

Enjoy the Silence..  
Enjoy your life

**HC Silent Roots Blower**



## Construction & Material List

### ENERGY SAVING, CARBON REDUCTION AND HIGH EFFICIENCY

#### 性能

口徑: 40mm ~ 150mm (1.5" ~ 6")  
 風量: 0.4 ~ 22 m<sup>3</sup>/min ( 24 ~ 1320 m<sup>3</sup>/hr)  
 壓力: 0~6000 mmAq (0~0.6 kgf/cm<sup>2</sup>)

#### 特點

三葉魯氏鼓風機  
 循環氣流、全機冷卻  
 靜音運轉、超低震動  
 節能省電、高效率  
 直立設計、省空間  
 結構堅固、易保養  
 氣體潔淨、無油污  
 直結傳動、免皮帶

#### 用途

廢水處理、水產養殖、粉粒輸送、  
 穀類輸送、造紙工業、食品工業、  
 電鍍、半導體工業、化學工業...等  
 更適合安裝於醫院、學校、飯店、  
 住宅區、辦公大樓及其他需要安靜  
 的場所。

#### Performance

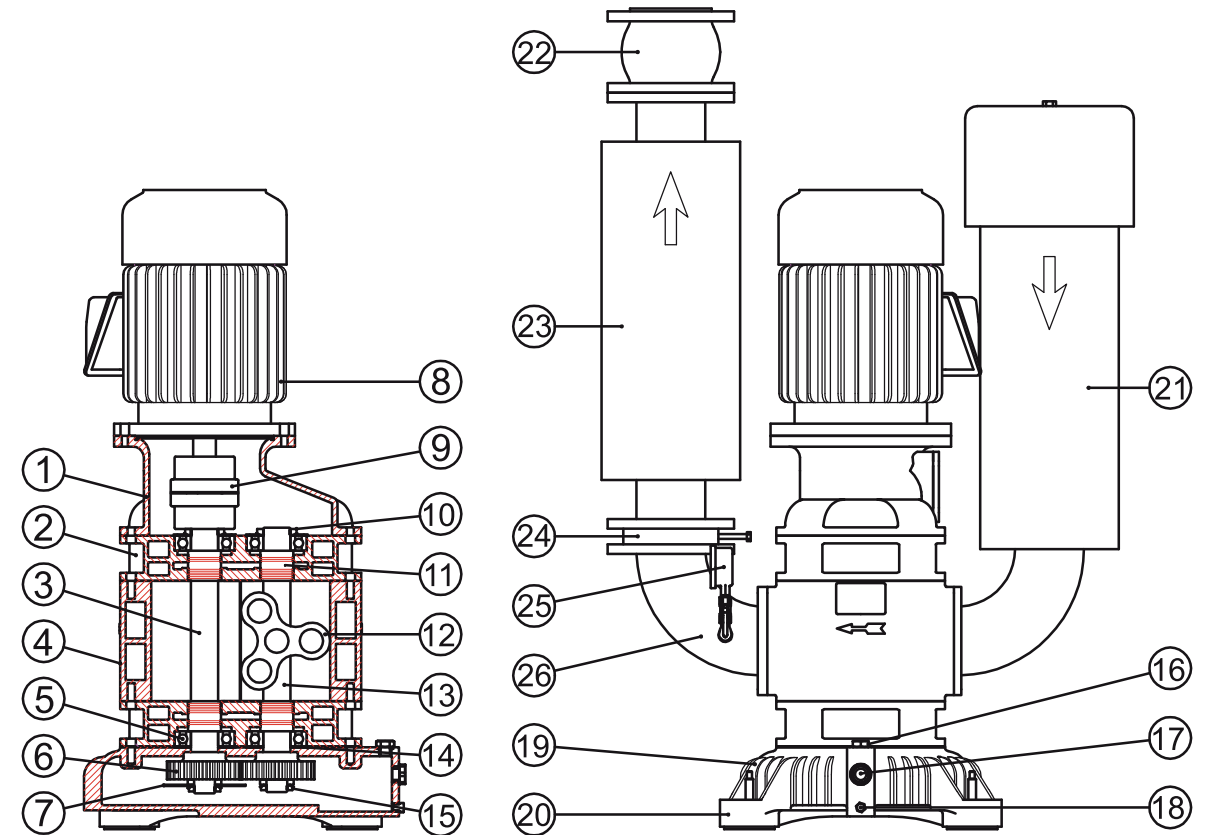
Bore Size: 40mm ~ 150mm (1.5" ~ 6")  
 Capacity: 0.4 ~ 22 m<sup>3</sup>/min ( 24 ~ 1320 m<sup>3</sup>/hr)  
 Pressure: 0~ 6000 mmAq (0~0.6 kgf/cm<sup>2</sup>)

#### Advantage

Tri-Lobe Roots Blower  
 Air cooled and circulated for fully blower  
 Silence design,Extremely low vibration  
 Energy and gear oil saving, High efficiency  
 Vertical design,Space saving  
 Solid construction ,Easy maintenance  
 Clean air,no oily odor  
 Coupling driven,No need belt

#### Application

Waste Water Treatment, Aquaculture,  
 Electroplating Industry, Powder Conveyance,  
 Grain Transport, Paper Making Industry,  
 Food Industry, Semiconductor Industry,  
 Chemical Industry...etc.  
 Especially suitable to install in Hospital,  
 School,Hotel,Residential Area,Office Building,  
 ...etc where is prohibited noise.



No.	Item	Material	No.	Item	Material
1	motor case 馬達座	FC250	14	bearing plate 軸承壓板	SS400
2	bearing case 軸承座	FC250	15	screw nut 螺帽	SS400
3	drive shaft 主動軸	SCM440	16	oil plug 加油塞	S45C
4	cylinder 汽缸	FC250	17	oil gauge 油鏡	S45C
5	bearing 軸承	SUJ2	18	oil drainer 洩油塞	S45C
6	gear 齒輪	SCM415	19	gear oil box 齒輪箱	FC250
7	oil splash 甩油板	SS400	20	vibration isolator 防震腳	NBR
8	motor 馬達		21	suction silencer 入口消音器	SS400
9	coupling 聯軸器	FCD500	22	flexible joint 防震接頭	NBR
10	screw nut 螺帽	SS400	23	discharge silencer 出口消音器	SS400
11	shaft seal 軸封	S45C	24	check valve 逆止閥	FC250
12	rotor 葉輪	FC250	25	pressure gauge 壓力表	SUS304
13	driven shaft 被動軸	SCM440	26	elbow joint 出口彎頭	SS400

# HC Silent Roots Blower

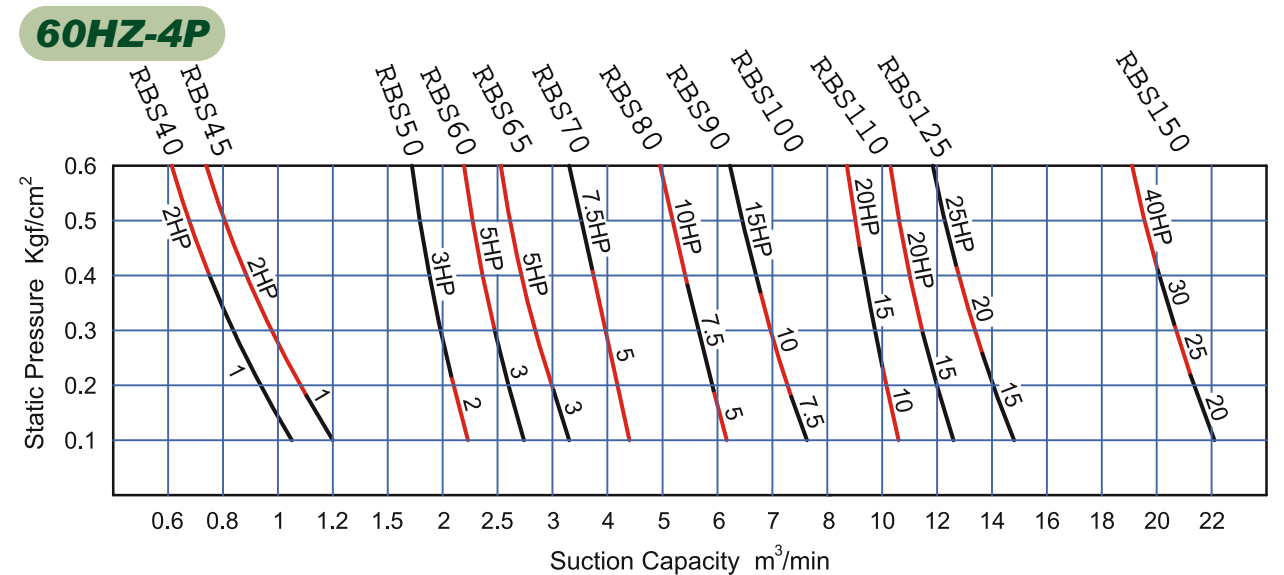
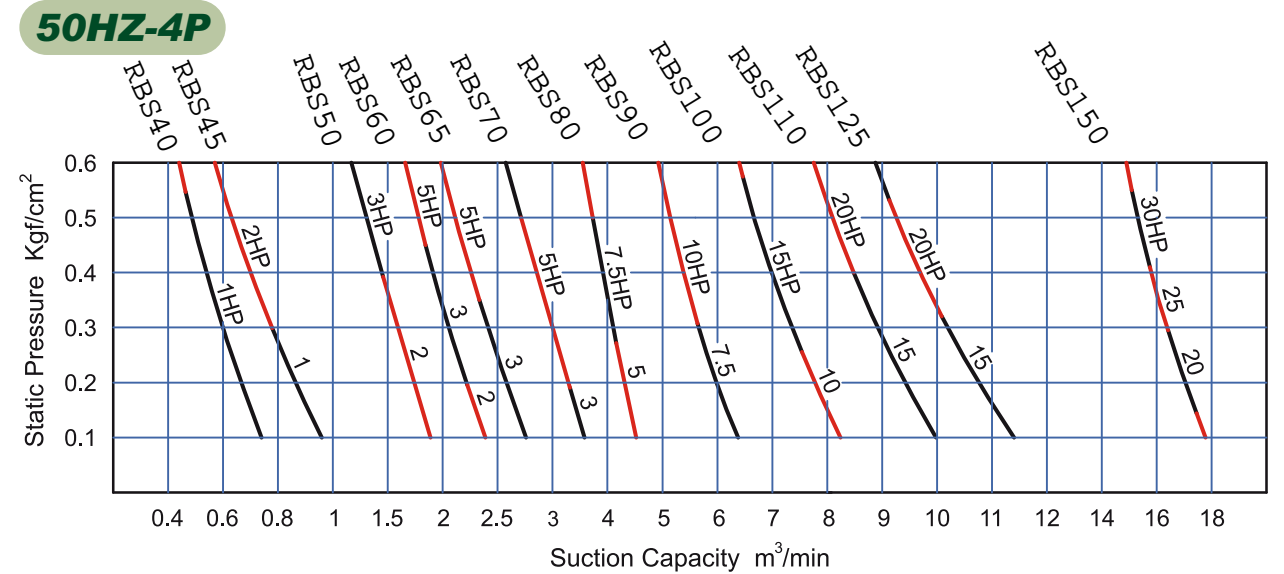
Performance Table

HC Silent Roots Blower 50HZ - 4P													
型號 Model	口徑 Bore (mm)	壓力 Pressure (mmAq)				風量 Capacity (m <sup>3</sup> /min)				功率 Power (kW)			
		1000 mmAq		2000 mmAq		3000 mmAq		4000 mmAq		5000 mmAq		6000 mmAq	
		m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW
RBS40	40	0.74	0.42	0.66	0.47	0.60	0.53	0.54	0.61	0.49	0.69	0.44	0.80
RBS45	40	0.96	0.53	0.86	0.66	0.78	0.78	0.70	0.89	0.63	0.99	0.57	1.07
RBS50	50	1.89	0.99	1.77	1.23	1.66	1.38	1.45	1.57	1.32	1.78	1.15	2.00
RBS60	65	2.39	1.33	2.23	1.54	2.09	1.78	1.91	2.07	1.82	2.47	1.75	2.79
RBS65	65	2.76	1.49	2.59	1.72	2.42	2.12	2.27	2.50	2.16	2.84	1.92	3.10
RBS70	80	3.38	1.79	3.18	2.31	3.00	2.67	2.80	3.12	2.62	3.71	2.53	4.25
RBS80	80	4.52	2.72	4.31	3.23	4.15	3.96	3.94	4.73	3.73	5.28	3.55	5.92
RBS90	100	6.43	3.89	6.04	4.62	5.73	5.46	5.43	6.62	5.17	7.61	4.92	8.73
RBS100	100	8.24	5.54	7.78	6.19	7.37	7.25	7.00	8.18	6.68	9.27	6.40	10.5
RBS110	125	9.98	7.05	9.43	8.25	8.93	10.1	8.48	11.3	8.09	12.4	7.75	13.8
RBS125	125	11.4	7.80	10.8	8.83	10.2	10.7	9.69	12.8	9.24	14.6	8.85	16.2
RBS150	150	17.8	10.5	17.1	12.3	16.5	15.2	15.8	17.5	15.3	20.6	14.9	23.7

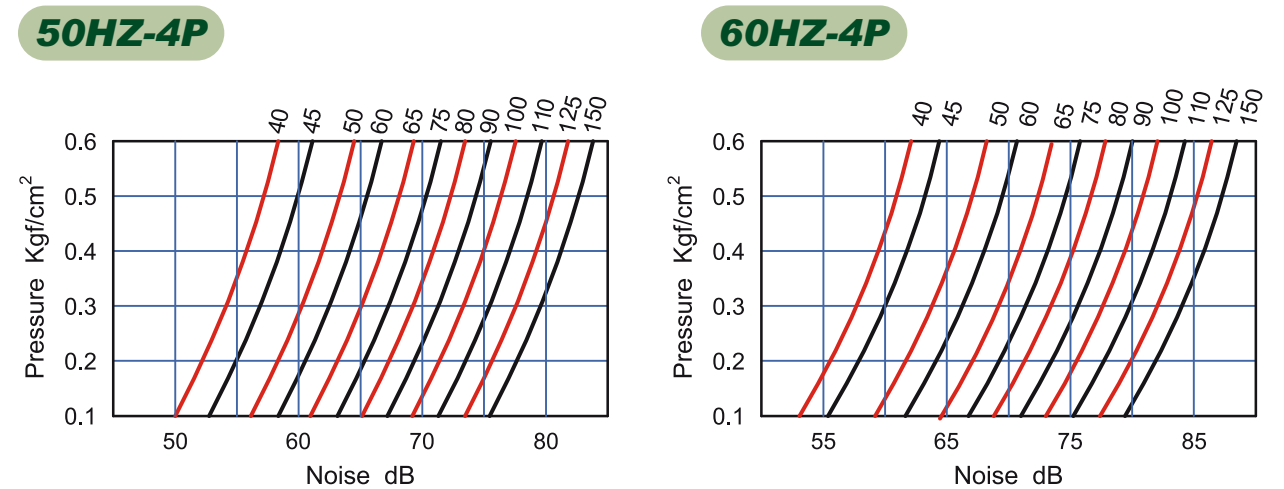
0.75kW=1HP , 1.5kW=2HP , 2.2kW=3HP , 3.7kW=5HP , 5.5kW=7.5HP , 7.5kW=10HP  
11kW=15HP , 15kW=20HP , 18.5kW=25HP , 22kW=30HP , 30kW=40HP , 37kW=50HP

HC Silent Roots Blower 60HZ - 4P													
型號 Model	口徑 Bore (mm)	壓力 Pressure (mmAq)				風量 Capacity (m <sup>3</sup> /min)				功率 Power (kW)			
		1000 mmAq		2000 mmAq		3000 mmAq		4000 mmAq		5000 mmAq		6000 mmAq	
		m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW	m <sup>3</sup> /min	kW
RBS40	40	1.05	0.49	0.94	0.56	0.83	0.65	0.75	0.75	0.67	0.87	0.62	1.01
RBS45	40	1.20	0.65	1.09	0.83	0.98	0.98	0.89	1.12	0.80	1.19	0.73	1.28
RBS50	50	2.23	1.12	2.10	1.39	1.97	1.55	1.88	1.79	1.81	1.94	1.72	2.14
RBS60	65	2.74	1.71	2.52	1.95	2.42	2.26	2.33	2.57	2.27	2.94	2.22	3.35
RBS65	65	3.15	1.86	2.87	2.12	2.72	2.46	2.63	2.83	2.55	3.20	2.47	3.60
RBS70	80	4.36	2.47	4.02	2.85	3.89	3.28	3.76	3.67	3.53	4.26	3.30	4.82
RBS80	80	6.17	3.36	5.86	3.97	5.65	4.83	5.42	5.64	5.18	6.30	4.96	6.86
RBS90	100	7.63	4.62	7.28	5.82	6.93	6.72	6.70	7.93	6.45	9.01	6.23	10.7
RBS100	100	10.6	6.33	10.2	7.01	9.74	8.29	9.36	9.38	9.02	11.1	8.72	12.4
RBS110	125	12.6	8.08	12.0	9.25	11.5	11.2	11.0	12.6	10.7	14.1	10.3	15.7
RBS125	125	14.8	9.12	14.1	10.7	13.4	13.2	12.8	14.8	12.3	16.2	11.8	17.8
RBS150	150	22.1	11.9	21.4	14.7	20.8	18.0	20.1	21.5	19.6	24.3	19.1	25.9

Performance Curve



Noise Curve



## Outline Dimension

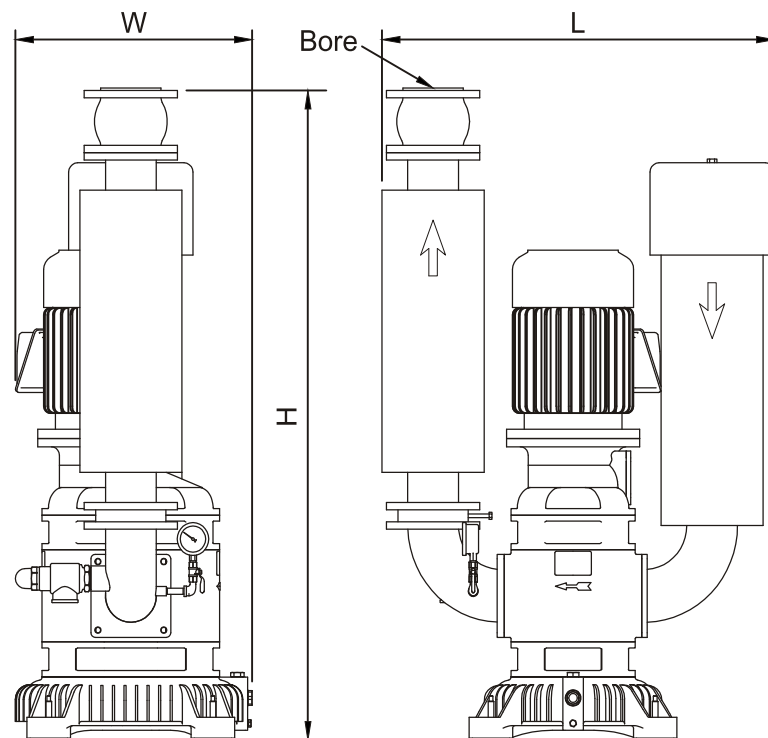


## Other Products



Unit=mm

型號 Model	長 L	寬 W	高 H	口徑 Bore
RBS40	590	345	830	40(1.5")
RBS45	590	345	845	40(1.5")
RBS50	670	420	1039	50(2")
RBS60	687	428	1082	65(2.5")
RBS65	727	450	1055	65(2.5")
RBS70	824	465	1250	80(3")
RBS80	824	465	1295	80(3")
RBS90	884	533	1408	100(4")
RBS100	952	580	1438	100(4")
RBS110	1060	580	1981	125(5")
RBS125	1070	580	2006	125(5")
RBS150	1266	703	2045	150(6")



## Unit Conversion

### 壓力 Pressure

Kgf/cm <sup>2</sup>	kPa	mbar	psi	mmAq mmH <sub>2</sub> O	Torr mmHg
1	98.0665	980.665	14.2231	10,000	735.559
0.010197	1	10	0.145	101.9716	7.50062
0.001019	0.1	1	0.0145	10.19716	0.750062
0.07031	6.895	68.95	1	703.08	51.7157
0.0001	0.009806	0.098	0.001422	1	0.073556
0.00136	0.13332	1.33321	0.019336	13.5951	1

### 風量 Capacity

CMM (m <sup>3</sup> /min)	CFM (ft <sup>3</sup> /min)	LPM (l/min)
1	35.32	1000
0.0283	1	28.3125
0.001	0.0353	1

### 功率 Power

kW	HP	PS
1	1.3404	1.3596
0.746	1	1.0143
0.7355	0.9859	1