APECPUMP

60Hz

RHINO

VERTICAL MULTI-STAGE CENTRIFUGAL PUMP SERIES

APEC PUMP ENTERPRISE CORP.
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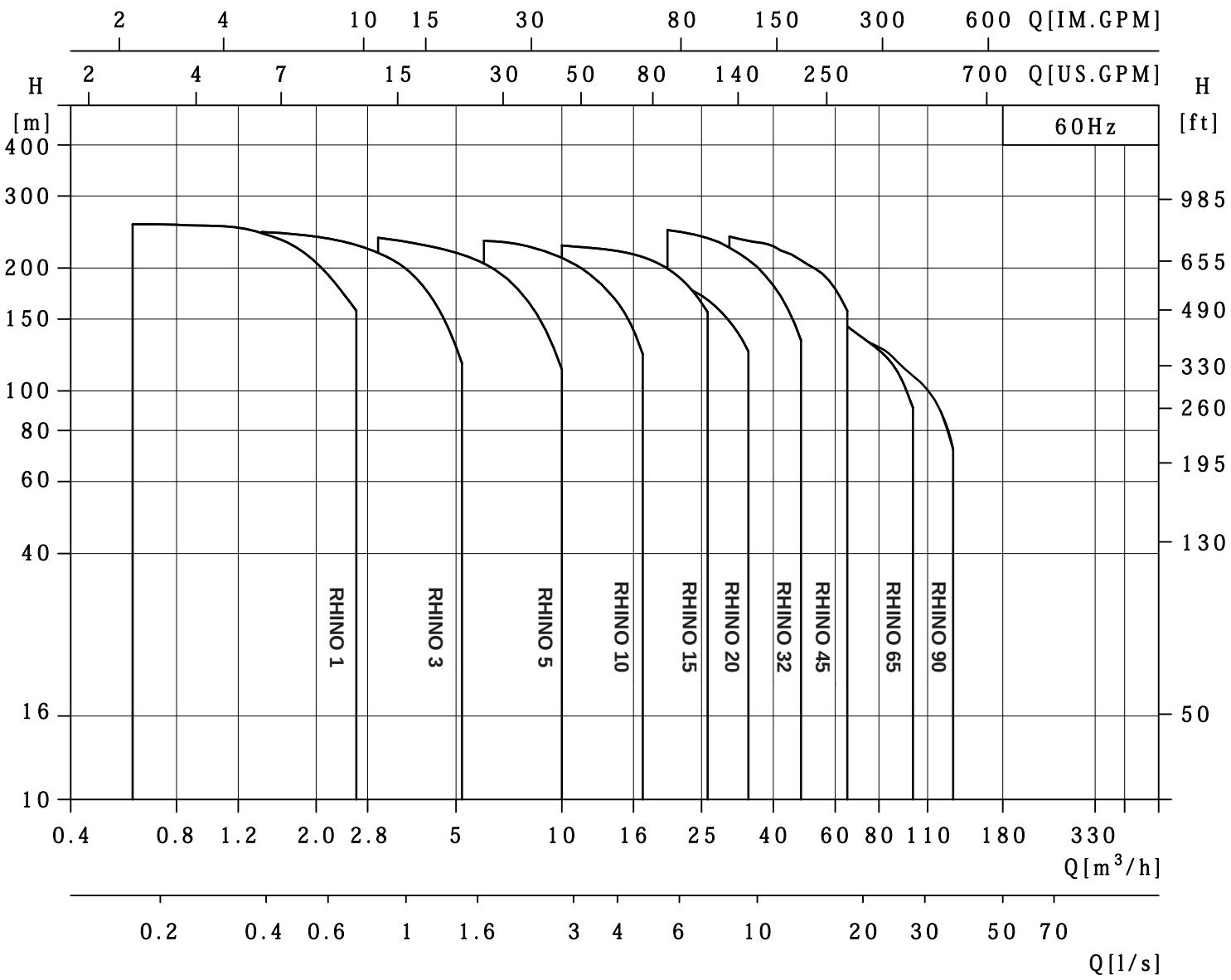
Performance range

Performance range



General information

Applications

RHINO(I) / RHINO C pumps are designed for a variety of applications ranging from the pumping of tap water to the pumping of industrial liquids.
The pumps are suitable for a wide diversity of liquid of temperature, flow rate, pressure range. The RHINO C model is intended for non-corrosive liquids, while the RHINO (I) model is suitable for mildly corrosive liquids.

● WATER SUPPLY

Filtration and transfer at waterworks, distribution from waterworks, Pressure boosting in mains, pressure boosting in high-rise buildings

● INDUSTRIAL PRESSURE BOOSTING

Process-water systems, washing and cleaning systems, vehicle-washing tunnels, firefighting systems

● INDUSTRIAL LIQUID TRANSFER

Cooling and air-conditioning systems (refrigerants), boiler feed and condensate systems, machine tools (cooling lubricants), acids and alkalis

● WATER TREATMENT

Ultra-filtration systems, Reverse osmosis systems, distillation systems, separators, Swimming baths

● IRRIGATION

Field irrigation, sprinkler irrigation, drip-feed irrigation

Operating condition

● Thin, clean, non-flammable and not explosive liquid that does not contain solid particles or fibers

● Liquid temperature:

Normal temperature type: -15℃ to +70℃

Hot water type -15℃ to +120℃

● Ambient temperature: Maximum +40℃

● Altitude: Maximum 1000m

Pump

RHINO(I) / RHINO C pumps are non-self-priming, vertical multistage centrifugal pumps. Pumps are coupled with motors by couplings. The chamber stack and the outer cylinder are secured between the inlet outlet chamber and the pump head by staybolts. The chamber has inlet and outlet ports on the same level (in line).

Electric motor

● Motor is totally enclosed, fan cooled two pole standard motor
● Protection class : IP55
● Insulation class : F
● Standard voltage :
60Hz: 1×220V
3×380V

Performance curve

Guidelines to performance curves
The guidelines below apply to the performance curves:
● All curves are based on motor measurements at a constant speed of 3500rpm or 3550rpm or 3575rpm.
● Tolerances to ISO 9906:2012, Grade 3B
● Measurements have been made with airless water at a temperature of 20 ° C. The curves apply to the following kinematic viscosity: 1 mm^2/s
● The bold curves indicate the recommended duty range for best efficiency. Due to the risk of overheating, the pumps must not be used at a flow rate below the minimum flow rate. Due to the risk of overload, the pumps must not be used at a flow rate over the maximum flow rate.

General information

Model definition

RHINO 1,3,5,10,15,20

RHINO C 5 - 2

- Stage
- Rated flow(m^3 /h)
- (blank) – Stainless Steel 304
  C – Cast Iron
  I – Stainless Steel 316
- Light vertical multistage centrifugal pump

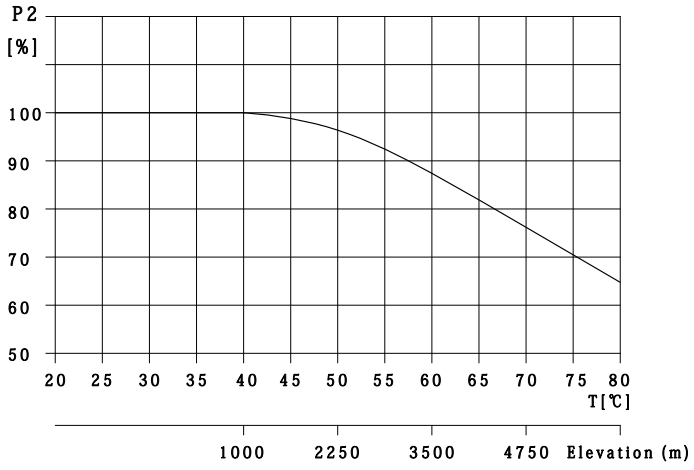
RHINO 32,45,65,90

RHINO I 32 -3 - 2

- Two impeller A
- Stage
- Rated flow(m^3 /h)
- (blank) – Stainless Steel 304
  C – Cast Iron
  I – Stainless Steel 316
- vertical multistage centrifugal pump

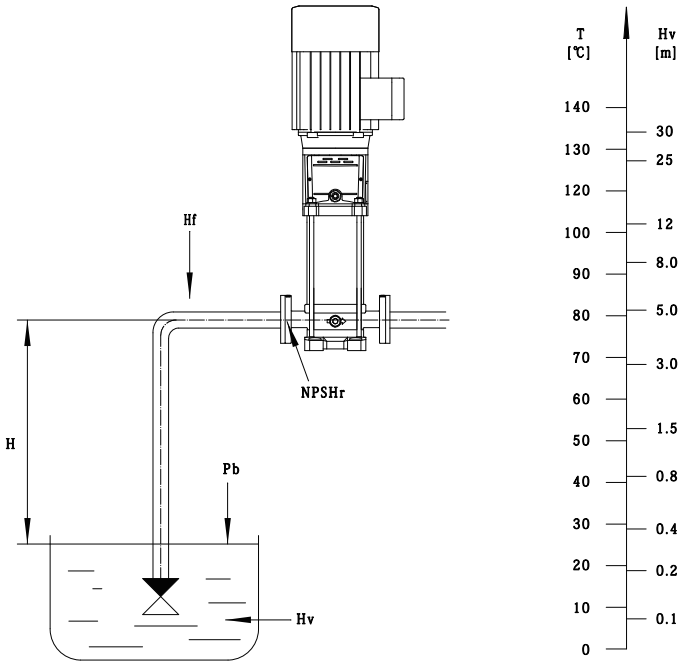
Max. ambient temperature

If the ambient temperature exceeds the 40 ℃ or the pump is installed at an altitudeexceeding the 1000m, due to the low density and low cooling effect of the air, the motor rated output will be reduced. It may be necessary to use a motor with a higher rated output.



Minimum inlet pressure, NPSHr

If the inner pump pressure is less than liquid vapor pressure, cavitation could happen.
To avoid cavitation, make sure that there is a minimum pressure on the inlet side of the pump.
Calculate the maximum suction lift "H" in metres head as follows:
H = Pb x 10.2 - NPSHr - Hf - Hv -Hs
Pb =Barometric pressure in bar.
Pb can be set to 1 bar at sea level.
In closed systems, Pb indicates the system pressure in bar.
NPSHr =Net Positive Suction Head in metres head. To be read from the NPSHr curve at the highest flow rate the pump will be delivering.
Hf = Friction loss in inlet pipe in metres head
Hv =Vapour pressure in metres head.
Hs = safe margin - 0.5 m head
If the calculated "H" is positive, the pump can operate at a suction lift of maximum "H" m head. If the calculated "H" is negative, an inlet pressure of minimum "H" m head is required.



※Always check the pump is not in cavitation.

General information

Product range

Model		RHINO							
Rated flow[m³/h]		1	3	5	10	15	20	32	45
Rated flow[l/s]		0.28	0.83	1.39	2.78	4.17	5.56	8.89	11.67
Flow range[m³/h]		0.6 ~ 2.6	1.4 ~ 5.2	3 ~ 10	6 ~ 17	10 ~ 26	13 ~ 34	20 ~ 48	30 ~ 65
Flow range[l/s]		0.17 ~ 0.72	0.39 ~ 1.4	0.83 ~ 2.78	1.67 ~ 4.72	2.78 ~ 7.2	3.61 ~ 9.44	5.56 ~ 13.33	8.33 ~ 18.06
Max pressure[bar]		26	25	24	23	23	19	27	23
Motor power[kW]		0.37 ~ 3	0.37 ~ 4	0.55 ~ 5.5	0.75 ~ 11	1.5 ~ 18.5	2.2 ~ 18.5	3 ~ 30	5.5 ~ 45
Motor power[hp]		0.5 ~ 4	0.5 ~ 5.5	0.75 ~ 7.5	1 ~ 15	2 ~ 25	3 ~ 25	4 ~ 40	7.5 ~ 60
Temperature range[℃]		-15 ~ +120							
Max eff.[%]		49	59	70	72	73	73	73	75
RHINO Pipelines	DIN flange	DN25	DN25	DN32	DN40	DN50	DN50	DN65	DN80
	Oval flange	G1	G1	G1 1/4	G1 1/2	-	-	-	-
RHINOF Pipelines	DIN flange	DN25	DN25	DN32	DN40	DN50	DN50	DN65	DN80
	PJE coupling	DN32	DN32	DN32	DN50	DN50	DN50	-	-
	Pipe thread	R1 1/4	R1 1/4	R1 1/4	R2	R2	R2	-	-
	Oval flange	G1	G1	G1 1/4	G1 1/2	-	-	-	-

Model		RHINO	
Rated flow[m³/h]		65	90
Rated flow[l/s]		18.06	23.61
Flow range[m³/h]		40 ~ 100	60 ~ 130
Flow range[l/s]		11.11 ~ 27.78	16.67 ~ 36.11
Max pressure[bar]		17	14
Motor power[kW]		7.5 ~ 45	11 ~ 45
Motor power[hp]		10 ~ 60	15 ~ 60
Temperature range[℃]		-15 ~ +120	
Max eff.[%]		78	78
RHINO(S) Pipelines	DIN flange	DN100	DN100

General information

Maximum permissible operating pressure

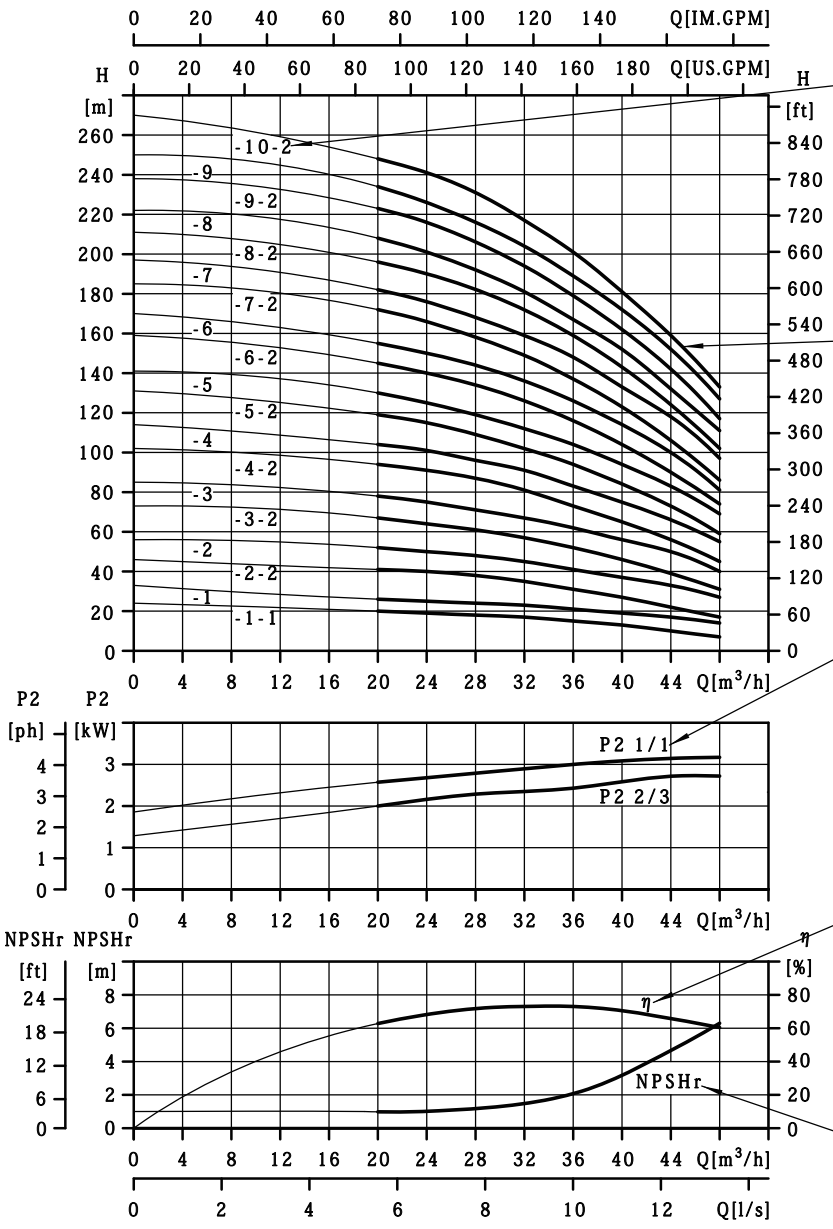
Model	Maximum permissible operating pressure(bar)
RHINO1,3,5,10,15,20	
Flange、PJE coupling 、Pipe thread	25
RHINO1,3,5,10	
Oval flange	16
RHINO C 32	
32-1-1 ~ 32-6-2	16（30※）
32-6 ~ 32-10-2	30
RHINO 32	30
RHINO C 45	
45-1-1 ~ 45-4-2	16（30※）
45-4 ~ 45-6	25（30※）
45-7-2 ~ 45-7	30
RHINO 45	
45-1-1 ~ 45-6	25（30※）
45-7-2 ~ 45-7	30
RHINO C 65	
65-1-1 ~ 65-3	16(25※)
65-4-2 ~ 65-5-2	25
RHINO 65	25
RHINO C 90	
90-1-1 ~ 90-3-2	16(25※)
90-3-1 ~ 90-4-2	25
RHINO 90	25

※（ ）Need to indicate for the pressure in bracket

MEI value

Model	MEI
RHINO 1-3	＞0.7
RHINO 3-3	＞0.7
RHINO 5-3	＞0.7
RHINO 10-3	＞0.7
RHINO 15-3	＞0.7
RHINO 20-3	＞0.7
RHINO 32-3	＞0.7
RHINO 45-3	＞0.7
RHINO 65-3	＞0.7
RHINO 90-3	＞0.7

How to read the curve charts



Stage
First number:
Stage
Second number
Number of small impeller

Pump Q-Hcurve,the thickened line presents recommended performance region

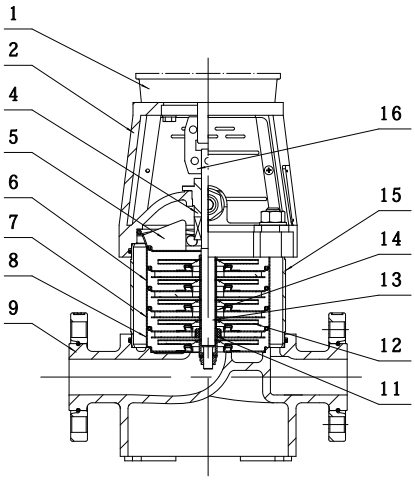
The power curve presents the input power of each stage,which is divided into integrate impeller type(1/1)and the type with small impeller(2/3)

η curve presents efficiency of the pump,For the pump equipped with small impeller,its efficiency will be 2% lower than shown by the curve

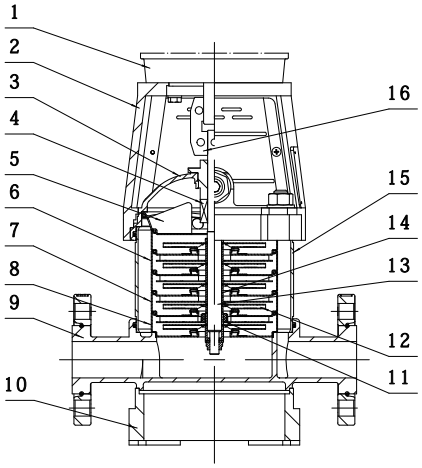
NPSHr curve expresses the average value of all curves of this series.Asafety margin of 0.5m shall be taken into consideration when making selection

Materials 1 / 3 / 5 / 10 / 15 /20

Sectional drawing



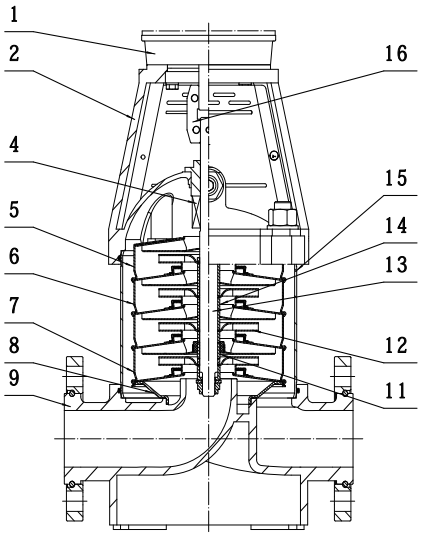
RHINO C



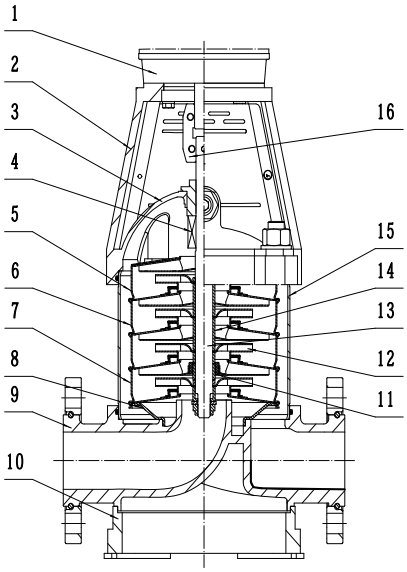
RHINO

Rhino 1,3,5 Material list

SN	Name	Material	AISI/ASTM
1	Motor	-	-
2	Bracket	Cast iron	ASTM A536-84 70-50-05
4	Mechanical seal	-	-
5	Discharge diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inlet chamber	Stainless steel	AISI304
11	Shaft sleeve	Tungsten carbide	-
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304
14	Sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Coupling	Carbon steel/ Powder metallurgy	-
	RHINO C		
9	Inlet&outlet chamber	Cast iron	ASTM25B
	RHINO		
3	Pump head	Stainless steel	AISI304
9	Inlet&outlet chamber	Stainless steel	AISI304
10	Pedestal	Cast iron	ASTM25B



RHINO C



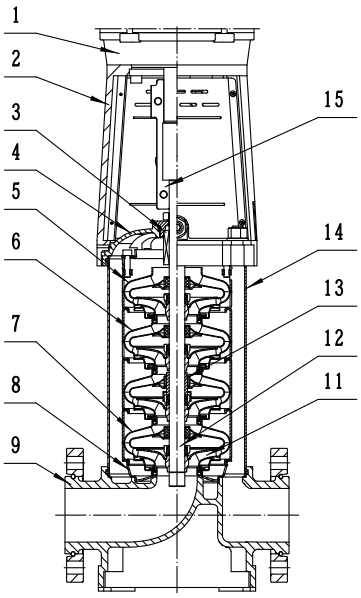
RHINO

Rhino 10,15,20 Material list

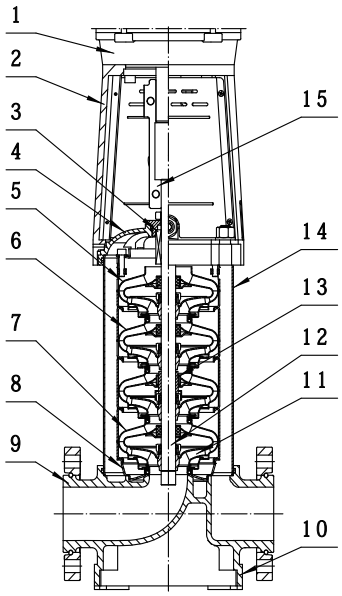
SN	Name	Material	AISI/ASTM
1	Motor	-	-
2	Bracket	Cast iron	ASTM A536-84 70-50-05
4	Mechanical seal	-	-
5	Discharge diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inlet chamber	Stainless steel	AISI304
11	Shaft sleeve	Tungsten carbide	-
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304
14	Sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Coupling	Carbon steel	
	RHINO C		
9	Inlet&outlet chamber	Cast iron	ASTM25B
	RHINO		
3	Pump head	Stainless steel	AISI304
9	Inlet&outlet chamber	Stainless steel	AISI304
10	Pedestal	Cast iron	ASTM A536-84 70-50-05

Materials 32 / 45 /65 /90

Sectional drawing



RHINO C



RHINO

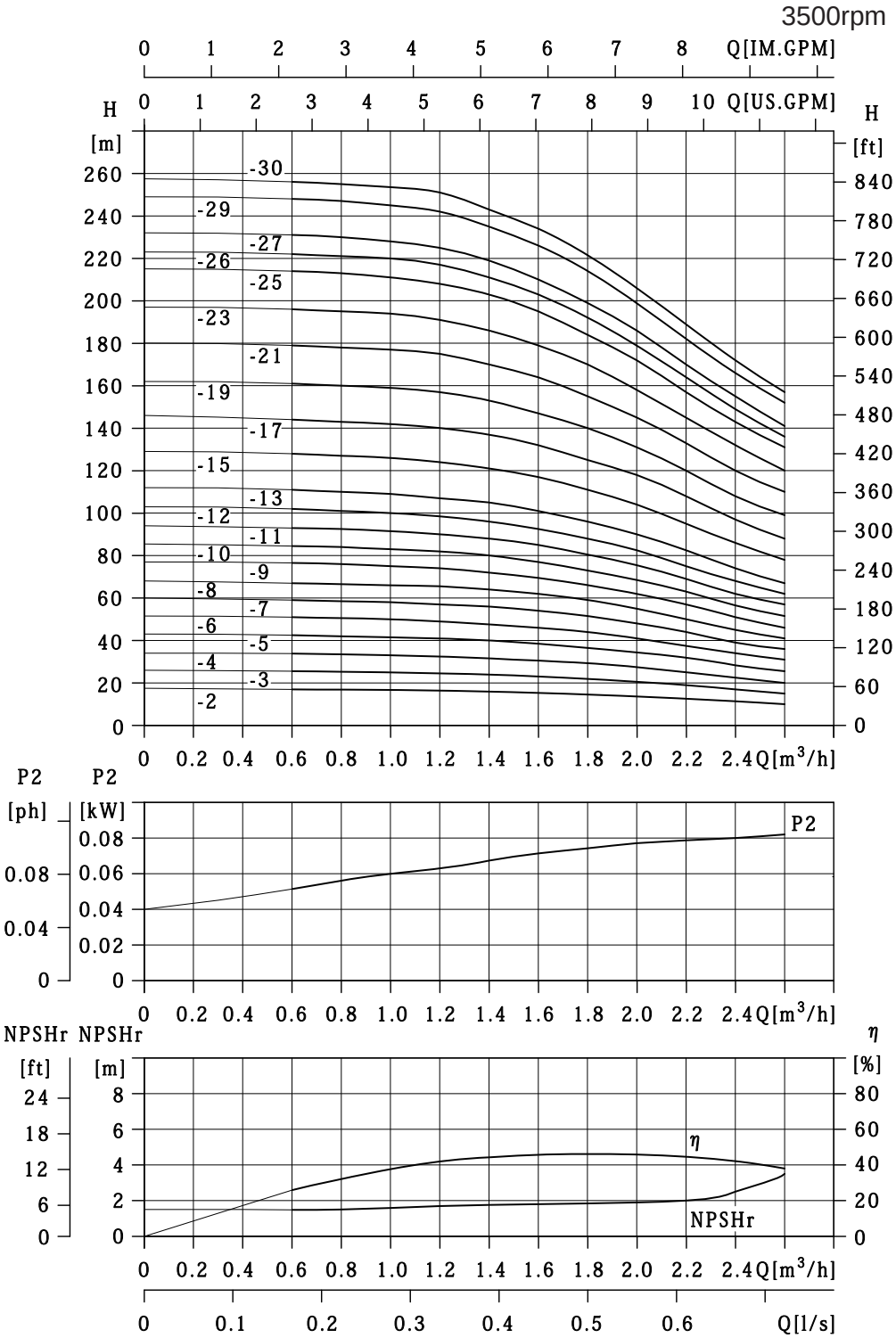
Rhino 32,45,65,90 Material list

SN	Name	Material	AISI/ASTM
1	Motor	-	-
2	Bracket	Cast iron	ASTM A536-84 70-50-05
3	Mechanical seal	-	-
5	Discharge diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inlet chamber	Stainless steel	AISI304
11	Impeller	Stainless steel	AISI304
12	Shaft	Stainless steel	AISI304
13	Shaft sleeve	Tungsten carbide	-
14	Cylinder	Stainless steel	AISI304
15	Coupling	Carbon steel	-
	RHINO C		
4	Pump head	Cast iron	ASTM25B
9	Inlet&outlet chamber	Cast iron	ASTM25B
	RHINO		
4	Pump head	Stainless steel	AISI304
9	Inlet&outlet chamber	Stainless steel	AISI304
10	Pedestal	Cast iron	ASTM25B

※Only for some models

RHINO 1

Performance curve



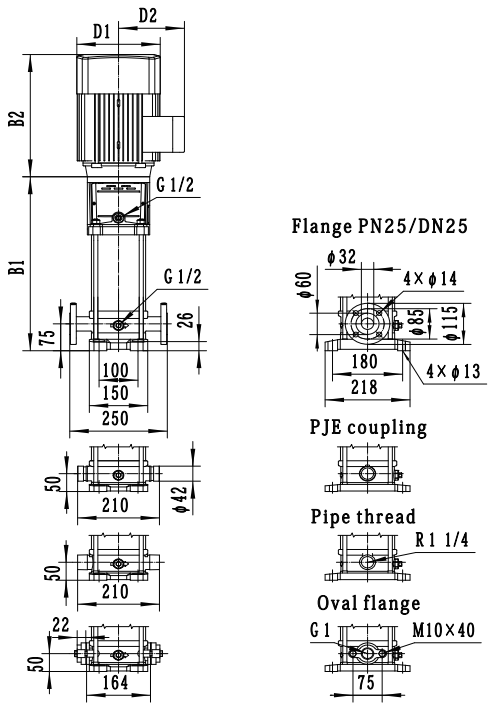
RHINO 1

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	0.6	0.8	1	1.2	1.4	1.6	1.8	2	2.4	2.6
1-2	0.37	0.5		17.5	17	16.8	16.6	16.4	16	15.4	14.5	13.7	11.3	10
1-3	0.37	0.5		26	25.5	25.3	25	24.5	24	23	22	20.5	17	15
1-4	0.37	0.5		34	33.8	33.5	33	32.5	31.5	30.5	29.3	27.5	22.5	20
1-5	0.55	0.75		43	42.5	42	41.5	41	40	38.5	36.5	34.4	28.3	25.5
1-6	0.55	0.75		51.5	51	50.5	50	49	47.5	46	44	41	34	31
1-7	0.75	1		60	59	58.5	58	57	56	54	51.5	48	39	36
1-8	0.75	1		68	67	66.5	66	65.5	64	62	59	55	45	41
1-9	0.75	1		77	76.5	76	75	74	72	69.5	66	62	51	46
1-10	1.1	1.5		85.5	84.5	84	83	82	80	77	73	68.5	56.5	51.5
1-11	1.1	1.5		94	93	92.5	91.5	90	88	85	80.5	75.5	62	57
1-12	1.1	1.5	H (m)	103	102	101	100	98.5	96	92.5	88	82.5	68	62
1-13	1.1	1.5		112	111	110	109	107	105	101	96	90	74	67
1-15	1.5	2		129	128	127	126	124	121	117	111	104	86	78
1-17	1.5	2		146	144	143	142	140	137	132	125	118	97	88
1-19	2.2	3		162	161	160	159	157	153	147	140	131	108	99
1-21	2.2	3		180	179	178	177	175	170	164	155	145	120	110
1-23	2.2	3		197	196	195	194	191	186	179	170	158	132	120
1-25	2.2	3		215	214	213	211	208	203	195	184	172	143	131
1-26	2.2	3		223	222	221	220	217	211	203	192	179	149	136
1-27	3	4		232	231	230	228	225	219	210	199	186	155	141
1-29	3	4		249	248	247	245	242	235	226	214	199	166	152
1-30	3	4		257.5	256	255	253.5	251	243	234	221.5	206	172	157

Installation drawing



※No oval flange connection for RHINO 1-19~1-30

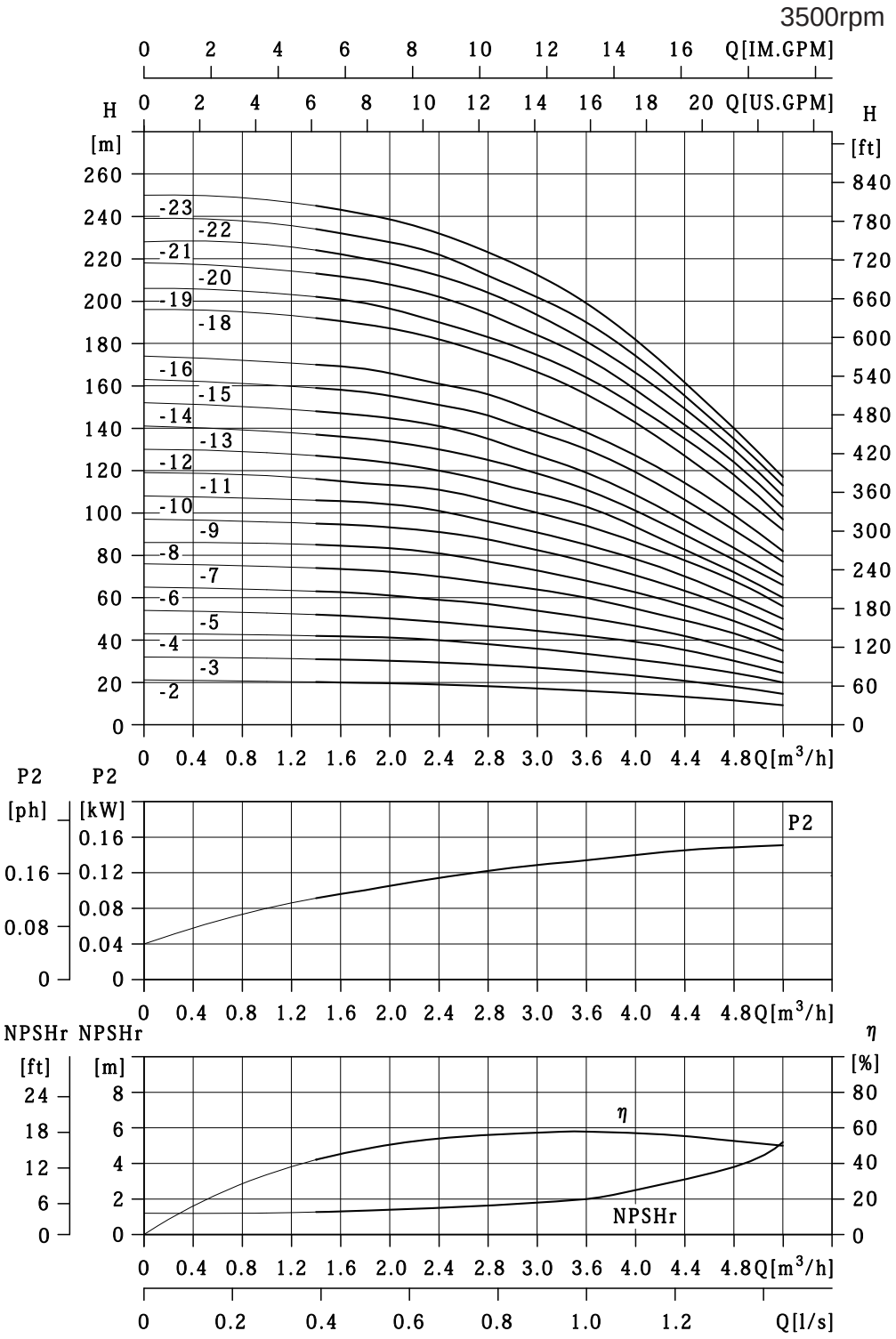
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
1-2	261	220	481	138	103	23
1-3	279	220	499	138	103	23
1-4	297	220	517	138	103	24
1-5	315	220	535	138	103	25
1-6	333	220	553	138	103	25
1-7	361	248	609	148	108	29
1-8	379	248	627	148	108	29
1-9	397	248	645	148	108	30
1-10	415	248	663	148	108	33
1-11	433	248	681	148	108	33
1-12	451	248	699	148	108	34
1-13	469	248	717	148	108	34
1-15	515	292	807	171	119	39
1-17	551	292	843	171	119	40
1-19	587	292	879	171	119	41
1-21	623	292	915	171	119	42
1-23	659	292	951	171	119	44
1-25	695	292	987	171	119	45
1-26	713	292	1005	171	119	46
1-27	741	343	1084	196	131	56
1-29	777	343	1120	196	131	58
1-30	795	343	1138	196	131	59

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 3

Performance curve



RHINO 3

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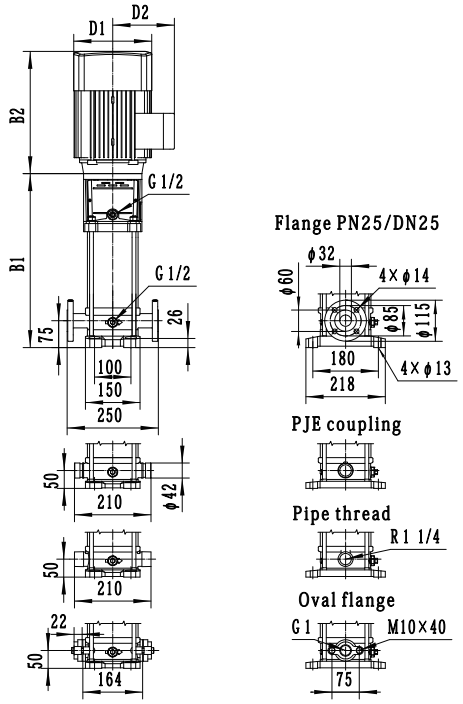
Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	1.4	1.8	2.4	2.8	3	3.6	4.2	4.8	5.2
3-2	0.37	0.5		21.2	20.2	19.8	19	18.2	17.7	16	14	11.5	9.2
3-3	0.55	0.75		32	31	30.5	29.5	28.4	27.6	25.2	22	18	14.6
3-4	0.75	1		43	42	41.5	40	38	37	33.5	29.5	24.5	20
3-5	1.1	1.5		54	52	51	48.5	46.5	45.5	42	37.5	30.2	24.5
3-6	1.1	1.5		65	63	62	59	57	55.5	50.5	44.5	36	29.5
3-7	1.1	1.5		76	74	73	70	67	65.5	60	52	43.2	35
3-8	1.5	2		86	85	84	81	77	75	68	59.5	49	40
3-9	1.5	2		97	95	94	91	87.5	85	77	67	55	45
3-10	2.2	3		108	106	105	101	96	93.5	85	74.5	60.5	50
3-11	2.2	3		119	116	114	111	106	103	94	82	68	56
3-12	2.2	3	H (m)	130	127	125	120	115	112	103	88	72	60
3-13	2.2	3		141	137	135	130	125	122	111	95.5	78	66
3-14	2.2	3		152	148	146	141	135	131	119	102.5	83.5	70
3-15	3	4		163	159	157	151	146	142	130	113	92	77
3-16	3	4		174	170	168	161	156	152	138	121	99	82
3-18	3	4		196	192	189	182	175	171	156	135	110	92
3-19	3	4		206	202	199	190	183	179	164	143	118	97
3-20	4	5.5		218	213	210	202	194	189	173	150	124	103
3-21	4	5.5		228	224	220	212	204	199	181	158	130	108
3-22	4	5.5		239	234	230	222	212	207	190	165	135	113
3-23	4	5.5		250	245	241	232	223	218	199	172	140	117

Installation drawing



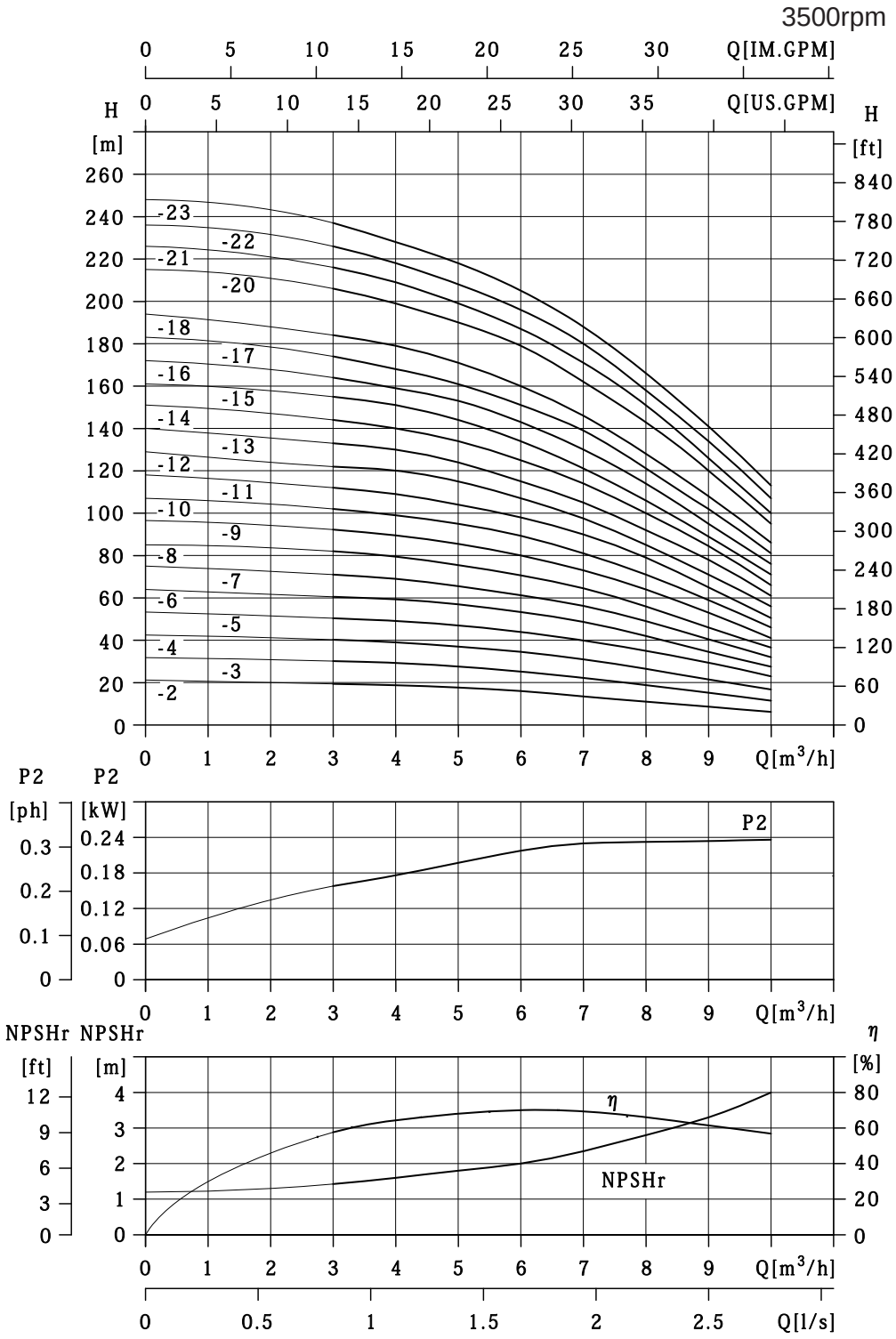
※ RHINO 3-15~3-23No oval flange connection

Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
3-2	261	220	481	138	103	23
3-3	279	220	499	138	103	24
3-4	307	248	555	148	108	29
3-5	325	248	573	148	108	30
3-6	343	248	591	148	108	30
3-7	361	248	609	148	108	31
3-8	389	292	681	171	119	38
3-9	407	292	699	171	119	38
3-10	425	292	717	171	119	41
3-11	443	292	735	171	119	41
3-12	461	292	753	171	119	42
3-13	479	292	771	171	119	42
3-14	497	292	789	171	119	43
3-15	525	343	868	196	131	50
3-16	543	343	886	196	131	51
3-18	579	343	922	196	131	52
3-19	597	343	940	196	131	52
3-20	615	348	963	215	150	58
3-21	633	348	981	215	150	58
3-22	651	348	999	215	150	59
3-23	669	348	1017	215	150	59

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

Performance curve



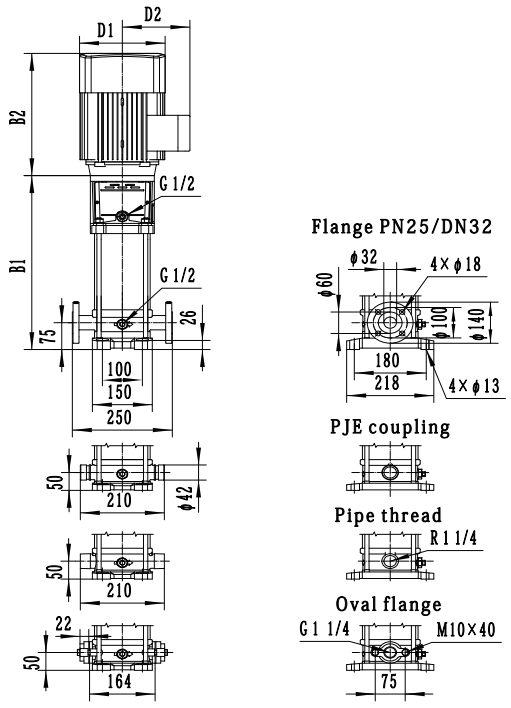
RHINO 5

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	3	4	5	6	7	8	9	10
5-2	0.55	0.75		21.2	19.4	18.8	17.7	16	13.5	11	8.6	6.2
5-3	0.75	1		31.8	30.2	29.3	27.6	25.2	22.3	18.8	15.2	11.5
5-4	1.1	1.5		42.5	40.3	39	37	34.5	31	26.5	21.5	16.8
5-5	1.5	2		53.3	50.4	49	47	44	39.8	35	29.5	23
5-6	1.5	2		64	60.5	59.3	57	53.3	48.7	42	34.5	27.5
5-7	2.2	3		75	71	69	65.5	61.2	56.2	49	40.5	32
5-8	2.2	3		85	82	79.5	75.5	70.6	64.5	56	46	36.5
5-9	2.2	3		96.5	92.2	89.5	85.5	80	73	64	53	41
5-10	3	4		107	102	99	95	89.3	81	71	59	46
5-11	3	4		118	112	109	104	98	90	79	65	50.5
5-12	3	4	H (m)	129	122	120	115	107	97.5	85	71	56
5-13	4	5.5		140	133	130	124	115	105	92	78	61
5-14	4	5.5		151	144	140	134	125	114	100	84.5	66
5-15	4	5.5		161	155	151	144	134	121	106	89	71
5-16	4	5.5		172	164	159	153	143	130	114	95	76
5-17	5.5	7.5		183	174	168	161	151	139	121	102	81
5-18	5.5	7.5		194	184	179	171	160	146	128	108	86
5-20	5.5	7.5		215	206	199	190	179	162	143	120	95
5-21	5.5	7.5		226	216	209	199	187	171	151	126	100
5-22	5.5	7.5		236	226	218	208	196	180	158	134	107
5-23	5.5	7.5		248	237	228	218	205	188	166	141	113

Installation drawing



※ Rhino 5-15~5-23No oval flange connection

Dimensions and weight

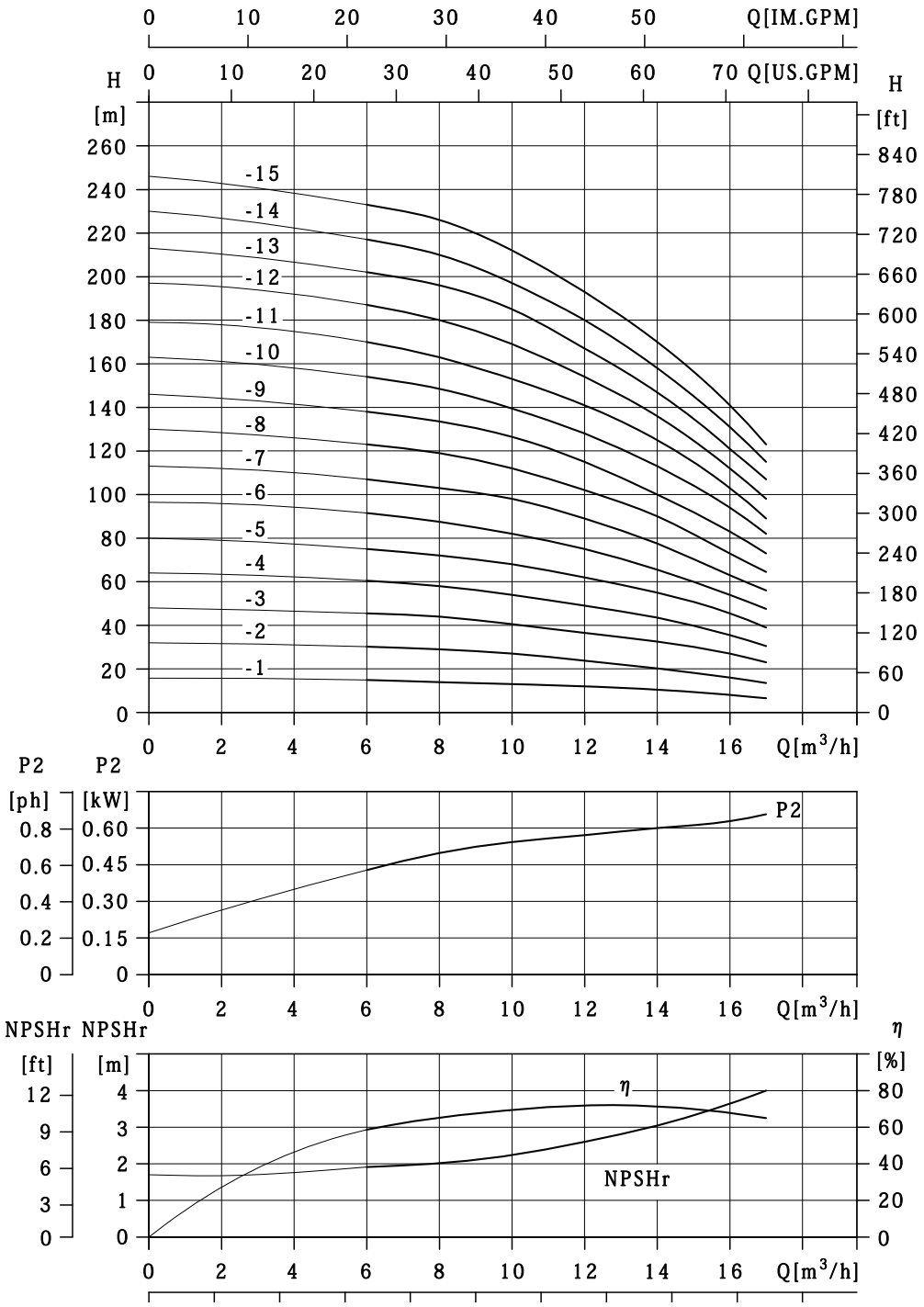
Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
5-2	279	220	499	138	103	23
5-3	316	248	564	148	108	26
5-4	343	248	591	148	108	28
5-5	380	292	672	171	119	33
5-6	407	292	699	171	119	33
5-7	434	292	726	171	119	37
5-8	461	292	753	171	119	37
5-9	488	292	780	171	119	38
5-10	525	343	868	196	131	46
5-11	552	343	895	196	131	46
5-12	579	343	922	196	131	47
5-13	606	348	954	215	150	54
5-14	633	348	981	215	150	54
5-15	660	348	1008	215	150	55
5-16	687	348	1035	215	150	55
5-17	792	383	1175	257	167	77
5-18	819	383	1202	257	167	77
5-20	873	383	1256	257	167	78
5-21	900	383	1283	257	167	79
5-22	927	383	1310	257	167	79
5-23	954	383	1337	257	167	80

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 10

Performance curve

3500rpm



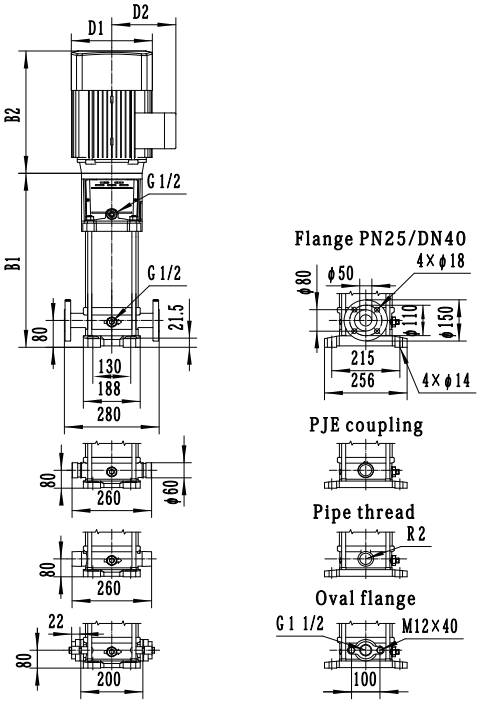
RHINO 10

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	6	8	10	12	14	16	17
10-1	0.75	1		15.8	14.9	14	13	12	10.5	8	6.5
10-2	1.5	2		32	30.2	29	27	23.8	20.2	16	13.5
10-3	2.2	3		48	45.5	44	40.5	36.5	32.5	27	23
10-4	3	4		64	60.5	58	54	49	43.5	35.5	30.5
10-5	4	5.5		80	75	72	68	62	55	45.5	39
10-6	4	5.5		96.5	91.5	87.5	82	75	65.5	54	47.5
10-7	5.5	7.5		113	107	103	98	89	77.5	63	56
10-8	5.5	7.5	H (m)	130	123	119	112	102	90	73	64.5
10-9	7.5	10		146	138	133.5	126.5	115	100	83	73
10-10	7.5	10		163	154	148.5	139.5	128	113	94	82
10-11	7.5	10		179	170	163	153	141	125	103	89
10-12	7.5	10		197	187	180	169	154	136	112	98
10-13	11	15		213	202	196	185	167	147	121	107
10-14	11	15		230	217	210	197	180	158	131	115
10-15	11	15		246	233	226	212	193	170	141	123

Installation drawing



* Rhino 10-10~10-15No oval flange connection

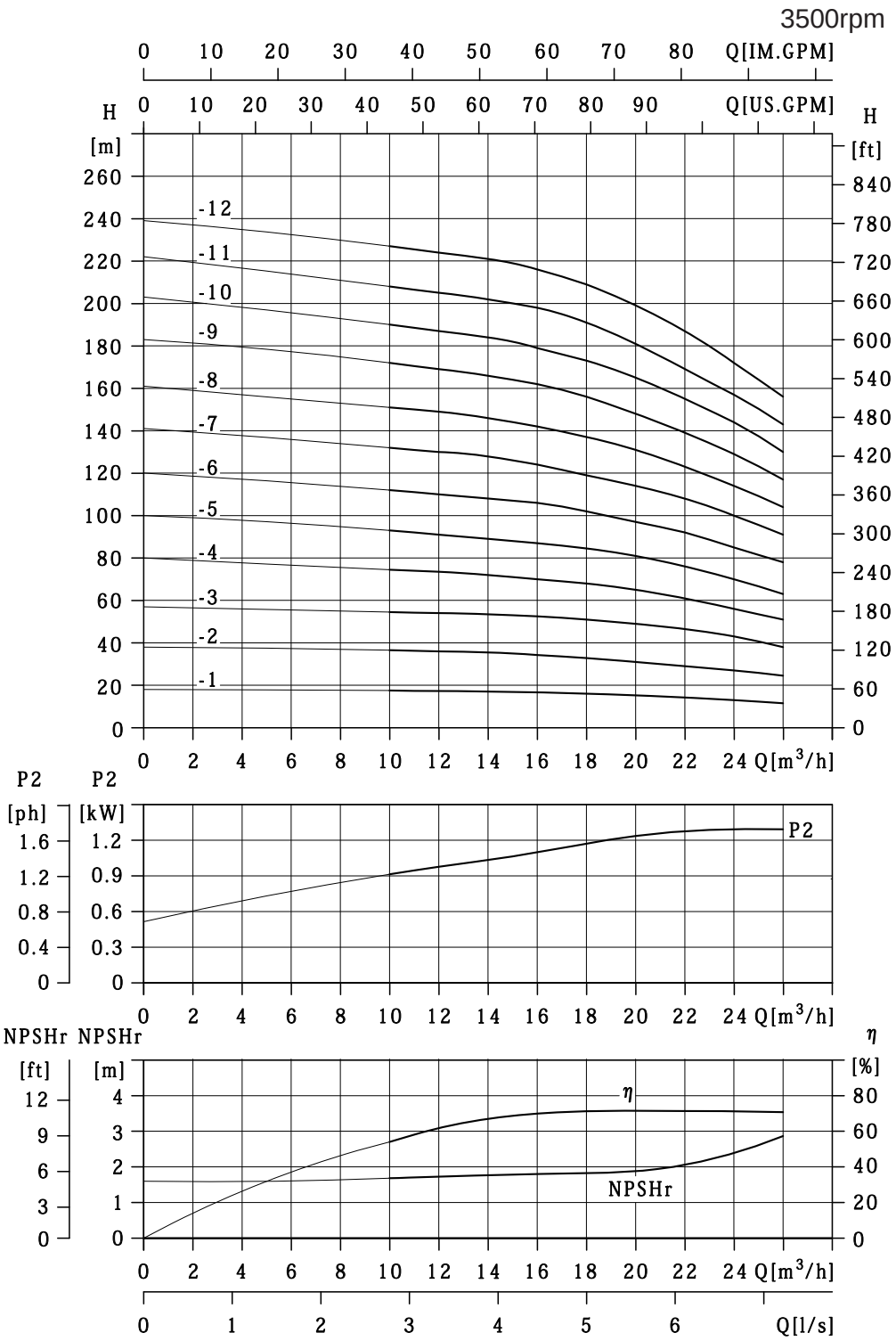
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
10-1	350	248	598	148	108	40
10-2	360	292	652	171	119	47
10-3	390	292	682	171	119	51
10-4	430	343	773	196	131	61
10-5	460	348	808	215	150	69
10-6	490	348	838	215	150	69
10-7	598	383	981	257	167	81
10-8	628	383	1011	257	167	81
10-9	658	383	1041	257	167	86
10-10	688	383	1071	257	167	86
10-11	718	383	1101	257	167	87
10-12	748	383	1131	257	167	88
10-13	808	499	1307	314	258	153
10-14	838	499	1337	314	258	154
10-15	868	499	1367	314	258	155

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 15

Performance curve



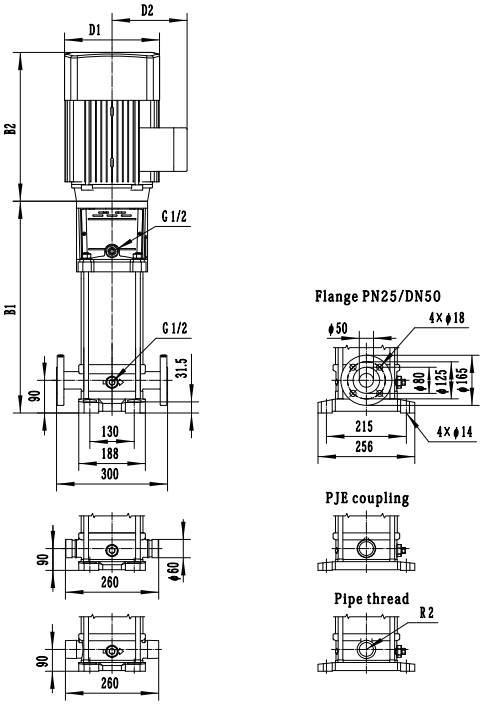
RHINO 15

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	10	12	14	15	16	18	20	22	24	26
15-1	1.5	2		18	17.5	17.3	17.1	16.9	16.7	16	15.2	14.3	13	11.5
15-2	3	4		38	36.5	36	35.5	35	34.3	32.8	31	29	27	24.5
15-3	4	5.5		57	54.5	54	53.5	53	52.5	51	49	46.5	43	38
15-4	5.5	7.5		80	74.5	73.5	72	71	70	68	65	61	56	51
15-5	7.5	10		100	93	91	89	88	87	84.5	81	76	70	63
15-6	11	15	H (m)	120	112	110	108	107	106	102	97	92	85	78
15-7	11	15		141	132	130	128	126	124	119	114	108	100	91
15-8	11	15		161	151	149	146	144	142	137	131	123	114	104
15-9	15	20		183	172	169	166	164	162	156	148	139	129	117
15-10	15	20		203	190	187	184	182	179	173	165	155	144	130
15-11	15	20		222	208	205	202	200	198	191	181	169	157	143
15-12	18.5	25		239	227	224	221	219	216	209	199	187	172	156

Installation drawing



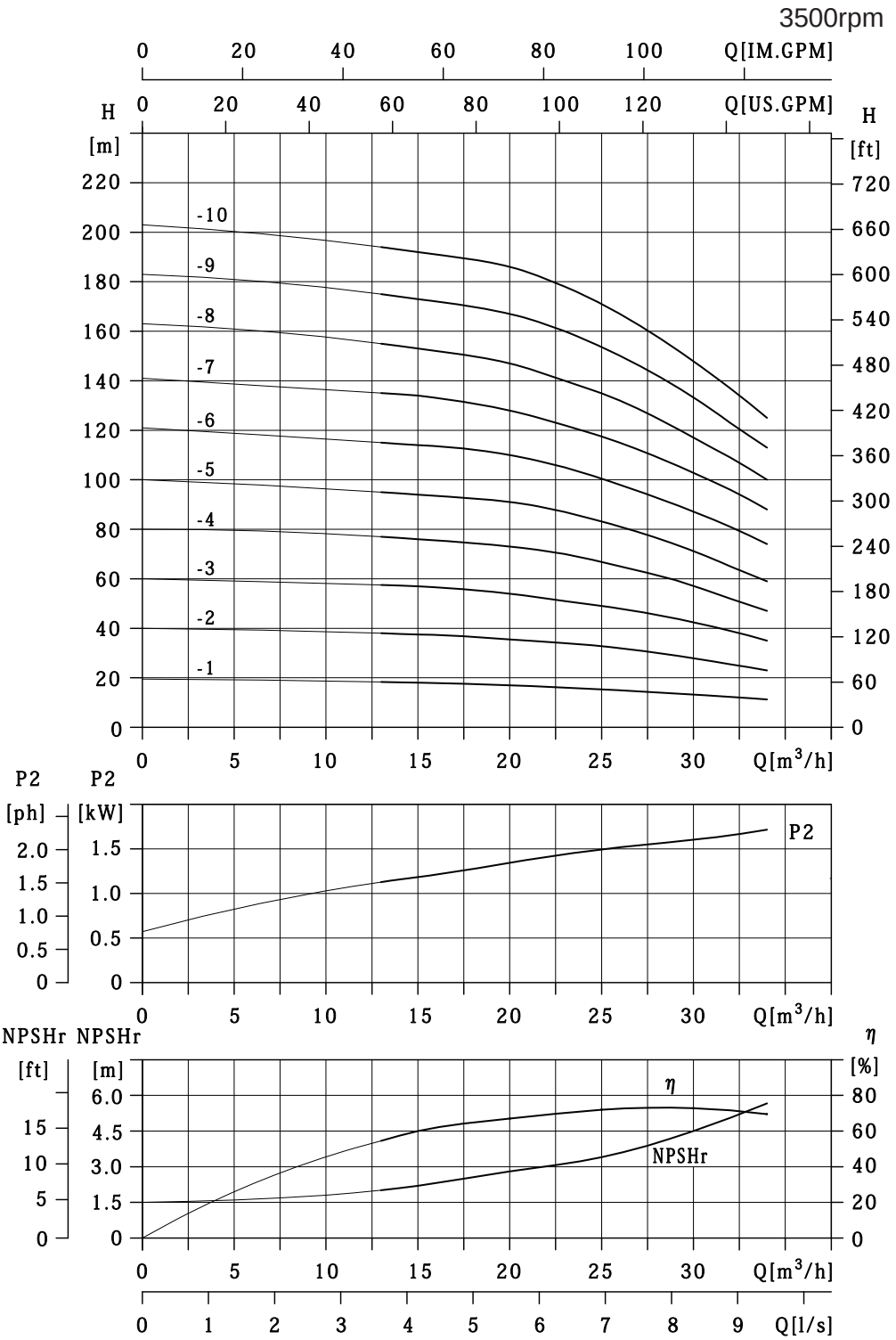
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
15-1	400	292	692	171	119	38
15-2	410	343	753	196	131	50
15-3	455	348	803	215	150	59
15-4	578	383	961	257	167	75
15-5	623	383	1006	257	167	81
15-6	698	499	1197	314	258	159
15-7	743	499	1242	314	258	161
15-8	788	499	1287	314	258	163
15-9	833	499	1332	314	258	176
15-10	878	499	1377	314	258	178
15-11	923	499	1422	314	258	180
15-12	968	543	1511	314	258	202

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 20

Performance curve



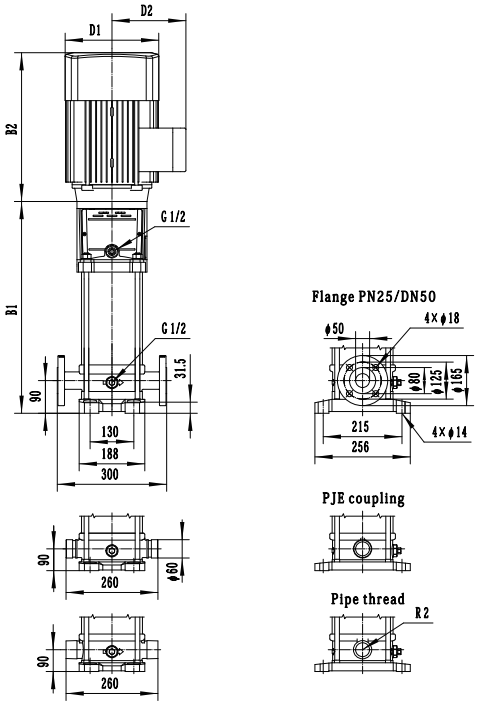
RHINO 20

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	13	15	17	20	23	26	29	32	34
20-1	2.2	3		19.5	18.3	18	17.7	17	16	15	13.7	12.3	11.3
20-2	4	5.5		40	38	37.5	37	35.5	34	32	29	25.5	23
20-3	5.5	7.5		60	57.5	57	56	54	51	48	44	39	35
20-4	7.5	10		80	77	76	75	73	70	65	59.5	52	47
20-5	11	15	H (m)	100	95	94	93	91	87	81	74	65	59
20-6	11	15		121	115	114	113	110	105	98	90	81	74
20-7	15	20		141	135	134	132	128	122	115	106	96	88
20-8	15	20		163	155	153	151	147	140	132	121	109	100
20-9	18.5	25		183	175	173	171	167	160	150	138	123	113
20-10	18.5	25		203	194	192	190	186	178	167	153	137	125

Installation drawing



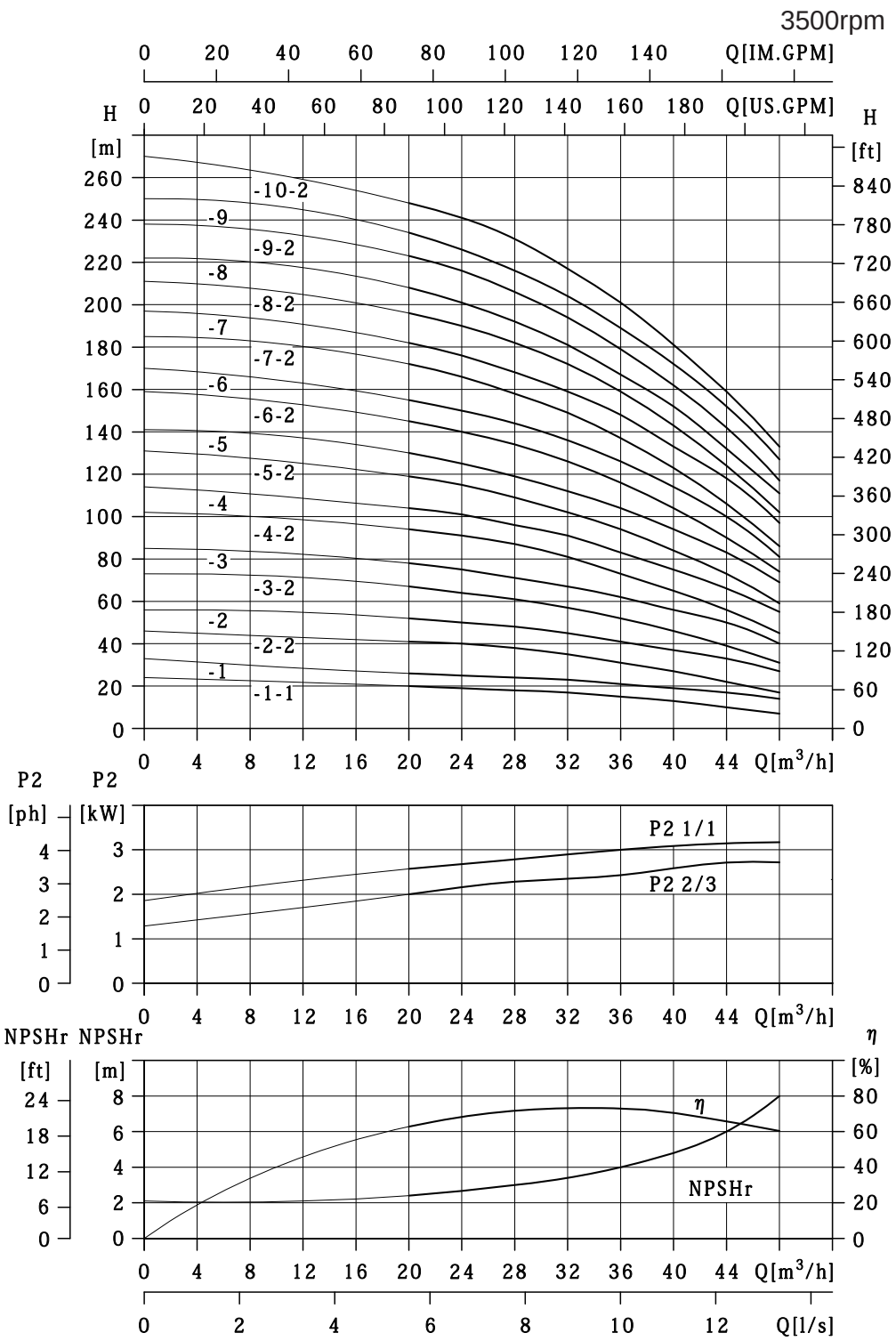
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
20-1	400	292	692	171	119	42
20-2	410	348	758	215	150	58
20-3	533	383	916	257	167	73
20-4	578	383	961	257	167	82
20-5	653	499	1152	314	258	153
20-6	698	499	1197	314	258	154
20-7	743	499	1242	314	258	168
20-8	788	499	1287	314	258	169
20-9	833	543	1376	314	258	192
20-10	878	543	1421	314	258	194

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 32

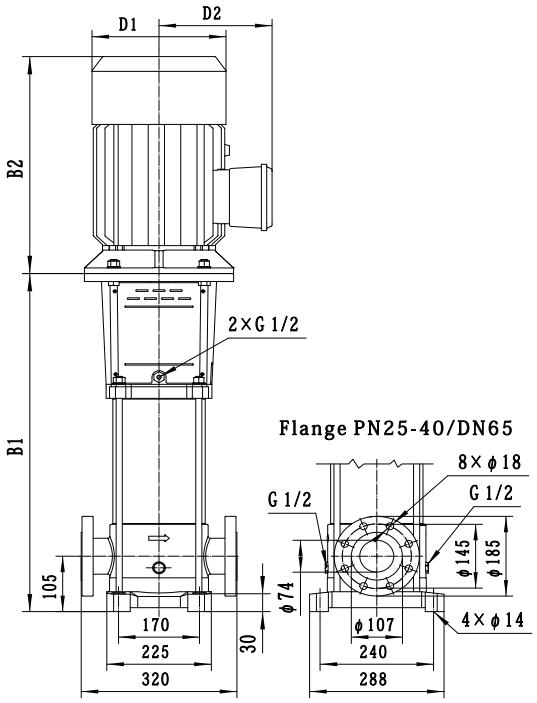
Performance curve



Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	20	24	28	32	36	40	44	48
32-1-1	3	4		24	20	19	18	17	15	13	10	7
32-1	4	5.5		33	26	25	24	23	21	19	17	14
32-2-2	5.5	7.5		46	41	40	38	35	31	27	22	17
32-2	7.5	10		56	52	50	48	45	41	37	33	27
32-3-2	7.5	10		73	67	64	61	57	52	46	39	31
32-3	11	15		85	78	75	71	67	62	56	50	40
32-4-2	11	15		102	94	91	87	81	73	65	56	45
32-4	15	20		114	104	101	96	91	83	75	66	55
32-5-2	15	20		131	119	115	109	102	94	84	73	59
32-5	18.5	25	H (m)	141	130	125	119	112	104	94	83	69
32-6-2	18.5	25		159	145	140	134	126	116	104	90	74
32-6	18.5	25		170	155	150	144	136	126	114	100	81
32-7-2	22	30		185	172	166	158	149	137	123	106	86
32-7	22	30		197	182	176	168	159	148	133	118	97
32-8-2	22	30		211	196	190	182	172	159	143	124	102
32-8	30	40		222	208	201	192	181	167	152	132	111
32-9-2	30	40		238	223	216	206	194	179	162	142	117
32-9	30	40		250	234	226	216	204	189	172	152	127
32-10-2	30	40		270	248	241	231	217	201	181	159	133

Installation drawing



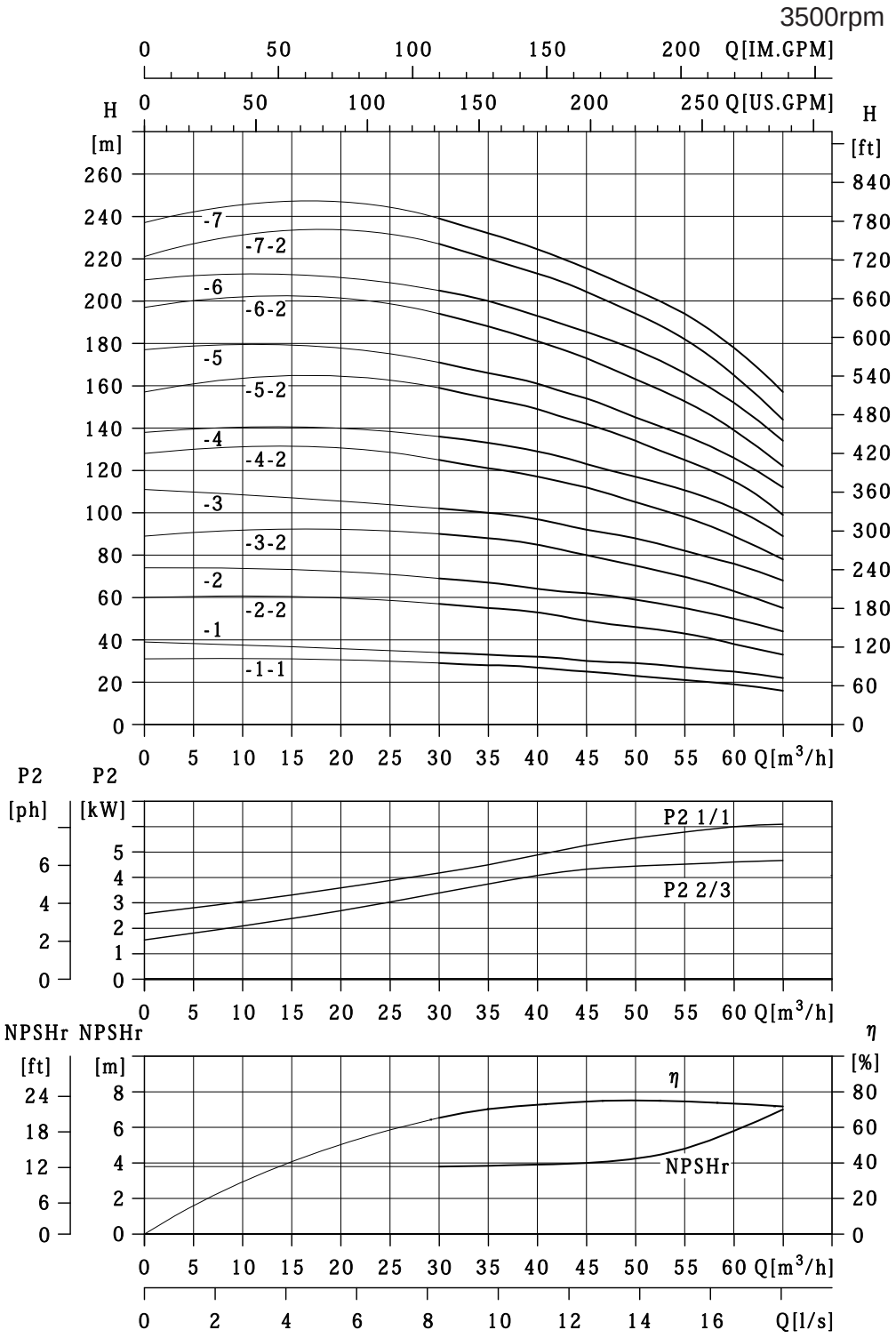
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
32-1-1	428	343	771	196	131	70
32-1	428	348	776	215	150	78
32-2-2	589	383	972	257	167	93
32-2	589	383	972	257	167	96
32-3-2	659	383	1042	257	167	101
32-3	689	499	1188	314	258	175
32-4-2	759	499	1258	314	258	180
32-4	759	499	1258	314	258	187
32-5-2	829	499	1328	314	258	202
32-5	829	543	1372	314	258	215
32-6-2	899	543	1442	314	258	220
32-6	899	543	1442	314	258	220
32-7-2	969	569	1538	355	274	266
32-7	969	569	1538	355	274	266
32-8-2	1039	569	1608	355	274	271
32-8	1039	667	1706	397	307	326
32-9-2	1109	667	1776	397	307	331
32-9	1109	667	1776	397	307	331
32-10-2	1179	667	1846	397	307	336

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 45

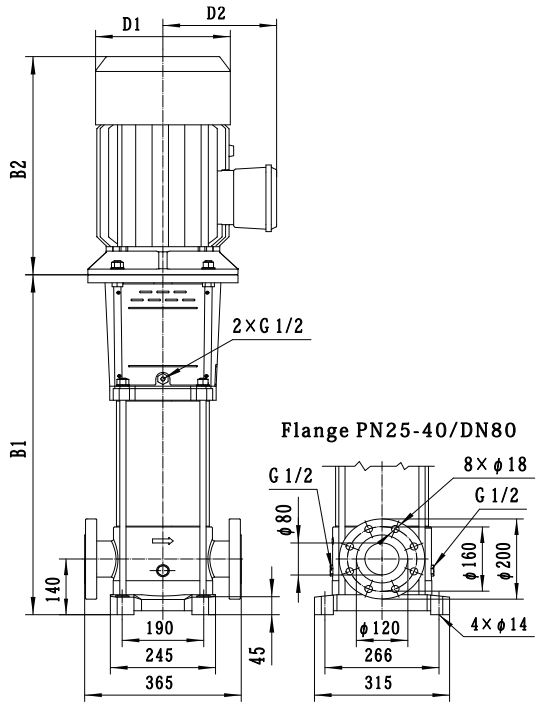
Performance curve



Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	30	35	40	45	50	55	60	65
45-1-1	5.5	7.5		31	29	28	27	25	23	21	19	16
45-1	7.5	10		39	34	33	32	30	29	27	25	22
45-2-2	11	15		60	57	55	53	49	46	43	38	33
45-2	15	20		74	69	67	65	61	59	55	50	44
45-3-2	18.5	25		89	90	88	85	80	75	72	63	55
45-3	18.5	25		111	102	100	97	92	88	82	76	68
45-4-2	22	30	H (m)	128	125	121	118	112	105	98	89	78
45-4	30	40		138	136	133	129	123	117	112	102	89
45-5-2	30	40		157	159	154	149	142	134	121	115	99
45-5	30	40		177	171	166	161	154	145	138	126	112
45-6-2	37	50		197	194	188	182	173	163	155	139	122
45-6	37	50		210	205	200	193	186	176	166	152	134
45-7-2	45	60		221	227	220	213	205	193	182	165	144
45-7	45	60		237	239	232	226	216	204	194	178	157

Installation drawing



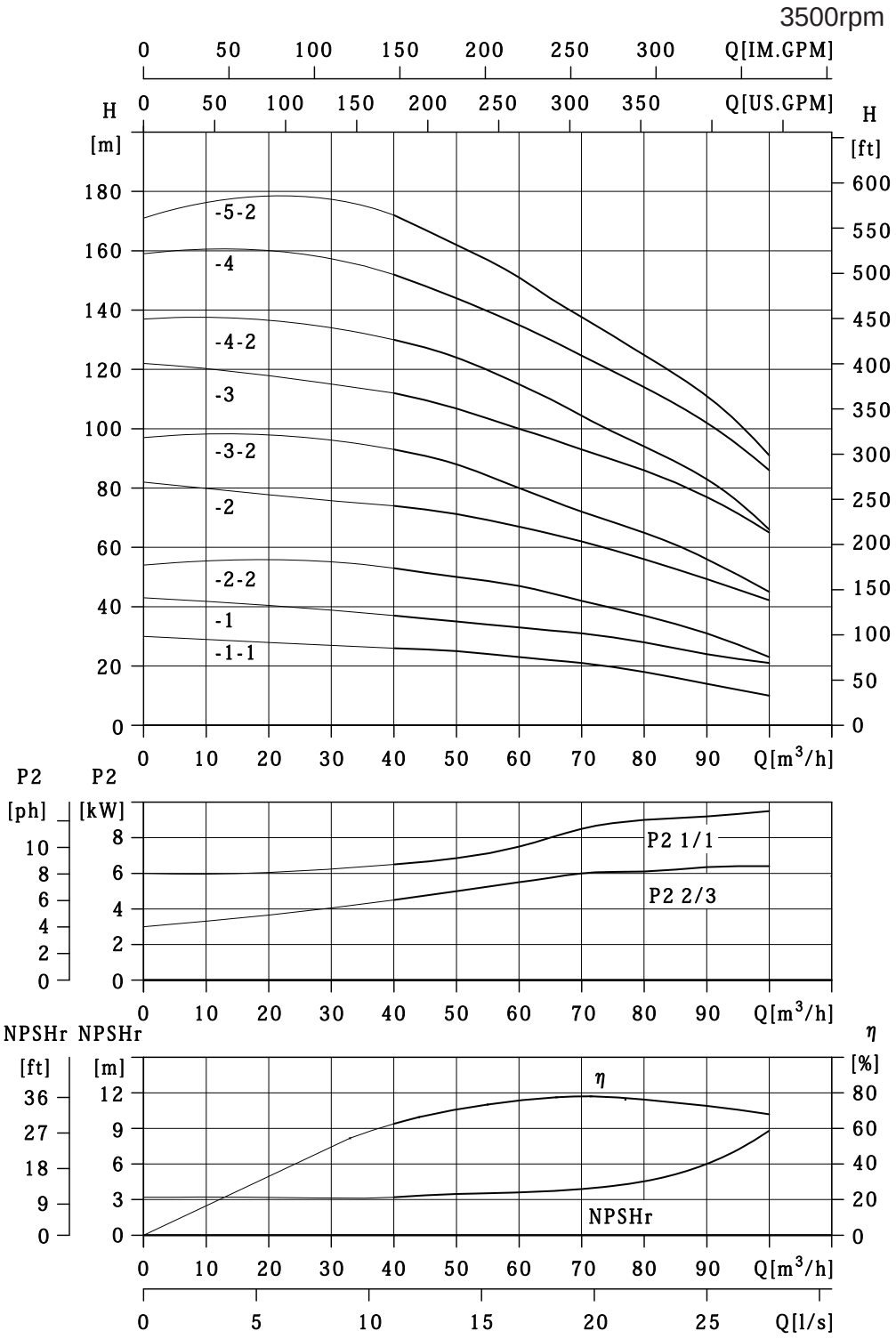
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
45-1-1	580	383	963	257	167	100
45-1	580	383	963	257	167	105
45-2-2	690	499	1189	314	258	180
45-2	690	499	1189	315	259	191
45-3-2	770	543	1313	314	258	201
45-3	770	543	1313	314	258	201
45-4-2	850	569	1419	355	274	242
45-4	850	667	1517	397	307	296
45-5-2	930	667	1597	397	307	301
45-5	930	667	1597	397	307	306
45-6-2	1010	667	1677	397	307	312
45-6	1010	667	1677	397	307	312
45-7-2	1090	702	1792	397	307	382
45-7	1090	702	1792	446	330	382

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 65

Performance curve



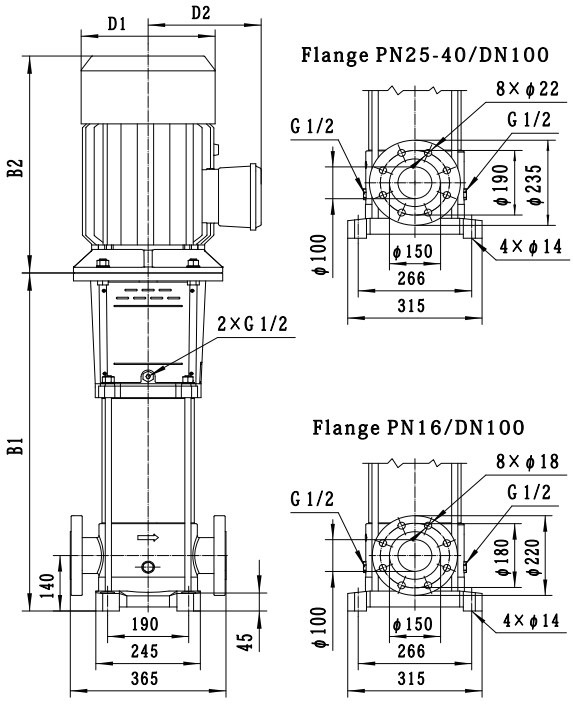
RHINO 65

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	40	50	60	65	70	80	90	100
65-1-1	7.5	10		30	26	25	23	22	21	18	14	10
65-1	11	15		43	37	35	33	32	31	28	24	21
65-2-2	15	20		54	53	50	47	44	42	37	31	23
65-2	22	30		82	74	72	67	64	62	57	51	52
65-3-2	22	30	H (m)	97	93	88	80	76	72	65	56	54
65-3	30	40		122	112	108	100	96	93	86	77	65
65-4-2	37	50		137	130	124	115	110	103	94	83	66
65-4	45	60		159	152	144	135	130	123	114	102	86
65-5-2	45	60		171	172	162	151	144	137	126	112	91

Installation drawing



※PN25-40/DN100 flange is optional

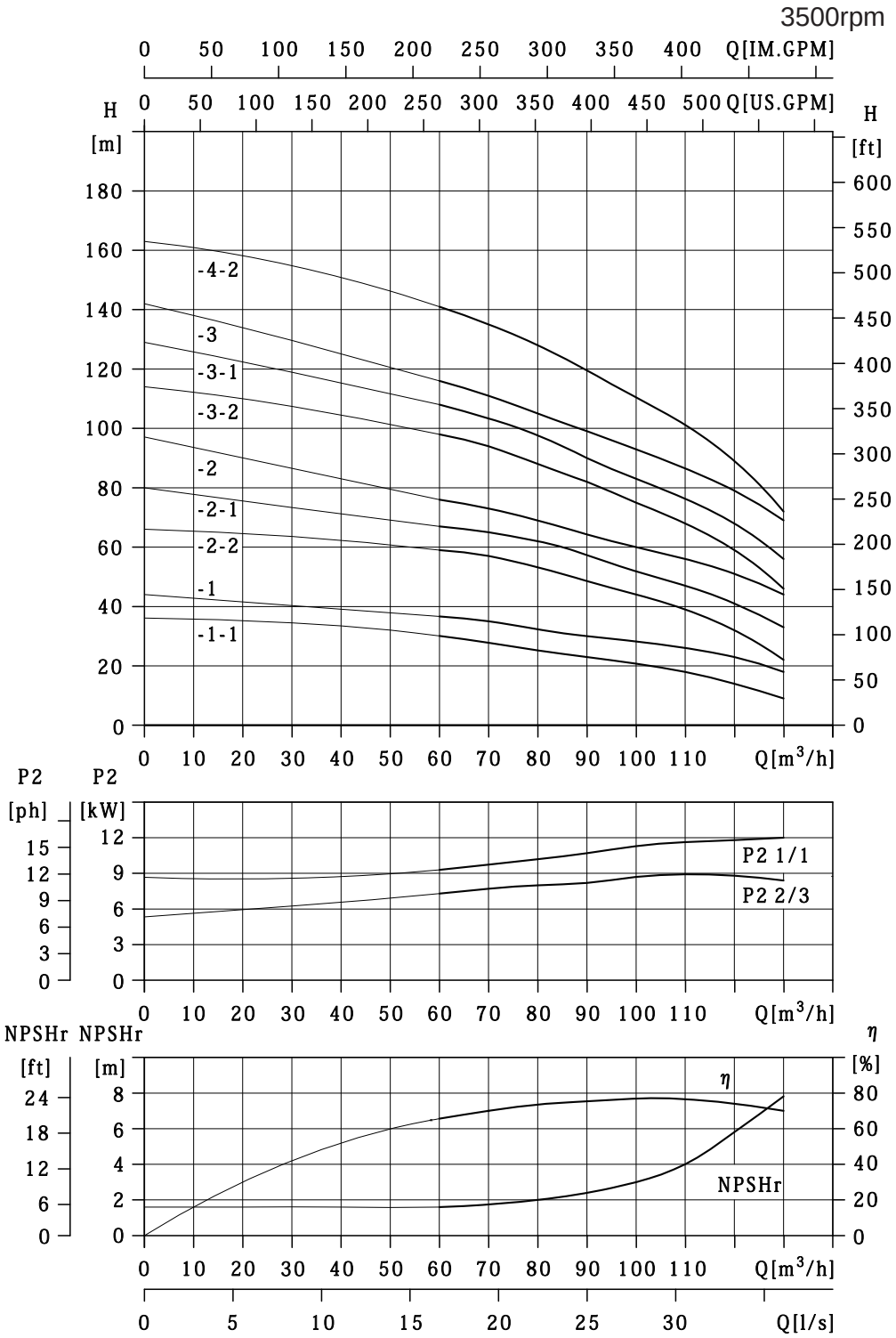
Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
65-1-1	582	383	965	257	167	98
65-1	612	499	1111	314	258	168
65-2-2	695	499	1194	314	258	178
65-2	695	569	1264	355	274	233
65-3-2	778	569	1347	355	274	238
65-3	778	667	1445	397	307	295
65-4-2	861	667	1528	397	307	325
65-4	861	702	1563	446	330	392
65-5-2	944	702	1646	446	330	397

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.

RHINO 90

Performance curve



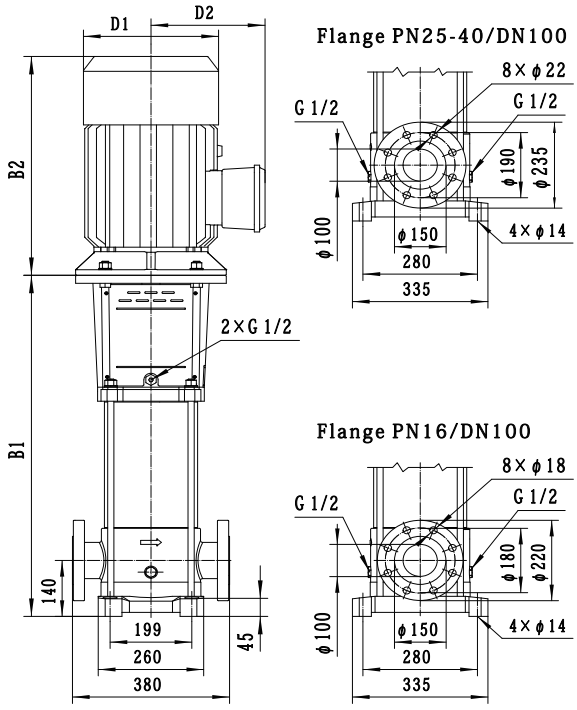
RHINO 90

APECPUMP

Performance table

Model	Motor (kW)	Motor (hp)	Q (m³/h)	0	60	70	80	90	100	110	120	130
90-1-1	11	15		36	31	27	25	23	21	18	14	9
90-1	15	20		44	36	35	33	30	29	26	23	18
90-2-2	18.5	25		66	59	57	54	48	44	39	32	22
905-2-1	22	30		80	67	65	62	57	51	47	41	33
90-2	30	40	H (m)	99	76	73	69	64	60	56	52	44
90-3-2	37	50		114	98	94	88	82	75	69	59	46
90-3-1	37	50		129	108	104	98	90	83	78	69	56
90-3	45	60		142	116	111	105	97	93	88	79	69
90-4-2	45	60		163	141	135	128	118	109	102	89	72

Installation drawing



※PN25-40/DN100 flange is optional

Dimensions and weight

Model	Dimensions (mm) B1	B2	B1+B2	D1	D2	Weight (kg)
90-1-1	622	499	1121	314	258	176
90-1	622	499	1121	314	258	182
90-2-2	714	543	1257	314	258	205
90-2-1	714	569	1283	355	274	248
90-2	714	667	1381	397	307	301
90-3-2	806	667	1473	397	307	325
90-3-1	806	667	1473	397	307	325
90-3	806	702	1508	446	330	394
90-4-2	898	702	1600	446	330	400

※The dimensions will be different for the Ex-proof motor, please contact us for more detail.