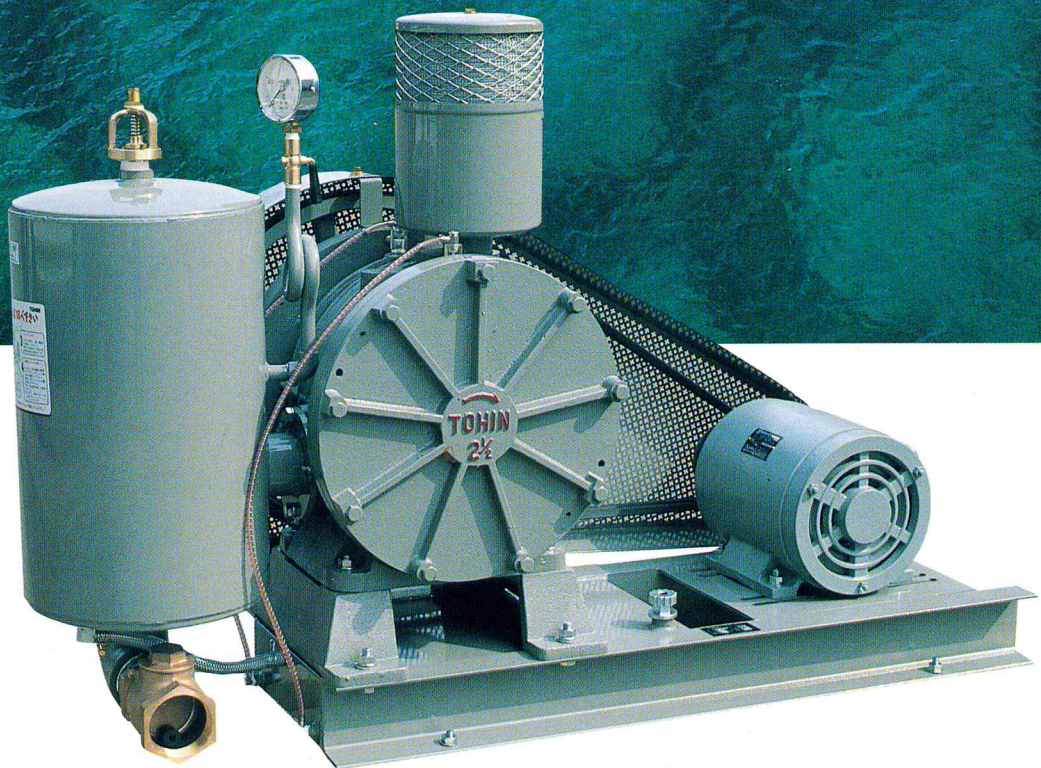
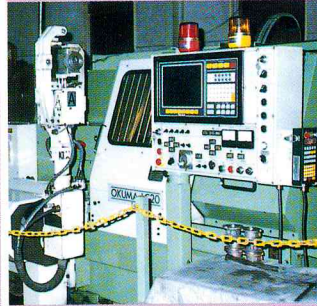
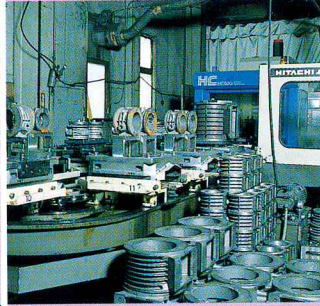




TOHIN ROTARY BLOWER



**THE LARGEST ROTARY BLOWER SPECIALITY MANUFACTURER, TOHIN
WHICH IS PROUD OF HIS TECHNOLOGY AND PROVEN RESULTS IN JAPAN**



KIYOKU Factory

KUKI Factory



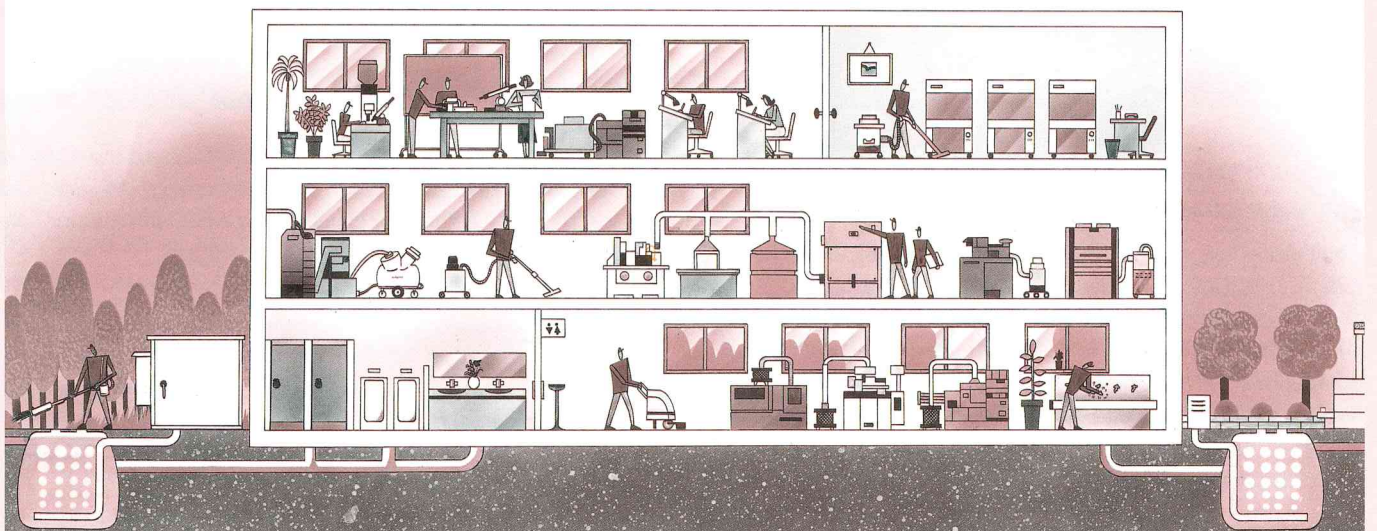
- For sanitary treatment (exposure to the air) in the septic tank and for purification of water
- For spraying for heavy oil and kerosene oil burners
- For breeding and propagating fish in water tanks for tropical fish and fish ponds
- For agitation in plating tanks and water treatment tanks
- For air curtain in water, etc.

TOHIN is the largest speciality manufacturer of blowers having an ample experience and proven results with a long history of more than 40 years.

A large variety of TOHIN Rotary Blowers ranging from small to large types manufactured under strict quality control backed up by incessant technical development meet the requirements of all intended purposes and your full expectations.

Producing compressed air by rotary movement of the rotor, superior functionality and durability are the fruit of high technology of TOHIN including the realization of epoch-making quietness of operating sound.

TOHIN Rotary Blowers adopted not only for domestic use but also for industrial one are favourably commented for in a wide application field. The established production of more than 3 million units is a good proof of reliability.



Powerful Air Flowrate and yet Silent Operating Sound

Principles and construction of rotary blower

A blower will be used when a large quantity of air is required at normal pressure 0.1–0.5 kg/cm²G or so. A blower consists of the following main component units. Construction is simple, resulting in being little in occurrence of trouble.

- Motor
- Air filter
- Blower body
- Air chamber
- Base (and Oil tank)
- Oil dropping nozzle

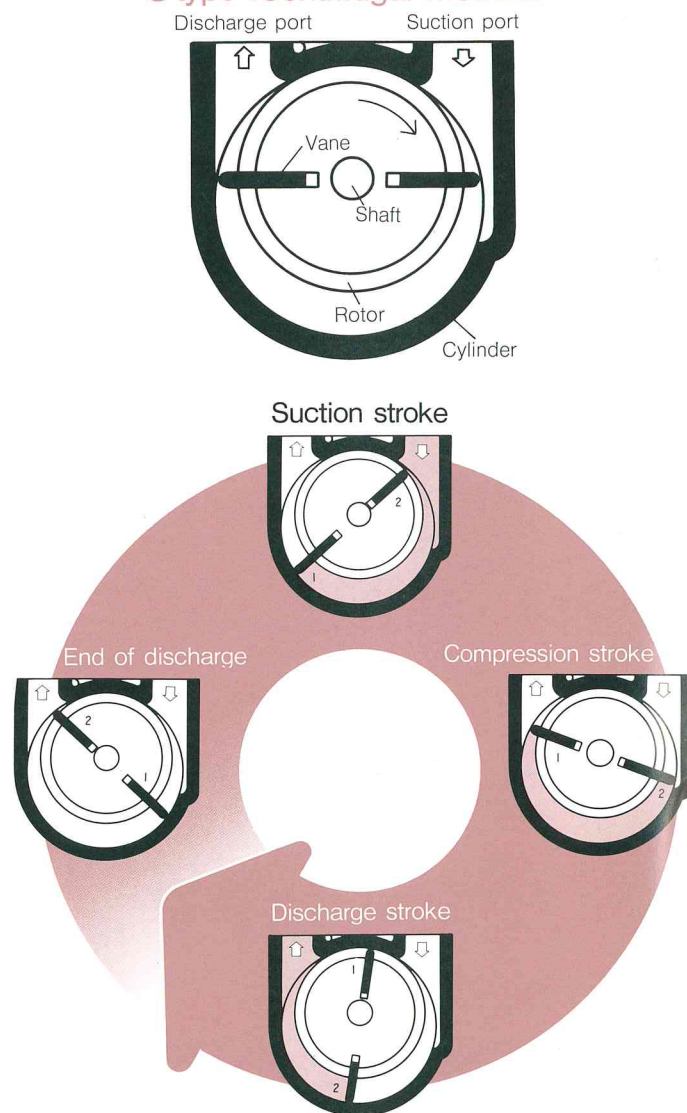
A blower is so designed and constructed that air is sucked, compressed and discharged repeatedly while vanes protruding from the grooves of rotor are coming in and out by revolution of a rotor (rotating body) set eccentrically inside the cylinder diameter.

Friction heat is generated due to friction of iron and iron at rotating part and reciprocating part. Therefore, a minimum required quantity of circulating oil is dropped into the cylinder always while operating, by means of an oil dropping nozzle in order to make lubrication for the purpose of prevention of generation of heat and noise. Airtightness of blower is maintained by formation of an oil film among parts.

An automatic circulating equipment designed and manufactured by taking advantage of differential pressure of blower is adopted for circulation of oil.

Principles and Construction of

S type <Centrifugal Method>



③

Features of TOHIN Rotary Blowers

Compact, powerful air flowrate and yet silent operating sound

Compressed air is produced by revolving movement. Therefore, TOHIN Rotary Blowers display their powerful discharge capacity for their compactness. And yet, the operating sound is so small as eluding all attempts at imitation by other competitors.

As the operating sound is quiet, no machine room is required for small capacity models. No large models require the soundproofing equipment in the machine room.

No vibration at the time of operation and simple installing work

In the case of small types, no vibration is generated at all. Mere installation of a rotary blower is enough to meet your requirements, not requiring tightening work with anchor bolts. No limitation is placed on installing place.

Securing of a fixed air flowrate even if a change takes place in the operating condition.

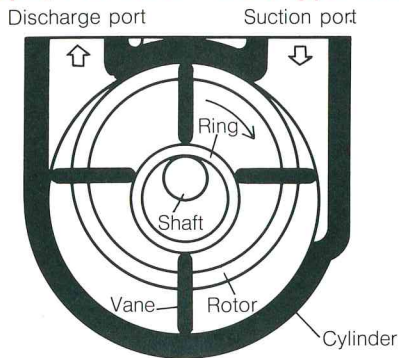
Take for instance, if a TOHIN Rotary Blower is used for sanitary treatment in the septic tank, almost no air flowrate is decreased even if load becomes large due to the change in the pressure inside tank.

Provided with an air chamber for carrying out air dispersion smoothly

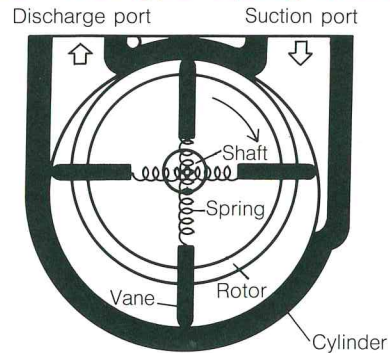
TOHIN ROTARY BLOWERS

TOHIN Rotary Blowers

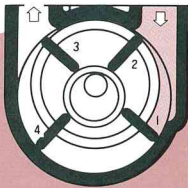
SD•FD type, HC-251s~501s type <Ring Method>



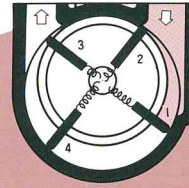
HC-60s~100s type <Spring Method>



Suction stroke

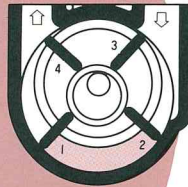
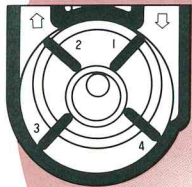


Suction stroke



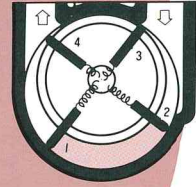
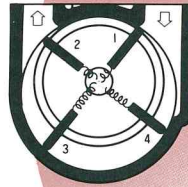
End of discharge

Compression stroke

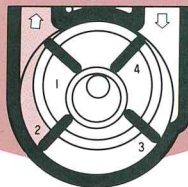


End of discharge

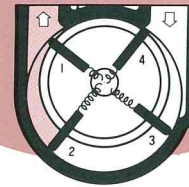
Compression stroke



Discharge stroke



Discharge stroke



All models are provided with an air chamber, resulting in being free from air pulsation and air dispersed smoothly.

High superiority for keeping always high performance

Highly durable materials are adopted for all operating parts and outside, including cylinders. TOHIN Rotary Blowers are designed and manufactured very robustly as almost free from trouble and deterioration of performance after a long use.

Unique mechanism — oil dropping equipment

No oil choked, no oil scatter, and very little oil decrease by the unique mechanism — oil dropping equipment

Check valve built in (SD, FD, and HC type)

Provided with a check valve which prevents the back flow from the tank.

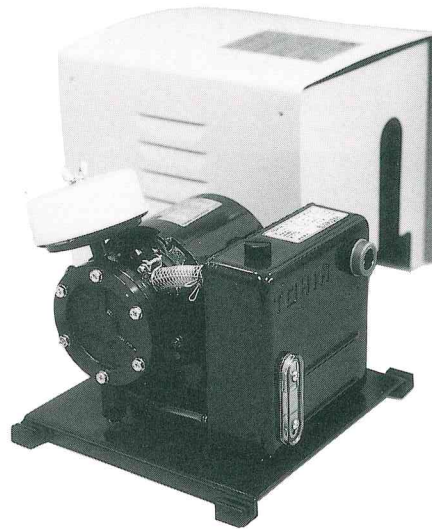
Air releasing valve built in (SD, FD, and HC type)

Provided with an air releasing valve which prevents the burning damage of a motor at the time of overloading that is clogging of holes due to entry of foreign matter at the time of piping as well as mesh clogging trouble of air dispersion pipe and which serves for an alarm whistle.

S type

Rotary Blower

S-40
S-60
S-80



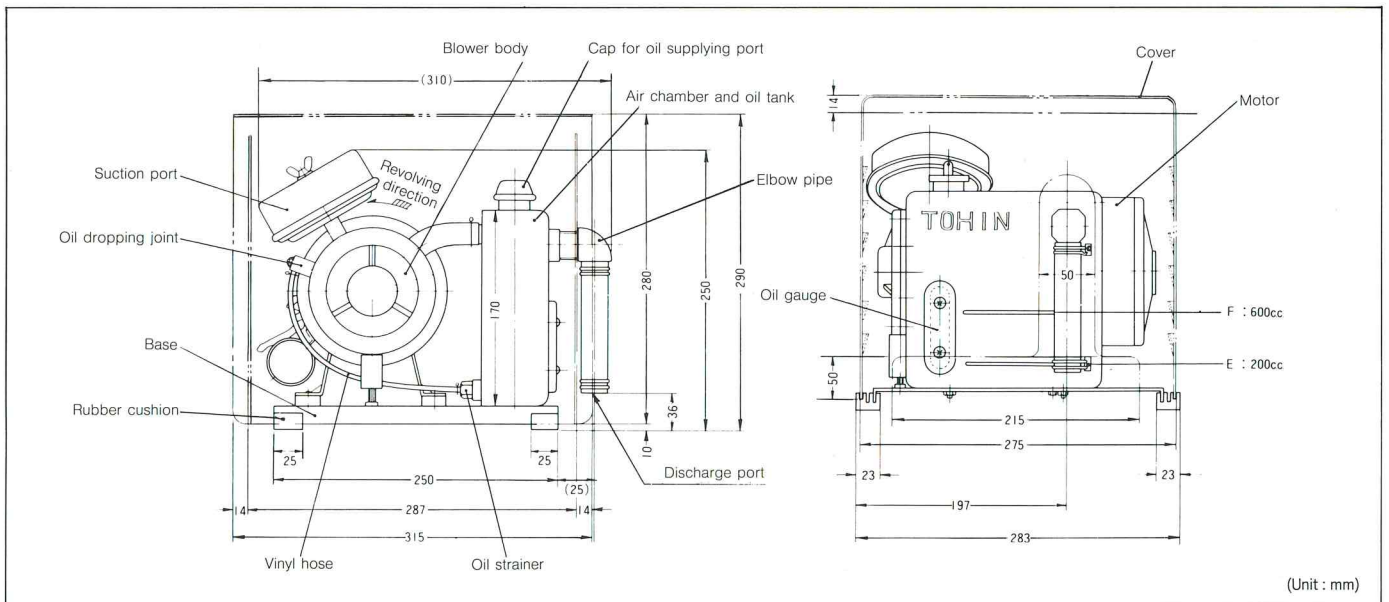
A motor direct coupling system has been adopted. As no rotary part is exposed, the operating sound is quiet, assuring safety.

Specification

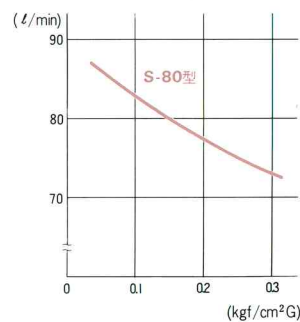
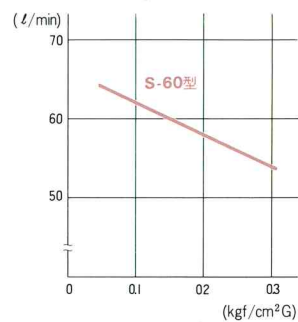
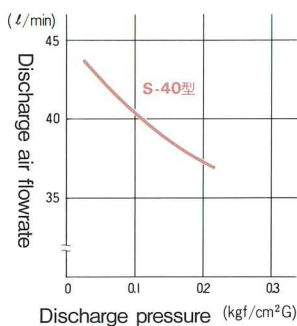
Model No.	Diameter of discharge	Output of motor	Frequency	Blower RPM	Air flowrate ℓ/min			Quantity of oil (Effective quantity)	Approx. weight
					0.1kgf/cm ² G	0.12kgf/cm ² G	0.2kgf/cm ² G		
S-40	1/2"	35W	50Hz	910r.p.m.	41	40	38	600cc (400cc)	16kg
			60Hz	1110r.p.m.	41	40	38		
S-60	1/2"	45W	50Hz	900r.p.m.	62	+60	58	600cc (400cc)	16.5kg
			60Hz	1100r.p.m.	62	+60	58		
S-80	1/2"	50W	50Hz	900r.p.m.	82	+80	77	600cc (400cc)	18kg
			60Hz	1100r.p.m.	82	+80	77		

* Air flowrate at 0.15kgf/cm²G

Name of parts and Size

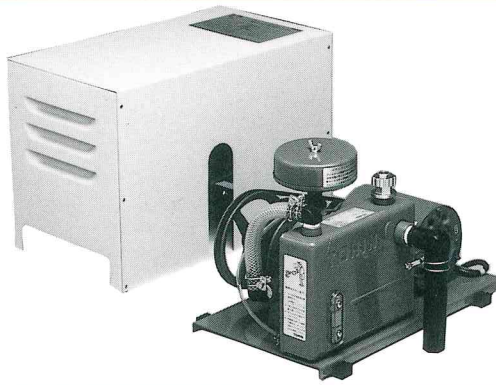


Performance curves



SD type

Rotary Blower

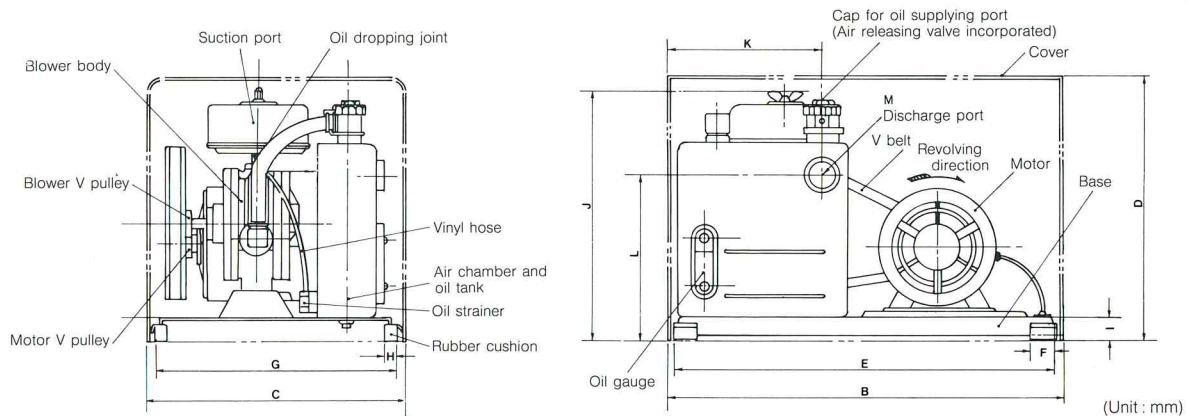


SD-12 SD-120s
 SD-12s SD-150
 SD-15 SD-150s
 SD-120 SD-200s

Specification

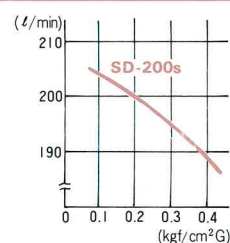
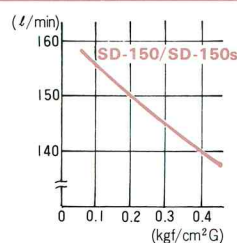
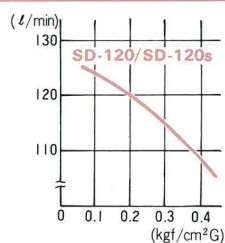
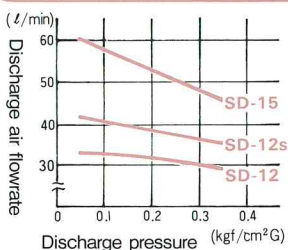
Model No.	Diameter of discharge	Output of motor	Frequency	Blower RPM	Air flowrate (ℓ/min)			V pulley		V belt	Quantity of oil (Effective Quantity)	Approx. weight
					0.1kgf/cm ² G	0.2kgf/cm ² G	0.3kgf/cm ² G	Blower	Motor			
SD-12	1/2"	35W	50Hz	480r.p.m.	33	32	30	6"	2"	M-26	600cc (400cc)	19kg
			60Hz	480r.p.m.	33	32	30	6"	1 5/8"	M-26		
SD-12s	1/2"	65W	50Hz	480r.p.m.	41	39	37	6"	2"	M-26	600cc (400cc)	20kg
			60Hz	480r.p.m.	41	39	37	6"	1 5/8"	M-26		
SD-15	1/2"	100W	50Hz	480r.p.m.	58	53	49	6"	2"	M-26	600cc (400cc)	24kg
			60Hz	480r.p.m.	58	53	49	6"	1 5/8"	M-26		
SD-120	3/4"	150W	50Hz	480r.p.m.	124	120	114	6"	2"	M-30	1000cc (650cc)	29.5kg
			60Hz	480r.p.m.	124	120	114	6"	1 5/8"	M-30		
SD-120s	1/2"	150W	50Hz	480r.p.m.	124	120	114	6"	2"	M-26	600cc (400cc)	25kg
			60Hz	480r.p.m.	124	120	114	6"	1 5/8"	M-26		
SD-150	3/4"	200W	50Hz	480r.p.m.	156	150	145	6"	2"	M-30	1000cc (650cc)	33kg
			60Hz	480r.p.m.	156	150	145	6"	1 5/8"	M-30		
SD-150s	3/4"	200W	50Hz	600r.p.m.	156	150	145	6"	2 1/2"	M-30	1000cc (650cc)	30kg
			60Hz	600r.p.m.	156	150	145	6"	2"	M-30		
SD-200s	3/4"	250W	50Hz	600r.p.m.	205	200	195	6"	2 1/2"	M-30	1000cc (650cc)	34kg
			60Hz	600r.p.m.	205	200	195	6"	2"	M-30		

Name of parts and Size



Model No.	B	C	D	E	F	G	H	I	J	K	L	M
SD-12, 12s	385	250	260	375	25	238	10	23	250	150	163	1/2"
SD-15	420	265	300	410	25	253	10	23	255	150	163	1/2"
SD-120	480	265	325	450	25	253	10	23	280	220	163	3/4"
SD-120s	430	265	300	410	25	253	10	23	280	150	163	1/2"
SD-150	500	310	350	460	25	298	10	23	313	225	163	3/4"
SD-150s	480	265	325	450	25	253	10	23	280	220	163	3/4"
SD-200s	500	310	350	460	25	298	10	23	313	225	163	3/4"

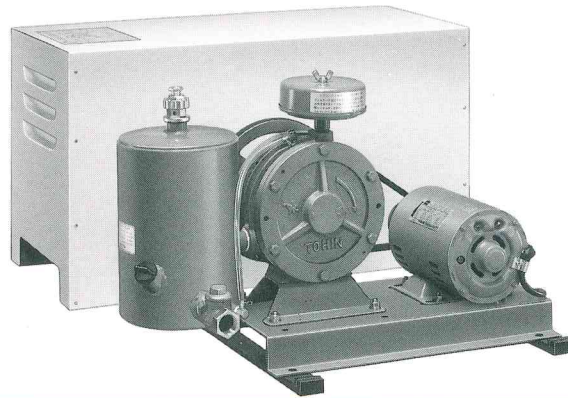
Performance curves



FD type

Rotary Blower

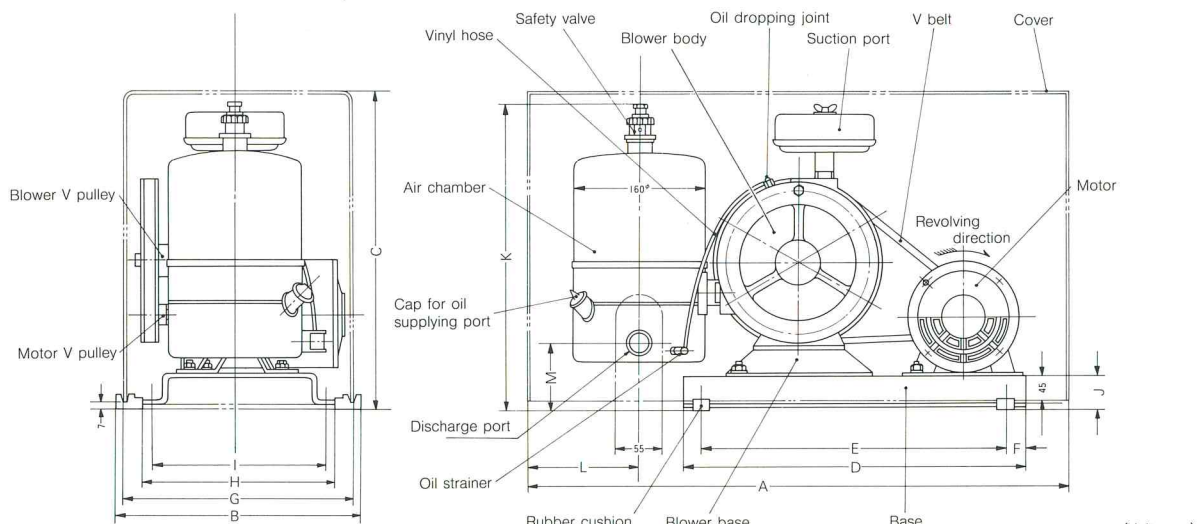
FD-200
FD-250
FD-250s
FD-300



Specification

Model No.	Diameter of discharge	Output of motor	Frequency	Blower RPM	Air flowrate (ℓ/min)				V pulley		V belt	Quantity of oil (Effective Quantity)	Approx. weight
					0.1kgf/cm ² G	0.2kgf/cm ² G	0.3kgf/cm ² G	0.4kgf/cm ² G	Blower	Motor			
FD-200	3/4"	250W	50Hz	430r.p.m.	205	200	195	189	8"	2 1/2"	A-35	1200cc (900cc)	45kg
			60Hz	430r.p.m.	205	200	195	189	8"	2"	A-35	1200cc (900cc)	
FD-250	3/4"	300W	50Hz	360r.p.m.	265	250	237	225	8"	2"	A-35	1200cc (900cc)	50kg
			60Hz	360r.p.m.	265	250	237	225	8"	1 5/8"	A-35	1200cc (900cc)	
FD-250s	3/4"	300W	50Hz	540r.p.m.	265	250	237	225	8"	3"	A-35	1200cc (900cc)	47kg
			60Hz	540r.p.m.	265	250	237	225	8"	2 1/2"	A-35	1200cc (900cc)	
FD-300	3/4"	400W	50Hz	450r.p.m.	310	300	292	285	8"	2 1/2"	A-35	1200cc (900cc)	53kg
			60Hz	450r.p.m.	310	300	292	285	8"	2"	A-35	1200cc (900cc)	

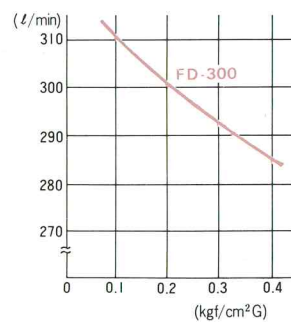
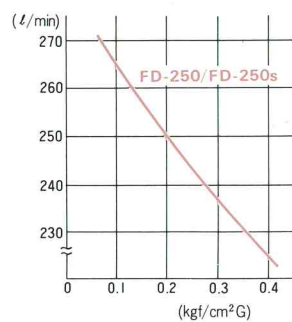
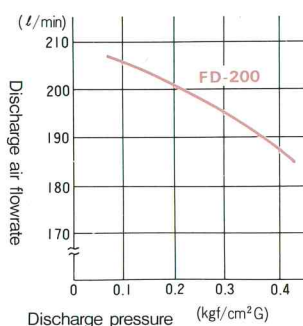
Name of parts and Size



Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M
FD-200	690	330	387	440	380	30	310	240	215	52	377	130	92
FD-250	690	330	387	440	380	30	310	240	215	52	377	130	92
FD-250s	690	330	387	440	380	30	310	240	215	52	377	130	92
FD-300	690	330	387	440	380	30	310	240	215	52	377	130	92

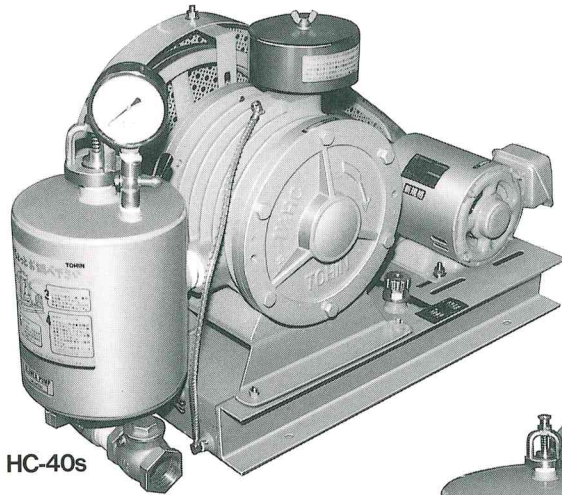
(Unit : mm)

Performance curves

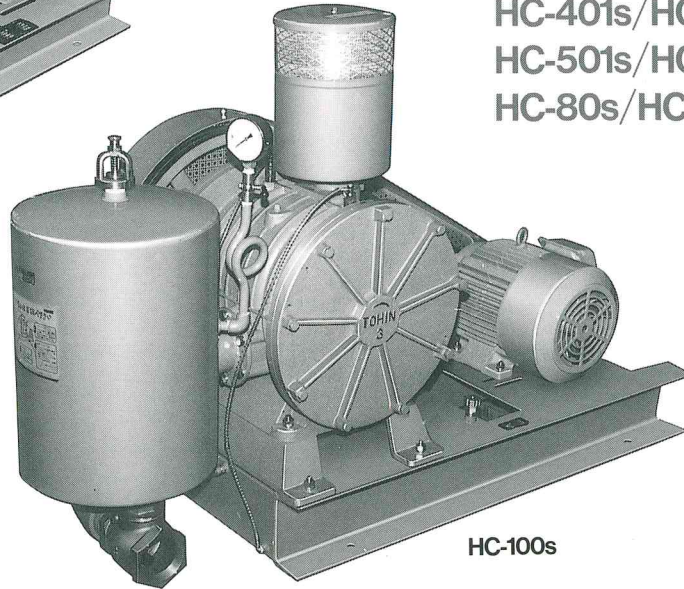


HC-S type

Rotary Blower



HC-40s



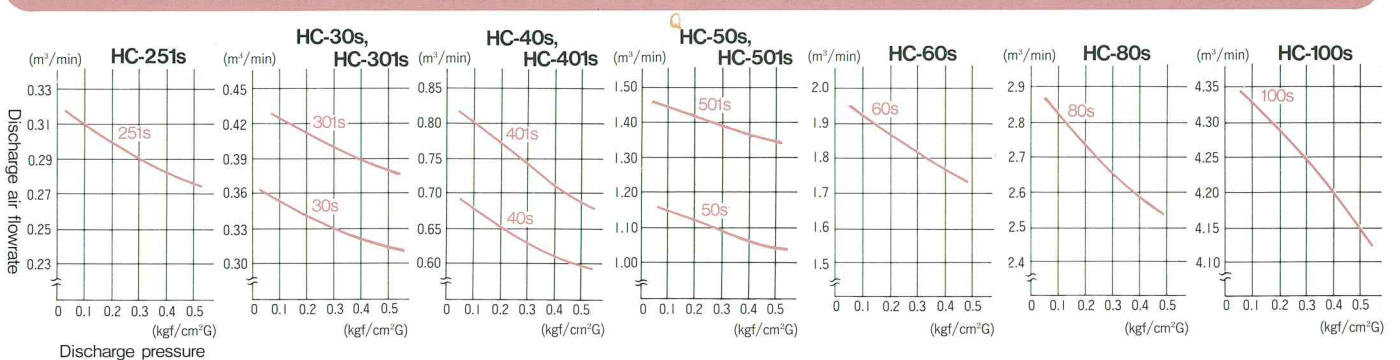
HC-100s

HC-251s/HC-30s
 HC-301s/HC-40s
 HC-401s/HC-50s
 HC-501s/HC-60s
 HC-80s/HC-100s

Specification

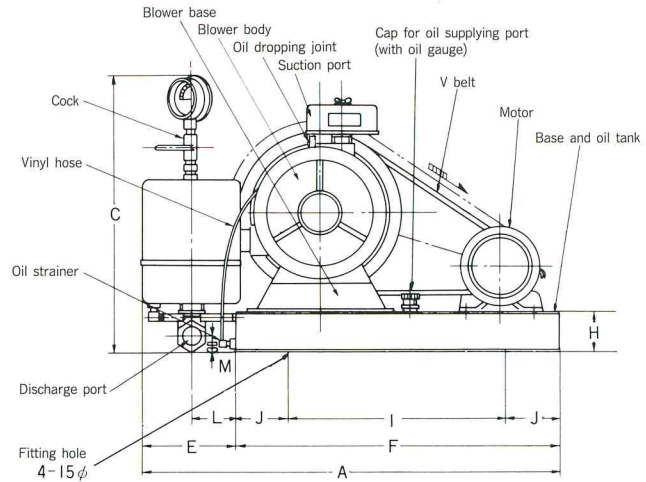
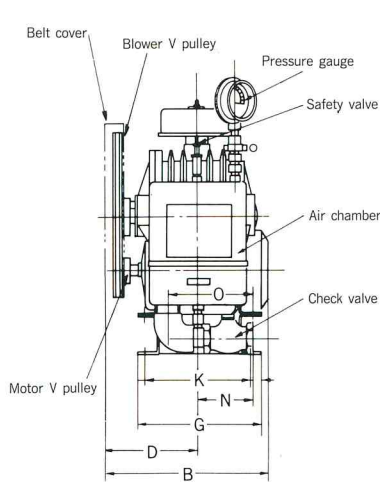
Model No.	Diameter of discharge	Output of motor	Frequency	Blower RPM	Air flowrate (m ³ /min)					V pulley		V belt	Quantity of oil (Effective quantity)	Approx. weight
					0.1kgf/cm ² G	0.2kgf/cm ² G	0.3kgf/cm ² G	0.4kgf/cm ² G	0.5kgf/cm ² G	Blower	Motor			
HC-251s	3/4"	0.4KW	50Hz	450r.p.m.	0.31	0.30	0.29	0.28	0.28	8"A1	2 1/2"A1	A-40	1.5ℓ	44kg
			60Hz	450r.p.m.	0.31	0.30	0.29	0.28	0.28	8"A1	2"A1	A-40	(1.1ℓ)	
HC-30s	1"	0.4KW	50Hz	430r.p.m.	0.35	0.34	0.33	0.32	0.31	10"A1	3"A1	A-44	1.5ℓ	50kg
			60Hz	430r.p.m.	0.35	0.34	0.33	0.32	0.31	10"A1	2 1/2"A1	A-44	(1.1ℓ)	
HC-301s	1"	0.75KW	50Hz	520r.p.m.	0.42	0.41	0.40	0.39	0.38	10"A1	3 1/2"A1	A-45	1.5ℓ	50kg
			60Hz	520r.p.m.	0.42	0.41	0.40	0.39	0.38	10"A1	3"A1	A-44	(1.1ℓ)	
HC-40s	1 1/4"	0.75KW	50Hz	500r.p.m.	0.66	0.65	0.63	0.61	0.59	12"A2	4"A2	A-52	2.5ℓ	80kg
			60Hz	500r.p.m.	0.66	0.65	0.63	0.61	0.59	12"A2	3 1/2"A2	A-52	(1.7ℓ)	
HC-401s	1 1/4"	1.5KW	50Hz	580r.p.m.	0.80	0.77	0.74	0.71	0.67	12"A2	4 1/2"A2	A-52	2.5ℓ	85kg
			60Hz	580r.p.m.	0.80	0.77	0.74	0.71	0.67	12"A2	4"A2	A-52	(1.7ℓ)	
HC-50s	1 1/2"	1.5KW	50Hz	430r.p.m.	1.14	1.12	1.09	1.06	1.02	14"A2	4"A2	A-64	3.5ℓ	120kg
			60Hz	430r.p.m.	1.14	1.12	1.09	1.06	1.02	14"A2	3 1/2"A2	A-64	(2.3ℓ)	
HC-501s	1 1/2"	2.2KW	50Hz	500r.p.m.	1.44	1.42	1.39	1.36	1.32	14"A2	4 1/2"A2	A-64	3.5ℓ	125kg
			60Hz	500r.p.m.	1.44	1.42	1.39	1.36	1.32	14"A2	4"A2	A-64	(2.3ℓ)	
HC-60s	2"	2.2KW	50Hz	450r.p.m.	1.90	1.87	1.82	1.77	1.71	16"B2	5"B2	B-74	5.5ℓ	190kg
			60Hz	450r.p.m.	1.90	1.87	1.82	1.77	1.71	16"B2	4"B2	B-72	(3.8ℓ)	
HC-80s	2 1/2"	3.7KW	50Hz	430r.p.m.	2.82	2.74	2.66	2.59	2.50	18"B2	5 1/2"B2	B-84	8ℓ	250kg
			60Hz	430r.p.m.	2.82	2.74	2.66	2.59	2.50	18"B2	4 1/2"B2	B-84	(6ℓ)	
HC-100s	3"	5.5KW	50Hz	390r.p.m.	4.32	4.28	4.25	4.18	4.11	20"B3	5 1/2"B3	B-93	20ℓ	375kg
			60Hz	390r.p.m.	4.32	4.28	4.25	4.18	4.11	20"B3	4 1/2"B3	B-93	(16ℓ)	

Performance curve

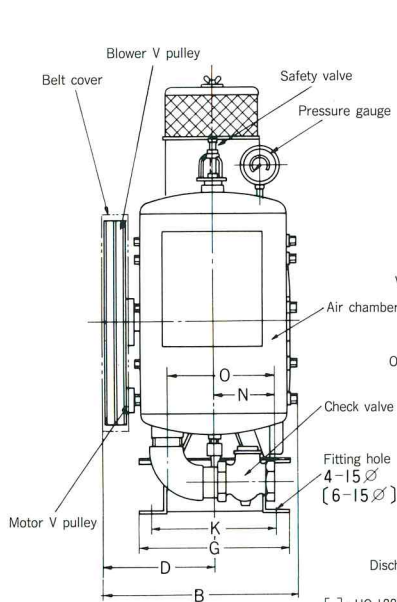


Name of parts and Size

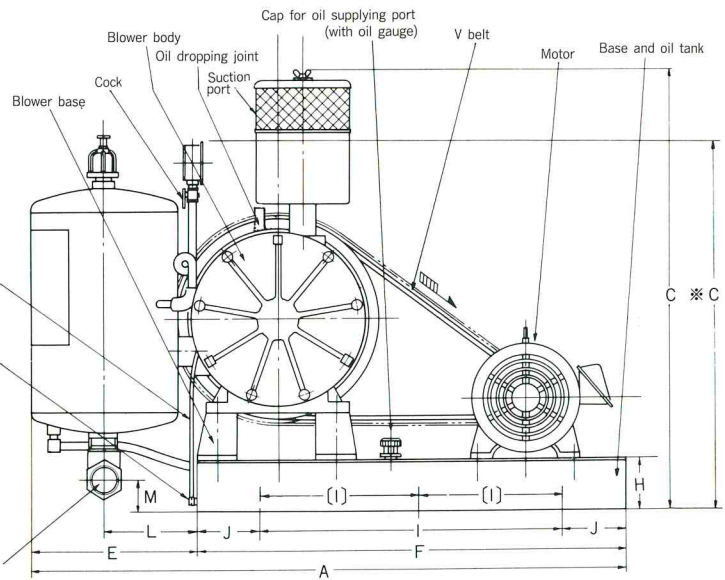
● HC-251S~501S



● HC-60S~100S



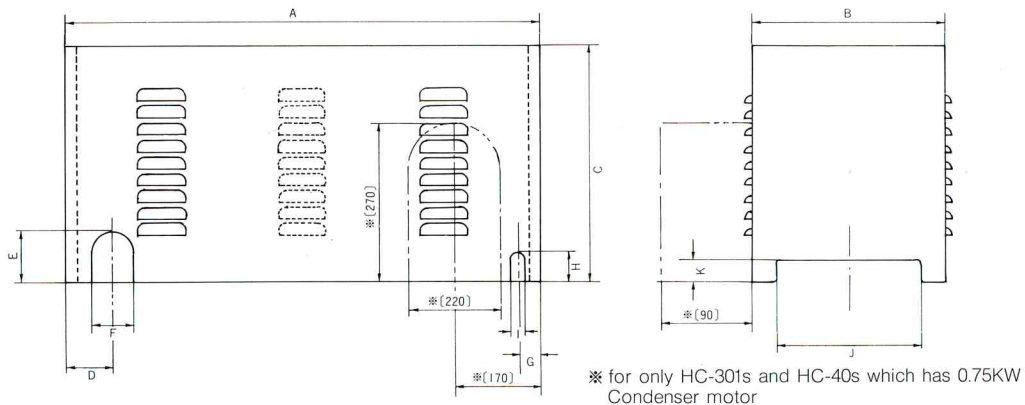
[] : HC-100S



(Unit : mm)

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
HC-251s	710	255	445	145	200	510	170	75	410	50	130	120	30	65	115	3/4"
HC-30s	690	255	450	145	180	510	170	75	410	50	130	100	30	80	130	1"
HC-301s	730	265	450	150	180	510	170	75	410	50	130	100	30	80	130	1"
HC-40s	795	305	500	190	170	600	230	75	400	100	190	80	40	100	155	1 1/4"
HC-401s	800	310	500	190	170	600	230	75	400	100	190	80	40	100	155	1 1/4"
HC-50s	1010	345	600	213	210	800	265	75	600	100	225	100	90	90	160	1 1/2"
HC-501s	1010	350	600	218	210	800	265	75	600	100	225	100	90	90	160	1 1/2"
HC-60s	1180	385	※ 730	230	330	850	300	100	600	125	260	185	60	95	185	2"
HC-80s	1325	440	870	260	325	1000	350	100	700	150	310	180	65	140	235	2 1/2"
HC-100s	1520	555	955	320	420	1100	470	150	400	150	410	245	70	150	270	3"

Size of HC-251s~HC-501s' Full cover



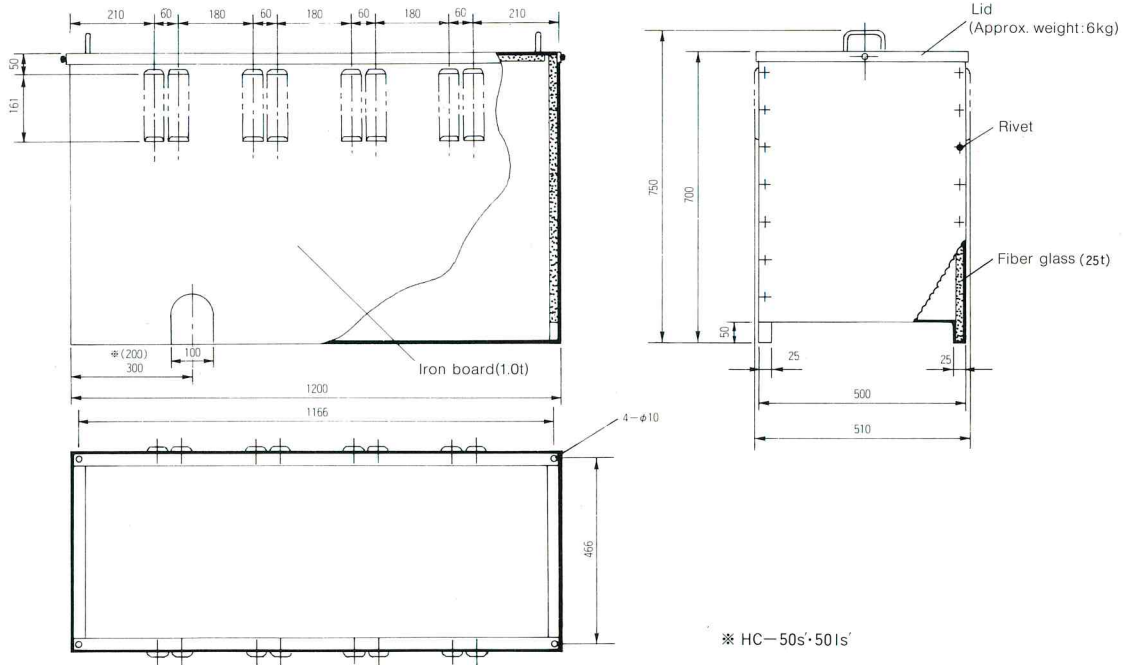
※ for only HC-301s and HC-40s which has 0.75KW Condenser motor

(Unit : mm)

Model No.	A	B	C	D	E	F	G	H	I	J	K
HC-251s, 301s	780	325	540	115	90	65	45	90	20	230	45
HC-40s, 401s	920	350	575	160	90	65	40	90	20	240	50
HC-50s, 501s	1130	385	615	172.5	130	65	40	90	20	215	50

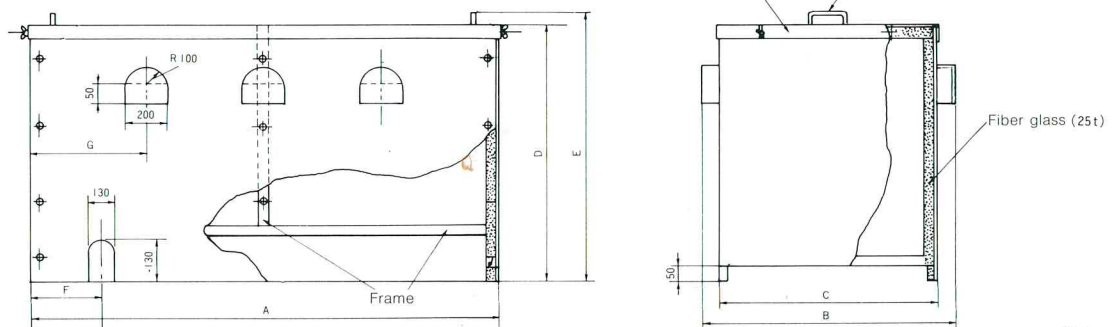
Extra-fine Full Cover

HC-251s~501s (Soundproofing type)



※ HC-50s'501s'

HC-60s~100s (Soundproofing type)



(Unit:mm)

Model No.	A	B	C	D	E	F	G	Vent	Approx. weight of Lid	Approx. whole weight
HC-60s	1350	650	550	900	(935)	240	230	4 Places	11kg	68kg
HC-80s	1500	760	660	1000	(1035)	240	270	4 Places	14kg	84kg
HC-100s	1800	850	750	1150	(1185)	315	300	6 Places	19kg	115kg



Note : Appearance and specifications are subject to change without notice.



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