

品质源自专业 诚信铸就明天  
Specialty Builds Quality Honesty Creates Future



**MJSR Series Three Lobes Roots Blower / Vacuum Pump**



山东明天机械集团股份有限公司  
Shandong Mingtian Machinery Group Joint Stock Co., Ltd  
Add: Industrial Park, North of Xianggong Town, Zhangqiu District, Jinan, Shandong, China  
Tel: +8613869163278  
Mobile: +8613869163278  
Email: vincent@cnrootsblower.com  
Website: www.cnrootsblower.com

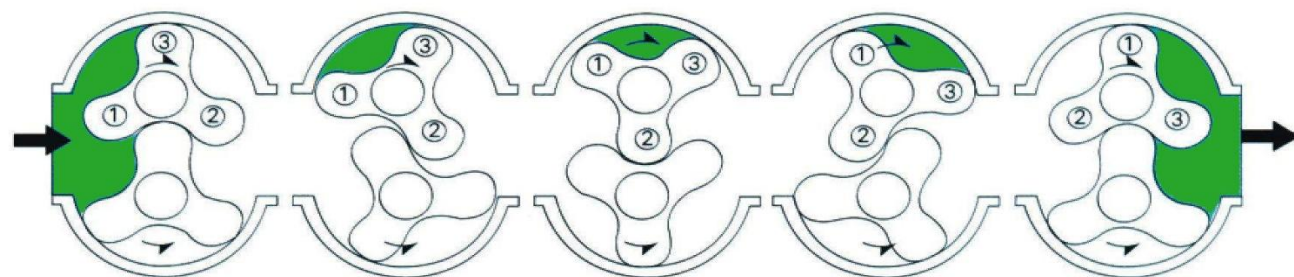
**山东明天机械集团股份有限公司**  
Shandong Mingtian Machinery Group Joint Stock Co., Ltd

## Company Introduction



Shandong Mingtian Machinery Group Joint Stock Co., Ltd is located Zhangqiu District, Jinan City, Shandong Province. It covers an area of more than 76000 m<sup>2</sup>, building surface is more than 39000m<sup>2</sup>, with more than 180 employees, among of them including 22 technicians, 5 technical engineers, and 3 domestic chief experts. Founded in 2007, we are manufacturing and exporting roots blower and MVR compressors with 12 years experiences. With advanced CNC processing centers and test equipments, we are able to manufacture roots blowers, roots vacuum pumps and MVR compressors in 10 series and 220 models, with air capacity 0.6-1000 m<sup>3</sup>/min and pressure rise 9.8-198kPa. Our blowers are widely used in pneumatic conveying, waste water treatment, aquaculture, petroleum, chemical industry, metallurgy, electric power, cement, food, coal preparation, vacuum packaging and other industries.

## Roots Blower Working Principle



The rotary-type positive-displacement roots blower incorporates two intermeshing rotors mounted on parallel shafts. In a twin-lobe roots blower, each rotor has two lobes (four per roots blower). In a tri-lobe roots blower, each rotor has three lobes (six per roots blower).

- The two rotors rotate in opposite directions.
- As each rotor passes the blower inlet, it traps a definite volume of gas (the 'displaced volume') and carries it around the case to the blower outlet. With constant speed operation, the displaced volume remains approximately the same at different inlet temperatures, inlet pressures and discharge pressures.
- As each rotor passes the blower outlet the gas is compressed to the system pressure there and expelled.
- Small but definite clearances allow operation without lubrication being required inside the air casing.
- Timing gears control the relative position of the rotors to each other.

## Products Features

Shangu three lobes Roots Blower are new series Roots type blowers. With the help of CNC machine, we make precise rotors and casings to get a perfect gap to promote air performance, lower vibrations and noises results a significant improvement compared to traditional two lobe Roots Blower. Traditional Roots Blower lubricate bearings and gears with grease and oil. Shangu blowers with double oil tank need oil only. It is very convenient to maintain and oil has a better lubricating effect than grease. So it could be a longer bearings and gears life.

- ◆ Strict management of quality standards. ISO9001 and CE systems.
- ◆ Technical customization (size, pressure, design, pump accessories).
- ◆ CNC machinery enabling precise measurements and grinding needed for more efficient pumping.
- ◆ Fewer vibrations transmitted through the lobe, for longer-lasting shafts, gears and bearings.
- ◆ Three-lobe design controls any backflow pressure towards rotor.
- ◆ Oil and dust-free outlet.
- ◆ Lubricated with high grade oil, proven to be a much better alternative to grease.
- ◆ Significant improvement in air performance ratios: wider air, pressure and vacuum range.
- ◆ Much quieter: our new design can effectively reduce noise by approximately 5 dB.
- ◆ Lower energy consumption.
- ◆ All our products can be used for OEM.

## Product Performance

- ◆ Pressure Rise:9.8-98kpa
- ◆ Air Capacity:2.35-59m<sup>3</sup>/min
- ◆ Motor Power:1.5-160kw

## Information to Submit When Order

Usage	Blowing use or vacuum use
Gas Handled	Gas variety, status, temperature
	With or without corrosiveness and explosiveness
	State the proportion of gas formation and the molecular weight if handle mixed gas
Pressure	Unit:kPa, kgf/cm <sup>2</sup> ,mmH <sub>2</sub> O,mmHg,Pa, etc.
	Difference between gauge pressure and absolute pressure
Air Capacity	Unit: m <sup>3</sup> /min
	Differences among Reference Condition (N : 0oC, 1 standard atmosphere pressure),Standard Condition (S : 20oC,1 standard atmosphere pressure), and inlet condition
Location	Outdoor or indoor
	Surrounding temperature, with or without dangerous
Motor	Model No, output, poles
Driving Type	Coupling or v-belt
Others	Temperature of cooling water
	Operating time
	Whether in need of accessories or spare parts
	Painting colour

### Performance Table Explain

- The performance tables give the model type, bore, r.p.m, discharge pressure, air capacity and required power of the blower.
- The air capacity in the tables is indicated in the standard suction state. The standard suction state herein mentioned is defined as the condition at 20 temperature, 1.0332kgf/cm2 [101.3kPa] absolute pressure and 65%relative humidity.
- The reference air capacity(temperature 0 °C and 1.0332kgf/cm2) [101.3kPa] absolute pressure is generally indicated in Nm<sup>3</sup>/min.
- However, it may be converted into the standard air capacity by the following equation if the suction pressure is equal.

$$Q_s = Q_N \times 1.0732$$

Where,

Q<sub>s</sub>: standard air capacity;

Q<sub>N</sub>: referenee air capacity;

- The discharge air capacity can be converted into the standard air capacity by the following equation.

$$Q_s = Q_d \times \frac{1.0332 + P_d}{2 \times 1.0332} \times \frac{273 + t_s}{273 + t_d}$$

Where,

Q<sub>d</sub>:discharge air capacity,in(m3/min)

P<sub>d</sub>:discharge pressure,in(kgf/cm2)

t<sub>s</sub>:suction temperature,in(°C)

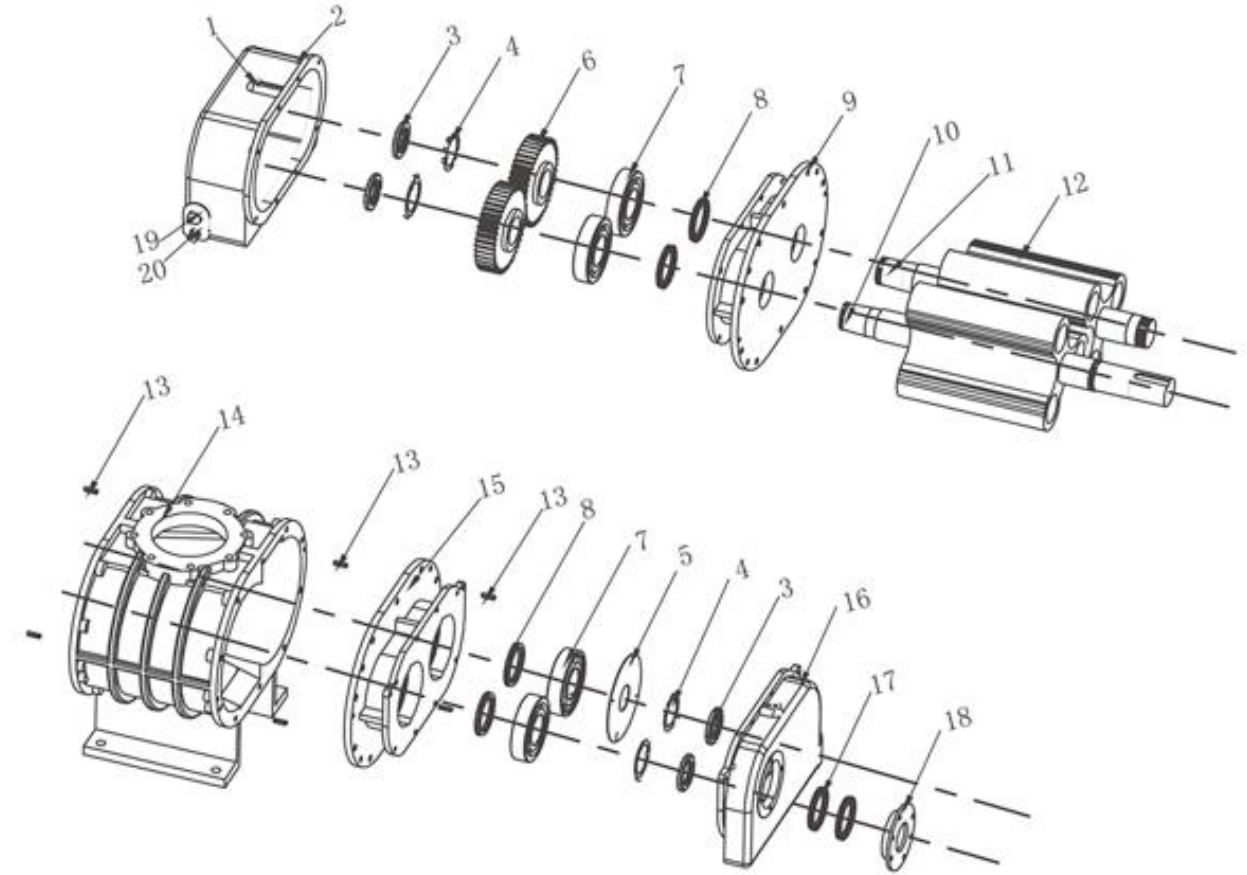
t<sub>d</sub>:discharge temperature, in(°C)

- According to the air capacity and discharge pressure as calculated above, the model number, bore, r.p.m and required power can be found in the performance table.

### Pressure Conversion Table

	Pa	Bar	Kgf/cm <sup>2</sup>	Atm	MmH <sub>2</sub> O	MmHg (Torr)
Pressure	1	1 x 10 <sup>-5</sup>	1.01972 x 10 <sup>-5</sup>	9.86923 x 10 <sup>-6</sup>	1.01972 x 10 <sup>-1</sup>	7.50062 x 10 <sup>-3</sup>
	1 x 10 <sup>5</sup>	1	1.01972	9.86923 x 10 <sup>-1</sup>	1.01972 x 10 <sup>4</sup>	7.50062 x 10 <sup>2</sup>
	9.80665 x 10 <sup>4</sup>	9.80665 x 10 <sup>-1</sup>	1	9.67841 x 10 <sup>-1</sup>	1 x 10 <sup>4</sup>	7.35559 x 10 <sup>2</sup>
	1.01325 x 10 <sup>5</sup>	1.01325	1.03323	1	1.03323 x 10 <sup>4</sup>	7.60000 x 10 <sup>2</sup>
	9.80665	9.80665 x 10 <sup>-5</sup>	1 x 10 <sup>-4</sup>	9.67841 x 10 <sup>-5</sup>	1	7.35559 x 10 <sup>-2</sup>
	1.33322 x 10 <sup>2</sup>	1.33322 x 10 <sup>-3</sup>	1.35951 x 10 <sup>-3</sup>	1.31579 x 10 <sup>-3</sup>	1.35951 x 10 <sup>1</sup>	1

### Roots Blower Structure



### Parts Material Table

No.	Name	Material	QTY	No.	Name	Material	QTY
1	Lubrication Plug	A3	2	11	Driven Shaft	45#	1
2	Gear Case	HT250	1	12	Rotor	QT400	2
3	Lock Nut	A3	4	13	Positioning Pin	45#	6
4	Washer	A3	4	14	Casing	HT250	1
5	Oil Splash	A3	2	15	Drive Side Wall	HT250	1
6	Gear	20CrMnTi	2	16	Drop Tank	HT250	1
7	Bearing	SUJ2	4	17	Oil Seal	Nitrile Rubber	2
8	V-ring	Nitrile Rubber	4	18	Oil Tank Cap	HT250	1
9	Wall Plate	HT250	1	19	Oil Gauge	Organic Glass	2
10	Drive Shaft	45#	1	20	Purge Plug	A3	2

## MJSR Series Roots Blower Performance Datasheet

Qs: Inlet Airflow (m<sup>3</sup>/min.) La: Blower Shaft Power(Kw) Po: Motor Power(Kw)

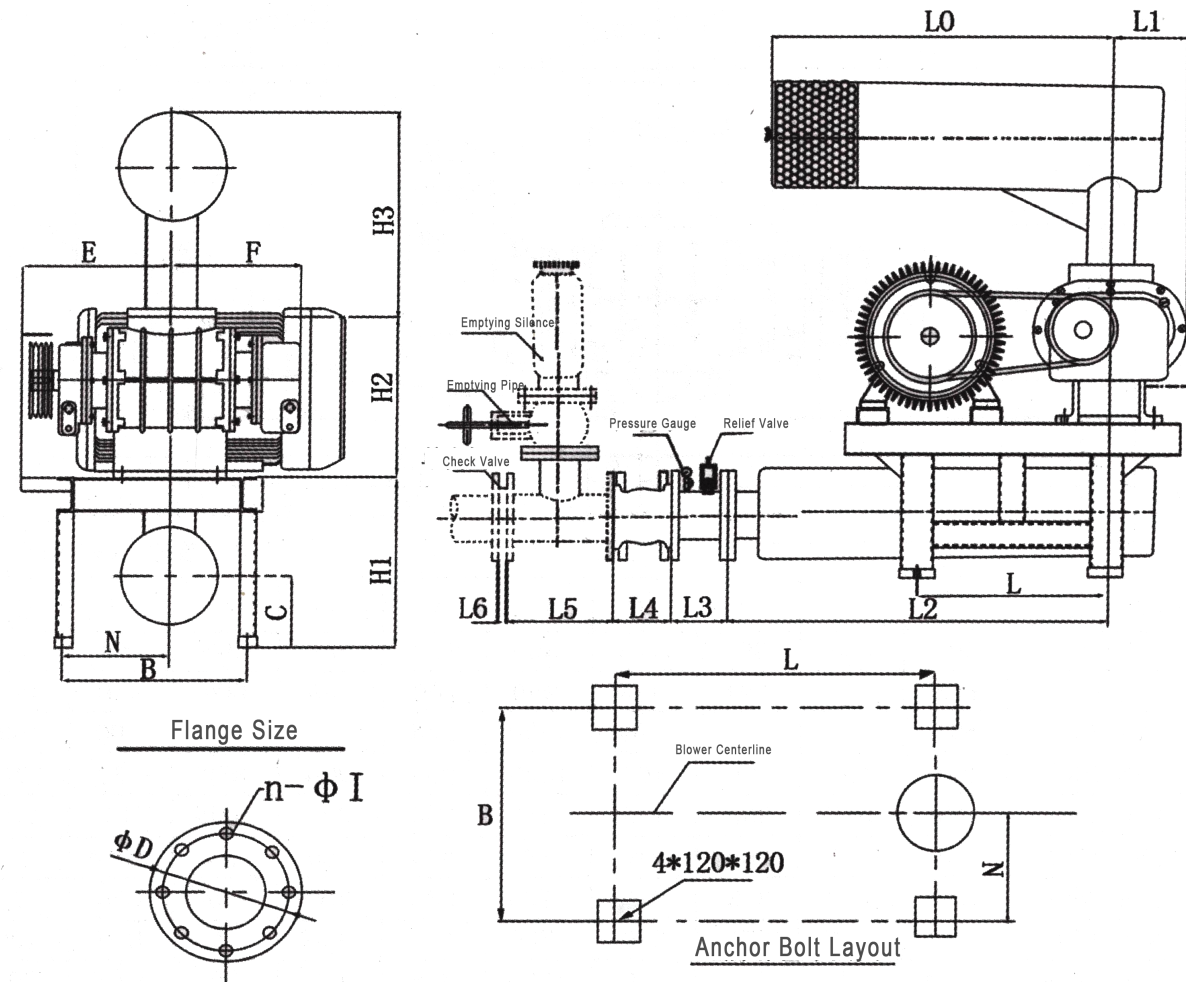
Model	Bore mm	RPM	Performance Datasheet																													
			9.8KPA			19.6KPA			29.4KPA			39.2KPA			49KPA			58.8KPA			68.6KPA			78.4KPA			88.2KPA			98KPA		
			Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po
MJSR 80	80A	1230	3.66	1.05	1.5	3.15	1.56	2.2	3.29	2.49	3	3.15	3.11	4	3.03	3.98	5.5	2.92	4.66	5.5	2.82	5.43	7.5	2.73	6.21	7.5	2.54	6.98	7.5	2.35	7.76	11
		1300	3.80	1.12	1.5	3.59	1.64	2.2	3.43	2.46	3	3.29	3.28	4	3.17	4.10	5.5	3.06	4.92	5.5	2.96	5.74	7.5	2.87	6.56	7.5	2.78	7.58	11	2.61	8.20	11
		1360	3.91	1.11	1.5	3.70	1.72	2.2	3.54	2.58	3	3.40	3.43	4	3.28	4.29	5.5	3.17	5.15	5.5	3.07	6.01	7.5	2.98	6.86	7.5	2.89	7.72	11	2.70	8.58	11
		1460	4.26	1.19	1.5	4.05	2.17	3	3.88	3.10	4	3.75	3.99	5.5	3.63	4.61	5.5	3.52	5.53	7.5	3.32	6.45	7.5	3.23	7.47	11	3.04	8.29	11	2.81	9.21	11
		1560	4.70	1.10	1.5	4.49	2.21	3	4.33	2.96	4	4.12	3.94	5.5	3.97	4.92	5.5	3.77	5.91	7.5	3.57	6.89	7.5	3.42	7.87	11	3.23	8.86	11	3.03	9.84	11
		1650	4.60	1.56	2.2	4.48	2.29	3	4.34	3.13	4	4.24	4.17	5.5	4.15	5.51	7.5	4.03	6.25	7.5	3.68	7.59	11	3.55	8.33	11	3.40	9.37	11	3.09	10.50	15
		1730	5.11	1.30	2.2	4.82	2.39	3	4.68	3.28	4	4.55	4.37	5.5	4.40	5.46	7.5	4.26	6.55	7.5	4.16	7.64	11	4.06	8.73	11	3.98	9.82	11	3.65	11.91	15
		1820	5.51	1.58	2.2	5.30	2.95	4	5.13	3.98	5.5	5.00	4.59	5.5	4.88	5.74	7.5	4.77	6.89	7.5	4.47	8.04	11	4.28	9.18	11	4.09	10.83	15	3.92	11.48	15
		1900	5.59	1.54	2.2	5.37	3.08	4	5.21	4.05	5.5	5.08	4.80	5.5	4.96	5.99	7.5	4.85	7.59	11	4.75	8.39	11	4.65	9.59	11	4.53	10.98	15	4.38	11.98	15
		2100	6.28	2.25	3	6.07	3.41	4	5.91	4.48	5.5	5.77	5.52	7.5	5.65	7.51	11	5.54	7.95	11	5.44	9.27	11	5.35	10.95	15	5.26	12.92	15	5.18	13.24	15
2300	6.43	2.47	3	6.26	3.50	5.5	6.10	4.85	5.5	5.97	5.80	7.5	5.85	7.25	11	5.74	8.70	11	5.64	10.15	11	5.54	11.60	15	5.46	13.92	18.5	5.37	15.36	18.5		
MJSR 100	100A	1140	5.02	1.78	2.2	4.74	2.26	3	4.51	3.39	4	4.33	4.52	5.5	4.16	5.65	7.5	4.02	6.78	7.5	3.88	7.91	11	3.75	9.04	11						
		1220	5.46	1.83	2.2	5.17	2.42	3	4.95	4.13	5.5	4.76	4.84	5.5	4.60	6.05	7.5	4.45	7.46	11	4.32	8.46	11	4.19	9.67	11						
		1310	5.85	1.46	2.2	5.56	2.92	4	5.34	3.90	5.5	5.16	5.46	7.5	4.99	6.49	7.5	4.84	7.79	11	4.71	9.09	11	4.52	10.39	15						
		1460	6.67	2.03	3	6.38	3.25	4	6.16	4.34	5.5	5.97	5.79	7.5	5.81	7.24	11	5.66	8.68	11	5.53	10.13	15	5.40	11.58	15						
		1540	7.11	2.12	3	6.82	4.04	5.5	6.60	4.58	5.5	6.41	6.11	7.5	6.25	7.63	11	6.10	9.16	11	5.96	10.68	15	5.84	12.21	15						
		1680	7.77	2.28	3	7.48	3.95	5.5	7.26	5.62	7.5	7.08	6.66	7.5	6.91	8.33	11	6.76	10.50	15	6.63	11.65	15	6.50	13.32	15						
		1780	8.22	3.19	4	7.93	4.53	5.5	7.71	5.99	7.5	7.52	7.46	11	7.36	8.82	11	7.21	10.58	15	7.07	12.35	15	6.95	15.11	18.5						
		1880	8.76	3.10	4	8.47	4.73	5.5	8.25	5.59	7.5	8.07	7.75	11	7.90	9.32	11	7.76	11.18	15	7.62	13.04	15	7.49	14.90	18.5						
		1980	9.31	3.29	4	9.02	5.40	7.5	8.80	6.19	7.5	8.61	7.85	11	8.45	10.39	15	8.30	11.77	15	8.16	13.73	15	8.04	15.70	18.5						
		2100	9.76	4.41	5.5	9.48	5.76	7.5	9.25	7.49	11	9.07	8.33	11	8.90	10.41	15	8.76	12.49	15	8.62	14.57	18.5	8.49	16.65	18.5						
2200	10.31	4.51	5.5	10.06	5.60	7.5	9.85	8.41	11	9.71	8.72	11	9.55	11.54	15	9.40	13.08	15	9.27	15.26	18.5	9.14	17.44	18.5								
MJSR 125	125A	980	6.61	3.07	4	6.23	4.17	5.5	5.93	4.71	5.5	5.68	5.48	7.5	5.46	6.85	7.5	5.26	8.22	11	5.08	9.59	11	4.91	10.96	15						
		1200	8.30	3.12	4	7.92	4.31	5.5	7.62	5.66	7.5	7.38	6.71	7.5	7.16	8.39	11	6.96	10.06	11	6.78	11.74	15	6.61	13.42	15	6.45	15.09	18.5	6.30	16.77	18.5
		1310	9.15	3.05	4	8.77	4.71	5.5	8.47	5.79	7.5	8.22	7.32	11	8.00	9.16	11	7.80	10.99	15	7.62	12.82	15	7.45	14.65	18.5	7.29	16.48	18.5	7.14	18.45	22
		1390	9.77	3.12	4	9.38	3.89	5.5	9.09	5.83	7.5	8.81	7.77	11	8.62	9.72	11	8.42	11.66	15	8.24	14.40	18.5	8.07	15.54	18.5	7.91	17.88	22	7.76	19.43	22
		1450	10.03	3.11	4	9.64	4.56	5.5	9.35	6.08	7.5	9.10	8.11	11	8.89	10.53	15	8.68	12.16	15	8.50	14.69	18.5	8.33	16.21	18.5	8.17	18.24	22	8.02	20.26	22
		1530	10.54	2.96	4	10.16	5.56	7.5	9.86	7.52	11	9.62	8.56	11	9.40	10.69	15	9.20	12.83	15	9.02	14.97	18.5	8.85	17.49	22	8.69	19.24	22	8.54	21.38	30
		1630	11.21	2.93	4	10.83	6.13	7.5	10.53	7.69	11	10.29	9.11	11	10.07	11.39	15	9.87	14.67	18.5	9.69	15.95	18.5	9.52	18.22	22	9.36	21.45	30	9.21	22.78	30
		1750	11.94	4.15	5.5	11.55	6.28	7.5	11.26	8.26	11	11.01	10.36	15	10.79	12.23	15	10.59	14.68	18.5	10.41	17.82	22	10.24	19.57	22	10.08	22.01	30	9.93	24.46	30
		1850	12.61	4.18	5.5	12.22	7.46	11	11.93	9.76	11	11.68	11.34	15	11.46	14.29	18.5	11.26	15.51	18.5	11.08	18.10	22	10.91	20.68	30	10.75	23.27	30	10.60	25.85	30
		2000	13.66	6.03	7.5	13.28	8.03	11	12.98	10.45	15	12.73	11.18	15	12.51	15.98	18.5	12.32	17.77	22	12.13	20.57	30	11.96	22.36	30	11.80	25.15	30	11.65	31.59	37

## MJSR Series Roots Blower Performance Datasheet

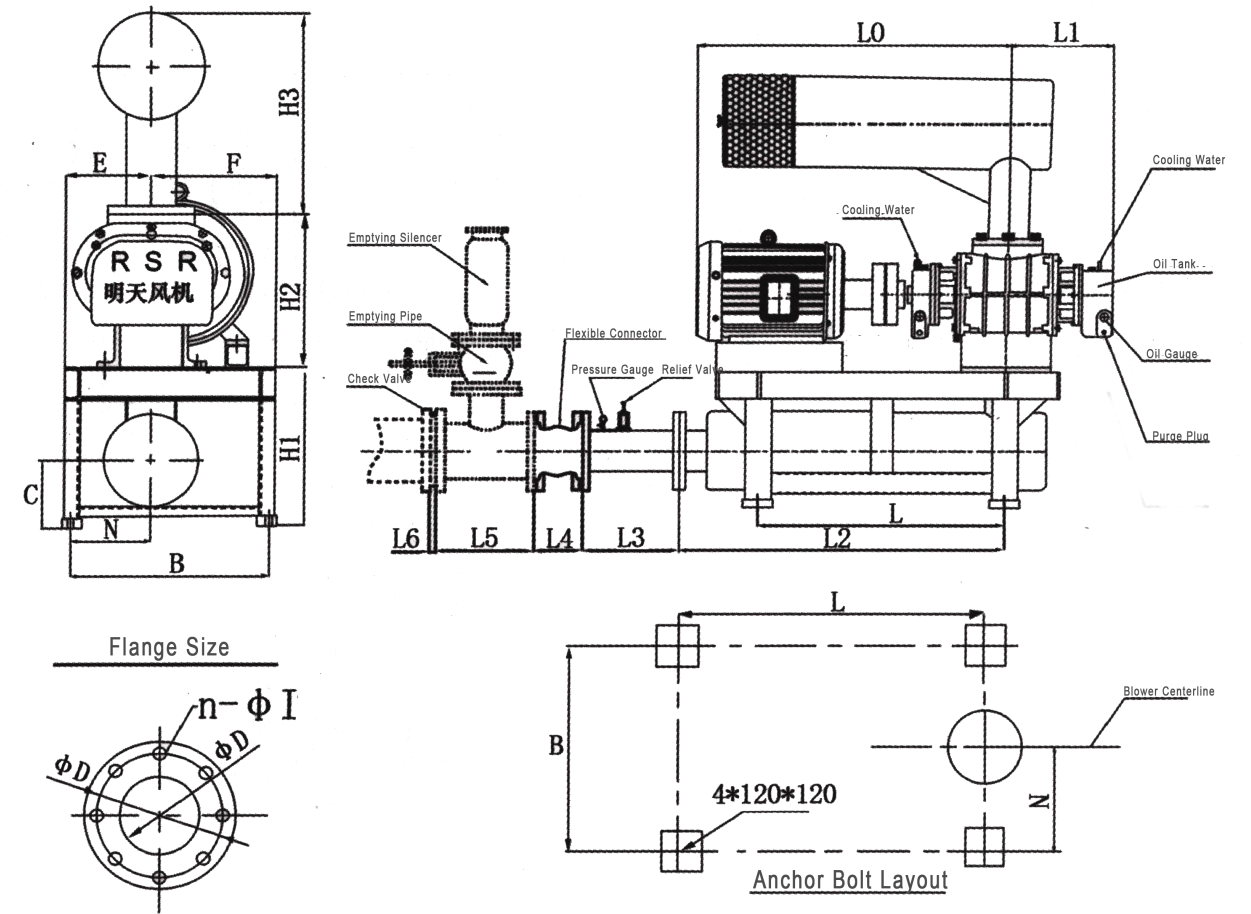
Qs: Inlet Airflow (m<sup>3</sup>/min.) La: Blower Shaft Power(Kw) Po: Motor Power(Kw)

Model	Bore mm	RPM	Performance Datasheet																													
			9.8KPA			19.6KPA			29.4KPA			39.2KPA			49KPA			58.8KPA			68.6KPA			78.4KPA			88.2KPA			98KPA		
			Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po	Qs	La	Po
MJSR 150	150A	970	15.05	4.27	5.5	14.38	7.92	11	14.06	10.57	15	13.72	13.06	15	13.55	16.32	18.5	13.39	19.58	22	13.13	22.85	30	12.97	26.11	30	12.81	29.37	37	12.63	32.64	37
		1100	17.34	5.80	7.5	17.10	7.47	11	16.75	11.21	15	16.32	14.94	18.5	15.96	18.68	22	15.79	22.41	30	15.57	26.14	30	15.37	29.88	37	15.19	33.61	37	14.93	37.35	45
		1180	18.66	5.51	7.5	18.32	10.21	15	17.99	11.91	15	17.70	16.82	22	17.46	21.02	30	17.23	23.82	30	17.02	27.79	30	16.82	31.76	37	16.50	35.73	45	16.25	39.70	45
		1240	19.55	5.61	7.5	19.37	11.02	15	19.03	14.08	18.5	18.83	17.66	22	18.65	21.86	30	18.43	25.03	30	18.11	29.21	37	17.93	33.38	37	17.62	37.55	45	17.34	43.72	55
		1400	22.32	7.70	11	22.05	13.05	15	21.82	18.17	22	21.60	21.20	30	21.43	23.55	30	21.07	28.46	37	20.93	35.07	45	20.73	37.68	45	20.48	43.39	55	20.12	47.10	55
		1470	24.23	7.42	11	24.08	14.84	18.5	23.82	19.08	22	23.61	22.95	30	23.44	24.73	30	23.09	29.68	37	22.01	35.62	45	21.88	39.57	45	21.65	44.51	55	21.38	49.46	55
		1620	26.31	11.81	15	25.55	17.35	22	25.23	21.03	30	25.03	23.09	30	24.88	32.86	37	24.53	35.63	45	24.35	44.92	55	24.13	48.60	55	23.86	53.19	75	23.63	55.12	75
		1730	27.81	14.58	18.5	27.16	19.47	22	26.88	22.45	30	26.62	30.19	37	26.42	32.82	37	26.21	37.93	45	26.04	45.14	55	25.72	51.39	75	25.55	55.47	75	25.31	61.21	75
1900	30.19	11.51	15	29.75	23.01	30	29.55	28.76	37	29.23	34.53	37	29.15	40.84	45	28.84	45.61	55	28.55	49.75	55	28.29	54.14	75	28.05	57.53	75	27.86	63.92	75		
MJSR 175A	150A	970	19.05	5.25	7.5	17.9	8.16	11	17.01	12.24	15	16.31	16.32	18.5	15.6	22.4	30	14.9	24.48	30	14.42	29.56	37	14.01	34.91	45	13.88	39.27	45			
		1150	23.1	6.21	7.5	21.98	11.61	15	20.95	14.51	18.5	20.34	20.35	22	19.62	24.18	30	18.91	29.02	37	18.33	33.86	37	17.86	40.96	45	17.19	46.08	55			
		1450	30.65	7.32	11	29.48	12.2	15	28.61	18.3	22	27.87	24.4	30	27.18	30.49	37	26.61	36.59	45	25.95	43.69	55	25.36	51.65	75	24.85	58.11	75			
		1750	37.32	7.56	11	36.05	16.72	18.5	35.15	22.08	30	34.45	29.44	37	33.75	36.8	45	33.04	44.16	55	32.61	53.52	75									
		2000	42.78	11.09	15	41.67	18.83	22	40.78	25.24	30	39.95	33.65	37	39.26	42.06	45	38.68	50.47	55												
MJSR 200H	200A	970	32.1	8.3	11	31.0	16.5	18.5	30.1	23.2	30	29.1	25.7	30	28.2	32.2	37	27.8	38.6	45	27.2	45.0	55	26.6	53.4	75	26.3	57.9	75	25.7	64.3	75
		1170	39.9	10.6	15	38.7	18.6	22	37.7	27.9	37	36.8	35.8		36.0	38.8	45	35.4	46.5	55	34.7	54.3	75	34.4	62.0	75	33.8	69.8	90	33.5	77.5	90
		1250	42.8	11.5	15	41.7	18.6	22	40.7	29.0	37	39.7	40.1	45	38.9	44.4	55	38.4	54.7	75	36.7	57.0	75	36.1	60.3	75	35.7	75.6	90	35.4	86.8	110
		1350	46.5	11.1	15	45.3	23.1	30	44.4	30.8	37	43.7	41.8	45	42.7	44.7	55	42.2	53.7	75	41.6	62.6	75	41.1	74.6	90	40.6	80.5	90	40.3	89.5	110
		1450	50.2	10.8	15	49.0	24.7	30	48.1	32.4	37	47.4	38.4	45	46.7	48.1	55	46.1	57.7	75	45.5	67.3	75	45.0	76.9	90	44.6	89.5	110	44.1	96.1	110
MJSR 200	200A	970	39.1	10.6	15	38.4	18.4	22	37.7	24.7	30	37.1	32.9	37	36.5	44.1	55	35.7	49.3	55	35.0	57.6	75	34.3	65.8	75	33.7	77.0	90	33.0	82.2	90
		1150	46.8	14.7	18.5	45.9	21.7	30	45.4	29.0	37	45.0	38.6	45	44.1	48.2	55	43.5	57.9	75	43.1	67.5	75	42.6	77.2	90	42.1	86.8	110	41.0	96.5	110
		1230	50.7	18.3	22	49.1	25.6	30	48.6	35.8	45	48.1	44.3	55	47.4	54.6	75	46.8	61.9	75	46.6	74.2	90	46.2	82.6	90	45.7	92.9	110	44.8	103.2	110
		1390	55.5	18.3	22	55.2	28.2	37	54.9	41.0	45	54.5	54.5	75	54.0	68.3	75	53.6	74.0	90	53.1	81.6	90	52.9	93.3	110	52.5	105.0	110	52.0	116.6	132
		1480	59.3	19.0	22	58.8	28.9	37	58.4	44.9	55	58.1	55.9	75	57.7	64.1	75	57.5	74.5	90	57.1	86.9	110	56.9	99.3	110	56.5	111.7	132	56.0	126.2	160

### MJSR Series Belt Drive Drawings



### MJSR Series Coupling Drive Drawings



Model	L	B	L0	L1	L2	L3	L4	L5	L6	Nd	Ns	C	Ed	Es	F	H1	H2	H3	D	nΦI
MJSR80	500	360	700	175	800	150	135	320	19	165	220	150	245	300	240	375	305	420	160	8-18
MJSR100	520	470	750	175	1050	150	150	320	19	205	260	160	285	340	280	400	305	450	180	8-18
MJSR125	590	500	775	200	1100	150	165	320	21	200	260	185	290	356	290	450	370	453	210	8-18
MJSR150A	600	590	1050	240	1200	180	180	400	24	215	295	210	335	400	320	500	470	600	240	8-22
MJSR150	600	590	1050	240	1200	180	180	400	24	270	335	210	390	450	375	500	440	600	240	8-22
MJSR200H	760	755	1320	330	1700	225	190	400	29	325	400	250	485	555	465	580	570	730	295	8-22
MJSR200	760	755	1320	330	1700	225	190	400	29	380	460	250	536	605	515	580	570	730	295	8-22

Model	L	B	L0	L1	L2	L3	L4	L5	L6	N	C	E	F	H1	H2	H3	D	nΦI
MJSR80	500	450	780	240	800	150	135	320	19	190	150	190	260	375	305	420	160	8-18
MJSR100	600	450	820	280	1050	150	150	320	19	190	160	190	260	400	305	450	180	8-18
MJSR125	640	540	1000	290	1100	150	165	320	21	220	185	220	320	450	370	453	210	8-18
MJSR150A	860	650	1000	320	1200	180	180	400	24	265	210	265	320	500	470	600	240	8-22
MJSR150	860	650	1200	375	1200	180	180	400	24	265	210	265	385	500	470	600	240	8-22
MJSR200H	1240	755	1560	465	1700	225	190	400	29	320	250	320	530	580	570	730	295	8-22
MJSR200	1240	755	1700	515	1700	225	190	400	29	320	250	320	435	580	570	730	295	8-22

## Roots Blower Applications

<b>Water Treatment</b>  Blowers are used to purify water and stir up sediment at water treatment plants.	<b>Incinerators</b>  Blowers enhance combustion efficiency and promote the removal of exhaust gases.	<b>Cleaning of Pipes</b>  Blowers can be used to remove dust and iron particles when piping is replaced or periodically checked. They can also be used to supply various kinds of coating material to the interior of pipes.	<b>Air Blower</b>  Here blower is used to blow off drops of water clinging to surfaces of cans, bottles, machine parts, etc. Air blowers can also be used as sources of cooling or drying air.
<b>Plating Bath</b>  Plating quality can be enhanced by using a blower to circulate electrolytes in the plating bath to give the plating a more uniform thickness. Here blowers serve as the source of air supply.	<b>Ozonizer</b>  This blower is used as the air supply source for a high-concentration ozonizer.	<b>Snow Machine</b>  Ski resorts use blowers for pneumatic transport with artificial snow machines.	<b>Fermentation</b>  The stream of air provided by the blower promotes the fermentation of livestock excrement, etc., for efficient composting.
<b>Atomization of Detergent</b>  Blowers conserve energy at car washes by atomizing water and detergent.	<b>Paper Feed for Printer</b>  Air discharged from blowers facilitates the separation of sheets of paper as well as their distribution in neat piles after printing.	<b>Frozen Food</b>  Blowers are useful in the stir-freezing of frozen foods in water.	<b>Aquaculture Oxygen Supply</b>  Aquafarms producing all sorts of fish and shellfish use blowers to oxygenate and circulate the water in tanks. Blowers are also used for aquariums and live fish tanks.
<b>Sand Blasting</b>  Provides a concentrated blast of air for use in sandblasting.	<b>Airlift Pump</b>  Bubbles formed by air jet lift water through the pipe by reducing the specific gravity of sewage.	<b>Press</b>  Blower is used for lift when removing molded products from the press.	<b>Medical Treatment Bath</b>  Blowers supply the air that creates the whirlpool in a Jacuzzi hot tub. Many health centers and other facilities have introduced whirlpool baths for their therapeutic effects.
<b>Back Washing</b>  Blowers are used to optimize filter and filter material performance by backwashing.	<b>Drying Line</b>  Our blowers are used to good effect in small-scale drying lines.	<b>Particle Transportation</b>  Blower is used for the pneumatic conveyance of pelletized raw materials such as vinyl chloride and polyethylene (The vacuum method will work here as well).	<b>Special Gas</b>  Blowers serve vital functions in the supply of city gas, etc.

## Roots Blower Applications

<b>Food Processing</b>  Vacuum conditions are useful in the seasoning of foods.	<b>Vacuum Drying</b>  Here, a Roots-type vacuum pump that can collect solvent drainage is ideal (used with drainage pot).	<b>Vacuum Drying</b>  Used to vacuum dry the moisture.	<b>Leak Testes</b>  Can be used in tests of airtightness.
<b>Vacuum Packing of Food</b>  Vacuum packing keeps foods such as meat and vegetables fresh.	<b>Freeze Drying</b>  Freshness and quality of vegetables and other foods can also be preserved by freezing the foods in tanks under vacuum conditions.	<b>Sterilization Apparatus</b>  Our pumps are used as vacuum sources in sterilizers.	<b>Concentration/Distillation</b>  In these processes, liquids are made more concentrated by evaporation, or the vapor produced is cooled and returned once again to liquid state.
<b>Adsorption Conveyance</b>  Adsorption conveyance by vacuum pump is well suited to heavy materials such as steel plates and easily breakable materials such as glass. Energy savings are promoted by the elimination of gripping operations.	<b>Particle Transport</b>  Used in the conveyance of rice, wheat, soybeans, resin pellets, etc.	<b>Soil Remediation</b>  Used in the decontamination of soil and groundwater.	<b>Combustion Gas Recovery</b>  Also used in the desulfurization of high-temperature combustion gas and flue gas.
<b>Vacuum Molding</b>  Roots-type vacuum pumps are used as vacuum sources for vacuum molders used with resins, etc. (trap attached).	<b>Vacuum Defoaming</b>  Product quality is improved for chemicals and pharmaceuticals by using a Roots-type vacuum pump to remove air bubbles by defoaming under vacuum.	<b>Impregnation</b>  In this setup, our pumps first produce a vacuum in the tank and then supply high pressure to facilitate the impregnation of parts with liquids or gases.	
<b>Experiments</b>  Dry vacuum pumps can be used to create a "space environment" on Earth by producing a vacuum state within a space chamber.	<b>VPSA/PSA</b>  This configuration shows a blower used in combination with a vacuum pump.	<b>Heat Treatment</b>  Reaction furnaces for heat treatment need to be airtight so that no oil or air will become admixed with the reactants. Roots-type vacuum pumps can meet this need.	

Company & Workshop



Office Building



Agma CNC Center



Hanchuan Lathe



Ready Delivery Roots Blower



Workshop



Workshop



Workshop



Workshop

MJSR Series Roots Blower

