

www.arka-industry.com

Tel: 0098-21-3398 3144
0098-21-3398 0904

Mob: 0098-912-321 0837
0098-912-843 8489



PROFESSIONAL MANUFACTURER OF
VORTEX AIR PUMP/BLOWER PUMP/ RING BLOWER



DOUBLE STAGE VORTEX AIR PUMP



GB220



GB320



GB420



GB520



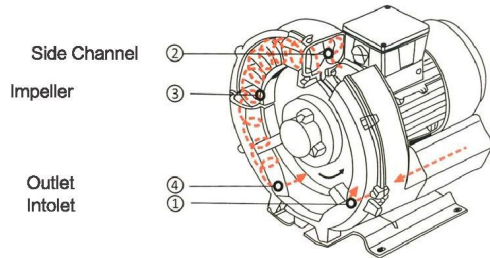
GB720



GB820



OPERATING PRINCIPLE

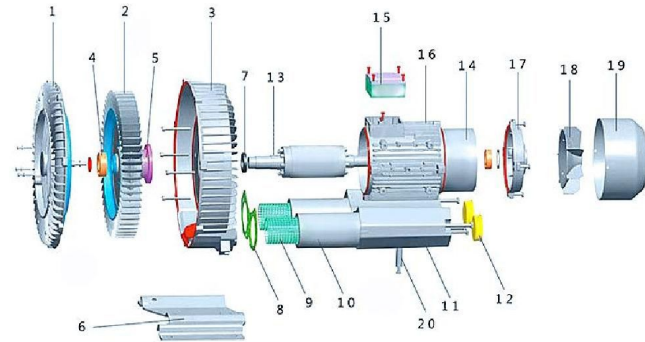


The impellers are mounted directly on the motor shaft for noncontact compression entirely without friction. Maximum operational reliability, even at high differential is ensured by the arrangement of the bearings outside the compression chamber.

The gas is taken in through the inlet 1. As it enters the side channel 2, the rotating impeller 3 imparts velocity to the gas in direction of rotation. Centrifugal force in the impeller blades accelerates the gas outward and the pressure increases. Every rotation adds kinetic energy.

Resulting in the further increase of the pressure along the side channel. The side channel narrows at the rotor, sweeping the gas off the impeller blades and discharging it through the outlet silencer 4 where it exits the side channel blower.

VORTEX AIR PUMP EXPLOSIVE VIEW



- 1, Pump Cover
- 2, Impeller
- 3, Pump Body
- 4, Bearing
- 5, Bearing Seat

- 6, Base plate
- 7, Oil seal
- 8, Gasket
- 9, Silencer net
- 10, Silencer sponge

- 11, Silencer pipe
- 12, Connector(flange)
- 13, Rotor
- 14, Motor
- 15, Terminal box

- 16, Motor housing
- 17, Motor end cover
- 18, Motor fan
- 19, Motor back cover
- 20, Supporting tube

SERIES PRODUCT



Frequency conversion explosion proof fan



belt drive



Upper exhaust fan



Silencer filter configuration



Bearing heat insulation fan



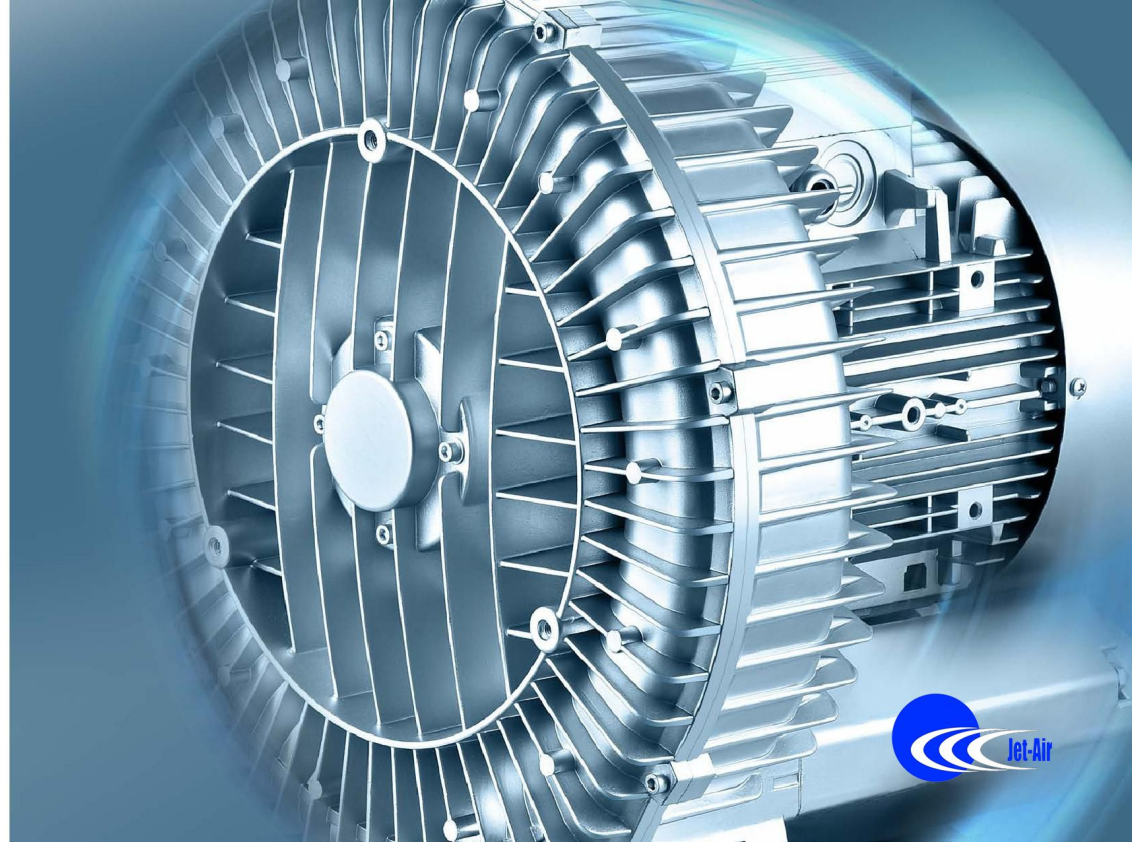
Explosion-proof fan



Single stage blower



Double stage blower





HIGH PRESSURE VORTEX AIR PUMP

GB 210

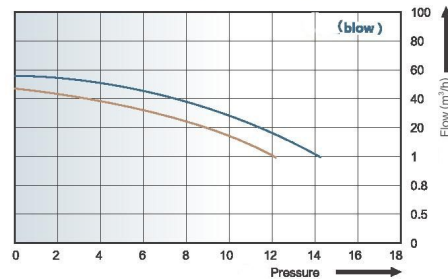
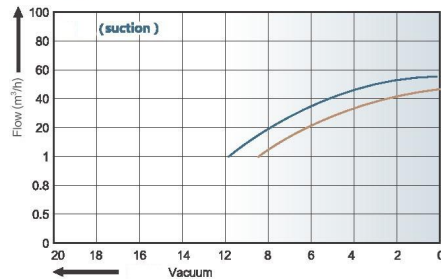


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB210-250	220	2.5(3.0)	50(60)	12(14)	48(57)	8.5(10)	0.25(0.30)	2800(3400)	<56	10.6	11.2	31x28x28
GB210-250S	Δ 220 Y380	1.24(1.68) 0.72(0.97)	50(60)	12(14)	48(57)	8.5(10)	0.25(0.30)	2800(3400)	<56	10	10.5	31x28x28
GB210-370	220	3.5(4.2)	50(60)	16(19)	60(70)	11(13)	0.37(0.44)	2800(3400)	<56	11	11.7	31x28x28
GB210-370S	Δ 220 Y380	1.55(2.11) 1.05(1.16)	50(60)	16(19)	60(70)	11(13)	0.37(0.44)	2800(3400)	<56	10.6	11.2	31x28x28

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

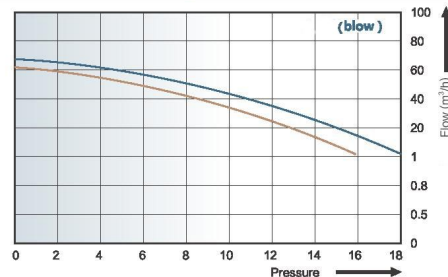
GB210-250

● 50HZ 0.25KW ● 60HZ 0.30KW



GB210-370

● 50HZ 0.37KW ● 60HZ 0.44KW





HIGH PRESSURE VORTEX AIR PUMP

GB 310
GB 410

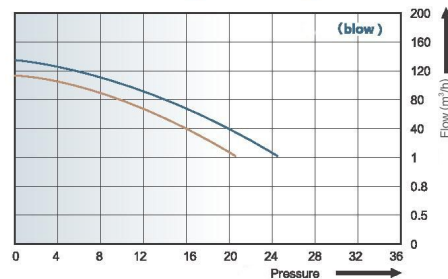
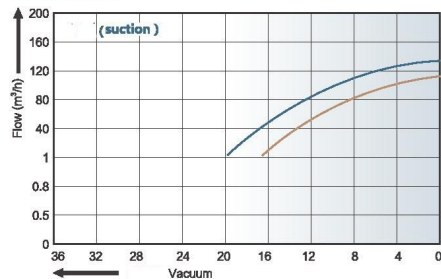


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB310-550	220	4.8(5.76)	50(60)	20(24)	110(132)	16(19)	0.55(0.66)	2800(3400)	<60	12.6	14.1	32x31x30
GB310-550S	Δ 220 Y380	2.51(3.01) 1.45(1.74)	50(60)	20(24)	110(132)	16(19)	0.55(0.66)	2800(3400)	<60	12	13.5	32x31x30
GB410-750	220	6.3(7.56)	50(60)	22(25)	145(170)	18(20)	0.75(0.90)	2800(3400)	<60	16.5	18	35x32x33
GB410-750S	Δ 220 Y380	3.31(4.10) 1.81(2.37)	50(60)	22(25)	145(170)	18(20)	0.75(0.90)	2800(3400)	<60	16	17.5	35x32x33

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

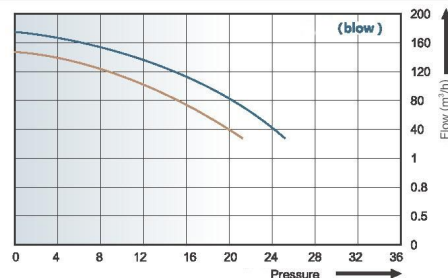
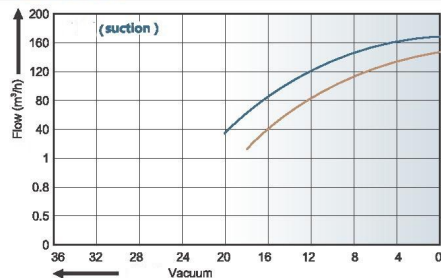
GB310-550

● 50HZ 0.55KW ● 60HZ 0.66KW



GB410-750

● 50HZ 0.75KW ● 60HZ 0.90KW





HIGH PRESSURE VORTEX AIR PUMP

GB 510

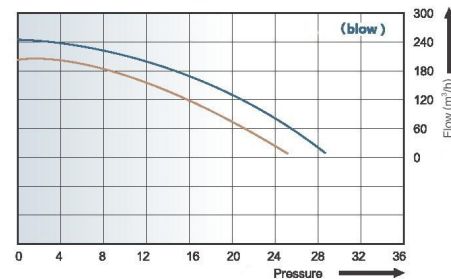
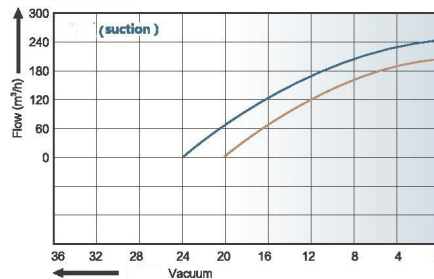


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB510-1100	220	8.7(10.44)	50(60)	25(30)	210(245)	20(24)	1.1(1.3)	2800(3400)	<60	23	24.7	37x37x38
GB510-1100S	Δ 220 Y380	4.36(5.88) 2.52(3.42)	50(60)	25(30)	210(245)	20(24)	1.1(1.3)	2800(3400)	<60	21.5	22.9	37x37x38
GB510-1500	220	11.8(14.16)	50(60)	26(31)	220(255)	21(25)	1.5(1.8)	2800(3400)	<60	23.4	28	37x37x38
GB510-1500S	Δ 220 Y380	5.96(8.20) 3.44(4.74)	50(60)	26(31)	220(255)	21(25)	1.5(1.8)	2800(3400)	<60	22.5	26	37x37x38

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

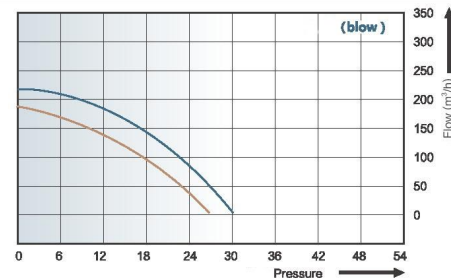
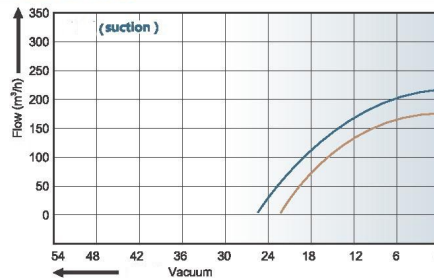
GB510-1100

● 50HZ 1.1KW ● 60HZ 1.3KW



GB510-1500

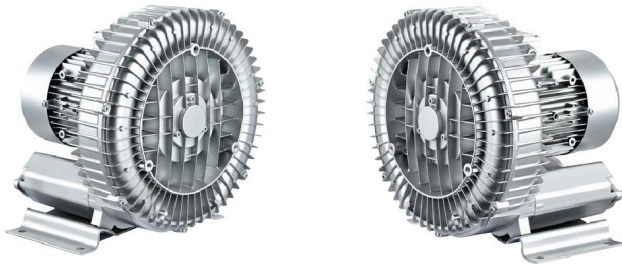
● 50HZ 1.5KW ● 60HZ 1.8KW





HIGH PRESSURE VORTEX AIR PUMP

GB 610
GB 710

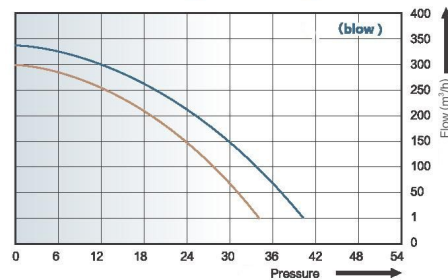
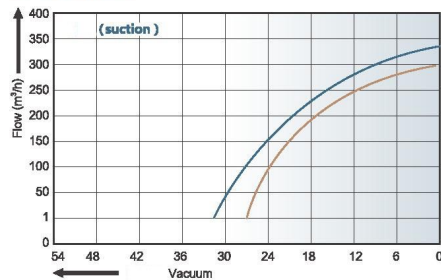


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB610-2200S	Δ 220 Y380	8.52(10.22) 4.92(5.91)	50(60)	34(41)	300(340)	26(31)	2.2(2.6)	2800(3400)	<70	27	29.5	40x40x40
GB710-2200S	Δ 220 Y380	8.52(10.22) 4.92(5.91)	50(60)	36(43)	325(365)	28(33)	2.2(2.6)	2800(3400)	<70	29	31.5	42x42x42

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

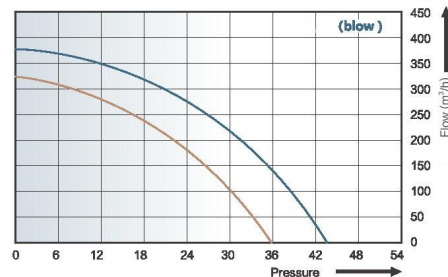
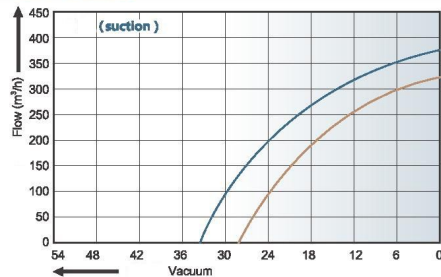
GB610-2200

● 50HZ 2.2KW ● 60HZ 2.6KW



GB710-2200

● 50HZ 2.2KW ● 60HZ 2.6KW





HIGH PRESSURE VORTEX AIR PUMP

GB 710

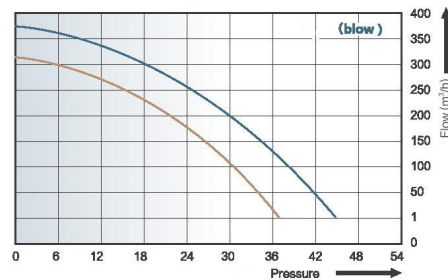
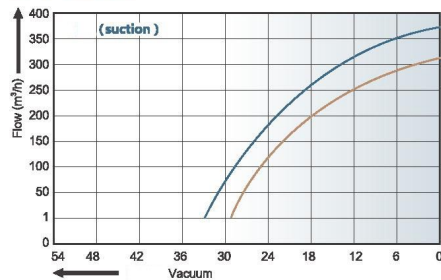


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB710-3000S	Δ 220 Y380	11.07(13.29) 6.39(7.67)	50(60)	37(44)	330(375)	29(34)	3.0(3.6)	2800(3400)	<70	35	37.5	43x44x44
GB710-4000S	Δ 380 Y660	8.17(9.8) 4.72(5.6)	50(60)	38(45)	340(385)	30(35)	4.0(4.8)	2800(3400)	<70	37	40	43x44x44

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

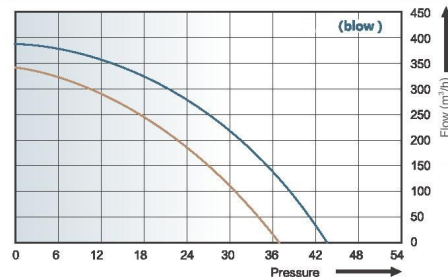
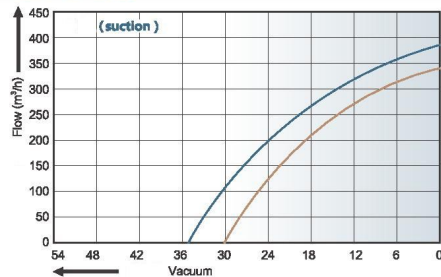
GB710-3000

● 50HZ 3.0KW ● 60HZ 3.6KW



GB710-4000

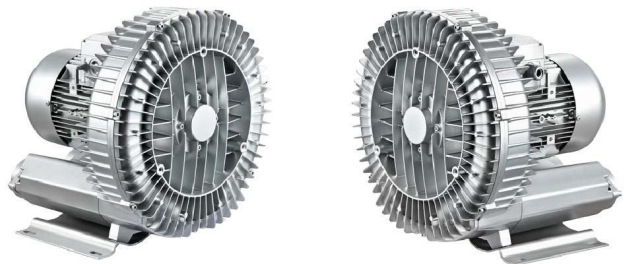
● 50HZ 4.0KW ● 60HZ 3.6KW





HIGH PRESSURE VORTEX AIR PUMP

GB 810

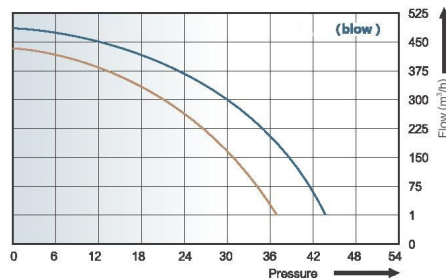


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB810-3000S	Δ 220 Y380	11.07(13.29) 6.39(7.67)	50(60)	37(44)	430(475)	29(34)	3.0(3.6)	2800(3400)	<70	44	51	46x46x50
GB810-4000S	Δ 380 Y660	8.17(9.8) 4.72(5.6)	50(60)	38(45)	475(525)	30(35)	4.0(4.8)	2800(3400)	<70	47	54	46x46x50

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

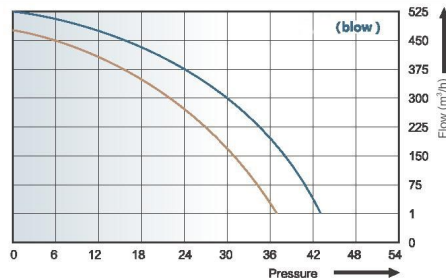
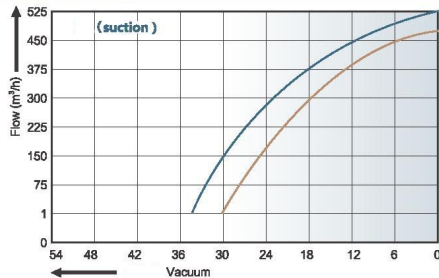
GB810-3000

● 50HZ 3.0KW ● 60HZ 3.6KW



GB810-4000

● 50HZ 4.0KW ● 60HZ 4.8KW





HIGH PRESSURE VORTEX AIR PUMP

GB 810

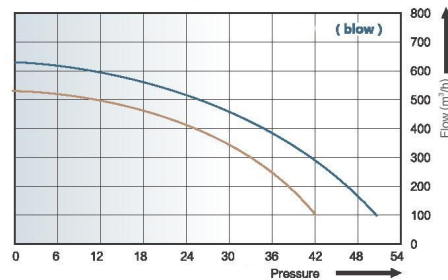
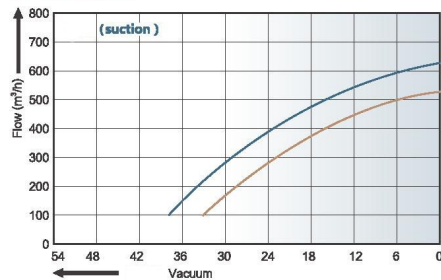


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB810-5500S	Δ 380 Y660	11.1(13.4) 6.4(7.6)	50(60)	42(50)	530(616)	34(38)	5.5(6.6)	2800(3400)	<70	62	71	48x50x52
GB810-7500S	Δ 380 Y660	15(19.74) 8.6(10.4)	50(60)	45(52)	550(640)	35(42)	7.5(9.0)	2800(3400)	<70	65	74	48x50x52

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

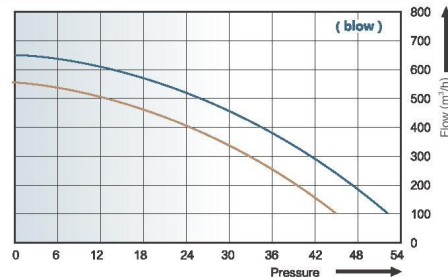
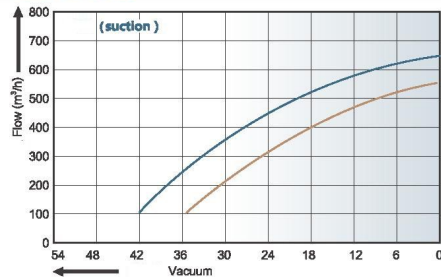
GB810-5500

● 50HZ 5.5KW ● 60HZ 6.6KW



GB810-7500

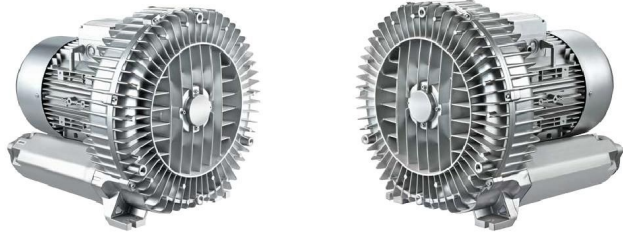
● 50HZ 7.5KW ● 60HZ 9.0KW





HIGH PRESSURE VORTEX AIR PUMP

GB 910

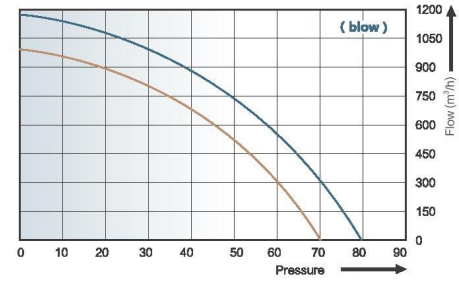
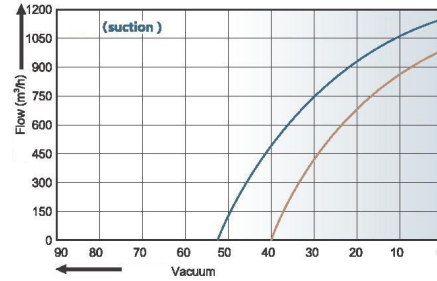


Model	Rated voltage	Rated current	Frequency	Max.pressure	Max.flow	Max.vacuum	power	Speed	Noise	N.W	G.W	Packing volume
	V	A	HZ	Kpa	m ³ /h	Kpa	KW	r/min	dB	KG	KG	CM
GB910-9000S	Δ 380 Y660	18(21) 10.4(12)	50(60)	70(80)	1000(1150)	40(52)	9.0(10.3)	2800(3400)	<70	100	125	69x58x61
GB910-11000S	Δ 380 Y660	21(24.2) 12.1(14)	50(60)	75(85)	1050(1200)	40(52)	11(12.5)	2800(3400)	<70	120	135	69x58x61
GB910-15000S	Δ 380 Y660	28(33.5) 16.2(18.6)	50(60)	77(87)	1050(1200)	40(52)	15(17.2)	2800(3400)	<70	125	140	69x58x61
GB910-18000S	Δ 380 Y660	34(39) 19.6(22.6)	50(60)	79(89)	1050(1200)	40(52)	18(20.7)	2800(3400)	<70	130	145	69x58x61

Performance Curve of GB Series Vortex Air pump (for reference only and not for testing basis)

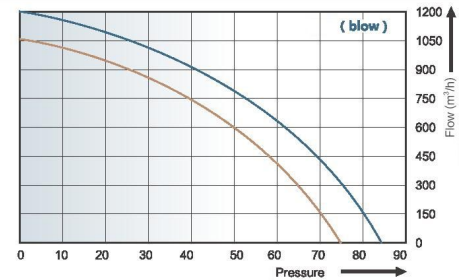
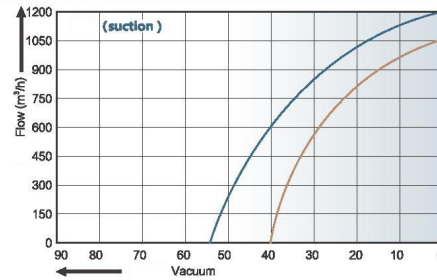
GB910-9000

● 50HZ 9.0KW ● 60HZ 10.3KW



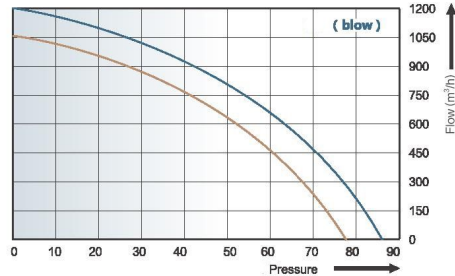
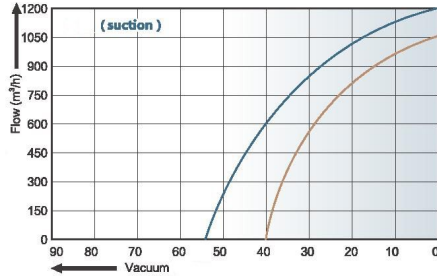
GB910-11000

● 50HZ 11KW ● 60HZ 12.5KW



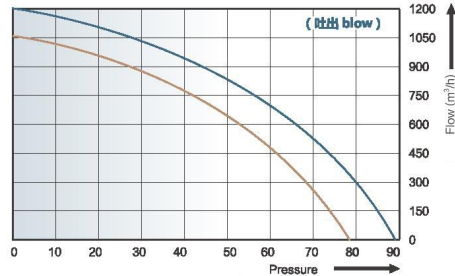
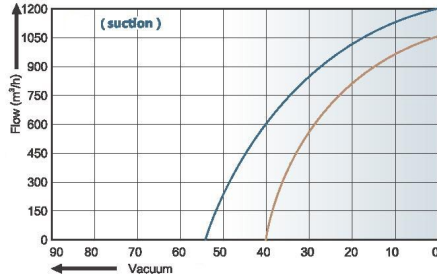
GB910-15000

● 50HZ 15KW ● 60HZ 17.2KW

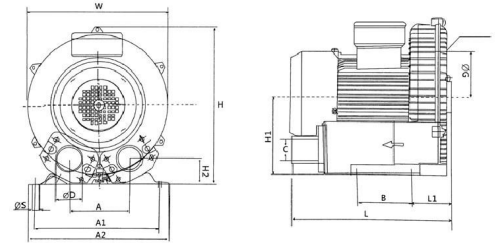


GB910-18000

● 50HZ 18KW ● 60HZ 20.7KW



DIMENSION DIAGRAM



Mode	Size													
	L	W	H	H1	H2	A	A1	A2	L1	B	G	D	S	C
GB-90	205	184	200	96	32	80	158	172	55	56		φ20	7	
GB-120	205	184	200	96	32	80	157	172	55	56		φ20	7	
GB-180	223	200	212	110	36	88	184	204	62	66		φ20	7	
GB-200	223	200	212	110	36	88	184	204	62	66		φ20	7	
GB210-250	260	246	247	120	37	90	205	235	62	83	φ140	φ49	8.5	G1¼
GB210-370	260	246	247	120	37	90	205	235	62	83	φ140	φ49	8.5	G1¼
GB310-550	277	268	272	155	47	93	205	265	66	83	φ162	φ49	12	G1¼
GB410-750	300	286	302	165	58	111	225	265	80	95	φ173	φ50	12	G1½
GB510-1100	325	335	340	190	61.5	115	270	300	30	140	φ200	φ60	14	G2
GB510-1500	325	335	340	190	61.5	115	270	300	30	140	φ200	φ60	14	G2
GB610-2200	350	362	365	192	61	120	290	328	95	140	φ246	φ80	14	G2
GB710-2200	377	382	385	192	56	125	290	328	103	140	φ256	φ80	14	G2
GB710-3000	377	382	385	192	56	125	290	328	103	140	φ256	φ80	14	G2
GB710-4000	377	382	385	192	56	125	290	328	103	140	φ256	φ80	14	G2
GB810-3000	402	408	410	210	56	140	313	345	103	140	φ256	φ80	14	G2
GB810-4000	435	418	470	237	110	143	315	330	113	185	φ280	φ76	14	G2½
GB810-5500	475	446	480	250	118	148	360	415	100	170	φ288	φ76	15	G2½
GB810-7500	475	446	480	250	118	148	360	415	100	170	φ288	φ76	15	G2½
GB910-9000	660	550	570	300	92	207	360	415	89	-	490	φ110	-	G4
GB910-11000	660	550	570	300	92	207	360	415	89	-	490	φ110	-	G4
GB910-15000	660	550	570	300	92	207	360	415	89	-	490	φ110	-	G4
GB910-18000	660	550	570	300	92	207	360	415	89	-	490	φ110	-	G4



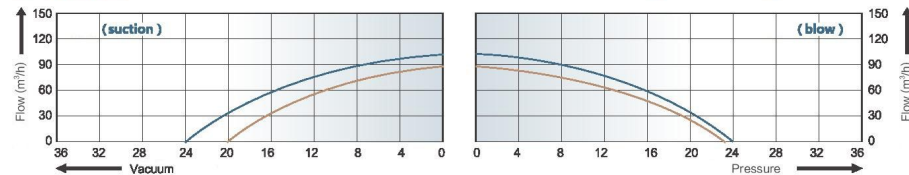
DOUBLE STAGE VORTEX AIR PUMP

Model	Frequency	power	Rated voltage		Rated current	Max.flow	Max.vacuum	Max.pressure	Noise	N.W
	Hz	KW	V		A	m ³ /h	Kpa	Kpa	dB	KG
GB220-H26	50	0.7	200-240 Δ	345-415Y	3.8 Δ / 2.2Y	88	-20	23	55	16
	60	0.83	220-275 Δ	380-480Y	3.75 Δ / 2.15Y	103	-24	24	61	16
GB320-H26	50	0.85	200-240 Δ	345-415Y	4.2 Δ / 2.4Y	110	-21	24	58	17
	60	0.95	220-275	380-480	4.0/2.3	130	-25	25	60	17
GB320-H36	50	1.3	200-240	345-415	5.7/3.3	110	-23	23	58	18
	60	1.5	220-275	380-480	6.0/3.5	130	-26	26	60	18
GB420-H36	50	1.6	200-240	345-415	7.5/4.3	150	-28	28	66	25
	60	2.05	220-275	380-480	7.6/4.4	180	-32	31	69	25
GB420-H46	50	2.2	200-240	345-415	9.7/5.6	150	-33	42	66	27
	60	2.55	220-275	380-480	10/5.8	180	-35	44	69	27
GB520-H36	50	2.2	200-240	345/415	9.7/5.6	230	-29	33	72	25
	60	2.55	220-275	380-480	10.3/6.0	275	-35	36	74	25
GB520-H46	50	3.0	200-240	345-415	12.5/7.2	230	-34	36	72	40
	60	3.45	220-275	380-480	12.6/7.3	275	-38	41	74	40
GB720-H26	50	3.0	200-240	245-415	12.5/7.2	320	-23	20	73	48
	60	3.45	220-275	380-480	12.6/7.3	380	-28	26	76	48
GB720-H27	50	4	345-415	600-720	9.0/5.2	320	-34	31	73	53
	60	4.6	380-480	660-720	9.4/5.2	385	-35	37	76	53
GB720-H47	50	5.5	345-415	600-720	13.3/7.7	320	-44	50	73	66
	60	6.3	380-480	660-720	13.3/7.7	380	-44	50	76	66
GB720-H57	50	7.5	345-415	600-720	16.7/9.6	320	-44	57	73	73
	60	8.6	380-480	660-720	17.3/10.0	380	-46	66	76	73
GB820-H17	50	5.5	345-415	600-720	13.3/7.7	520	-52	67	74	83
	60	6.3	380-480	660-720	13.3/7.7	620	-54	69	78	83
GB820-H27	50	7.5	345-415	600-720	16.7/9.6	520	-53	68	74	86
	60	8.6	380-480	660-720	17.3/10.0	620	-55	70	78	86
GB820-H37	50	11	345-415	600-720	28.0/16.2	520	-55	70	74	104
	60	12.6	380-480	660-720	29.0/16.7	620	-57	72	78	104
GB820-H47	50	15	345-415	600-720	32.5/18.8	520	-57	72	74	120
	60	17.3	380-480	660-720	34.5/19.9	620	-59	74	78	120

Performance Curve of gb Series Vortex Air pump (for reference only and not for testing basis)

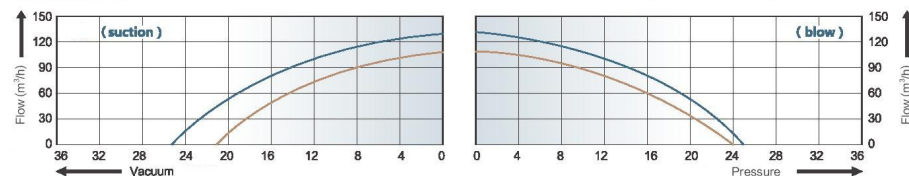
GB220-H26

● 50HZ 0.7KW ● 60HZ 0.83KW



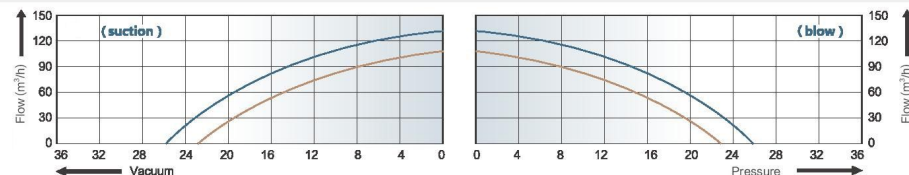
GB320-H26

● 50HZ 0.85KW ● 60HZ 0.95KW



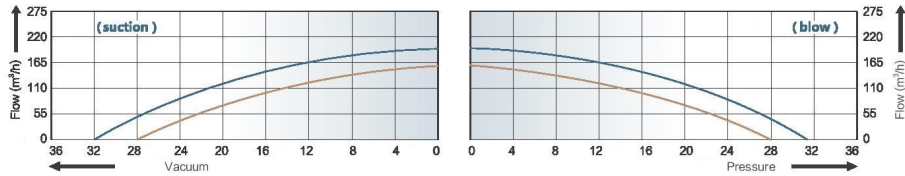
GB320-H36

● 50HZ 1.3KW ● 60HZ 1.5KW



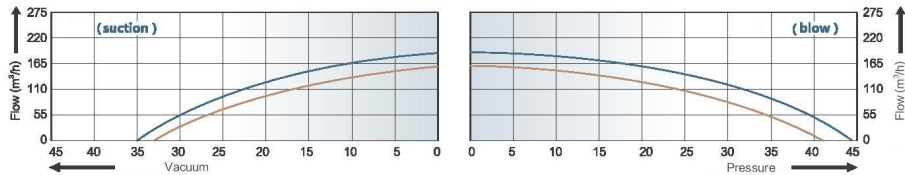
GB420-H36

● 50HZ 1.6KW ● 60HZ 2.05KW



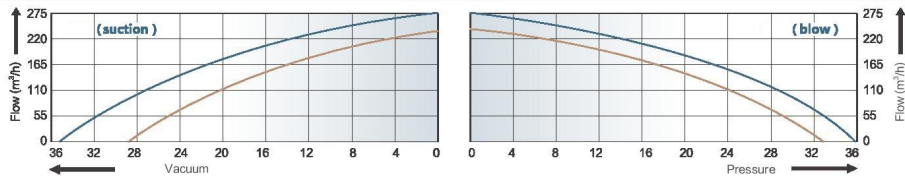
GB420-H46

● 50HZ 2.2KW ● 60HZ 2.55KW



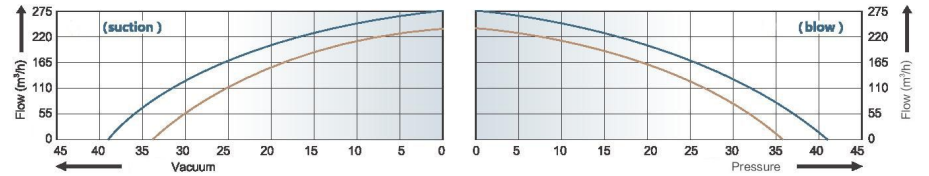
GB520-H36

● 50HZ 2.2KW ● 60HZ 2.55KW



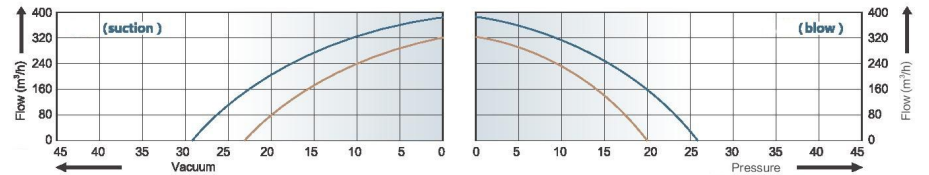
GB520-H46

● 50HZ 3.0KW ● 60HZ 3.45KW



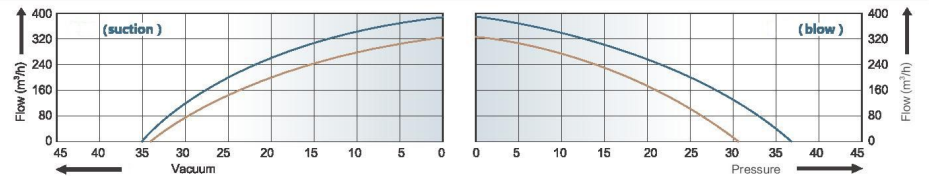
GB720-H26

● 50HZ 3.0KW ● 60HZ 3.45KW



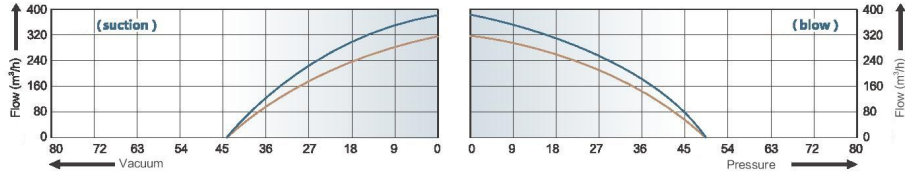
GB720-H27

● 50HZ 4.0KW ● 60HZ 4.6KW



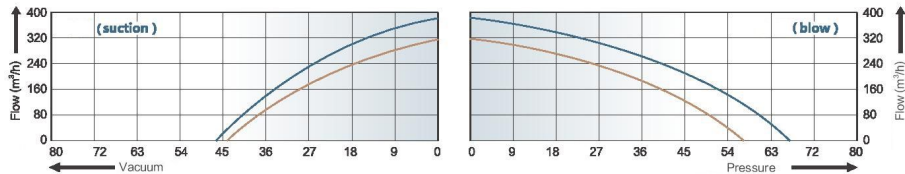
GB720-H47

● 50HZ 5.5KW ● 60HZ 6.3KW



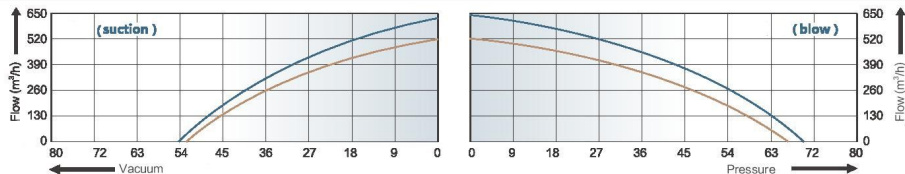
GB720-H57

● 50HZ 7.5KW ● 60HZ 8.6KW



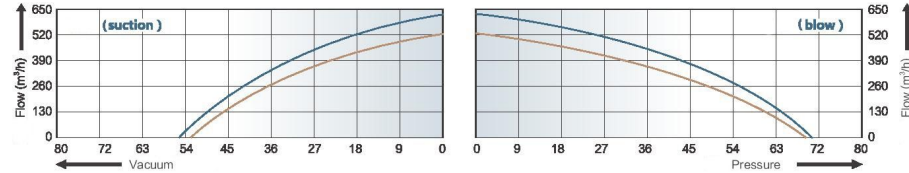
GB820-H17

● 50HZ 5.5KW ● 60HZ 6.3KW



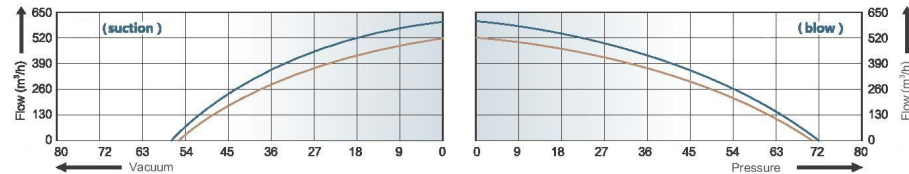
GB820-H27

● 50HZ 7.5KW ● 60HZ 8.6KW



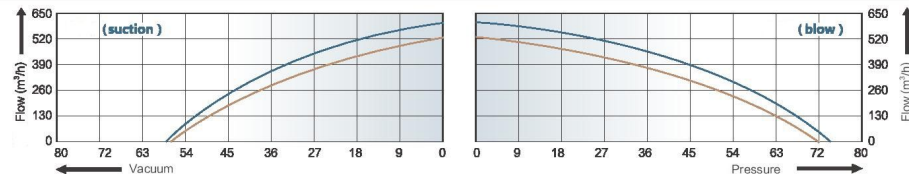
GB820-H37

● 50HZ 11KW ● 60HZ 12.6KW



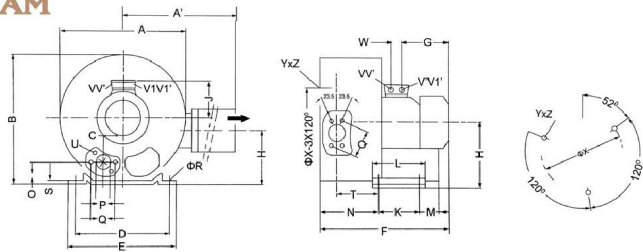
GB820-H47

● 50HZ 15KW ● 60HZ 17.3KW





DIMENSION DIAGRAM



Model	Size																														
	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	φR	S	T	U	V	V'	V1	V1'	a	φX	YXZ	X-Holes	W
GB220-H26	284	316	270	45	205	230	316	135	128	108	111	83	108	75	130	39	G1/4	64	10	3	88	M8X17	-	-	M25X1.5	M18X1.5	27*	140	M6X15	51*1/171*291*	
GB320-H26	293	324	288	47	205	230	354	180	141	114	120	83	108	82	138	41	G1/4	64	10	3	92	M8X17	-	-	M25X1.5	M18X1.5	27*	140	M6X15	51*1/171*291*	
GB320-H36	293	324	288	47	205	230	354	180	141	114	120	83	108	82	138	41	G1/4	64	10	3	92	M8X17	-	-	M25X1.5	M18X1.5	27*	140	M6X15	51*1/171*291*	
GB420-H36	322	324	315	58	225	295	401	191	154	153	128	95	130	73	151	45	G1/2	72	12	3	104	M8X19	-	-	M25X1.5	M18X1.5	28*	174	M6X15	51*1/171*291*	
GB420-H46	322	324	315	58	225	295	401	191	154	153	128	95	130	73	151	45	G1/2	72	12	3	104	M8X19	-	-	M25X1.5	M18X1.5	28*	174	M6X15	51*1/171*291*	
GB520-H36	372	411	371	80	280	295	465	190	175	144	135	115	155	98	171	48	G2	83	14	4	116	M8X17	M25X1.5	M25X1.5	-	-	200	M8X20	51.5*1/171.5*291.5*	42	
GB520-H46	372	411	371	80	280	295	465	190	175	144	135	115	155	98	171	48	G2	83	14	4	116	M8X17	M25X1.5	M25X1.5	-	-	200	M8X20	51.5*1/171.5*291.5*	42	
GB720-H26	426	426	410	83	290	325	496	188	197	162	135	140	180	84	205	53	G2	83	15	4.5	130	M8X17	-	-	M25X1.5	M25X1.5	240	M10X20	51.5*1/171.5*291.5*	42	
GB720-H27	426	426	410	83	290	325	496	188	197	162	135	140	180	84	205	53	G2	83	15	4.5	130	M8X17	-	-	M25X1.5	M25X1.5	240	M10X20	51.5*1/171.5*291.5*	42	
GB720-H47	426	426	410	154	290	325	571	226	197	162	167	140	180	200	205	53	G2	83	15	4.5	130	M8X17	-	-	M25X1.5	M25X1.5	240	M10X20	51.5*1/171.5*291.5*	42	
GB720-H57	426	426	410	154	290	325	571	226	197	162	167	140	180	200	205	53	G2	83	15	4.5	130	M8X17	-	-	M25X1.5	M25X1.5	240	M10X20	51.5*1/171.5*291.5*	42	
GB820-H17	500	549	490	76	356	394	545	226	240	199	167	170	217	-	236	65	G2 1/2	15	6				2XM25X1.5				286	M12X20	514*1/120*240*	42	
GB820-H27	500	549	490	76	356	394	545	226	240	199	167	170	217	-	236	65	G2 1/2	15	6				2XM25X1.5				286	M12X20	514*1/120*240*	42	
GB820-H37	500	549	490	76	356	394	545	226	240	199	167	170	217	-	212	105	G2 1/2	15	6				2XM32X1.5				286	M12X20	514*1/120*240*	42	
GB820-H47	500	549	490	76	356	394	545	226	240	199	167	170	217	-	212	105	G2 1/2	15	6				2XM32X1.5				286	M12X20	514*1/120*240*	42	

VORTEX AIR PUMP FITTINGS



FILTER



FILTER



RELIEF VALVE



DISTRIBUTOR



SILENCER



FILTER



AIR KNIFE



FILTER+PIPE



PIPE



ELBOW PIPE