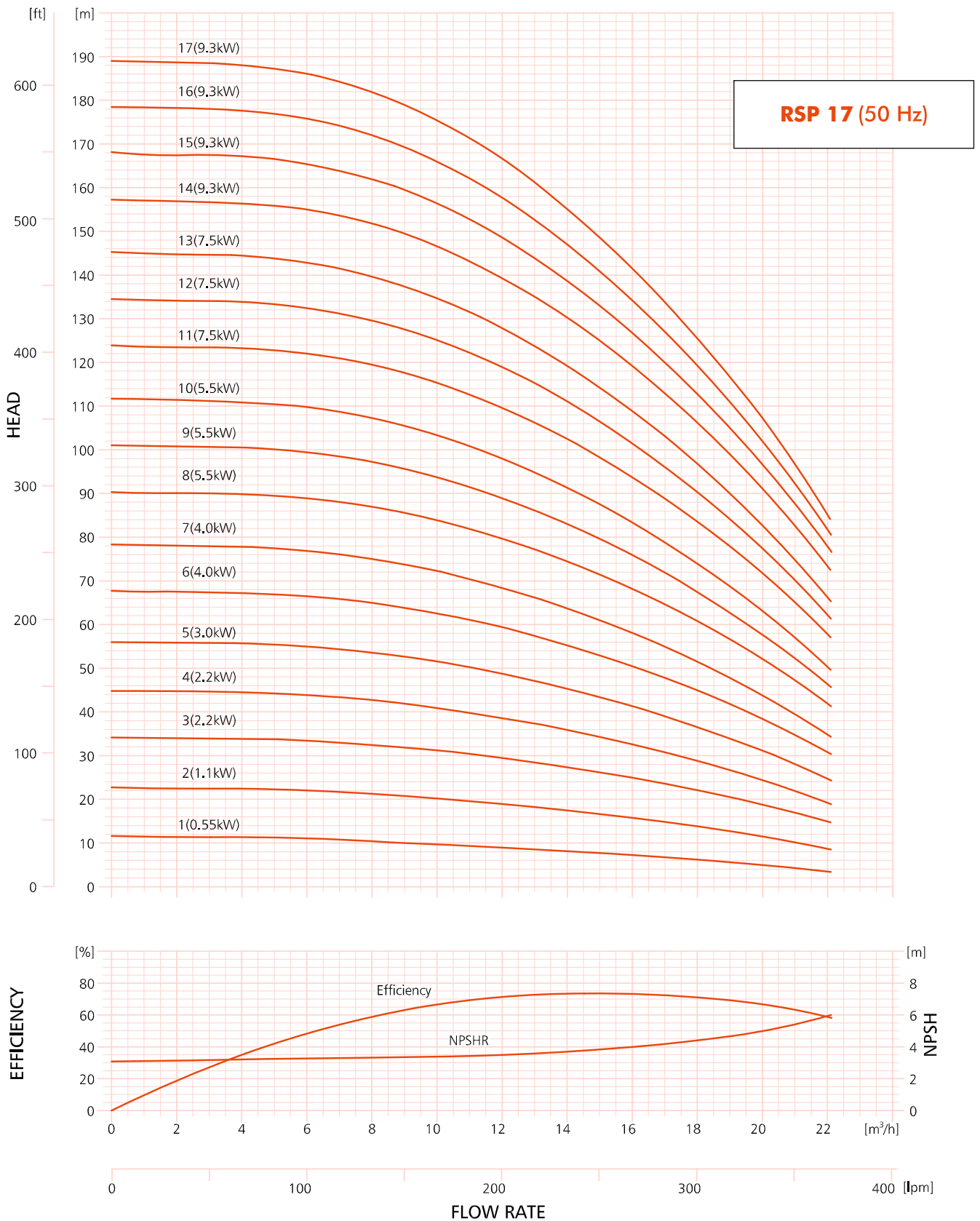


RSP Type Pump  
RSP17, RSP30, RSP46, RSP60

### Materials

Pos.	Component	Material
1	Bowl / Diffuser	Stainless steel AISI 304
2	Impeller	Stainless steel AISI 304
3	Neck ring	NBR
4	Shaft	Stainless steel AISI 431
5	Couple	Stainless steel AISI 316
6	Delivery casing	Stainless steel AISI 304
7	Suction case	Stainless steel AISI 304
8	Bearing bush	NBR
9	Strainer	Stainless steel AISI 304

## Performance Curve

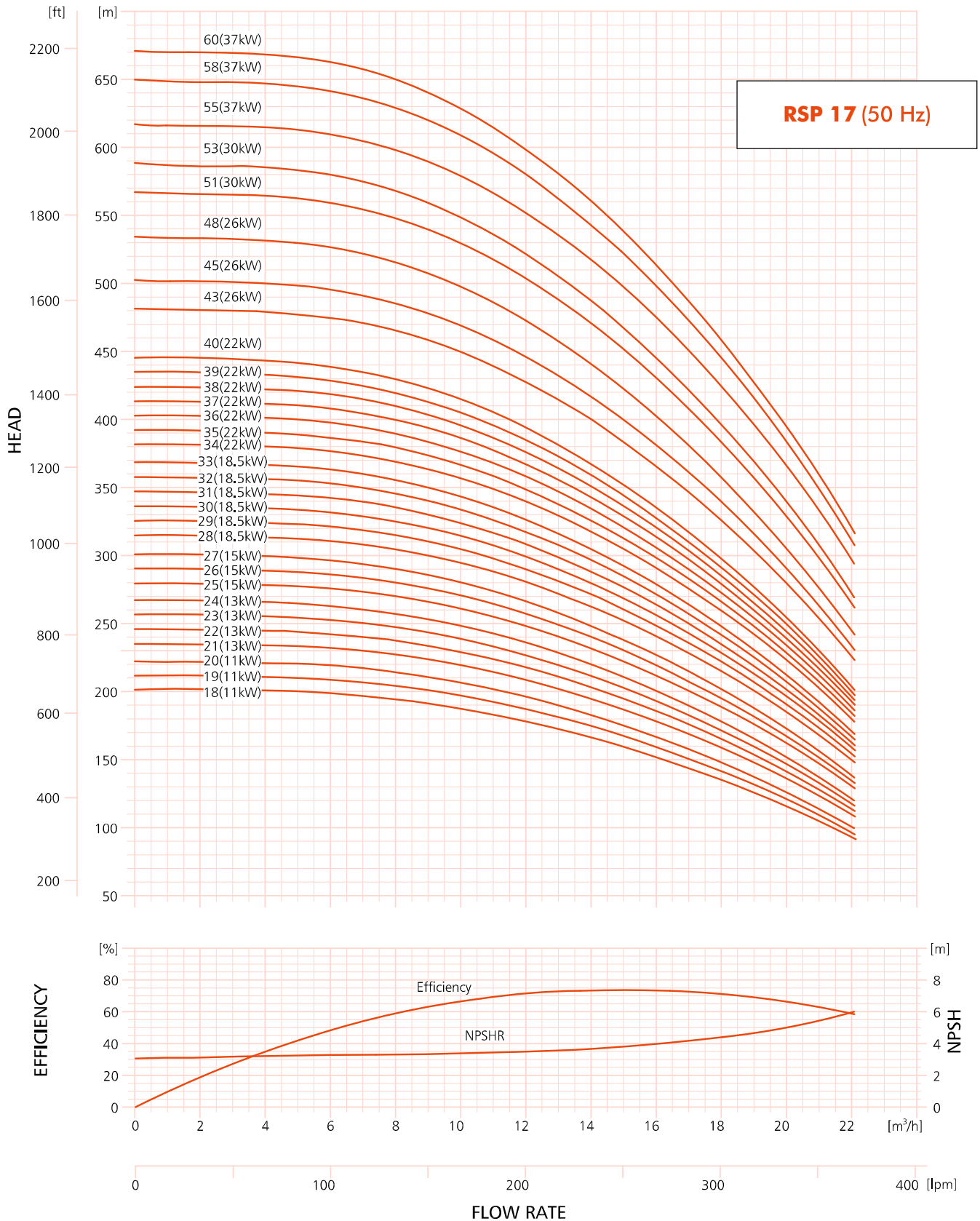


## Performance Table

### Mixed Flow 6" Electric Submersible Pump

RSP 17		Q		n = 2900 rpm											
		M <sup>3</sup> /h		0	2	4	6	8	10	12	14	16	18	20	22
		l/min.		0	33.3	66.7	100	133.3	166.7	200	233.3	266.7	300	333.3	366.7
Model	Motor Rating		Total Head In Meters												
	[kW]	[HP]													
RSP17-1	0.55	0.75	12	11	11	11	10	10	9	8	7	6	5	4	
RSP17-2	1.1	1.5	23	23	22	22	21	20	19	17	16	14	12	9	
RSP17-3	2.2	3	34	34	34	33	33	31	29	27	25	22	19	15	
RSP17-4	2.2	3	45	45	44	44	43	41	39	36	33	29	24	19	
RSP17-5	3	4	56	56	56	55	54	51	49	45	41	37	31	25	
RSP17-6	4	5.5	68	67	67	66	65	63	59	55	50	45	38	31	
RSP17-7	4	5.5	78	78	78	77	75	72	68	64	58	52	44	35	
RSP17-8	5.5	7.5	90	90	90	89	87	84	80	74	68	61	52	42	
RSP17-9	5.5	7.5	101	101	100	99	97	94	89	83	76	67	58	46	
RSP17-10	5.5	7.5	112	111	111	110	107	103	98	91	83	74	63	50	
RSP17-11	7.5	10	124	124	123	122	119	115	110	102	94	84	72	58	
RSP17-12	7.5	10	135	134	134	132	130	125	119	111	101	90	77	62	
RSP17-13	7.5	10	145	145	144	143	140	135	128	119	109	97	83	66	
RSP17-14	9.3	12.5	157	157	156	155	152	147	139	130	119	106	91	74	
RSP17-15	9.3	12.5	168	168	167	165	162	156	149	139	127	113	97	78	
RSP17-16	9.3	12.5	179	178	178	176	172	166	158	147	134	119	102	82	
RSP17-17	9.3	12.5	189	189	188	186	182	175	166	155	141	126	107	86	

## Performance Curve

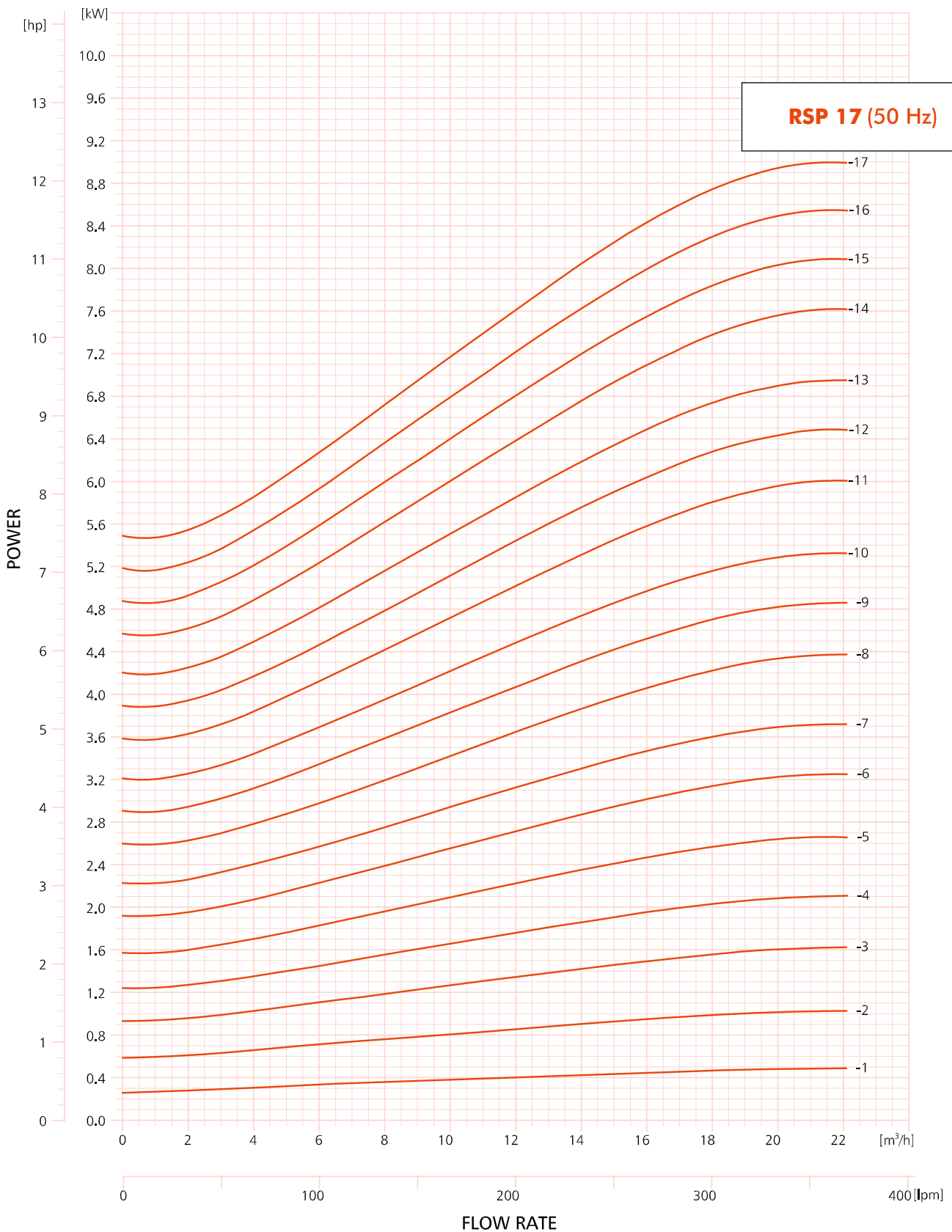


## Performance Table

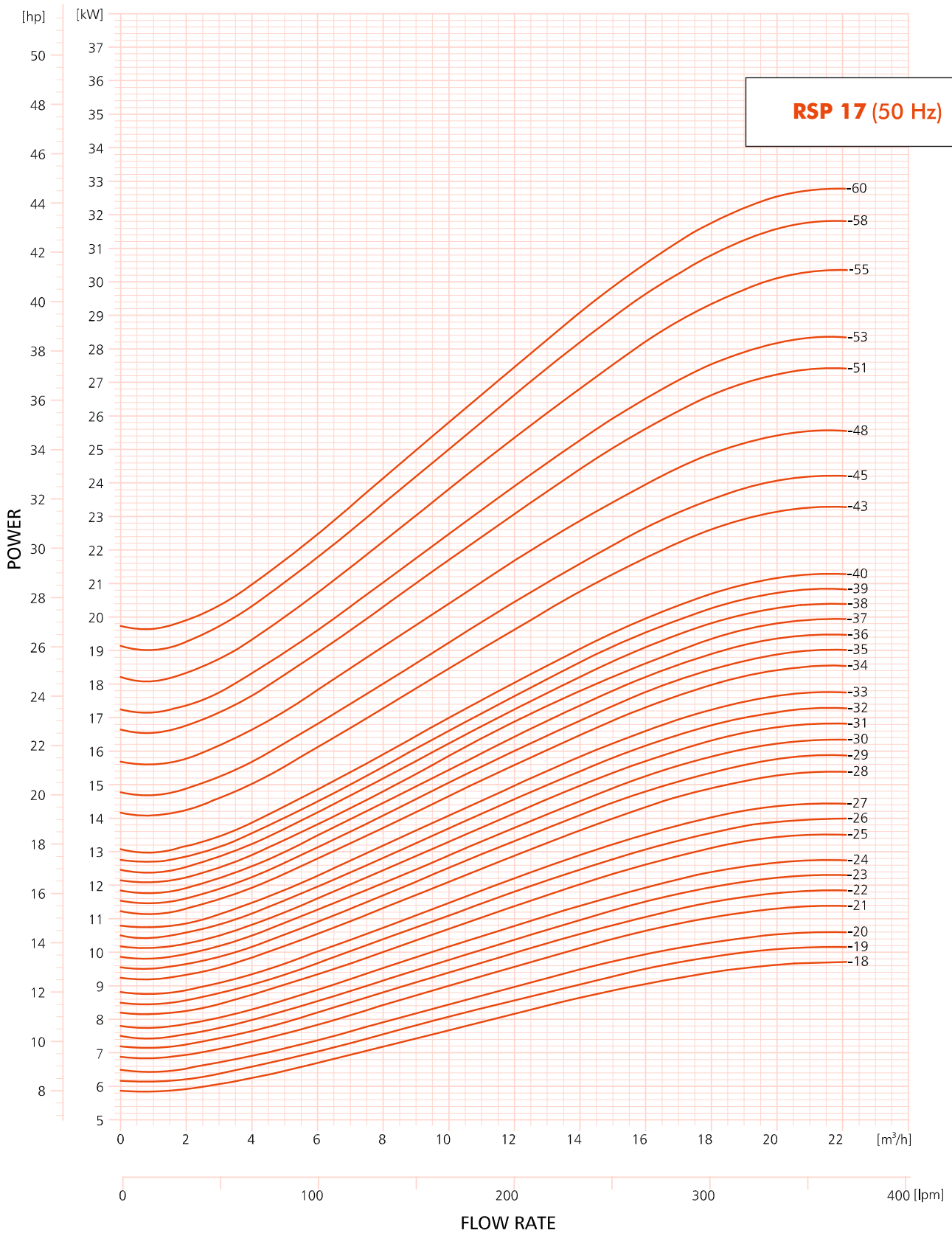
### Mixed Flow 6" Electric Submersible Pump

<b>RSP 17</b>			Q		n = 2900 rpm											
			M <sup>3</sup> /h		0	2	4	6	8	10	12	14	16	18	20	22
			l/min.		0	33.3	66.7	100	133.3	166.7	200	233.3	266.7	300	333.3	366.7
Model	Motor Rating		Total Head In Meters													
	[kW]	[HP]														
RSP17-18	11	15	202	201	200	199	194	188	178	167	152	136	116	94		
RSP17-18	11	15	212	212	211	209	204	197	187	175	160	142	121	97		
RSP17-18	11	15	223	222	221	219	214	207	196	183	167	148	126	101		
RSP17-18	13	17.5	235	235	234	232	227	220	209	195	179	159	137	110		
RSP17-18	13	17.5	246	246	245	243	237	229	218	204	186	166	142	114		
RSP17-18	13	17.5	257	256	255	253	248	239	227	212	193	172	147	118		
RSP17-18	13	17.5	267	267	266	263	258	248	236	220	201	178	152	122		
RSP17-18	15	20	280	279	279	276	270	261	248	232	212	189	162	131		
RSP17-18	15	20	291	290	289	286	280	271	257	240	220	196	168	135		
RSP17-18	15	20	301	300	300	297	290	280	266	249	227	202	173	139		
RSP17-18	18.5	25	315	314	314	311	305	295	281	263	241	215	186	151		
RSP17-18	18.5	25	326	325	324	321	315	305	290	272	249	222	191	155		
RSP17-18	18.5	25	336	336	335	332	325	315	299	280	257	229	197	159		
RSP17-18	18.5	25	347	346	346	342	336	324	309	289	264	236	202	163		
RSP17-18	18.5	25	358	357	356	353	346	334	318	297	272	242	208	168		
RSP17-18	18.5	25	368	368	367	363	356	344	327	305	279	249	213	172		
RSP17-18	22	30	382	381	380	377	369	357	340	318	291	260	223	181		
RSP17-18	22	30	392	392	391	387	380	367	349	326	299	266	229	185		
RSP17-18	22	30	403	402	401	398	390	377	358	335	306	273	234	189		
RSP17-18	22	30	414	413	412	408	400	386	367	343	314	279	240	193		
RSP17-18	22	30	425	424	423	418	410	396	376	351	321	286	245	197		
RSP17-18	22	30	435	434	433	429	420	405	385	360	328	292	250	201		
RSP17-18	22	30	446	445	444	439	430	415	394	368	336	298	255	205		
RSP17-18	26	35	481	481	479	475	466	450	428	400	366	326	280	227		
RSP17-18	26	35	503	502	501	496	486	469	446	417	381	339	291	235		
RSP17-18	26	35	535	534	532	527	516	498	473	441	403	358	306	246		

## Performance Curve

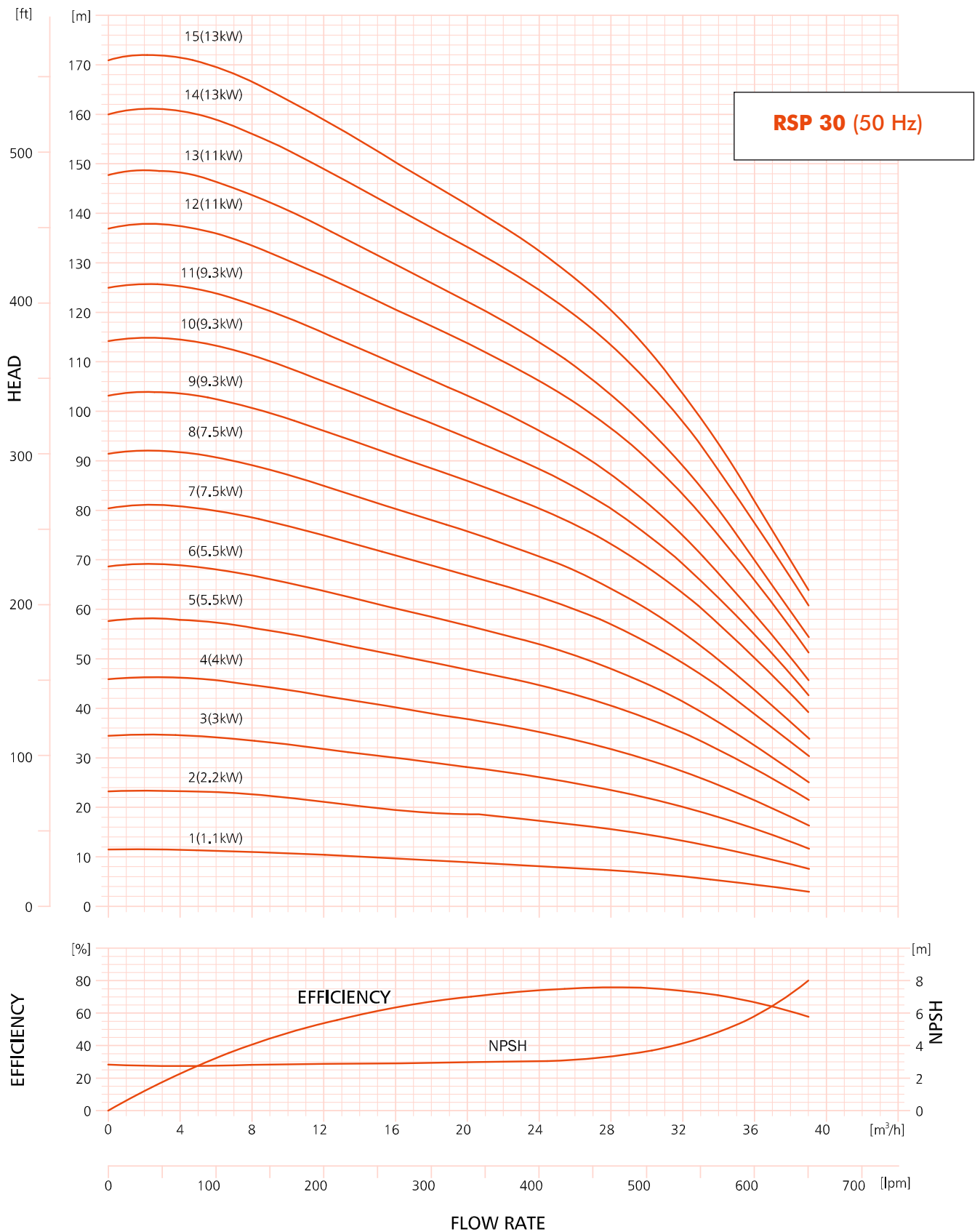


## Performance Curve





## Performance Curve

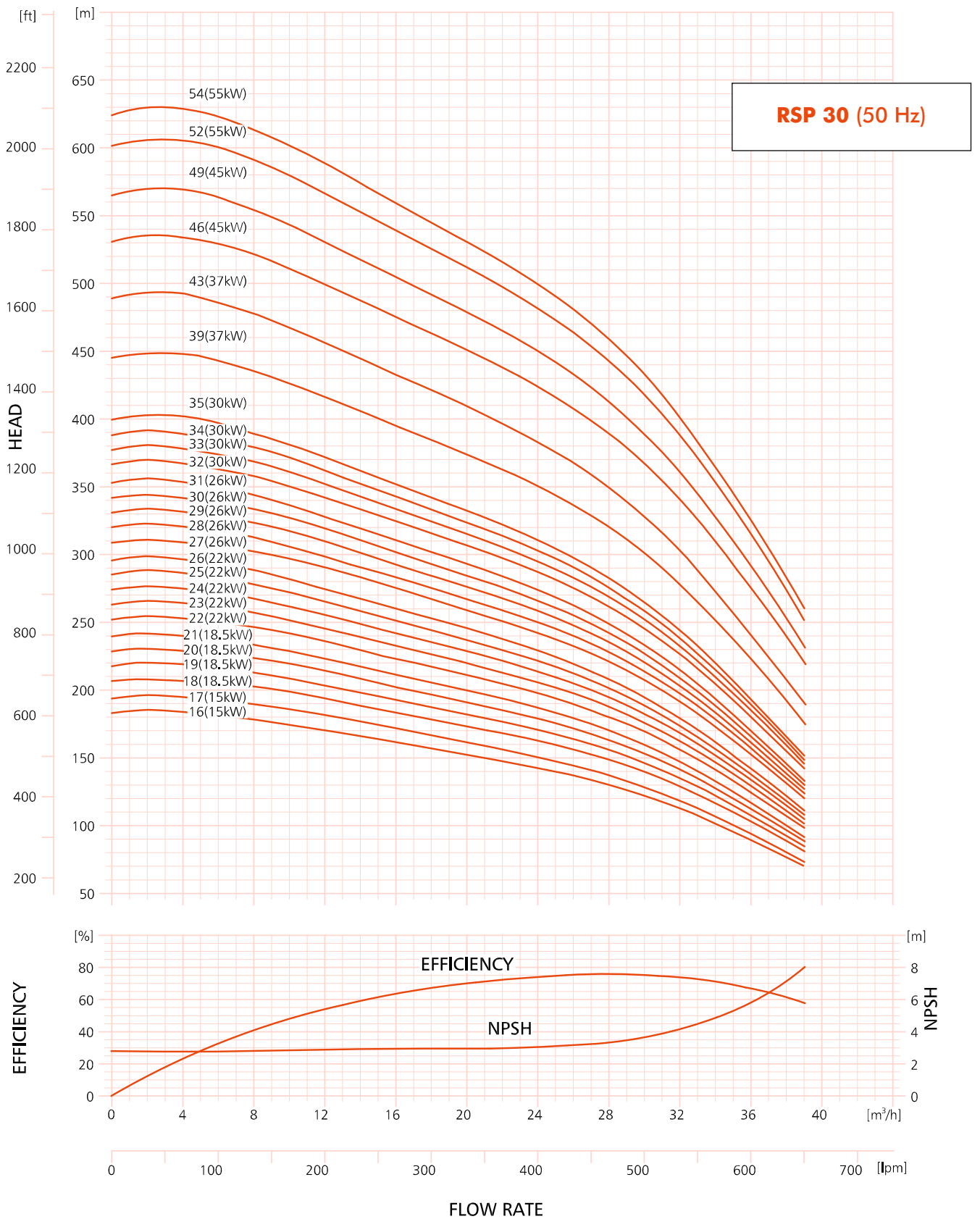


## Performance Table

### Mixed Flow 6" Electric Submersible Pump

<b>RSP 30</b>		Q		n = 2900 rpm									
		M <sup>3</sup> /h		0	4	8	12	16	20	24	28	32	39
		l/min.		0	66.7	133.3	200	266.7	333.3	400	466.7	533.3	650
Model	Motor Rating		Total Head In Meters										
	[kW]	[HP]											
RSP30-1	1.1	1.5	11	11	11	10	10	9	8	7	6	3	
RSP30-12	2.2	3	23	23	23	21	20	19	17	16	13	8	
RSP30-3	3	4	35	35	33	32	30	28	26	24	20	12	
RSP30-4	4	5.5	46	46	45	43	40	38	35	32	27	16	
RSP30-5	5.5	7.5	58	58	56	54	51	48	45	41	35	22	
RSP30-6	5.5	7.5	69	69	67	64	60	57	53	48	41	25	
RSP30-7	7.5	10	80	81	79	75	71	67	63	57	49	31	
RSP30-8	7.5	10	91	92	89	85	80	76	71	64	55	34	
RSP30-9	9.3	12.5	103	104	101	96	91	86	80	73	63	39	
RSP30-10	9.3	12.5	114	115	111	106	100	95	88	80	69	43	
RSP30-11	9.3	12.5	125	125	122	116	110	103	96	87	75	46	
RSP30-12	11	15	137	137	134	127	121	114	106	97	83	51	
RSP30-13	11	15	148	148	144	137	130	122	114	103	89	55	
RSP30-14	13	17.5	160	161	156	149	141	133	125	113	98	61	
RSP30-15	13	17.5	171	171	167	159	150	142	132	120	104	64	

## Performance Curve

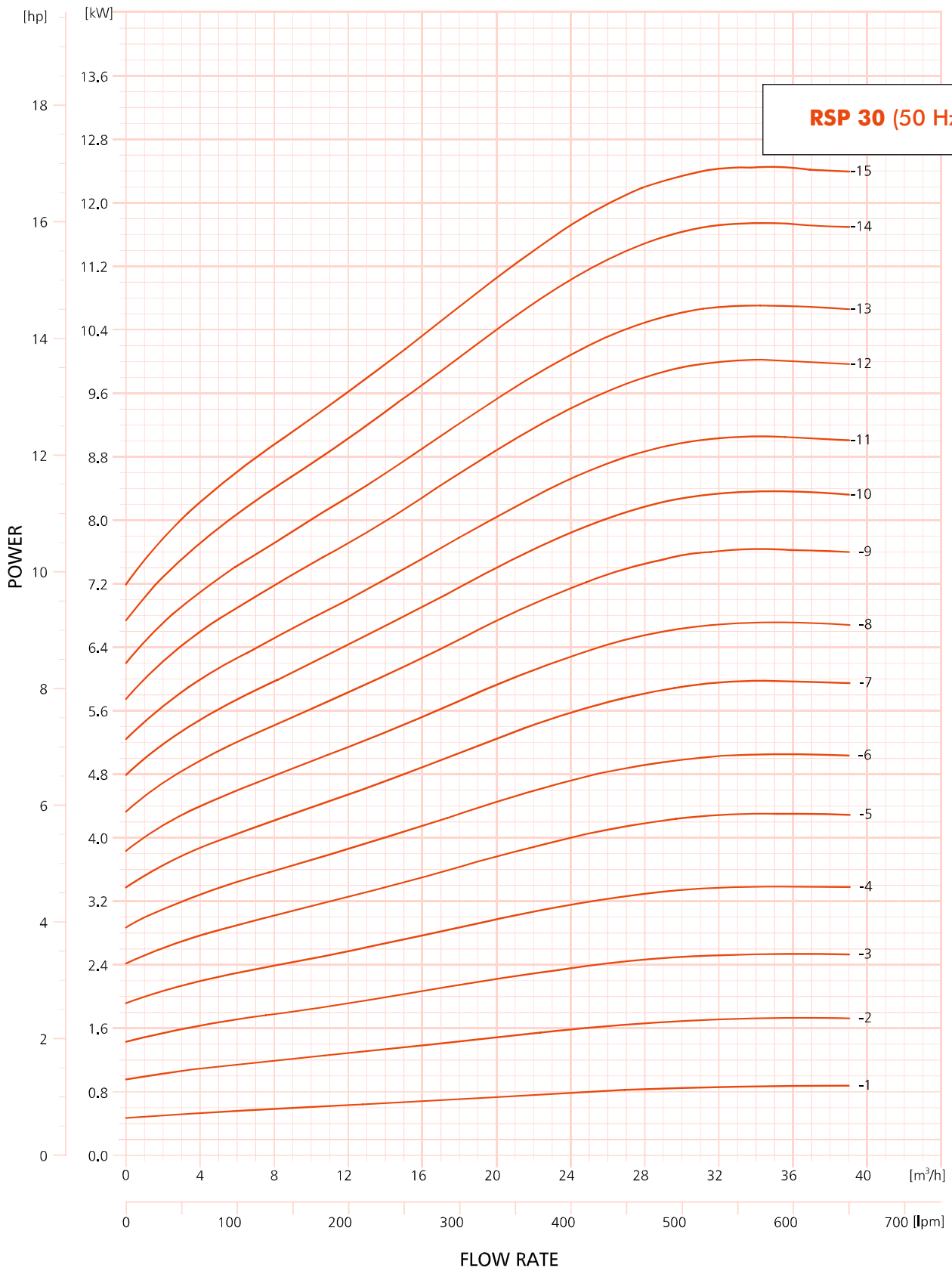


## Performance Table

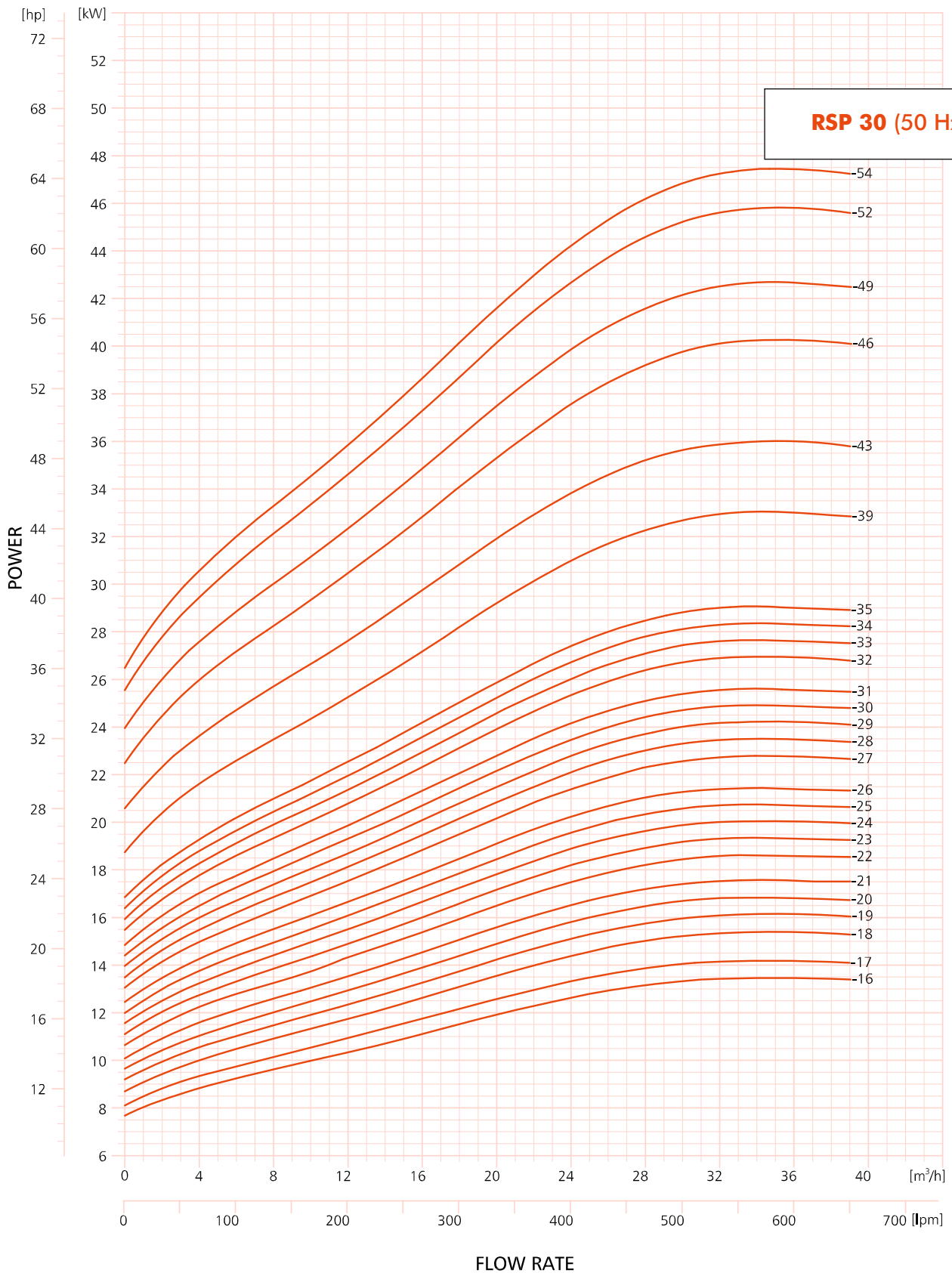
### Mixed Flow 6" Electric Submersible Pump

RSP 30		Q		n = 2900 rpm									
		M <sup>3</sup> /h		0	4	8	12	16	20	24	28	32	39
		l/min.		0	66.7	133.3	200	266.7	333.3	400	466.7	533.3	650
Model	Motor Rating		Total Head In Meters										
	[kW]	[HP]											
RSP30-16	15	20	183	184	179	171	162	153	143	130	112	70	
RSP30-17	15	20	194	195	189	180	171	161	151	137	118	74	
RSP30-18	18.5	25	207	208	202	193	183	173	163	148	129	82	
RSP30-19	18.5	25	218	219	213	203	193	182	171	156	135	85	
RSP30-20	18.5	25	229	230	223	213	202	191	179	163	141	89	
RSP30-21	18.5	25	240	241	234	223	212	200	187	170	147	92	
RSP30-22	22	30	252	253	246	235	223	211	198	180	156	99	
RSP30-23	22	30	263	264	257	245	233	220	206	188	162	102	
RSP30-24	22	30	274	275	268	255	242	228	214	195	168	105	
RSP30-25	22	30	285	286	278	265	251	237	221	201	174	108	
RSP30-26	22	30	296	297	288	275	260	245	229	208	179	111	
RSP30-27	26	35	309	310	302	288	274	259	242	221	191	121	
RSP30-28	26	35	320	321	313	298	283	267	250	228	197	124	
RSP30-29	26	35	331	332	323	308	292	276	258	235	203	127	
RSP30-30	26	35	342	343	333	318	301	284	266	242	209	130	
RSP30-31	26	35	353	354	344	328	310	293	274	249	215	133	
RSP30-32	30	40	367	368	358	342	324	306	287	262	227	143	
RSP30-33	30	40	378	379	369	352	334	315	295	269	232	146	
RSP30-34	30	40	389	390	379	362	343	324	303	276	238	149	
RSP30-35	30	40	399	401	390	372	352	332	310	283	244	152	
RSP30-39	37	50	445	447	435	416	395	374	351	320	278	176	
RSP30-43	37	50	489	491	478	456	433	409	383	350	303	190	
RSP30-46	45	60	531	535	521	499	475	451	424	389	341	220	
RSP30-49	45	60	565	568	554	530	504	478	450	413	361	233	

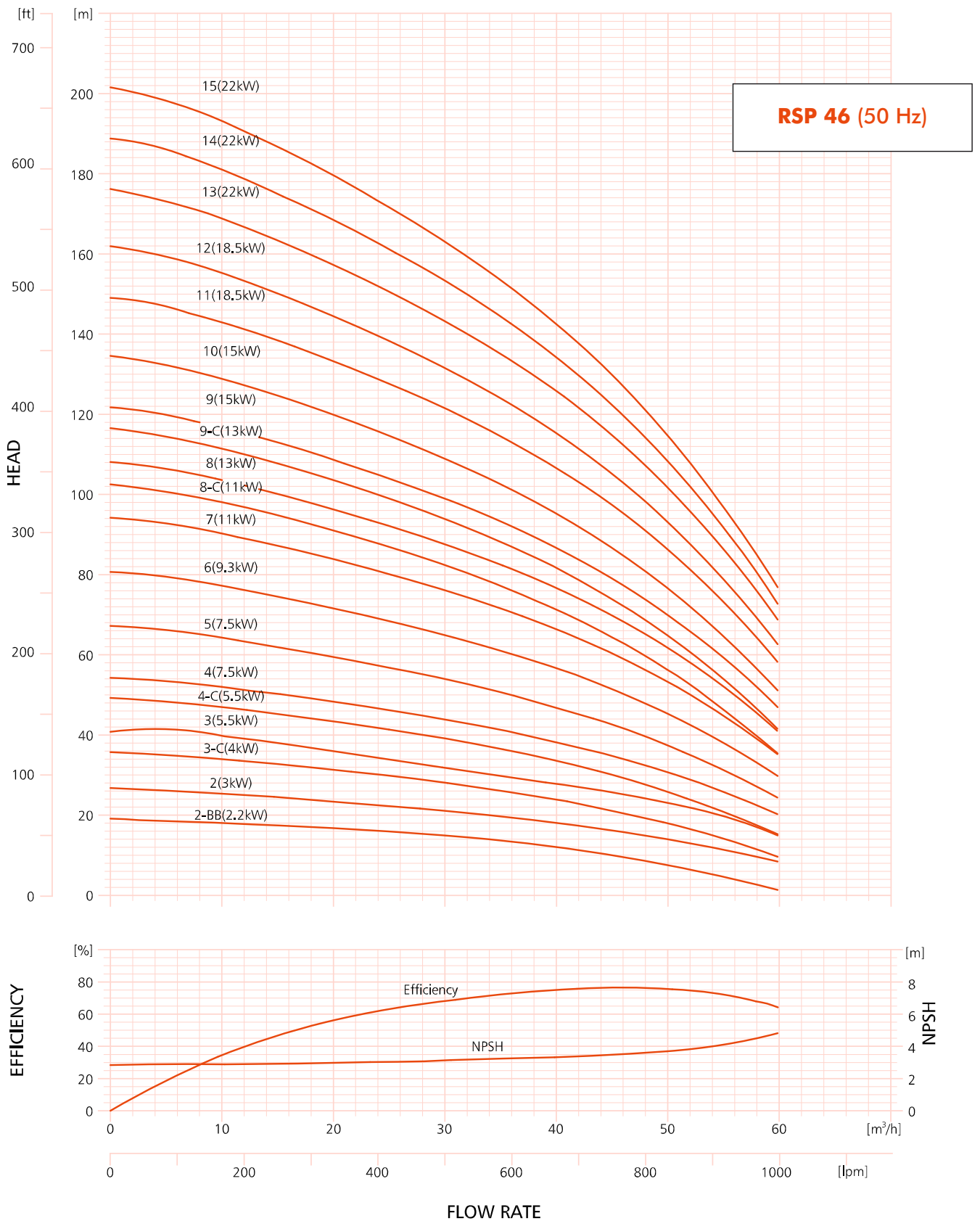
## Performance Curve



## Performance Curve



## Performance Curve



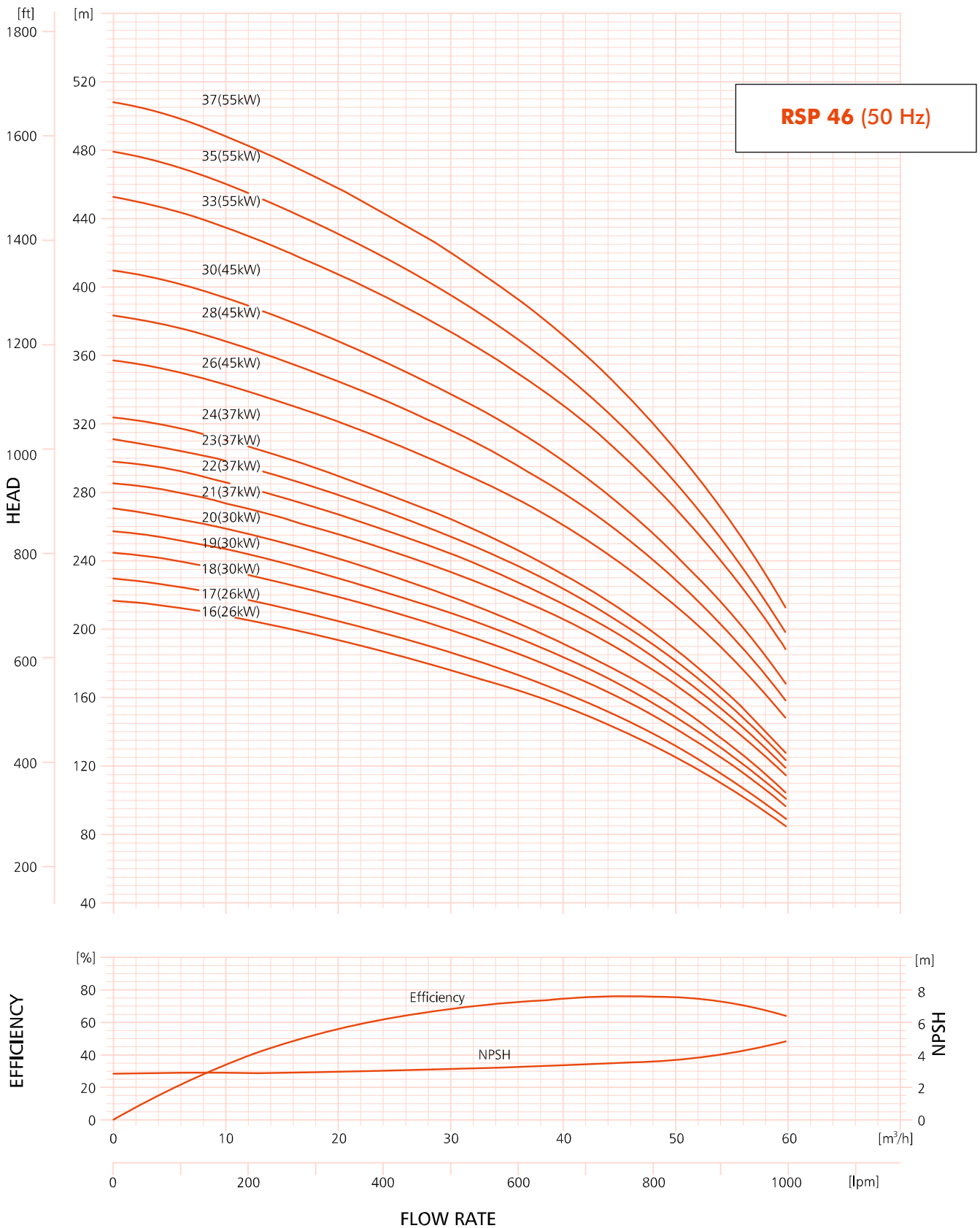
## Performance Table

### Mixed Flow 6" Electric Submersible Pump

RSP 46		Q		n = 2900 rpm												
		M <sup>3</sup> /h		0	5	10	15	20	25	30	35	40	45	50	55	59.8
		l/min.		0	83.3	166.7	250	333.3	416.7	500	583.3	666.7	750	833.3	916.7	996.7
Model	Motor Rating		Total Head In Meters													
	[kW]	[HP]														
RSP46-2-BB	2.2	3	19	19	18	17	17	16	15	14	12	10	8	5	1	
RSP46-2	3	4	27	26	25	24	23	22	21	20	18	16	14	11	9	
RSP46-3-C	4	5.5	36	35	34	33	31	30	28	26	24	21	18	14	10	
RSP46-3	5.5	7.5	41	41	40	38	36	34	32	30	28	26	23	20	15	
RSP46-4-C	5.5	7.5	49	48	47	45	43	41	39	37	34	30	26	21	15	
RSP46-4	7.5	10	54	53	52	50	48	46	44	41	38	35	31	26	20	
RSP46-5	7.5	10	67	66	64	62	60	57	54	51	47	43	37	31	24	
RSP46-6	9.3	12.5	81	79	77	75	72	68	65	61	57	51	45	38	30	
RSP46-7	11	15	94	93	90	87	84	80	76	72	66	60	53	45	35	
RSP46-8-C	11	15	103	101	98	95	91	87	82	77	71	64	56	46	36	
RSP46-8	13	17.5	108	106	104	100	96	92	88	83	77	70	62	52	41	
RSP46-9-C	13	17.5	117	115	112	108	104	99	94	88	82	74	65	54	42	
RSP46-9	15	20	122	120	117	113	109	104	99	93	87	79	70	59	47	
RSP46-10	15	20	135	132	129	125	120	115	109	103	95	87	77	65	51	
RSP46-11	18.5	25	149	147	143	138	133	128	122	115	107	97	86	73	59	
RSP46-12	18.5	25	162	159	155	150	145	138	132	124	115	105	93	79	63	
RSP46-13	22	30	176	173	169	163	157	151	143	135	126	115	102	86	69	
RSP46-14	22	30	189	186	181	175	169	161	153	144	134	122	108	92	73	
RSP46-15	22	30	202	198	193	187	180	172	163	154	143	130	115	97	77	



## Performance Curve

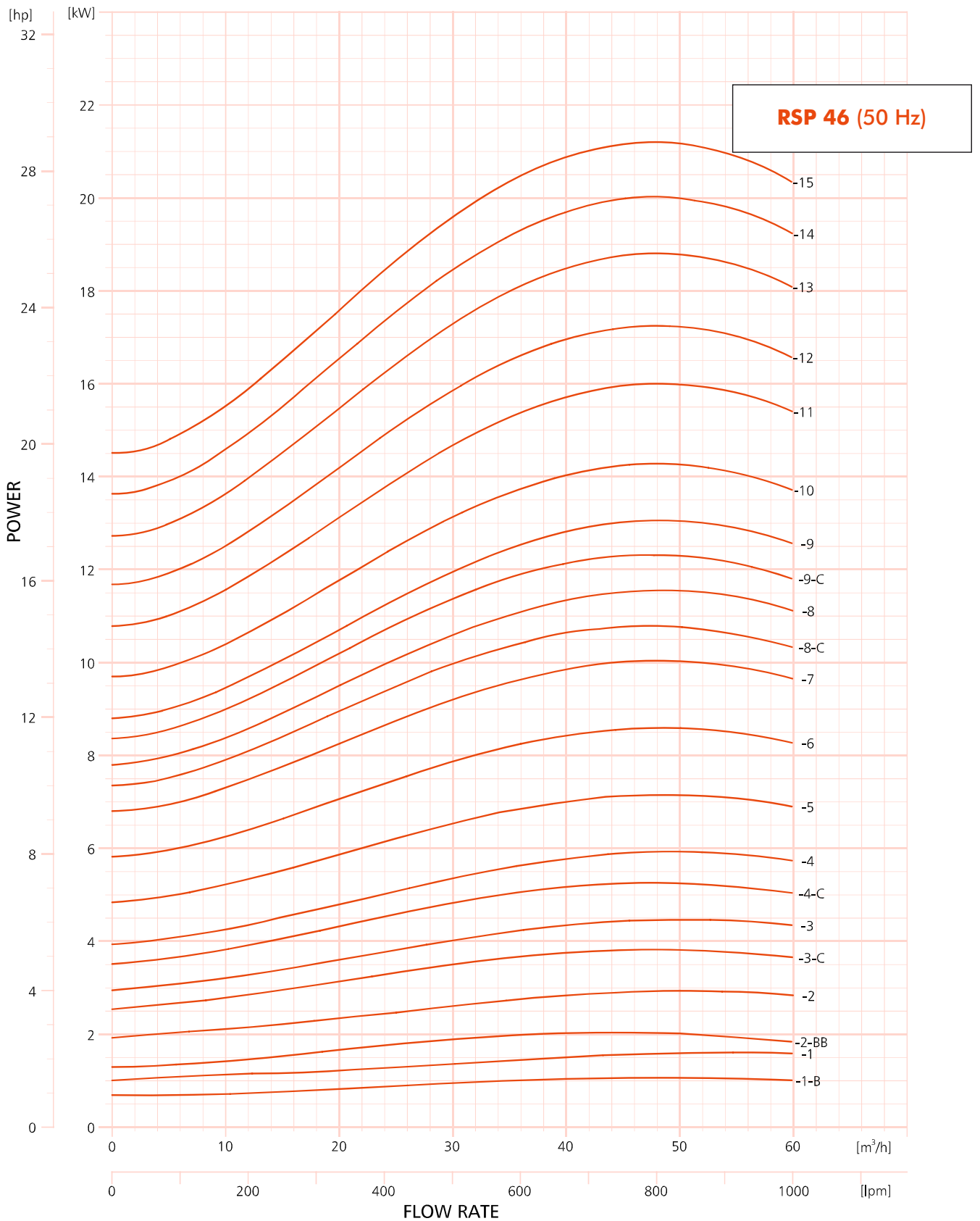


## Performance Table

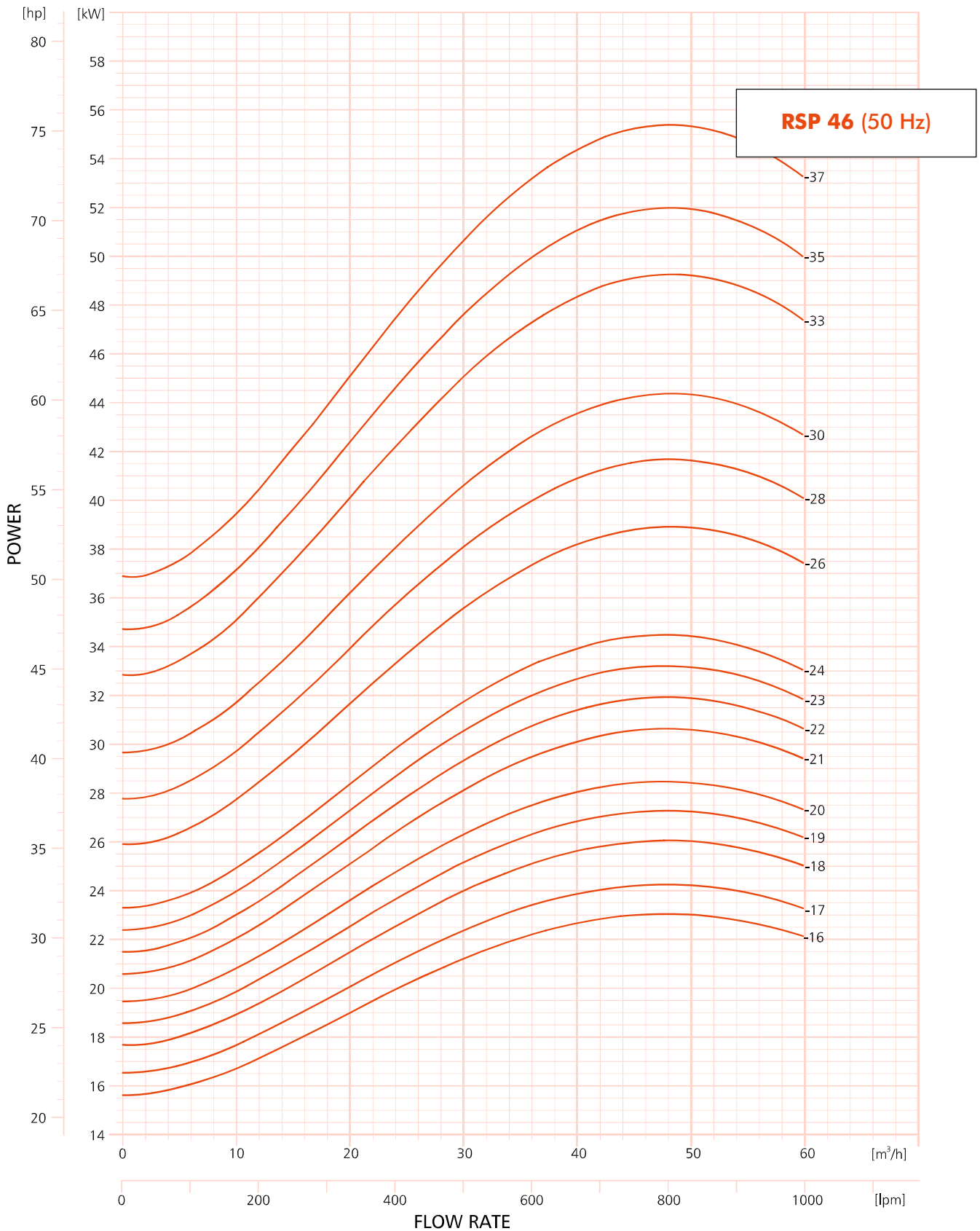
### Mixed Flow 6" Electric Submersible Pump

RSP 46		Q		n = 2900 rpm												
		M <sup>3</sup> /h		0	5	10	15	20	25	30	35	40	45	50	55	59.8
		l/min.		0	83.3	166.7	250	333.3	416.7	500	583.3	666.7	750	833.3	916.7	996.7
Model	Motor Rating		Total Head In Meters													
	[kW]	[HP]														
RSP46-16	26	35	217	213	208	201	193	185	176	166	155	141	125	106	85	
RSP46-17	26	35	229	226	220	213	205	196	186	175	163	149	132	112	89	
RSP46-18	30	40	244	241	234	227	219	209	199	188	175	160	142	121	97	
RSP46-19	30	40	257	253	247	239	230	220	209	197	183	167	148	126	101	
RSP46-20	30	40	270	265	259	251	241	230	219	206	192	175	155	132	105	
RSP46-21	37	50	285	280	273	265	255	245	234	221	206	188	167	143	115	
RSP46-22	37	50	298	293	286	277	267	256	244	230	215	196	174	148	119	
RSP46-23	37	50	311	306	298	289	278	267	254	240	223	204	181	154	124	
RSP46-24	37	50	324	318	310	300	289	277	264	249	232	212	188	160	128	
RSP46-26	45	60	357	351	343	332	321	308	295	279	261	239	214	183	149	
RSP46-28	45	60	383	377	368	357	345	331	316	299	280	256	229	196	159	
RSP46-30	45	60	410	403	393	381	368	353	337	319	298	273	244	208	169	
RSP46-33	55	75	452	445	435	422	407	391	374	354	331	303	271	232	189	

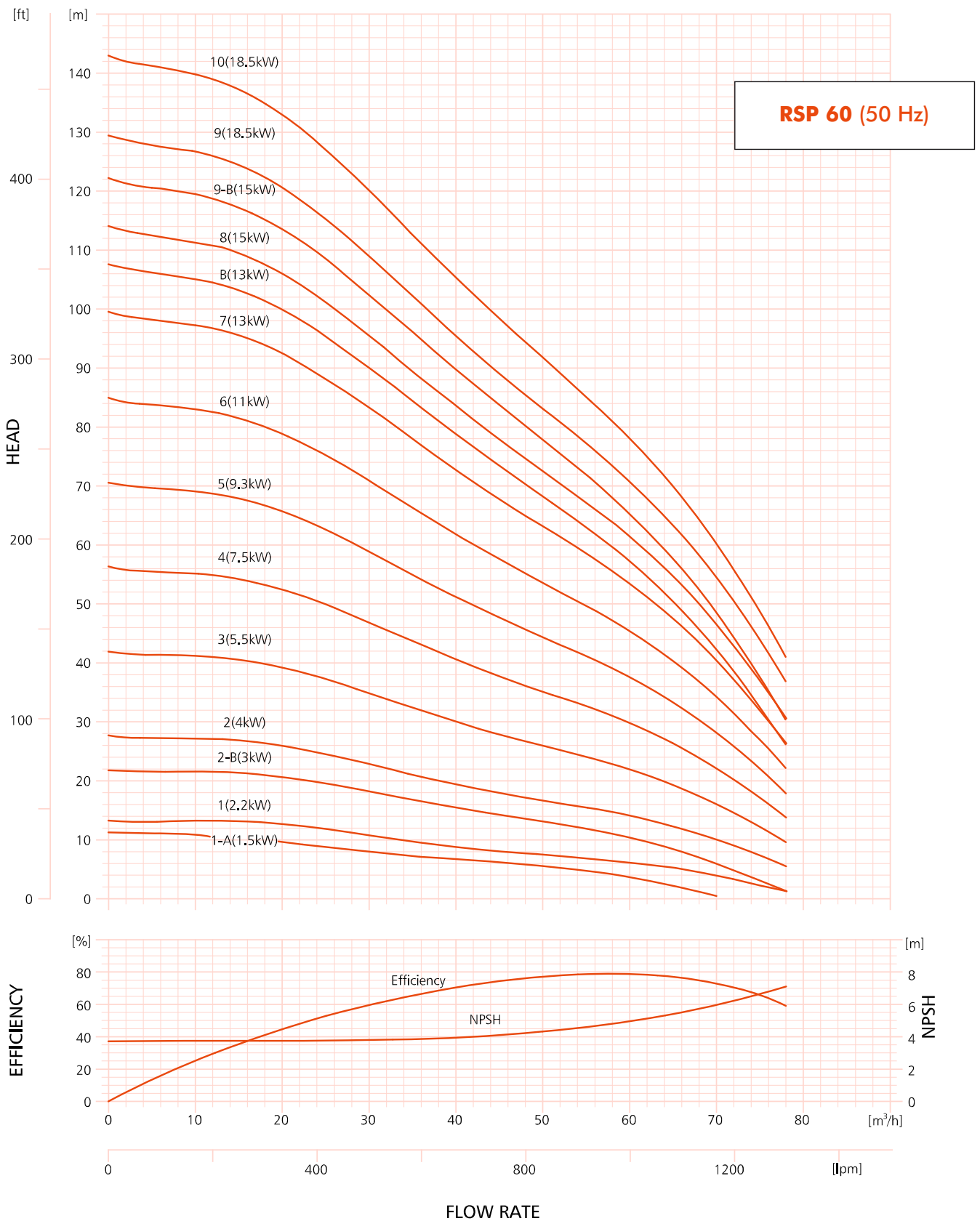
## Performance Curve



## Performance Curve



## Performance Curve

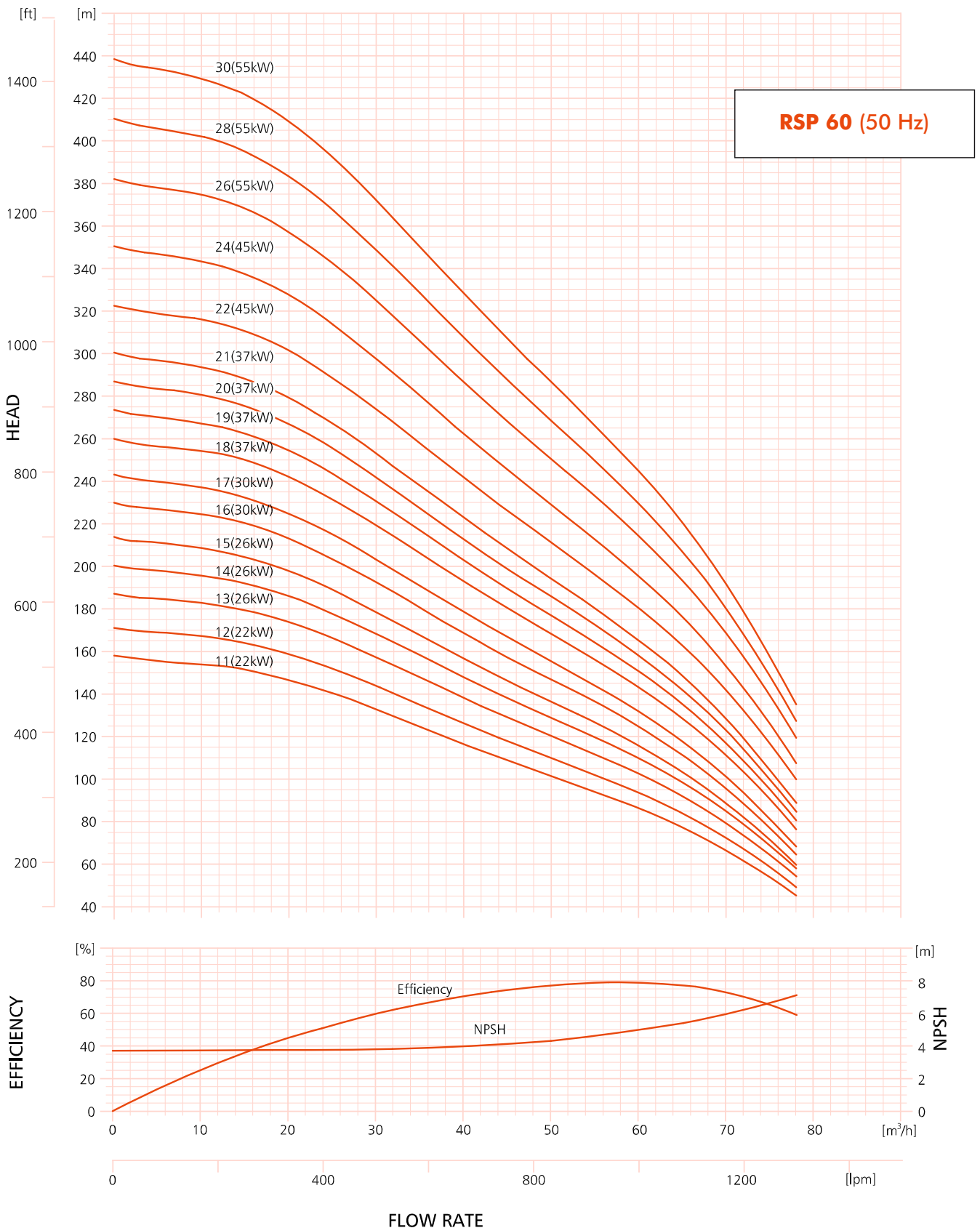


## Performance Table

### Mixed Flow 6" Electric Submersible Pump

RSP 60		Q		n = 2900 rpm								
		M <sup>3</sup> /h		0	10	20	30	40	50	60	70	78
		l/min.		0	166.7	333.3	500	666.7	833.3	1000	1166.7	1300
Model	Motor Rating		Total Head In Meters									
	[kW]	[HP]										
RSP60-1-A	1.5	2	12	11	10	8	6	5	4	1	0	
RSP60-1	2.2	3	14	14	13	12	11	10	8	6	5	
RSP60-2-B	3	4	22	22	21	18	15	13	10	6	1	
RSP60-2	4	5.5	28	27	26	23	19	17	14	10	5	
RSP60-3	5.5	7.5	42	41	39	35	30	26	22	16	10	
RSP60-4	7.5	10	56	55	52	47	41	35	30	22	14	
RSP60-5	9.3	12.5	71	69	66	59	51	44	38	28	18	
RSP60-6	11	15	85	83	79	71	62	54	45	34	22	
RSP60-7	13	17.5	99	97	92	83	73	63	53	40	26	
RSP60-8-B	13	17.5	108	105	100	90	79	68	57	42	26	
RSP60-8	15	20	114	112	106	96	84	73	61	47	31	
RSP60-9-B	15	20	122	119	113	102	90	78	65	48	30	
RSP60-60-9	18.5	25	129	127	121	109	95	83	71	54	37	
RSP60-60-10	18.5	25	143	140	133	120	105	92	78	60	41	

## Performance Curve



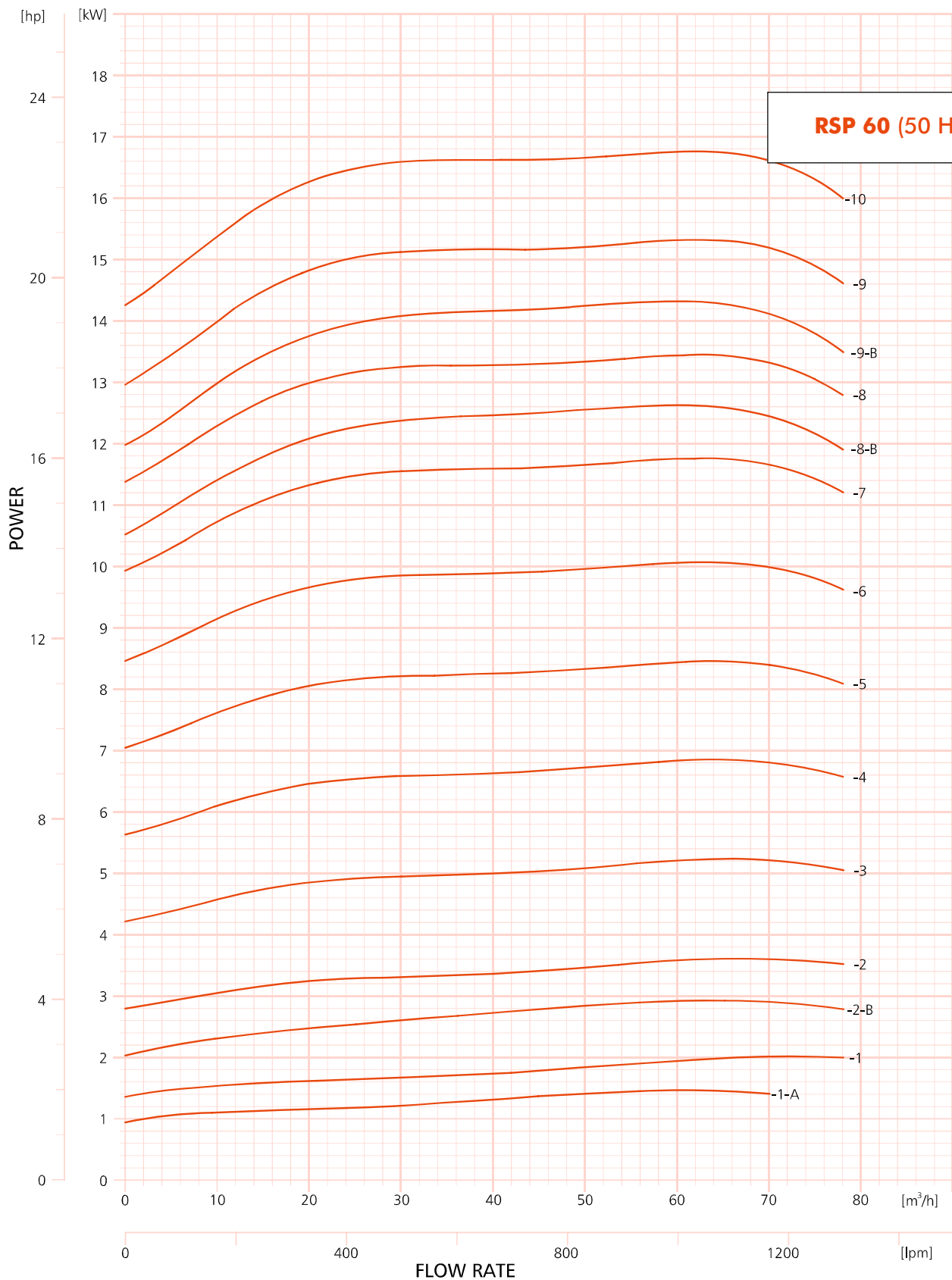
## Performance Table

### Mixed Flow 6" Electric Submersible Pump

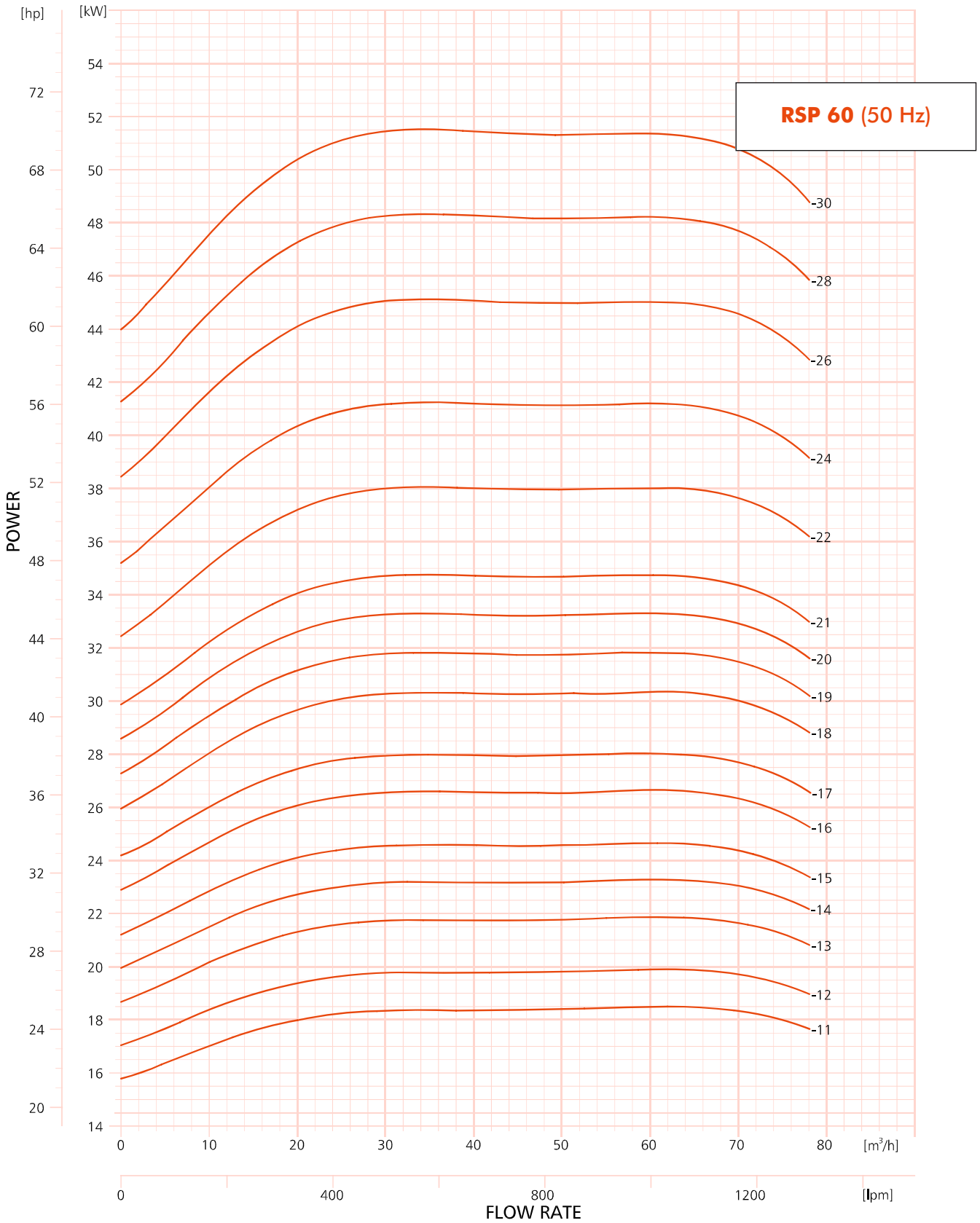
RSP 60		Q		n = 2900 rpm								
		M <sup>3</sup> /h		0	10	20	30	40	50	60	70	78
		l/min.		0	66.7	333.3	500	666.7	833.3	1000	1166.7	1300
Model	Motor Rating		Total Head In Meters									
	[kW]	[HP]										
RSP60-11	22	30	158	154	147	133	116	101	86	67	45	
RSP60-12	22	30	171	167	159	144	126	110	94	72	50	
RSP60-13	26	35	187	183	174	157	138	120	103	79	54	
RSP60-14	26	35	200	196	186	168	148	129	110	85	58	
RSP60-15	26	35	214	209	198	179	157	136	116	89	60	
RSP60-16	30	40	230	224	213	192	169	147	125	96	65	
RSP60-17	30	40	243	237	225	203	179	155	132	101	69	
RSP60-18	37	50	260	254	242	219	193	168	143	111	77	
RSP60-19	37	50	274	268	255	231	203	177	151	117	81	
RSP60-20	37	50	287	281	267	242	213	186	158	123	85	
RSP60-21	37	50	301	294	279	253	223	194	166	129	89	
RSP60-22	45	60	323	316	302	274	242	211	181	142	100	



## Performance Curve



## Performance Curve



## 8" Product Data

Stainless steel submersible bore well pumps.

### Construction

- Submersible motor & pumps for deep wells of 8" (DN 200mm).
- Sized for connection to the motor according to NEMA standards.
- Delivery casing with built-in non-return valve.
- All standard pumps are completely manufactured out of stainless AISI 304 sheet metal.
- Impeller
  - Mixed flow impellers
  - RSP77, RSP95
- Connection : Screwed pipe connection with BSP thread as standard.

### Applications

- Water Supply
- Irrigation
- Civil
- Industrial
- Fire Fighting

### Performance range

- Flow Range : Max. 123.8m<sup>3</sup>/h
- Head Range : Max. 423m

### Operating conditions

- Liquid temperature : 0°C to +45°C
- Max. sand content into the water : 50g/m<sup>3</sup>
- Max. starts per hour : 30 at regular intervals.
- Direction of rotation : Clockwise as seen from the pump coupling side.

### Special construction on request

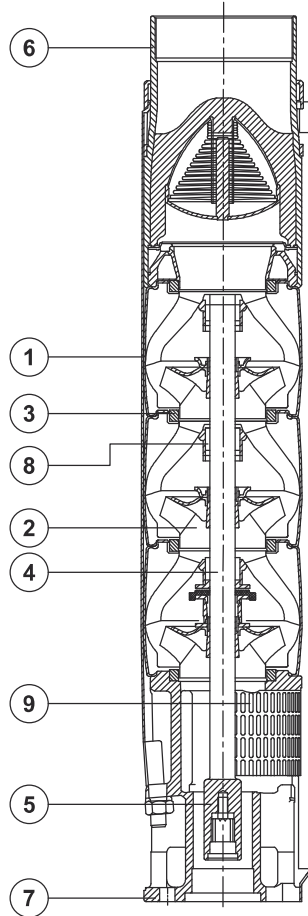
- Also available in stainless steel AISI 316 material.
- Also available with NPT thread pipe connection.



## 8" Construction

Stainless steel submersible bore well pumps.

### Sectional Drawing

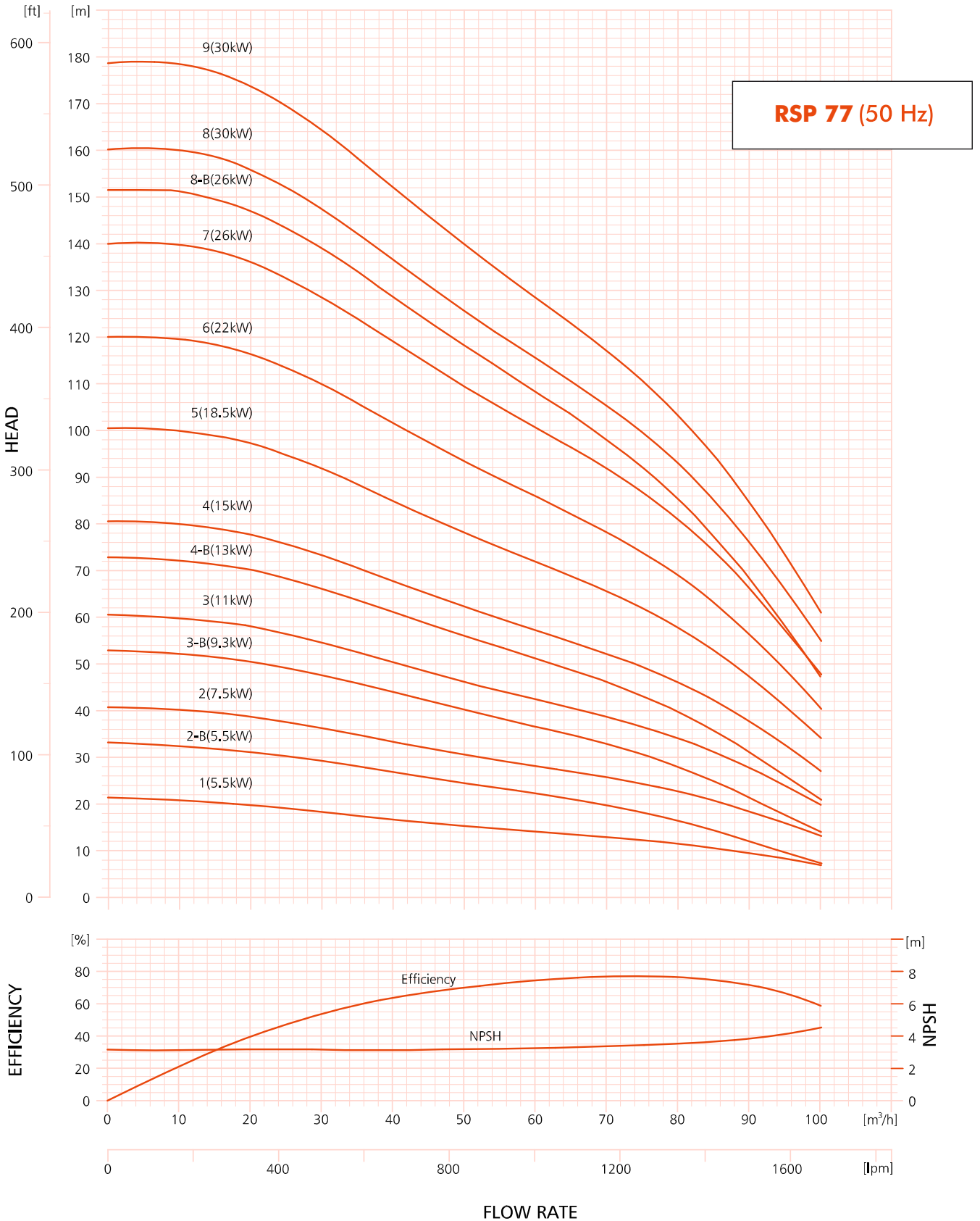


RSP Type Pump  
RSP77, RSP95

### Materials

Pos.	Component	Material
1	Bowl / Diffuser	Stainless steel AISI 304
2	Impeller	Stainless steel AISI 304
3	Neck ring	NBR
4	Shaft	Stainless steel AISI 431
5	Couple	Stainless steel AISI 316
6	Delivery casing	Stainless steel AISI 304
7	Suction case	Stainless steel AISI 304
8	Bearing bush	NBR
9	Strainer	Stainless steel AISI 304

## Performance Curve

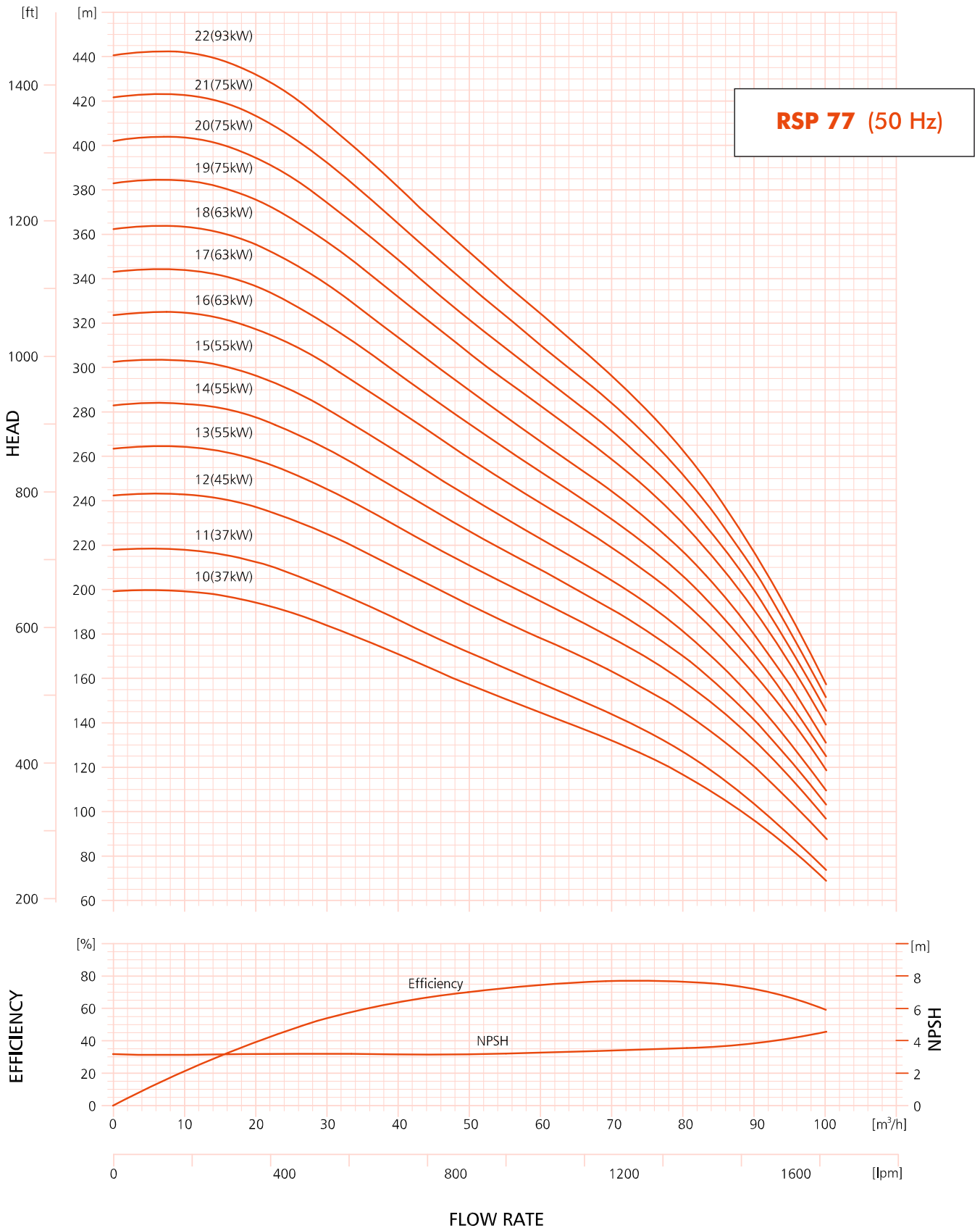


## Performance Table

### Mixed Flow 8" Electric Submersible Pump

RSP 77		Q		n = 2900 rpm										
		M <sup>3</sup> /h		0	10	20	30	40	50	60	70	80	90	100
		l/min.		0	166.7	333.3	500	666.7	833.3	1000	1167	1333	1500	1666.7
Model	Motor Rating		Total Head In Meters											
	[kW]	[HP]												
RSP77-1	5.5	7.5	21	21	20	18	17	15	14	13	12	10	7	
RSP77-2-B	5.5	7.5	33	32	31	29	27	25	22	20	16	12	7	
RSP77-2	7.5	10	41	40	39	36	33	31	28	26	23	18	13	
RSP77-3-B	9.3	12.5	53	52	51	48	44	40	37	33	28	22	14	
RSP77-3	11	15	61	60	58	55	50	46	42	39	34	28	20	
RSP77-4-B	13	18	73	72	70	66	61	56	51	46	40	31	21	
RSP77-4	15	20	81	80	78	73	68	62	57	52	46	38	27	
RSP77-5	18.5	25	100	100	97	92	85	78	72	66	58	47	34	
RSP77-6	22	30	120	120	116	110	102	94	86	78	69	56	41	
RSP77-7	26	35	140	140	136	129	119	110	101	92	81	66	48	
RSP77-8-B	26	35	152	151	147	139	129	118	108	98	85	68	48	
RSP77-8	30	40	160	160	156	147	137	126	116	105	93	76	55	
RSP77-9	30	40	179	179	174	164	152	140	129	117	103	85	61	

## Performance Curve



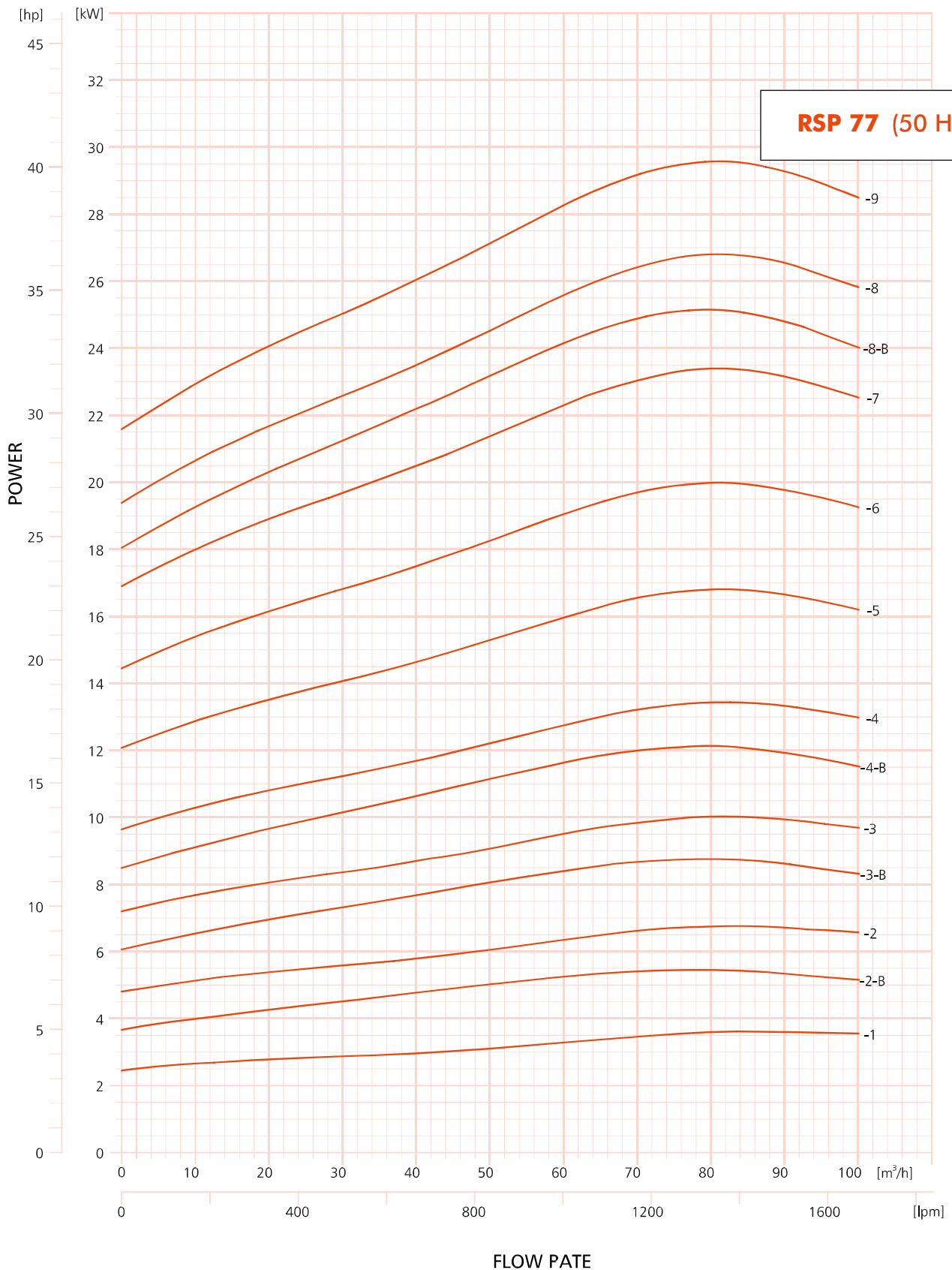
## Performance Table

### Mixed Flow 8" Electric Submersible Pump

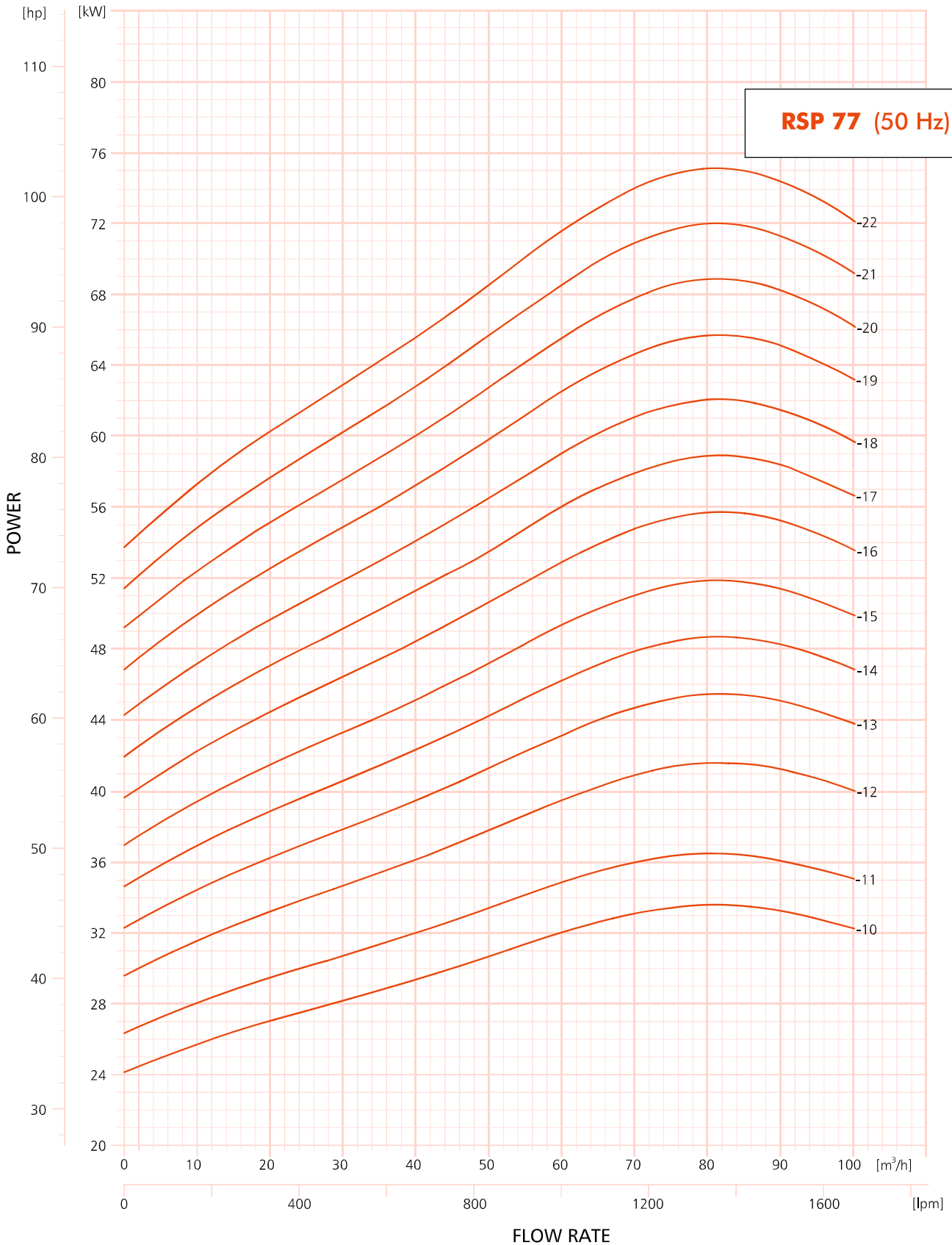
<b>RSP 77</b>		Q		n = 2900 rpm										
		M <sup>3</sup> /h		0	10	20	30	40	50	60	70	80	90	100
		l/min.		0	166.7	333.3	500	666.7	833.3	1000	1167	1333	1500	1666.7
Model	Motor Rating		Total Head In Meters											
	[kW]	[HP]												
RSP77-10	37	50	199	199	194	184	171	157	145	132	117	96	69	
RSP77-11	37	50	218	218	212	201	186	172	158	144	127	104	74	
RSP77-12	45	60	242	243	237	225	209	193	178	163	145	120	88	
RSP77-13	55	75	264	264	258	245	228	211	195	178	159	132	98	
RSP77-14	55	75	283	284	277	263	245	226	209	191	170	141	104	
RSP77-15	55	75	303	303	296	281	262	242	223	204	181	150	110	
RSP77-16	63	85	324	325	317	301	281	259	239	219	195	162	119	
RSP77-17	63	85	343	344	336	319	297	274	253	232	206	171	126	
RSP77-18	63	85	363	363	355	337	314	290	267	244	217	180	132	
RSP77-19	75	100	383	384	376	357	332	307	283	259	230	191	140	
RSP77-20	75	100	402	404	395	375	349	322	297	271	241	200	146	
RSP77-21	75	100	422	424	415	394	366	338	312	285	253	210	153	
RSP77-22	93	125	442	444	435	413	384	354	327	298	265	220	161	



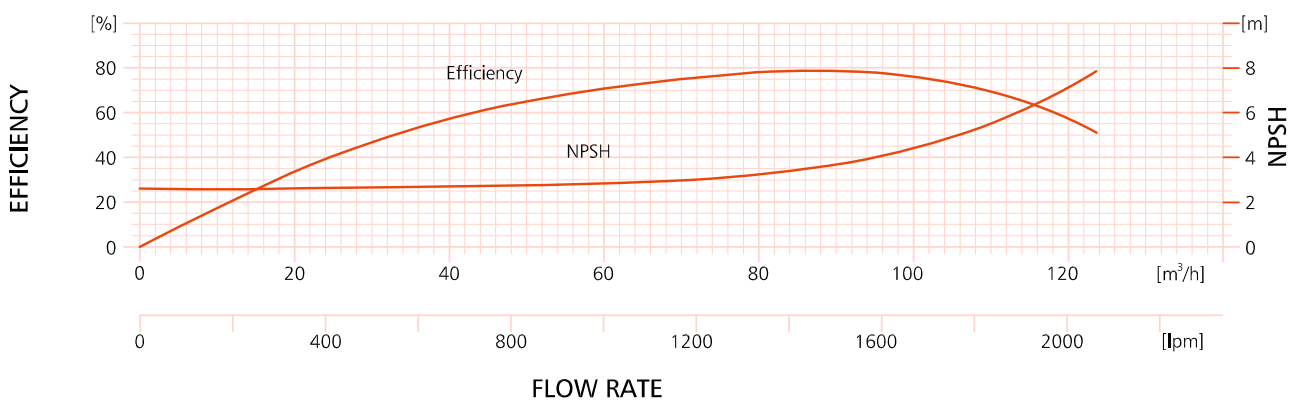
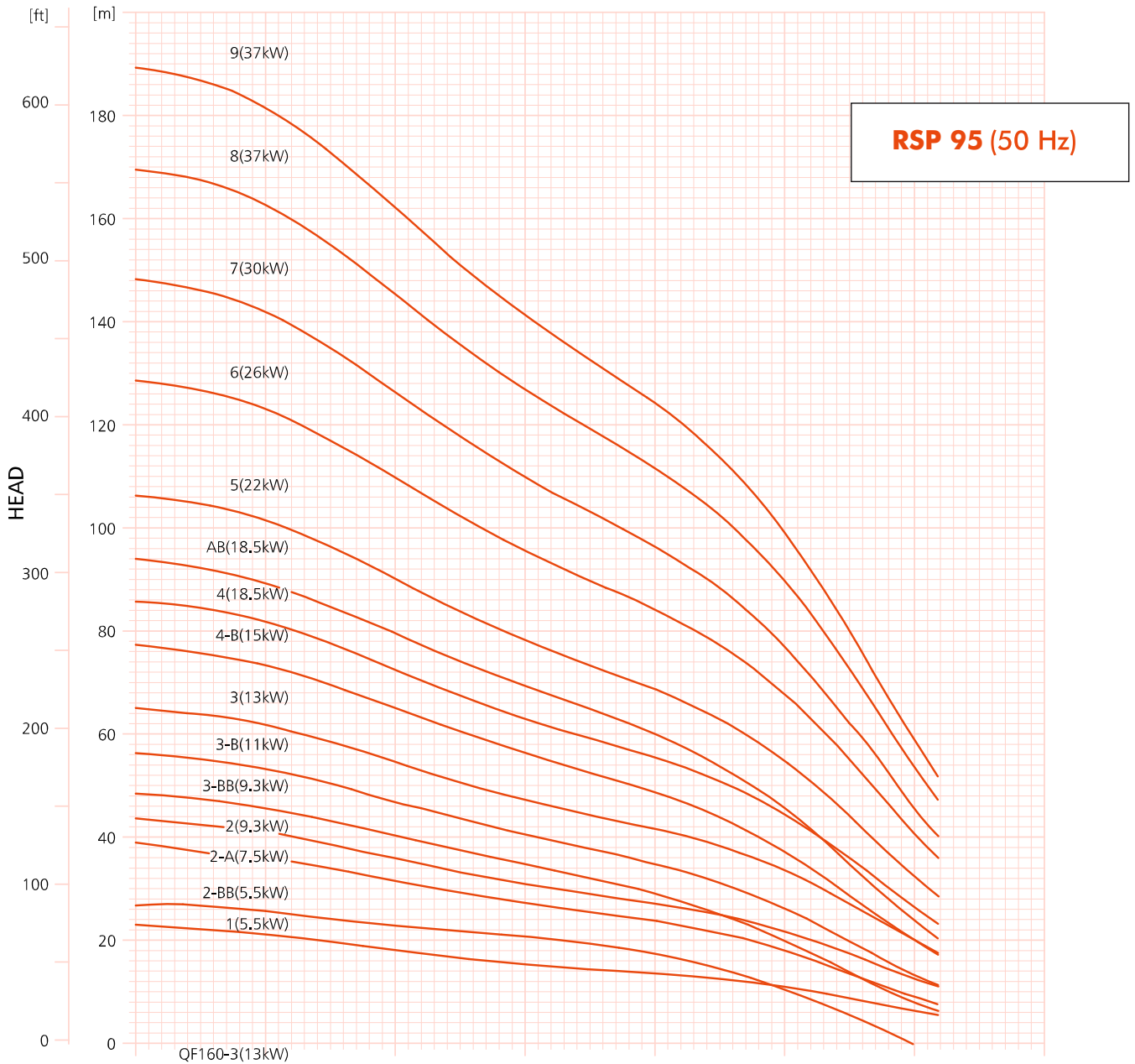
## Performance Curve



## Performance Curve



## Performance Curve

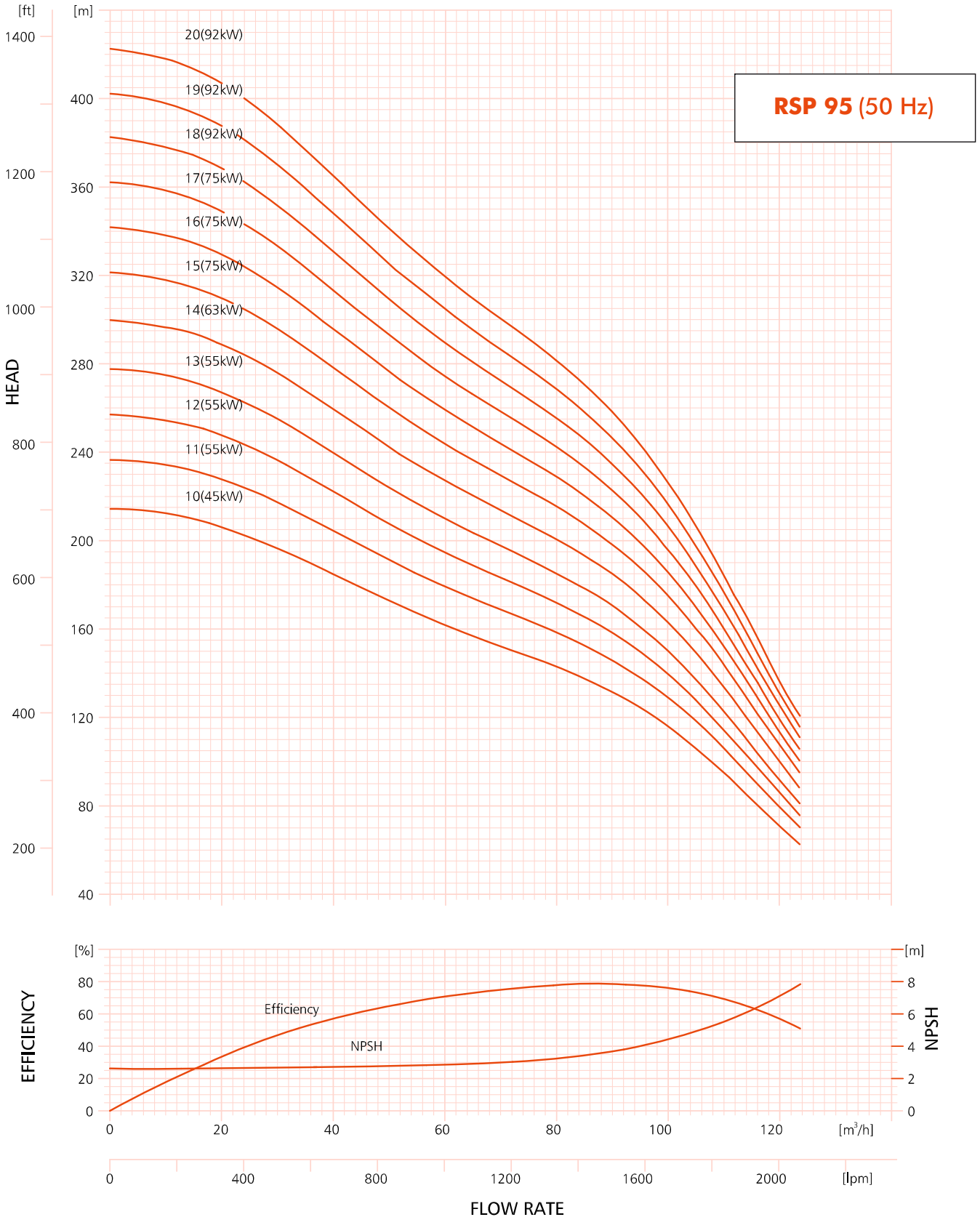


## Performance Table

### Mixed Flow 8" Electric Submersible Pump

RSP 95		Q		n = 2900 rpm													
		M <sup>3</sup> /h		0	10	20	30	40	50	60	70	80	90	100	110	120	122
		l/min.		0	67	333	500	667	833	1000	1167	1333	1500	1667	1833	2000	2033
Model	Motor Rating		Total Head In Meters														
	[kW]	[HP]															
RSP95-1	5.5	7.5	23	22	21	20	18	17	15	14	13	13	11	9	6	6	
RSP95-2-BB	5.5	7.5	27	27	26	24	23	22	21	19	17	14	10	5	0	-	
RSP95-2-A	7.5	10	39	38	36	34	32	29	27	26	24	21	18	14	9	8	
RSP95-2	9.3	12.5	44	43	41	39	36	33	31	29	27	25	22	17	13	12	
RSP95-3-BB	9.3	12.5	49	47	46	43	40	37	35	32	29	25	20	14	8	7	
RSP95-3-B	11	15	56	55	53	50	47	44	41	38	35	31	26	20	13	12	
RSP95-3	13	17.5	65	64	62	58	55	51	47	44	42	38	33	27	20	19	
RSP95-4-B	15	20	77	76	73	70	65	60	56	53	49	44	37	29	20	18	
RSP95-4	18.5	25	86	84	82	78	73	67	63	59	55	51	44	36	26	25	
RSP95-5-AB	18.5	25	94	92	89	85	79	74	69	65	60	54	45	35	24	22	
RSP95-5	22	30	106	105	101	96	90	84	78	73	69	63	55	44	32	30	
RSP95-6	26	35	129	127	123	117	110	102	96	90	84	77	68	55	41	38	
RSP95-7	30	40	148	146	142	135	126	118	110	103	96	88	77	62	46	43	
RSP95-8	37	50	170	167	163	155	145	136	127	119	112	102	90	73	54	50	
RSP95-9	37	50	189	187	182	173	162	151	141	133	124	114	99	80	59	55	

## Performance Curve

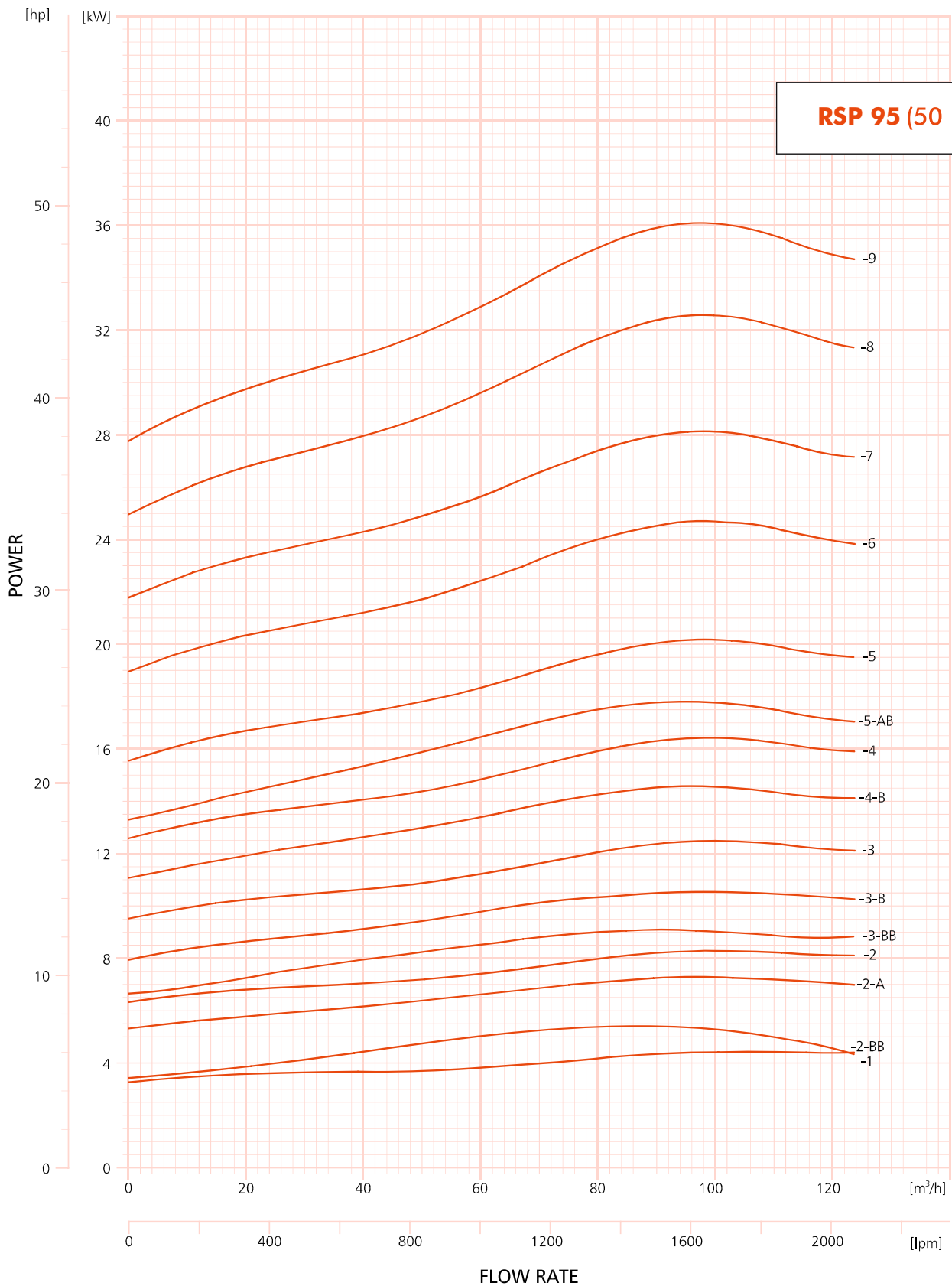


## Performance Table

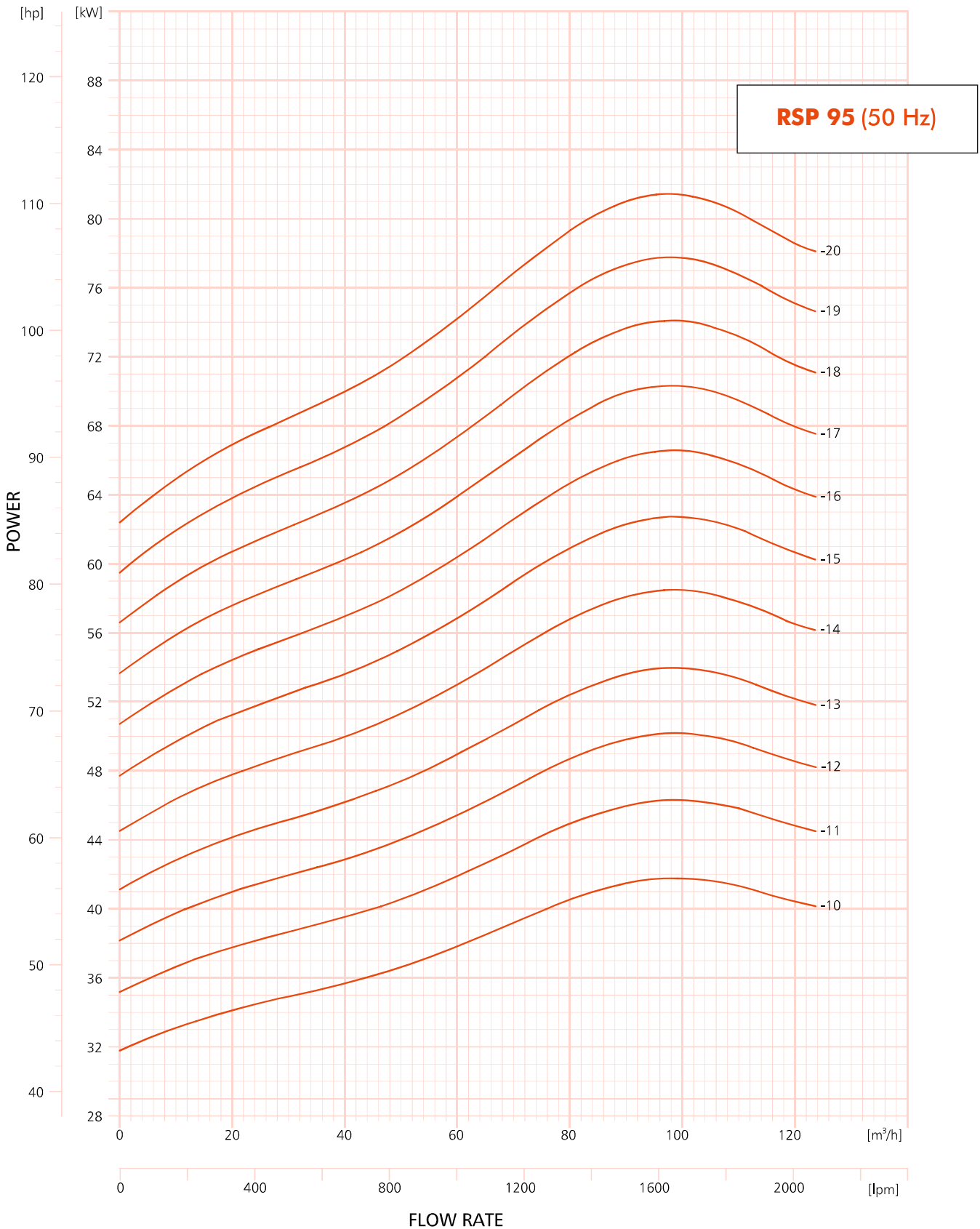
### Mixed Flow 8" Electric Submersible Pump

RSP 95		Q		n = 2900 rpm													
		M <sup>3</sup> /h		0	10	20	30	40	50	60	70	80	90	100	110	120	122
		l/min.		0	167	333	500	667	833	1000	1167	1333	1500	1667	1833	2000	2033
Model	Motor Rating		Total Head In Meters														
	[kW]	[HP]															
RSP95-10	45	60	214	212	206	197	185	173	162	152	143	132	116	95	71	66	
RSP95-11	55	75	237	234	228	217	205	191	179	169	158	146	129	106	79	74	
RSP95-12	55	75	257	254	248	236	222	208	195	183	172	158	140	115	86	80	
RSP95-13	55	75	278	275	267	255	240	224	210	198	185	170	150	123	92	86	
RSP95-14	63	85	300	297	289	276	259	243	227	214	201	185	163	134	100	93	
RSP95-15	75	100	321	318	310	296	278	260	244	230	215	198	175	144	107	100	
RSP95-16	75	100	342	338	329	314	296	277	259	244	229	211	186	152	114	106	
RSP95-17	75	100	362	358	349	333	313	293	275	258	242	223	196	160	120	112	
RSP95-18	93	125	382	378	368	352	331	309	290	272	255	235	206	169	125	117	
RSP95-19	93	125	402	398	388	370	348	325	305	287	269	247	216	177	131	122	
RSP95-20	93	125	423	418	407	388	365	341	320	301	281	258	226	184	137	128	

## Performance Curve



## Performance Curve







## Certificate of Registration

This is to certify that

**RAINFOS SUBMERSIBLE PUMP**  
PROPERTY NO. B/27/64, THARADARA NAGAR, OPP. SKM HIGH SCHOOL  
KANODAR, TA- PALANPUR, KANODAR, BANASKANTHA, 385520,  
GUJARAT, INDIA.

has been independently assessed by QRO  
and is compliant with the requirements of:

**ISO 9001:2015**

**Quality Management System**

For the Following Scope of Activities:

**RAINFOS SUBMERSIBLE PUMP**

Date of initial registration: XXXXXX  
Date of the Certificate: XXXXXX

Certificate Expiry: XXXXXX  
Recertification Due: XXXXXX

**Certificate Number: Draft**



Head of Certification

Validity of this certificate is subject to annual surveillance audits to be done successfully on or before 365 days from date of the audit.  
(In case if surveillance audit is not allowed to be conducted: this certificate shall be suspended / withdrawn).

The Validity of this certificate can be verified at [www.qrocert.org](http://www.qrocert.org)

This certificate of registration remains the property of QRO Certification LLP, and shall be returned immediately upon request.

India Office : QRO Certification LLP

142, 11nd Floor, Avtar Enclave, Near Paschim Vihar West Metro Station, Delhi-110063, (INDIA)  
Website : [www.qrocert.org](http://www.qrocert.org); E-mail : [info@qrocert.org](mailto:info@qrocert.org)



## CERTIFICATE OF COMPLIANCE

This is to Certify

of

**RAINFOS SUBMERSIBLE PUMP**

PROPERTY NO. B/27/64, THARADARA NAGAR, OPP. SKM HIGH SCHOOL KANODAR,  
TA- PALANPUR, KANODAR, BANASKANTHA, 385520, GUJARAT , INDIA .

Manufacturer

PRODUCT: RAINFOS SUBMERSIBLE PUMP.

Complies with the Requirements applicable to it

The Certification body has performed an audit of the above product quality system covering the design, manufacture and final inspection of the certified product. The quality system has been assessed, approved and is subject to continuous surveillance according to Directive 2006/95/EC Low Voltage Directive & 2004/108/EC Electro Magnetic Directive.

This certificate is issued under the following conditions:

1. It applies only to the quality system maintained in the manufacture of above referenced models and it does not substitute the design or type-examination procedures, if requested.
2. The certificate remains valid until the manufacturing conditions or the quality systems are changed.
3. The certificate validity is conditioned by positive results or surveillance audits.

The CE Mark as Shown Above Can Be Used, Under the Responsibility of The Manufacturer, After Completion of An EC Declaration of Conformity and Compliance with All Relevant EC Directives. The Statement is Based on a Single Evaluation of One Sample of Above-Mentioned Product. It Does Not Imply an Assessment of The Whole Production.

We hereby declare that the technical file of product complied with the requirement of directives 2014/35/EU Low Voltage Directive & 2014/30/EU Electromagnetic Compatibility Directive.

**Certificate Number : DRAFT.**

Validity of this certificate can be verified at [www.ukmcert.org.uk/verify](http://www.ukmcert.org.uk/verify)

Date of Certification	<b>14-02-2023</b>
1st Surveillance Audit Due	<b>13-01-2024</b>
2nd Surveillance Audit Due	<b>13-01-2025</b>
Certificate Expiry	<b>14-02-2026</b>



Authority Signature:

This certificate is the property of UK Management Certification Limited and shall returned immediately on request.  
7 Bell Yard, London, England, WC2A 2JR, United Kingdom  
Website :- [www.ukmcert.org.uk](http://www.ukmcert.org.uk), Email:- [info@ukmcert.org.uk](mailto:info@ukmcert.org.uk)  
Company No.- 14285337

NOTES

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# **RAINFOS<sup>®</sup>**

## **SUBMERSIBLE PUMP**

 **Factory**

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 Banas Kantha, National Highway MH 8, Gujrat India - 385210

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 +91 97141 79482

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