



ROTARY BLOWER

R Series

BLOWER



TAIKO KIKAI INDUSTRIES CO., LTD.

The R Series is a two-lobe roots-type dual shaft rotary blower that use a special profile impeller that was developed by combining years of research and technology. We worked to create extremely practical rotary blowers with appropriate clearance that demonstrate high performance in volumetric efficiency and overall heat-insulating efficiency. The R Series offers a variety of models with a wide range of specifications to satisfy our customers, from small to large volume, low to high pressure, and air to special gas blowers.

Features

1 High(energy saving) volumetric efficiency

As illustrated in Diagram 1, the peak of the rotor profile in the R Series is formed with an inner peripheral casing and a surface seal. The conventional root-type blowers has a linear seal structure, making it easier for the discharged gas to blow-by the rotor peak towards the intake area.

In the R Series, a step has been added to the circular arc of the rotor. Gas that attempts to blow through in the opposite direction in which the rotor is moving is curtailed by a backspin flow produced by the step, significantly increasing volumetric efficiency and resulting in saving

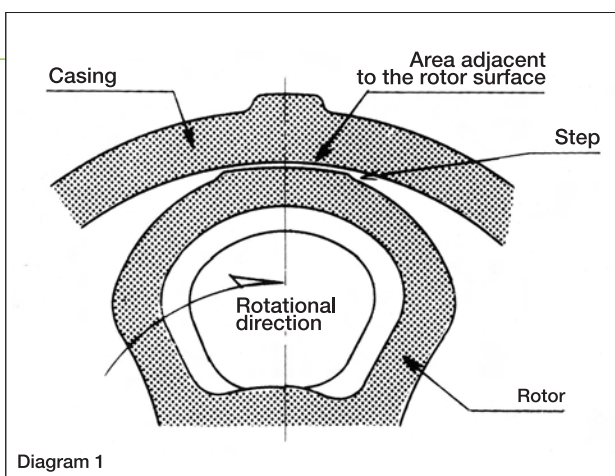


Diagram 1

2 A variety of models

The R Series is based on pneumatic transportation of air, but can also handle special gas. The seal construction can handle mechanical seals and other seals at the shaft. In addition, it can handle various material qualities, including FC, FCD, SC, and SCS materials.

The surface treatment of areas that come into contact with gas include kanizen plating and aluminum coating.

Collectively, these allow not only the pneumatic transportation of gas, but also gas intake (vacuum). We also have a variety of dry and wet-type models.

3 Oil-free

The casing and rotor are non-contact, eliminating the need for oil lubrication in the inner casing. Also, the blowers are constructed so that lubricant in the bearings and gears won't mix with the inner casing.

4 Simple construction

There are no valve systems that break down easily, and the rotors rotate with no slides. Because there are very few areas that come into contact with one another, the blowers are very durable and can be operated over a long period of time. Combining with these features offer easy maintenance.

5 Low noise, less vibration

Noise is minimized due to wide-spaced teeth, modules, high-quality materials, optimum heat treatment, and teeth sharpened to gear accuracy above JIS1 class precision, and a tapered fit makes a precise seal possible for lower noise.

Plus, the rotor uses a dynamic balancer to achieve perfect balance. Together with highly rigid components and construction, the combination ensures low vibration over a long period.

R Series Type Symbols

Examples



Series Symbols
 1 Stage System...R
 2 Stage System...TR
 3 Stage System...TTR

Profile Symbols
 (Indicates size)
 B,C,D,ME,E,MF,F,G

Diameter Symbols
 (Exact Diameter or Approximation)

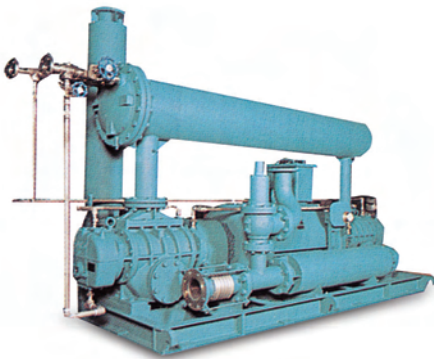
Usage Symbols
 Standard...No symbol
 Vacuum: Dry...V
 Vacuum: Wet...W

Sealing Symbols
 Standard...No symbol
 1-S mechanical seal...M
 1-W mechanical seal...K
 4-W mechanical seal...N
 4-W dry gas seal...U

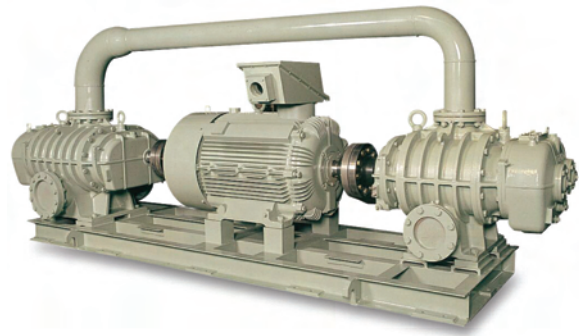
Special Symbols...P
 Mark 'P' at the end to indicate special product.

Material Quality Symbols
 Standard...No symbol
 Kanigen Plating...Z
 Ductile Iron...B
 Cast Steel...F
 Stainless...S

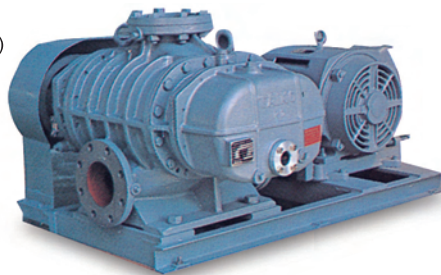
R Series Product Overview



2 Stage Pressurized Gas Blower
 TR Series (Double axis direct drive motor)



2 Stage Gas Intake Wet Blower
 TR-W Series (Double axis direct drive motor)



1 Stage Pressurized Gas Blower, Gas Intake Dry Blower
 R Series, R-V Series (Standard, V belt drive)



1 Stage Pressurized Gas Blower
 Sealing: 4-W mechanical seal
 Gas sector: Kanigen plating
 R-NZ Series (Direct drive motor)



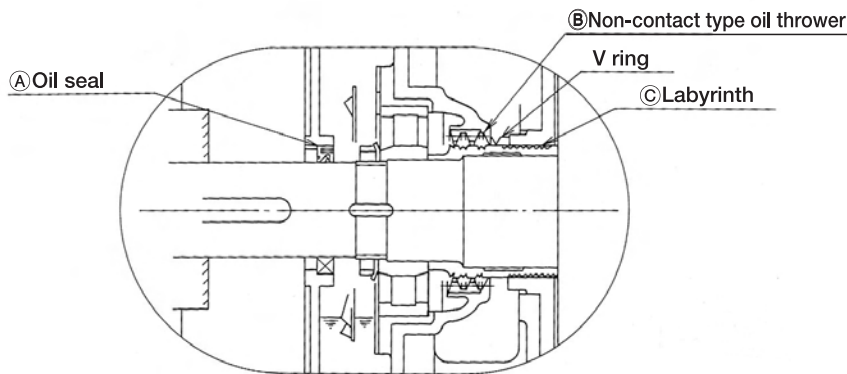
1 Stage Pressurized Gas Blower
 Sealing: 4-W mechanical seal
 Gas sector: Stainless
 R-NS Series (V belt drive with counter axis)

Sealing options

The items ABC shown below are all available. We will choose the appropriate one for your needs.

A. Shaft Sealing	B. Bearing oil Sealing	C. Gland Sealing
<p>Standard</p> <p>Type RB~RD:Oil sealing Type RME~RG:Labyrinth+V ring</p>	<p>Standard</p> <p>Non-contact type oil thrower (For Vacuum use...+ V ring)</p>	<p>Standard</p> <p>Labyrinth (Drainage in sleeve)</p>
<p>K Type</p> <p>1-W mechanical seal (Patent fuel circulation device Perfect seal by oil tank pressure)</p>	<p>Oil Sealing Type</p> <p>Double- oil seal</p>	<p>Teflon Labyrinth Type</p> <p>Teflon labyrinth (Tiny gap possibility...virtually no leak)</p>
		<p>N Type</p> <p>4-W mechanical seal</p>
		<p>U Type</p> <p>4-W dry gas seal</p>
		<p>Labyrinth 2 room Type</p> <p>Standard labyrinth + Teflon labyrinth (Maintenance free, closed and oil free)</p>

Standard Structure Detail (Reference: Type RB~RD)



Refueling, Lubricating and Cooling

Refueling See below for details of bearing and pilot gear refueling. Type of oil and refueling method is also listed below. Please select appropriate oil and method according to specification.

Cooling Cooling method is also listed below. Please select appropriate cooling method according to specification.



Shell:Tellus oil 68
Nisseki:FBK Oil RO68
Idemitsu: Daphne mechanic oil

Use multi-purpose industrial oil listed here or additive Turbine Oil 68.

Method	Refueling and Lubricating		Cooling			
	Location		Bearing cover (Drive side)		Gear case (Opposite side of drive)	
Type	Bearing cover (Bearing) (Drive side)	Gear case (Bearing and gear) (Opposite side of drive)	Standard	Special	Standard	Special
Type RB and RC	Oil bath Splasher Splash	Oil bath Gear splash	No jacket Natural cooling	SS jacket Water cooling	No jacket Natural cooling	SS jacket Water cooling
Type RD, RME, RE, RMF and RF Type RG	Oil bath Splasher Splash	Oil bath Gear splash	No jacket Natural cooling	Jacket water cooling	Jacket water cooling	No jacket Natural cooling

Main materials

The materials used for the dual shaft rotary blower are listed below.
We will select the appropriate combination of materials from the lists below in consideration of your machine and the type of gas.

Number	Material Names	Labels	Features	TAIKO Labels
F-1	Gray cast iron	FC200	Standard material	
F-2	Nodular graphite cast iron	FCD400	High strength, Low temperature -30°C, High pressure	B
S-1	Carbon steel cast iron	SC410	High strength, Low temperature, High pressure, Corrosion-resistance	F
S-2	Low temperature high pressure cast iron	SCPL1	Low temperature -45°C	F
S-3	Stainless cast iron	SCS1	13 Cr steel, Low thermal expansion	S
S-4	Stainless cast iron	SCS13	SUS304 equivalent, Corrosion-resistance, Low temperature, High pressure	S
S-5	Stainless cast iron	SCS14	SUS316 equivalent, Corrosion-resistance, Low temperature, High pressure	S
F-3	High nickel cast iron	Ni-Resist	30%Ni, Corrosion-resistance	
B-1	Bronze cast iron	CAC403	Spark prevention, Rust proof	
A-1	Aluminum alloy cast iron	AC4C	Spark prevention, Light weight	
S-6	Stainless steel bar	SUS304, 316	Corrosion-resistance, Low temperature	
S-7	Carbon iron for machine	S45C	Standard shaft material	
S-8	Chrome molybdenum steel	SCM440H	Axis material (High strength)	
S-9	Chrome molybdenum steel	SCM415	Standard gear material	
S-10	Rolled steel for general structure	SS400		

Surface Treatment (Gas sector)

The list below is for standard material FC200.

Classification	Number	Materials	Details	Features
Coating	C-1	Aluminum coating	10~20μAL Paint	Rust proof, For export
	C-2	Cashew silver coating	10~20μCashew paint	Corrosion-resistance (Car exhaust etc)
Plating	P-1	Kanigen plating	Chemical Ni plating, 50μ	Corrosion-resistance (Equally coated)
	P-2	Chrome plating	Electric plating, Ni-Ni-Cr 20-30μ	Corrosion-resistance (Impeller only)
Lining	L-1	Rubber lining	NR, NBR, other 3-5mm	Corrosion-resistance, spark prevention
	L-2	Teflon lining	Teflon 1-3mm	Corrosion-resistance, spark prevention

Main parts' materials

The materials listed below are available for each part.

Classification	Parts	Casing Side cover	Impeller	Gear case Bearing cover	Shaft	Gear
Standard materials		F-1	F-1	F-1	S-7、S-8	S-9
Special materials		F-2、S-1 S-2 S-4、S-5	F-2、S-1、S-2 S-3、F-3、B-1 A-1、S-4、S-5	F-2、S-10 └ RB、RC Jacket For high pressure	S-6	
Surface treatment		C-1、C-2 P-1 L-1、L-2	C-1、C-2 P-1、P-2 L-1、L-2			

Reading the Performance Tables and Using the Products

Air volume

Performance tables is indicated when the fluid is based on air. For rotary blowers under standard conditions (101.3kPa atmospheric pressure, 20°C, 75% humidity) and vacuum pumps at 20°C for each vacuum level, Qsm³/min is used to indicate air volume suction. In other words, when the prescribed state is expressed by QNm³/min, it is necessary to view the chart by converting to Qs.
Normal humidity is ignored. (Take into consideration when precise air volume is necessary.)

$$Q_s = Q_N \times \frac{273+T_s}{273} \times \frac{101.3}{101.3+P_s} \quad (101.3 \text{ changes to } 1.033\text{kg/cm}^2, 10330\text{mmAq, etc. depending on the unit})$$

When taking humidity into account, use Ps-ψF in place of Ps. (Ps:gauge pressure)

When gas temperature Ts rises above 20°C, or when the molecular weight M becomes greater than 29 (air), volumetric capacity changes. (Internal leak volume Qb changes.)

Internal leak volume Qbam³/min=Vth-Qsa Qba; leak capacity when air is 20°C as calculated from this table.

If Qbam³/min is the internal leak volume when suction temperature is Ts°C and molecular weight is M, then:

$$Q_b = Q_{ba} \times \sqrt{\frac{273+T_s}{273+20}} \times \frac{29}{M}$$

When internal leak is the same as pressure (pressure ratio), they will be the same regardless of rotational speed. Also, theoretical volume Vth m³/min will be exactly proportional to the rotational speed. Distribute intermediary Qsa listed in this chart from preceding and subsequent Qsa.

Horsepower

Shaft horsepower La is determined by differential pressure and rotational speed. Distribute intermediary pressure listed in this chart from preceding and subsequent shaft horsepower.

- ①The required power La is indicated by an equivalent motor output for each pressure. It is advisable to leave a slight margin using La×1.1-1.2 for the actual motor output.
- ②When operating under conditions where blow-off relief valves are used and overload is prevented by complete shut-off, take into account the total shut-off pressure to determine motor output.
- ③When using a gland seal, mechanical seal, oil seal, etc. La will rise slightly by the loss from sliding fiction.

When suction pressure is not atmospheric pressure

When viewing the performance listed on the table, the pressure ratio should be viewed as equal to discharge pressure. For example: When suction pressure is Ps=98kPa Pd=176.4kPa pressure ratio

$$\text{pressure ratio} = \frac{101.3+176.4 (P_d)}{101.3+98 (P_s)} = \frac{101.3+P'}{101.3} \quad P' \text{ is the catalog discharge pressure of the same pressure ratio by atmospheric pressure suction.}$$

That is, you should view 39.2kPa in the catalog as an indication. However, the required power is the differential power, so in relation to the rotational speed sought from the above, the shaft power is 78.4kPa.

Type	Diameter	Rotational speed min ⁻¹	Theoretical air volume m ³ /min	Suction volume Qs (m ³ /min) for each discharge pressure and required power La (kW)																				Rotational speed min ⁻¹
				9.8kPa		19.6kPa		29.4kPa		39.2kPa		49.0kPa		58.8kPa		68.6kPa		78.4kPa		88.2kPa		98.0kPa		
				Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	
		N	Vth																					

Summary

This table can be used for any sorts of specification if the above is understood. In other words, choose the general type from the required air volume Qs, calculate Qsa and Qsb from the pressure (pressure ratio), and then calculate Qb from Ts and M. Obtain necessary Vth from Qs+Qb, and rotational speed Nmin⁻¹ can be calculated from the necessary Vth. La can be obtained from the rotational speed N and differential pressure Δ P. (However, when the internal clearance changes due to factors such as material quality, expected calculations may not be obtained.)

Calculating pressure

- atmospheric pressure=101.325kPa=1.033kg/cm²=760mmHG(760Torr)
- 1.033kg/cm²≒10330mmAq
- 1 atm=101325Pa=0.101325MPa =1.033kg/cm²

R Series Supply Result

R series applies to a variety of intake gas and their uses. Some examples are listed below.

Type	Intake gas name	Intake temperature (°C)	Intake capacity (m ³ /min)	Intake pressure (kPa)	Discharge pressure (kPa)	Gas sector material (Casing/Impeller)	Other
TRG-500W	AIR	30	411.7	-66.6	1.5	FC200/FC200	2 stage/ Wet
TRD-130KP	O ₂ /N ₂ /Ar	35	20.1	0	150.0	FC200/FC200	2 stage/ 1-W mechanical seal
TRE-150KP	O ₂ /N ₂ /Ar	40	24.8	40.0	150.0	FC200/FC200	2 stage/ 1-W mechanical seal
RF-250KP	O ₂ /N ₂ /Ar	40	112.7	7.0	40.0	FC200/FC200	1-W mechanical seal
RG-450MP	N ₂	45	361.3	2.0	79.9	FC200/FCD400	1-S mechanical seal
RF-245NBP	H ₂ /N ₂ /H ₂ O	50	69.4	760.0	834.0	FCD400/FC200	4-W mechanical seal
TRE-200VUFP	N ₂	40	51.8	-66.3	14.7	SCPL1/SC410	2 stage/ 4-W dry gas seal
RC-80WNBP	H ₂ /N ₂	35	5.8	-2.5	29.4	SCS13/SCS13	4-W mechanical seal/ Wet
RD-130WNP	Cl ₂ (Dry)	50	26.0	-9.8	39.2	FC300/FC300	4-W mechanical seal/ Wet
RC-100KBP	N ₂ /O ₂ /CO ₂ /Exhaust	30	9.3	-1.0	55.0	FCD400/FCD400	1-W mechanical seal
RMF-300MP	H ₂	45	96.3	5.0	20.0	FC200/FC200	1-S mechanical seal
RB-50KZP	N ₂ /Methanol	20	2.9	0	14.7	FC200*1/FC200*1	1-W mechanical seal
TRF-350VNP	NH ₃ /H ₂ O/O ₂ etc	40	194.0	-69.3	4.0	FC200/FC200	2 stage/ 4-W mechanical seal
RE-150NBP	HCl	27	32.5	577.0	668.0	FCD400/FC200	4-W mechanical seal
RD-125KSP	CH ₄ /CO ₂ /N ₂ /H ₂ S	20	14.0	0	36.2	SCS13/SCS13	1-W mechanical seal
RG-350NBZP	N ₂ /O ₂ /Toluene etc	20	108.1	351.0	501.0	FCD400*1/FC200*1	4-W mechanical seal
RD-125KSP	CO ₂ /AIR	20	12.0	0	58.8	SCS13/SCS13	1-W mechanical seal
RD-80KSP	Natural gas	30	13.9	70.0	200.0	SCS13/SCS1	1-W mechanical seal
RD-150WZP	AIR	30	30.0	-19.6	0	FC200*1/FC200*1	Wet
RF-250KZP	N ₂	40	77.6	2.0	73.0	FC200*1/FC200*1	1-W mechanical seal
RB-65VKSP	F ₂ /N ₂	50	3.0	-13.3	0	SCS13/SCS13	1-W mechanical seal
RD-150KSP	AIR/VCM/EDC	25	35.8	0	29.4	SCS13/SCS13	1-W mechanical seal
RF-240NSP	Recycled gas	37	70.9	830.0	900.0	SCS13/SCS13	4-W mechanical seal
RB-50KBP	CO ₂	-30	1.8	40.0	55.0	FCD400/FCD400	1-W mechanical seal
RD-100VNZP	H ₂ O	87	9.2	-38.8	-3.5	FC200*1/FC200*1	4-W mechanical seal
RD-130USP	NH ₃	-33	18.6	2.0	49.0	SCS13/SCS13	4-W dry gas seal
RE-150NSP	C ₃ H ₈ /C ₂ H ₆	-40	33.3	10.0	78.0	SCS13/SCS13	4-W mechanical seal
RD-125NZP	H ₂ O	100	11.0	0	55.0	FC200*1/FC200*1	4-W mechanical seal
RD-150NP	H ₂	40	20.6	2.0	12.0	FC200/FC200	4-W mechanical seal
RF-350NBZP	Mixed gas	43	141.7	833.0	902.0	FCD400*1/FC200*1	4-W mechanical seal
RC-80NSP	O ₂ /Plating mist	60	5.5	98.0	130.0	SCS14/SCS14	4-W mechanical seal
RD-100UBP	N ₂ /Mixed gas	40	6.6	250.0	334.0	FCD400/FC200	4-W dry gas seal

Notes 1:*1 in the column 'Gas sector material' indicates kanigen plating

Notes 2: Each figure shows the maximum amount of design condition.

Notes 3: 'Intake gas' and 'Gas sector material' details change depending upon the percentage of intake gas formation.
Contact us for more details.

*Material damaged by using intake gas is not covered by our guarantee.

■ Type TR-W/ TR-WZ 2 Stage Wet Type Dual Shaft Rotary Vacuum Blower Performance Table

Type	Diameter Discharge Intake	Rotational speed min ⁻¹	Theoretical air volume m ³ /min	Suction volume Qs (m ³ /min) for each vacuum pressure and required power La (kW)										Sealed water capacity ℓ /min
				-53.3kPa		-60.0kPa		-66.7kPa		-73.3kPa		-80.0kPa		
				Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	
TRB-65W (50 65)	50 ^A 65 ^A	1150	2.29	1.45	2.90	1.43	3.04	1.41	3.18	1.35	3.32	1.21	3.50	5
		1450	2.89	2.05	3.65	2.03	3.83	2.01	4.01	1.95	4.19	1.81	4.42	5
		1750	3.49	2.65	4.40	2.63	4.62	2.61	4.84	2.55	5.06	2.41	5.33	6
		2000	3.99	3.15	5.03	3.13	5.28	3.11	5.53	3.05	5.78	2.91	6.09	6
		2500	4.98	4.14	6.29	4.12	6.60	4.10	6.92	4.04	7.23	3.90	7.62	8
		3000	5.98	5.14	7.55	5.12	7.92	5.10	8.30	5.04	8.67	4.90	9.14	8
TRC-100W (80 100)	80 ^A 100 ^A	1150	6.33	4.63	7.36	4.63	7.82	4.53	8.33	4.33	8.74	3.93	9.25	8
		1450	7.99	6.29	9.28	6.29	9.86	6.19	10.5	5.99	11.0	5.59	11.7	9
		1750	9.64	7.94	11.2	7.94	11.9	7.84	12.8	7.64	13.3	7.24	14.1	9
		2000	11.0	9.30	12.8	9.30	13.6	9.20	14.5	9.00	15.2	8.60	16.1	9
		2500	13.7	12.0	16.0	12.0	17.0	11.9	18.1	11.7	19.0	11.3	20.1	9
TRD-125W (100 125)	100 ^A 125 ^A	970	11.1	9.30	11.3	9.30	12.0	9.20	12.8	9.00	13.6	8.50	14.4	10
		1150	13.2	11.5	13.4	11.4	14.3	11.3	15.2	11.1	16.1	10.6	17.0	10
		1450	16.6	14.9	16.9	14.8	18.0	14.7	19.1	14.5	20.3	14.0	21.5	12
		1750	20.0	18.3	20.4	18.2	21.7	18.1	23.1	17.9	24.5	17.4	25.9	12
		2000	22.9	21.2	23.3	21.1	24.8	21.0	26.4	20.8	28.0	20.3	29.6	12
TRD-130W (125 130)	125 ^A 125 ^A	970	16.9	14.5	16.3	14.4	17.5	14.3	18.5	14.2	19.4	13.5	20.6	12
		1150	20.2	17.8	19.4	17.7	20.7	17.6	22.0	17.5	23.0	16.8	24.4	12
		1450	25.3	22.9	24.4	22.8	26.1	22.7	27.6	22.6	29.0	21.9	30.8	13
		1750	30.5	28.1	29.5	28.0	31.5	27.9	33.3	27.8	35.0	27.1	37.2	13
		2000	34.9	32.5	33.7	32.4	36.0	32.3	38.1	32.2	39.9	31.5	42.5	15
TRD-150W (127 150)	150 ^A 125 ^A	970	20.8	17.8	19.6	17.6	20.9	17.4	22.1	17.3	23.3	16.4	24.7	15
		1150	24.6	21.6	23.2	21.4	24.8	21.2	26.2	21.1	27.7	20.2	29.3	15
		1450	31.1	28.1	29.3	27.9	31.3	27.7	33.0	27.6	34.9	26.7	37.0	18
		1750	37.5	34.5	35.4	34.3	37.7	34.1	40.0	34.0	42.1	33.1	44.5	18
		2000	42.9	39.9	40.4	39.7	43.1	39.5	45.5	39.4	48.1	38.5	50.9	18
TRE-150W (140 150)	150 ^A 150 ^A	750	27.5	23.5	26.9	23.3	28.4	23.1	30.0	22.7	32.0	21.8	33.1	18
		970	35.5	31.5	34.8	31.3	36.8	31.1	38.8	30.7	40.8	29.8	42.8	18
		1170	42.8	38.8	42.0	38.6	44.4	38.4	46.8	38.0	49.2	37.1	51.6	18
		1250	45.8	41.8	44.8	41.6	47.4	41.4	50.0	41.0	52.6	40.1	55.1	20
		1350	49.4	45.4	48.4	45.2	51.2	45.0	54.0	44.6	56.8	43.7	59.5	20
TRE-190W (145 190)	150 ^A 200 ^A	750	34.3	29.3	32.0	29.0	33.8	28.8	36.0	28.2	37.5	27.0	40.0	20
		970	44.4	39.4	41.4	39.1	43.8	38.9	46.3	38.3	48.5	37.1	51.3	20
		1170	53.6	48.6	50.0	48.3	52.8	48.1	55.8	47.5	58.5	46.3	62.0	20
		1250	57.2	52.2	53.3	51.9	56.4	51.7	59.6	51.1	62.5	49.9	66.1	20
		1350	61.8	56.8	57.6	56.5	60.9	56.3	64.4	55.7	67.5	54.5	71.4	20
TRE-200W (150 200)	150 ^A 200 ^A	750	42.0	36.7	38.9	36.4	41.1	36.1	43.6	35.7	46.1	34.3	48.3	20
		970	54.3	49.0	50.3	48.7	53.2	48.4	56.4	48.0	60.0	46.6	63.0	20
		1170	65.5	60.2	61.0	59.9	64.1	59.6	68.0	59.2	72.0	57.8	75.4	20
		1250	70.0	64.7	64.9	64.4	68.5	64.1	72.7	63.7	76.9	62.3	80.6	20
		1350	75.5	70.2	70.0	69.9	74.0	69.6	78.5	69.2	83.0	67.8	87.0	20
TRE-250W (190 250)	200 ^A 250 ^A	750	53.4	46.7	47.2	46.4	49.7	46.2	52.5	45.2	56.1	43.2	59.4	30
		970	69.1	62.4	61.1	62.1	64.3	61.9	67.9	60.9	72.6	58.9	76.9	30
		1170	83.3	76.6	73.7	76.3	77.6	76.1	81.9	75.1	87.5	73.1	92.7	30
		1250	89.0	82.3	78.7	82.0	82.9	81.8	87.5	80.8	93.5	78.8	99.1	30
		1350	96.2	89.5	85.5	89.2	91	89.0	97	88.0	102.5	86.0	108	30
TRF-250W (240 250)	250 ^A 250 ^A	650	87.1	77.0	75.6	76.0	80.3	75.0	86.2	74.0	91.0	72.0	96.2	30
		730	97.8	87.7	85.0	86.7	90.1	85.7	97.0	84.7	102	82.7	108	30
		800	107.2	97.1	93.1	96.1	98.8	95.1	106	94.1	112	92.1	118	35
		880	117.9	108	102	107	109	106	117	105	123	103	130	35
		980	131.3	121	114	120	121	119	130	118	137	116	145	40
TRF-295W (245 295)	250 ^A 300 ^A	650	108.9	98.8	99.5	97.8	105.5	97.8	108	96.8	117.5	93.8	123.5	35
		730	122.3	112	111.5	111	118.5	111	121.5	110	131.5	107	138.5	35
		800	134.0	124	122.5	123	129.5	123	133	122	144.5	119	151.5	40
		880	147.4	137	134.5	136	142.5	136	146.5	135	160	132	167	40
		980	164.1	154	150	153	159	153	168	152	177	149	186	40
TRF-300W (250 300)	250 ^A 300 ^A	650	133.7	121	115	120	122	120	130	119	139	116	146	35
		730	150.2	138	129	137	137	137	146	136	156	133	164	40
		800	164.6	152	141	151	150	151	160	150	171	147	180	40
		880	181.1	168	155	167	165	167	176	166	188	163	198	40
		980	201.7	189	173	188	184	188	196	187	209	184	220	40
TRF-350W (290 350)	300 ^A 350 ^A	650	158.6	141	134	141	143	140	153	139	163	136	172	43
		730	178.2	161	150.5	161	161	160	171	159	183	156	193	43
		800	195.2	178	165	178	176	177	188	176	200	173	212	43
		880	214.8	198	181.5	198	194	197	207	196	220	193	233	43
		980	239.2	222	202	222	216	221	230	220	245	217	259	43

(1) Wet vacuum pump required to fill water. If there is too much water, the blower will get over powered. If there is too little water, the blower can not reach regular capacity. The water level needs to be carefully maintained and filled as needed.

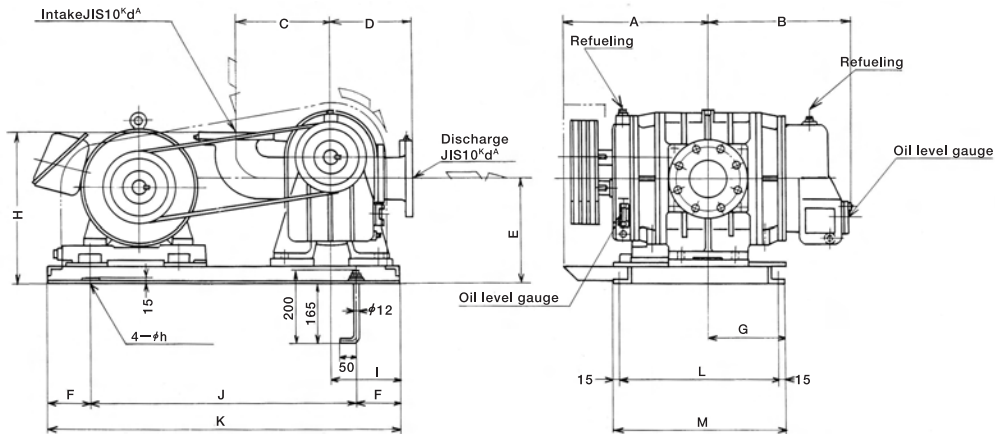
■ Type R-V/ R-VZ Dry Type Dual Shaft Rotary Vacuum Blower Performance Table (2)

Type	Diameter	Rotational speed min ⁻¹	Theoretical air volume m ³ /min	Suction volume Qs (m ³ /min) for each vacuum pressure and required power La (kW)																	
				-9.8kPa		-14.7kPa		-19.6kPa		-24.5kPa		-29.4kPa		-34.3kPa		-39.2kPa		-44.1kPa		-49.0kPa	
				Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
RE- 250V	250 ^A	750	53.4	46.8	12	44.8	16.5	43.9	21	42.2	25.5	41.0	30	39.6	34.5	36.4	39	36.8	43.5	48	
		970	69.1	62.5	15	60.5	21	59.6	27	57.9	32.5	56.7	38	55.3	44	54.1	50	52.5	56	50.8	
		1170	83.3	76.7	18	74.7	25	73.8	32	72.1	39	70.9	46	69.5	53	68.3	60	66.7	67	65.0	
		1250	89.0	82.4	20	80.4	27.5	79.5	35	77.8	42.5	76.6	50	75.2	57	74.0	64	72.4	71.5	70.7	
		1350	96.2	89.6	21	87.6	29	86.7	37	85.0	45	83.8	53	82.4	61	81.2	69	79.6	77.5	77.9	
RMF-250V	250 ^A	750	63.2	55.7	14.3	54.4	19.6	53.1	24.9	51.8	30.2	50.5	35.5	49.1	40.9	47.7	46.2	46.2	51.5	44.7	
		880	74.1	66.6	16.8	65.3	23.1	64.0	29.3	62.7	35.5	61.4	41.7	60.0	48.0	58.6	54.2	57.1	60.4		
		970	81.7	74.2	18.5	72.9	25.4	71.6	32.3	70.3	39.1	69.0	45.9	67.6	52.8	66.2	59.7	64.7	66.6		
		1170	98.6	91.1	22.3	89.8	30.6	88.5	38.9	87.2	47.2	85.9	55.4	84.5	63.7	83.1	72.0	81.6	80.3		
		1350	108.5	100.8	25.8	98.8	34.4	97.4	43.1	96.1	51.9	90.7	59.8	89.4	71.6	90.7	80.9	89.9	90.3		
RMF-300V	300 ^A	750	95.4	84.7	21.0	82.7	29.1	80.9	37.1	79.2	45.1	77.5	53.0	75.9	61.0	74.2	69.0	72.4	77.0		
		880	111.9	101	24.7	99.2	34.1	97.4	43.5	95.7	52.9	94.0	62.2	92.4	71.6	90.7	80.9	88.9			
		970	123.4	113	27.2	111	37.6	109	47.9	107	58.3	106	68.6	104	78.9	102	89.2	100	99.6		
		1170	148.8	138	32.8	136	45.3	134	57.8	133	70.3	131	82.7	129	95.2	128	108	126	120		
		1350	164.9	153	38.2	151	50.7	149	63.1	147	77.6	145	90.1	143	102.6	141	120	124			
RF- 240V	250 ^A	650	56.0	49.6	13	47.4	17.5	46.6	22	45.1	27	43.8	32	42.5	36.5	41.4	41	39.9	46		
		730	62.9	56.5	14	54.3	19.5	53.5	25	52.0	30.5	50.7	36	49.4	41	48.3	46	46.8			
		800	68.9	62.5	16	60.3	21.5	59.5	27	58.0	33	56.7	39	55.4	45	54.3	51	52.8			
		880	75.8	69.4	17	67.2	23.5	66.4	30	64.9	36.5	63.6	43	62.3	49.5	61.2	56	59.7			
		980	84.4	78.0	19	75.8	26	75.0	33	73.5	40.5	72.2	48	70.9	55	69.8	62	68.3			
RF- 245V	250 ^A	650	70.0	61.9	16	59.3	22	58.3	28	56.4	33.5	54.8	39	53.3	45	51.8	51	49.8			
		730	78.6	70.5	17	67.9	24	66.9	31	65.0	37.5	63.4	44	61.9	50.5	60.4					
		800	86.1	78.0	19	75.4	26.5	74.4	34	72.5	41	70.9	48	69.4	55.5	67.9					
		880	94.7	86.6	21	84.0	29	83.0	37	81.1	45	79.5	53	78.0	61	76.5					
		980	105.5	97.4	23	94.8	32	93.8	41	91.9	50	90.3	59	88.8	68	87.3					
RF- 250V	250 ^A	650	87.1	76.2	19	73.5	26.5	72.4	34	70.4	41	68.5	48	66.8	55.5	65.2					
		730	97.8	86.9	21	84.2	29.5	83.1	38	81.1	46	79.2	54	77.5	62	75.9					
		800	107.2	96.3	23	93.6	32	92.5	41	90.5	50	88.6	59	86.9	68	85.3					
		880	117.9	107	26	105	35.5	103	45	101	55	99.1	65	97.4	75	95.8					
		980	131.3	120	29	118	40	116	51	114	61.6	112	72	110	83.5						
RF- 290V	300 ^A	650	102.6	92.3	22	88.4	30.5	86.9	39	84.2	48	81.9	57	80.0							
		730	115.3	105	25	101	35	99.6	45	96.9	54.5	94.6	64	92.7							
		800	126.3	116	27	112	37.5	110	48	107	59	105	70	103							
		880	139.0	128	30	125	41.5	123	53	120	64.5	118	76	116							
		980	154.8	144	33	141	46	139	59	136	72	134	85	132							
RF- 295V	300 ^A	650	108.9	97.3	23	93.5	32.5	92.0	42	89.3	51	87.0	60	85.0							
		730	122.3	110	26	107	36.5	105	47	102	57	99.7	67	97.7							
		800	134.0	122	29	119	40	117	51	114	62.5	112	74	110							
		880	147.4	135	32	132	45.5	130	59	127	70	125	81	123							
		980	164.1	152	35	149	49	147	63	144	76.5	142	90	140							
RF- 300V	300 ^A	650	133.7	120	29	117	40	115	51	112	62	109	73	107							
		730	150.2	137	32	133	44.5	131	57	128	69.5	125	82	123							
		800	164.6	151	35	148	49	146	63	143	76.5	140	90	138							
		880	181.1	168	39	164	54	162	69	159	84	156	99	154							
		980	201.7	192	43	185	59.5	183	76	180	93	177	110	175							
RF- 350V	350 ^A	650	158.6	144	34	139	47	137	60	134	73	130	86	127							
		730	178.2	164	38	159	52.5	157	67	154	82	150	97	147							
		800	195.2	181	41	176	57.5	174	74	171	90	177	106	174							
		880	214.8	200	45	196	63	193	81	190	98.5	186	116	183							
		980	239.2	225	50	220	70	218	90	215	110	211	130	208							
RG- 350V	350 ^A	590	197.3	184	43	179	59.5	177	76	174	92.5	171	109	168							
		630	210.7	198	46	193	63.5	191	81	188	98.5	185	116	182							
		670	224.1	211	49	206	67.5	204	86	201	105	198	124	195							
		710	237.4	225	52	219	71.5	217	91	214	111	211	131	208							
		750	250.8	238	54	233	75	231	96	228	117	225	138	222							
RG- 400V	400 ^A	590	248.1	232	52	226	73	224	94	220	115	215	135	212							
		630	264.9	259	56	253	78	251	100	247	122	242	144	239							
		670	281.7	265	59	260	82.5	258	106	254	130	249	153	246							
		710	298.5	282	63	277	88	275	113	271	138	266	163	263							
		750	315.3	299	66	293	92.5	291	119	287	146	282	172	279							
RG- 450V	450 ^A	590	310.1	292	64	285	90	282	116	278	142	273	168	269							
		630	331.1	313	68	306	96	303	124	299	152	294	179	290							
		670	352.1	334	73	327	103	324	132	320	161	315	190	311							
		710	373.2	355	77	348	108	345	139	341	171	336	202	332							
		750	394.2	376	81	369	114	366	147	362	180	357	213	353							
RG- 500V	500 ^A	590	383.4	361	78	352	110	349	142	343	174	337	306	332							
		630	409.4	387	83	378	117	375	151	369	186	363	220	358							
		670	435.4	413	88	404	125	401	161	395	198	389	234	384							
		710	461.4	439	93	430	132	427	170	421	209	415	348	410							
		750	487.4	465	99	456	140	453	180	447	220	441	260	436							

Outline Drawings (Standard)

Basically, the standard blower rotates clockwise from the axis end (counter clockwise is also available – speak to us about this.) If you have a standard blower rotating counter clockwise without adjustment, the impeller might come into contact. The size of the base might change depending on the motor (including motor base and rail). If you use rubber pads, the quantity needed and the place to install them might be different from those of a regular bolt.

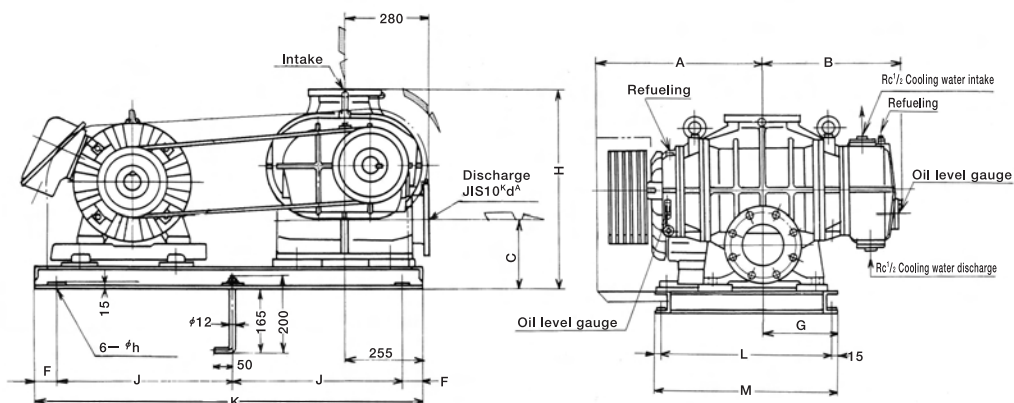
RB.RC



Type	Motor power (kW)	d ^A	A	B	C	D	E	F	G	H	I	J	K	L	M	φh	Weight kg
RB- 50	2.2、 3.7	50	270	271	203	173	248	100	130	338	150	540	740	290	320	15	80
	5.5、 7.5		180						600			800		330	360		
RB- 65	1.5~ 3.7	65	280	296	223	178	248	100	120	348	150	560	760	320	350	15	90
	5.5、 7.5		170						630			830		330	360		
RC- 80	5.5、 7.5	80	330	360	250	215	286	120	130	406	190	660	900	340	370	15	160
	11 ~ 18.5		250						740			980		440	470		
RC-100	3.7~ 7.5	100	400	395	260	225	286	120	140	406	190	680	920	440	470	15	190
	11 ~ 18.5		210						740			980		450	480		

The weight in the table above is for the blower itself. (not including motor or base etc.)

RD

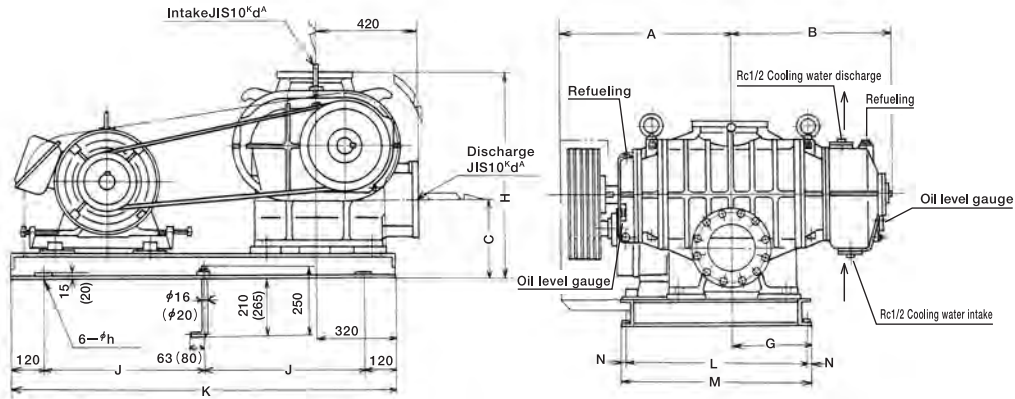


Type	Motor power (kW)	d ^A	A	B	C	F	G	H	J	K	L	M	φh	Weight kg	
RD-100	3.7 ~ 11	100	400	365	205	70	180	635	480	1100	460	490	15	295	
	15 ~ 22						230		530	1200					
RD-125	5.5 ~ 15	125	430	397	225	70	190	655	480	1100	460	490	15	360	
	18.5 ~ 22		230				530		1200	480					510
	30 ~ 45		280				580		1300	520					550
RD-127	11 ~ 22	125	510	457	225	70	240	655	530	1200	580	590	15	410	
RD-130	30 ~ 45								580	1300					560
RD-150	11 ~ 30	150	580	497	245	70	260	720	530	1200	640	670	15	530	
	37 ~ 55								580	1300					580

The weight in the table above is for the blower itself. (not including motor or base etc.)

Outline Drawings (Standard)

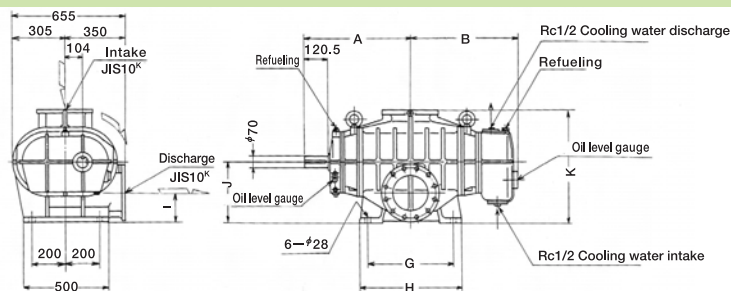
RE



Type	Motor power (kW)	d ^A	A	B	C	G	H	J	K	L	M	N	φh	Weight kg	Type	Motor power (kW)	d ^A	A	B	C	G	H	J	K	L	M	N	φh	Weight kg
RE-140	11~22	150	560	550	270	180	820	580	1400	560	600	20	19	890	RE-190	15, 18.5, 22	200	700	685	325	300	865	580	1400	840	880	20	19	1150
	30, 37, 45							630	1500							810							850						
	55, 75							680	1600							780							820						
RE-145	90	150	580	590	280	210	830	580	1400	590	630	20	19	950	RE-200	90	200	720	750	360	400	970	580	1400	1000	1050	25	23	1350
	30, 37, 45							630	1500							950							1000						
RE-150	55, 75	150	580	590	280	210	830	680	1600	570	610	20	19	950	RE-250	30, 37, 45	200	750	360	400	970	630	1500	950	1000	25	23	1350	
	90							730	1700							670						710							

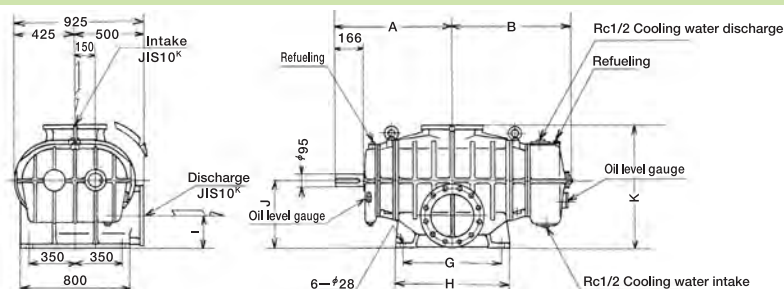
The weight in the table above is for the blower itself. (not including motor or base etc.)

RME



Type	Diameter	A	B	G	H	I	J	K	N	Weight kg
RME-150	150 ^A	525	535	310	400	155	335	630		650
RME-200	200 ^A	620	630	500	590	175	355	650		750

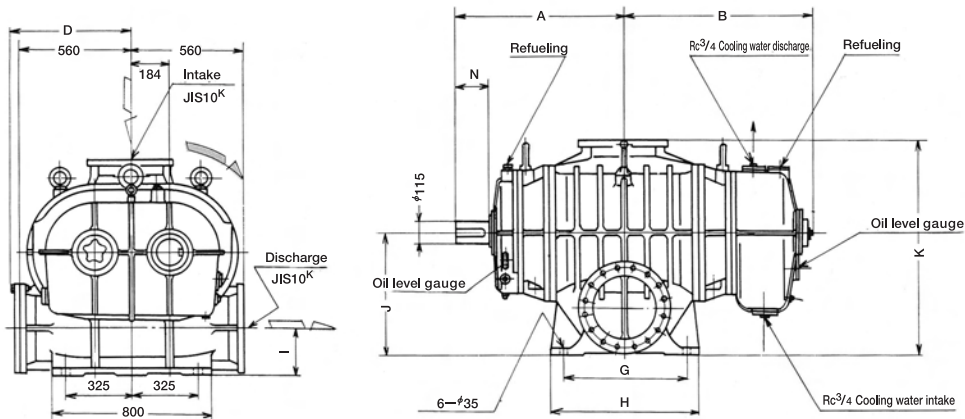
RMF



Type	Diameter	A	B	G	H	I	J	K	N	Weight kg
RMF-250	250 ^A	715	740	470	570	215	475	875		1700
RMF-300	300 ^A	850	875	740	840	240	500	900		2150

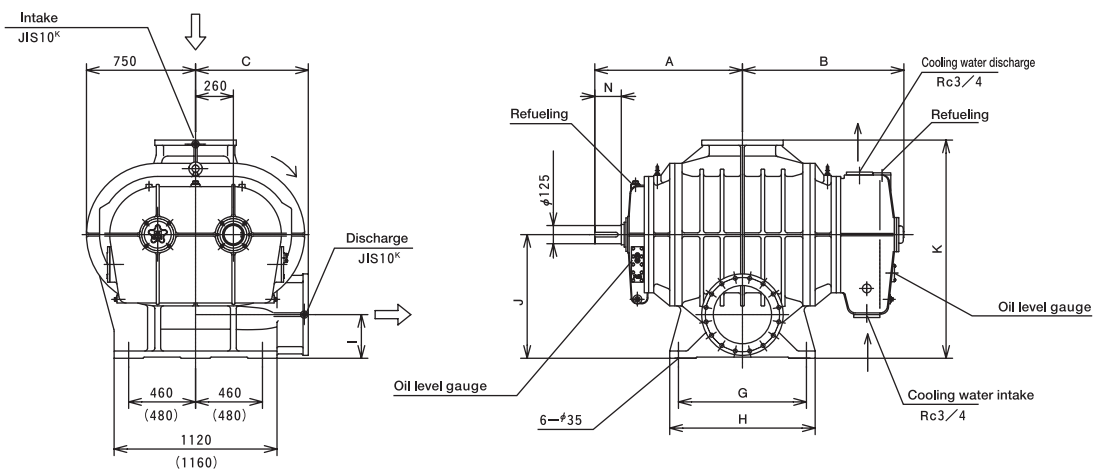
Outline Drawings (Standard)

RF Body Outline Drawings



Type	Diameter	A	B	D	G	H	I	J	K	N	Weight kg	Notes
RF-240	250 ^A	730	810	601	400	480	210	570	1040	163.5	2000	Discharge flange 12-M22 Depth 34
RF-245												
RF-250		785	865		460	590	220					2280
RF-290	300 ^A	855	935	601	600	730	230	600	1060	163.5	2660	
RF-295												2660
RF-300		935	1015		710	860			1090		3000	
RF-350	350 ^A	1020	1095	603	900	1050	250	630	1150	168.5	3450	With intake reducer

RG Body Outline Drawings



() indicates RG-500

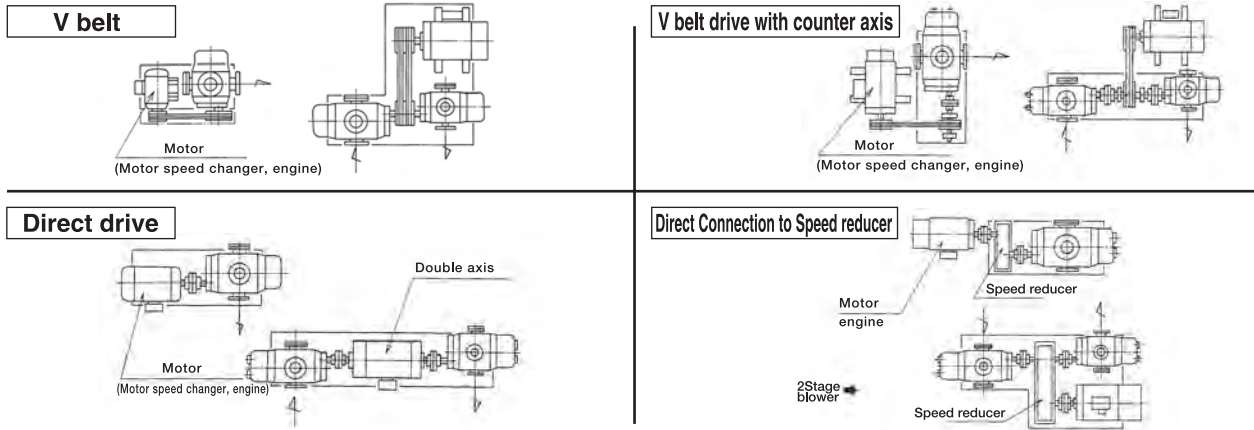
Type	Diameter	A	B	C	G	H	I	J	K	N	Weight kg	Notes
RG-350	350 ^A	925	1020	775	780	900	275	825	1475	182	5770	Without intake reducer (Integrated Casing type)
RG-400	400 ^A	1015	1110		880	1000	300	850			6200	
RG-450	450 ^A	1125	1220	800	1000	1150	315	750	1500	182	6810	
RG-500	500 ^A	1280	1375		1280	1400	350	800	1550		9100	

ROTARY BLOWER

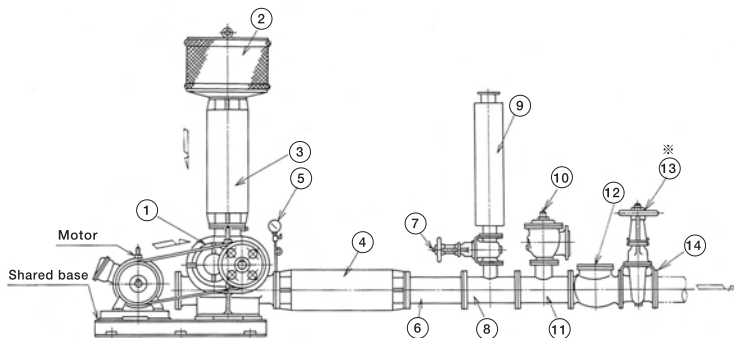
Driving method and examples of piping

The motor uses a V belt drive as the standard. However, direct drive an engine drive, speed reducer and speed changer are also available as needed.

Driving method : an example



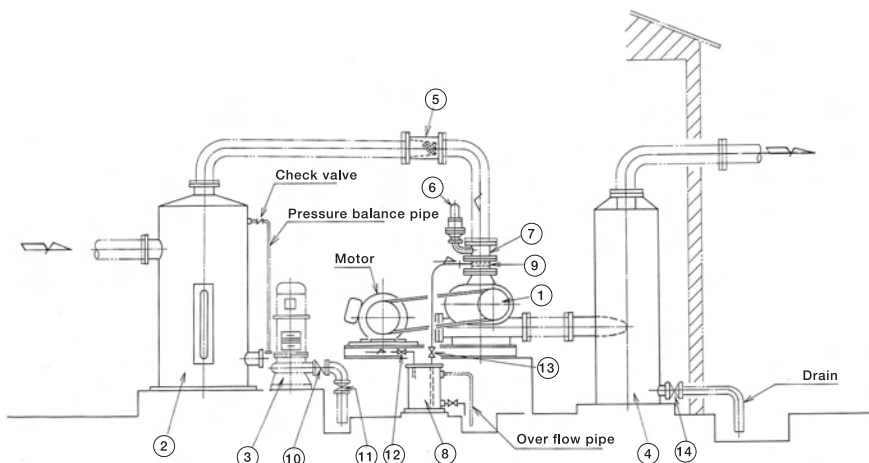
Blower layout example (Dry)



No.	Parts
1	Rotary blower
2	Air filter
3	Intake silencer
4	Discharge silencer
5	Pressure gauge
6	Expansion joint
7	Bypass gate valve
8	T reducer
9	Bypass silencer
10	Escape valve
11	T reducer
12	Check valve
13	Gate valve
14	Flange

The picture above shows the piping around the blower. Please lay pipes with appropriate consideration of the space vibration prevention, other piping connected to the blower. Installing rubber vibration insulator or expansion joints to the blower discharge is an effective way to prevent vibration. Silencer works well both standing upright or lying down. Please install JIS swing Check valve level. Install escape valve standing upright. Upright silencer is also available. Appropriate support is needed to make sure the weight of the pipe is not on the blower nozzle.

Vacuum blower layout example (Wet)



No.	Parts
1	Rotary vacuum blower
2	Suction separator tank
3	Drain pump
4	Wet silencer
5	Line filter
6	Vacuum breaker
7	YF reducer
8	Supply Water tank
9	Sealed water reducer
10	Check valve
11	Gate valve
12	Water pipe
13	Sealed water intake valve
14	Capacity adjustment valve

Note: The parts listed above are available as needed.

Accessory

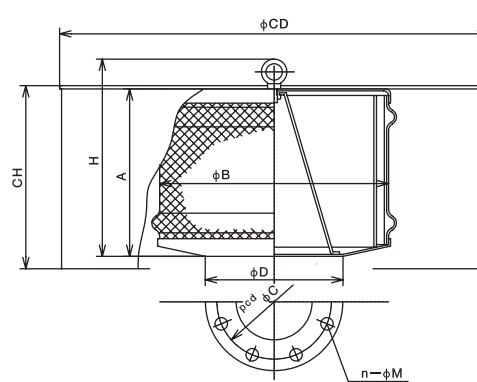
Standard Accessory

Base (single and common baseplate); Body V pulley; Motor V pulley; V belt or coupling set; safety cover; foundation bolts (nuts, washers); flange (bolts, nuts, packing)

Special Accessory Sizes

Special accessory are available as shown below. Please choose according to applications, specifications, pipework plan etc...
 The Silencer's standard material is SS400+ glass wool. Stainless is also available.
 Snapper type (SS400 and SUS304) is also available. Please use when you want to make the pulsation smaller or if there is a problem with the sound absorbing material.
 Upright silencer is also available. Please talk to us if you need it.

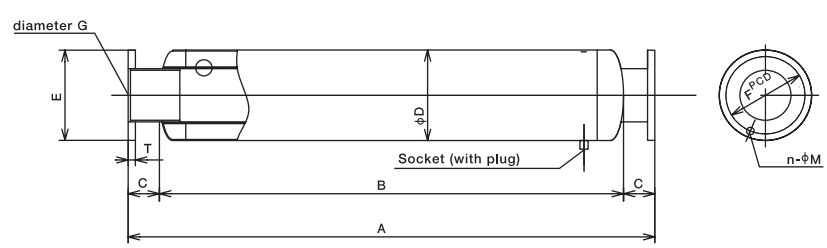
Air filter **AF**



(Flange JIS 10k)

Type	CD	CH	H	A	B	C	D	n-M	Weight kg	Cover Weight kg
AF- 50	356	200	208	166	230	120	155	4-M16	2.5	4.5
AF- 65	406	230	230	188	260	140	175	4-M16	3.2	5.9
AF- 80	586	250	260	218	300	150	185	8-M16	4.0	10.5
AF-100	656	280	290	248	350	175	210	8-M16	4.6	13.2
AF-125	806	350	371	320	450	210	250	8-M20	9.8	20.1
AF-150	856	450	473	422	550	240	280	8-M20	18.0	27.0
AF-200	1106	550	573	522	700	290	330	12-M20	24.0	41.0
AF-250	1360	650	675	624	900	355	400	12-M22	37.0	60.0
AF-300	1556	780	805	754	1100	400	445	16-M22	56.0	84.0
AF-350	1700	880	946	860	1300	445	490	16-M22	115.0	105.0
AF-400	1850	920	1088	1000	1500	510	560	16-M24	165.0	120.0
AF-450	1960	1120	1190	1100	1650	565	620	20-M24	202.0	155.0
AF-500	2160	1220	1290	1200	1850	620	675	20-M24	252.0	190.0

Silencer **KM**



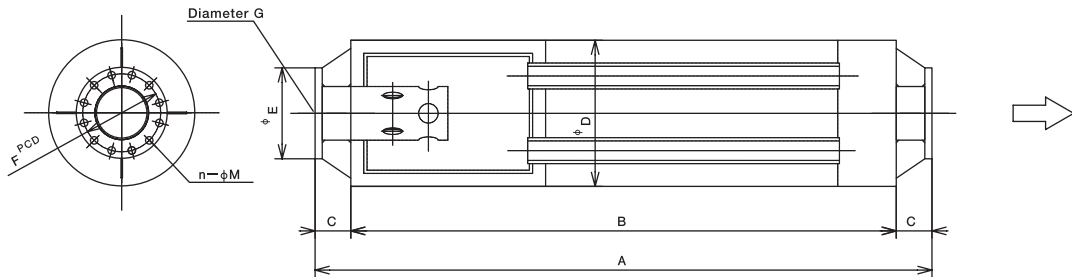
(Flange JIS 10k)

Type	G	A	B	C	D	Flange JIS 10k				Weight kg
						E	F	T	n-φM	
KM- 40	40A	570	460	55	114	140	105	16	4-19	8
KM- 50	50A	600	480	60	140	155	120	16	4-19	10
KM- 65	65A	700	560	70	165	175	140	18	4-19	14
KM- 80	80A	900	740	80	190	185	150	18	8-19	18
KM-100	100A	1200	1040	80	217	210	175	18	8-19	37
KM-125	125A	1400	1210	95	261	250	210	20	8-23	44
KM-150	150A	1600	1410	95	268	280	240	22	8-23	67
KM-200	200A	1800	1600	100	320	330	290	22	12-23	88
KM-250	250A	2000	1800	100	410	400	355	24	12-25	122
KM-300	300A	2200	1960	120	600	445	400	24	16-25	
KM-350	350A	2500	2260	120	700	490	445	26	16-25	
KM-400	400A	3000	2740	130	800	560	510	28	16-27	
KM-450	450A	3600	3360	140	900	620	565	30	20-27	
KM-500	500A	4200	3920	140	1000	675	620	30	20-27	

Special Accessory Size

Discharge silencer | KMB

This side must be attached to the blower side.

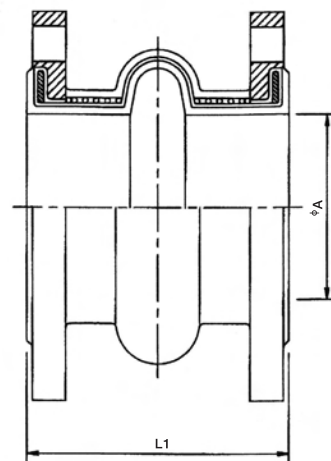


Silencer must be attached directly to the blower, or as close as possible.

Type	G	A	B	C	D	JIS 10K F.F. Flange			Weight kg
						E	F	n-φM	
KMB- 50	50A	900	740	80	184	155	120	4-19	21
KMB- 65	65A	1200	1020	90	233	175	140	4-19	38
KMB- 80	80A	1400	1220	90	280	185	150	8-19	45
KMB-100	100A	1600	1420	90	310	210	175	8-19	65
KMB-125	125A	1800	1600	100	350	250	210	8-23	88
KMB-150	150A	1900	1680	110	450	280	240	8-23	135
KMB-200	200A	2000	1780	110	500	330	290	12-23	200
KMB-250	250A	2200	1960	120	600	400	355	12-25	260
KMB-300	300A	2500	2260	120	700	445	400	16-25	350
KMB-350	350A	3000	2740	130	800	490	445	16-25	
KMB-400	400A	3600	3340	130	900	560	510	16-27	

Expansion joint | EA1

Type	Size		1ARCH		
	A	L1	Shrinkage	Expansion	Eccentricity
EA1- 50	51	150	15	10	20
EA1- 65	64	150	15	10	20
EA1- 80	76	150	15	10	20
EA1-100	102	150	20	15	30
EA1-125	127	150	20	15	30
EA1-150	152	200	20	20	30
EA1-200	203	200	20	20	30
EA1-250	254	200	25	25	30
EA1-300	305	200	25	25	30
EA1-350	350	250	25	25	30
EA1-400	400	250	25	25	30
EA1-450	450	250	25	25	30
EA1-500	500	250	25	25	30

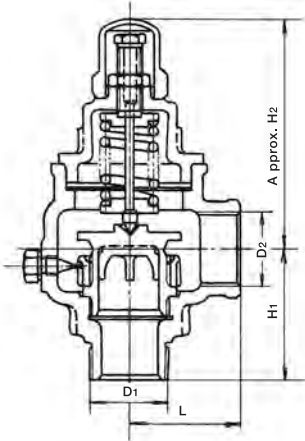


Special Accessory Size

CF200 for gate valve body, and CAC for hinge is standard. Also, hinge SUS, all SUS and cast steel are available.

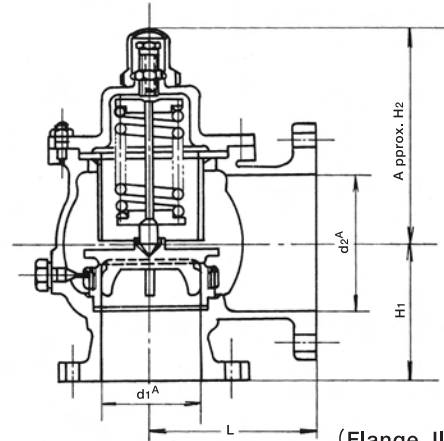
Moreover, open style gate valves are available too. (inexpensive Air type)

Escape valve SVS



Type	D ₁	D ₂	L	H ₁	H ₂	Weight kg
SVS-20	Rc 3/4	G 3/4	45	60	103	2
SVS-25	Rc 1	G 1	50	70	120	3
SVS-32	Rc 1 1/4	G 1 1/4	60	75	138	3.5
SVS-38	Rc 1 1/2	G 1 1/2	70	85	145	4.8
SVS-50	Rc 2	G 2	80	100	155	7
SVS-65	Rc 2 1/2	G 2 1/2	85	105	190	9.2
SVS-75	Rc 3	G 3	95	115	205	15

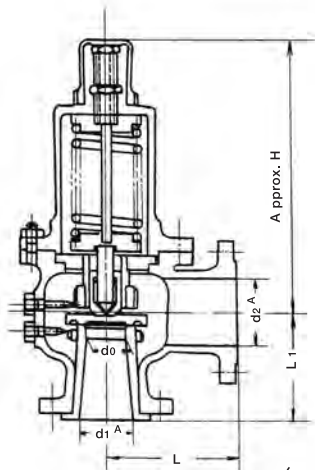
Escape valve SVF



(Flange JIS 10k)

Type	d ₁ ^A ×d ₂ ^A	L	H ₁	H ₂	Weight kg
SVF- 38	40 ^A ×50 ^A	120	100	150	12
SVF- 50	50 ^A ×65 ^A	130	110	180	16.7
SVF- 65	65 ^A ×100 ^A	145	120	200	30
SVF- 75	80 ^A ×100 ^A	200	145	215	40.6
SVF-100	100 ^A ×125 ^A	200	150	245	48.5
SVF-125	125 ^A ×180 ^A	210	180	275	61.4
SVF-150	150 ^A ×200 ^A	220	200	345	100
SVF-180	180 ^A ×250 ^A	240	275	365	125
SVF-200	200 ^A ×250 ^A	280	275	380	125

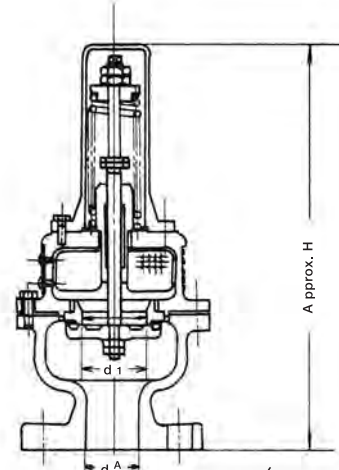
Full flow type escape valve FB



(Flange JIS 10k)

Type	d ₁ ^A ×d ₂ ^A	d ₀	L	L ₁	H	Weight kg
FB- 50	50 ^A ×65 ^A	33	140	120	275	35
FB- 65	65 ^A ×100 ^A	44	180	150	380	50
FB- 80	80 ^A ×100 ^A	57	185	165	380	60
FB-100	100 ^A ×125 ^A	75	200	180	430	100
FB-125	125 ^A ×150 ^A	90	210	190	500	130
FB-150	150 ^A ×200 ^A	111	240	220	580	200
FB-200	200 ^A ×250 ^A	150	305	280	645	350
FB-250	250 ^A ×300 ^A	170	330	300	700	550

Vacuum breaker VB



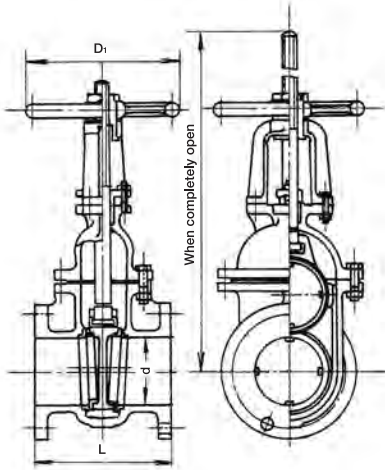
(Flange JIS 10k)

Type	d	d ₁	H	Weight kg	Type	d	d ₁	H	Weight kg
VB-25	25 ^A	50	330	9	VB-100	100 ^A	150	570	40
VB-32	32 ^A	50	330	10	VB-125	125 ^A	175	655	55
VB-40	40 ^A	50	330	12	VB-150	150 ^A	200	750	90
VB-50	50 ^A	80	410	18	VB-200	200 ^A	250	830	120
VB-65	65 ^A	100	485	22	VB-250	250 ^A	300	940	150
VB-80	80 ^A	100	485	30	VB-300	300 ^A	350	1000	180

Special Accessory Size

Custom made valves are also available

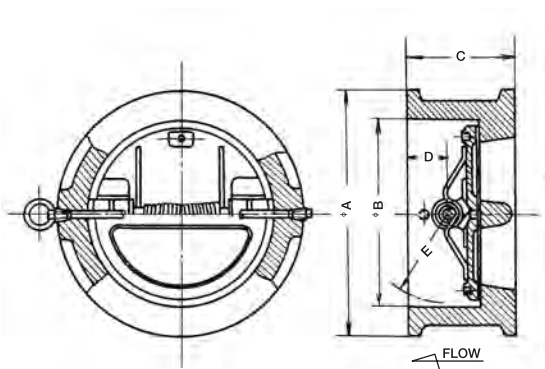
Outside screw gate valve **GV**



(Flange JIS 10k)

Type	d	L	D ₁	H	Weight kg
GV- 50	50	180	200	381	18
GV- 65	65	190	200	428	24
GV- 80	80	200	224	493	27.7
GV-100	100	230	250	588	43.5
GV-125	125	250	280	689	61
GV-150	150	270	300	798	128.3
GV-200	200	290	355	903	128.3
GV-250	250	330	400	1204	202
GV-300	300	350	450	1403	275

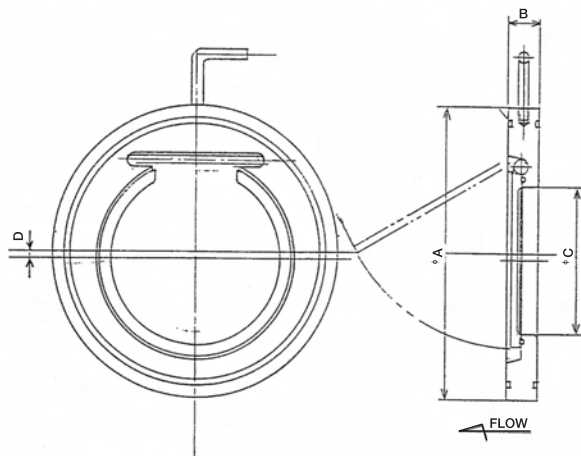
Check valve **K** (Duo check type)



(Use flange JIS 10k)

Type	A	B	C	D	E	Weight kg
K- 50	101	60	54	27	27	3
K- 65	121	73	54	27	34	4
K- 80	131	89	57	28	42	5
K-100	156	114	64	30	53	6
K-125	187	141	70	31	65	9
K-150	217	168	76	31	79	10
K-200	267	219	95	41	102	19
K-250	330	273	108	41	126	31
K-300	375	324	144	56	153	56
K-350	420	356	178	84	175	71
K-400	483	406	159	63	194	99

Check valve **DCV** (Insert disk type)



(Use flange JIS 10k)

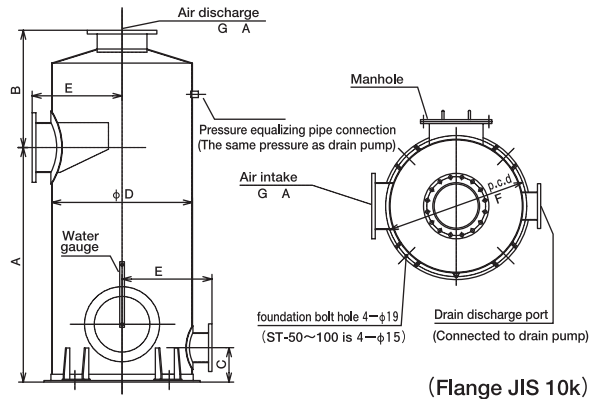
Type	Nominal Diameter	φA	B	φC
DCV- 50	50A	104	19	27
DCV- 65	65A	124	19	38
DCV- 80	80A	134	19	48
DCV-100	100A	159	19	69
DCV-125	125A	190	21	100
DCV-150	150A	220	24	110
DCV-200	200A	270	29	140

*The distance between the blower and the check valve is more than 5D.
(D=pipe diameter)

*Please install check valve to level.

Special Accessory Size

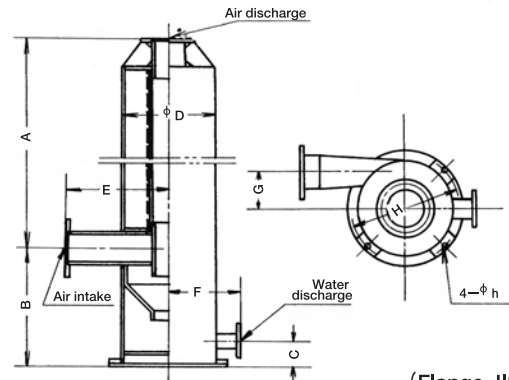
Separator tank | ST



(Flange JIS 10k)

Type	A	B	C	D	E	F	G	Weight kg
ST- 50	500	250	80	200	210	250	50	
ST- 65	500	250	80	250	210	300	65	
ST- 80	600	300	100	300	250	350	80	
ST-100	700	350	100	350	250	400	100	
ST-125	800	400	120	400	280	460	125	95
ST-150	900	450	150	500	340	560	150	140
ST-200	1000	500	170	600	400	660	200	195
ST-250	1250	625	170	750	500	810	250	290
ST-300	1500	750	192	900	575	960	300	410
ST-350	1750	875	170	1050	650	1110	350	540

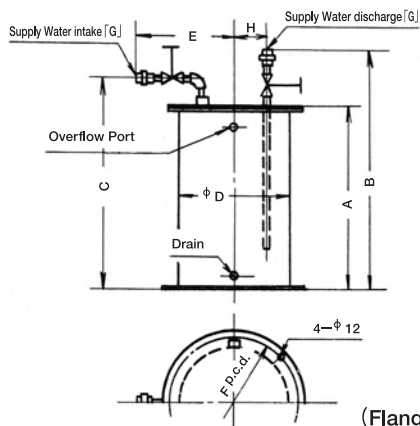
Wet silencer | SKM



(Flange JIS 10k)

Type	Air intake and discharge diameter	Water discharge diameter	A	B	C	D	E	F	G	H	h
SKM- 50	50	40	600	360	75	180	200	200	53	230	15
SKM- 65	65	40	700	400	75	200	220	200	55	250	15
SKM- 80	80	40	900	450	75	280	250	220	89	330	15
SKM-100	100	40	1200	500	75	330	310	240	101	380	15
SKM-125	125	50	1400	640	85	400	380	280	126	450	15
SKM-150	150	50	1600	750	85	475	450	330	148	540	19
SKM-200	200	50	1800	825	85	550	500	380	160	600	19
SKM-250	250	65	2000	1000	95	670	600	460	195	720	19
SKM-300	300	65	2200	1200	95	800	750	550	236	900	19
SKM-350	350	80	2500	1350	105	900	800	600	265	1000	23
SKM-400	400	80	3000	1450	105	1030	900	670	305	1130	23

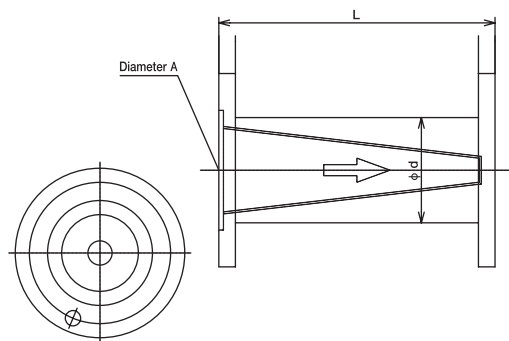
Supply Water tank | SWT



(Flange JIS 10k)

Type	A	B	C	D	E	F	H	G
SWT- 20	450	615	520	280	245	320	80	Rc ³ / ₈
SWT- 30	500	665	570	320	255	360	90	Rc ³ / ₈
SWT- 45	570	750	660	360	290	430	110	Rc ¹ / ₂
SWT- 60	700	880	790	400	300	470	120	Rc ¹ / ₂
SWT-100	750	950	860	450	340	520	140	Rc ³ / ₄
SWT-150	850	1070	960	500	370	570	150	Rc1

Line filter | LF



(Flange JIS 10k)

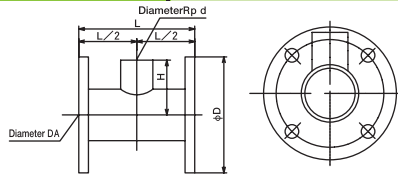
Type	A	L	d	Weight kg
LF- 50	50 ^A	180	60.5	5.0
LF- 65	65 ^A	200	76.3	7.2
LF- 80	80 ^A	250	89.1	8.2
LF-100	100 ^A	300	114.3	10.8
LF-125	125 ^A	350	139.8	15.9
LF-150	150 ^A	400	165.2	20.6
LF-200	200 ^A	450	216.3	31.0
LF-250	250 ^A	475	267.4	47.1
LF-300	300 ^A	500	318.5	56.1

LF line filter works as a strainer to catch dust in the pipe at the first stage of operations. The inline gas filter, which can catch 10μof dust, is available. Please talk to us for more information.

Special Accessory Size

Reducers are available when installing the gate valve and the bypass valve. Please select the one appropriate to your piping. Pressure gauge fitting connector and elbow are also available. Please talk to us if you need them.

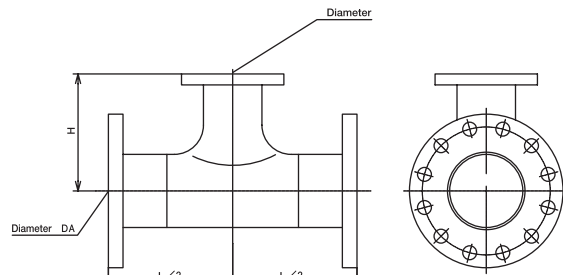
Reducer TS



(Flange JIS 10k)

Type	D	d	L	H
TS20- 50	50	3/4	160	60
TS20- 65	65	3/4	160	70
TS20- 80	80	3/4	180	80
TS25- 50	50	1	160	70
TS25- 65	65	1	160	80
TS25- 80	80	1	180	90
TS32- 50	50	1 1/4	160	70
TS32- 65	65	1 1/4	180	80
TS32- 80	80	1 1/4	200	90
TS32-100	100	1 1/4	200	90
TS40- 50	50	1 1/2	160	70
TS40- 65	65	1 1/2	180	80
TS40- 80	80	1 1/2	200	90
TS40-100	100	1 1/2	220	100
TS50- 50	50	2	180	70
TS50- 65	65	2	180	90
TS50- 80	80	2	200	95
TS50-100	100	2	250	110
TS50-125	125	2	250	120
TS65- 80	80	2 1/2	200	95
TS65-100	100	2 1/2	220	100
TS65-125	125	2 1/2	260	100
TS65-150	150	2 1/2	280	130
TS75-100	100	3	260	90
TS75-125	125	3	260	130
TS75-150	150	3	280	130
TS75-200	200	3	280	150

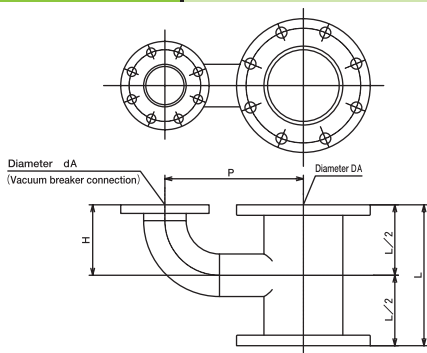
Reducer (Flange) TF



(Flange JIS 10k)

Type	D	d	L	H
TF40- 50	50	40	200	120
TF40- 65	65	40	220	120
TF40- 80	80	40	250	130
TF40-100	100	40	300	160
TF40-125	125	40	300	160
TF50- 50	50	50	200	120
TF50- 65	65	50	220	120
TF50- 80	80	50	250	130
TF50-100	100	50	300	160
TF50-125	125	50	350	160
TF50-150	150	50	350	180
TF65- 65	65	65	220	120
TF65- 80	80	65	250	150
TF65-100	100	65	300	160
TF65-125	125	65	350	160
TF65-150	150	65	400	180
TF65-200	200	65	400	200
TF80- 80	80	80	250	150
TF80-100	100	80	300	150
TF80-125	125	80	370	160
TF80-150	150	80	400	200
TF80-200	200	80	400	250
TF100-100	100	100	300	150
TF100-125	125	100	400	220
TF100-150	150	100	400	220
TF100-200	200	100	420	220
TF100-250	250	100	445	250
TF125-125	125	125	400	220
TF125-150	150	125	400	220
TF125-200	200	125	450	250
TF125-250	250	125	450	250
TF125-300	300	125	520	250
TF150-150	150	150	450	220
TF150-200	200	150	450	250
TF150-250	250	150	500	280
TF150-300	300	150	520	280
TF150-350	350	150	570	300
TF150-400	400	150	500	320
TF180-200	200	180	500	250
TF180-250	250	180	500	250
TF180-300	300	180	500	300
TF180-350	350	180	500	300
TF180-400	400	180	500	320
TF180-450	450	180	500	380
TF180-500	500	180	500	380
TF200-200	200	200	500	250
TF200-250	250	200	500	250
TF200-300	300	200	500	300
TF200-350	350	200	500	300
TF200-400	400	200	500	320
TF200-450	450	200	500	380
TF200-500	500	200	500	380
TF250-350	350	250	500	330
TF250-400	400	250	500	380
TF250-450	450	250	500	380
TF250-500	500	250	500	380

Reducer YF

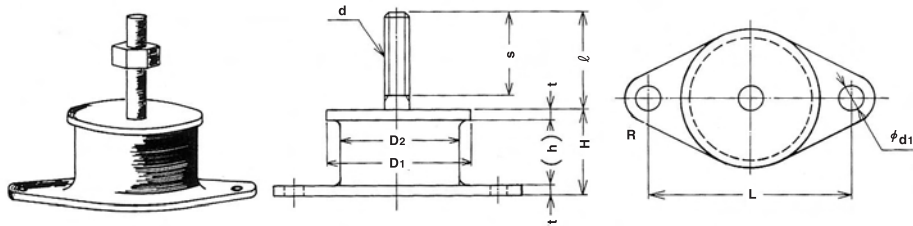


(Flange JIS 10k)

Type	d	D	L	H	P
YF25- 50	25	50	135	80	200
YF25- 65	25	65	160	80	210
YF32- 80	32	80	180	90	220
YF40-100	40	100	220	110	235
YF50-100	50	100	220	120	245
YF50-125	50	125	260	130	260
YF65-125	65	125	260	150	270
YF80-150	80	150	295	170	290
YF100-150	100	150	295	200	330
YF100-200	100	200	367	200	340
YF125-250	125	250	445	250	381
YF150-250	150	250	445	280	423
YF200-300	200	300	520	375	534

Special Accessory Size

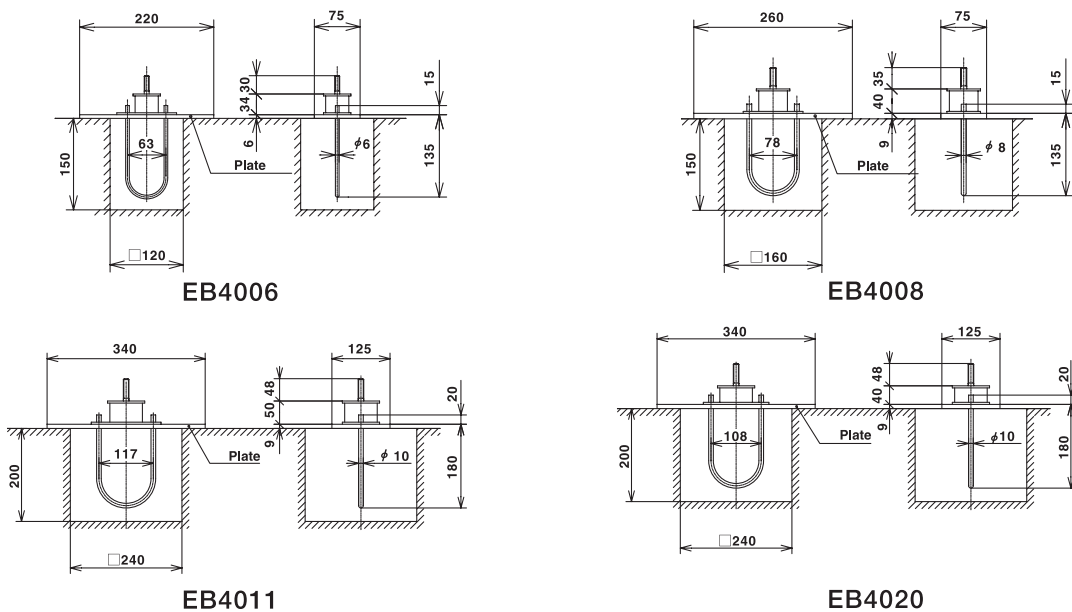
Rubber vibration insulator (U bolt, nut) installation diagram



Product number	Standard size (mm)											Model
	D ₁	D ₂	H	(h)	t	d	l	S	L	d ₁	R	
EB4006	45	38	34	27.6	3.2	8	30	25	63	7	7.5	RB、RC
EB4008	55	47	40	33.6	3.2	10	35	30	78	9	10	RD
EB4011	90	80	50	41	4.5	12	48	42	117	11.5	12	RE
EB4020	80	70	40	31.0	4.5	12	48	42	108	11.5	14	RE

Caution: 1. The screw is a JIS3 metric coarse thread screw. (ISO metric coarse thread)
 2. One hexagon nut and one spring washer are needed.

Rubber vibration insulator (U bolt, nut) installation diagram



Sound Proof Box

If sound regulations in your area are strict, a sound proof box is available. (Small to large sizes available) Talk to us if you need one.

Inter cooler and after cooler are available in upright, lying down and gas use.

Other Technical Data

Type	Weight (kg)	AxisGD ² (kg·m ²)	Torque kg·m	Cooling water ℓ/min	Lubrication oil(ℓ)	
					Bearing cover (Drive side)	Gear case
RB- 50	80	0.07	0.5	(5~8)	0.3	1.3
65	90	0.096	0.75			
RC- 80	160	0.3	1.3	(5~8)	0.5	1.8
100	190	0.41	1.8			
RD-100	295	1.5	2	8~10	1.1 Jacket type 0.6	2.4
125	360	1.96	2.5			
127	410	2.3	3			
130	410	2.75	3.5			
150	530	4.0	4			
RME-150	650	6	5	8~10	2.0 Jacket type 1.1	5.0 Air cooling type 6.5
200	750	9	7			
RE-140	890	8.65	4	10~13	2.8 Jacket type 1.2	6.0 Air cooling type 7.0
145	890	10.05	5			
150	950	12.27	6			
190	1150	14.75	7.5			
200	1150	17.55	9			
250	1350	21.65	12			
RMF-250	1700	35	14	12~15	4.5 Jacket type 2.5	10
300	2150	52	20			
RF-240	2000	85	14	15~18	10 Jacket type 7.0	26
245	2000	100	17			
250	2280	120	21			
290	2660	137	26			
295	2660	144	27			
300	3000	172	33			
350	3450	200	39			
RG-350	5770	365	55			
400	6200	430	70			
450	6810	527	86			
500	9100	633	105			

Standard paint is Munsell 7.5 BG 4/1.5. (Body and parts)

TAIKO KIKAI INDUSTRIES CO., LTD.

URL <http://www.taiko-kk.com>

● Head Office and Factory 209-1 Shimotabuse, Tabuse-cho, Kumage-gun, Yamaguchi Pref. 742-1598 Japan
Tel: +81-820-52-3113~4 Fax: +81-820-53-1001
E-mail: business@taiko-kk.com

● Tokyo Branch 4th floor, Suidobashi MS Building, 3-4-9 Misaki-cho, Chiyoda-ku, Tokyo 101-0061 Japan
Tel: +81-3-3221-8551 Fax: +81-3-3221-8555
E-mail: tokyo-br@taiko-kk.com

● Osaka Branch 8th floor, KC Building, 3-4-7 Kawara-machi, Chuo-ku, Osaka 541-0048 Japan
Tel: +81-6-6231-6241 Fax: +81-6-6222-3295
E-mail: osaka-br@taiko-kk.com

● Electro Magnetic Division 966 Ogo, Tabuse-cho, Kumage-gun, Yamaguchi Pref. 742-1513 Japan
Tel: +81-820-52-2147 Fax: +81-820-52-2148
E-mail: sales@secoh.co.jp

● Beijing Resident Office ● Shanghai Resident Office ● TAIKO KOREA CO.

● ISO9001 certified

■ For the sake of efficiency improvement, the details in this catalog are subject to change without notice.

