

SPECIFICATION**DB-50**

Green Genesis Engineering Limited has introduced modern technologies in Roots Blower in Bangladesh. We are supplying high quality energy efficient three-lobe roots-type blower. Our principles lie well-anchored in innovation and we have thrived in the lead of the Bangladesh and Asian market, placing us on par with Western engineering standards. We remain unstoppable when it comes to super-competitive costs and effectiveness of production, with easy maintenance for enduring quality, for many of your engineering needs.

We are committed to maintaining product quality and innovation, production standardization, and strict inspection system, in order to ensure that Roots Blowers, Pumps and Diffusers can meet customer's requirement. We offer the best quality products and quick after-sale service. We are capable to make products according to customer's special request.

◆ Feature

- ◆ Wide range for air Volume ` pressure and vacuum.
 1. Bore : 40A~400A (1.5"~16")
 2. Capacity : 0.5~360 m³/min
 3. Pressure : 0~8000 mmAq
 4. Vacuum : - 5000 mmAq
- ◆ Stable air flow and less pressure variation.
- ◆ Clean air note with oil moist.
- ◆ Construction simple and easy maintenance.
- ◆ Bearings are all lubricated by oil moist.

◆ Why You Select

Low Energy Consumption: Dynamic Roots Blower has designed on three lobes' basis and it control backflow pressure to rotor. So, it reduce energy consumption.

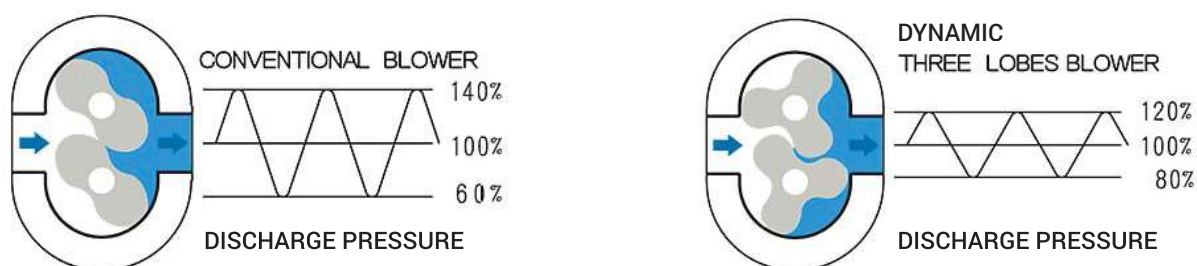
Lower Noise: In a Roots Blower pressure pluses are the major noise source. Since our blower is three lobes so, this design can efficiently reduce noise by approximately 5dB.

Longer Bearing Life : With Modern technology and three lobe causes of less vibration. And the less vibration transmitted through the lobe result approximately 20% longer bearing life.

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❖ Lower Energy Consumption

Three lobes design control backflow pressure to rotor so reduce consumption



❖ Lower Noise

Pressure pluses are the major noise source of blower.

Three lobes design can efficiently reduce noise by approximately 5dB.

❖ Longer Bearing Life

Less vibration transmitted through the lobe results approximately 20% longer bearing life. Conventional blowers result pressure pluses and vibration rob power and shorten the life of every bearing, gear and other drive train components.

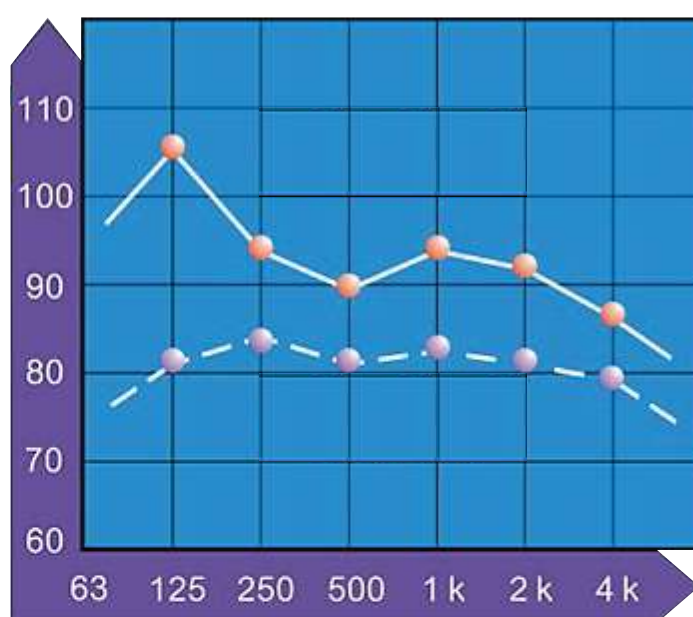


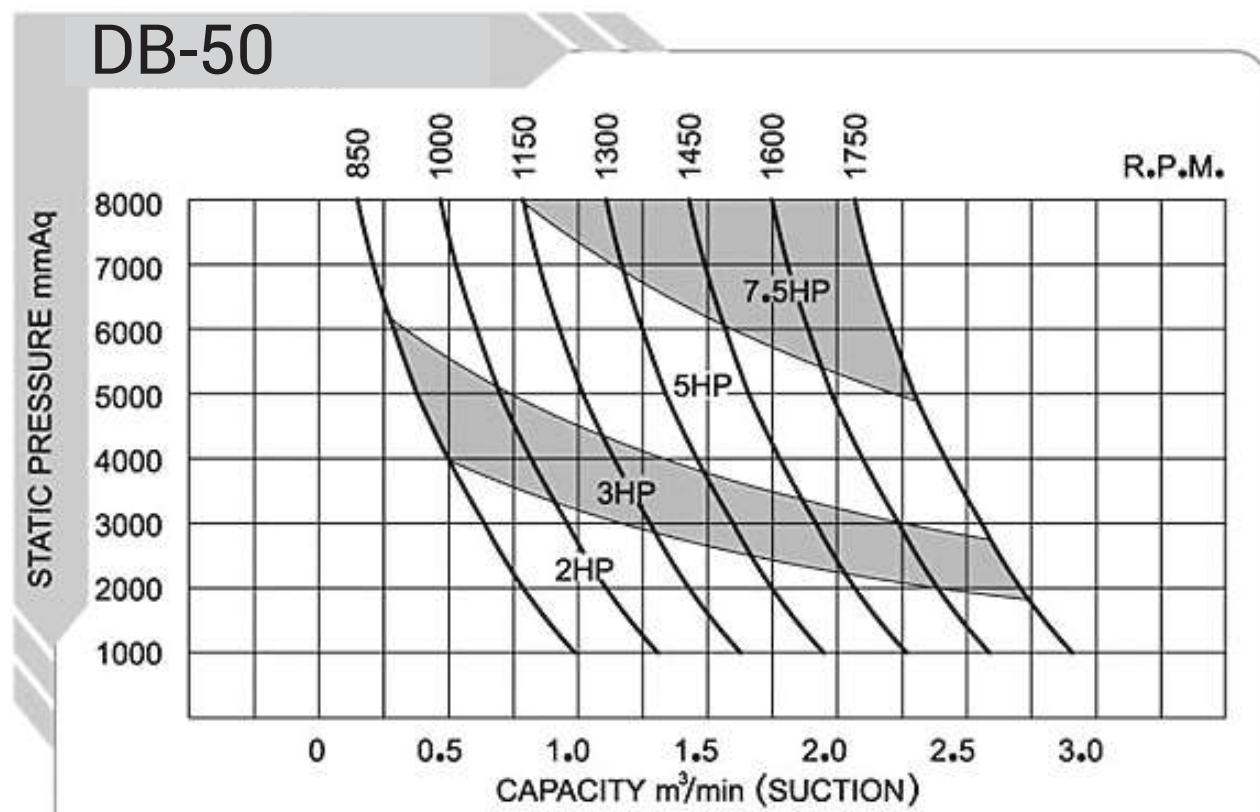
Fig: Hz

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❖ DB-50 Performance Table (For Pressure)

TYPE	RPM	Qs(m ³ /min)				PRESSURE(mmAq)								La(Kw)			
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
DB-50	850	0.99	0.41	0.79	0.80	0.64	1.16	0.50	1.51	0.38	1.84	0.29	2.15	0.21	2.45	0.15	2.74
	1000	1.31	0.48	1.11	0.94	0.96	1.37	0.82	1.77	0.70	2.16	0.61	2.53	0.53	2.88	0.47	3.22
	1150	1.63	0.56	1.44	1.08	1.28	1.57	1.15	2.04	1.02	2.49	0.93	2.91	0.86	3.32	0.79	3.71
	1300	1.95	0.63	1.76	1.22	1.61	1.78	1.47	2.31	1.34	2.81	1.25	3.29	1.18	3.75	1.12	4.19
	1450	2.27	0.70	2.08	1.36	1.93	1.98	1.79	2.57	1.67	3.13	1.58	3.67	1.50	4.18	1.44	4.67
	1600	2.60	0.77	2.40	1.50	2.25	2.19	2.11	2.84	1.99	3.46	1.90	4.05	1.82	4.61	1.76	5.16
	1750	2.92	0.85	2.72	1.64	2.57	2.39	2.43	3.11	2.31	3.78	2.22	4.43	2.14	5.05	2.08	5.64

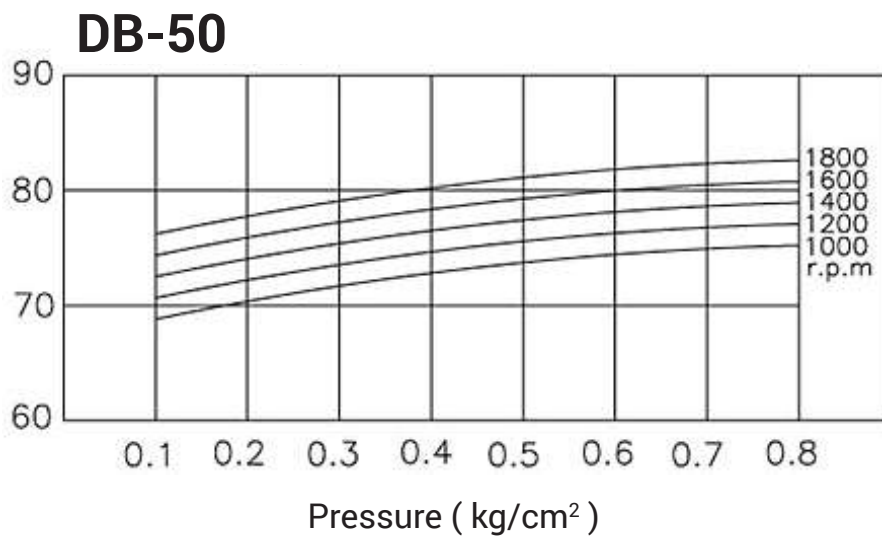
❖ DB-50 Performance Curve (For Pressure)



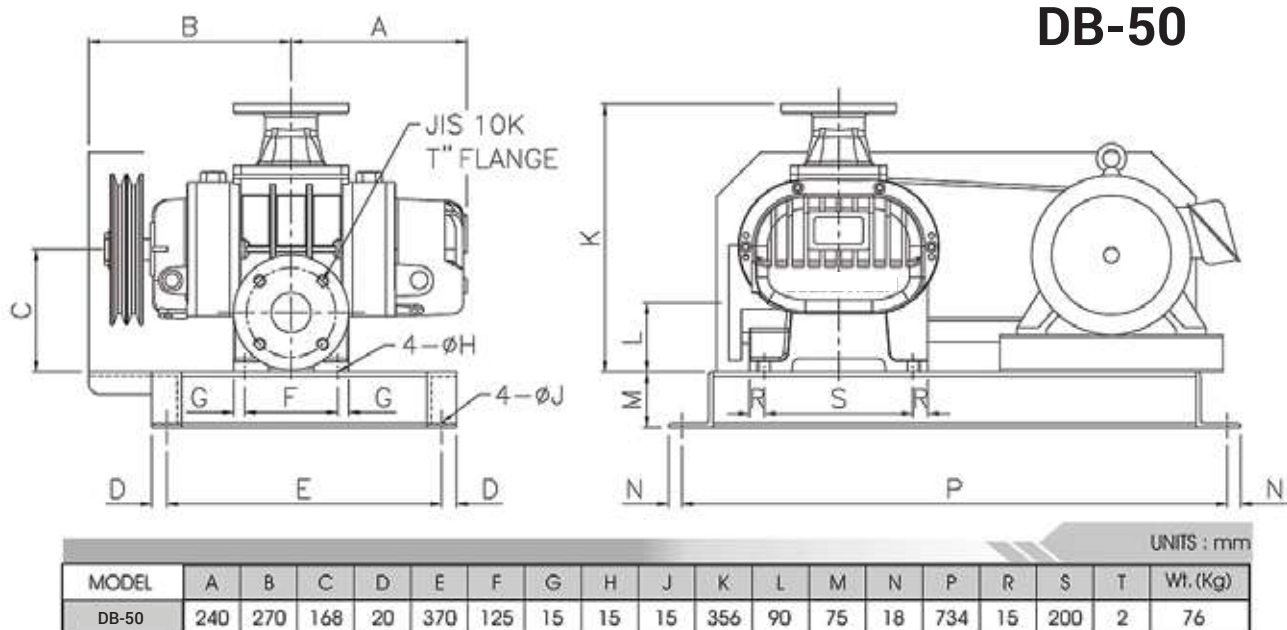
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❖ Noise Level Of Blower

1. LEVEL MEASURED AT DISTANCE 1 METER FOR THE BLOWER FITTED WITH STANDARD SILENCER.
2. NOISE LEVEL MAY BE DIFFERENT ACCORDING TO THE EXTEND PIPE LENGTH AND AMBIENT CONDITION.



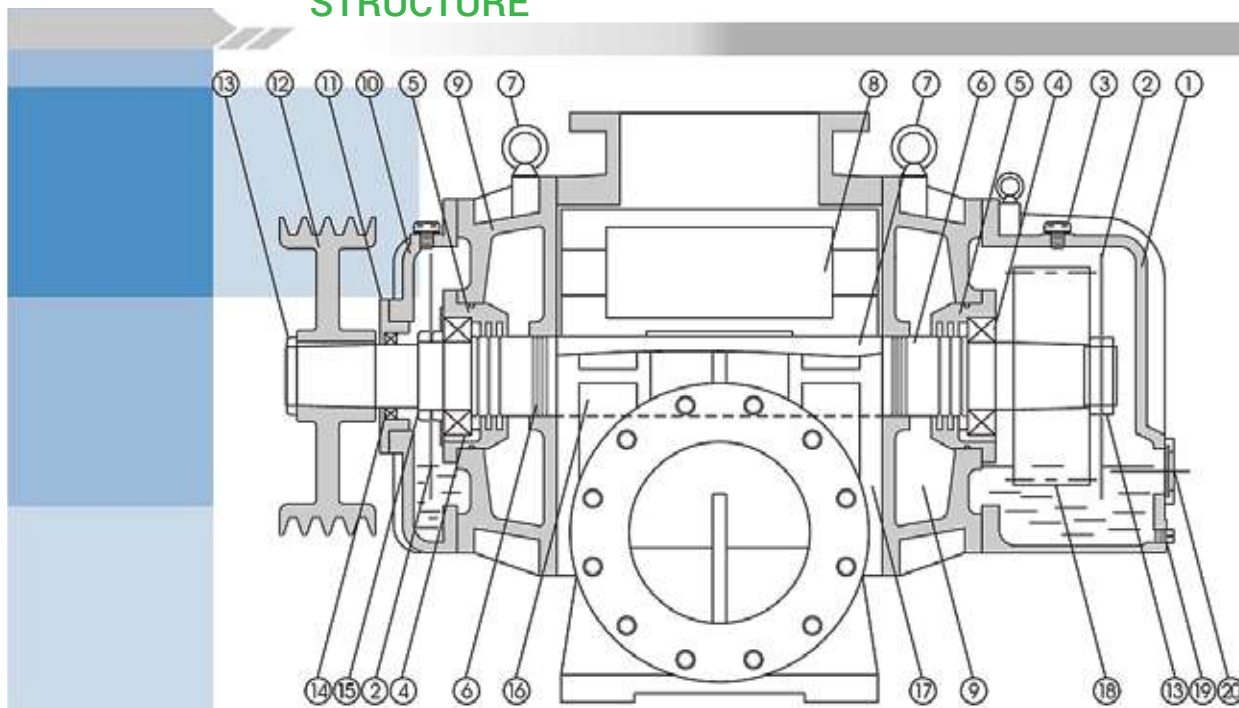
❖ Outline Dimension



(WT. FOR MAINBODY)

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STRUCTURE



MATERIAL LIST

NO.	NAME	MATERIAL	NO.	NAME	MATERIAL
1.	Gear Case	FC250	11.	Seal case	FC250
2.	Oil splash	SS400	12.	Pulley	FC250
3.	Oil plug	S45C	13.	Nut	SS400
4.	Bearing	SUJ2	14.	Seal	NBR
5.	Bearing case	FC250	15.	Nut	SS400
6.	Labyrinth seal	SS400	16.	Shaft	SCM440
7.	Eye bolt	S45C	17.	Main casing	FC250
8.	Rotor	FC250	18.	Timing gear	SCM415
9.	Side cover	FC250	19.	Oil drain	S45C
10.	Oil case	FC250	20.	Oil gause	S45C

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❖ INSTALLATIONS

