Delivery Premium Quality Fans Globally for Healthier Breathing

World's Largest Selection of Fan Products
World's Most Comprehensive Fan Solutions

LONGWELL®
Turn to Experts - HVAC&R

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CE RoHS compliant Intertek BSCI ISO EAC UL LVD

LONGWELL®
Turn to Experts - HVAC&R

LONGWELL TECHNOLOGY

"Born for High-Quality Breathing
LONGWELL Fans Power Your Equipments"

Professional Manufacturer of HVACR Fan & Motors

—— Roots Blower

Longwell Group
Longwell-China
Longwell-USA
Longwell-Russia
Longwell-Europe

Ningbo Longwell Electric Technology Co., Ltd
https://www.longwellfans.com Email:sales@zjlongwell.com

About Longwell

Born for High-Quality Breathing, LONGWELL Fans Power Your Equipment

OEM for Well-Known Brands | **Supplies Fortune 500 Companies** | **Global Technical Support**

LONGWELL is a leading fan manufacturer, specializing in high-quality fans, blowers, motors, and components for heating, ventilation, air conditioning, and refrigeration applications. We have a strong presence in delivery capabilities, design and R&D capabilities, as well as manufacturing, placing us at the forefront of the industry.

Our product range includes EC/DC/AC centrifugal fans, axial fans, AC/BLDC cross-flow fans, single/double forward curved fans, AC/BLDC/ECM motors, and industrial fan blowers. Since our establishment in 1990, we have continuously upgraded our facilities and production capacity, boasting advanced testing labs and production facilities with an annual capacity of millions of fans. With over 20 years of experience, we are highly skilled in the design, development, and manufacture of fans and motors. We export to over 30 countries and serve numerous Fortune 500 clients.

Our facilities and products are compliant with certifications such as ISO9001, ISO14001, BSCI, CE, UL/ETL, CCC, EMC, and LVD. These certifications demonstrate our compliance in quality management, environmental management, social responsibility, and product safety. We are quality-oriented and dedicated to providing products and services that meet international standards.

Equipped with advanced testing labs and production facilities, including a B&K noise lab, CFD simulation lab, air dynamics test chambers, automatic welding machines, CNC machining centers, and auto robot injection machines, we ensure efficient production and on-time delivery.

As industry leaders, we prioritize technological innovation and efficiency. We employ advanced technologies such as aerodynamics principles and CFD simulation to ensure precise and efficient fan designs. Additionally, we offer customized services to design and manufacture fan systems according to specific customer requirements. Our focus is on providing high-tech, high-efficiency products that meet our customers' needs and contribute to a better future.

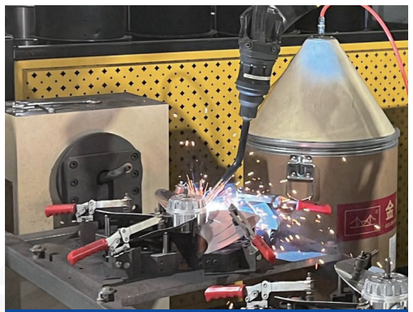
At LONGWELL, innovation is at the core of our operations, driving continuous improvement. With our extensive experience and expertise, we can quickly customize solutions that meet customer needs. We emphasize technological sophistication, utilizing advanced technologies and high-performance materials to deliver products that are efficient, safe, and reliable. Our brand is widely recognized globally, and we are committed to promoting sustainable development and advancing the efficient fan industry.

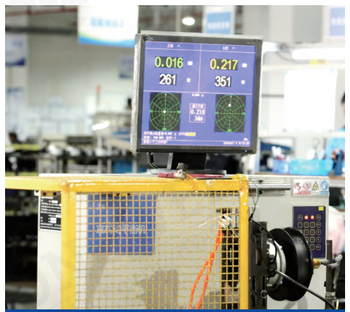
LONGWELL looks forward to collaborating with you and providing high-quality customized fan and motor solutions. Please feel free to contact us as we work together to create a brighter future.

193	40000㎡	500+	1Million+PCS	6	50+
Staff	Floor Space	Branding Clients	Annual Outputs	Overseas Offices on Spot Support	Members R&D Team


B&K Noise Testing Lab


Production Line


Automatic Welding



Balance Machine


Automatic Welding Machine


Production Line - Centrifugal Fan


Automatic CNC Machine


Air Dynamic Test Lab


Production Line - Axial Fans


Production Line

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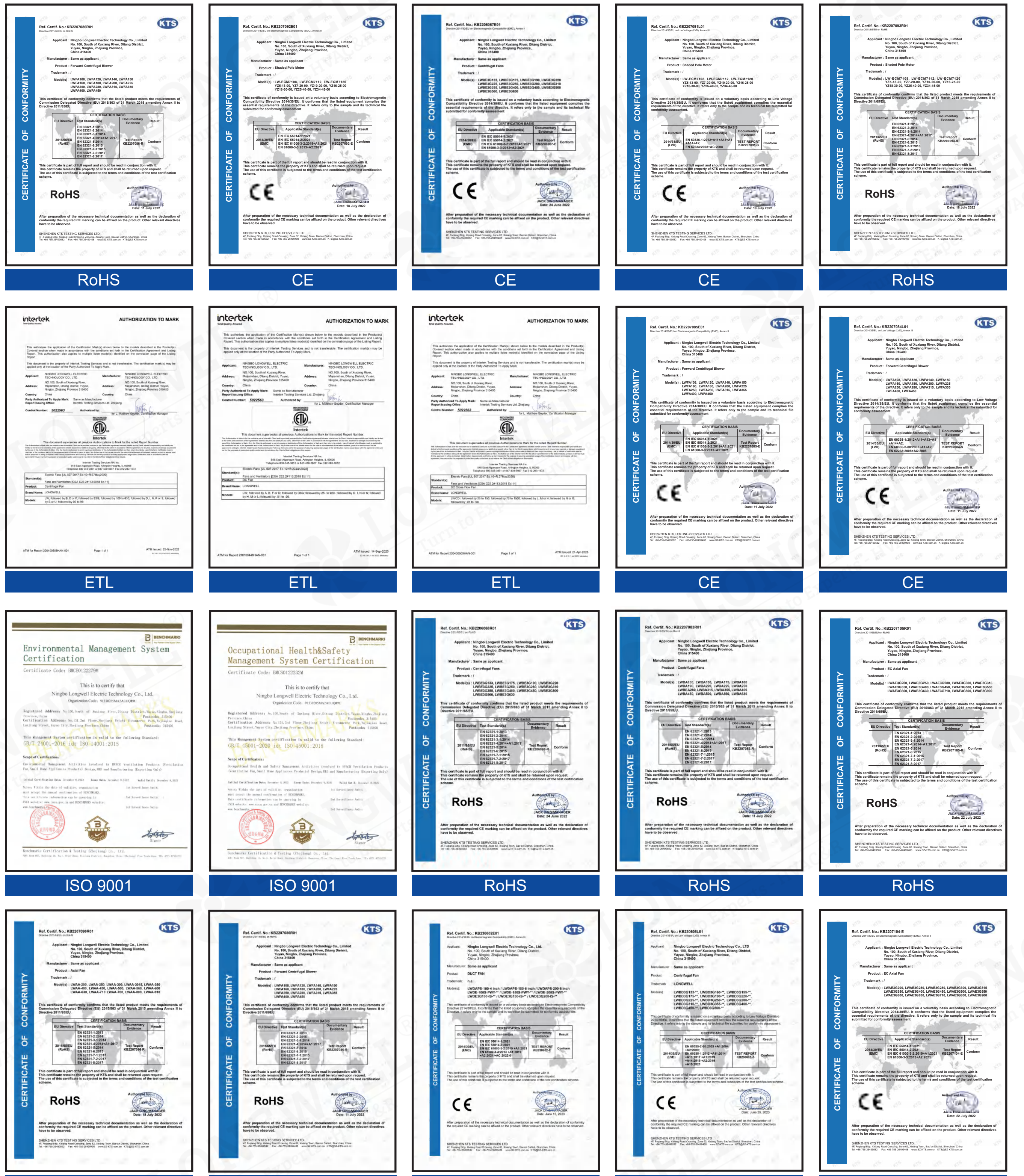
Testing and Standards

- ISO GB/T 19001-2016 idt ISO 9001:2015/GB/T 24001-2016 idt ISO 14001:2015/GB/T 45001-2020 idt ISO 45001:2018
- UL 507:2017 Ed.10+R:27/CSA C22.2#113:2018 Ed.11
- BSCI ANSI C63.4:2014/ANSI C63.4a-2017
- EN IEC 55014-1:2021/EN IEC 55014-2:2021/EN IEC 61000-3-2:2019 +A1:2021
  EN 61000-3-3:2013 +A1:2019 +A2:2021 +AC:2022-01
  EN 60335-2-80:2003 +A1:2004 +A2:2009;
  EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019+A14:2019 +A2:2019+A15:2021
  EN 62321-1:2013/EN 62321-2:2014/EN 62321-3-1:2014
  EN 62321-4:2014+A1:2017/EN 62321-5:2014/EN 62321-6:2015
  EN 62321-7-1:2015/EN 62321-7-2:2017/EN 62321-8:2017

Enterprise Credit Evaluation Certificate - Hightest Level in China

Own-Brand | Own-Brand | ETL | ETL | CE



RoHS | CE | CE | CE | RoHS

ETL | ETL | ETL | CE | CE

ISO 9001 | ISO 9001 | RoHS | RoHS | RoHS

RoHS | RoHS | CE | CE | CE

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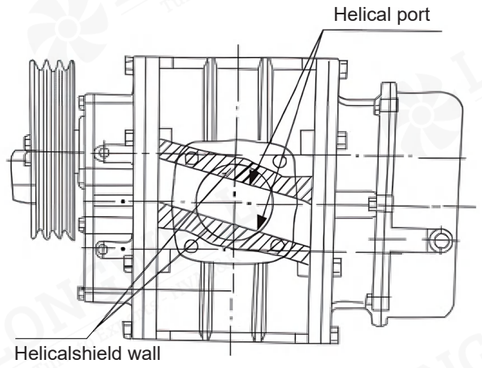
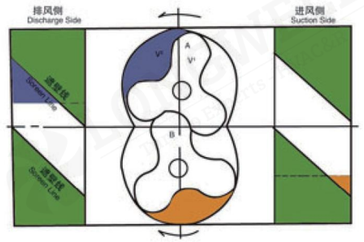
The Working Principle of The LWSR Type Fan

The fan casing contains 2 sets of three-lobe impellers,driven by a pair of synchronous gears to perform reciprocating operation in opposite directions. The inlet port has a volume of V^1. Due to the rotation of the impellers, a low-pressur zone is formed, simultaneously drawing in air with a volume of V^2. As the resistance at the outlet increases, high-pressure gas is generated and then discharged. Since there is a certain clearan between the impellers and between the impellers and the casing, with no friction involved, the fan can operate continuously for extended periods. The following explains the key aspects of the spiral-shaped features of this fan.

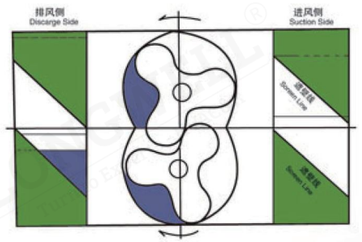




(1)

Rotor A: On the intake side, the entire width of the rotor is open and begins to progressively close. On the discharge side, it is progressively opening and has passed the halfway point of opening.

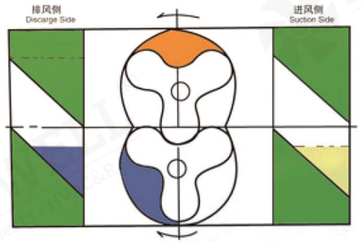
Rotor B: On the intake side, it is progressively closing and nearing full closure. On the discharge side, it is not yet open but is about to begin opening.



(2)

Rotor A: On the intake side, the entire rotor is now somewhat more closed than in position(1). The triangular holes indicated by the slanted lines are progressively shrinking along the casing cover line.On the discharge side, the exhaust process has been completed.

Rotor B:On the intake side, the rotor is about to reach the casing cover line. On the discharge side, during the exhaust process, the triangular holes are progressively opening.



(3)

Rotor A: Both the intake side and the discharge side are in a closed state, but the discharge side is about to begin opening.

Rotor B: The intake side has just started the closing process and is progressively closing, while the discharge side has progressively opened and is about to reach a fully open state.

LWSR Blower Specifications and Unit Conversion Table

- Each fan model is accompanied by performance charts and standard specifications, making it easy to select the appropriate model.
- The main fan unit, including accessories, is standardized and supported by a well-established mass production system, enabling us to meet your requirements promptly at any time.
- Thanks to its optimized spiral structure and the use of a silencer equipped with a matched silent air filter, the operating noise of the fan is significantly lower than before.
- The rotors are fully machined precision components, dynamically balanced during manufacturing to ensure minimal vibration.
- The compact design reduces the installation footprint.

LWSR Model Main Specifications

- Fan Port Diameter: 40-350mm
- Air Volume: 0.44-210m³/min
- Pressure: 9.8-150kPa
- Motor Power: /

Standard Accessories

- Ventilated base
- Belt guard
- Fan pulley, motor pulley, belt
- Silencer
- Safety valve
- Pressure gauge
- Anchor bolts
- Special accessories (provided as per contract requirements)
- Discharge silencer
- Gear oil
- Check valve
- Flexible connector

LWSR Model Performance Chart Description:

The performance chart illustrates the relationship between the fan model, port diameter, speed, discharge pressure, air volume, and required power.

The air volume shown in the performance chart is based on the standard intake conditions.

The standard conditions refer to a temperature of 20°C, an absolute pressure of 1.0332 kgf/cm² [101.3 kPa], and a relative humidity of 65%.

The air volume under reference conditions (temperature 0°C, absolute pressure 1.0332 kgf/cm² [101.3 kPa]) is generally expressed in Nm³/min. When the intake pressure remains the same, it can be converted to the air volume under standard conditions using the following formula.

$Q_S=Q_N\times1.0732$

Q_S=Air volume under standard conditions (m³/min)

Q_N=Air volume under reference conditions (m³/min)

The air volume under discharge conditions can be converted to that under standard conditions using the following formula.

$$Q_S=Q_d\frac{1.0332+Pd}{1.0332}\times\frac{273+ts}{273+td}$$

Qd: Discharge air volume (m³/min)

P_d: Discharge pressure (kgf/cm²)

t_s: Inlet air temperature (℃)

t_d: Discharge temperature (℃)

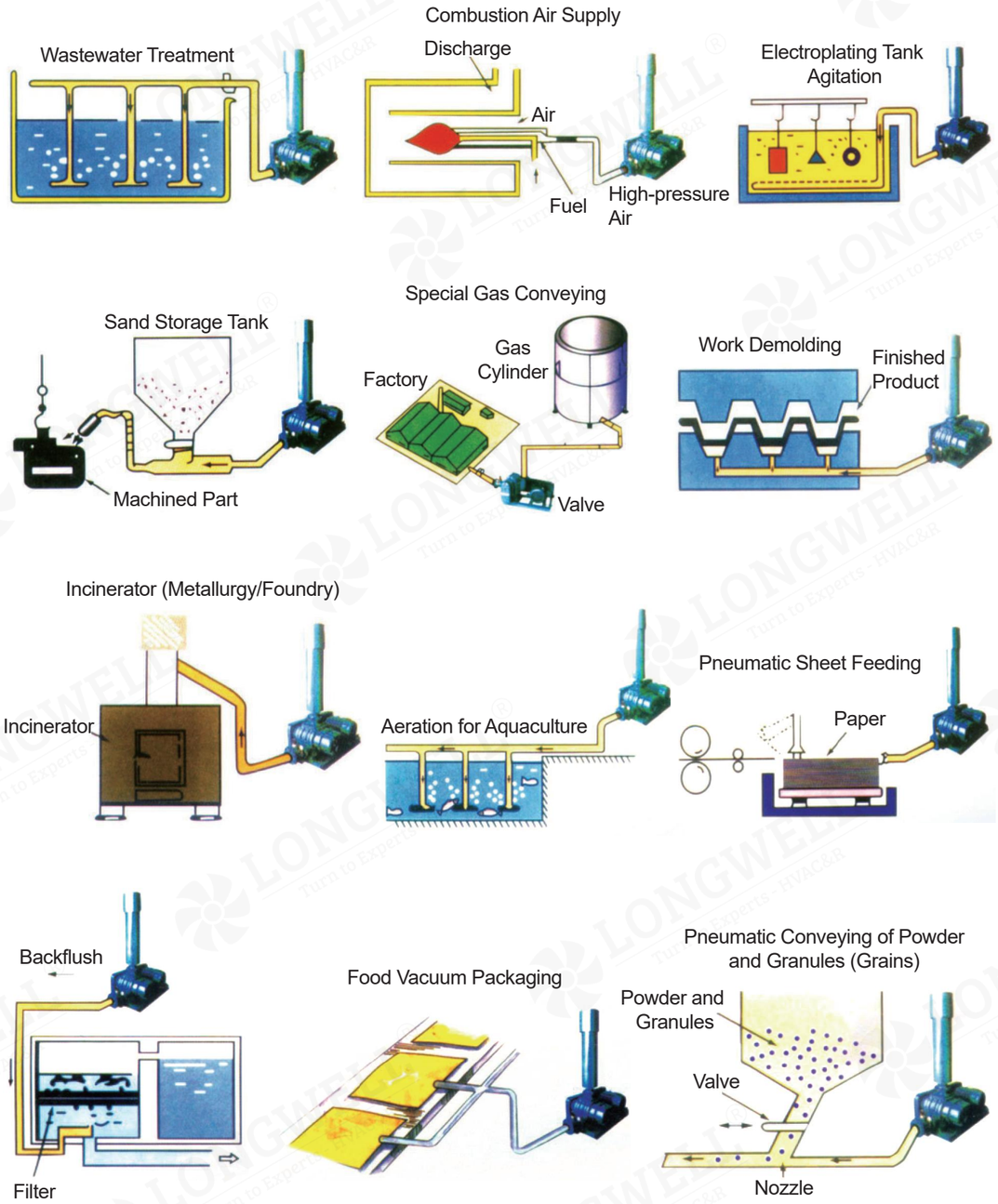
Based on the results obtained above, determine the required discharge pressure, and then refer to the performance chart to select the appropriate fan model, port diameter, rotational speed, and required power.

The performance chart uses different colors to indicate different motor output power ratings. Users should select a motor with the corresponding power rating.

The selection ranges for some fan models may overlap. From an economic perspective, it is advisable to choose a smaller fan model; from a noise control perspective, a larger fan model is recommended.

	Pa	Bar	kgf/cm²	Atm	MnH_2O	MmHg(Torr)
Pressure	1	1×10^{-5}	1.01972×10^{-5}	9.86923×10^{-6}	1.01972×10^{-1}	7.50062×10^{-3}
	1×10^{5}	1	1.01972	9.86923×10^{-1}	1.01972×10^{4}	7.50062×10^{2}
	9.80665×10^{4}	9.80665×10^{-1}	1	9.67841×10^{-1}	1×10^{4}	7.35559×10^{2}
	1.01325×10^{5}	1.01325	1.01325	1	1.03323×10^{4}	7.60000×10^{2}
	9.80665	9.80665×10^{-5}	1×10^{-4}	9.67841×10^{-5}	1	7.35559×10^{-2}
	1.33322×10^{2}	1.33322×10^{-3}	1.35951×10^{-3}	1.31579×10^{-3}	1.35951×10^{1}	1

Roots Blower Use Example



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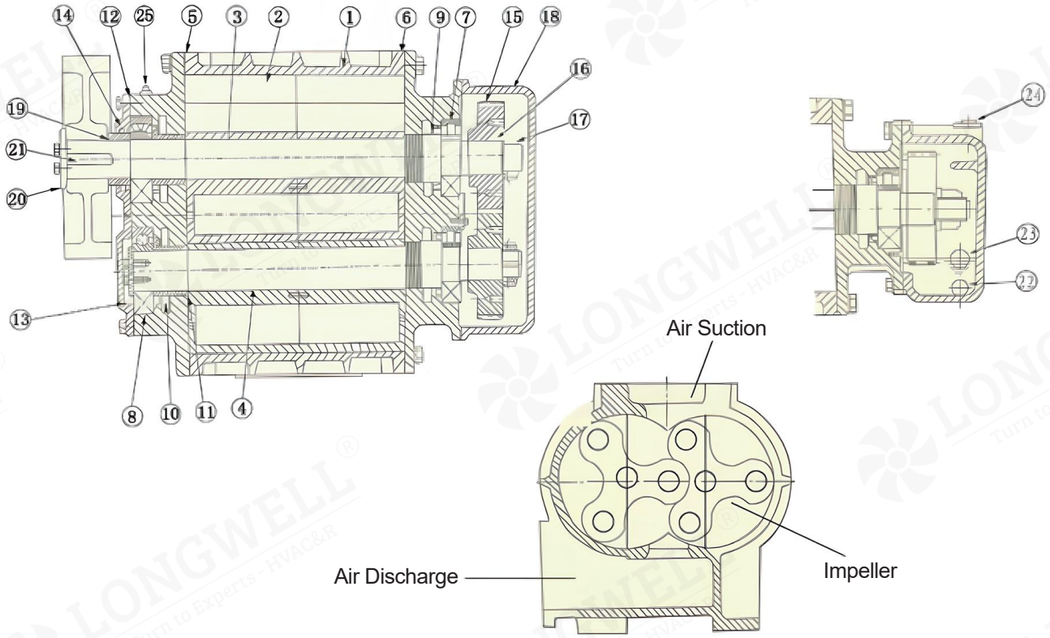
Drawing of LWSR Wind Turbine



No.	Name	Material	Qty	No.	Name	Material	Qty
1	Casing	HT200	1	14	Labiate Seal	Nitrile rubber	1
2	Impeller	QT400	2	15	Gear	20CrMnti	2
3	Drive Shaft	45	1	16	Gear Lock Nut	45	2
4	Driven Shaft	45	1	17	Gear Lock Washer	Q235	2
5	Side Cover(Drive Side)	HT200	1	18	Gear Case	HT200	1
6	Side Cover(Gear Side)	HT200	1	19	Collar	45	1
7	Bearing (Drive Side)	GCr15	2	20	End Plate	Q235	1
8	Bearing (Driven Side)	GCr15	2	21	Parallel Key	45	1
9	Stop Ring (Gear Side)	Nitrile rubber	2	22	Drain Plug	35	1
10	Stop Ring(Gear Side)	Nitrile rubber	2	23	Oil Gauge	/	1
11	Seal Bushings	45	2	24	Air Breather	45	1
12	Bearing Cover(Drive Side)	HT200	1	25	Grease Nipple	C3604	2
13	Bearing Cover(Driven Side)	HT200	1				

LWSR Series Blower Performance Table

Model	Bore (mm)	Speed (RPM)	Discharge Pressure(kgf/cm²)										
			0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60
			9.8kPa	14.7kPa	19.6kPa	24.5kPa	29.4kPa	34.3kPa	39.2kPa	44.1kPa	49kPa	53.9kPa	58.8kPa
			Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La
LWSR 50A	50	1100	1.22 0.30	1.16 0.44	1.12 0.52	1.05 0.66	0.99 0.78	0.93 0.92	0.90 1.04	0.85 1.18	0.78 1.32	0.72 1.54	0.63 1.77
		1123	1.38 0.38	1.31 0.52	1.27 0.64	1.20 0.78	1.44 0.92	1.28 1.06	1.05 1.20	1.00 1.35	0.94 1.49	0.90 1.64	0.86 1.83
		1350	1.53 0.44	1.46 0.60	1.42 0.74	1.34 0.88	1.28 1.04	1.23 1.19	1.19 1.34	1.14 1.50	1.09 1.65	1.05 1.82	0.97 2.01
		1450	1.66 0.50	1.58 0.67	1.54 0.82	1.46 0.98	1.40 1.14	1.34 1.30	1.30 1.47	1.25 1.62	1.20 1.79	1.16 1.96	1.14 2.15
		1530	1.75 0.56	1.68 0.74	1.63 0.90	1.55 1.06	1.49 1.24	1.43 1.40	1.39 1.58	1.35 1.75	1.30 1.92	1.26 2.10	1.24 2.29
		1640	1.89 0.64	1.81 0.84	1.76 1.01	1.68 1.18	1.62 1.37	1.56 1.55	1.52 1.74	1.47 1.91	1.43 2.10	1.40 2.29	1.38 2.49
		1730	2.00 0.71	1.92 0.92	1.87 1.10	1.79 1.28	1.73 1.48	1.66 1.67	1.62 1.86	1.57 2.05	1.53 2.25	1.50 2.45	1.48 2.66
		1840	2.13 0.80	2.05 1.01	2.00 1.20	1.92 1.40	1.86 1.62	1.79 1.81	1.75 2.02	1.70 2.22	1.67 2.43	1.64 2.64	1.62 2.86
		1950	2.27 0.89	2.19 1.11	2.13 1.32	2.05 1.52	1.99 1.75	1.92 1.95	1.88 2.18	1.83 2.39	1.81 2.61	1.77 2.83	1.75 3.06
		2120	2.48 1.02	2.39 1.26	2.33 1.49	2.25 1.71	2.19 1.96	2.12 2.18	2.08 2.42	2.03 2.65	2.01 2.89	1.98 3.13	1.96 3.37
LWSR 65A	65	1100	1.67 0.38	1.57 0.60	1.48 0.80	1.40 0.99	1.32 1.16	1.25 1.35	1.18 1.52	1.12 1.72	1.07 1.82	0.10 2.02	0.92 2.25
		1240	1.92 0.48	1.82 0.70	1.73 0.92	1.65 1.12	1.59 1.33	1.51 1.53	1.44 1.74	1.38 1.96	1.32 2.10	1.27 2.30	1.17 2.58
		1360	2.16 0.56	2.06 0.81	1.97 1.04	1.89 1.24	1.82 1.48	1.75 1.71	1.68 1.94	1.62 2.18	1.56 2.35	1.51 2.58	1.45 2.80
		1450	2.31 0.63	2.22 0.88	2.14 1.12	2.07 1.34	2.00 1.30	1.93 1.85	1.86 2.10	1.80 2.32	1.74 2.54	1.69 2.78	1.63 3.00
		1530	2.45 0.70	2.36 0.96	2.28 1.20	2.21 1.45	2.14 1.72	2.08 1.98	2.02 2.25	1.96 2.50	1.90 2.72	1.84 2.96	1.79 3.20
		1640	2.66 0.80	2.57 1.08	2.49 1.33	2.42 1.60	2.36 1.89	2.30 2.17	2.24 2.46	2.18 2.73	2.12 2.95	2.06 3.22	2.01 3.46
		1740	2.86 0.89	2.77 1.18	2.69 1.46	2.62 1.74	2.56 2.04	2.50 2.34	2.44 2.64	2.38 2.94	2.32 3.16	2.26 3.45	2.21 3.70
		1820	3.02 0.96	2.93 1.27	2.85 1.56	2.78 1.86	2.72 2.16	2.66 2.46	2.60 2.79	2.54 3.10	2.48 3.33	2.42 3.63	2.37 3.90
		1940	3.26 1.07	3.17 1.40	3.09 1.71	3.02 2.03	2.96 2.35	2.90 2.69	2.83 3.02	2.77 3.35	2.71 3.59	2.66 3.90	2.61 4.20
		2130	3.64 1.24	3.55 1.60	3.47 1.95	3.40 2.30	3.33 2.65	3.27 3.00	3.21 3.35	3.15 3.72	3.09 4.00	3.04 4.34	2.99 4.66
LWSR 80A	80	1140	3.09 1.04	3.00 1.32	2.90 1.60	2.84 1.98	2.78 2.14	2.71 2.43	2.63 2.69	2.54 3.00	2.48 3.22	2.40 3.47	2.36 3.74
		1230	3.37 1.14	3.28 1.46	3.18 1.76	3.10 2.06	3.06 2.35	2.99 2.65	2.91 6.94	2.82 3.27	2.76 3.63	2.68 3.81	2.63 4.11
		1300	3.59 1.22	3.50 1.57	3.41 1.89	3.33 2.21	3.27 2.51	3.20 2.83	3.12 3.14	3.03 3.49	2.97 3.77	2.90 4.09	2.84 4.41
		1360	3.77 1.29	3.68 1.66	3.59 1.99	3.52 2.33	3.46 2.64	3.38 2.98	3.30 3.31	3.22 3.67	3.16 3.98	3.09 4.30	3.02 4.65
		1460	4.08 1.40	3.99 1.81	3.90 2.17	3.82 2.54	3.76 2.87	3.69 3.23	3.62 3.60	3.53 3.98	3.46 4.32	3.40 4.69	3.34 5.06
		1560	4.38 1.52	4.30 1.97	4.21 2.32	4.14 2.74	4.17 3.10	4.00 3.49	3.93 3.88	3.84 4.29	3.77 4.66	3.71 5.07	3.65 5.48
		1650	4.66 1.62	4.57 2.11	4.48 2.50	4.41 2.92	4.36 3.31	4.28 3.71	4.20 4.14	4.12 4.56	4.05 4.98	3.98 5.40	3.92 5.85
		1730	4.90 1.71	4.82 2.23	4.73 2.64	4.67 3.08	4.60 3.50	4.53 3.92	4.46 4.36	4.38 4.80	4.30 5.26	4.24 5.74	4.15 6.18
		1820	5.18 1.81	5.10 2.37	5.00 2.80	4.94 3.27	4.88 3.70	4.81 4.15	4.74 4.62	4.65 5.08	4.58 5.57	4.52 6.06	4.45 6.56
		1900	5.43 1.91	5.35 2.50	5.27 2.95	5.19 3.44	5.12 3.88	5.06 4.35	4.99 4.86	4.89 5.33	4.82 5.84	4.77 6.36	4.70 6.88

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

0.75KW 1.1KW 1.5KW 2.2KW 3KW 4KW 5.5KW 7.5KW 11KW 15KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

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LWSR Series Blower Performance Table

Model	Speed (RPM)	Discharge Pressure(kgf/cm²)																					
		0.10		0.15		0.20		0.25		0.30		0.35		0.40		0.45		0.50		0.55		0.60	
		9.8kPa		14.7kPa		19.6kPa		24.5kPa		29.4kPa		34.3kPa		39.2kPa		44.1kPa		49kPa		53.9kPa		58.8kPa	
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
LWSR 100A Bore 100mm	1060	4.57	1.35	4.40	1.80	4.24	2.23	4.09	2.70	3.95	3.10	3.82	3.57	3.70	4.00	3.59	4.48	3.48	4.95	3.38	5.40	3.28	5.86
	1140	4.97	1.52	4.81	2.00	4.65	2.46	4.50	2.95	4.36	3.41	4.23	3.90	4.12	4.38	4.01	4.88	3.90	5.38	3.80	5.88	3.71	6.38
	1220	5.34	1.68	5.18	2.20	5.03	2.70	4.89	3.20	4.76	3.71	4.64	4.24	4.53	4.76	4.42	5.29	4.32	5.76	4.22	6.37	4.13	6.90
	1310	5.73	1.87	5.58	2.41	5.44	2.96	5.31	3.50	5.18	4.05	5.06	4.61	4.95	5.18	4.84	5.75	4.74	6.30	4.62	6.92	4.55	7.48
	1460	6.53	2.18	6.38	2.78	6.25	3.40	6.12	3.98	6.00	4.62	5.89	5.24	5.78	5.87	5.68	6.52	5.58	7.10	5.48	7.74	5.39	8.45
	1540	6.91	2.40	6.77	3.02	6.64	3.67	6.52	4.30	6.40	4.98	6.29	5.63	6.19	6.30	6.09	6.98	5.99	7.61	5.90	8.37	5.81	9.00
	1680	7.63	2.78	7.49	3.48	7.36	4.18	7.24	4.90	7.13	5.62	7.02	6.36	6.92	7.08	6.82	7.83	6.73	8.50	6.64	9.30	6.55	10.03
	1780	8.09	3.05	7.96	3.81	7.84	4.56	7.73	5.32	7.62	6.10	7.52	6.86	7.42	7.63	7.32	8.43	7.23	9.15	7.14	9.97	7.06	10.71
	1880	8.57	3.33	8.45	4.13	8.36	4.93	8.25	5.75	8.15	6.55	8.05	7.38	7.95	8.18	7.86	9.02	7.77	9.80	7.68	10.65	7.60	11.42
	1980	9.07	3.66	8.96	4.46	8.85	5.31	8.75	6.17	8.65	7.01	8.55	7.90	8.46	8.75	8.37	9.63	8.28	10.45	8.20	11.30	8.12	12.13
LWSR 125A Bore 125mm	980	6.50	1.65	6.30	2.23	6.15	2.80	6.05	3.45	5.95	4.10	5.82	4.70	5.75	5.40	5.64	6.10	5.55	6.70	5.47	7.20	5.37	8.05
	1050	6.95	1.90	6.78	2.54	6.63	3.15	6.51	3.85	6.42	4.53	6.30	5.20	6.22	5.95	6.11	6.65	6.03	7.03	5.95	7.90	5.85	8.75
	1200	8.00	2.50	7.80	3.20	7.65	3.92	7.55	4.70	7.45	5.50	7.34	6.28	7.25	7.10	7.15	7.90	7.00	8.65	6.98	9.40	6.90	10.25
	1310	8.75	2.90	8.55	3.65	8.40	4.50	8.29	5.35	8.19	6.20	8.09	7.05	8.00	7.90	7.90	8.80	7.82	9.65	7.74	10.05	7.64	11.40
	1390	9.30	3.20	9.10	4.00	8.95	4.90	8.84	5.80	8.74	6.70	8.63	7.60	8.54	8.50	8.45	9.45	8.37	10.35	8.28	11.25	8.20	12.20
	1450	9.72	3.45	9.50	4.25	9.35	5.20	9.25	6.15	9.15	7.10	9.05	8.05	8.95	9.00	8.85	9.90	8.77	10.90	8.70	11.80	8.60	12.80
	1530	10.27	3.80	10.07	4.70	9.90	5.65	9.80	6.65	9.70	7.65	9.60	8.60	9.50	9.60	9.40	10.60	9.33	11.60	9.25	12.60	9.15	13.60
	1630	10.96	4.30	10.75	5.20	10.57	6.25	10.47	7.25	10.37	8.35	10.27	9.35	10.17	10.35	10.08	11.35	10.01	12.40	9.93	13.50	9.85	14.60
	1750	11.78	4.90	11.55	5.80	11.38	6.95	11.29	7.95	11.18	9.18	11.09	10.20	10.99	11.26	10.91	12.33	10.83	13.38	10.75	14.70	10.66	15.80
	1850	12.48	5.40	12.25	6.36	12.05	7.55	11.97	8.57	11.85	9.88	11.70	10.94	11.66	12.02	11.58	13.12	11.50	14.20	11.42	15.60	11.34	16.85
LWSR 150A Bore 150mm	810	9.28	2.35	8.99	3.18	8.78	3.99	8.64	4.92	8.49	5.85	8.31	6.73	8.21	7.71	8.05	8.70	7.92	9.56	7.81	10.28	7.67	11.49
	860	9.83	2.68	9.59	3.59	9.37	4.45	9.21	5.44	9.08	6.40	8.91	7.35	8.80	8.41	8.64	9.40	8.53	9.94	8.62	11.17	8.28	12.38
	970	11.17	3.49	10.89	4.46	10.68	5.67	10.54	6.56	10.42	7.67	10.25	8.76	10.12	9.91	9.98	11.02	9.77	12.07	9.75	13.13	9.63	14.30
	1110	12.81	4.24	12.51	5.34	12.30	6.58	12.13	7.82	11.99	9.07	11.84	10.31	11.71	11.56	11.56	12.87	11.45	14.12	11.33	14.71	11.58	16.68
	1180	13.64	4.69	13.34	5.86	13.13	7.18	12.96	8.50	12.82	9.87	12.66	11.14	12.52	12.66	12.39	13.85	12.27	15.17	12.14	16.49	12.02	17.99
	1240	14.36	5.09	14.03	6.27	13.81	7.68	13.67	9.08	13.52	10.49	13.37	11.89	13.22	13.29	13.07	14.62	12.96	16.10	12.85	17.42	12.70	18.90
	1350	15.66	5.79	15.35	7.16	15.09	8.61	14.94	10.13	14.79	11.66	14.63	13.10	14.48	14.63	14.33	16.15	14.22	17.67	14.10	19.20	13.95	20.73
	1450	16.84	6.60	16.52	7.99	16.24	9.60	16.09	11.14	15.94	12.83	15.78	14.36	15.63	15.90	15.49	17.44	15.38	19.05	15.26	20.74	15.14	22.44
	1520	17.68	7.35	17.32	8.70	17.08	10.43	16.93	11.92	16.77	13.77	16.63	15.30	16.48	16.89	16.36	18.43	16.24	20.07	16.12	22.05	15.99	23.71
	1600	18.65	8.06	18.30	9.50	18.01	11.28	17.89	12.87	17.71	14.76	17.48	16.34	17.42	17.95	17.30	19.60	17.18	21.21	17.06	23.30	16.94	25.14

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

2.2KW 3KW 4KW 5.5KW 7.5KW 11KW 15KW 18.5KW 22KW 30KW 37KW 45KW 55KW 75KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

LWSR Series Blower Performance Table

Model	Speed (RPM)	Discharge Pressure(kgf/cm²)																					
		0.10		0.15		0.20		0.25		0.30		0.35		0.40		0.45		0.50		0.55		0.60	
		9.8kPa		14.7kPa		19.6kPa		24.5kPa		29.4kPa		34.3kPa		39.2kPa		44.1kPa		49kPa		53.9kPa		58.8kPa	
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
LWSR 150A Bore 150mm	810	12.01	3.85	11.76	5.00	11.54	6.20	11.35	7.30	11.15	8.50	11.00	9.60	10.86	10.80	10.76	11.95	10.65	13.20	10.52	14.40	10.39	15.60
	860	12.80	4.40	12.62	5.60	12.40	6.86	12.20	8.05	12.03	9.30	11.86	10.45	11.75	11.70	11.65	13.00	11.54	14.25	11.40	15.51	11.27	16.80
	970	14.70	5.58	14.50	7.00	14.30	8.30	14.10	9.66	13.95	11.05	13.80	12.40	13.70	13.80	13.60	15.20	13.50	16.60	13.35	18.00	13.23	19.40
	1110	17.08	7.00	16.90	8.60	16.70	10.15	16.52	11.70	16.37	13.10	16.25	14.80	16.15	16.50	16.05	18.00	15.95	19.60	15.85	21.20	15.70	22.80
	1180	18.25	7.80	18.10	9.45	17.92	11.10	17.73	12.70	17.59	14.40	17.47	16.00	17.37	17.80	17.27	19.40	17.17	21.10	17.07	22.80	16.97	24.40
	1240	19.27	8.45	19.10	10.20	19.95	11.90	18.77	13.60	18.63	15.40	18.53	17.07	18.43	18.90	18.33	20.70	18.23	22.40	18.13	24.20	18.03	25.80
	1400	22.00	10.20	21.83	12.10	21.70	14.00	21.55	15.95	21.40	17.90	21.30	19.91	21.20	21.90	21.15	23.85	21.05	25.80	20.97	27.90	20.87	29.70
	1520	23.93	11.65	23.80	13.80	23.68	15.90	23.52	18.00	23.40	20.15	23.30	22.30	23.21	24.60	23.13	26.70	23.04	28.90	22.95	31.20	22.82	33.30
	1620	25.42	13.40	25.30	15.60	25.15	18.00	25.00	20.40	24.86	22.60	24.75	25.00	24.68	27.40	24.58	29.65	24.48	32.05	24.40	34.40	24.27	36.90
	1730	27.05	15.30	26.92	17.60	26.77	20.20	26.61	22.90	26.48	25.30	26.35	27.90	26.27	30.40	26.17	33.00	26.08	35.55	26.00	38.00	25.87	40.80
LWSR 175A Bore 175mm	970	22.72	9.13	22.20	10.19	22.13	11.25	21.63	13.55	21.05	15.46	20.85	17.57	20.53	19.65	20.21	21.75	20.12	23.87	19.83	26.03	19.65	28.14
	1110	26.75	10.73	26.54	11.94	26.33	13.14	25.83	15.53	26.04	17.93	25.24	20.33	24.83	22.73	24.55	25.10	24.23	27.53	24.07	29.93	23.95	32.33
	1180	28.65	11.24	28.50	12.54	28.35	13.84	27.96	16.35	27.55	18.95	27.17	21.47	26.83	24.07	26.57	26.63	26.34	29.15	26.15	31.74	25.95	34.26
	1240	30.25	12.10	30.10	13.43	29.94	14.75	29.53	17.47	29.15	20.16	28.85	22.85	29.55	25.54	28.27	28.24	28.05	30.93	27.84	33.56	27.63	36.26
	1400	34.22	15.45	33.93	16.70	33.65	18.54	33.35	21.65	33.26	24.54	32.83	27.57	32.55	30.64	32.33	33.63	32.03	36.65	31.82	39.71	31.62	42.76
	1520	36.65	16.35	36.54	17.80	36.43	19.64	36.03	22.94	35.73	26.23	35.35	29.52	35.17	32.83	34.95	36.07	34.64	39.37	34.53	43.65	34.25	45.95
	1620	38.67	10.30	38.52	21.13	39.36	22.87	38.03	26.43	37.84	29.94	37.43	33.42	39.15	36.96	36.96	40.43	36.65	43.95	36.55	47.45	36.35	50.97
	1730	40.54	21.24	40.35	23.14	40.17	25.03	38.85	28.74	39.64	32.53	39.43	36.24	39.15	40.03	38.94	43.74	36.71	47.53	38.63	51.24	38.45	65.03
LWSR 200A Bore 200mm	810	31.77	8.05	31.19	11.28	30.52	14.65	29.98	17.60	29.55	20.68	29.21	23.83	28.89	26.94	28.57	29.22	28.22	33.16	27.91	36.05	27.63	39.05
	900	35.68	9.95	35.05	13.48	34.49	17.10	34.04	20.44	33.66	24.00	33.26	27.53	33.05	20.93	32.73	34.40	32.34	37.83	32.03	41.02	31.71	44.38
	980	39.15	11.58	38.53	15.50	38.08	19.38	37.66	22.93	37.34	27.18	37.05	30.78	36.77	34.55	36.41	38.23	36.03	42.02	35.68	45.53	35.34	49.38
	1070	43.03	13.46	42.50	17.81	42.04	21.24	41.68	25.82	41.44	30.13	41.17	34.43	40.97	38.88	40.56	42.65	40.15	46.82	39.77	50.71	39.42	54.95
	1150	46.50	15.18	46.04	19.95	45.55	23.71	45.31	28.13	45.07	32.71	44.85	37.26	44.60	42.02	44.21	46.62	43.78	50.98	43.42	55.09	43.06	59.74
	1230	49.60	17.09	49.16	21.94	48.74	26.43	48.45	31.28	48.22	36.26	48.00	41.25	47.78	46.08	47.49	50.78	47.08	55.53	46.76	59.83	46.44	64.80
	1310	52.67	19.65	52.22	24.34	51.86	29.20	51.57	34.28	51.38	39.66	51.18	44.88	50.99	50.18	50.69	55.09	50.40	59.96	50.10	64.53	49.83	69.72
	1390	55.77	21.31	54.31	26.64	54.96	31.88	54.72	37.46	54.49	42.92	54.35	48.52	54.16	54.22	53.91	59.28	53.68	64.48	53.49	69.16	53.24	74.60
	1480	59.20	23.80	58.83	28.96	58.46	34.37	58.24	40.42	58.02	46.58	57.89	42.36	57.76	58.19	57.57	63.62	57.37	68.88	57.22	74.22	57.08	80.18

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

2.2KW 3KW 4KW 5.5KW 7.5KW 11KW 15KW 18.5KW 22KW 30KW 37KW 45KW 55KW 75KW 90KW 110KW 132KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

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LWSR Series Blower Performance Table

Model	Speed (RPM)	Discharge Pressure(kgf/cm²)																			
		0.10		0.15		0.20		0.25		0.30		0.35		0.40		0.45		0.50		0.55	
		9.8kPa		14.7kPa		19.6kPa		24.5kPa		29.4kPa		34.3kPa		39.2kPa		44.1kPa		49kPa		53.9kPa	
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
LWSR 200A Bore 200mm	810	25.54	6.48	24.60	8.90	24.06	11.56	23.65	13.87	23.32	16.31	23.06	18.78	22.79	21.23	22.54	23.66	22.26	26.15	22.02	28.42
	900	28.13	7.86	27.64	10.64	27.18	13.49	26.84	16.12	26.58	18.95	26.33	21.73	26.08	24.37	25.82	27.13	25.50	29.81	25.21	32.27
	980	30.87	9.14	30.37	12.24	30.02	15.29	29.69	18.09	29.62	21.43	29.26	24.28	29.00	27.23	28.71	30.13	28.40	33.10	28.11	35.86
	1070	33.92	10.78	33.50	14.03	33.15	16.75	32.86	20.36	32.26	23.75	32.46	27.17	32.32	30.47	31.98	33.62	31.65	36.90	31.36	39.95
	1150	36.67	11.98	36.30	15.73	35.91	18.70	35.70	22.18	35.54	25.79	35.36	29.37	35.18	33.11	34.86	36.76	34.50	40.20	34.24	43.42
	1230	39.11	13.48	38.75	17.30	38.60	20.83	38.19	24.65	38.01	28.58	37.87	32.53	37.66	36.32	37.44	40.03	37.10	43.76	36.85	47.14
	1310	41.52	15.50	41.18	19.20	40.88	23.05	40.64	27.01	40.49	31.26	40.35	35.37	40.21	39.55	39.96	43.45	39.72	47.25	39.49	50.84
	1390	43.96	16.81	42.82	21.00	43.30	25.14	43.12	29.53	42.94	33.83	42.87	38.24	42.71	42.71	42.52	46.77	42.30	50.81	42.16	54.49
	1480	46.67	18.76	46.36	22.83	40.07	23.57	45.90	31.86	45.74	36.70	45.63	41.27	45.54	45.86	45.39	50.13	45.21	54.37	45.10	58.49
LWSR 230A Bore 200mm	810	41.43	10.52	40.69	14.73	39.80	19.12	39.12	22.95	38.58	26.98	38.13	31.06	37.69	35.12	37.29	39.15	36.82	43.26	36.41	47.00
	900	46.53	13.00	45.72	17.61	44.96	22.31	44.39	26.67	43.89	31.30	43.54	35.94	43.14	40.32	42.71	44.88	42.71	49.30	41.80	53.51
	980	51.06	15.12	50.23	20.24	49.65	45.30	49.11	29.04	48.66	35.44	48.40	40.16	47.97	45.05	47.49	49.84	46.97	54.74	46.50	59.32
	1070	56.10	17.85	55.41	23.21	54.83	27.71	54.32	33.68	54.02	39.29	53.69	44.94	53.46	50.41	52.89	55.61	52.35	61.04	51.87	66.08
	1150	60.65	19.81	60.14	26.01	59.39	30.93	59.05	36.69	58.79	42.67	58.49	48.58	58.19	54.77	57.65	60.80	57.05	66.48	56.62	71.81
	1230	64.68	22.30	64.09	28.62	63.52	34.46	63.17	40.78	62.87	47.28	62.63	53.80	62.28	60.06	61.92	66.21	61.37	72.39	60.95	77.97
	1310	68.66	25.64	68.05	31.76	67.61	38.12	67.22	44.69	66.97	51.71	66.74	58.50	66.50	65.41	66.08	71.86	65.69	78.14	65.32	84.10
	1390	72.70	27.80	70.83	34.75	70.55	41.68	70.32	48.33	70.00	55.67	69.75	63.10	69.20	69.61	69.06	75.89	69.00	85.58	67.75	89.14
	1480	77.19	31.03	76.68	37.77	76.20	44.83	75.92	52.70	75.65	60.70	75.47	68.26	75.32	75.85	75.08	82.92	74.78	89.94	74.59	96.73
LWSR 250A Bore 200mm	1100	57.74	19.97	57.26	26.94	56.90	32.37	56.65	37.84	56.42	43.89	56.22	49.65	55.99	55.52	55.65	60.95	55.42	66.39	55.13	71.50
	1160	60.89	22.96	60.39	28.41	60.01	34.14	59.74	39.91	59.51	46.29	59.30	42.36	59.05	58.55	58.69	64.28	58.46	70.02	58.14	75.40
	1210	63.52	23.95	63.00	29.64	62.60	35.62	62.32	41.64	62.08	48.29	61.86	54.62	61.60	61.08	61.23	67.06	60.99	73.04	60.65	78.65
	1260	66.15	24.94	65.61	30.87	65.19	37.10	64.90	43.37	64.65	50.29	64.42	56.88	64.15	63.61	63.77	69.84	63.52	76.06	63.16	81.90
	1310	68.78	25.93	68.22	32.10	67.78	38.58	67.48	45.15	67.22	52.29	66.98	59.14	66.70	66.14	66.31	72.62	66.05	79.08		
	1390	72.83	28.12	72.35	34.98	71.85	42.00	71.61	49.38	71.38	56.65	71.13	64.05	70.98	71.57	70.74	78.15	70.57	85.03		
	1480	77.55	31.41	77.04	38.17	76.51	45.30	76.25	53.34	76.01	61.40	75.74	69.07	75.60	76.70	75.33	83.97	75.14	90.97		

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

11KW 15KW 18.5KW 22KW 30KW 37KW 45KW 55KW 75KW 90KW
110KW 132KW 160KW 185KW 200KW 220KW 250KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

LWSR Series Blower Performance Table

Model	Speed (RPM)	Discharge Pressure(kgf/cm²)																			
		0.10		0.15		0.20		0.25		0.30		0.35		0.40		0.45		0.50		0.55	
		9.8kPa		14.7kPa		19.6kPa		24.5kPa		29.4kPa		34.3kPa		39.2kPa		44.1kPa		49kPa		53.9kPa	
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
LWSR 250A Bore 250mm	990	63.00	21.00	62.70	22.00	62.30	28.20	61.90	34.30	61.60	39.00	61.20	43.20	60.90	52.10	60.60	55.50	60.20	61.10	59.90	67.90
	1170	75.00	22.10	73.90	23.10	73.50	31.20	73.10	38.50	72.70	46.20	72.30	53.90	71.90	61.60	71.60	69.30	71.20	75.40	70.80	81.20
	1250	80.00	23.00	78.60	24.60	78.20	34.80	41.10	45.00	77.40	49.30	77.10	57.60	76.70	65.80	76.30	70.10	76.00	78.90	75.70	85.70
	1360	88.00	27.00	86.60	26.80	86.20	37.90	85.80	44.70	85.50	53.70	85.00	62.60	84.60	71.60	84.20	76.30	83.80	85.90	83.30	93.30
	1480	95.00	28.00	93.20	29.30	92.80	41.30	92.30	48.20	91.80	58.50	91.40	68.30	90.90	77.90	90.50	83.10	90.00	93.60	89.50	101.6
LWSR 300A Bore 300mm	990	89.30	26.40	89.10	29.20	88.90	32.00	88.70	46.10	88.50	55.30	88.30	64.30	88.10	73.40	87.90	73.20	87.60	77.10	87.40	94.30
	1170	108.0	27.30	106.5	35.50	105.0	43.70	104.7	54.40	104.0	65.00	104.1	75.90	103.8	86.40	103.5	90.60	103.2	101.1	102.9	110.1
	1250	114.8	28.10	113.5	37.40	112.2	46.70	112.0	58.20	111.8	69.80	111.6	81.30	111.4	92.80	111.2	97.80	111.0	108.8	110.8	119.6
	1360	127.0	34.00	126.0	43.00	125.0	52.10	124.8	64.50	124.6	77.50	124.4	90.70	124.2	103.4	124.0	109.1	123.8	121.3	123.6	133.5
	1480	138.1	35.00	137.0	45.50	135.9	56.20	135.8	70.60	135.6	84.30	135.3	98.60	135.1	112.5	134.9	118.7	134.7	132.1	134.5	145.3
LWSR 300B Bore 300mm	990	108.0	31.92	107.78	31.32	107.54	38.69	107.29	55.76	107.05	66.89	106.81	77.77	106.57	88.78	106.33	88.54	105.96	93.25	105.72	114.06
	1170	130.64	33.02	128.83	42.94	127.01	52.89	126.65	65.80	126.41	78.62	125.92	91.80	125.56	104.51	125.20	109.59	124.83	122.28	124.47	133.17
	1250	138.87	33.99	137.29	45.23	135.72	56.48	135.48	70.40	135.24	84.43	135	98.34	134.75	111.25	134.51	118.30	134.27	131.60	134.03	144.67
	1360	153.62	41.12	152.41	52.01	151.20	63.02	150.96	78.02	150.72	93.74	150.48	109.71	150.24	125.07	150	131.97	149.75	146.72	149.51	161.48
	1480	167.05	42.33	165.72	55.03	164.39	67.98	164.27	85.40	164.03	101.97	163.66	119.26	163.42	136.08	163.18	143.58	162.94	159.79	162.70	175.76
LWSR 300C Bore 300mm	990	122.40	36.17	121.26	39.73	121.87	43.84	121.59	63.19	121.32	75.80	121.05	88.13	120.77	100.60	120.50	100.33	120.08	105.67	119.81	129.26
	1170	148.05	37.42	146.00	48.62	143.94	59.94	143.43	74.51	143.26	89.09	142.70	104.03	142.30	118.44	141.89	124.19	141.47	138.58	141.06	150.91
	1250	157.38	38.40	155.59	51.25	153.81	64.00	153.54	79.78	153.27	95.68	153	111.45	152.71	126.07	152.44	134.06	152.17	149.14	151.90	163.95
	1360	174.10	46.60	172.73	58.94	171.36	71.42	171.08	88.41	170.87	106.27	170.27	124.33	170.27	141.74	170	149.56	169.71	166.27	169.44	183.05
	1480	189.32	47.97	187.81	62.36	186.30	77.04	186.17	96.78	185.90	115.08	185.48	135.16	185.20	154.21	184.93	162.71	184.66	181.09	184.39	199.19
LWSR 350 Bore 350mm	650	140.0	37.00	138.0	55.00	136.0	75.00	135.0	75.00	133.0	110.0	131.0	132.0	130.0	132.0	129.0	160.0	127.0	160.0	126.0	160.0
	730	157.0	45.00	155.0	75.00	153.0	90.00	151.0	90.00	149.0	110.0	148.0	132.0	147.0	132.0	145.0	160.0	144.0	185.0	143.0	185.0
	800	171.0	45.00	170.0	75.00	167.0	90.00	165.0	110.0	163.0	132.0	162.0	132.0	161.0	160.0	160.0	185.0	158.0	185.0	156.0	185.0
	880	188.0	55.00	186.0	75.00	185.0	90.00	182.0	110.0	180.0	132.0	178.0	160.0	177.0	160.0	176.0	185.0	175.0	185.0	174.0	200.0
	980	208.0	55.00	206.0	90.00	205.0	110.0	203.0	132.0	201.0	160.0	200.0	160.0	198.0	185.0	197.0	200.0	196.0	200.0	190.0	220.0

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

11KW 15KW 18.5KW 22KW 30KW 37KW 45KW 55KW 75KW 90KW
110KW 132KW 160KW 185KW 200KW 220KW 250KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

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LWSR Series Blower Performance Table

Model	Bore (mm)	Speed (RPM)	Discharge Pressure(kgf/cm²)							
			0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.0
			63.7kPa	68.6kPa	73.5kPa	78.4kPa	83.3kPa	88.2kPa	93.1kPa	98.0kPa
			Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La
LWSR 50A	50mm	1100	0.61 2.01	0.56 2.39	0.52 2.75	0.49 3.12	0.46 3.03	0.41 3.35	0.38 3.98	0.35 4.31
		1230	0.78 2.05	0.73 2.24	0.69 2.49	0.65 2.76	0.61 3.37	0.56 3.95	0.50 4.17	0.45 4.65
		1350	0.95 2.23	0.90 2.48	0.86 2.76	0.81 3.06	0.78 3.40	0.69 4.01	0.65 4.32	0.61 4.65
		1430	1.06 2.35	1.01 2.61	0.97 2.90	0.93 3.23	0.90 3.68	0.87 4.05	0.81 4.48	0.72 4.81
		1530	1.22 2.55	1.19 2.83	1.16 3.18	1.13 3.57	1.08 3.88	0.96 4.20	0.90 4.61	0.85 5.10
		1640	1.38 2.75	1.35 3.16	1.32 3.32	1.29 3.89	1.24 4.27	1.18 4.43	1.13 4.80	1.06 5.20
		1730	1.50 2.93	1.46 3.25	1.42 3.54	1.39 3.91	1.31 4.38	1.26 4.70	1.22 5.12	1.14 5.50
		1840	1.65 3.15	1.60 3.35	1.56 3.64	1.51 3.96	1.46 4.43	1.40 4.92	1.35 5.30	1.28 5.70
		1950	1.78 3.42	1.75 3.65	1.71 3.97	1.68 4.31	1.62 4.60	1.57 5.10	1.50 5.53	1.45 5.92
		2120	2.02 3.77	1.98 3.97	1.95 4.21	1.91 4.53	1.83 4.80	1.75 5.30	1.70 5.75	1.63 6.12
		2300	2.31 4.43	2.24 4.35	2.20 4.57	2.17 4.81	2.12 5.20	2.07 5.50	2.03 6.01	1.98 6.32
LWSR 65A	65mm	1100	0.89 2.52	0.85 2.86	0.80 3.22	0.76 3.58	0.71 3.94	0.66 4.30	0.62 4.66	0.57 5.02
		1240	1.13 2.89	1.08 3.17	1.03 3.49	0.98 3.84	0.93 4.20	0.88 4.56	0.83 4.92	0.78 5.28
		1360	1.39 3.08	1.34 3.42	1.28 3.76	1.23 4.13	1.17 4.40	1.12 4.75	1.06 5.11	1.01 5.47
		1440	1.60 3.35	1.55 3.68	1.51 4.05	1.46 4.45	1.41 4.85	1.35 5.20	1.29 5.56	1.23 5.92
		1530	1.74 3.50	1.69 3.80	1.64 4.14	1.59 4.49	1.53 5.10	1.48 5.40	1.42 5.71	1.37 6.05
		1640	1.98 3.74	1.92 4.06	1.86 4.42	1.81 4.80	1.75 5.25	1.70 5.40	1.65 5.78	1.60 6.10
		1740	2.18 4.13	2.12 4.59	2.06 5.05	2.01 5.55	1.92 5.80	1.84 6.10	1.75 6.35	1.70 6.50
		1820	2.34 4.36	2.27 4.75	2.20 5.15	2.13 5.74	2.10 6.10	2.08 6.40	2.03 6.63	2.00 6.90
		1940	2.57 4.71	2.52 5.03	2.47 5.59	2.42 6.21	2.38 6.43	2.31 6.60	2.27 7.00	2.24 7.30
		2130	2.96 5.22	2.89 5.54	2.84 5.86	2.78 6.30	2.70 6.62	2.65 6.91	2.60 7.20	2.53 7.55
		2300	3.09 5.72	3.06 6.14	3.01 6.58	2.95 6.89	2.88 7.10	2.83 7.33	2.77 7.51	2.70 7.82
LWSR 80A	80mm	1140	2.27 4.09	2.20 4.44	2.14 4.83	2.07 5.25	2.01 5.61	1.96 5.97	1.89 6.33	1.82 6.99
		1230	2.52 4.49	2.45 4.88	2.37 5.30	2.30 5.76	2.25 6.10	2.19 6.45	2.12 6.81	2.06 7.17
		1300	2.77 4.82	2.69 5.23	2.61 5.59	2.53 6.18	2.48 6.40	2.40 6.71	2.34 7.07	2.28 7.43
		1360	2.95 5.08	2.86 5.52	2.77 5.99	2.69 6.52	2.62 6.80	2.57 7.21	2.49 7.53	2.42 7.89
		1440	3.07 5.67	3.00 6.06	2.92 6.44	2.84 6.89	2.78 7.03	2.65 7.38	2.60 7.90	2.55 8.10
		1560	3.44 6.17	3.37 6.57	3.30 6.97	3.21 7.21	3.18 7.40	3.15 7.70	3.10 8.12	3.07 8.35
		1650	3.73 6.55	3.65 7.02	3.59 7.45	3.48 7.73	3.40 8.00	3.32 8.20	3.27 8.40	3.21 8.70
		1730	4.01 6.94	3.93 7.35	3.85 7.84	3.79 8.25	3.70 8.40	3.65 8.71	3.61 8.89	3.52 9.10
		1820	4.29 7.27	4.22 7.74	4.15 8.25	4.08 8.72	4.00 9.01	3.95 9.15	3.89 9.28	3.80 9.55
		1900	4.55 7.65	4.49 8.14	4.42 8.63	4.35 9.13	4.27 9.31	4.20 9.58	4.13 9.88	4.07 10.10
		2100	5.26 8.45	5.18 9.04	5.12 9.54	5.05 9.09	5.00 10.20	4.91 10.51	4.87 10.90	4.80 11.20
		2300	5.52 8.73	5.50 9.35	5.47 9.97	5.41 11.04	5.35 11.66	5.28 12.28	5.21 12.90	5.14 13.52

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

2.2KW 3KW 4KW 5.5KW 7.5KW 11KW 15KW 18.5KW 22KW 30KW
37KW 45KW 55KW 75KW 90KW 110KW 132KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

LWSR Series Blower Performance Table

Model	Bore (mm)	Speed (RPM)	Discharge Pressure(kgf/cm²)							
			0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.0
			63.7kPa	68.6kPa	73.5kPa	78.4kPa	83.3kPa	88.2kPa	93.1kPa	98.0kPa
			Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La	Qs La
LWSR 100AG	100mm	1060	3.17 6.36	3.09 6.91	3.01 7.51	2.94 8.17	2.87 8.53	2.79 8.89	2.72 9.25	2.65 9.61
		1140	3.65 6.90	3.58 7.51	3.65 8.15	3.72 8.66	3.65 8.90	3.60 9.10	3.54 9.50	3.48 9.86
		1220	4.06 7.52	3.98 8.18	3.90 8.88	3.83 9.65	3.75 10.10	3.68 10.40	3.61 10.76	3.54 11.11
		1310	4.43 8.15	4.35 8.75	4.26 9.62	4.18 10.56	4.10 10.82	4.03 11.50	3.90 11.71	3.82 12.10
		1460	5.28 9.23	5.19 9.85	5.10 10.40	4.99 10.91	4.75 11.32	4.61 11.85	4.48 12.30	4.30 12.75
		1540	5.70 9.75	5.64 10.46	5.55 11.12	5.43 10.96	5.21 11.98	5.00 12.21	4.83 12.80	4.68 13.20
		1680	6.44 10.77	6.35 11.53	6.25 12.21	6.16 12.63	6.00 12.90	5.85 13.20	5.71 13.67	5.49 14.10
		1780	6.59 11.52	6.87 12.34	6.83 13.07	6.75 13.44	6.55 13.92	6.38 14.10	6.10 14.52	5.91 14.88
		1880	7.55 12.25	7.45 13.05	7.33 13.86	7.24 14.26	7.09 14.58	6.90 14.93	6.73 15.20	6.51 15.69
		1980	8.06 13.05	7.92 13.87	7.85 14.72	7.75 15.27	7.58 15.61	7.40 16.02	7.21 16.60	7.03 17.20
		2100	8.65 13.85	8.55 14.70	8.49 15.62	8.40 16.02	8.25 16.62	8.07 17.13	7.93 17.66	7.71 18.20
		2200	9.17 14.57	9.14 15.46	9.04 16.42	8.92 16.95	8.72 17.40	8.61 17.98	8.47 18.33	8.21 18.98
LWSR 125AG	125mm	980	5.24 8.92	5.14 9.81	5.04 10.89	4.93 12.10	4.86 13.20	4.78 14.10	4.71 15.30	4.64 16.40
		1050	5.54 9.71	5.43 10.78	5.32 11.98	5.21 13.01	5.11 14.08	5.01 15.11	4.92 16.01	4.80 16.40
		1200	6.83 11.05	6.74 11.82	6.66 12.55	6.54 13.33	6.43 14.61	6.32 15.58	6.23 16.57	6.15 17.90
		1310	7.55 12.22	7.45 13.13	7.39 13.92	7.34 14.83	7.25 15.85	7.17 16.86	7.09 17.87	6.99 18.80
		1390	8.14 13.14	8.06 14.04	7.92 14.91	7.85 15.82	7.61 16.20	7.52 17.21	7.43 18.23	7.34 19.25
		1460	8.50 13.73	8.45 14.67	8.33 15.62	8.24 16.55	8.08 17.10	7.90 17.72	7.73 18.20	7.53 19.80
		1530	9.05 14.63	8.95 15.62	8.87 16.63	8.82 17.62	8.61 18.01	8.48 18.71	8.21 19.40	8.00 20.10
		1630	9.75 15.65	9.65 16.73	9.55 17.82	9.45 18.95	9.31 19.60	9.15 20.30	8.93 20.98	8.80 21.60
		1750	10.55 16.94	10.45 18.06	10.35 19.14	10.25 20.25	10.05 21.00	9.87 21.80	9.80 22.35	9.62 23.10
		1850	11.23 18.05	11.13 19.24	11.04 20.37	10.94 21.45	10.78 22.10	10.61 22.98	10.45 23.70	10.27 24.20
LWSR 150AG	150mm	810	10.26 17.16	10.16 18.86	10.06 20.73	9.96 22.78	9.86 24.38	9.75 25.98	9.64 27.28	9.53 28.58
		860	11.16 17.77	11.03 18.97	10.85 20.87	10.73 24.37	10.62 25.67	10.51 26.97	10.40 28.27	10.29 28.57
		970	13.12 21.45	12.95 22.93	12.86 24.34	12.73 25.82	12.51 26.50	12.39 29.01	12.25 30.36	12.12 33.71
		1110	15.55 25.07	15.46 26.74	15.33 28.45	15.15 30.07	15.00 32.60	14.78 35.00	14.56 37.21	14.50 39.35
		1180	16.86 26.34	16.73 28.22	16.55 30.15	16.43 31.84	16.27 33.20	16.10 36.30	15.89 40.10	15.71 44.23
		1240	17.92 27.73	17.75 29.55	17.66 31.43	17.53 33.17	17.21 36.21	17.10 39.38	16.80 44.45	16.63 47.78
		1400	20.76 33.34	20.63 35.85	20.45 37.97	20.33 40.13	20.11 43.00	19.87 46.10	19.63 49.80	19.48 52.00
		1470	21.92 34.57	21.82 36.92	21.69 39.12	21.52 41.33	21.30 44.80	21.11 47.10	20.90 50.90	20.71 54.00
		1620	24.12 40.07	24.04 43.32	23.85 45.83	23.73 48.25	23.50 51.10	23.31 54.00	23.13 57.80	22.90 60.10
		1730	25.76 44.85	25.64 47.63	25.45 50.27	25.32 52.95	25.14 55.95	25.00 58.10	24.80 61.00	24.61 65.00
		1730	28.35 47.83	28.15 50.54	27.97 53.35	27.92 56.43	27.71 59.23	27.58 62.01	27.39 65.30	27.11 69.01

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

2.2KW 3KW 4KW 5.5KW 7.5KW 11KW 15KW 18.5KW 22KW 30KW
37KW 45KW 55KW 75KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

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LWSR Series Blower Performance Table

Model	Bore (mm)	Speed (RPM)	Discharge Pressure(kgf/cm²)													
			0.65		0.70		0.75		0.80		0.85		0.90		0.95		1.0	
			63.7kPa		68.6kPa		73.5kPa		78.4kPa		83.3kPa		88.2kPa		93.1kPa		98.0kPa	
			Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
LWSR 200AG	200mm	810	27.26	47.34	26.93	45.35	26.62	48.52	26.33	51.73	26.12	55.00	25.90	58.20	25.59	61.40	25.28	64.61
		900	31.45	47.64	31.14	51.23	30.85	54.52	30.54	57.85	30.21	60.80	29.90	64.01	28.89	67.21	28.58	70.41
		980	35.05	53.03	34.72	56.75	34.38	60.55	34.05	64.23	33.80	66.80	33.62	69.10	33.27	72.30	32.92	75.51
		1070	39.35	58.83	39.13	63.73	38.92	67.37	38.75	71.44	38.58	74.10	38.37	77.20	38.11	80.50	37.90	84.20
		1150	43.03	64.33	42.74	68.63	42.45	73.34	42.25	77.66	42.03	80.10	41.81	84.20	41.63	87.50	41.45	90.70
		1230	46.41	69.32	46.21	74.22	46.02	78.81	45.83	83.52	45.60	86.10	45.42	89.10	45.20	92.30	45.00	96.00
		1310	49.72	74.81	49.53	79.71	49.32	84.72	49.11	89.76	48.90	92.10	48.68	95.30	48.41	99.20	48.25	105.1
		1390	53.03	79.65	52.82	84.91	52.71	90.24	52.52	95.55	52.35	98.70	52.10	103.2	51.90	107.2	51.72	112.0
		1480	56.92	85.61	56.82	91.32	56.71	96.72	56.53	102.4	56.21	106.3	56.10	110.0	55.75	115.0	55.40	120.0
LWSR 200BG	200mm	810	21.47	37.28	21.21	35.71	20.97	38.22	20.74	40.74	20.57	43.31	20.40	45.84	20.16	48.37	19.91	50.88
		900	24.58	37.90	24.33	40.80	24.08	43.70	23.84	46.60	23.56	55.00	23.26	55.00	23.00	75.00	22.76	75.00
		980	27.35	41.20	27.10	44.40	26.83	47.60	26.57	50.70	26.30	75.00	26.03	75.00	25.78	75.00	25.53	75.00
		1070	30.75	45.00	30.57	48.50	30.42	51.90	30.28	55.40	30.14	75.00	30.00	75.00	29.80	75.00	29.60	75.00
		1150	33.59	48.40	33.39	52.10	33.16	55.80	32.97	59.60	32.76	75.00	32.56	75.00	32.32	75.00	32.20	90.00
		1230	36.25	51.70	36.08	55.70	35.93	59.70	35.81	63.70	35.69	75.00	35.56	75.00	35.13	90.00	35.00	90.00
		1310	38.83	55.10	38.66	59.40	38.49	63.60	38.38	67.80	38.25	75.00	38.12	90.00	38.09	90.00	37.85	90.00
		1390	41.38	58.50	41.26	63.00	41.16	67.50	41.06	72.00	40.96	90.00	40.85	90.00	40.72	90.00	40.60	110.0
		1480	44.49	62.30	44.39	67.10	44.28	71.80	44.17	76.60	44.07	90.00	43.96	90.00	43.85	110.0	43.69	110.0
LWSR 250AG	250mm	990	61.20	83.20	61.00	88.90	59.90	93.60	59.80	99.70	59.20	112.1	58.80	120.0	58.30	129.6	58.00	137.0
		1170	71.00	96.10	69.60	101.5	69.40	108.5	69.00	115.1	68.60	126.0	68.20	134.4	67.70	140.1	67.10	152.0
		1250	76.40	103.5	76.00	110.8	75.60	118.2	75.10	125.2	74.50	142.0	74.10	149.0	73.40	155.0	73.00	165.0
		1360	86.30	112.5	86.00	125.5	85.70	133.9	85.40	142.4	85.10	154.0	84.70	165.0	84.30	177.0	84.00	183.0
		1480	93.70	126.9	93.40	136.2	93.20	145.6	92.60	154.3	92.20	170.1	91.80	184.0	91.50	192.0	91.20	205.0

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

11KW 15KW 18.5KW 22KW 30KW 37KW 45KW 55KW 75KW 90KW
110KW 132KW 160KW 185KW 200KW 225KW 250KW 280KW 315KW
355KW 400KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

LWSR Series Blower Performance Table

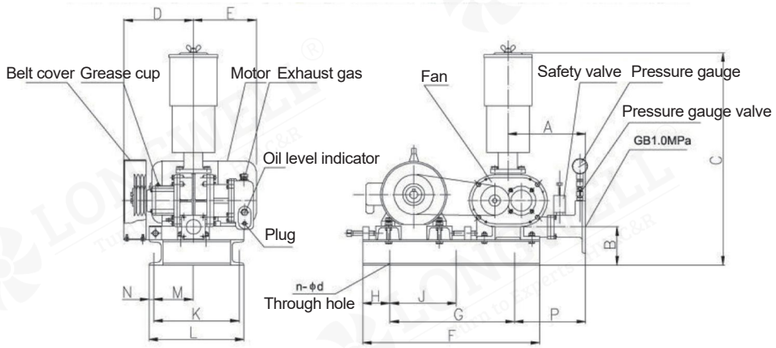
Model	Bore (mm)	Speed (RPM)	Discharge Pressure(kgf/cm²)													
			0.65		0.70		0.75		0.80		0.85		0.90		0.95		1.0	
			63.7kPa		68.6kPa		73.5kPa		78.4kPa		83.3kPa		88.2kPa		93.1kPa		98.0kPa	
			Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
LWSR 300AG	300mm	990	86.90	114.7	86.70	123.6	86.40	127.1	86.10	135.1	85.50	150.1	85.00	165.0	84.60	172.3	83.80	183.0
		1170	102.5	135.3	102.3	145.3	102.1	150.1	101.8	159.8	101.5	170.5	101.1	182.1	100.8	200.1	100.5	227.0
		1250	110.4	145.7	110.2	155.8	110.0	161.7	109.8	172.4	109.3	187.1	108.9	203.1	108.6	220.1	108.3	234.0
		1360	123.2	162.6	123.0	176.6	122.7	180.4	122.5	192.3	122.2	106.1	122.0	217.5	121.7	232.0	121.5	256.0
		1480	134.1	177.8	134.0	190.6	133.8	196.7	133.7	209.9	133.5	213.0	133.2	235.1	132.8	250.1	132.5	270.1
LWSR 300BG	300mm	990	105.12	138.74	104.87	149.50	104.51	153.74	104.15	163.42	103.42	181.51	102.82	199.59	102.33	208.40	101.37	221.36
		1170	123.99	163.66	123.75	175.76	123.50	181.56	123.14	193.29	122.78	206.24	122.29	220.26	121.93	242.04	121.57	274.59
		1250	133.54	176.23	133.30	188.45	133.06	196.39	132.82	208.54	132.21	226.31	131.73	245.67	131.37	266.24	131.00	283.04
		1360	149.03	196.69	148.79	213.62	148.42	218.18	148.18	232.61	147.82	249.31	147.58	263.10	147.21	280.63	146.97	309.66
		1480	162.21	215.07	162.09	230.54	161.85	237.93	161.73	253.90	161.49	257.65	161.12	284.37	160.64	302.53	160.28	326.72
LWSR 300CG	300mm	990	119.13	157.23	118.85	169.42	118.44	174.23	118.03	185.19	117.20	205.74	116.52	226.16	115.97	236.17	114.88	250.78
		1170	140.52	185.47	140.25	199.19	139.96	205.75	139.55	219.04	139.15	233.73	138.54	249.61	138.18	274.29	137.77	311.18
		1250	151.34	199.72	151.07	213.57	150.80	222.57	150.52	236.33	149.83	256.47	149.29	278.41	148.88	256.39	148.46	320.76
		1360	168.90	222.91	168.62	242.09	168.20	247.29	167.93	263.61	167.52	282.53	167.25	298.16	166.83	318.03	166.56	350.93
		1480	183.83	243.73	183.70	261.27	183.43	269.65	183.29	287.74	183.02	292.00	182.60	322.28	182.05	342.85	181.56	370.28

La: Required electric power(KW) Qs: Suction-phase air volume(m³/min)

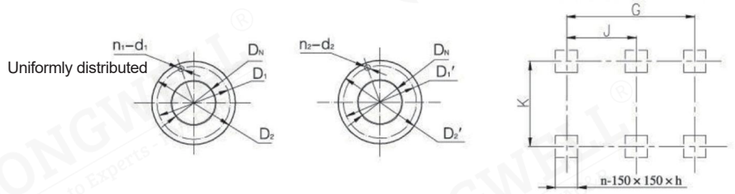
11KW 15KW 18.5KW 22KW 30KW 37KW 45KW 55KW 75KW 90KW
110KW 132KW 160KW 185KW 200KW 225KW 250KW 280KW 315KW
355KW 400KW

Nore: 1. The selected motor is generally four-potor,the number of poles can be adjusted subject to the speed.
2. The type with"t"also can be used for the direct--drive refer to the speed of motor.

Outline Drawing of LWSR Series Horizontal V-Belt Drive



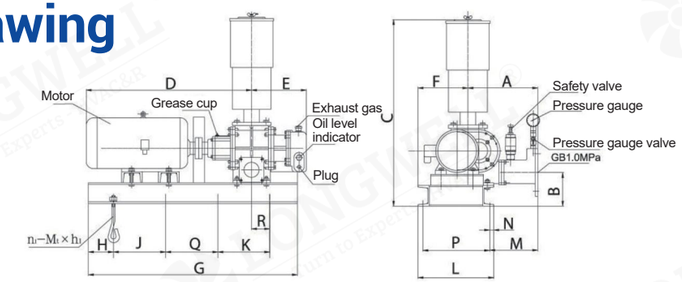
Inlet Flange Dimensions **Outlet Flange Dimensions** **Anchor Bolt Hole Layout Drawing**



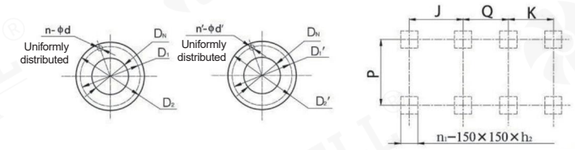
Model	Motor	A	B	C	D	E	F	G	H	J	K	L	M	N	P	n-Φd	Dɴ	D₁	D₂	n₁-d₁	D₁'	D₂'	n₂-d₂	h
LWSR50	Y80M-4 Y90S/L-4 Y100L-4 Y112M-4	245	120	670	220	260	560	410	70	-	270	300	125	15	230	4-Φ17	Φ50	Φ85	Φ110	4-Φ14	Φ125	Φ165	4-Φ19	500
	Y132S-4	245	120	670	220	281	670	470	100	-	310	340	125	15	250	4-Φ17	Φ50	Φ85	Φ110	4-Φ14	Φ125	Φ165	4-Φ19	500
LWSR65	Y90S/L-4 Y100L-4 Y112M-4 Y132S-4	245	130	720	242.5	280	600	450	75	-	310	340	147.5	15	225	4-Φ17	Φ65	Φ130	Φ150	4-Φ14	Φ145	Φ185	4-Φ19	500
	Y132M-4	245	130	720	242.5	297.5	680	480	100	-	350	380	147.5	15	250	4-Φ17	Φ65	Φ130	Φ150	4-Φ14	Φ145	Φ185	4-Φ19	500
LWSR80	Y100L-4 Y112M-4 Y132S/M-4	280	145	1085	235.5	299.5	650	500	75	-	330	360	130.5	15	245	4-Φ17	Φ80	Φ130	Φ155	4-Φ14	Φ160	Φ200	8-Φ19	500
	Y160M-4	280	145	1085	235.5	459.5	810	620	95	-	450	480	130.5	15	265	4-Φ17	Φ80	Φ130	Φ155	4-Φ14	Φ160	Φ200	8-Φ19	500
LWSR100	Y100L2-4 Y112M-4 Y132S/M-4 Y160M-4	280	155	1190	288	352.5	730	580	75	-	370	400	158	15	245	4-Φ17	Φ100	Φ145	Φ180	4-Φ18	Φ180	Φ220	8-Φ19	500
	Y160L-4 Y180M-4	280	155	1190	288	438	830	600	115	-	430	460	158	15	285	4-Φ17	Φ100	Φ145	Φ180	4-Φ18	Φ180	Φ220	8-Φ19	500
LWSR125	Y132S/M-4 Y160M/L-4 Y80M-4	370	190	1366	302	429	860	700	80	350	440	470	167	15	300	6-Φ17	Φ125	Φ177	Φ207	8-Φ18	Φ210	Φ250	8-Φ23	500
	Y180L-4	370	190	1366	302	499	1020	680	170	340	540	570	167	15	390	6-Φ17	Φ125	Φ177	Φ207	8-Φ18	Φ210	Φ250	8-Φ23	500
LWSR150	Y160M/L-4 Y180M/L-4 Y200L-4 Y225S/M-4	420	230	1600	405	473	1050	750	105	400	510	550	215	10	450	6-Φ17	Φ150	Φ225	Φ260	8-Φ18	Φ240	Φ285	8-Φ23	500
	Y250M-4	420	230	1600	405	613	1250	800	225	400	660	700	215	20	480	6-Φ17	Φ150	Φ225	Φ260	8-Φ18	Φ240	Φ285	8-Φ23	500
LWSR175	Y160L-4 Y180M/L-4 Y200L-4	430	265	1610	490	524	1230	800	215	400	680	720	320	20	340	6-Φ17	Φ150	Φ225	Φ260	8-Φ18	Φ240	Φ285	8-Φ23	500
	Y225S/M-4 Y250M-4 Y280S-4	430	265	1610	490	524	1230	800	215	400	680	720	320	20	460	6-Φ17	Φ150	Φ225	Φ260	8-Φ18	Φ240	Φ285	8-Φ23	500
LWSR200	Y180M-4 Y200L-4 Y225S/M-4 Y250M-4 Y280S-4	561	315	2170	560	557	1280	1000	140	500	670	720	350	25	476	6-Φ17	Φ200	Φ280	Φ320	8-Φ22	Φ295	Φ340	8-Φ23	500
	Y280M-4 Y315S-4	561	315	2170	560	749	1480	1000	240	500	750	800	350	25	576	6-Φ17	Φ200	Φ280	Φ320	8-Φ22	Φ295	Φ340	8-Φ23	500
LWSR250	Y225M-4 Y280S/M-4 Y250M-4 Y315S/M/L-4	760	425	2485	589	740	1900	1490	210	745	874	950	341	38	612	6-Φ26	Φ250	Φ350	Φ395	12-Φ18	Φ350	Φ395	12-Φ22	700
LWSR300	Y250M-4 Y280S/M-4 Y315S/M/L-4	750	465	2515	679	686	1950	1550	200	775	874	950	441	38	302	6-Φ26	Φ300	Φ400	Φ445	8-Φ22	Φ400	Φ445	12-Φ22	700

Note: The LWSR50-LWSR200 type anchor bolts are M16x300, while the LWSR250-LWSR300 type anchor bolts are M24x500.

LWSR Series Horizontal Coupling Transmission Outline Drawing



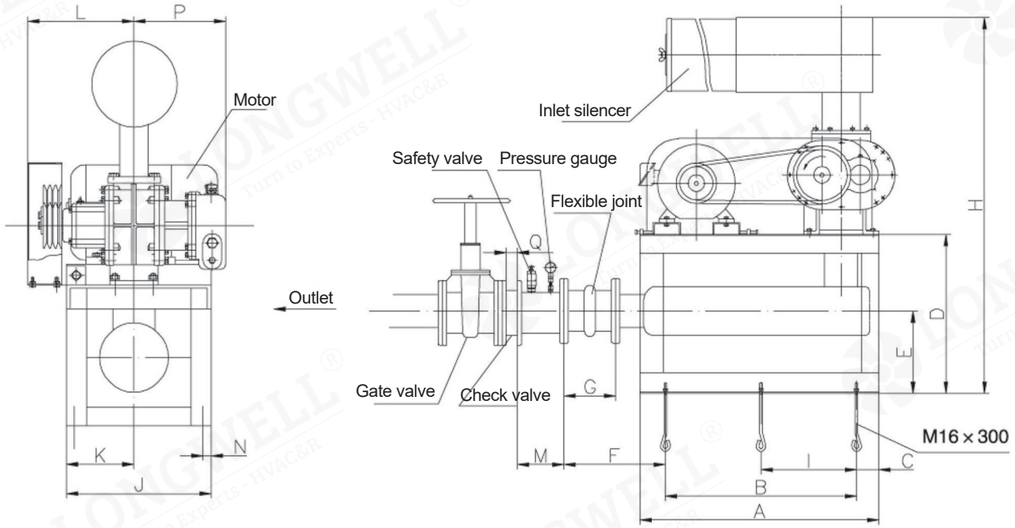
Inlet Flange Dimensions **Outlet Flange Dimensions** **Anchor Bolt Hole Layout Drawing**



Model	Motor	A	B	C	D (max)	E	F	G	H	J	K	Q	L	M	N	P	R	n-Φd	D₁	D₂	Dɴ	n'-Φd'	D₁'	D₂'	n₁-Mt	h₁	h₂
LWSR50	Y90 Y100 Y112	245	120	670	605	258	205	720	100	-	-	-	370	100	20	330	-40	4-Φ14	Φ85	Φ110	Φ50	4-Φ19	Φ125	Φ165	4-M16	300	500
LWSR65	Y90 Y100 Y112 Y132	245	130	720	698	281	235	760	100	-	-	-	400	100	20	360	-23	4-Φ14	Φ130	Φ150	Φ65	4-Φ19	Φ145	Φ185	4-M16	300	500
LWSR80	Y100 Y112 Y132	280	145	1085	739	293	230	800	150	-	-	-	400	130	20	360	-78	4-Φ14	Φ130	Φ155	Φ80	8-Φ19	Φ160	Φ200	4-M16	300	500
LWSR100	Y100 Y112	280	155	1190	791	333	230	900	150	-	-	-	400	130	20	360	-40	4-Φ18	Φ145	Φ180	Φ100	8-Φ19	Φ180	Φ220	4-M16	300	500
	Y160	280	155	1190	951	333	250	1040	150	-	-	-	420	130	20	380	-40	4-Φ18	Φ145	Φ180	Φ100	8-Φ19	Φ180	Φ220	4-M16	300	500
LWSR125	Y132	370	190	1366	802	364	245	840	120	300	300	-	460	175	20	420	-10	8-Φ18	Φ177	Φ207	Φ125	8-Φ23	Φ210	Φ250	6-M16	300	500
	Y160 Y180M	370	190	1366	992	364	285	1060	140	390	390	-	500	175	20	460	-30	8-Φ18	Φ177	Φ207	Φ125	8-Φ23	Φ210	Φ250	6-M16	300	500
LWSR150	Y160L	420	230	1600	1061	428	270	1140	150	420	420	-	500	215	25	450	15	8-Φ18	Φ225	Φ260	Φ150	8-Φ23	Φ240	Φ285	6-M16	300	500
	Y180 Y200	420	230	1600	1161	428	340	1300	150	500	500	-	570	215	25	520	15	8-Φ18	Φ225	Φ260	Φ150	8-Φ23	Φ240	Φ285	6-M16	300	500
	Y225	420	230	1600	1236	428	340	1380	150	540	540	-	570	215	25	520	15	8-Φ18	Φ225	Φ260	Φ150	8-Φ23	Φ240	Φ285	6-M16	300	500
LWSR175	Y180L	430	265	1610	1457	517	270	1340	150	520	520	-	530	195	25	480	85	8-Φ18	Φ225	Φ260	Φ150	8-Φ23	Φ240	Φ285	6-M16	300	500
	Y200	430	265	1610	1487	517	320	1460	150	580	580	-	580	195	25	530	85	8-Φ18	Φ225	Φ260	Φ150	8-Φ23	Φ240	Φ285	6-M16	300	500
	Y225 Y250	430	265	1610	1627	517	370	1570	150	635	635	-	630	195	25	580	85	8-Φ18	Φ225	Φ260	Φ150	8-Φ23	Φ240	Φ285	6-M16	300	500
LWSR200	Y200 Y225	561	315	2170	1641	557	338	1500	200	550	550	-	640	284	25	590	45	8-Φ22	Φ280	Φ320	Φ200	8-Φ23	Φ295	Φ340	6-M16	300	500
	Y250	561	315	2170	1706	557	378	1560	200	580	580	-	680	284	25	630	45	8-Φ22	Φ280	Φ320	Φ200	8-Φ23	Φ295	Φ340	6-M16	300	500
	Y280 Y315S	561	315	2170	2066	557	448	1750	200	675	675	-	750	284	25	700	45	8-Φ22	Φ280	Φ320	Φ200	8-Φ23	Φ295	Φ340	6-M16	300	500
LWSR250	Y250 Y280	760	410	2470	1586	596	450	1660	200	420	420	420	900	345	35	830	10	12-Φ18	Φ350	Φ395	Φ250	12-Φ22	Φ350	Φ395	8-M24	500	700
	Y315	760	410	2470	1851	596	470	1800	150	500	500	500	920	345	35	850	60	12-Φ18	Φ350	Φ395	Φ250	12-Φ22	Φ350	Φ395	8-M24	500	700
LWSR300	Y280	750	450	2500	1678	686	460	1860	150	520	520	520	920	330	40	840	150	8-Φ22	Φ400	Φ445	Φ300	12-Φ22	Φ400	Φ445	8-M24	500	700
	Y315	750	450	2500	1943	686	480	2000	160	560	560	560	960	330	40	880	140	8-Φ22	Φ400	Φ445	Φ300	12-Φ22	Φ400	Φ445	8-M24	500	700
	Y355M	750	450	2500	2173	686	515	2060	175	570	570	570	995	330	40	915	125	8-Φ22	Φ400	Φ445	Φ300	12-Φ22	Φ400	Φ445	8-M24	500	700
LWSR350	Y280	820	495	2555	1722	730	520	1900	170	520	520	520	1040	340	40	960	120	8-Φ22	Φ460	Φ505	Φ350	16-Φ22	Φ460	Φ505	8-M24	500	700
	Y315	820	495	2555	1987	730	520	2100	150	600	600	600	1040	340	40	960	140	8-Φ22	Φ460	Φ505	Φ350	16-Φ22	Φ460	Φ505	8-M24	500	700
	Y355M	820	495	2555	2217	730	540	2150	175	600	600	600	1060	340	40	980	115	8-Φ22	Φ460	Φ505	Φ350	16-Φ22	Φ460	Φ505	8-M24	500	700

Note: The LWSR50-LWSR200 type anchor bolts are M16x300, while the LWSR250-LWSR350 type anchor bolts are M24x500.

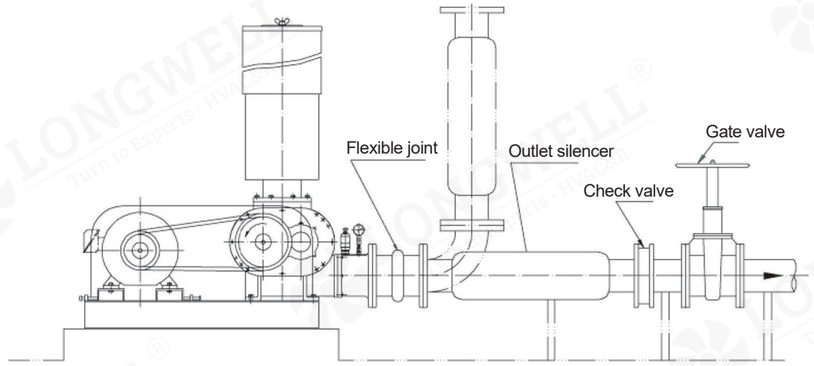
Outline Drawing of the LWSR Series Dense V-Belt Drive



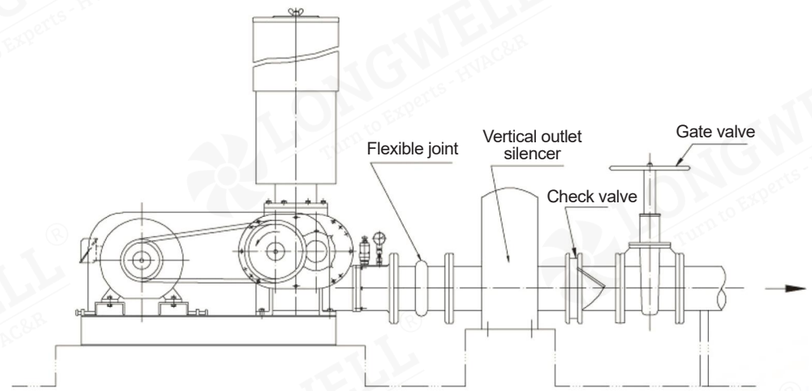
Model	Motor	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q
LWMJ65	Y90S/L-4 Y100L-4 Y112M-4 Y132S-4	600	450	75	380	227.5	265	115	913	-	340	162.5	242.5	110	25	282.5	20
	Y132M-4	680	480	100	380	227.5	200	115	913	-	380	162.5	242.5	110	15	295.5	20
LWMJ80	Y100L-4 Y112M-4 Y132S-4	680	480	100	350	185	440	135	1045	-	400	155.5	235.5	110	25	299.5	21
	Y160M-4	810	620	95	350	185	290	135	1045	-	480	145.5	242.5	110	15	459.5	21
LWMJ100	Y100L1-4 Y100L2-4 Y112M-4 Y132S-4	730	580	75	360	181	458	150	1070	-	400	195.5	315.5	110	15	384	21
	Y132M-4 Y160M-4 Y160L-4 Y180M-4	830	600	115	360	181	403	150	1070	-	460	195.5	315.5	110	25	465.5	21
LWMJ150	Y132M-4 Y160M/L-4 Y180M/L-4 Y200L-4 Y225S/M-4	1050	870	90	490	237	685	180	1470	435	550	235	405	170	30	473	23
	Y250M-4	1250	800	225	490	237	620	180	1470	400	700	235	405	170	20	613	23
LWMJ175	Y160L-4 Y180M/L-4 Y200L-4	1230	800	215	520	267	570	180	1510	400	720	340	490	170	20	524	23
	Y225S/M-4 Y250M/L-4 Y280S-4	1230	950	140	520	267	595	180	1510	475	720	340	490	170	40	524	23
LWMJ200	Y180M/L-4 Y200L-4 Y225S/M-4 Y200M-4 Y280S-4	1280	1000	140	560	290	663	190	1762	500	720	375	560	240	40	557	25
	Y280M-4 Y315S-4	1480	1000	240	560	290	563	190	1762	500	800	375	560	240	25	749	25
LWMJ250	Y225M-4 Y250M-4 Y280S/M-4 Y315S/M/L-4	1900	1500	200	740	337	430	230	2300	750	950	379	589	300	40	740	30

Note: The inlet/outlet flange dimensions and anchor bolt hole depth for the LWMJ series are the same as those for the LWSR series.

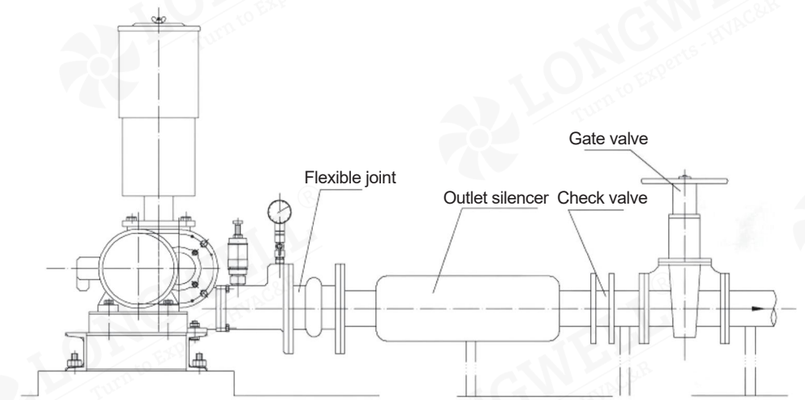
Unit assembly drawing with coupling



Installation drawing of vertical silencer with coupling



Direct coupled installation drawing



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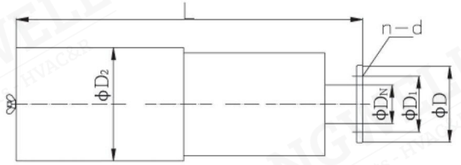
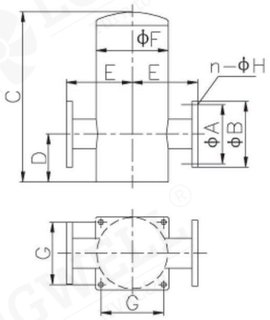
Inlet silencer(HF)



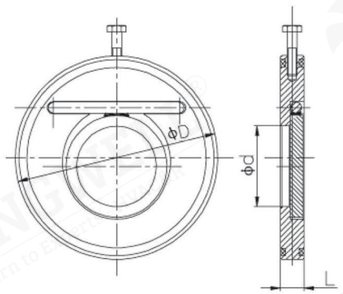
Model	DN	D₁	D	D₂	L	n-d	Weight (kg)
HF-50	50	85	110	150	380	4-Φ14	5
HF-65	65	130	150	165	420	4-Φ14	7
HF-80	80	130	155	250	715	4-Φ14	16
HF-100	100	145	180	265	810	4-Φ18	20
HF-125	125	177	207	300	915	8-Φ18	22
HF-150	150	225	260	350	1040	8-Φ18	35
HF-200	200	280	320	438	1450	8-Φ22	60
HF-250	250	350	395	550	1450	12-Φ18	120
HF-300	300	400	445	600	1450	8-Φ22	140
HF-350	350	460	505	650	1450	8-Φ22	180

Vertical outlet silencer(HL)



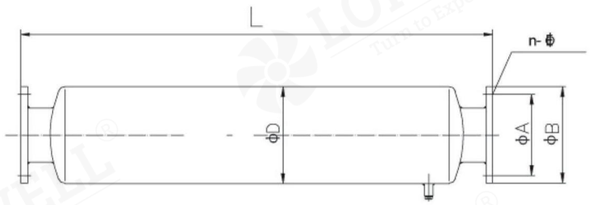
Model	Bore	A	B	C	D	E	F	G	n-ΦH	Weight (kg)
HL-50	50	125	165	450	130	140	165	140	4-Φ19	14
HL-65	65	145	185	500	140	170	190	170	4-Φ19	16
HL-80	80	160	200	610	150	190	217	190	8-Φ19	25
HL-100	100	180	220	680	160	220	261	230	8-Φ19	33
HL-125	125	210	250	820	200	240	286	240	8-Φ19	43
HL-150	150	240	285	940	220	290	320	300	8-Φ23	57
HL-200	200	295	340	1060	260	320	438	370	8-Φ23	98
HL-250	250	350	395	1200	300	360	554	480	12-Φ22	142
HL-300	300	400	445	1500	450	410	604	510	12-Φ22	178
HL-350	350	460	505	1600	480	470	654	560	16-Φ22	220

Check valve(HDF)



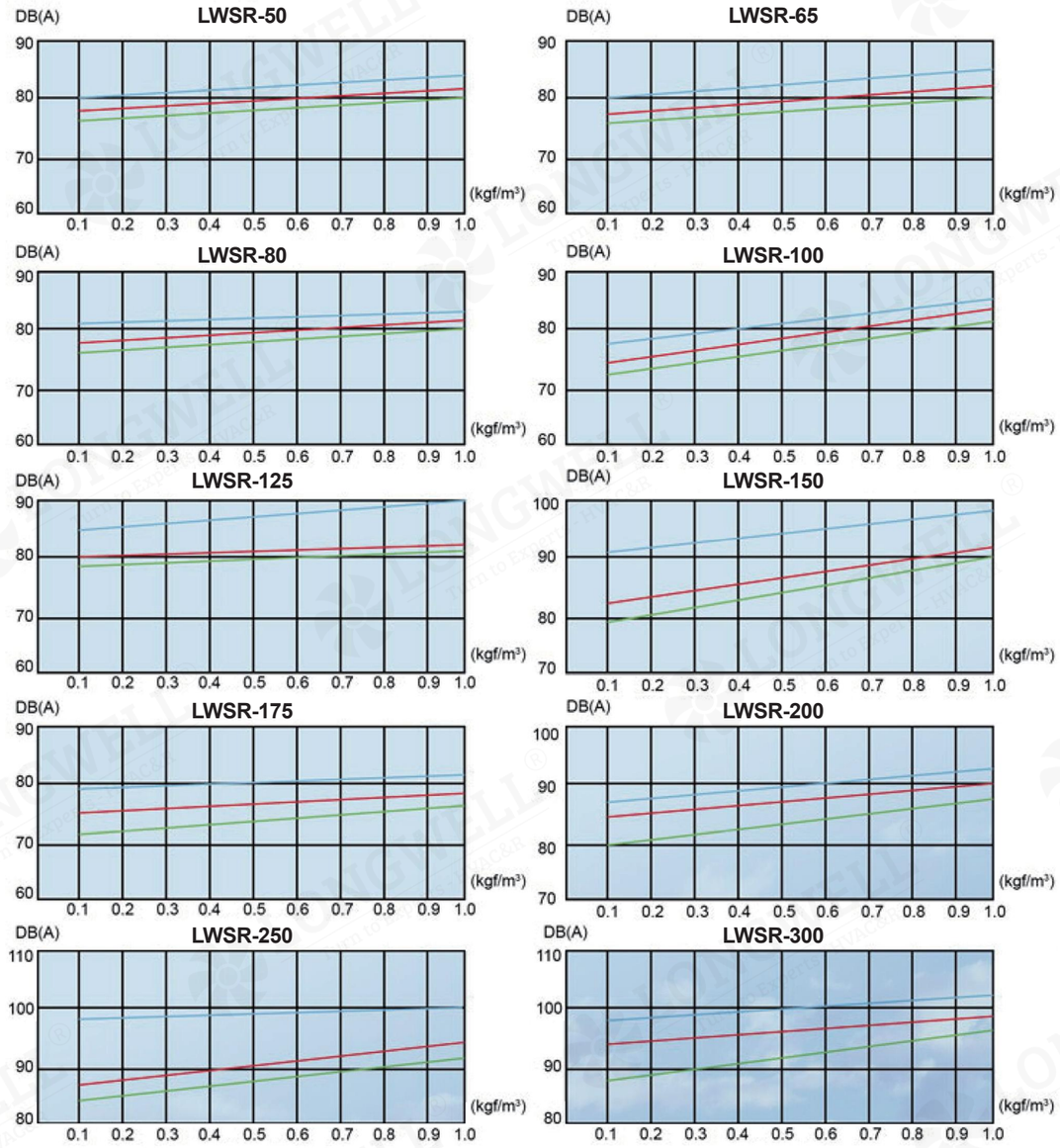
Nominal diameter (mm)	(inch)	L	Φd	ΦD	Weight (kg)
50	2	19	22	105	1.1
65	2½	20	32	130	1.8
80	3	21	48	140	2
100	4	21	58	160	2.8
125	5	21	80	188	4
150	6	23	102	218	5.4
200	8	25	148	270	8.4
250	10	30	180	325	12.8
300	12	40	220	380	21.4
350	14	40	270	436	33

Outlet silencer(HM)



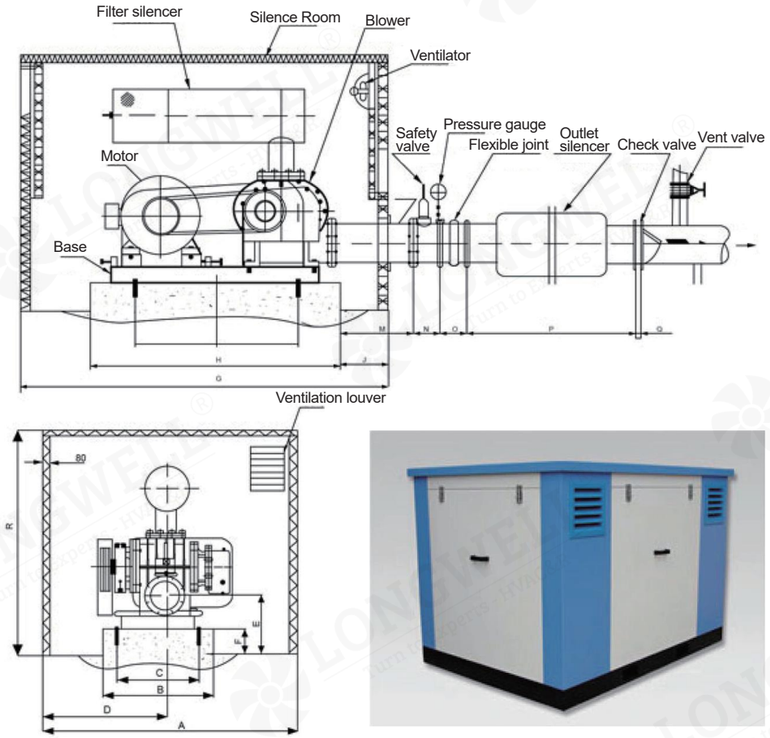
Model	Bore	A	B	L	D	n-ΦE	Weight (kg)
HM-50	50	125	165	600	140	4-Φ19	10
HM-65	65	145	185	700	165	4-Φ19	14
HM-80	80	160	200	900	190	8-Φ19	25
HM-100	100	180	220	1200	217	8-Φ19	33
HM-125	125	210	250	1400	261	8-Φ19	43
HM-150	150	240	285	1600	286	8-Φ23	57
HM-200	200	295	340	1800	320	8-Φ23	98
HM-250	250	350	395	2000	406	12-Φ22	130
HM-300	300	400	445	2000	500	12-Φ22	160
HM-350	350	460	505	2000	580	16-Φ22	230

LWSR Type Roots Blower Noise Level



Noise value DB(A)
Note: 1. The noise value is the average value measured 1.0m beside the fan with standard silencers fitted.
2. The noise value may vary depending on the length of additional pipework, the number of bends, and the surrounding environment.

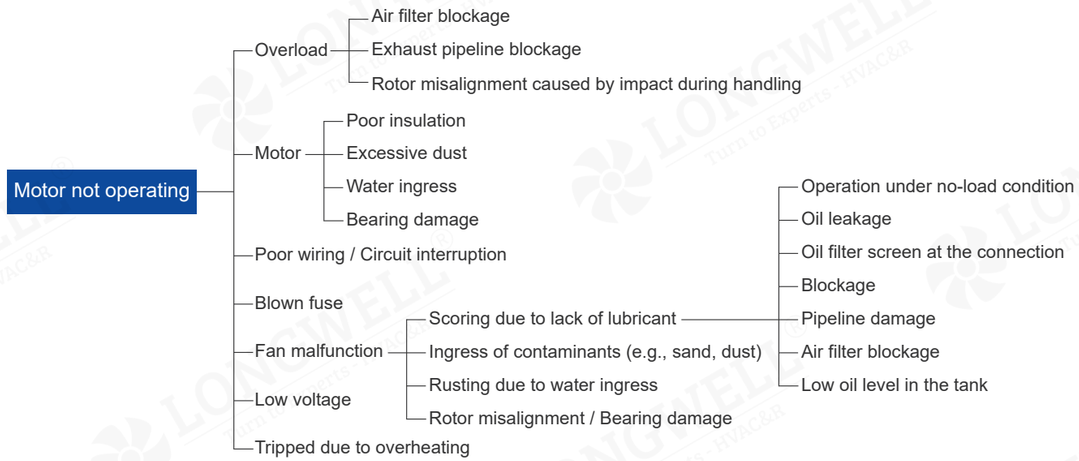
Outline Drawing of LWSR Type Anechoic Chamber



Model	Bore	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R
LWSR-50	50A	1200	470	270	500	100	225	1300	660	200			300	120	105	610	19	1300
LWSR-65	65A	1200	510	310	500	100	235	1400	750	200			300	130	115	710	19	1300
LWSR-80	80A	1400	530	330	600	100	250	1600	800	300			400	140	135	910	19	1600
LWSR-100	100A	1400	640	440	600	100	260	1700	880	300			400	140	150	1200	19	1600
LWSR-125	125A	1400	640	440	600	100	290	1800	960	300			400	150	165	1410	21	1600
LWSR-150	150A	1600	750	550	700	100	310	2100	1160	350			450	150	180	1610	24	2000
LWSR-175	175A	1600	856	656	700	100	360	2200	1250	350			450	150	180	1610	24	2000
LWSR-200B	200A	1800	802	602	800	100	350	2350	1350	400			500	160	190	1810	29	2000
LWSR-200	200A	1800	905	705	800	100	350	2600	1500	400	500	500	500	160	190	1810	29	2000
LWSR-250B	250A	2200	1050	800	1000	100	430	2600	1600	300	500	520	500	250	230	2000	30	2000
LWSR-250	250A	2400	1100	890	1100	100	470	3000	2000	400	745	745	500	250	230	2000	30	2200
LWSR-300	300A	2400	1100	890	1100	100	470	3000	2000	400	745	745	500	260	245	2000	40	2200
LWSR-350	350A	3000	1840	1376	1400	100	530	4000	2600	550	700	700	700	300	255	2000	45	2800

Fault Cause and Solution

Fault Symptom	Cause	Remedy
High Noise	1. Pressure rise due to pipe blockage 2. Vibration due to improper belt guard installation 3. Motor bearing wear 4. Scoring/galling caused by dust ingress into the fan 5. Lack of lubricant 6. Poor lubrication 7. Loose pulley 8. V-belt slipping	1. Clean or replace the pipeline 2. Reinstall the belt guard properly 3. Replace the bearing with a new one 4. Overhaul the fan 5. Check the oil supply system 6. Clean the oil dropper and oil filter 7. Tighten the set screw 8. Adjust the belt tension
Overheating	1. Overload operation 2. Fan inlet filter blockage 3. Fan rotor misalignment/rubbing 4. Lack of lubricant 5. Belt slipping 6. Poor lubrication 7. Internal scoring/galling inside the fan	1. Check whether the pipeline is blocked 2. Clean the air filter 3. Gently tap the end cover with a wooden hammer 4. Refill the oil and check the oil supply system 5. Adjust the belt tension 6. Change the oil and clean the oil dropper and oil filter 7. Disassemble and inspect the fan
Insufficient Air Flow	1. Fan inlet filter blockage 2. Lack of lubricant 3. Poor lubrication 4. Belt slipping 5. Air leakage in pipeline 6. Pipeline too long	1. Clean the inlet filter 2. Check the oil supply system and refill oil 3. Clean the oil filter and oil dropper 4. Adjust the belt tension 5. Repair the pipeline 6. Reconfigure the pipeline
Excessive Oil Consumption	1. Overload operation 2. Air filter blockage 3. Oil leakage 4. Oil evaporation and splashing due to high temperature	1. Check the pipeline system 2. Clean the air filter 3. Repair the oil leakage point 4. Identify the cause and fix the problem
Damaged Belt	1. Overload operation 2. Belt slipping 3. Misalignment of the two pulleys	1. Adjustment 2. Adjustment 3. Adjustment
Motor Stops	1. Overload 2. Fan scoring/galling 3. Faulty power supply wiring 4. Excessive dirt inside the motor or bearing damage 5. Defective motor quality	1. Check the pipeline system 2. Overhaul the fan 3. Repair as needed 4. Clean the motor or replace the bearing 5. Replace the motor



- Motor operation
  - High noise
    - Resonance
      - Insecure installation of the belt guard
      - Insecure installation of the base
    - Poor silencing design of the machine room
    - Compression noise caused by excessive pressure
    - Motor or fan bearing damage
    - Motor rotor-stator contact
    - Fan malfunction
      - Dropper blockage
      - Oil filter blockage
      - Oil deterioration
      - Bearing damage
      - Internal scoring of fan components
  - Insufficient exhaust
    - Insufficient lubricant
    - Poor oil quality
    - Air leakage in oil passage
    - Inlet filter blockage
    - Belt slipping
    - Worn oil seal
    - Defective sealing ring
    - Faulty pipe joint
    - Air leakage in air chamber
  - Oil leakage
  - Abnormal temperature
    - Poor lubrication
    - Fan scoring
    - Excessive pressure due to installation valve failure
    - Air filter blockage
    - Motor rotor misalignment
    - Fan room too small / Poor ventilation
  - Incorrect motor rotation direction

Purchase Instructions

When purchasing a blower, please provide the following items as much as possible:

1. Application: sewage treatment, aquaculture, pneumatic conveying, etc.
2. Medium conveyed: air, etc.
3. Operating environment: indoor, outdoor, etc.
4. Operating conditions: flow rate, pressure, temperature, etc.
5. Motor: required or not

LWK Type Air Suspension Blower

Utilizing turbomachinery design technology, this product features a high-strength aluminum alloy three-dimensional flow impeller, paired with a high-speed permanent magnet synchronous motor and air foil bearings (or active magnetic bearings), achieving non-contact, friction-free operation without the need for lubrication. It requires no mechanical maintenance and offers high efficiency with low noise. The core components comply with international standards, ensuring high reliability to serve our customers.

Working Principle

Adopting air foil bearings, a high-speed permanent magnet synchronous motor, and direct-coupled drive with a three-dimensional flow impeller, the impeller generates kinetic energy during high-speed rotation. This kinetic energy draws air into the volute through the inlet, where it is converted into pressure potential energy within the volute passage, resulting in gas with a specific flow velocity and pressure. Finally, the gas is delivered into the pipeline network through the volute outlet, achieving the blower's function.

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Features of LWK Type Air Suspension BLower

Long service life: Friction-free, with a service life exceeding 20 years.

Compact size: Integrated design with high power density,
occupying only 1/3 to 1/5 of the volume of traditional blowers.
Simple installation—can be placed directly on the ground without the need for a foundation.

Easy maintenance: only requires cleaning the filter cotton as prompted by the system.

Energy saving: Utilizing an inverter-driven permanent magnet synchronous motor, an aviation-grade three-dimensional flow centrifugal impeller, and hydrodynamic air bearings, the operating status can be adjusted according to the load, achieving energy savings of 20%-50% compared to traditional blowers.

Cloud-based intelligent management: Users can manage via mobile devices or PC cloud platforms, with real-time transmission of operational data to facilitate timely analysis and service support.

Oil-free: Advanced hydrodynamic air bearings ensure friction-free operation, eliminating the need for oil lubrication.

Low noise: Low-noise centrifugal impeller design ensures no mechanical vibration, with noise levels below 80 dB.

The Main Structure of the LWK Type Air Suspension Blower

High-strength three-dimensional flow impeller

High-strength aluminum alloy centrifugal impeller, precision-machined by high-speed 5-axis CNC machining, offering strong deformability, wear resistance, corrosion resistance, high efficiency, and long service life.

High-efficiency permanent magnet synchronous motor

The motor features high power density and low heat loss, enabling operation in harsh and demanding environments. It offers high rotational speed, high efficiency, long service life, and moisture resistance.

High-strength three-dimensional flow impeller

100% oil-free foil bearings with no mechanical friction, offering semi-permanent service life. Features include non-contact operation, friction-free performance, no lubrication required, low noise, and long service life.

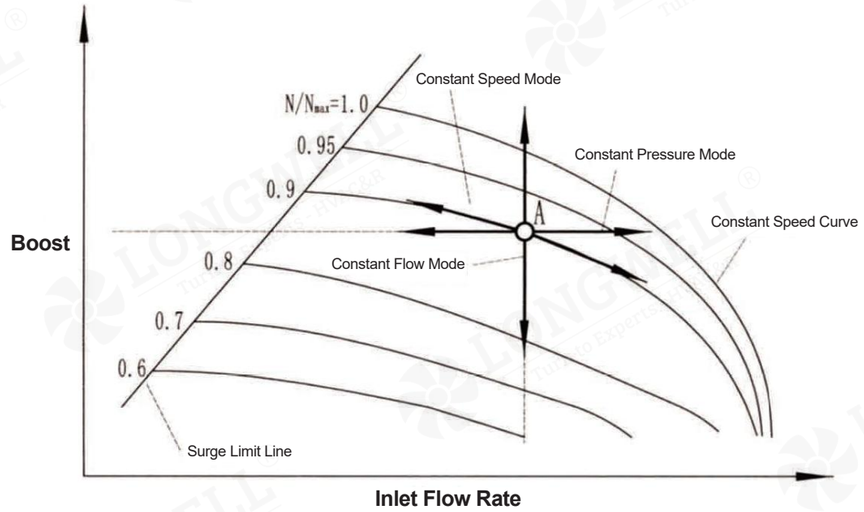
Variable frequency drive (VFD)

The VFD is used to control the frequency of the high-speed permanent magnet motor. It is equipped with a dedicated cooling device and a touch screen display, allowing on-site adjustment and monitoring of the equipment's operating status. The drive enables adaptive parameter configuration based on different working conditions, meeting customer requirements for automated control and unattended operation.

Data cloud platform

Interconnection of all things with data as the core. Based on the deep integration of Industrial Internet of Things (IIoT) technology and big data analytics, it provides rich algorithm models to offer customers full lifecycle information services for their equipment.

LWK Air Suspension Blower Model Parameters



Model LW-	K5.5	K7.5	K11	K15	K20	K30	K40	K50	K60	K75	K90	K110	K130	K150	K175	K200	K250	K300	K400	K500	K600
Total Power	5.5	7.5	11	15	20	30	40	50	60	75	90	110	130	150	175	200	250	300	400	500	600
Boost(Kpa)	Flow Rate(m³/min)																				
30	7.9	10.4	15.2	20.5	28	42	56	71	86	105	130	160	188	215	254	291	363	433	582	726	866
40	5.9	7.9	11.6	16	22	33	44	55	66	85	104	126	147	170	198	223	278	339	446	556	678
50	4.9	6.6	9.8	13.2	18	28	37	47	46	73	89	108	129	145	172	192	242	291	384	484	582
60			8.3	11	15	24	32	41	49	65	77	92	111	128	147	167	210	255	334	520	510
70					13	21	28	36	43	56	67	81	95	114	130	149	189	227	298	378	454
80						19	25	32	38	50	61	72	87	104	120	130	168	206	260	336	412
90						17	23	28	34	45	54	64	80	96	110	120	151	186	240	302	372
100								25	31	41	50	59	74	88	102	112	146	179	224	292	358
110									29	38	45	55	68	81	95	101	134	161	202	268	322
120										35	42	51	63	75	89	94	125	149	188	250	298
Shaft power(KW)	5.1	6.9	10.1	13.8	18.4	27.5	36.8	44	53	68	82	100	118	136	159	183	225	273	366	450	546
Current(A)	9.3	12.6	18.6	25	34	51	68	85	102	127	152	186	220	253	296	338	422	507	676	844	1013
Dimensions (mm) L	100	100	1200	1200	1200	1400	1400	1600	1600	1600	1700	1700	1900	1900	2000	2000	2100	2100	3500	3500	3500
Dimensions (mm) W	500	500	600	600	600	750	750	900	900	900	1000	1000	1200	1200	1400	1400	1500	1500	1800	1800	1800
Dimensions (mm) H	800	800	900	900	900	1100	1100	1300	1300	1300	1400	1400	1700	1700	1900	1900	2000	2000	2100	2100	2100
Outlet connection	DN65	DN65	DN100	DN100	DN100	DN150	DN150	DB200	DB200	DB200	DN250	DN250	DN300	DN300	DN350	DN350	DN400	DN400	DN600	DN600	DN600
Weight(kg)	130	50	185	220	330	350	380	650	690	750	800	850	950	1000	1300	1400	1700	1780	2400	3000	3200
Cable specifications(mm²)	3×10 +1×6	3×10 +1×6	3×10 +1×6	3×10 +1×6	3×16 +1×10	3×25 +1×10	3×35 +1×16	3×50 +1×16	3×70 +1×25	3×70 +1×25	3×95 +1×35	3×95 +1×35	3×10 +1×35	3×150 +1×50	3×185 +1×50	3×185 +1×50	3×240 +1×70	3×240 +1×70	3×(240× 2)+1×95	3×(240× 2)+1×95	3×(240× 2)+1×95

Note:
1. The flow rate in the above table refers to the inlet flow rate of a single fan under the conditions of 1 atm and 20°C.
2. For each model, the flow rate deviation at the rated pressure is within ±4%.
3. As site conditions may vary, please consult our professional technical personnel for specific model selection.

LWC Type Rotary Blower

Working Principle of the Rotary Blower

LWC Rotary Blower features a compact structure. Its pressure range is 0.1–0.5 kgf/cm².
It mainly consists of the following six parts: motor, air filter, blower body, air chamber, base (also serving as oil tank), and oil drip nozzle. The blower operates by the eccentric rotation of the rotor inside the cylinder, causing the volume between the blades in the rotor slots to change, thereby drawing in, compressing, and discharging air. During operation, the pressure difference generated by the blower automatically delivers lubricating oil to the oil drip nozzle, which drips into the cylinder to reduce friction and noise, while also preventing backflow of air inside the cylinder.

Characteristics of the Rotary Blower

Compact Size, High Airflow, Low Noise, and Energy Efficiency

(The rotary blower operates on the principle of compressing air through rotation. Despite its compact size, it delivers high airflow, saves energy, and operates quietly—features that are incomparable to other types of blowers.)

Stable Operation and Easy Installation

(When properly placed, small models operate with minimal vibration and do not require anti-vibration devices, making installation simple and convenient.)

Strong Load Resistance and Stable Airflow

(For example, even if pressure fluctuates in a sewage treatment aeration tank, the airflow remains largely unaffected by the pressure changes.)

High-Quality Materials, Ingenious Structure, and Excellent Performance

(All components are made from high-quality materials. The blower features a compact and durable design, ensuring excellent performance and long-term reliability with fewer failures.)

Built-in Air Chamber for Smooth Air Delivery

(All models are equipped with an air chamber to prevent air pulsation and ensure stable, smooth air distribution.)

Easy Maintenance, Low Speed, Reduced Wear, Fewer Failures, and Long Service Life

Wide Selection of Models and Speeds

(A variety of models and rotational speeds are available to meet diverse needs. Customization is also available based on user requirements.)

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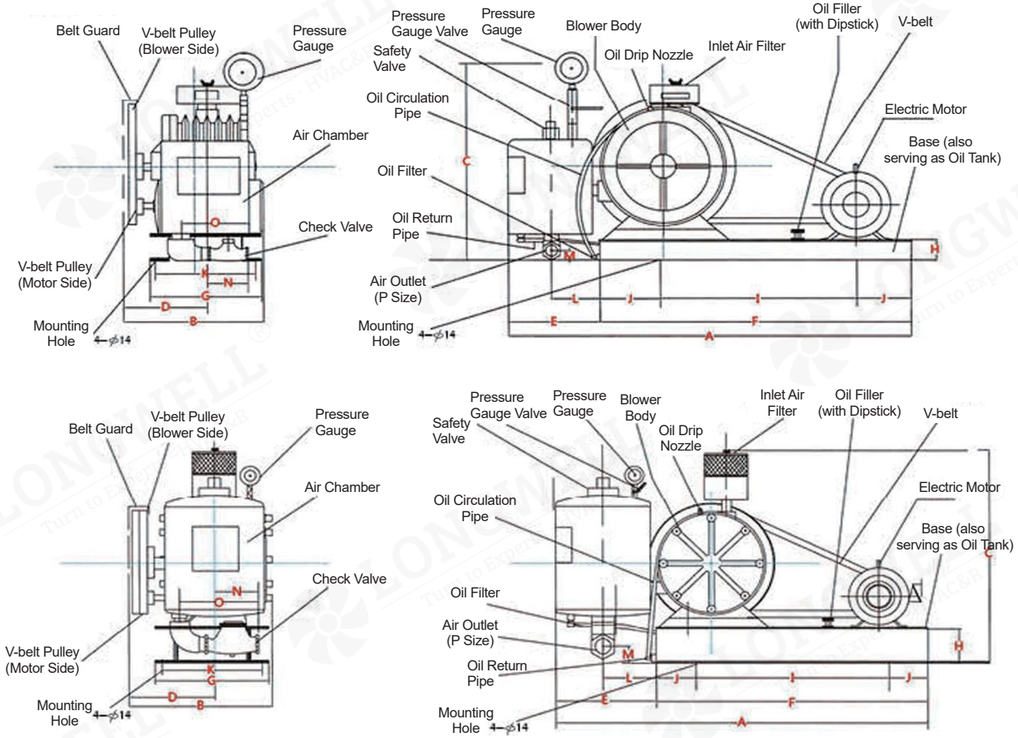
Working Principle of the Rotary Blower

Model	Air Outlet Diameter(mm)	Motor Power(KW)	Frequency (Hz)	Speed (rpm)	Air Flow(m³/min) 0.1kgf/cm²	0.2kgf/cm²	0.3kgf/cm²	0.4kgf/cm²	0.5kgf/cm²	V-belt Pulley Blower	Motor	V-belt	Oil Tank Capacity (Usable Oil)
LWC-20S	3/4”(20)	0.37	50	500	0.210	0.205	0.400	0.195	0.190	6”	21/2”	A-40	1.5L(1.1l)
LWC-25S	3/4”(20)	0.37	50	430	0.278	0.265	0.250	0.237	0.225	8”	21/2”	A-40	1.5L(1.1l)
LWC-251S	3/4”(20)	0.55	50	450	0.31	0.30	0.29	0.28	0.28	8”	21/2”	A-40	1.5L(1.1l)
LWC-30S	1”(25)	0.55	50	430	0.35	0.34	0.33	0.32	0.31	10”	3”	A-44	1.5L(1.1l)
LWC-301S	1”(25)	0.75	50	520	0.42	0.41	0.40	0.39	0.38	10”	31/2”	A-45	1.5L(1.1l)
LWC-40S	11/4”(32)	0.75	50	500	0.66	0.65	0.63	0.61	0.59	12”	4”	A-52	2.5L(1.7l)
LWC-401S	11/4”(32)	1.5	50	580	0.80	0.77	0.74	0.71	0.67	12”	41/2”	A-53	2.5L(1.7l)
LWC-50S	11/2”(40)	1.5	50	430	1.14	1.12	1.09	1.06	1.02	14”	4”	A-66	3.5L(2.3L)
LWC-501S	11/2”(40)	2.2	50	500	1.44	1.42	1.39	1.36	1.32	14”	41/2”	A-67	3.5L(2.3L)
LWC-60S	2”(50)	3	50	450	1.90	1.87	1.82	1.77	1.71	16”	5”	B-71	5.5L(3.8L)
LWC-601S	2”(50)	4	50	540	2.41	2.34	2.29	2.24	2.18	16”	6”	B-72	5.5L(3.8L)
LWC-80S	21/2”(65)	4	50	430	2.82	2.74	2.66	2.59	2.50	18”	51/2”	B-80	8l(6l)
LWC-801S	21/2”(65)	5.5	50	500	3.53	3.45	3.38	3.33	3.25	18”	6”	B-82	8l(6l)
LWC-100S	3”(80)	5.5	50	390	4.32	4.28	4.25	4.18	4.11	20”	51/2”	B-93	20L(16L)
LWC-1001S	3”(80)	7.5	50	420	5.41	5.32	5.25	5.18	5.11	20”	6”	B-93	20L(16L)
LWC-125A	4”(100)	7.5	50	380	6.10	6.02	5.95	5.90	5.83	20”	51/2”	B-92	30l(25l)
LWC-125B	4”(100)	11	50	420	6.85	6.77	6.70	6.62	6.55	20”	51/2”	B-93	30l(25l)
LWC-150A	4”(100)	11	50	390	7.83	7.75	7.68	7.60	7.50	21”	6”	B-96	30l(25l)
LWC-150B	4”(100)	11	50	420	8.80	8.72	8.64	8.56	8.40	21”	6”	B-98	30l(25l)
LWC-150C	4”(100)	15	50	490	10.20	10.00	9.80	9.50	9.35	21”	7”	B-98	30l(25l)

Rotary Blower Installation Dimension Drawing



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P Size
LWC-251S	710	255	445	445	200	510	170	80	410	50	130	120	30	65	115	3/4”
LWC-30S	690	255	450	450	180	510	170	80	410	50	130	100	30	80	130	1”
LWC-301S	730	265	450	450	180	510	170	80	410	50	130	100	30	80	130	1”
LWC-40S	795	305	500	500	170	600	230	80	400	100	190	80	40	100	155	11/4”
LWC-401S	800	310	500	500	170	600	230	80	400	100	190	80	40	100	155	11/4”
LWC-50S	1010	345	600	600	210	800	265	80	600	100	225	100	90	90	160	11/2”
LWC-501S	1010	350	600	600	210	800	265	80	600	100	225	100	90	90	160	11/2”
LWC-60S	1180	385	730	730	330	850	300	100	600	125	260	185	60	95	185	2”
LWC-601S	1180	390	730	730	330	850	300	100	600	125	260	185	60	95	185	2”
LWC-80S	1325	440	870	870	325	1000	350	100	700	150	310	180	65	140	235	21/2”
LWC-801S	1325	445	870	870	325	1000	350	100	700	150	310	180	65	140	235	21/2”
LWC-100S	1520	555	955	955	420	1100	470	140	400	150	410	245	70	150	270	3”
LWC-1001S	1520	555	955	955	420	1100	470	140	400	150	410	245	70	150	270	3”

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Structure and Working Principle of the Rotary Blower

When the rotor, which is eccentrically installed inside the cylinder, rotates, it causes the four vanes (blades) inside the rotor slots to slide back and forth. This action draws in, compresses, and discharges air, enabling the blower to function. Friction occurs between the vanes, the rotor, and the cylinder wall, generating frictional heat.

Therefore, during operation, the oil drip nozzle injects the necessary lubricating oil into the cylinder. This lubricates the friction surfaces, reducing frictional heat and noise. It also forms an oil film between the components, maintaining the blower's internal seal.

The lubrication system is a circulating device that automatically supplies oil by utilizing the pressure difference generated during blower operation. Consequently, the blower must not be operated under no-load (idling) conditions!

Troubleshooting Guide for Rotary Blower

Fault Symptom	Cause	Remedy
High Noise	1. Pressure rise due to pipe blockage 2. Vibration due to improper belt guard installation 3. Motor bearing wear 4. Scoring/galling caused by dust ingress into the fan 5. Lack of lubricant 6. Poor lubrication 7. Loose pulley 8. V-belt slipping	1. Clean or replace the pipeline 2. Reinstall the belt guard properly 3. Replace the bearing with a new one 4. Overhaul the fan 5. Check the oil supply system 6. Clean the oil dropper and oil filter 7. Tighten the set screw 8. Adjust the belt tension
Overheating	1. Overload operation 2. Fan inlet filter blockage 3. Fan rotor misalignment/rubbing 4. Lack of lubricant 5. Belt slipping 6. Poor lubrication 7. Internal scoring/galling inside the fan	1. Check whether the pipeline is blocked 2. Clean the air filter 3. Gently tap the end cover with a wooden hammer 4. Refill the oil and check the oil supply system 5. Adjust the belt tension 6. Change the oil and clean the oil dropper and oil filter 7. Disassemble and inspect the fan
Insufficient Air Flow	1. Fan inlet filter blockage 2. Lack of lubricant 3. Poor lubrication 4. Belt slipping 5. Air leakage in pipeline 6. Pipeline too long	1. Clean the inlet filter 2. Check the oil supply system and refill oil 3. Clean the oil filter and oil dropper 4. Adjust the belt tension 5. Repair the pipeline 6. Reconfigure the pipeline
Excessive Oil Consumption	1. Overload operation 2. Air filter blockage 3. Oil leakage 4. Oil evaporation and splashing due to high temperature	1. Check the pipeline system 2. Clean the air filter 3. Repair the oil leakage point 4. Identify the cause and fix the problem
Damaged Belt	1. Overload operation 2. Belt slipping 3. Misalignment of the two pulleys	1. Adjustment 2. Adjustment 3. Adjustment
Motor Stops	1. Overload 2. Fan scoring/galling 3. Faulty power supply wiring 4. Excessive dirt inside the motor or bearing damage 5. Defective motor quality	1. Check the pipeline system 2. Overhaul the fan 3. Repair as needed 4. Clean the motor or replace the bearing 5. Replace the motor