



# REPUBLIC MANUFACTURING



*efficient and easy to maintain*

# CENTRIFUGAL BLOWERS

Republic Manufacturing services the industrial manufacturing industry by providing high quality solutions utilizing air movement technologies. Committed to quality and innovation, the company is progressive and energetic in its search for unique solutions to challenging problems. Republic strives to be market leaders in the air movement technology industry, and generates an annual profit to be reinvested for growth and to provide competitive salaries and benefits for employees.

The company expects its employees to work hard and wear many hats, but in return offers a fun, energetic, and happy workplace. The company's culture is built around upholding 27 Core Value Essentials; which are actions based on 5 core values:

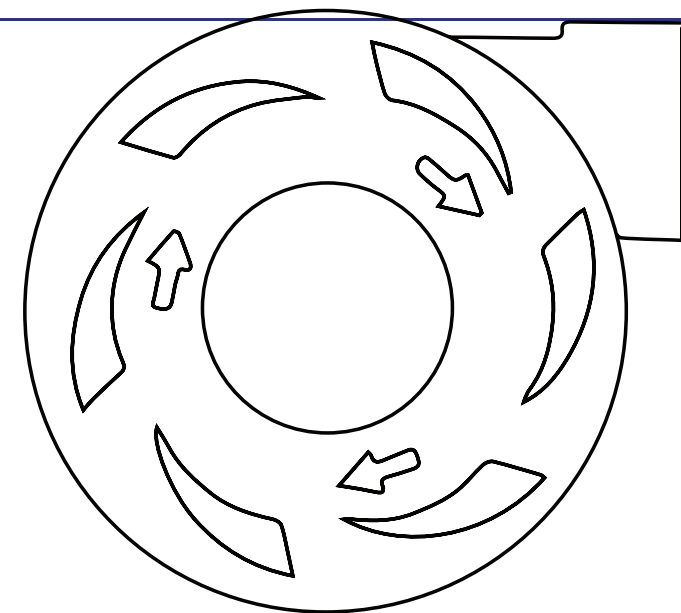
1. Value, Respect, and Recognize the Customer
2. Continuous Learning, Change and Improvement
3. Respect for People
4. We Keep our Commitments.
5. Open and Honest Communication

## REPUBLIC STANDARD WARRANTY

Republic Manufacturing warrants all finished Republic products to be free from functional defects in material and workmanship for a period of twelve (12) months from the date of installation, or no longer than eighteen (18) months from shipment.

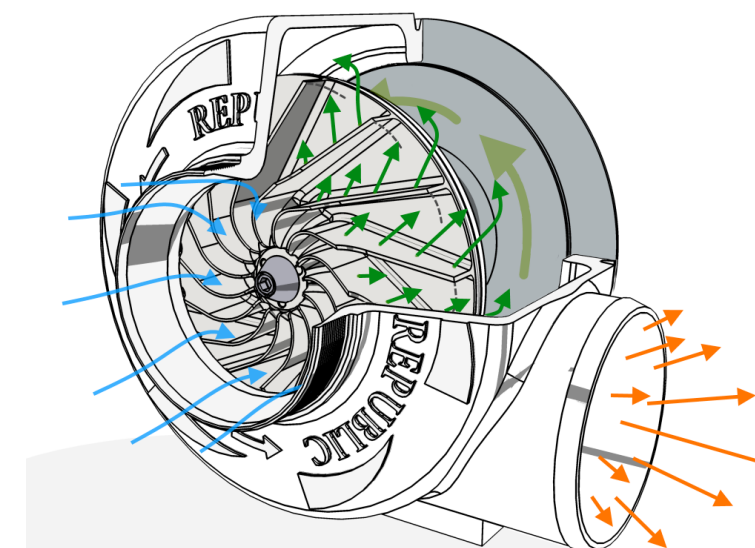
Wear parts such as drive belts, filter elements, hoses and pulleys are not covered by the 12 to 18 month warranty.

DISASSEMBLY OF BLOWER MAY VOID WARRANTY.







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## CENTRIFUGAL BLOWER WORKING PRINCIPLE



Air enters at the center of a spinning impeller, and is divided between the impeller's vanes. As the impeller turns, it accelerates the fluid (air) outwards by centrifugal force. This high-velocity air is then diffused (slowed down) in the housing to create pressure, with a wide range of volumetric flows possible due to the open impeller geometry.

-  inlet air
-  energy to air
-  recirculating air
-  expelled air



Call **800-847-0380**  
to consult a Republic representative.

Visit **republic-mfg.com**

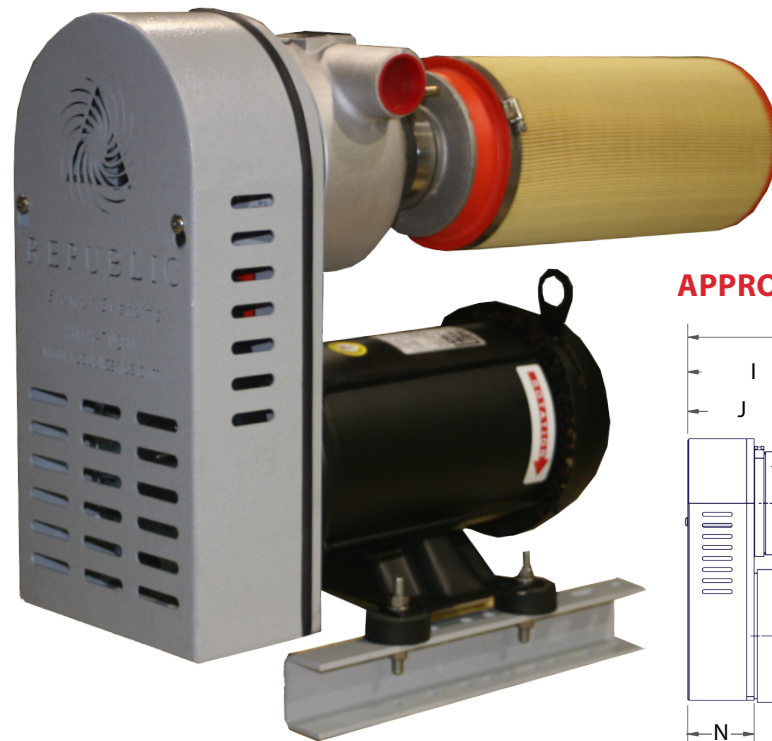


# RB500

Republic's smallest centrifugal blower, the RB500 is robust and hard-working. With capacities up to 500 cfm, this blower can reach up to 103 inches of water for pressure and 80 inches of water for vacuum, this blower comes with ceramic hybrid bearings, 360 degree rotatable outlet discharge, easy to remove stainless steel bearing housing assembly, and zinc plated steel motor pulley. 100% operational performance guaranteed and vibration tested. Operational with all types of motors and backed by Republic Manufacturing's standard warranty.

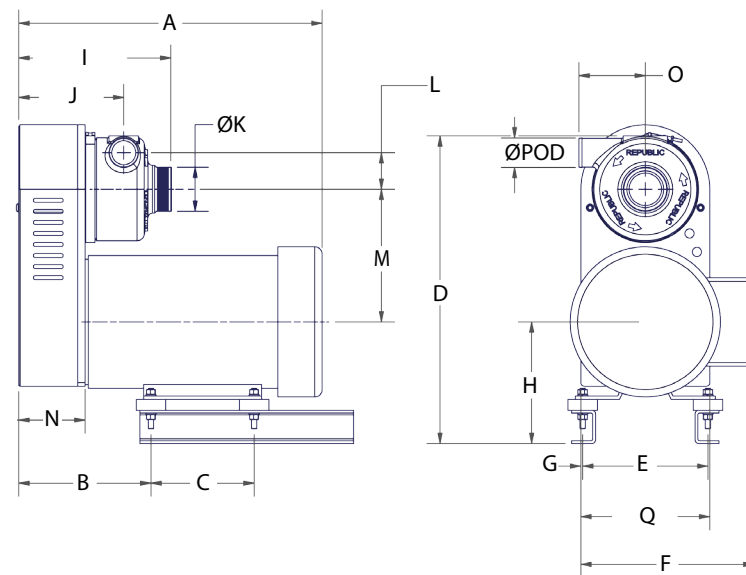
## OPTIONS AVAILABLE

- Stainless steel impeller
- Hard anodized impeller
- Inlet and outlet flanges
- Exhaust silencer
- Enclosures for noise control



Weight	lbs.	kg
3 HP	128	58
5 HP	142	64
7.5 HP	163	74

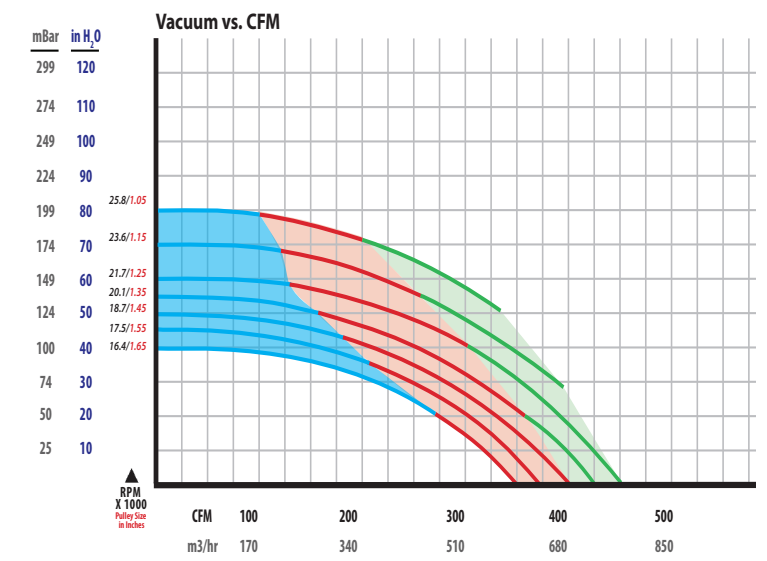
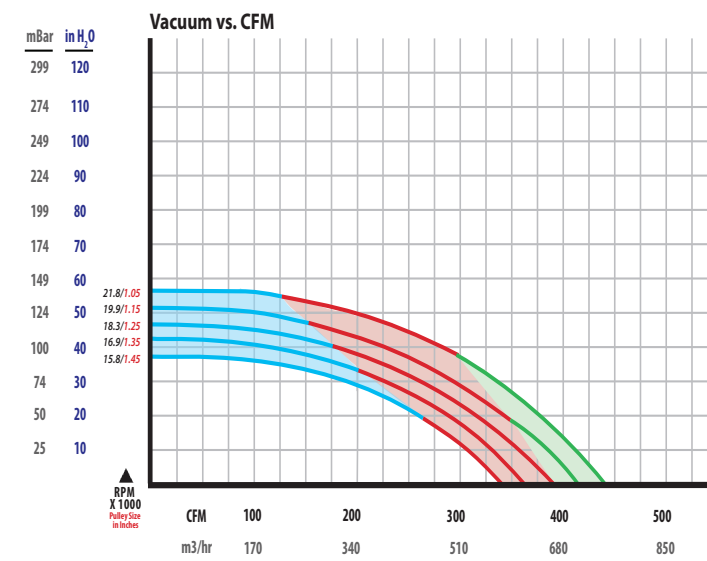
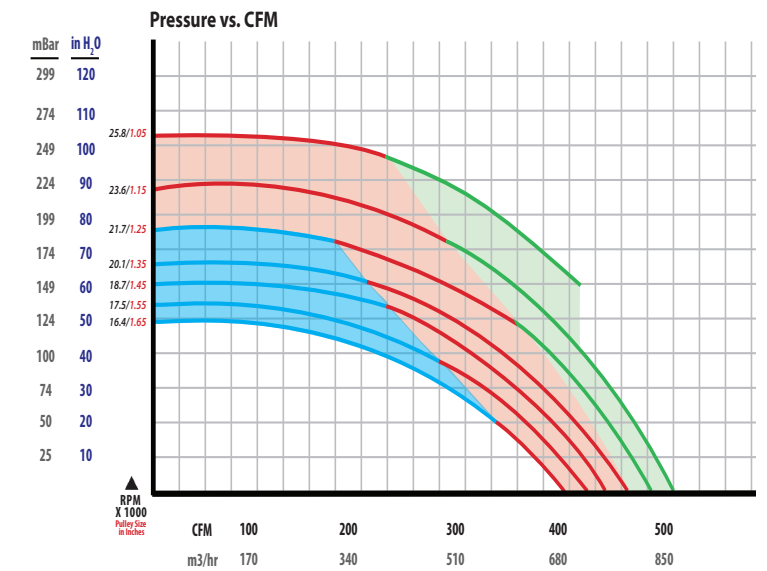
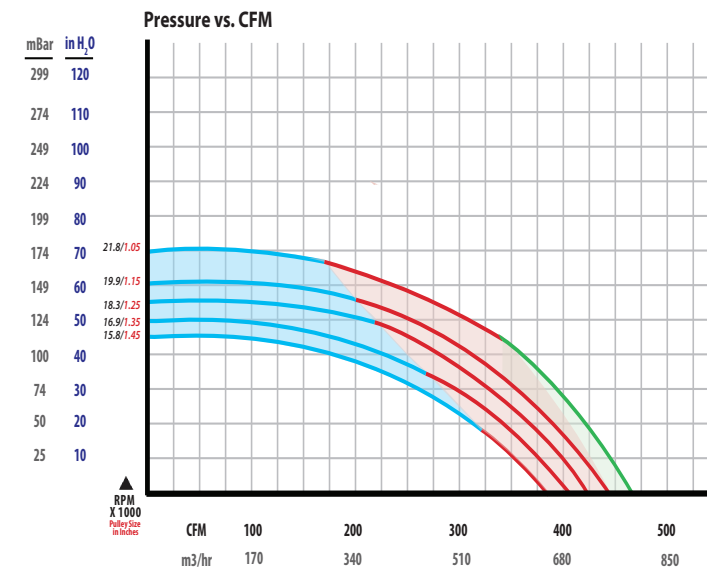
## APPROXIMATE DIMENSIONS



## PERFORMANCE CURVES

### 50 Hz

### 60 Hz



RB500	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
3 HP	in	17	8	4.5	20	7.5	9.5	5/8	7.5	10	7	2	2.98	2.5	4.5	4.5	4.5	9
	mm	433	206	114	511	190.5	286	16	190.5	263.5	181	50.8	75.7	63.5	12.7	114.3	222	228.6
5 HP	in	18	8	5.5	20	7.5	10	5/8	7.5	10	7	2	2.98	2.5	4.5	4.5	4.5	9
	mm	433	206	139.7	511	190.5	286	16	190.5	263.5	181	50.8	75.7	63.5	12.7	114.3	222	228.6
7.5 HP	in	20.5	9	5.5	21	8.5	12	1/8	8	10	7	2	2.98	2.5	4.5	4.5	4.5	9
	mm	508	228.6	140	530	216	314	2	209.5	263.5	181	50.8	75.7	63.5	12.7	114.3	222	228.6

Standard cubic feet per minute, air at 14.7 PSIA, 68° F, 36% R.H.  
 $1" H_2O = 0.074" Hg = 0.036 PSIG = 0.57 oz = 25.4 mm H_2O$

■ RB500-3 HP

■ RB500-5 HP

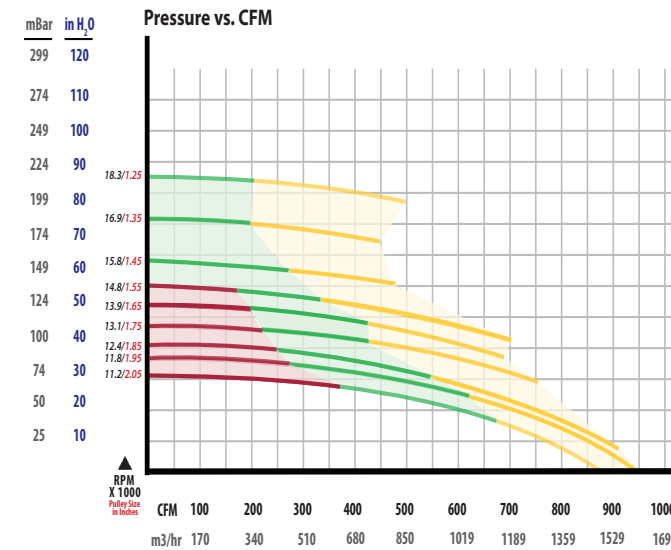
■ RB500-7.5 HP

The Republic RB800 is robust and hard-working. With capacities up to 975 cfm, this blower can reach up to 100 inches of water for pressure and 78 inches of water for vacuum, this blower comes with ceramic hybrid bearings, 360 degree rotatable outlet discharge, easy to remove stainless steel bearing housing assembly, and zinc plated steel motor pulley. 100% operational performance guaranteed and vibration tested. Operational with all types of motors and backed by Republic Manufacturing's standard warranty.

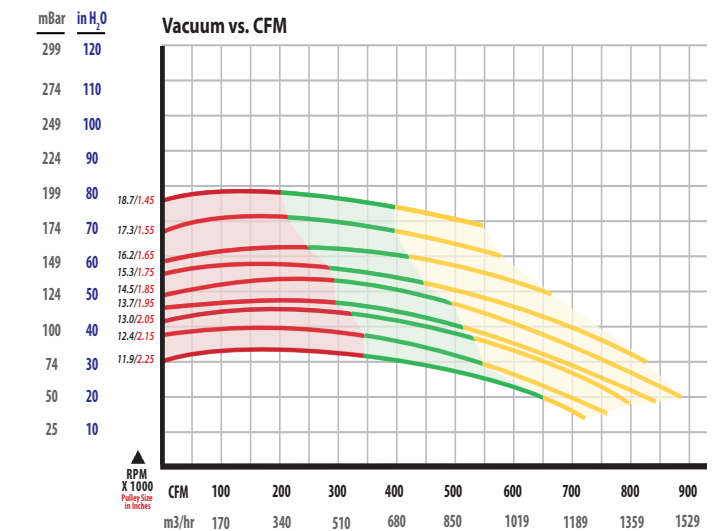
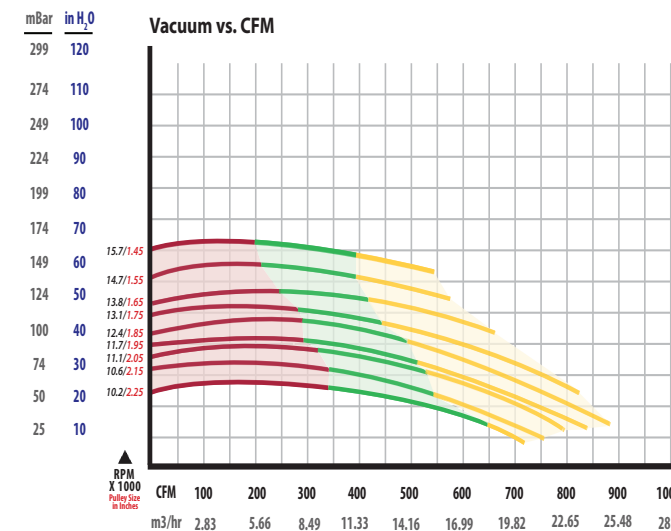
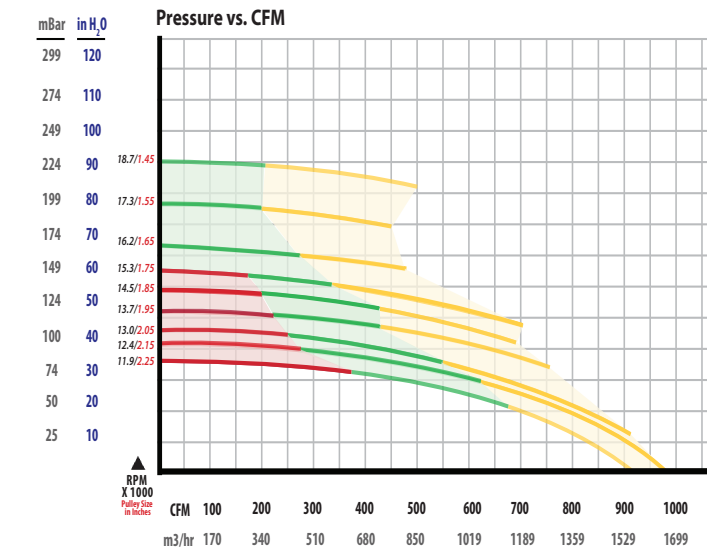
### OPTIONS AVAILABLE

- Stainless steel impeller
- Hard anodized impeller
- Inlet and outlet flanges
- Exhaust silencer
- Enclosures for noise control

## PERFORMANCE CURVES 50 Hz

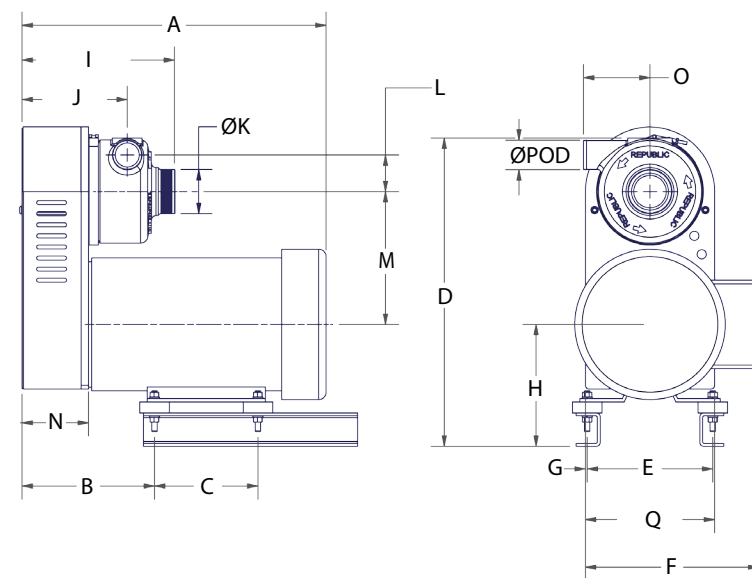


## 60 Hz



Weight	lbs.	kg
5 HP	142	64
7.5 HP	163	74
10 HP	193	88

### APPROXIMATE DIMENSIONS



RB800	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
5 HP	in	18	7	5.5	23	7.5	11	1	7.5	12	8	10	Ø3.98	4.5	4	6.5	3	10
	mm	433	206	114	587	190.5	301.6	32	190.5	308	206	100.5	92	260	114	165	76	254
7.5 HP	in	20.5	8	5.5	23	8.5	12	.75	8	12	8	10	Ø3.98	4.5	4	6.5	3	10
	mm	508	229	140	587	216	331	10	209.5	308	206	100.5	92	260	114	165	76	254
10 HP	in	20.5	8	7	23	8.5	12	.75	8	12	8	10	Ø3.98	4.5	4	6.5	3	10
	mm	517	229	178	587	216	332	19	209.5	308	206	100.5	92	260	114	165	76	254

Standard cubic feet per minute, air at 14.7 PSIA, 68° F, 36% R.H.  
 $1'' H_2O = 0.074'' Hg = 0.036 PSIG = 0.57 oz = 25.4 mm H_2O$

■ RB800-5 HP

■ RB800-7.5 HP

■ RB800-10 HP

# RB1200HC

REPUBLIC CENTRIFUGAL BLOWER

Republic's most popular centrifugal blower, the RB1200HC is versatile and reliable. With capacities up to 1350 cfm, this blower can reach up to 112 inches of water for pressure and 80 inches of water for vacuum, this blower comes with ceramic hybrid bearings, 360 degree rotatable outlet discharge, easy to remove stainless steel bearing housing assembly, and zinc plated steel motor pulley. 100% operational performance guaranteed and vibration tested. Operational with all types of motors and backed by Republic Manufacturing's standard warranty.

## OPTIONS AVAILABLE

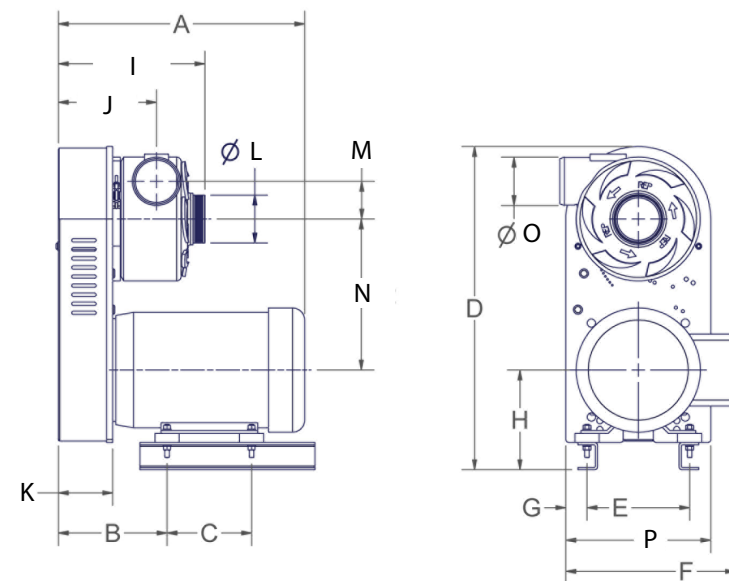
- Stainless steel impeller
- Hard anodized impeller
- Inlet and outlet flanges
- Exhaust silencer
- Enclosures for noise control



Weight	lbs.	kg
5 HP	160	73
7.5 HP	167	76
10 HP	205	93

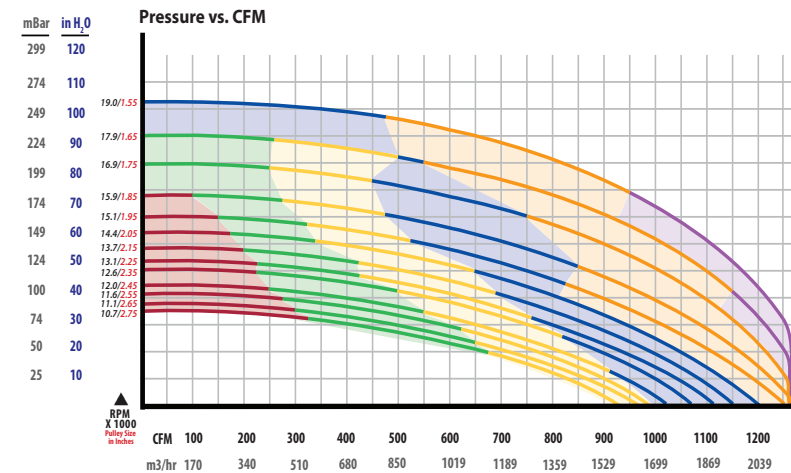
Weight	lbs.	kg
15 HP	245	111
20 HP	348	158
25 HP	440	200

## APPROXIMATE DIMENSIONS

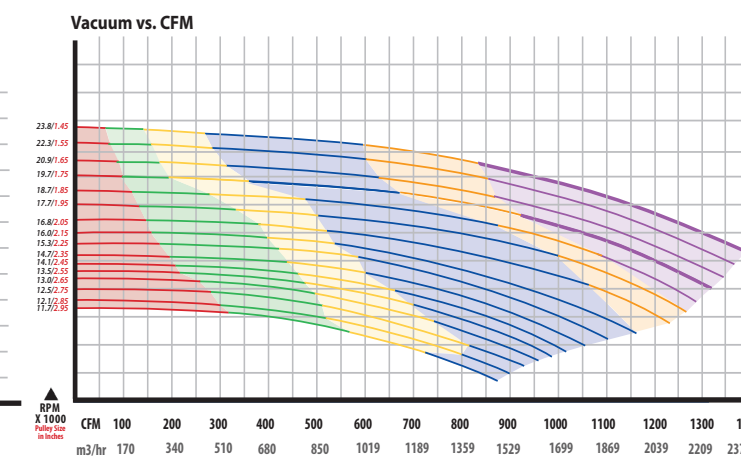
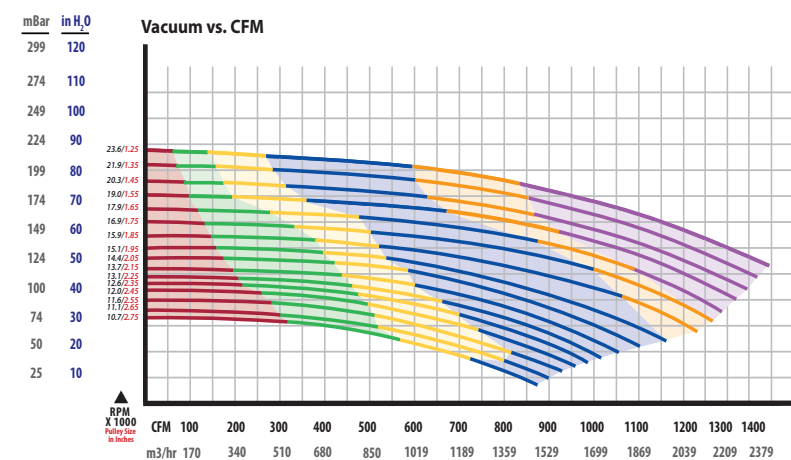
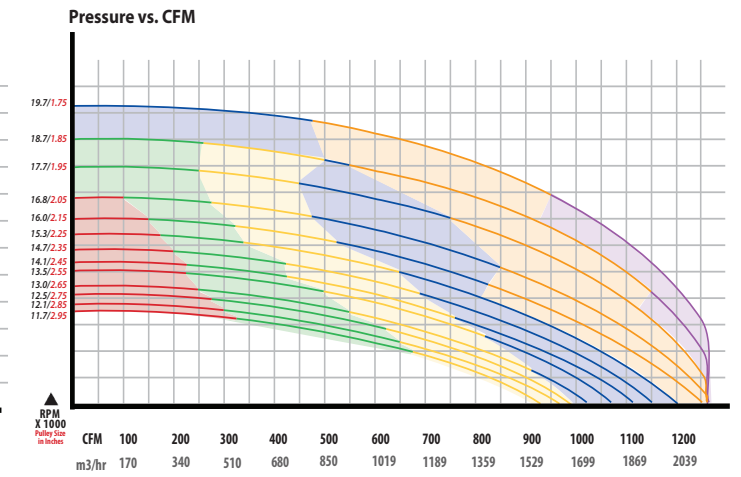


## PERFORMANCE CURVES

### 50 Hz



### 60 Hz



Standard cubic feet per minute, air at 14.7 PSIA, 68° F, 36% R.H.  
 $1" H_2O = 0.074" Hg = 0.036 PSIG = 0.57 oz = 25.4 mm H_2O$

- RB1200HC-5 HP
- RB1200HC-7.5 HP
- RB1200HC-10 HP
- RB1200HC-15 HP
- RB1200HC-20 HP
- RB1200HC-25 HP

RB1200HC	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
5 HP	in	17	8	5.5	26	8	13	2.25	7.5	12	8	4.5	3.96	3	12.5	4	12
	mm	433	206	140	660	194	327	57	190.5	308	206	114	100.58	79	317.5	102	305
7.5 HP	in	20	9	5.5	27	8.5	14	1.75	8.25	12	8	4.5	4	3	12.5	4	12
	mm	508	229	140	679	216	357	44.5	210	308	206	114	100	79	317.5	101	305
10 HP	in	20	9	7	27	8.5	14	1.75	8.25	12	8	4.5	3.96	3	12.5	4	12
	mm	517	228	178	679	216	357	44.5	209.5	308	206	114	100.58	79	317.5	102	305

RB1200HC	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
15 HP	in	24.5	9.5	8.25	27.75	8.5	16	1	9.25	12	8	4.5	3.96	3	12.5	4	12
	mm	622	241	209.5	705	216	408	25	235	307.8	206	114	100.58	3	12.5	4	12
20 HP	in	24.5	9.5	10	27.75	10	16	1	9.25	12	8	4.5	3.96	3	12.5	4	12
	mm	621	241	254	705	254	408	25	235	308	206	114	100.58	79	317.5	102	305
25 HP	in	26	9.5	9.5	27	11	18	.5	8.5	12	8	4.5	3.96	3	12.5	4	12
	mm	662	241	241	686	279	459	13	216	308	206	114	100.58	79	317.5	102	305

# RB2000

Republic's RB2000 is versatile and reliable. With capacities up to almost 2100 cfm, this blower can reach up to 92 inches of water for pressure and 80 inches of water for vacuum, this blower comes with ceramic hybrid bearings, 360 degree rotatable outlet discharge, easy to remove stainless steel bearing housing assembly, and zinc plated steel motor pulley. 100% operational performance guaranteed and vibration tested. Operational with all types of motors and backed by Republic Manufacturing's standard warranty.

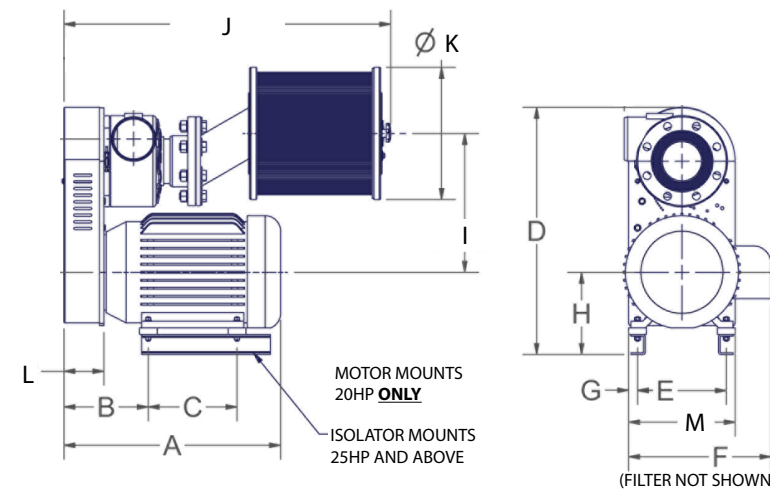
## OPTIONS AVAILABLE

- Stainless steel impeller
- Hard anodized impeller
- Inlet and outlet flanges
- Exhaust silencer
- Enclosures for noise control



Weight	lbs.	kg
20 HP	348	158
25 HP	440	200
30 HP	440	200

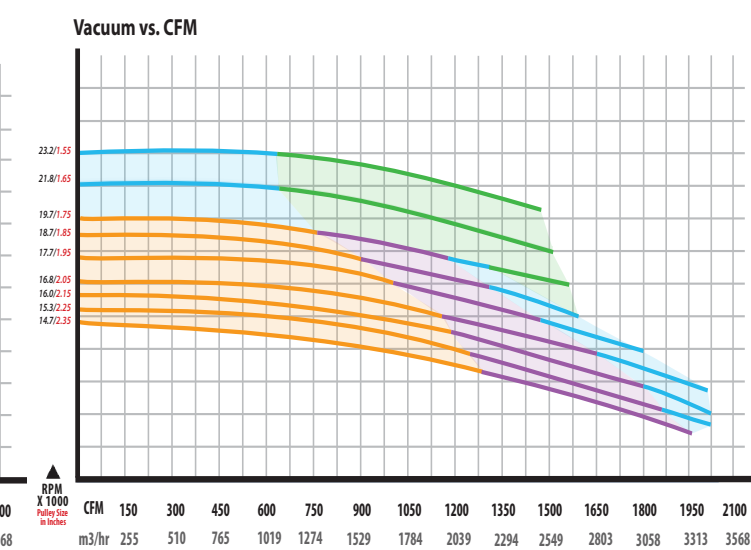
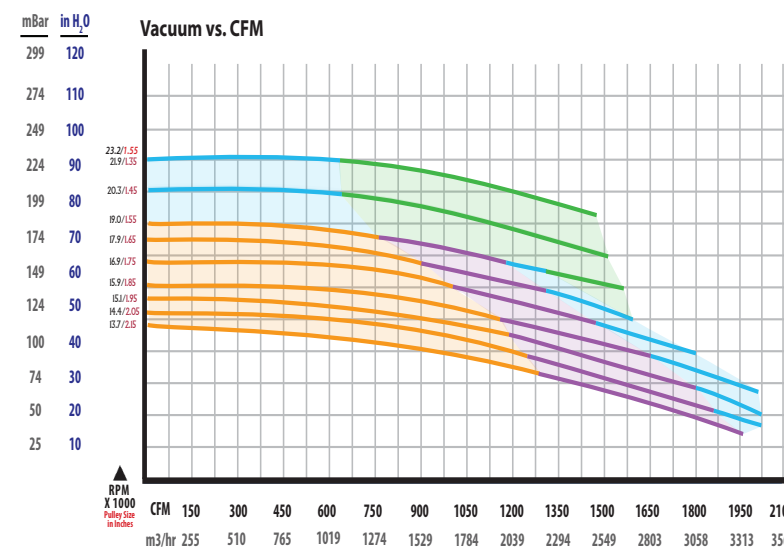
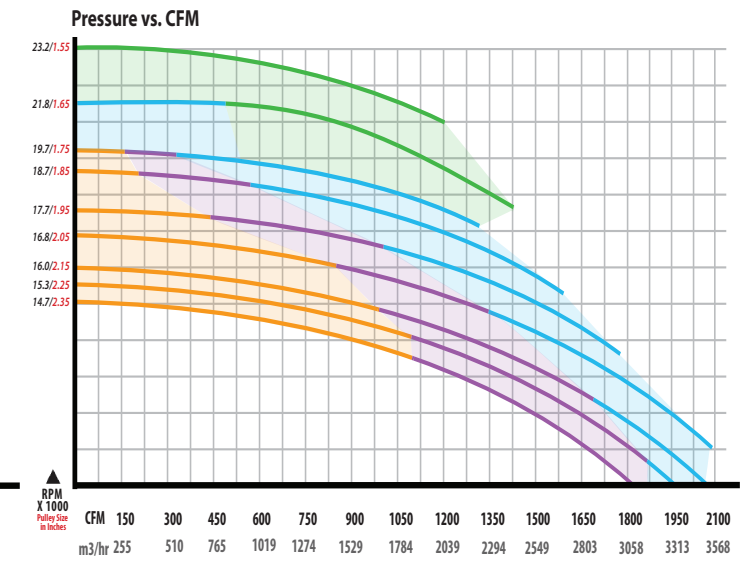
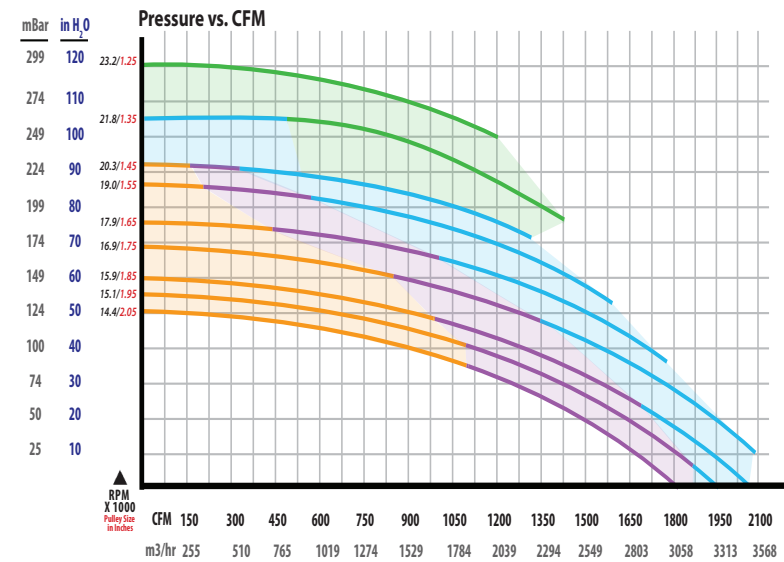
## APPROXIMATE DIMENSIONS



## PERFORMANCE CURVES

### 50 Hz

### 60 Hz



RB2000	unit	A	B	C	D	E	F	G	H	I	J	K	L	M
20 HP	in	24	9.5	10	28	10	16	1	9	16	37	15	4.5	12
	mm	620	241	254	706.5	254	407	25.5	235	397	935	378	114	305
25 HP	in	26	9.5	9.5	27	11	18	.5	8.5	16	37	15	4.5	12
	mm	662	241	241	687	279	459.5	13	216	397	935	377	114	305
30 HP	in	30	10	10.5	29.5	12.5	21	.25	9.5	17	37	15	4.512	12
	mm	756.5	254	267	749	317.5	524	6	241	435	935	378	114	305

Standard cubic feet per minute, air at 14.7 PSIA, 68° F, 36% R.H.  
 $1" H_2O = 0.074" Hg = 0.036 PSIG = 0.57 oz = 25.4 mm H_2O$

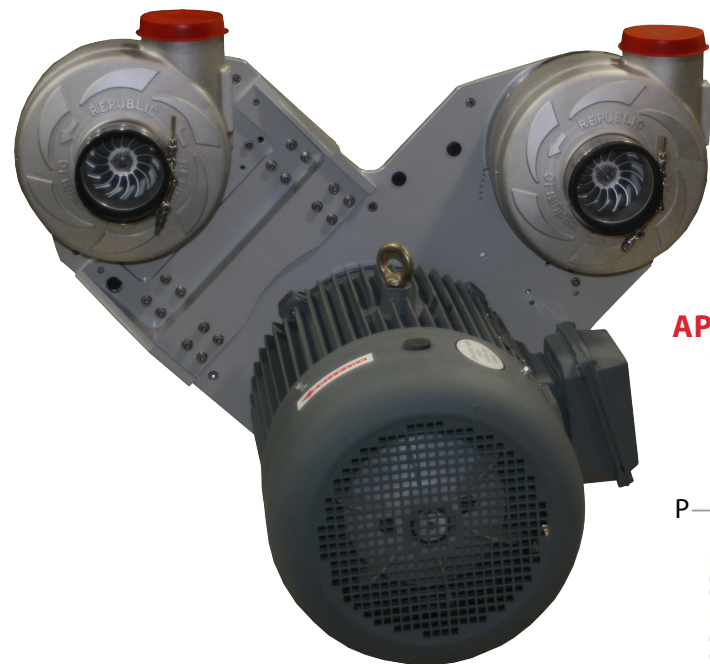
- RB2000-20 HP
- RB2000-25 HP
- RB2000-30 HP
- RB2000-40 HP

# RB2400

The Republic RB2400 doubles the flow capabilities of the RB1200HC without the need for two blowers. With capacities over 2600 cfm, this blower can reach up to 112 inches of water for pressure and 80 inches of water for vacuum, this blower comes with ceramic hybrid bearings, easy to remove stainless steel bearing housing assembly, and zinc plated steel motor pulley. 100% operational performance guaranteed and vibration tested. Operational with all types of motors and backed by Republic Manufacturing's standard warranty.

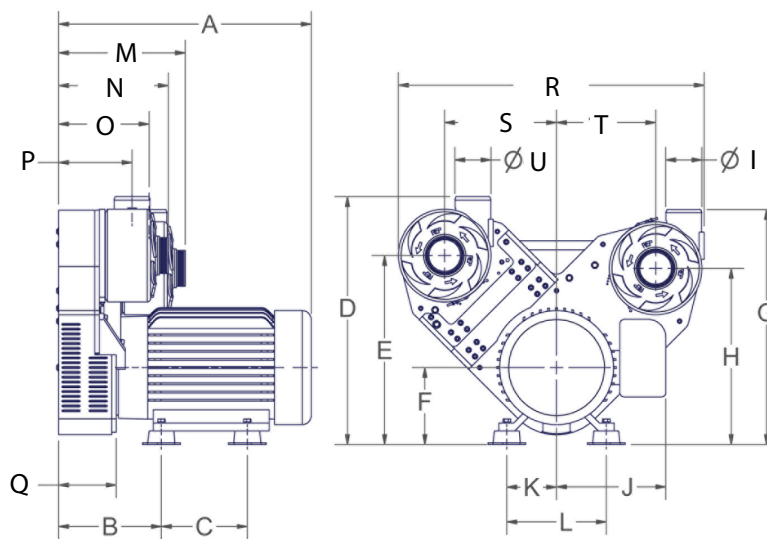
## OPTIONS AVAILABLE

- Stainless steel impeller
- Hard anodized impeller
- Inlet and outlet flanges
- Exhaust silencer
- Enclosures for noise control



Weight	lbs.	kg
25 HP	513	233
30 HP	513	233
40 HP	625	283
50 HP	725	329

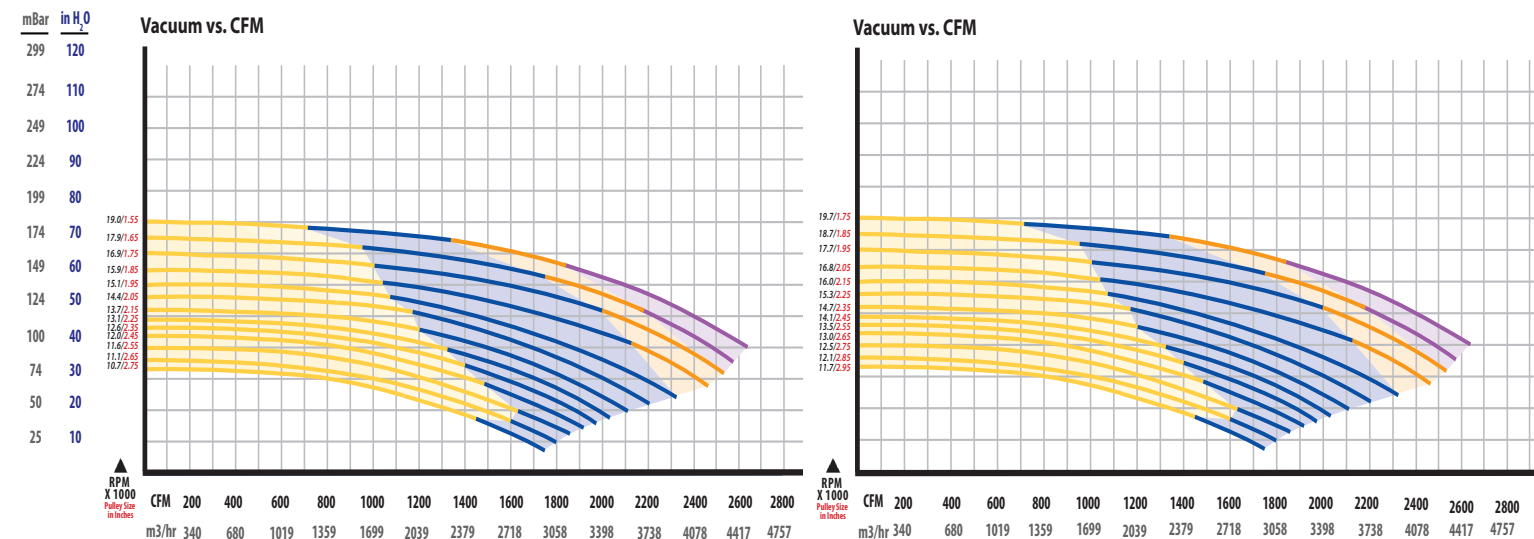
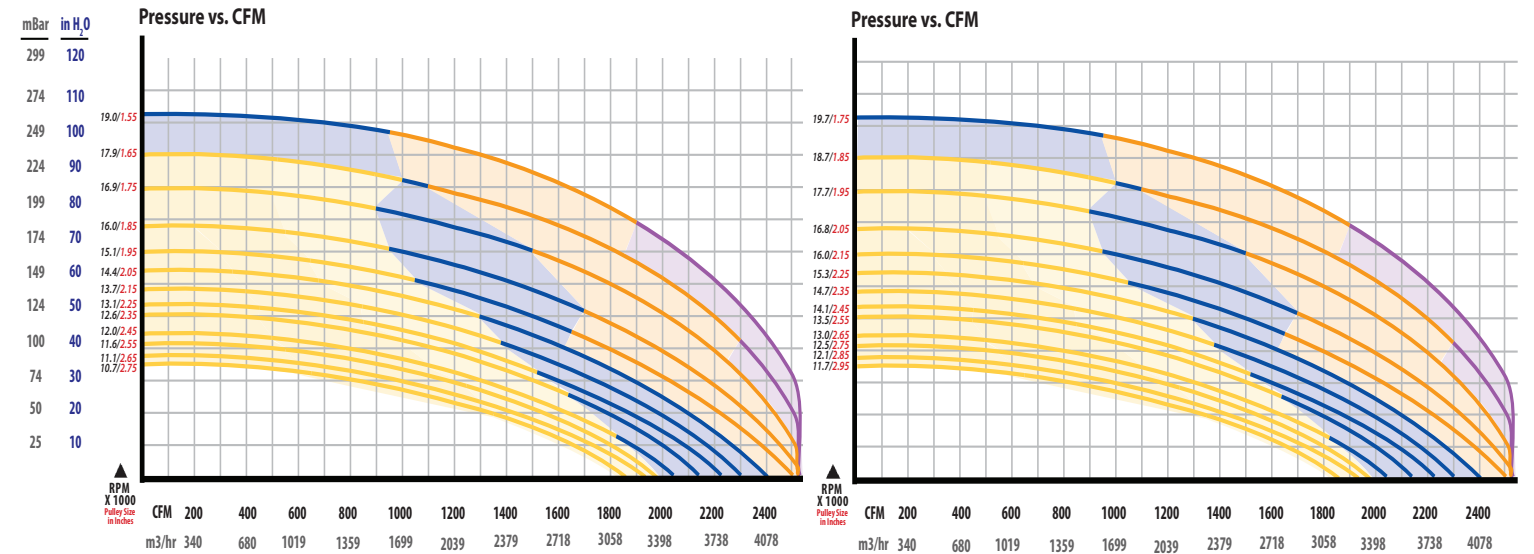
## APPROXIMATE DIMENSIONS



## PERFORMANCE CURVES

### 50 Hz

### 60 Hz



RB2400	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
25 HP	in	28	11	9.5	27	21	8.5	26	19.5	4	12	5.5	11	14	12	10	8	6	34	12	11	4
	mm	710	289	241	695	530	216	660	495	102	306	140	279	356	308	254	206	162	860	314	279	102
30 HP	in	28	11	9.5	27	21	8.5	26	19.5	4	13	5.5	11	14	12	10	8	6	34	12	11	4
	mm	713	289	241	695	530	216	660	495	102	333	140	279	355	308	254	206	162	860	314	279	101
40 HP	in	32	12	10.5	28	22	9.5	27	20.5	4	15	6.25	12.5	14	12	10	8	6	34	12	11	4
	mm	803	302	267	721	556	241	686	521	102	371.5	159	317.5	356	308	254	206	162	860	314	279	102
50 HP	in	32	12	12	29	22	9.5	27	20.5	4	15	6	12.5	14	12	10	8	6	34	12	11	4
	mm	806	302	305	721	556	241	686	521	102	371	159	317.5	356	308	254	206	162	860	314	279	102

Standard cubic feet per minute, air at 14.7 PSIA, 68°F, 36% R.H.  
 1" H<sub>2</sub>O = 0.074" Hg = 0.036 PSIG = 0.57 oz = 25.4 mm H<sub>2</sub>O

■ RB2400-25 HP   
 ■ RB2400-30 HP   
 ■ RB2400-40 HP   
 ■ RB2400-50 HP

# RB4000

Republic's largest centrifugal blower, the RB4000 is robust and reliable. With capacities up to 4000 cfm, this blower can reach up to 169 inches of water for pressure and 112 inches of water for vacuum, this blower comes with ceramic hybrid bearings, 360 degree rotatable outlet discharge, easy to remove stainless steel bearing housing assembly, and zinc plated steel motor pulley. 100% operational performance guaranteed and vibration tested. Operational with all types of motors and backed by Republic Manufacturing's standard warranty.

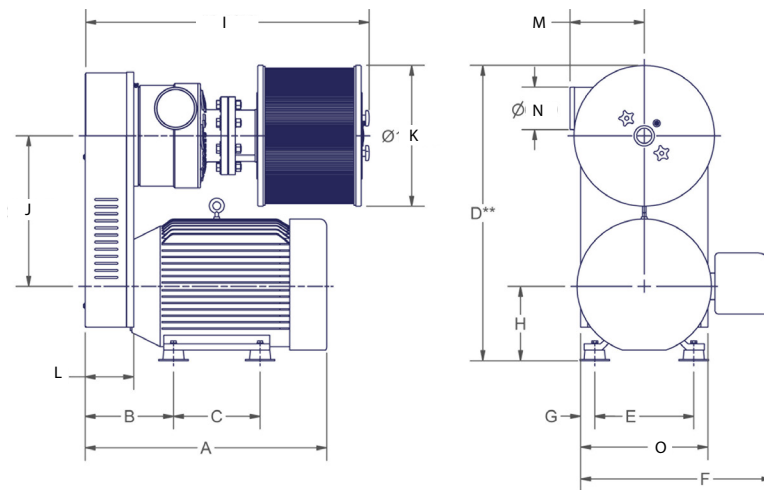
## OPTIONS AVAILABLE

- Stainless steel impeller
- Hard anodized impeller
- Inlet and outlet flanges
- Exhaust silencer
- Enclosures for noise control

Weight	lbs.	kg
40 HP	1018	462
50 HP	1004	455
60 HP	1265	574
75 HP	1331	604



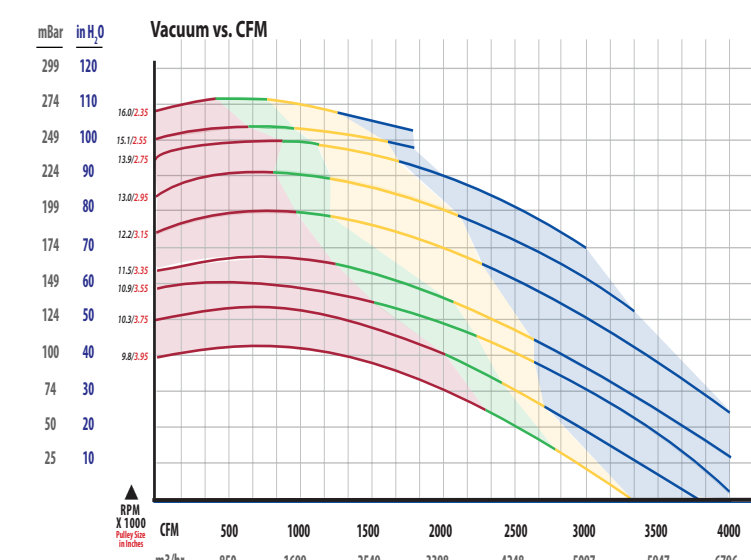
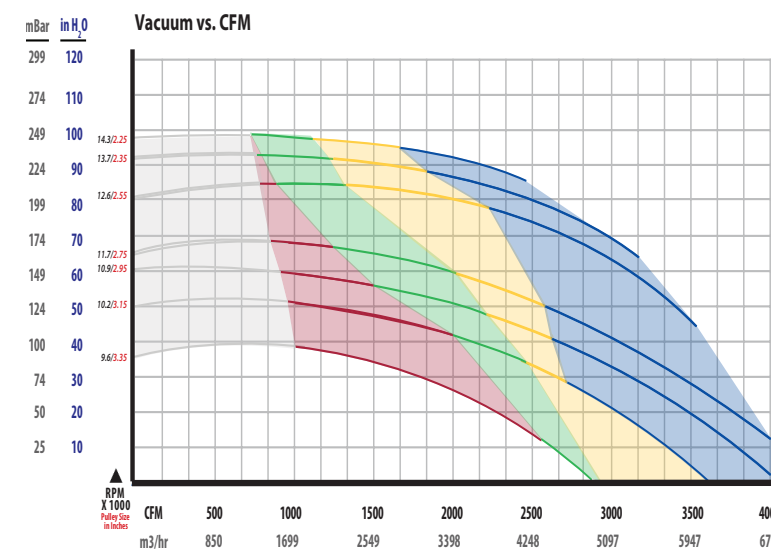
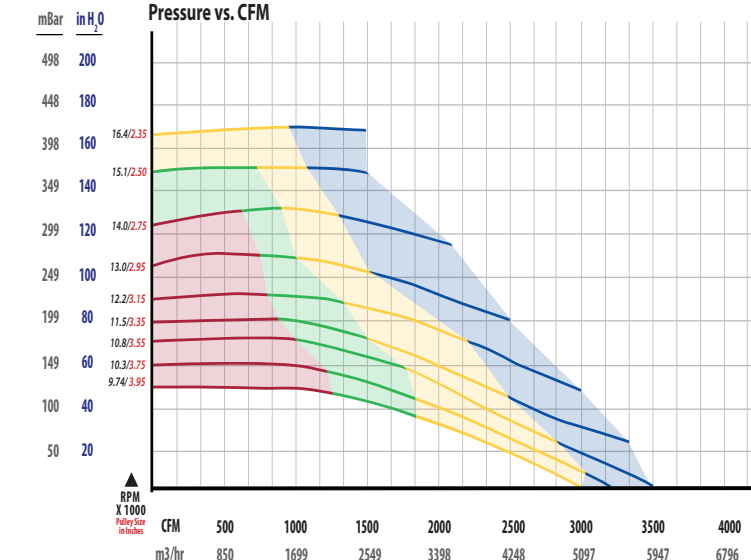
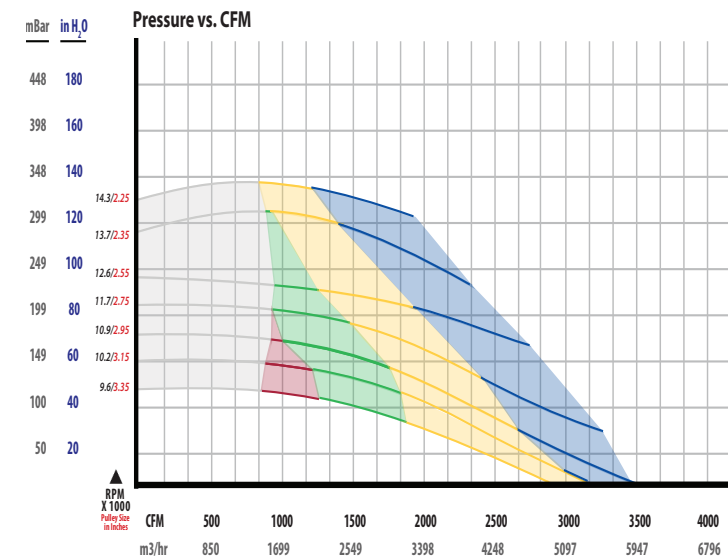
## APPROXIMATE DIMENSIONS



## PERFORMANCE CURVES

### 50 Hz

### 60 Hz



RB4000	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
40 HP	in	32	10	16	42	15	23	1	10.5	40	21	20	7	10.5	6	18
	mm	803	251	406	1059	371	574.5	27	267	1018	540	505	175	267	152	457
50 HP	in	32	10	16	42	15	23	1	10.5	40	21	20	7	10.5	6	18
	mm	806	251	406	1059	371	574	27	267	1018	540	505	175	267	152	457
60 HP	in	34	12.5	11	42	14	27	2	10.5	40	21	20	7	10.5	6	18
	mm	868	317.5	286	1059	356	687	51	267	1018	540	505	175	267	152	457
75 HP	in	34	12.5	12	42	14	27	2	10.5	40	21	20	7	10.5	6	18
	mm	868	317.5	311	1059	356	687	51	267	1018	540	505	175	267	152	457

Standard cubic feet per minute, air at 14.7 PSIA, 68° F, 36% R.H.  
 $1" H_2O = 0.074" Hg = 0.036 PSIG = 0.57 oz = 25.4 mm H_2O$

Unstable Range  
■ RB4000-40 HP    ■ RB4000-50 HP    ■ RB4000-60 HP    ■ RB4000-75 HP





5131 Cash Road Dallas, TX 75247

800.847.0380

[www.republic-mfg.com](http://www.republic-mfg.com)

