

## Blowers

### Turbo Ring Blower



The terms "blower" and "squirrel cage fan", (because it looks like a hamster wheel), are frequently used as synonyms. These fans increase the speed and volume of an air stream with the rotating impellers.

#### Features

**Low noise & Vibration** : Dynamic balancing minimizes vibration

**Dust Proofed Shaft Seal** : Protects bearing from contaminated air stream and possible foreign particle damage

**High Reliability** : Directly connected motor, shaft impeller provides reliable, long term performance, No gears, Belt, Motor, brushes or sliding blades to require periodic maintenance.

**Space Efficient Design** : Unique design results in substantial air flow sat moderate pressures in a minimum space and weight.

**Dust Proofed Shaft Seal** : Protects bearing from contaminated air stream and possible foreign particle damage

**Versatility** : Easily throttled and changed from pressure to suction operation. May be mounted in a variety of fashion

**Stable Airflow** : Centrifugal compressor design delivers smooth airflow with no pulsation.

**High Pressure Airflow** : Produces continuous high pressure airflow. The ring Blower is ideally suited to many industrial applications.

Ring Blowers are designed with practical regenerative theory, require no maintenance.

## Magnetic Drive Pump



### TMD Type Magnetic Drive Pump

Magnetic Drive Pump Materials comprise mainly GFR - PP (Glass Fibre Reinforced Polypropylene) and PVDF ( Polyvinylidene Fluoride). The former could stand for 80 degree celcius liquid, and the latter could stand for 100 degree celcius liquid. All major parts of Trundean TMD Series pumps have great anti 0 corrosion ability. Therefore, almost every chemical liquid could be transported safely. Magnetic Drive Pumps abandons traditional mechanical sales design. Thus, it not only saves much time to maintain the pump but also saves much repairing cost for the users. Magnetic Drive pump could be widely applied to many industries such as PCB manufacturing process, chemical industry, filtration, etching, electroplating and surface treatment, etc. It has great performance no matter in low capacity / high head or low head/ high capacity condition.

### Features

- Seal - free, No leakage
- Excellent corrosion resistant materials such as SIC, ceramics etc
- Designed with emphasis on improved durability
- Easy to assemble. Wide Application

### Application

- PCB Manufacturing process
- Chemical industry
- Filtration
- Etching
- Electroplating
- Heat exchanger
- Seawater Aquaculture

### Notes :-

- Dry Running is strictly prohibited.
- The pumps are not appropriate for the solutions which contain crystal or particles.



# POSITIVE DISPLACEMENT THREE LOBE ROTARY BLOWER



## Advantages

- Low pressure pulsation
- Less noise & vibration
- High volumetric efficiency
- Low discharge temperature
- Low power consumption
- 100% oil free air/gas
- Low maintenance and low spares inventory

## Application

- Cement Industry
- Sugar Industry
- Fertilizer Plants
- Chemical Plants
- Iron & Steel Plant
- Textile & Paper Mill
- Water Effluent treatment Plants

The AMCL- Three Lobe Positive Displacement Blower (Root type) have been developed under Technical Collaboration with world leader UNOZAWA Gumi Iron Works Ltd. Japan, incorporating AMCL's extensive experience and technical expertise. These ARJ Series high performance Blowers employ three lobe rotor design which reduces noise and vibration level. This World Class mechanical marvel is indigenously manufactured at AMCL's state-of-the-art plant at Butibori near Nagpur. These Blowers are working in different industries in India and abroad to utmost satisfaction of our customers due to excellent product performance and our after sales parts and service support.

Yesterday's Pioneer.... Today's Leader

**AMCL MACHINERY LIMITED**  
(HNGIL Group of Companies)

# Blower Performance Table

Model	Speed (rpm)	CAPACITY Qs (M3/Min) & SHAFT POWER L(KW) AT EACH DISCHARGE PRESSURE																			
		9.8 kpa		19.6 kpa		29.4 kpa		39.2 kpa		49 kpa		58.8 kpa		68.6 kpa		78.4 kpa		88.2 kpa		98 kpa	
		1000 mmAq	2000 mmAq	3000 mmAq	4000 mmAq	5000 mmAq	6000 mmAq	7000 mmAq	8000 mmAq	9000 mmAq	10000 mmAq	11000 mmAq	12000 mmAq	13000 mmAq	14000 mmAq	15000 mmAq	16000 mmAq	17000 mmAq	18000 mmAq	19000 mmAq	20000 mmAq
ARJ 0651	1650	3.57	1	3.28	1.7	3.06	2.4	2.88	3.1	2.72	3.8	2.4	4.5	2.25	5.2	2.12	5.9				
	1750	3.83	1.1	3.54	1.9	3.32	2.6	3.14	3.3	2.98	4.1	2.66	4.8	2.51	5.6	2.38	6.3				
	1850	4.09	1.2	3.8	2	3.58	2.8	3.4	3.6	3.24	4.4	2.92	5.1	2.77	5.9	2.64	6.7				
	1950	4.35	1.3	4.06	2.1	3.84	3	3.66	3.8	3.5	4.6	3.18	5.5	3.03	6.3	2.9	7.1				
	2050	4.61	1.4	4.32	2.3	4.1	3.2	3.92	4	3.76	4.9	3.44	5.8	3.29	6.7						
	2160	4.9	1.5	4.61	2.5	4.39	3.4	4.21	4.3	4.05	5.2	3.73	6.1	3.58	7.1						
	2240	5.11	1.6	4.82	2.6	4.6	3.5	4.41	4.5	4.25	5.5	3.94	6.4	3.79	7.4						
	2380	5.47	1.8	5.18	2.8	4.96	3.8	4.78	4.9	4.62	5.9	4.3	6.9								
	1310	5.28	1.5	4.88	2.6	4.58	3.6	4.32	4.6	4.1	5.6	3.7	6.7	3.46	7.7	3.27	8.7	3.1	9.8	2.93	10.8
	1390	5.66	1.7	5.26	2.8	4.96	3.9	4.71	4.9	4.48	6	4	7.1	3.84	8.2	3.66	9.3	3.4	10.4	3.32	11.5
1470	6.05	1.8	5.65	3	5.34	4.1	5.09	5.3	4.87	6.4	4.4	7.6	4.23	8.8	4.04	9.9	3.86	11.1	3.7	12.2	
1550	6.48	2	6.08	3.2	5.78	4.5	5.52	5.7	5.3	6.9	4.9	8.1	4.66	9.4	4.47	10.6	4.3	11.8	4.13	13	
1650	6.91	2.2	6.51	3.5	6.21	4.8	5.95	6.1	5.73	7.4	5.3	8.7	5.09	10	4.9	11.3	4.73	12.6	4.56	13.9	
1750	7.39	2.4	6.99	3.8	6.69	5.2	6.43	6.6	6.21	7.9	5.8	9.3	5.57	10.7	5.38	12.1	5.21	13.4	5.04	14.8	
1850	7.87	2.7	7.47	4.1	7.17	5.6	6.91	7	6.69	8.5	6.3	9.9	6.05	11.4	5.86	12.8	5.69	14.3	5.52	15.7	
1950	8.35	3	7.95	4.5	7.65	6	7.39	7.5	7.17	9.1	6.7	10.6	6.53	12.1	6.34	13.7	6.17	15.2	6	16.7	
2050	8.83	3.2	8.43	4.8	8.13	6.4	7.87	8	7.65	9.7	7.2	11.3	7.01	12.9	6.82	14.5	6.65	16.1	6.48	17.7	
2150	9.36	3.5	8.96	5.2	8.66	6.9	8.4	8.6	8.18	10.3	7.7	12	7.54	13.7	7.35	15.4	7.18	17.1	7.01	18.8	
1310	8.05	2.3	7.52	3.8	7.11	5.4	6.76	6.9	6.46	8.5	5.9	10	5.59	11.5	5.24	13.1	5.1	14.6	4.88	16.2	
1390	8.54	2.5	8.1	4.2	7.68	5.8	7.4	7.4	7.04	9.1	6.4	10.7	6.17	12.3	5.92	14.1	5.68	15.6	5.45	17.2	
1470	9.21	2.8	8.67	4.5	8.26	6.2	7.92	7.9	7.61	9.7	7.1	11.4	6.75	13.1	6.49	14.9	6.25	16.6	6.03	18.3	
1560	9.86	3	9.32	4.9	8.91	6.7	8.56	8.5	8.26	10.4	7.7	12.2	7.39	14	7.14	15.9	6.9	17.7	6.68	20	
1650	10.5	3.3	10	5.3	9.56	7.2	9.21	9.1	8.91	11.1	8.3	13	8.04	15	7.79	16.9	7.55	18.8			
1750	11.2	3.7	10.7	5.7	10.3	7.8	9.93	9.8	9.63	11.9	9	14	8.76	16	8.51	18.1					
1850	11.9	4	11.4	6.2	11	8.4	10.7	10.6	10.4	12.7	9.8	14.9	9.48	17.1	9.23	19.3					
1950	12.7	4.4	12.1	6.7	11.7	9	11.4	11.3	11.1	13.6	10.5	15.9	10.2	18.2							
2050	13.4	4.8	12.8	7.3	12.4	9.7	12.1	12.1	11.8	14.5	11.2	16.9	10.9	19.3							
2160	14.2	5.3	13.6	7.9	13	10.4	12.9	12.9	12.6	15.5	12	18	11.7	21							
1100	11.2	3.1	10.5	5.3	9.9	7.5	9.5	9.7	9.1	11.9	8.3	14.1	8	16.3	7.7	18.5	7.4	21	7.2	23	
1170	12	3.4	11.3	5.7	10.8	8.1	10.4	10.4	10	12.7	9.2	15.1	8.9	17.4	8.6	20	8.3	22	8	24	
1240	12.9	3.7	12.2	6.2	11.6	8.7	11.2	11.1	10.8	1.6	10.1	16.1	9.7	18.6	9.4	21	9.2	24	8.9	26	
1310	13.7	4	13	6.6	12.5	9.3	12.1	11.9	11.7	14.5	10.9	17.1	10.6	20	10.3	22	10	25	9.8	28	
1390	14.7	4.4	14	7.2	13.5	10	13	12.8	12.7	15.5	11.9	18.3	11.6	21	11.3	24	11	27	10.7	29	
1470	15.7	4.8	14.8	7.8	14.4	10.7	14	13.7	13.7	16.6	12.9	19.5	12.5	22	12.2	25	12	28	11.7	31	
1560	16.8	5.3	16.1	8.5	15.5	11.6	15.1	14.7	14.8	17.3	14	21	13.6	24	13.3	27	13.1	30	12.5	33	
1650	17.9	5.9	17.2	9	16.6	12.5	16.2	15.8	15.9	19.1	15.1	22	14.7	26	14.4	29	14.2	32	13.9	36	
1750	19.1	6.5	18.4	10	17.9	13.5	17.4	17	17.1	20	16.3	24	16	27	15.7	31	15.4	34	15.1	38	
1100	16.6	4.2	15.7	7.4	15	10.6	14.4	13.8	13.9	17	12.8	20	12.4	23	12	27	11.6	30	12.8	33	
1170	17.9	4.6	16.9	8	16.2	11.4	15.6	14.8	15.1	18.2	14.1	22	13.7	25	13.3	28	12.9	32	12.5	35	
1240	19.1	5	18.2	8.6	17.5	12.2	16.9	15.8	16.4	19	15.3	23	14.9	27	14.5	30	14.1	34	13.8	38	
1310	20.4	5.4	19.4	9.2	18.7	13	18.1	16.8	17.6	21	16.6	24	16.2	28	15.8	32	15.4	36	15	40	
1390	21.8	5.9	20.8	9.9	20.1	14	19.6	18	19.1	22	18	26	17.6	30	17.2	34	16.8	38			
1470	23.2	6.4	22.3	10.7	21.6	15	21	19.3	20.5	24	19.4	28	19	32	18.6	36					
1560	24.8	7	23.9	11.6	23.2	16.1	22.6	21	22.1	25	21.1	30	20.6	34	20.2	39					
1650	26.4	7.6	25.5	12.5	24.8	17.3	24.2	22	23.7	27	22.7	32	22.2	37							
1750	28.2	8.4	27.3	13.5	26.6	18.6	26	24	25.5	29	24.4	34	24	39							
830	29.2	6.8	27.8	12.3	26.8	17.7	26	23	25.3	29	23.8	34	23.2	40	22.6	45	22.1	51	21.6	58	
930	31.1	7.3	29.7	13.1	28.7	18.9	27.9	24	27.2	30	25.7	36	25.1	42	24.5	48	24	54	23.5	59	
980	33	7.9	31.6	14	30.6	20	29.8	26	29.1	32	27.6	38	27	44	26	50	25.9	57	25.4	63	
1040	35.2	8.5	33.9	15	32.9	21	32.1	28	31.4	34	29.9	41	29.3	47	28.7	54	28.2	60	27.7	67	
1100	37.5	9.2	36.2	16.1	35.2	23	34.4	30	33.7	37	32.2	43	31.5	50	31	57	30.5	64	30	71	
1170	40.2	10.1	38.8	17.4	37.8	25	37	32	36.3	39	34.8	46	34.2	54	33.6	61	33.1	68	32.6	76	
1240	42.9	11	41.5	18.7	40.5	26	39.7	34	39	42	38.4	50	36.9	57	36.3	65	35.8	73	35.3	80	
1310	45.5	11.9	44.1	20	43.1	28	42.3	36	41.6	44	41	53	39.5	61	39	69	38.4	77	38	85	
1390	48.6	13.1	47.2	22	46.2	30	45.4	39	44.7	48	44.1	56	42.6	65	42	74	41.5	82	41	91	
830	46.1	10.6	44.2	19.1	42.8	28	41.7	36	40.7	45	38.6	53	37.8	62	37	70	36.3	79	35.6	87	
930	49	11.4	47.1	20	45.8	29	44.6	38	43.7	47	41.6	56	40.7	65	39.9	74	39.2	83	38.5	92	
980	52	12.3	50.1	22	48.7	31	47.6	41	46.6	50	45.5	60	40.7	69	42.9	79	42.2	88	41.5	97	
1040	55.5	13.3	53.6	23	52.3	33	51.1	43	50.2	53	48.1	64	47.2	74	46.5	84	45.7	94	45	104	
1100	59.1	14.4	57.2	25	55.8	36	54.7	46	53.2	57	52.9	68	50.8	78	50	89	49.3	99	48.6	110	
1170	63.2	15.7	61.3	27	59.9	38	58.8	50	57.9	61	57	72	54.9	84	54.1	95	53.4	106	52.7	117	
1240	67.4	17.1	65.5	29	64.1	41	63	53	62	65	61.1	77	59.1	89	58.3	101	57.6	113			
1310	71.5	18.6	69.6	31	68.2	44	67.1	57	66.1	69	65.3	82	63.2	95	62.4	107					
1390	76.2	20	74.3	34	73	47	71.8	61	70.9	74	70	87	67.9	101	67.1	114					
740	71.3	17	68.9	30	67.1	43	65.6	56	64.3	69	63.2	82	60.5	95	59.5	108	58.6	121	57.7	134	
780	75.6	19	73.1	32	71.3	46	69.9	60	68.6	73	67.5	87	64.8	100	63.8	114	62.81	128	62	141	
830	81	20	78.5	35	76.7	49	75.2	64	74	78	72.8	93	70.1	107	69.1	122	68.2	136	67.3	151	
880	86.3	22	83.8	38	82	53	80.6	68	79.3	84	78.2	99	75.5	114	74.5	130	73.5	145	72.6	1	



AMCL Machinery Limited

AMCL – A Profit Optimizer and Solution Provider



Works at Nagpur

## Blower Features

### AMCL Three Lobe Positive Displacement Blowers

#### Features

Three lobe rotor design

Heat- treated castings of graded cast irons

Dynamically balanced rotors

Alloy steel hardened, ground and crowned timing gears.  
High quality, amply designed anti- friction bearings  
Intermediate chamber side covers and labyrinth shaft seal  
Optimum internal clearances

Bottom Horizontal discharge design with lube oil cooling facility.

Engineered, high quality accessories

#### Benefits

Leads to lower range of pressure pulsations at discharge. Results in smoother air discharge  
Low levels of noise < 90-100 dbA, vibration less than 80 Microns  
Lower shock loading of bearings and timing gears

Improves grain structure and ensures dimensional stability; result in higher reliability and lower maintenance

Lower to noise, vibration levels and reduced bearings loads.  
Results in smoother operation, low maintenance, higher reliability.

Leads to lower gear running noise, low wear & longer life of gears.

Long life of bearings- virtually maintenance free and smooth operation.

Prevent oil leakage into main chamber and ensure 100% oil free air.

Reduce air slippage giving high volumetric and energy efficiency and lower air discharge temperature (generally less than 100 Deg C.)

Compact installation, maintains low lube oil temperature which minimizes wear of gears and bearings.

Reliable, trouble free operation with guaranteed performance.

Catalogue No. BLW-01-06-07-2011 Rev- Issue-0

In view of continuous product development, the information given here is likely to change without prior notice.

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**Minimal Vibration and Lowest Noise**

**Roots Blower**

**ISO 9001**



**AMCL MACHINERY LIMITED, NAGPUR (INDIA)**

# Professional Manufacturer of Roots Blower



TH Type  
Roots Blower



THD Type  
Direct Drive Roots Blower



THV Type  
Roots Vacuum Blower



TV Type  
Vertical Roots Blower



TSW Type  
Submersible Roots Blower



THL Type  
Two Section Roots Blower



THVE Type (European Style)  
Roots Vacuum Blower



TS Type  
Ring Blower



THW Type  
Water-Cooled Roots Blower



THS Type  
Partial Water-Cooled Roots Blower



TMD Type  
Magnetic Drive Pump

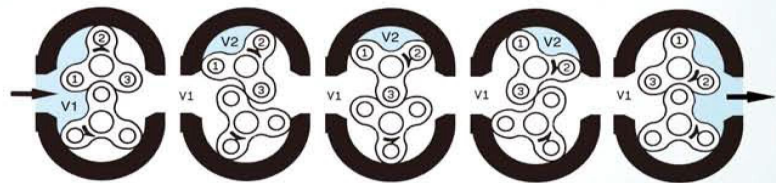


Diffusers  
Tubes

## Features of TRUNDEAN Pwots Blower :

1. The air compartment and the side cover of our blower has a flange and groove rim, which can not only strengthen the blower's operational functions but also prevent eccentric phenomenal resulting from the fastening of the stud, which may shorten the life of the blower.
2. To reduce man-made errors, enhance the precision of the leave wheel, and to higher the blower efficiency, our rotor uses the most advanced one time work process Four-Shaft method.
3. Appropriate clearance between the rotors and the rotors with the casing ensure no direct operational contact, hence no lubrication is necessary. The synchronous gear drive system and the shaft bearings are the only parts which require lubrication. Separate lateral chambers are designed to house these moving parts with proper seals to prevent oil leakage to the main chamber.
4. Computerized CNC machines are used to produce components and parts of high quality and precision also saves the user both time and labor during maintenance and replacement.
5. Low Noise & Minimal Vibration: Noise and vibration reduction are the main emphasis in developing the new series of roots blower. The TRUNDEAN Blower rotor concept was adopted based on its flow characteristics which are very stable and even compared to the 2 lobes type, also coupled with the fact that it shows a considerable reduction of both noise and vibration. The ext ent of reduction can even allow the smaller unit to operate without the need of a silencer.

## Principle of Blower Operation :



There are two rotors in the compartment of the blower body, when the rotors operate in opposite direction, they suck air in to balance the pressure created due to the volume V1 change on the inlet side. And the air of the volume V2 will be sent out thru the discharge side and the high pressure will be created thru the discharge.

There is no need to supply any lubrication between two rotors because of the existing clearance between them which gives no worry about the possibility of friction. The blower runs well at high speed and produces clean air, it is also applied to vacuum purpose.

## Usage of Performance Table :

The performance table shows relationships among blower type, bore, rpm., discharge pressure, theoretical air capacity and shaft power.

1. The air volume shown in the performance table represents a suction volume under standard suction condition (temp. 20 °C, absolute pressure 1.0332 kg/cm<sup>2</sup>, relative humidity 65%).
2. In case an air flow under the normal condition (0 °C 1.0332 1.0332 kg/cm<sup>2</sup> ABS) is equivalent to a suction pressure, it can be converted to an air flow under the standard condition by means of following formula:

$$Q_s = Q_n \times \frac{\gamma_n}{\gamma_s} \quad \gamma = 0.465 \frac{P - 0.378 \psi \times P_s}{273 + t} \quad \psi : \text{Humidity}(\%) \quad P : \text{Pressure}(\text{mmHg})$$

$Q_n$  : Air flow under normal condition Nm<sup>3</sup>/min     $Q_s$  : Air flow under standard condition (indicated in the performance table, m<sup>3</sup>/min)

$\gamma$  : Air ratio weight(kg/m<sup>3</sup>)     $P_s$  : Water vapor saturation pressure of the temperature(mmHg)     $T$  : Absolute Temperature(273+t)°C

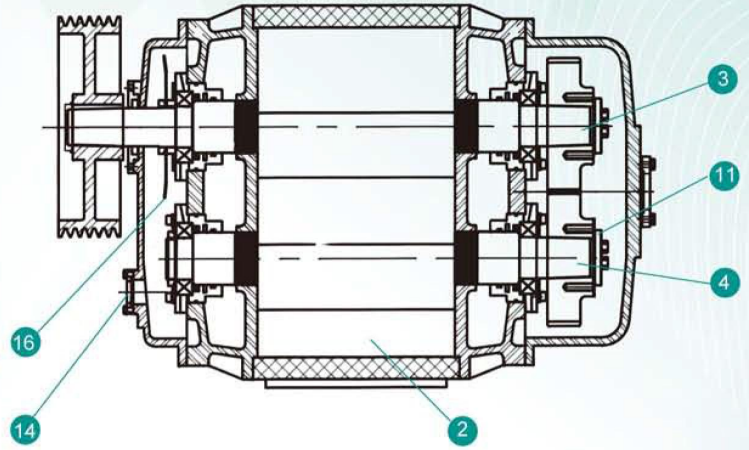
3. An air flow under discharge condition can be converted to an air flow under standard condition :

$$Q_s = Q_d \times \frac{1.0332 + P_d}{1.0332} \times \frac{273 + T_s}{273 + T_d} \quad Q_d : \text{Air flow under discharge condition, m}^3/\text{min} \quad T_s : \text{Suction temperature}$$

$$P_d : \text{Discharge pressure, kgf/m}^2 \quad T_d : \text{Discharge temperature}$$

4. Seek blower type, bore, rpm., and shaft power of the performance table based on the air flow and required discharge pressure obtained as a result of the aforementioned results.
5. The selective range is duplicated depending on blower types. However, as a selective criterion, choose blowers of the smaller type from a economical viewpoint and those of the larger type from a viewpoint of noise level.

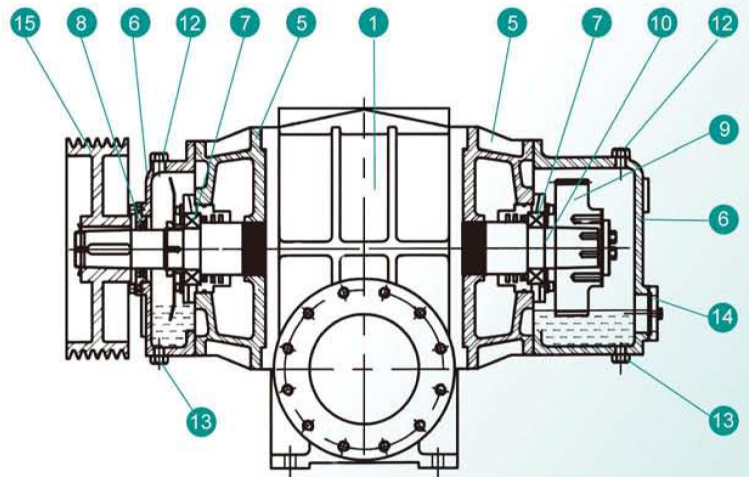
# TH Type Structural Drawing



## TH Type (Pressure Conveyance)

Pressure: 0~6000 mmAq

Power: 1~300 HP



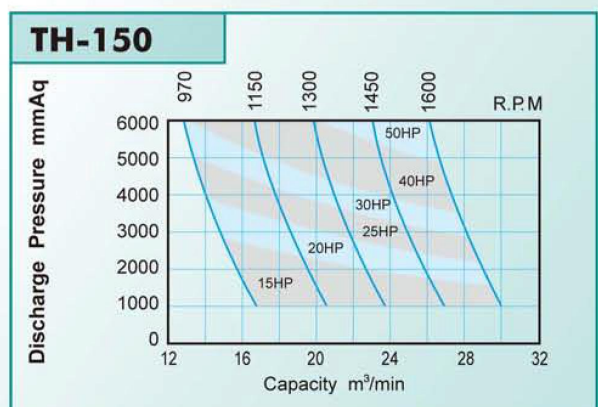
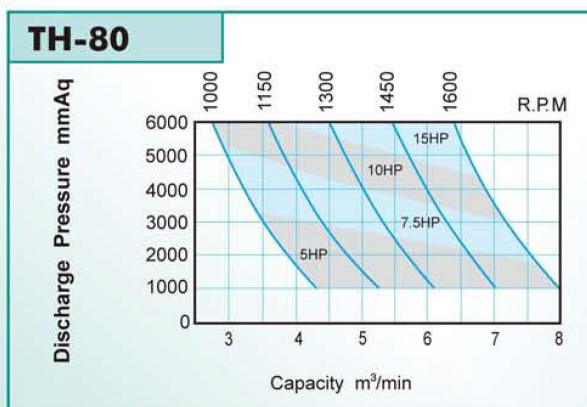
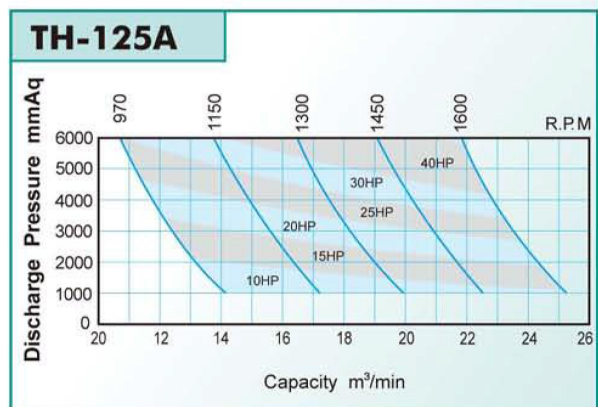
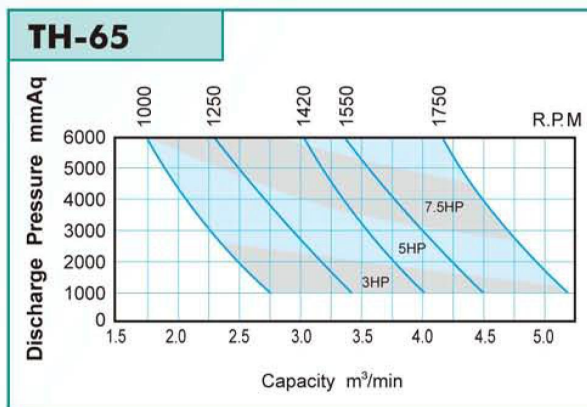
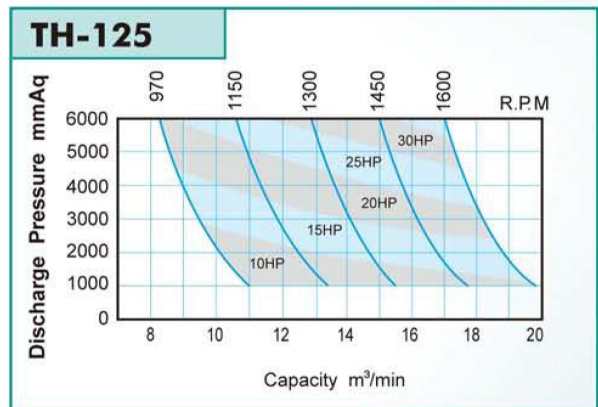
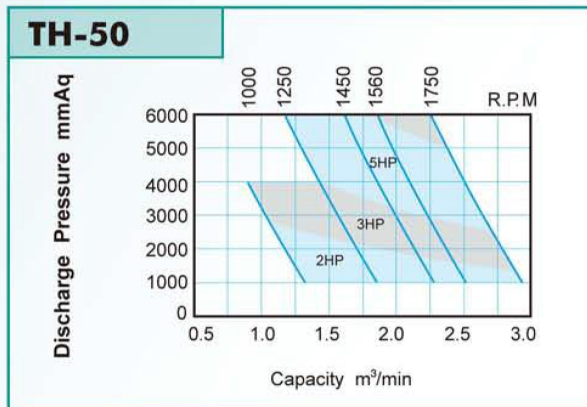
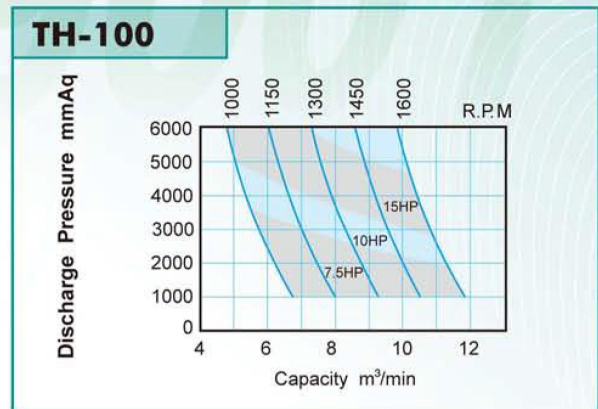
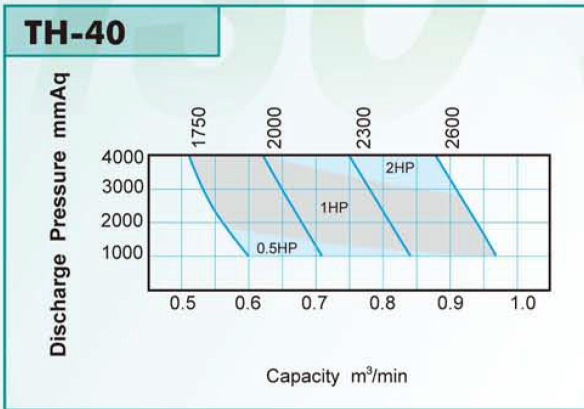
NO.	Name	Material	Q'ty	NO.	Name	Material	NO.
1	Main body	FC25	1	9	Gear	SNM220	2
2	Rotor	FC25	2	10	"S"Ring	SK7	2
3	Drive Shaft	S45C	1	11	Washer	S45C	2
4	Driven Shaft	S45C	1	12	Lubrication Plug	PP	2
5	Bearing Base	FC25	2	13	Drain Plug	FCMB28	2
6	Oil Box	FC25	2	14	Oil Gauge	BRASS	2
7	Bearing	SUJ2	4	15	Pulley	FC20	1
8	Oil Seal	NBR	1	16	Oil Splasher	SS41	1

※ Could be manufactured by special material

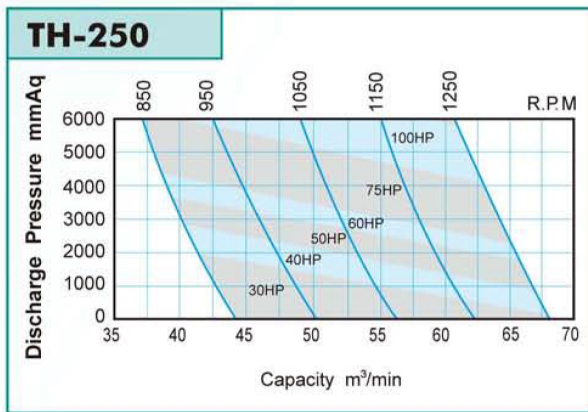
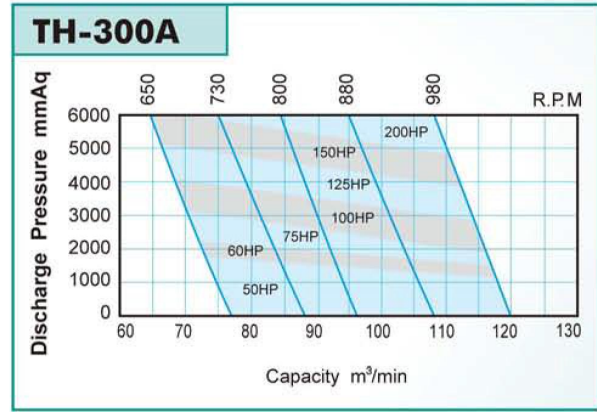
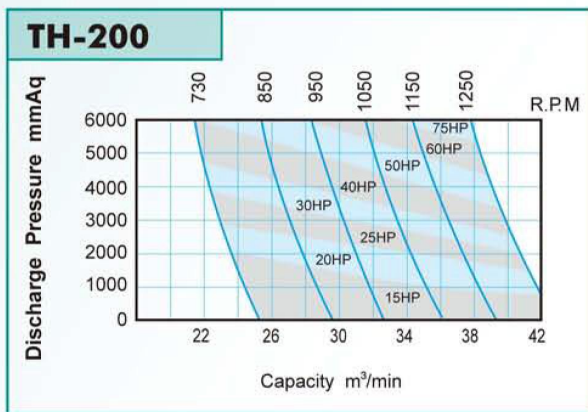
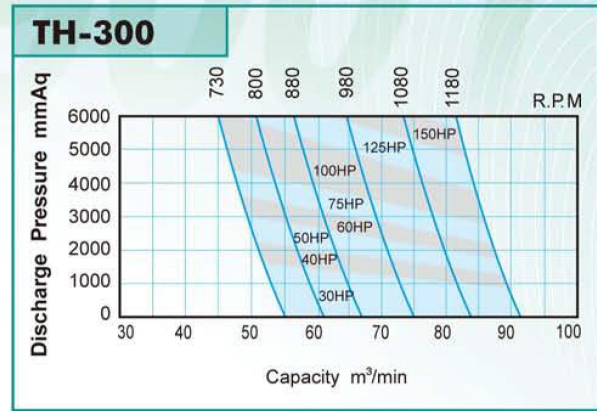
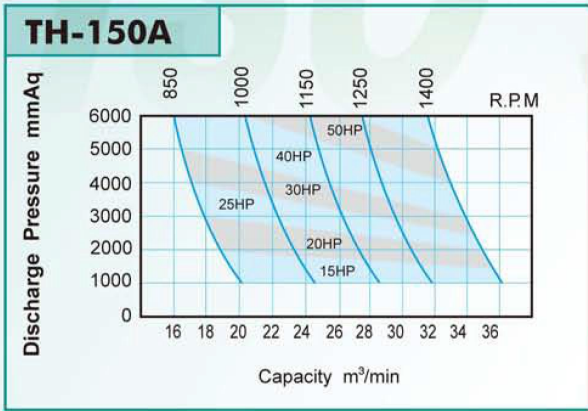
## TH Type Performance Table (Pressure Conveyance)

Models	Speed R.P.M	1000 mmAq		2000 mmAq		3000 mmAq		4000 mmAq		5000 mmAq		6000 mmAq	
		m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw
TH-40	1750	0.60	0.26	0.56	0.39	0.54	0.53	0.51	0.66				
	2000	0.71	0.30	0.68	0.45	0.65	0.60	0.62	0.75				
	2300	0.84	0.34	0.81	0.51	0.78	0.69	0.75	0.86				
	2600	0.97	0.38	0.84	0.57	0.91	0.78	0.88	0.97				
TH-50	1000	1.33	0.72	1.18	1.07	1.04	1.45	0.90	1.81	0.77	2.15	0.64	2.44
	1250	1.86	0.91	1.71	1.35	1.57	1.82	1.43	2.27	1.31	2.69	1.18	3.06
	1450	2.29	1.05	2.14	1.56	2.00	2.10	1.86	2.62	1.74	3.11	1.61	3.53
	1560	2.53	1.13	2.38	1.68	2.24	2.26	2.10	2.82	1.97	3.35	1.84	3.80
	1750	2.94	1.27	2.78	1.88	2.65	2.54	2.51	3.17	2.38	3.75	2.25	4.27
TH-65	1000	2.76	1.2	2.48	1.9	2.27	2.5	2.06	3.1	1.85	3.7	1.75	4.3
	1250	3.41	1.5	3.14	2.2	2.93	2.9	2.72	3.6	2.51	4.3	2.31	5.0
	1420	4.03	1.7	3.76	2.5	3.55	3.3	3.34	4.2	3.23	5.0	3.03	5.8
	1550	4.48	1.8	4.23	2.7	4.00	3.6	3.79	4.5	3.58	5.4	3.37	6.3
	1750	5.17	2.1	4.89	3.1	4.68	4.1	4.47	5.1	4.26	6.1	4.16	7.1
TH-80	1000	4.38	1.5	3.94	2.4	3.57	2.8	3.25	4.3	2.97	5.2	2.72	6.1
	1150	5.27	1.8	4.85	2.9	4.48	3.9	4.16	5.0	3.87	6.0	3.61	7.1
	1300	6.17	2.0	5.74	3.2	5.37	4.4	5.05	5.6	4.76	6.8	4.51	8.0
	1450	7.07	2.2	6.65	3.6	6.28	5.0	5.96	6.3	5.66	7.6	5.41	9.0
	1600	7.96	2.5	7.54	4.0	7.17	5.5	6.85	6.9	6.55	8.4	6.30	9.9
TH-100	1000	6.72	2.3	6.22	3.5	5.72	4.8	5.38	6.1	5.04	7.4	4.80	8.7
	1150	8.00	2.8	7.42	4.2	7.02	5.5	6.58	7.2	6.34	8.5	6.14	10.0
	1300	9.26	3.0	8.71	4.6	8.26	6.3	7.89	8.0	7.57	9.7	7.31	11.4
	1450	10.50	3.4	9.96	5.2	9.51	7.0	9.14	9.0	8.82	10.8	8.57	12.7
	1600	11.8	3.7	11.2	5.7	10.8	7.8	10.4	9.9	10.1	12.0	9.82	14.1
TH-125	970	11.0	3.4	10.2	5.7	9.5	7.9	8.9	10.2	8.5	12.5	8.0	14.8
	1150	13.5	4.0	12.7	6.7	12.1	9.4	11.5	12.1	11.0	14.8	10.6	17.5
	1300	15.6	4.5	14.8	7.6	14.2	10.6	13.6	13.6	13.1	16.7	12.7	19.8
	1450	17.7	5.0	16.9	8.5	16.2	11.8	15.6	15.2	15.2	18.7	14.7	22.1
	1600	19.8	5.5	19.0	9.3	18.3	13.0	17.7	16.8	17.3	20.6	16.8	24.4
TH-125A	970	14.1	4.2	13.1	7.1	12.4	9.9	11.7	13.0	11.2	15.7	10.7	18.5
	1150	17.2	5.0	16.3	8.4	15.6	11.8	14.8	15.4	14.4	18.6	13.8	22.0
	1300	19.9	5.7	18.9	9.5	18.2	13.3	17.5	17.4	17.0	21.0	16.5	24.8
	1450	22.5	6.3	21.6	10.6	20.9	14.8	20.2	19.4	19.6	23.4	19.1	27.7
	1600	25.2	7.0	24.2	11.7	23.5	16.4	22.8	21.4	22.3	25.9	21.8	30.6
TH-150	970	16.8	4.9	15.7	8.4	14.9	11.8	14.2	15.2	13.5	18.6	12.9	22.0
	1150	20.6	5.8	19.5	9.9	18.6	14.0	17.9	18.0	17.3	22.1	16.7	26.1
	1300	23.7	6.6	22.6	11.2	21.8	15.8	21.1	20.4	20.4	25.0	19.9	29.5
	1450	26.9	7.4	25.8	12.5	24.9	17.6	24.2	22.7	23.6	27.9	23.0	33.0
	1600	30.0	8.1	28.9	13.8	28.1	19.4	27.4	25.1	26.7	30.7	26.1	36.4
TH-150A	850	20.7	6.1	19.5	10.2	18.3	14.3	17.5	18.4	16.7	22.6	16.1	26.7
	1000	25.0	7.1	23.7	12.0	22.6	16.9	21.7	21.7	20.9	26.6	20.3	31.4
	1150	29.3	8.2	27.9	13.8	26.9	17.7	25.9	22.8	25.2	30.6	24.5	36.1
	1250	32.2	8.9	30.8	15.0	29.7	21.1	28.8	27.2	28.0	33.3	27.3	39.3
	1400	36.4	10.0	35.0	16.9	34.0	23.6	33.0	30.4	32.3	37.3	31.6	44.0
TH-200	730	24.6	6.7	23.8	11.2	23.2	15.9	22.7	20.5	22.1	25.1	21.7	29.7
	850	28.6	7.8	27.7	13.1	27.0	18.5	26.4	24.0	25.6	29.2	25.3	34.6
	950	32.0	8.7	31.0	14.6	30.2	20.7	29.5	26.7	28.8	32.6	28.3	38.7
	1050	35.3	9.6	34.3	16.2	33.3	22.8	32.6	29.5	31.8	36.1	31.3	42.7
	1150	38.7	10.5	37.5	17.7	36.5	25.0	35.7	32.3	34.9	39.5	34.2	46.8
	1250	42.1	11.4	40.8	19.3	44.7	27.2	38.8	35.1	38.0	43.0	37.2	50.9
TH-250	730	38.6	9.7	37.5	16.6	36.6	23.7	35.9	30.8	35.2	37.9	34.5	44.8
	850	44.9	11.2	43.7	19.4	42.6	27.6	41.8	35.8	40.9	44.1	40.2	52.2
	950	50.1	12.6	48.8	21.6	47.7	30.8	46.7	40.1	45.8	49.3	44.9	58.3
	1050	55.4	13.9	54.0	23.9	52.7	34.1	51.6	44.3	50.6	54.5	49.7	64.5
	1150	60.7	15.2	59.1	26.2	57.7	37.3	56.5	48.5	55.4	59.7	54.4	70.6
	1250	65.9	16.6	64.3	28.5	62.8	40.6	61.4	52.8	60.3	64.9	59.2	76.8
TH-300	730	52.8	15.7	50.8	27.4	49.2	39.1	47.8	50.8	46.5	62.5	45.4	74.8
	800	58.4	17.1	56.4	29.9	54.8	42.6	53.4	55.4	52.0	68.1	50.9	81.6
	880	64.8	18.8	62.8	32.8	61.1	46.7	59.7	60.7	58.3	74.6	57.2	89.4
	980	72.9	20.7	70.9	36.2	69.2	51.4	67.8	66.9	66.4	82.3	65.2	98.6
	1080	81.1	22.9	79.1	39.9	77.4	56.7	76.0	73.8	74.6	90.8	73.4	108.7
	1180	89.3	25.0	87.3	43.6	85.6	62.0	84.1	80.6	82.7	99.2	81.6	118.7
TH-300A	650	74.8	21.9	72.2	39.1	69.9	55.2	68.1	72.5	66.3	89.7	64.8	97.8
	730	85.2	24.2	82.6	43.7	80.4	62.1	78.6	80.5	76.9	100.0	75.3	118.5
	800	94.4	26.5	91.8	47.2	89.7	67.9	87.8	88.6	86.1	109.3	84.5	130.0
	880	105.3	29.9	102.6	51.8	100.3	74.8	98.4	97.8	96.6	120.8	95.1	143.8
	980	117.8	33.4	115.5	58.7	113.4	82.8	109.6	109.3	108.9	134.6	108.1	159.9

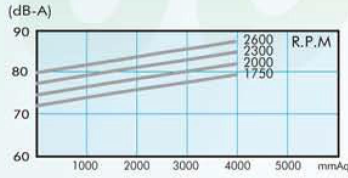
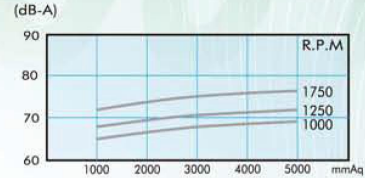
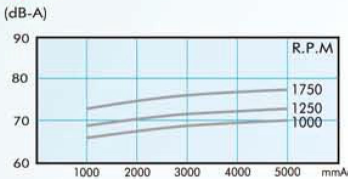
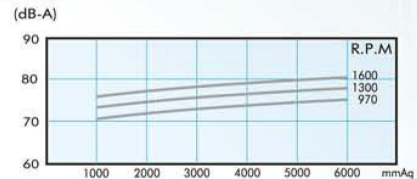
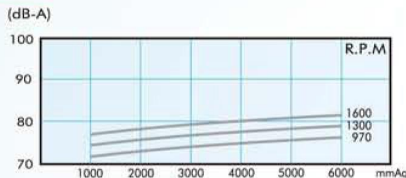
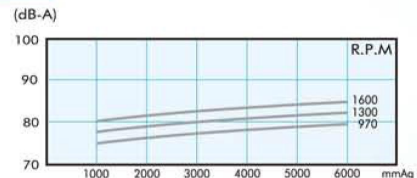
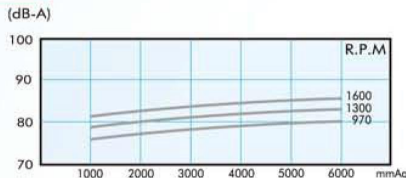
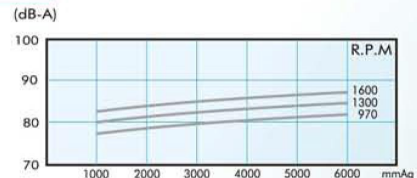
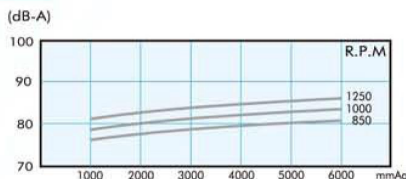
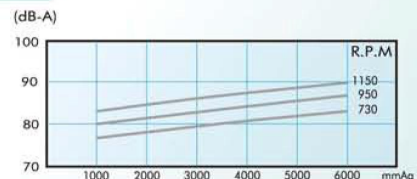
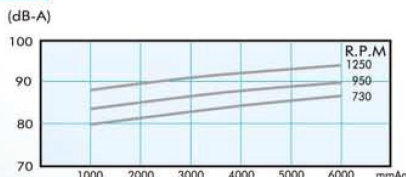
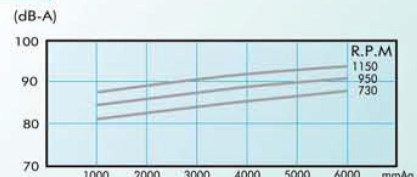
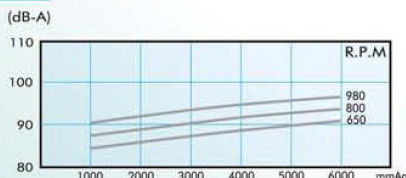
# TH Type Performance Curve (Pressure Conveyance)



# TH Type Performance Curve (Pressure Conveyance)



# TH Type Noise Level Curve

**TH-40**

**TH-50**

**TH-65**

**TH-80**

**TH-100**

**TH-125**

**TH-125A**

**TH-150**

**TH-150A**

**TH-200**

**TH-250**

**TH-300**

**TH-300A**


- Noise Level measured at a distance of 1 meter for the blower fitted with a standard silencer.
- Noise level may be different according to the extent pipe length and environmental conditions.

All of TRUNDEAN's products have been improved which reduce more noise level.

# THV Type Performance Table (Vacuum)

THV Type Performance Table

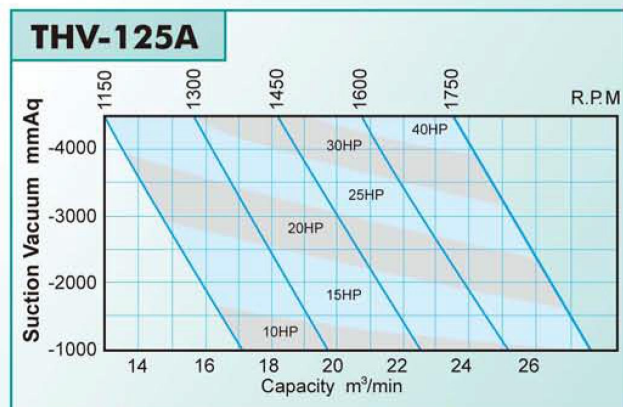
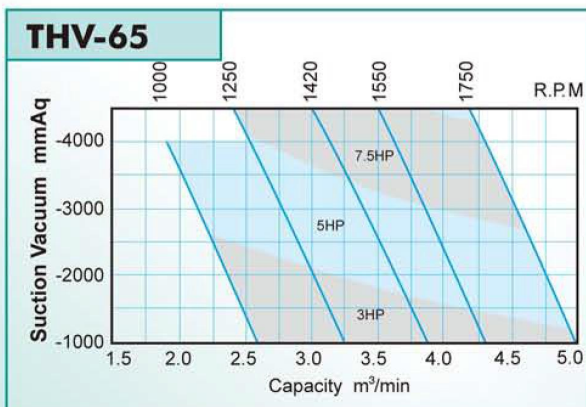
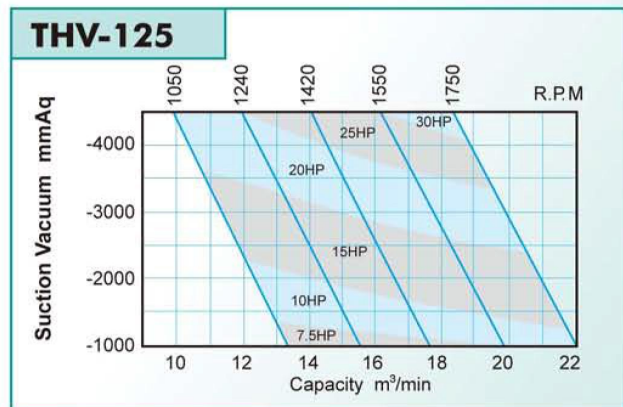
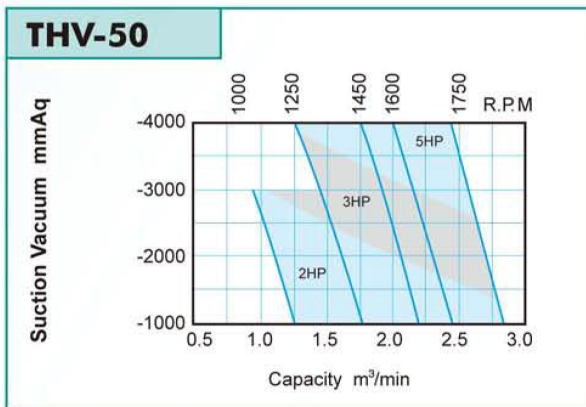
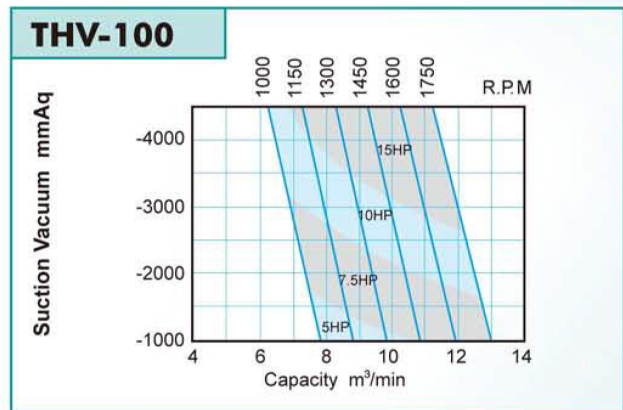
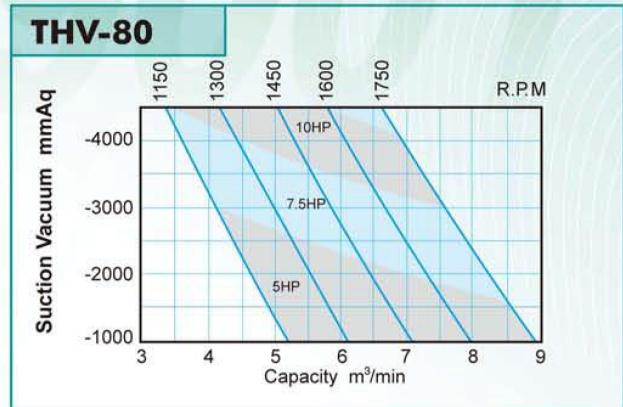
Models	Speed R.P.M	-1000 mmAq		-2000 mmAq		-3000 mmAq		-3500 mmAq		-4000 mmAq		-4500 mmAq	
		m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw
THV-50	1000	1.22	0.72	1.07	1.07	0.93	1.45	0.86	1.61	0.79	1.78	0.73	1.95
	1250	1.76	0.91	1.61	1.35	1.47	1.82	1.40	2.02	1.33	2.22	1.26	2.44
	1450	2.19	1.05	2.04	1.56	1.90	2.10	1.83	2.34	1.76	2.58	1.69	2.83
	1560	2.42	1.13	2.27	1.68	2.13	2.26	2.06	2.52	1.99	2.77	1.93	3.04
	1750	2.83	1.27	2.68	1.88	2.54	2.54	2.47	2.83	2.40	3.11	2.34	3.41
THV-65	1000	2.58	1.24	2.31	1.90	2.10	2.50	2.00	2.77	1.89	3.10	1.81	3.37
	1250	3.23	1.50	2.97	2.20	2.76	2.90	2.65	3.27	2.55	3.63	2.47	3.98
	1420	3.85	1.70	3.59	2.50	3.38	3.31	3.27	3.75	3.17	3.75	3.09	4.55
	1550	4.30	1.80	4.03	2.70	3.82	3.61	3.72	4.09	3.61	4.20	3.53	4.97
	1750	4.99	2.10	4.72	3.10	4.51	4.10	4.40	4.62	4.30	4.54	4.22	5.61
THV-80	1150	5.11	1.8	4.55	2.9	4.03	3.9	3.83	4.5	3.61	5.0	3.42	5.5
	1300	6.12	2.0	5.51	3.2	4.98	4.4	4.71	5.0	4.43	5.6	4.19	6.2
	1450	7.09	2.2	6.43	3.6	5.81	5.0	5.51	5.6	5.12	6.3	4.99	6.9
	1600	7.98	2.5	7.31	4.0	6.64	5.5	6.37	6.2	6.04	6.9	5.78	7.7
	1750	8.85	2.7	8.23	4.4	7.54	6.0	7.24	6.8	6.92	7.6	6.61	8.4
THV-100	1150	8.54	2.7	8.08	4.1	7.62	5.6	7.42	6.3	7.23	7.1	6.9	7.9
	1300	9.65	3.0	9.14	4.6	8.62	6.3	8.39	7.1	8.17	8.1	7.8	8.9
	1450	10.80	3.4	10.20	5.2	9.61	7.1	9.36	7.9	9.11	9.0	8.7	9.9
	1600	11.9	3.7	11.2	5.7	10.6	7.8	10.3	8.7	10.1	9.9	9.6	11.0
	1750	13.0	4.1	12.3	6.2	11.6	8.5	11.3	9.6	11.0	10.8	10.5	12.0
THV-125	970	11.0	3.4	9.8	5.6	8.7	7.9	8.2	9.0	7.8	10.1	7.3	11.3
	1150	13.5	4.0	12.4	6.7	11.3	9.3	10.8	10.7	10.4	12.0	9.8	13.4
	1300	15.6	4.5	14.5	7.5	13.4	10.5	12.9	12.1	12.5	13.6	12.0	15.1
	1450	17.7	5.0	16.6	8.4	15.5	11.7	14.9	13.5	14.5	15.2	14.1	16.9
	1600	19.8	5.5	18.7	9.3	17.5	13.0	17.0	14.9	16.6	16.7	16.2	18.6
THV-125A	970	14.0	4.3	12.7	7.2	11.5	10.0	11.0	11.5	10.4	12.9	9.7	14.2
	1150	17.2	5.0	15.9	8.5	14.7	11.9	14.2	13.6	13.6	15.3	13.0	16.8
	1300	19.9	5.7	18.5	9.6	17.3	13.4	16.8	15.4	16.2	17.3	15.6	19.0
	1450	22.5	6.4	21.2	10.7	20.0	15.0	19.5	17.1	18.9	19.2	18.3	21.2
	1600	25.2	7.0	23.9	11.8	22.6	16.5	22.1	18.9	21.5	21.2	20.9	23.4
THV-150	970	16.8	4.9	15.3	8.4	13.9	11.8	13.2	13.5	12.6	15.2	11.8	17.0
	1150	20.6	5.8	19.0	9.9	17.6	14.0	17.0	16.0	16.4	18.0	15.6	20.1
	1300	23.7	6.6	22.2	11.2	20.8	15.8	20.1	18.1	19.5	20.4	18.7	22.7
	1450	26.9	7.4	25.3	12.5	23.9	17.6	23.3	20.2	22.7	22.7	21.9	25.3
	1600	30.0	8.1	28.5	13.8	27.1	19.5	26.4	22.3	25.8	25.1	25.0	28.0
THV-150A	850	24.9	7.1	23.1	12.0	21.6	16.9	20.8	19.3	20.0	21.7	19.1	24.1
	1000	29.1	8.2	27.4	13.8	25.9	19.4	25.1	22.2	24.3	25.0	23.3	27.8
	1150	33.4	9.3	31.7	15.6	30.1	21.9	29.3	25.1	28.5	28.3	27.6	31.4
	1250	36.6	10.4	33.9	17.6	31.7	24.8	30.5	28.3	29.4	31.9	28.0	35.4
	1400	41.0	11.6	38.0	19.7	35.5	27.8	34.2	31.7	32.9	35.7	31.4	39.6
THV-200	880	30.1	8.0	29.0	13.4	27.8	19.0	27.3	21.9	26.9	24.7	26.4	27.5
	950	32.5	8.7	31.3	14.6	30.1	20.6	29.5	23.7	29.1	26.7	28.5	29.7
	1050	36.0	9.5	34.6	16.1	33.2	22.8	32.6	26.2	32.1	29.4	31.5	32.8
	1150	39.4	10.5	37.9	17.7	36.4	25.0	35.7	28.7	35.2	32.3	34.5	35.9
	1230	42.1	11.2	40.5	19.0	38.9	26.7	38.2	30.7	37.6	34.5	36.9	38.4
THV-250	880	46.9	11.7	45.3	20.3	43.8	28.9	43.1	33.1	42.4	37.5	41.6	41.8
	950	50.7	12.7	49.0	22.0	47.3	31.2	46.6	35.8	45.8	40.5	45.0	45.2
	1050	56.1	14.0	54.2	24.3	52.3	34.4	51.5	39.6	50.7	44.8	49.7	50.0
	1150	61.4	15.4	59.3	26.6	57.2	37.7	56.4	43.4	55.5	49.0	54.5	54.2
	1230	65.7	16.4	63.5	28.4	61.2	40.3	60.3	46.4	59.4	52.4	58.2	58.5
THV-300	730	52.8	15.7	50.8	27.4	49.2	39.1	48.5	45.0	47.8	50.8	47.2	56.7
	800	58.4	17.1	56.4	29.9	54.8	42.6	54.1	49.0	53.4	55.4	52.7	61.8
	880	64.8	18.8	62.8	32.8	61.1	46.7	60.4	53.7	59.7	60.7	59.0	67.7
	980	72.9	20.7	70.9	36.2	69.2	51.4	68.5	59.2	67.8	66.9	67.1	74.6
	1080	81.1	22.9	79.1	39.9	77.4	56.7	76.7	65.3	76.0	73.8	75.3	82.3
THV-300A	650	74.8	21.9	72.2	39.1	69.9	55.2	69.0	63.9	68.1	72.5	67.2	81.1
	730	85.2	24.2	82.6	43.7	80.4	62.1	79.5	71.3	78.6	80.5	77.8	90.3
	800	94.4	26.5	91.8	47.2	89.7	67.9	88.8	78.3	87.8	88.6	87.0	99.0
	880	105.3	29.9	102.6	51.8	100.3	74.8	99.4	81.7	98.4	97.8	97.5	109.3
	980	117.8	33.4	115.5	58.7	113.4	82.8	111.5	96.1	109.6	109.3	107.7	122.0

# THV Type Performance Curve (Vacuum)



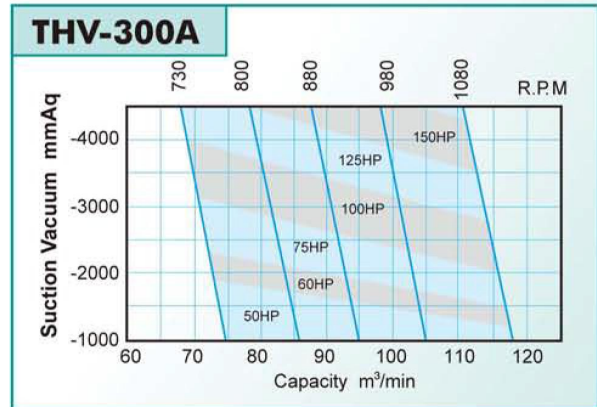
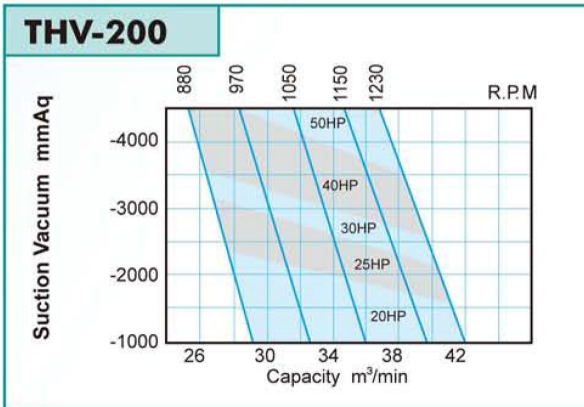
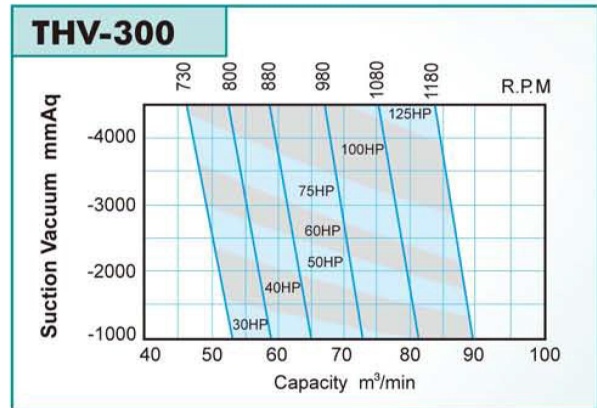
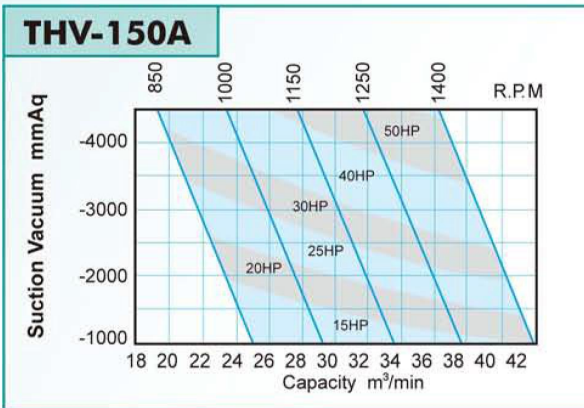
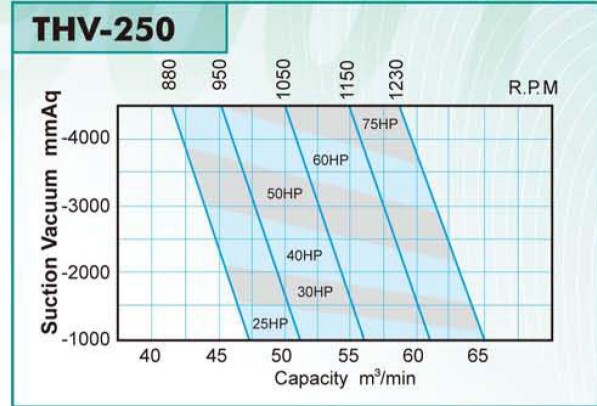
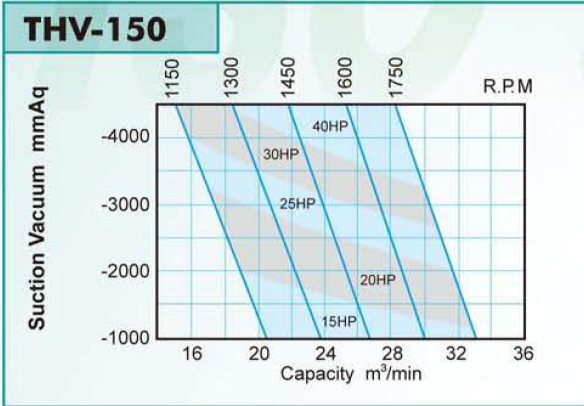
**THV Type (Vacuum)**  
 Vacuum Pressure: 0~-4500 mmAq  
 Power: 2~250 HP

THV Type Performance Curve



# THV Type Performance Curve (Vacuum)

THV Type Performance Curve



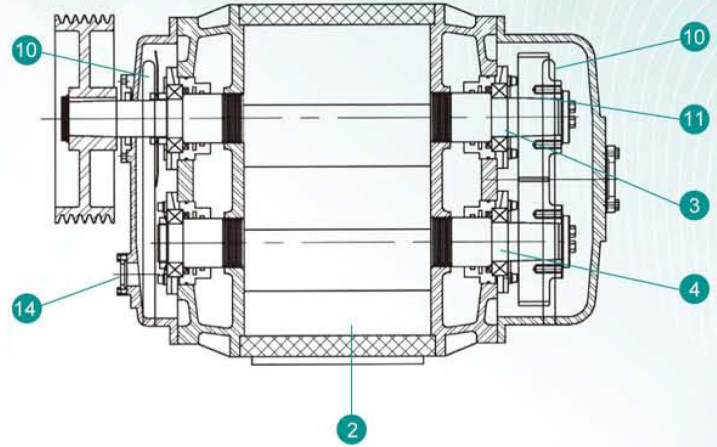
# THS Type Structural Drawing



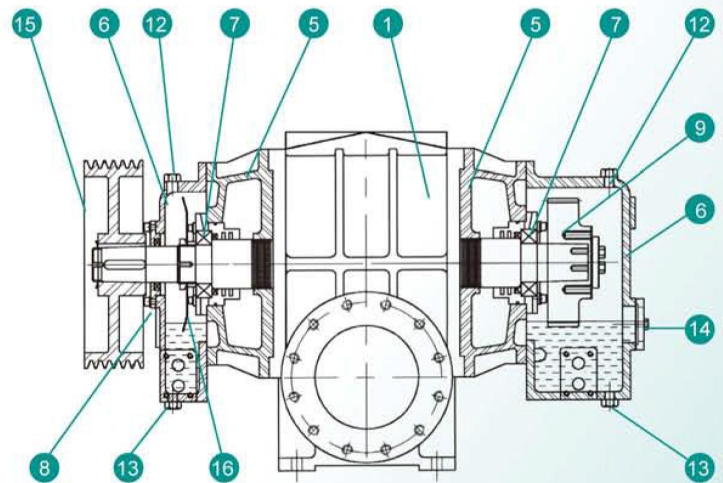
## THS Type (Pressure Conveyance)

Pressure: 0~8000 mmAq

Power: 10~250 HP



THS Type Structural Drawing



NO.	Name	Material	Q'ty	NO.	Name	Material	NO.
1	Main body	FC25	1	9	Gear	SNM220	2
2	Rotor	FC25	2	10	"S"Ring	Brass	2
3	Drive Shaft	S45C	1	11	Washer	S45C	2
4	Driven Shaft	S45C	1	12	Lubrication Plug	PP	2
5	Bearing Base	FC25	2	13	Drain Plug	FCMB28	2
6	Oil Box	FC25	2	14	Oil Gauge	BRASS	2
7	Bearing	SUJ2	4	15	Pulley	FC20	1
8	Oil Seal	NBR	1	16	Oil Splasher	SS41	1

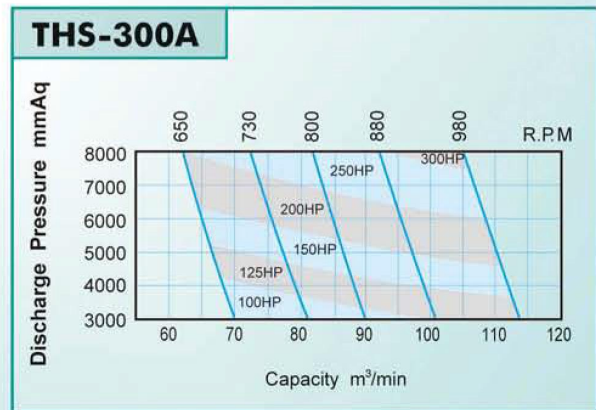
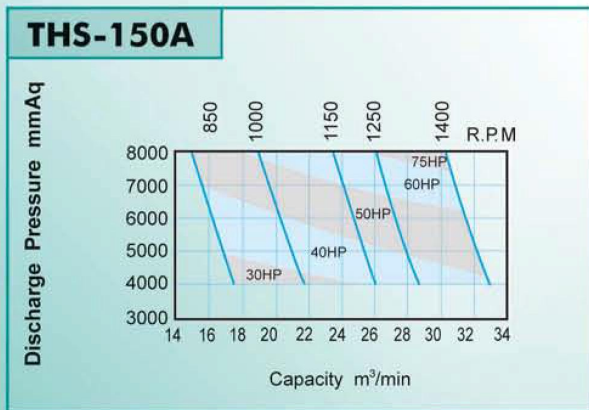
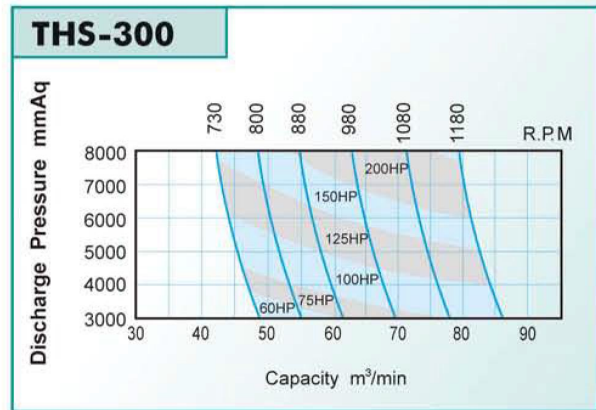
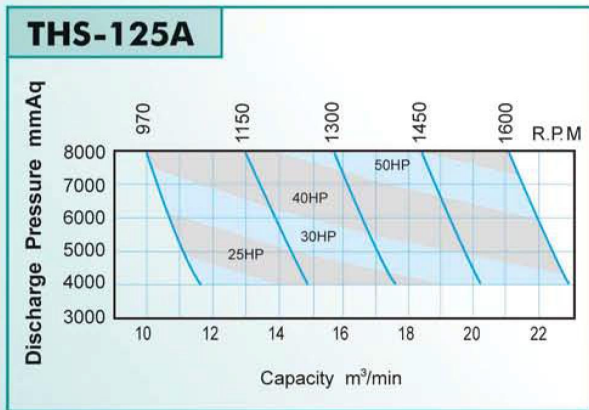
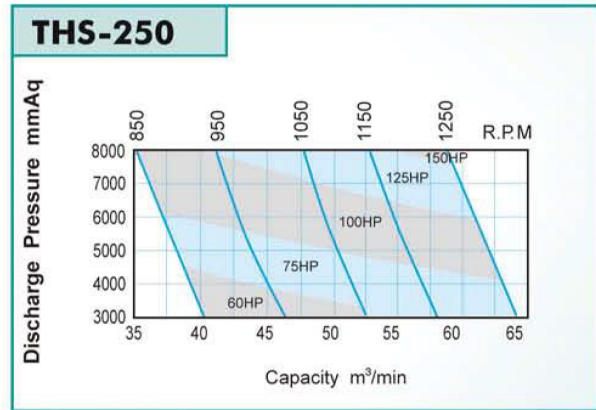
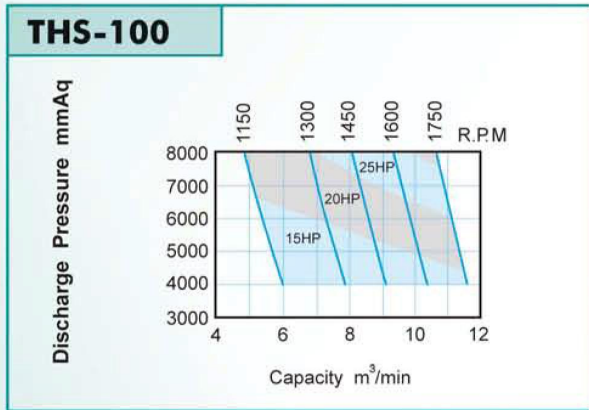
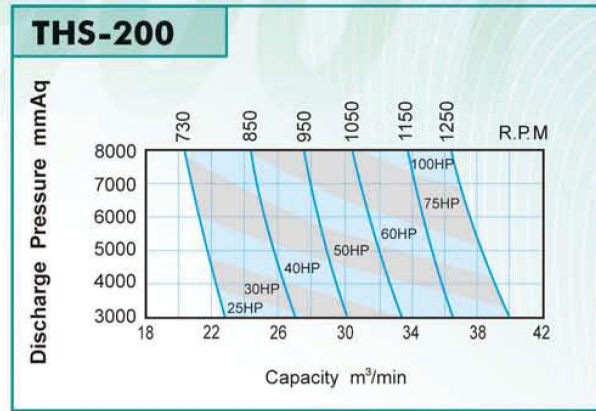
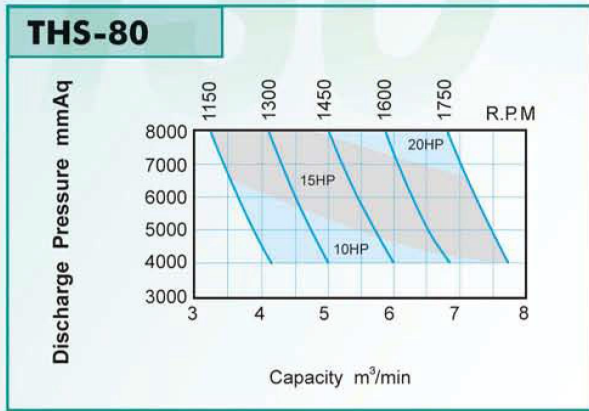
※ Could be manufactured by special material

## THS Type Performance Table (Pressure Conveyance)

Models	Speed	4000 mmAq		5000 mmAq		6000 mmAq		7000 mmAq		8000 mmAq		Cooling Water
	R.P.M	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	L / min
THS-80	1150	4.16	5.0	3.87	6.0	3.61	7.1	3.41	8.2	3.18	9.2	8
	1300	5.05	5.6	4.76	6.8	4.51	8.0	4.30	9.2	4.08	10.4	
	1450	5.96	6.3	5.66	7.6	5.41	9.0	5.20	10.3	4.98	11.6	
	1600	6.85	6.9	6.55	8.4	6.30	9.9	6.09	11.4	5.87	12.8	
	1750	7.75	7.6	7.45	9.2	7.20	10.8	6.99	12.4	6.77	14.0	
THS-100	1150	6.19	7.1	5.82	8.6	5.56	10.1	5.16	11.6	4.98	13.1	10
	1300	7.89	8.0	7.57	9.7	7.31	11.4	7.00	13.1	6.79	14.8	
	1450	9.14	9.0	8.82	10.8	8.57	12.7	8.25	14.6	8.04	16.5	
	1600	10.40	9.9	10.10	12.0	9.82	14.1	9.51	16.2	9.30	18.2	
	1750	11.60	10.8	11.30	13.1	11.00	15.4	10.70	17.7	10.55	19.9	
THS-125A	970	11.6	13.0	11.1	15.7	10.6	18.5	10.1	21.4	9.8	24.2	15
	1150	14.8	15.4	14.3	18.6	13.8	22.0	13.3	25.4	13.0	28.7	
	1300	17.5	17.4	16.9	21.0	16.5	24.8	16.0	28.7	15.6	32.4	
	1450	20.1	19.4	19.6	23.4	19.1	27.7	18.6	32.0	18.3	36.2	
	1600	22.8	21.4	22.3	25.9	21.8	30.6	21.3	35.3	20.9	39.9	
THS-150A	850	17.5	18.4	16.6	22.6	16.1	26.7	16.0	28.2	15.7	31.8	18
	1000	21.7	21.7	20.9	26.6	20.3	31.4	20.1	33.4	19.8	37.7	
	1150	25.9	22.8	25.2	30.6	24.5	36.1	23.6	37.8	23.2	42.6	
	1250	28.8	27.2	28.0	33.3	27.3	39.3	27.0	42.1	26.7	47.5	
	1400	33.0	30.4	32.3	37.3	31.6	44.0	30.4	46.5	30.1	52.5	
THS-200	850	24.3	23.7	23.5	29.1	22.9	34.6	22.3	39.7	21.7	45.1	20
	950	28.1	26.6	27.3	32.6	26.7	38.7	26.1	44.4	25.5	50.5	
	1050	31.9	29.5	31.1	36.1	30.5	42.8	29.9	49.1	29.3	55.9	
	1150	35.7	32.3	34.8	39.5	34.2	46.8	33.6	53.8	33.1	61.2	
	1250	39.5	35.2	38.6	43.0	38.0	50.9	37.4	58.5	36.9	66.6	
THS-250	850	39.1	35.9	38.1	44.2	37.1	52.3	36.2	60.3	35.3	68.6	25
	950	44.9	40.1	43.9	49.4	42.9	58.4	42.0	67.4	41.1	76.7	
	1050	50.7	44.3	49.7	54.6	48.7	64.5	47.8	74.5	46.9	84.8	
	1150	56.5	48.5	55.4	59.7	54.4	70.6	53.5	81.6	52.6	92.8	
	1250	62.3	52.7	61.2	64.9	60.2	76.7	59.3	88.7	58.4	100.9	
THS-300	730	47.8	50.8	46.5	62.5	45.4	74.8	44.3	85.8	43.5	97.6	30
	800	53.4	55.4	52.0	68.1	50.9	81.6	49.8	93.6	49.0	106.4	
	880	59.7	60.7	58.3	74.6	57.2	89.4	56.1	102.5	55.2	116.5	
	980	67.8	66.9	66.4	82.3	65.2	98.6	64.1	113.1	63.2	128.8	
	1080	76.0	73.8	74.6	90.8	73.4	108.7	72.3	124.9	71.4	141.7	
THS-300A	1180	84.1	80.6	82.7	99.2	81.6	118.7	80.5	136.6	79.6	154.6	35
	650	68.1	72.5	66.3	89.7	64.8	97.8	63.2	123.0	61.8	139.2	
	730	78.6	80.5	76.9	100.0	75.3	118.5	73.7	138.0	72.4	156.4	
	800	87.8	88.6	86.1	109.3	84.5	130.0	82.9	150.7	81.5	171.4	
	880	98.4	97.8	96.6	120.8	95.1	143.8	93.5	165.6	92.1	188.6	
	980	109.6	109.3	108.9	134.6	108.1	159.9	106.6	185.2	105.2	210.5	

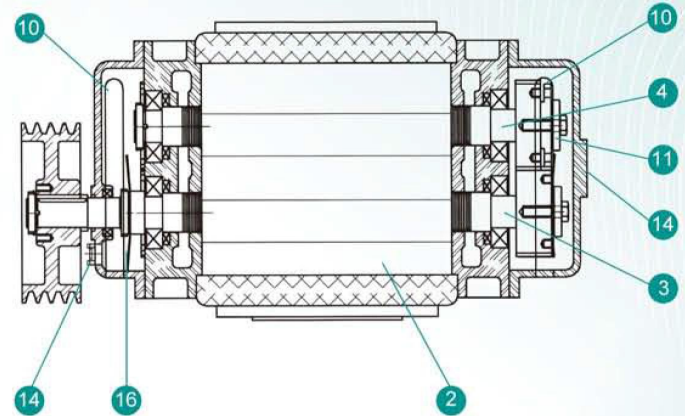
THS Type Performance Table

# THS Type Performance Curve (Pressure Conveyance)



THS Type Performance Curve

# THW Type Structural Drawing

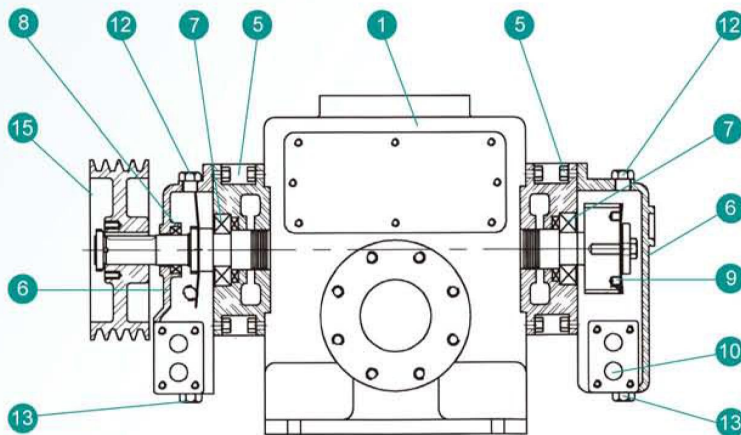


## THW Type (Pressure Conveyance)

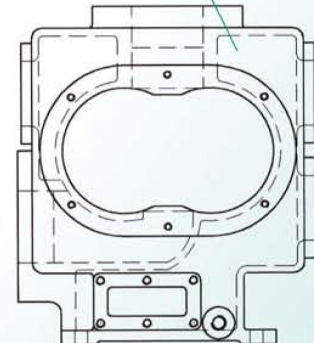
Pressure: 0~10000 mmAq

Power: 15~300 HP

THW Type Structural Drawing



The Case of cooling water



NO.	Name	Material	Q'ty	NO.	Name	Material	NO.
1	Main body	FC25	1	9	Gear	SNM220	2
2	Rotor	FC25	2	10	"S"Ring	Brass	2
3	Drive Shaft	S45C	1	11	Washer	S45C	2
4	Driven Shaft	S45C	1	12	Lubrication Plug	PP	2
5	Bearing Base	FC25	2	13	Drain Plug	FCMB28	2
6	Oil Box	FC25	2	14	Oil Gauge	BRASS	2
7	Bearing	SUJ2	4	15	Pulley	FC20	1
8	Oil Seal	NBR	1	16	Oil Splasher	SS41	1

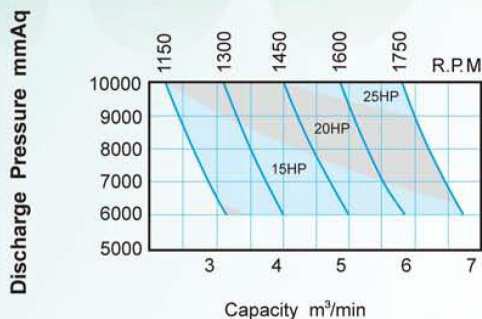
※ Could be manufactured by special material

## THW Type Performance Table (Pressure Conveyance)

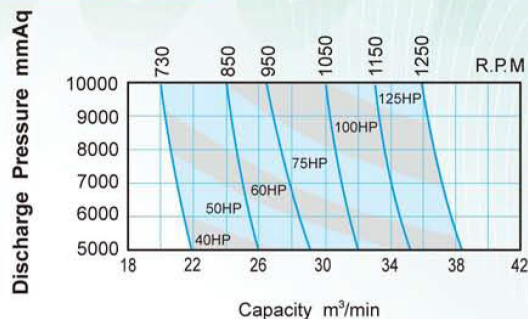
Models	Speed R.P.M	6000 mmAq		7000 mmAq		8000 mmAq		9000 mmAq		10000 mmAq		Cooling water L / min
		m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	
THW-80	1150	3.61	7.1	3.41	8.2	3.18	9.2	2.95	10.5	2.75	11.4	8
	1300	4.51	8.0	4.30	9.2	4.08	10.4	3.84	11.6	3.65	12.8	
	1450	5.41	9.0	5.20	10.3	4.98	11.6	4.64	13.0	4.44	14.3	
	1600	6.30	9.9	6.09	11.4	5.87	12.8	5.43	14.3	5.33	15.9	
	1750	7.20	10.8	6.99	12.4	6.77	14.0	6.33	15.6	6.23	17.2	
THW-100	1150	5.52	10.1	5.16	11.6	4.92	13.1	3.92	12.6	3.76	14.1	10
	1300	7.31	11.4	7.00	13.1	6.79	14.8	6.43	16.5	6.27	18.2	
	1450	8.57	12.7	8.25	14.6	8.04	16.5	7.86	18.4	7.51	20.3	
	1600	9.82	14.1	9.51	16.2	9.30	18.2	8.94	20.4	8.78	22.3	
	1750	11.00	15.4	10.70	17.7	10.55	19.9	10.20	22.3	10.10	24.0	
THW-125A	970	10.6	18.5	10.1	21.4	9.8	24.2	9.1	27.1	8.9	29.9	15
	1150	13.8	22.0	13.3	25.4	13.0	28.7	12.3	32.2	12.1	35.4	
	1300	16.5	24.8	16.0	28.7	15.6	32.4	15.0	36.4	14.8	40.0	
	1450	19.1	27.7	18.6	32.0	18.3	36.2	17.6	40.6	16.5	44.7	
	1600	21.8	30.6	21.3	35.3	20.9	39.9	20.3	44.7	20.1	49.2	
THW-150A	850	16.1	26.7	16.0	28.2	15.7	31.8	14.2	43.7	13.6	43.2	18
	1000	20.3	31.4	20.1	33.4	19.8	37.7	18.4	46.0	17.9	50.9	
	1150	24.5	36.1	23.6	37.8	23.2	42.6	22.7	52.9	22.1	58.5	
	1250	27.3	39.3	27.0	42.1	26.7	47.5	25.5	57.5	24.9	63.6	
	1400	31.6	44.0	30.4	46.5	30.1	52.5	29.7	64.4	29.1	71.3	
THW-200	850	22.9	34.6	22.3	39.7	21.7	45.1	21.0	50.2	20.6	55.6	20
	950	26.7	38.7	26.1	44.4	25.5	50.5	24.8	56.2	24.4	62.3	
	1050	30.5	42.8	29.9	49.1	29.3	55.9	28.6	62.2	28.2	69.0	
	1150	34.2	46.8	33.6	53.8	33.1	61.2	32.3	68.1	32.0	75.6	
	1250	38.0	50.9	37.4	58.5	36.9	66.6	36.1	74.1	35.8	82.3	
THW-250	850	37.1	52.3	36.2	60.3	35.3	68.6	34.5	77.0	33.6	85.0	25
	950	42.9	58.4	42.0	67.4	41.1	76.7	40.3	86.0	39.4	95.0	
	1050	48.7	64.5	47.8	74.5	46.9	84.8	46.1	95.0	45.2	105.0	
	1150	54.4	70.6	53.5	81.6	52.6	92.8	51.8	104.0	50.9	115.0	
	1250	60.2	76.7	59.3	88.7	58.4	101.0	57.6	113.0	56.7	125.0	
THW-300A	650	64.8	97.8	63.2	123.0	61.8	139.2	60.4	156.4	59.0	173.6	35
	730	75.3	118.5	73.7	138.0	72.4	156.4	70.9	176.0	69.6	185.2	
	800	84.5	130.0	82.9	150.7	81.5	171.4	80.2	192.1	78.9	212.8	
	880	95.1	143.8	93.5	165.6	92.1	188.6	90.8	211.6	89.5	234.6	
	980	108.1	159.9	106.6	185.2	105.2	210.5	103.9	235.8	102.6	261.1	

# THW Type Performance Curve (Pressure Conveyance)

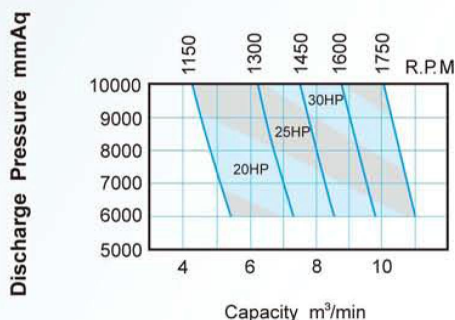
**THW-80**



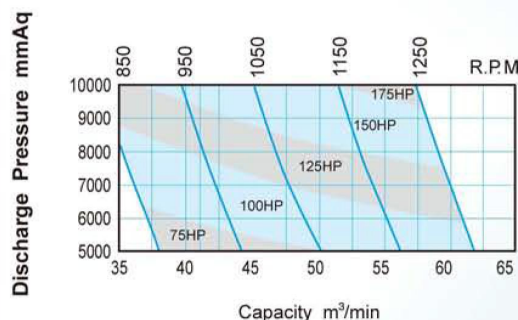
**THW-200**



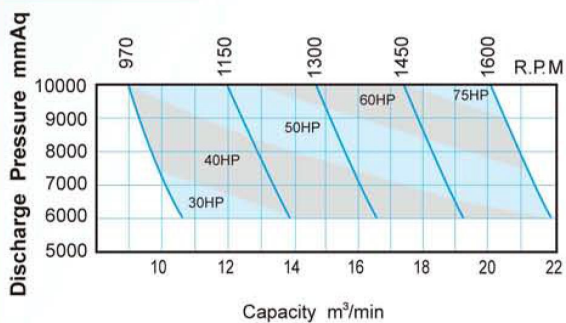
**THW-100**



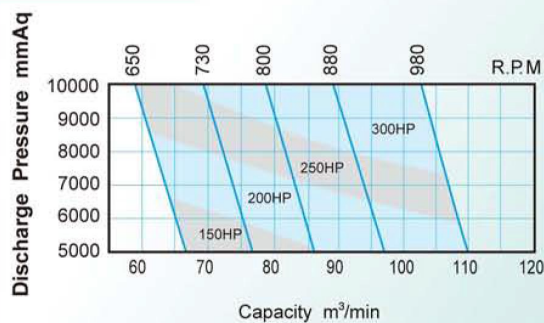
**THW-250**



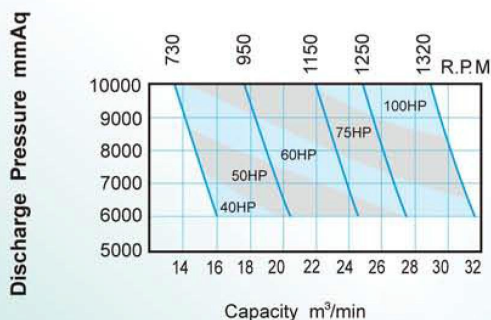
**THW-125A**



**THW-300A**

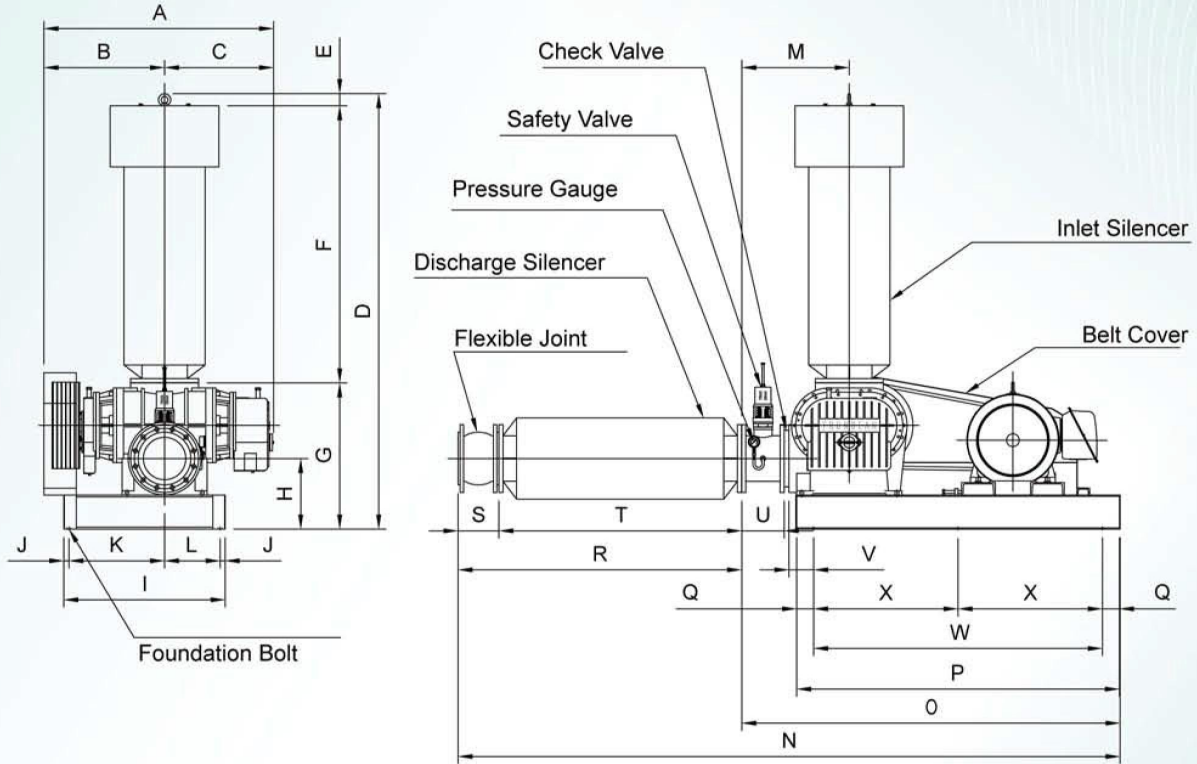


**THW-150A**



THW Type Performance Curve

# TH Type Dimension Drawing

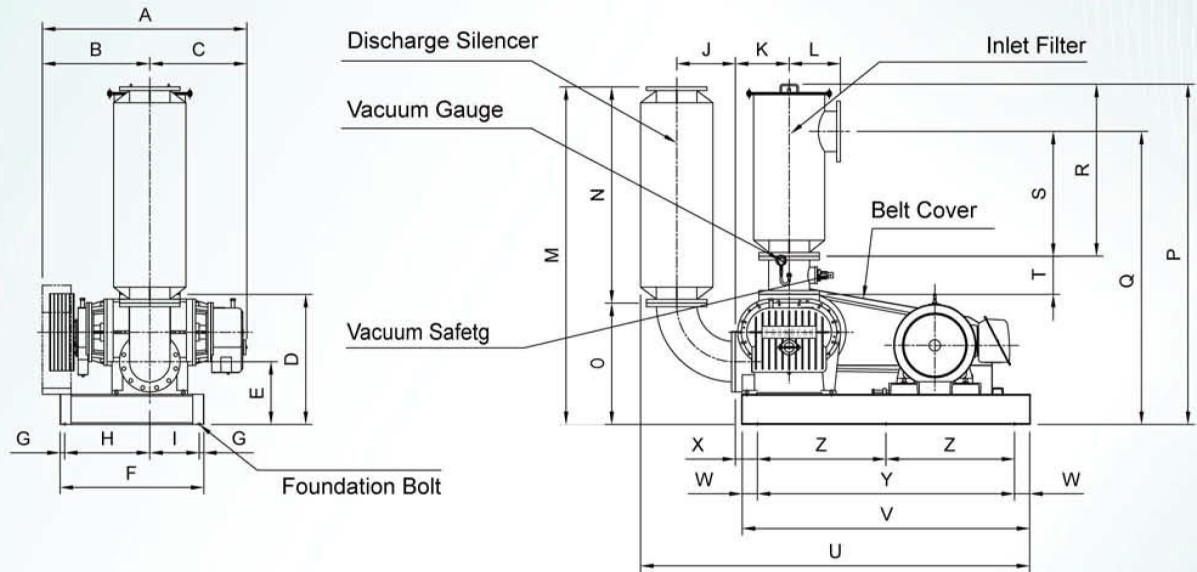


Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W1	W2
TH-40	349	195	154	820	51		260	185	330	18	177	117	304	709		500	50				123	86		400	30	61
TH-50	565	303	262	1134	51	741	342	175	470	18	285	149	326	1804	911	700	50	893	105	788	160	81	600		76	137
TH-65	658	346	312	1174	51	781	342	175	470	18	328	106	326	1814	907	700	50	907	115	792	160	81	600		94	169
TH-80	711	390	321	1248	51	782	415	183	470	18	247	187	380	2052	1130	900	100	922	130	792	185	129	700		151	234
TH-100	807	435	372	1318	51	841	462	196	470	18	292	142	380	2062	1130	900	100	932	135	797	185	129	700		168	270
TH-125	813	420	393	2022	60	1492	530	230	600	22	258	298	451	2945	1353	1100	100	1592	170	1422	200	138	900		290	464
TH-125A	893	460	433	2082	60	1492	530	230	600	22	298	258	451	2945	1353	1100	100	1592	170	1422	200	138	900		311	486
TH-150	991	503	488	2097	60	1492	545	245	600	22	340	216	451	2959	1353	1100	100	1606	180	1426	200	138	900		352	539
TH-150A	1066	555	511	2180	60	1492	628	275	600	25	395	155	511	3277	1671	1400	100	1606	180	1426	200	155	1400		580	777
TH-200	1171	624	547	2563	71	1632	860	380	950	30	477	413	583	3808	2177	1900	100	1631	205	1426	200	145		850	812	1226
TH-250	1352	710	642	2563	71	1632	860	415	950	30	563	327	633	3897	2227	1900	100	1670	240	1430	250	145		850	941	1407
TH-300	1531	797	734	2618	71	1632	915	433	950	30	590	300	687	3971	2281	1900	100	1690	260	1430	300	145		850	1026	1593
TH-300A	1402	747	655	2698	71	1632	995	435	1300	30	721	519	782	4279	2589	2200	150	1690	260	1430	300	208	1900		1575	2181

W1 : Weight of main body only. (Kg)

W2 : Weight of main body and all accessories which include Inlet & Discharge Silencer, Base Plate, T-Joint, Safety Valve, Check Valve, Belt Cover and Flexible Joint, doesn't include motor. (Kg)

# THV Type Dimension Drawing



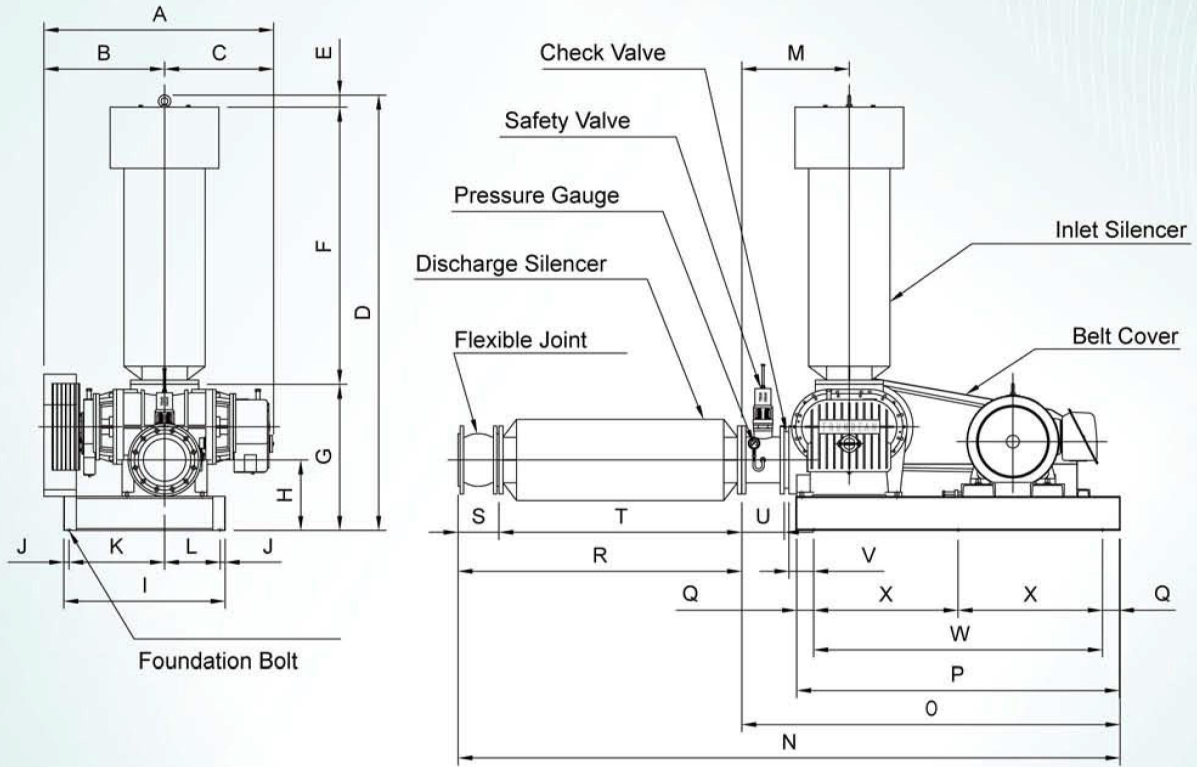
THV Type Dimension Drawing

Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	W1	W2
THV-50	565	303	262	342	175	470	18	285	149	110	150	221	1073	788	285	1022	843	520	341	160	929	700	50	81	600	76	140	
THV-65	658	346	312	342	175	470	18	328	106	120	150	223	1086	791	295	1125	934	623	432	160	963	700	50	81	600	94	169	
THV-80	711	390	321	415	183	470	18	247	187	125	179	223	1100	792	308	1323	1102	721	500	187	1166	900	100	129	700	151	234	
THV-100	807	435	372	426	196	470	18	292	142	162	179	243	1153	797	356	1335	1114	772	501	187	1229	900	100	129	700	168	270	
THV-125	813	420	393	530	230	600	22	258	298	212	235	285	1862	1422	440	1546	1293	814	561	202	1514	1100	100	138	900	290	459	
THV-125A	893	460	433	530	230	600	22	298	258	212	235	285	1862	1422	440	1546	1293	814	561	202	1514	1100	100	138	900	311	480	
THV-150	991	503	488	545	245	600	22	340	216	252	235	285	1921	1425	496	1563	1310	816	563	202	1554	1100	100	138	900	352	530	
THV-150A	1066	555	511	628	275	600	25	395	155	252	295	285	1951	1425	526	1646	1393	817	564	201	1872	1400	100	155	1200	580	769	
THV-200	1171	624	547	860	380	950	30	477	413	312	355	337	2116	1425	691	1908	1655	846	593	202	2500	1900	100	145	850	812	1193	
THV-250	1352	710	642	860	415	950	30	563	327	388	355	339	2231	1429	802	2250	1937	1138	825	252	2577	1900	100	145	850	941	1369	
THV-300	1531	797	734	915	432	950	30	590	300	465	355	339	2325	1429	896	2355	2042	1138	825	302	2728	1900	100	145	850	1026	1536	
THV-300A	1402	747	655	995	435	1300	30	721	519	465	450	339	2328	1430	898	2435	2122	1138	825	302	3040	2200	150	208	1900	1575	2125	

W1 : Weight of main body only. (Kg)

W2 : Weight of main body and all accessories which include Inlet Filter, Bast Plate T-Joint, Vacuum Safety Valve Discharge Silencer, Belt Cover, 90° Joint, doesn't include motor. (Kg)

# THS Type Dimension Drawing

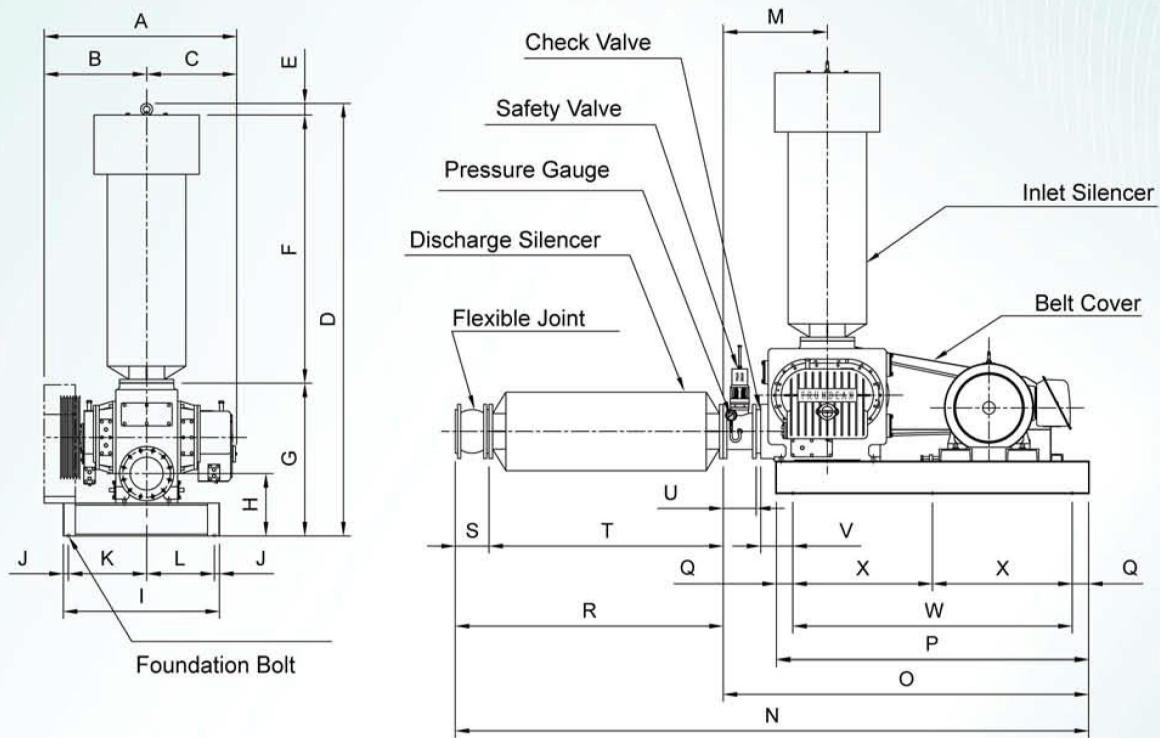


Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W1	W2
THS-80	711	390	322	1248	51	782	415	183	470	18	247	187	380	2052	1130	900	100	923	130	793	185	129	700	170	253	
THS-100	807	435	372	1318	51	841	426	196	470	18	292	142	380	2062	1130	900	100	932	135	797	185	129	700	185	287	
THS-125	514	420	394	2082	60	1492	530	230	600	22	258	298	451	2946	1354	1100	100	1592	170	1422	200	138	900	345	519	
THS-125A	938	478	460	2082	60	1492	530	230	600	22	298	258	451	2946	1354	1100	100	1592	170	1422	200	138	900	388	563	
THS-150A	1066	555	511	2180	60	1492	628	275	600	25	395	155	511	3277	1671	1400	100	1606	181	1426	200	155	1200	625	822	
THS-200	1174	624	550	2563	71	1632	860	380	950	30	477	413	583	3804	2173	1900	100	1631	205	1426	200	145	850	810	1224	
THS-250	1355	710	645	2563	71	1632	860	415	950	30	563	327	633	3893	2223	1900	100	1670	240	1430	250	145	850	970	1436	
THS-300	1531	797	734	2618	71	1632	915	433	950	30	590	300	687	3971	2281	1900	100	1690	260	1430	300	145	850	1120	1687	
THS-300A	1404	747	657	2698	71	1632	995	435	1300	30	721	519	782	4280	2590	2200	150	1690	260	1430	300	208	1900	1575	2182	

W1 : Weight of main body only. (Kg)

W2 : Weight of main body and all accessories which include Inlet & Discharge Silencer, Base Plate, T-Joint, Safety Valve, Check Valve, Belt Cover and Flexible Joint, doesn't include motor. (Kg)

# THW Type Dimension Drawing



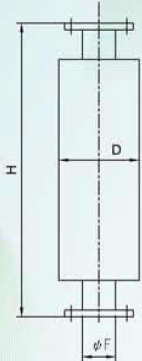
THW Type Dimension Drawing

Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W1	W2
THW-80	705	390	315	1383	51	782	550	245	470	18	247	187	411	2083	1161	900	100	923	130	793	185	160	700	237	320	
THW-100	799	435	365	1442	51	841	550	245	470	18	292	142	411	2165	1161	900	100	933	135	797	185	160	700	254	356	
THW-125A	963	480	483	2182	60	1492	630	275	600	22	288	268	496	3096	1399	1100	100	1592	170	1422	200	183	900	850	498	673
THW-150A	1066	555	511	2282	60	1492	730	310	600	25	395	155	556	3396	1716	1400	100	1606	180	1426	200	200	1200	717	914	
THW-200	1171	624	547	2633	71	1632	930	380	950	30	477	413	633	3854	2223	1900	100	1631	205	1426	200	195		896	1310	
THW-250	1352	710	642	2633	71	1632	930	430	950	30	563	327	683	3943	2273	1900	100	1670	240	1430	250	195	850	1217	1683	

W1 : Weight of main body only. (Kg)

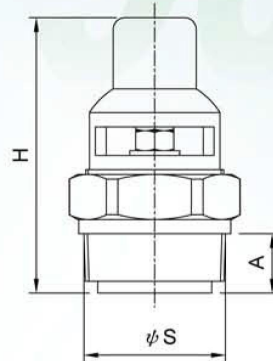
W2 : Weight of main body and all accessories which include Inlet & Discharge Silencer, Base Plate, T-Joint, Safety Valve, Check Valve, Belt Cover and Flexible Joint, doesn't include motor. (Kg)

# Accessories Dimension



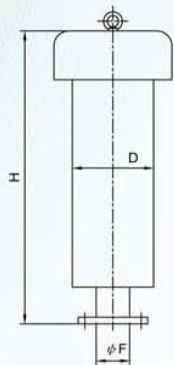
### Discharge Silencer

Type	H	D	φF	Wt.(kg)
DS-40	527	114	40	8
DS-50	787	168	50	13
DS-65	791	216	65	19
DS-80	791	216	80	20
DS-100	796	268	100	27
DS-125	1420	321	125	55
DS-150	1424	321	150	52
DS-200	1424	478	200	78
DS-250	1428	478	250	100
DS-300	1428	628	300	130



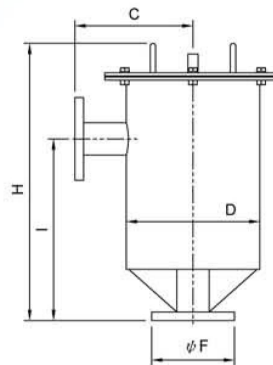
### Vacuum Safety Valve

Type	H	φS	A	Wt.(kg)
VB-50	116	PT 2"	25	1



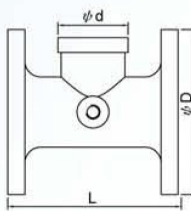
### Inlet Silencer

Type	H	D	φF	Wt.(kg)
SS-40	525	114	40	3
SS-50	740	168	50	14
SS-65	780	216	65	18
SS-80	780	216	80	19
SS-100	840	268	100	24
SS-125	1490	321	125	46
SS-150	1490	321	150	49
SS-200	1630	478	200	99
SS-250	1630	478	250	105
SS-300	1630	628	300	143



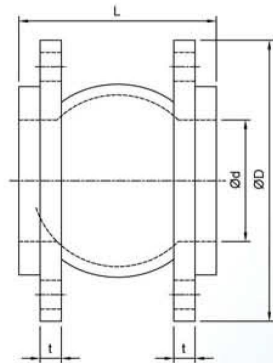
### Vacuum Inlet Filter

Type	C	D	φF	H	I	Wt.(kg)
SR-50	221	250	155	519	340	16
SR-65	223	250	175	621	430	20
SR-80	223	250	185	721	500	22
SR-100	243	290	210	721	500	25
SR-125	285	370	250	813	560	42
SR-150	287	370	280	815	562	45
SR-200	337	470	330	845	592	73
SR-250	339	470	400	1137	824	73
SR-300	339	470	445	1137	824	102



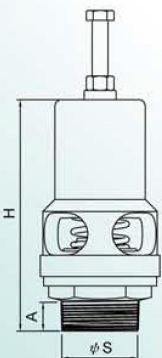
### T-Joint

Type	L	φd	φD	Wt.(kg)
SP-40	85	0.5"	90	1
SP-50	160	1.5"	155	5
SP-65	160	1.5"	175	7
SP-80	185	2"	185	8
SP-100	185	2"	210	8
SP-125	200	2"	250	12
SP-150	200	3"	280	17
SP-200	200	3"	330	22
SP-250	250	3"	400	37
SP-300	300	3"	445	



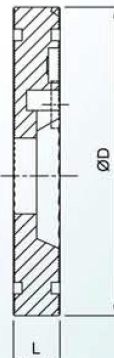
### Flexible Joint

Type	L	φd	φD	t	Wt.(kg)
FJ-50	105	50	155	13	3
FJ-65	115	65	175	14	5
FJ-80	130	80	185	14	5
FJ-100	135	100	210	14	6
FJ-125	170	125	250	17	8
FJ-150	180	150	280	18	10
FJ-200	205	200	330	19	15
FJ-250	240	250	400	20	19
FJ-300	260	300	445	24	26



### Safety Valve

Type	H	φS	A	適用機型	Wt.(kg)
SV-12	95	PT 0.5"	17	TH-40	0.5
SV-38	132	PT 1.5"	26	TH-50,65	1
SV-50	180	PT 2"	28	TH-80,100,125	3
SV-80	260	PT 3"	36	TH-150,200,250,300	7



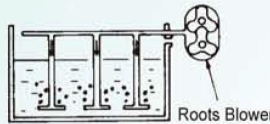
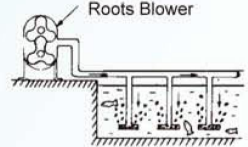
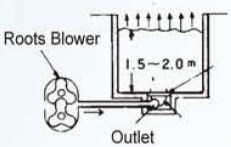
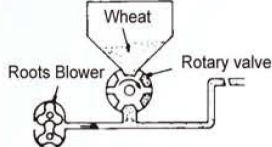
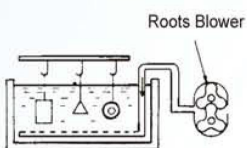
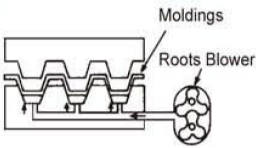
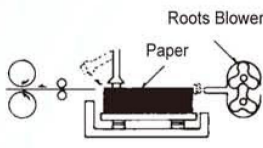
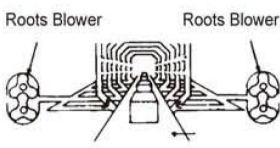
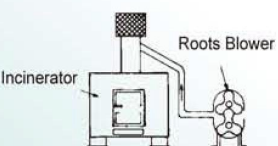
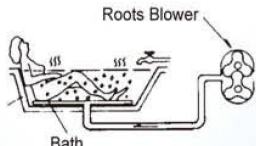
### Check Valve

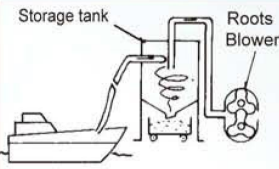
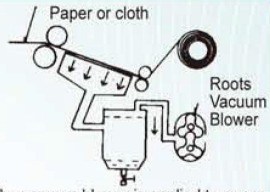
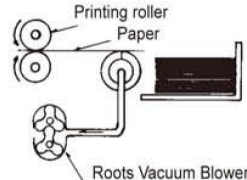
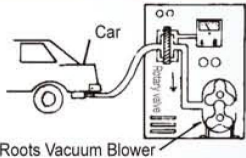
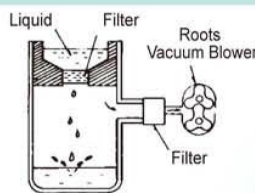
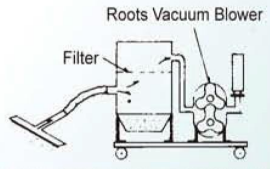
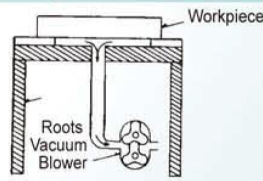
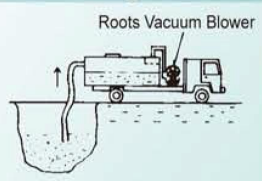
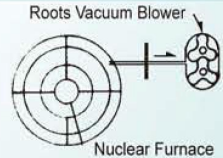
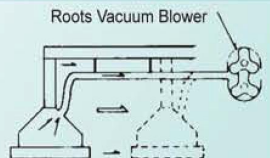
Type	φD	L	Wt.(kg)
DS-40	65	88	1
DS-50	106	16	1
DS-65	125	16	2
DS-80	133	16	2
DS-100	158	16	2
DS-125	189	16	3
DS-150	218	19	4
DS-200	265	28	8
DS-250	332	28	13
DS-300	375	32	21

# Application

## Pressure Conveyance

## Vacuum

<p><b>Waste Water Treatment</b></p>  <p>The blower is for aeration and stir purpose in the waste water treatment plant.</p>	<p><b>Oxygen Supply for Farming Ponds</b></p>  <p>The blower is for underwater enzyme supply in comparatively shallow ponds.</p>
<p><b>Barnyard Manure, Composted Manure Fertilizing</b></p>  <p>The blower promotes the fermentation of domestic animal's excreta, etc..</p>	<p><b>Conveyance of Grain</b></p>  <p>The blower is for pneumatic transport of wheat or other grain separated by a rotary valve.</p>
<p><b>Electroplating Tank</b></p>  <p>The blower supply air to tank to stir the liquid for high-quality electroplating.</p>	<p><b>Molding Press</b></p>  <p>The blower helps take out the pressed products.</p>
<p><b>Paper-Feeding for Printer</b></p>  <p>The blower helps printer to separate, align and feed papers.</p>	<p><b>Drying the Conveying-Belts</b></p>  <p>The blower is applied to dry the conveying-belts.</p>
<p><b>Incinerator</b></p>  <p>The blower enhances the combustion efficiency and promotes the exhaust gas removal.</p>	<p><b>Therapeutic Bath Tub</b></p>  <p>The blower is widely applied to health bath aeration in hospital and hotel.</p>

<p><b>Conveyance of Particles</b></p>  <p>The vacuum blower is applied to convey soybean, rice and wheat.</p>	<p><b>Dehydration</b></p>  <p>The vacuum blower is applied to paper and fiber industry.</p>
<p><b>Paper-Feeding for Printer</b></p>  <p>Keeps paper on the deceleration roller.</p>	<p><b>Smog Testing</b></p>  <p>The blower is applied to inspect exhaust gas from car.</p>
<p><b>Filter</b></p>  <p>A strong vacuum shortens time of the liquid passing the filter.</p>	<p><b>Vacuum Cleaner</b></p>  <p>The vacuum blower is applied to dust collector for general industry.</p>
<p><b>Reprocess Goods Absorption-Maintenance</b></p>  <p>Fix non-magnetic material on the worktable by vacuum.</p>	<p><b>Vacuum Mud-Sucking Truck</b></p>  <p>The vacuum blower is applied to clean colloidal sludge.</p>
<p><b>Nuclear Factory</b></p>  <p>The vacuum blower is applied to collect the radiation from nuclear furnace.</p>	<p><b>Absorption Transporter</b></p>  <p>The vacuum blower is applied to transport heavy material such as iron plate and breakable glass.</p>

# Units Conversion Table

## Pressure

	mbar	Pa	atm	lbf/in <sup>2</sup>	kgf/cm <sup>2</sup>	in Hg	mmAq
1 mbar	1	10 <sup>2</sup>	9.869X10 <sup>-4</sup>	1.45X10 <sup>-2</sup>	1.02X10 <sup>-3</sup>	2.953X10 <sup>-2</sup>	10.197
1 Pa	0.01	1	9.87X10 <sup>-6</sup>	1.45X10 <sup>-4</sup>	1.02X10 <sup>-5</sup>	2.953X10 <sup>-4</sup>	0.102
1 atm	1.013X10 <sup>3</sup>	1.013X10 <sup>5</sup>	1	14.7	1.033	29.92	1.033X10 <sup>4</sup>
1 lbf/in <sup>2</sup>	68.95	68.95X10 <sup>2</sup>	6.805X10 <sup>-2</sup>	1	7.03X10 <sup>-2</sup>	2.036	7.03X10 <sup>2</sup>
1 kgf/cm <sup>2</sup>	9.807X10 <sup>2</sup>	9.807X10 <sup>4</sup>	0.968	14.223	1	28.96	10 <sup>4</sup>
1 in Hg	33.86	33.86X10 <sup>2</sup>	3.342X10 <sup>-2</sup>	0.491	3.45X10 <sup>-2</sup>	1	3.45X10 <sup>2</sup>
1 mmAq	9.806X10 <sup>-2</sup>	9.806	9.678X10 <sup>-5</sup>	1.42X10 <sup>-3</sup>	10 <sup>-4</sup>	2.896X10 <sup>-3</sup>	1

### Common formulas for pressure conversion

1Pa=0.102mmAq  
1psi=703mmAq

1mbar=10.197mmAq  
1Torr=133.3Pa

1mmHg=13.6mmAq  
1Torr=1.333mbar

## Capacity

	m <sup>3</sup> /min(cmm)	m <sup>3</sup> /hr(cmh)	ℓ/min(c ℓm)	ft <sup>3</sup> /min(cfm)
1m <sup>3</sup> /min	1	60	1000	35.31
1m <sup>3</sup> /hr	0.017	1	16.67	0.589
1ℓ /min	0.001	0.06	1	0.035
1ft <sup>3</sup> /min	0.028	1.699	28.32	1

## Power

	kg-m/sec	KW	HP	PS
1 kg-m/sec <sup>2</sup>	1	0.001	0.0013	0.0013
1 KW	1000	1	1.341	1.360
1 HP	745.699	0.746	1	1.014
1 PS	735.498	0.736	0.986	1

## Usage Instruction for Roots Blower :

### ● Before starting the blower, check the following to make sure they are all normal.

#### 1、Distribution Pipes

- ◆ Make sure insides of the pips are clean and all connecting part are tightly secured.
- ◆ Make sure all valves are opened to avoid the pressure going up.

#### 2、Power Supply

- ◆ Motor wiring, voltage, frequency, etc. must be normal.

#### 3、Direction of Rotation

- ◆ Please follow the instruction on the safety cover. If rotation reversed, modified the motor wiring.

#### 4、Safety Valve

- ◆ Adjust the safety valve to 1.5~2.5 times than operation pressure.

#### 5、Lubricating oil

- ◆ Make sure that oil level stays at middle of oil gauge. Change the oil three months a time.
- ◆ Before turn blower on, check if it runs smoothly by hand.

### ● The Initial Noise

Because of viscosity of oil, there would be some noise when blower runs at very beginning. It would be normal approx. 10~20 minutes later

### ● Attention

Please pay attention to the sounds, pressure, current and temperature, etc. when the blower is running. If there is any abnormal circumstance, turn off the blower immediately and find the cause out.



**TRUNDEAN**  
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