

CES·CES-D FEATURES

FRPP SIROCCO FAN

MODEL CES

JAPAN PT. No.4590167
CHINA PT. No.ZL200380110333.X
TAIWAN PT. No.1253491



The conventional model was completely redesigned given birth to the model CES Compact Sirocco Fan made of an injected FRPP mold with standardized central discharge. It has the same capabilities as the conventional models and its rotating discharge direction was reduced by half making selection simple. Also, its impeller and casing are both made of an injected FRPP mold for enhanced recyclability.

• Standardized central discharge

Conventional models featured 6 rotational discharge directions, however, this fan's right rotation only central discharge cuts the number of rotational directions to 3 types. This significantly reduces the complexity of choosing a rotational direction and simplifies duct piping.

• Enhanced maintainability

Conventional compact sirocco fans were made with a casing divided into 2 parts. This required the removal of the suction and discharge ducts before being able to remove the impeller. However, by incorporating an easy-to-remove suction cone in the design, only the suction duct needs removal before the impeller can be taken off. Inner-casing inspection is also made easy.

• Excellent corrosion resistance

Its casing and impeller have excellent chemical resistance thanks to our standardized FRPP injection mold construction that boasts high dimensional accuracy. Also, its effective ribbed and hemmed design gives it superior strength while keeping it lightweight. We used materials that not only offer great corrosion resistance and maintainability, but also 100% recyclability.

• A variety of drive systems

Choose either a belt drive or direct action electric motor drive depending on the application. You can also choose from two types of the direct action electric motor drives: a universal electric motor (D-type) or an electric motor with built-in inverter (V-type). Because the only rotating parts in direct action electric motor drives are the motor itself and the impeller, there is no V-belt, shaft or any other mechanical part. This significantly reduces maintenance requirements and labor costs incurred during equipment inspections.

In addition, the electric motor with built-in inverter is direct action, however, like a belt driven fan, the required airflow and static pressure can be universally set.

JAPAN PT. No.4590167 CHINA PT. No.ZL200380110333X TAIWAN PT. No.1253491

MODEL CES-D WITH UNIVERSAL MOTOR



• Standardized central discharge

These models provide central discharge in only one direction (clockwise). Moreover, the number of rotating discharge directions is limited to three, compared with the six available with conventional models. This eliminates the troublesome selection of discharge direction and simplifies duct arrangement.

• Ease of maintenance

A conventional small sirocco fan has a two-block casing. Removal of the impeller requires removal of the suction duct and discharge duct. This new sirocco fan includes an easily removable suction cone that allows the impeller to be easily removed simply by removing the suction side duct. This simplifies checking of the casing interior.

• Excellent corrosion resistance

The standard casing and impeller are manufactured with injection-molded FRPP featuring excellent chemical resistance and high dimensional accuracy. In addition, the effective rib-and-turnback design ensures low weight and high strength. All materials have been selected for ease of maintenance and recycling as well as corrosion resistance.

• Greatly reduced maintenance

Direct-drive models feature universal motors (D type) or motors with built-in inverters (V type). The direct-drive type has no V-belt and no bearings; the only rotating parts are the motor and impeller. No maintenance is required for mechanical parts such as belts and bearings, which significantly reduces the labor required for facility monitoring. The use of a motor with a built-in inverter allows for easy setting of the required airflow and static pressure, similar to the case of a belt-driven fan.

MODEL CES-V WITH MOTOR FEATURING BUILT-IN INVERTER

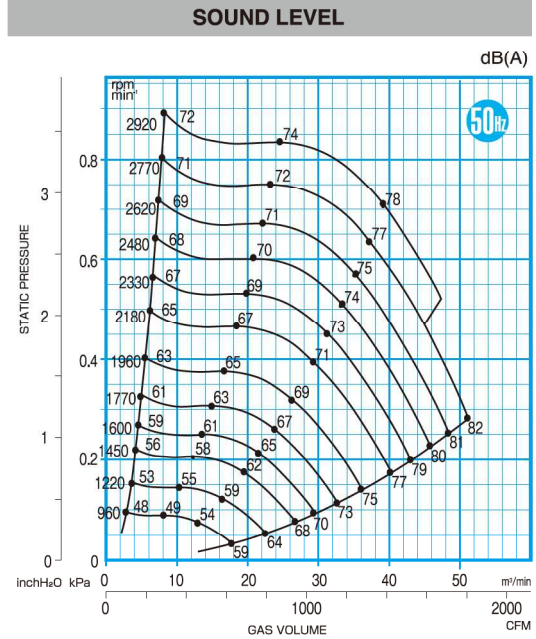
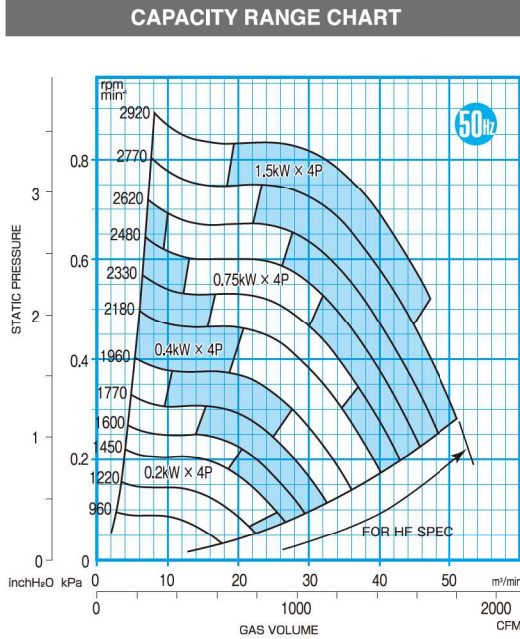


Typical applications:

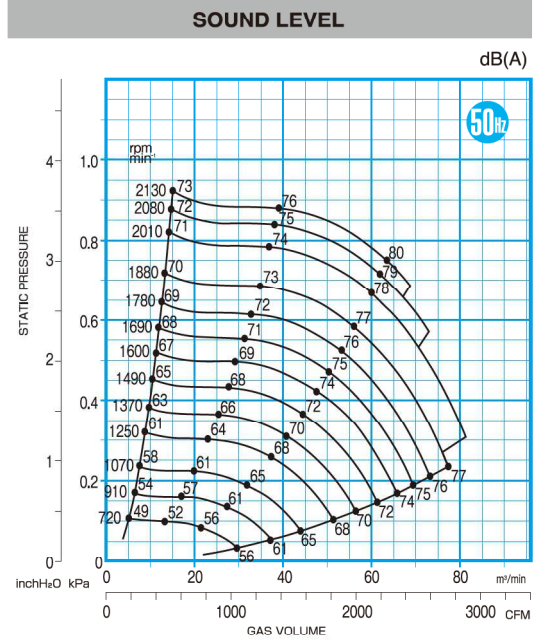
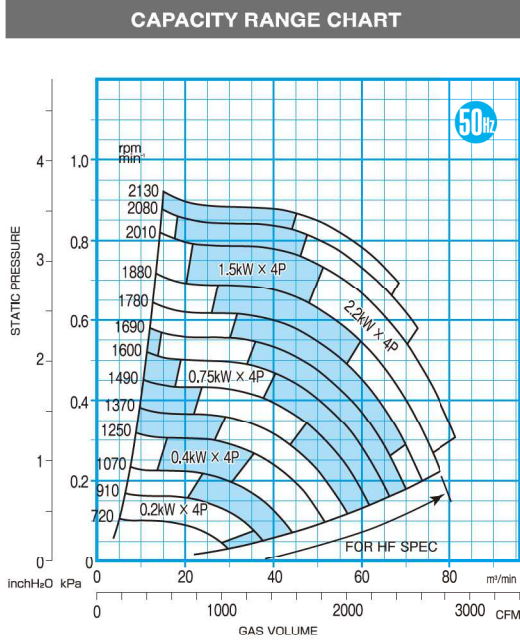
- As a corrosive gas fan/blower in a chemical or pharmaceutical plant
- As a draft chamber fan/blower in a chemical laboratory treating various gases
- As a fan/blower in a biotechnology research laboratory or experimental semiconductor laboratory
- As fan/blower in kitchen facilities
- As an odorous gas fan/blower in a sewage treatment facility
- As a fan /blower to eliminate coastal salt pollution

CES CAPACITY RANGE CHART

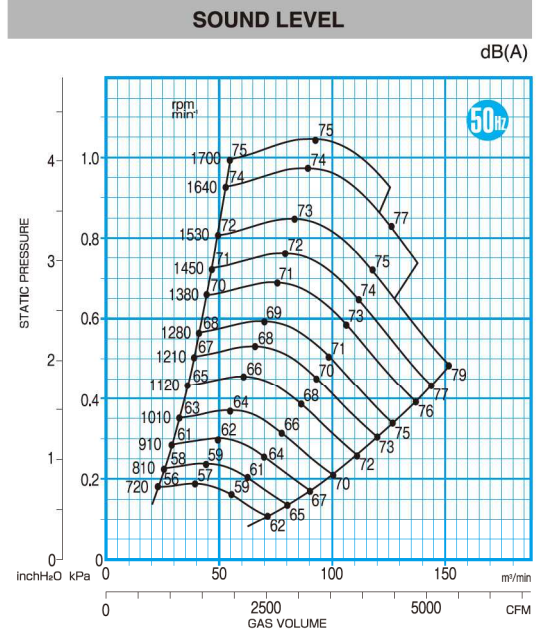
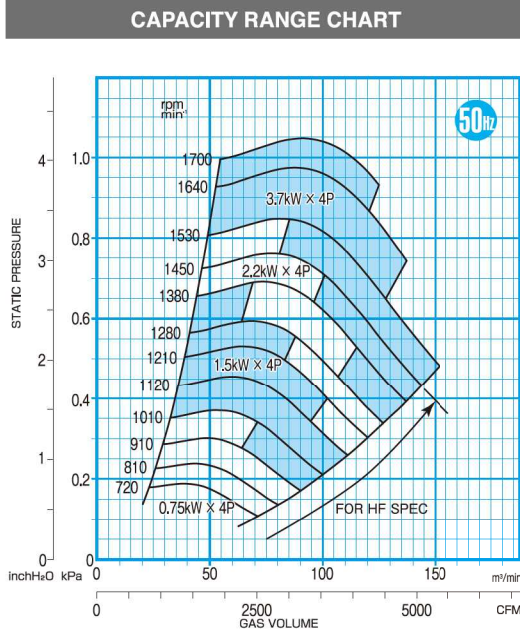
CES101



CES151

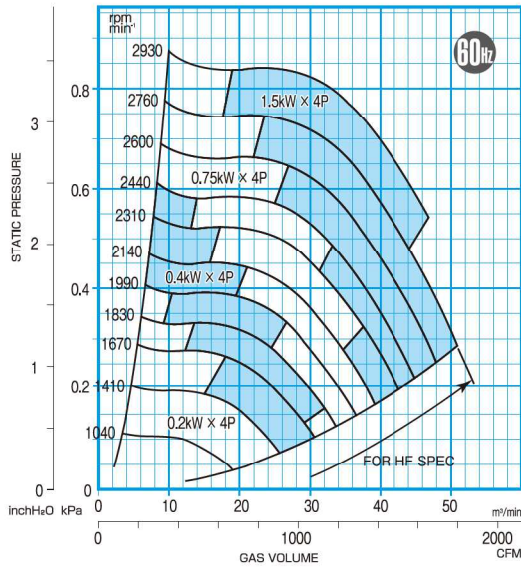


CES201

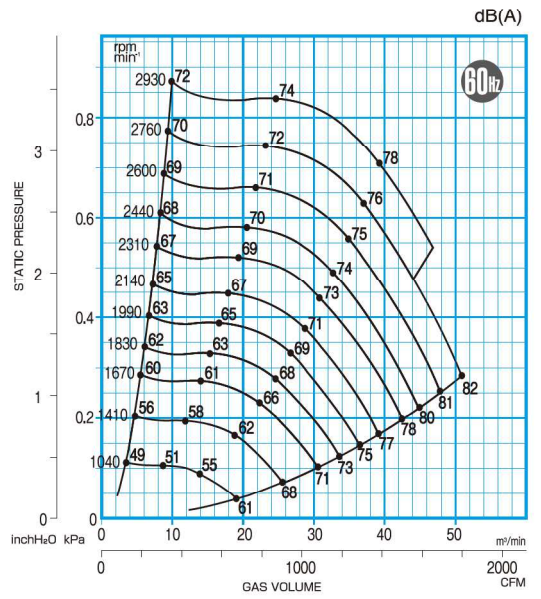


CES101

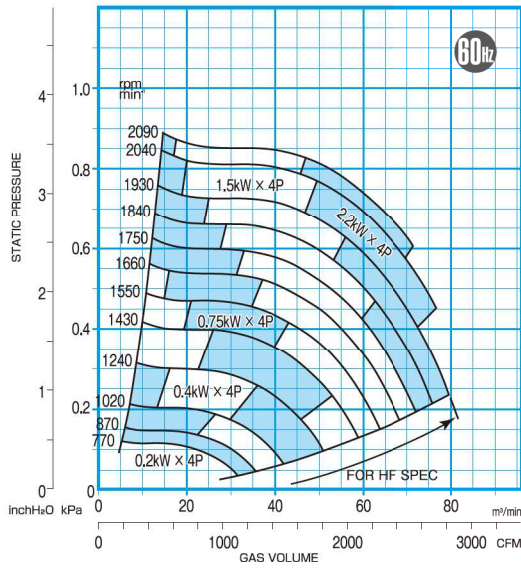
CAPACITY RANGE CHART



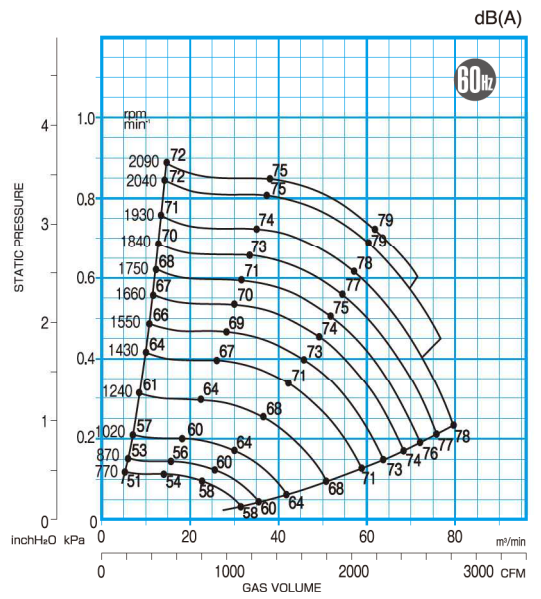
SOUND LEVEL



CAPACITY RANGE CHART

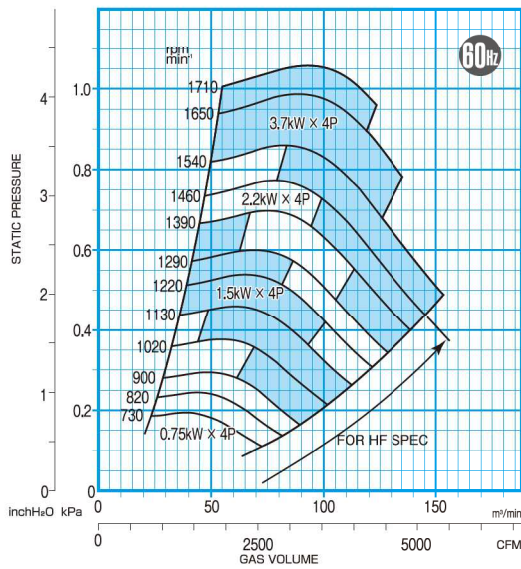


SOUND LEVEL

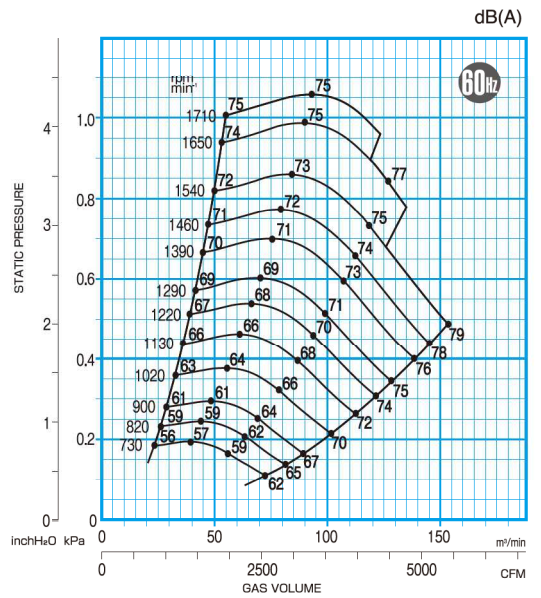


CES151

CAPACITY RANGE CHART



SOUND LEVEL

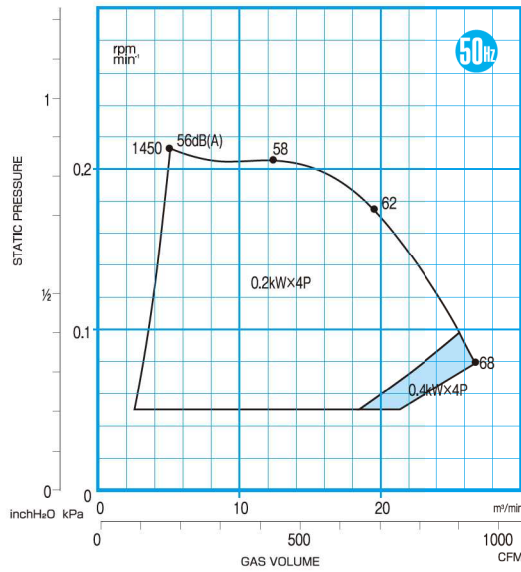


CES201

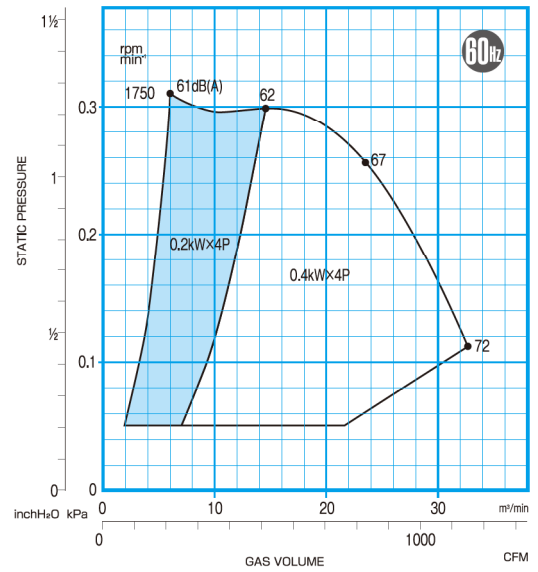
CES-D CAPACITY RANGE CHART

CES101D

CAPACITY RANGE CHART

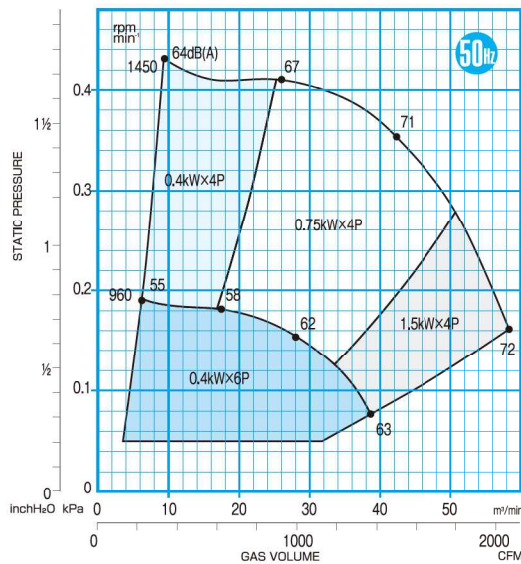


CAPACITY RANGE CHART

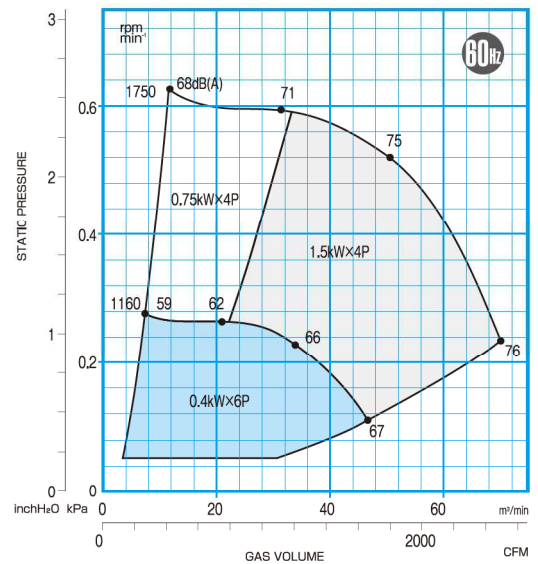


CES151D

CAPACITY RANGE CHART

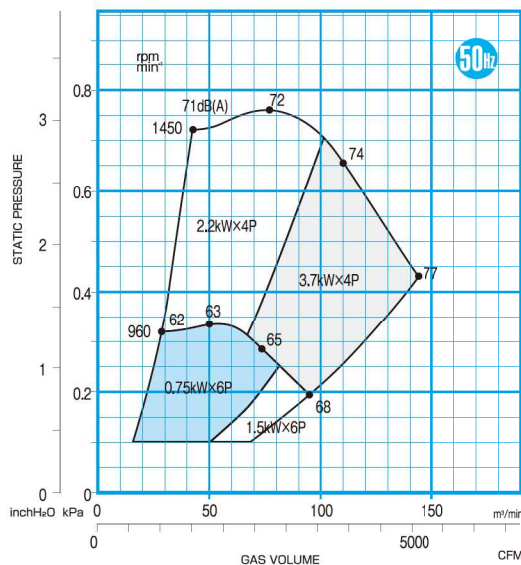


CAPACITY RANGE CHART

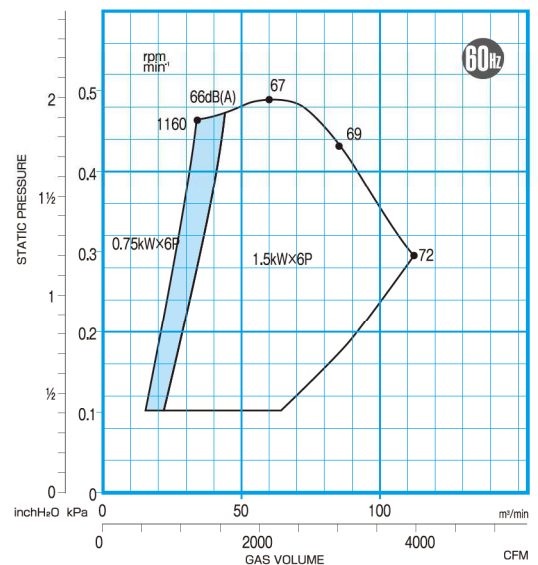


CES201D

CAPACITY RANGE CHART



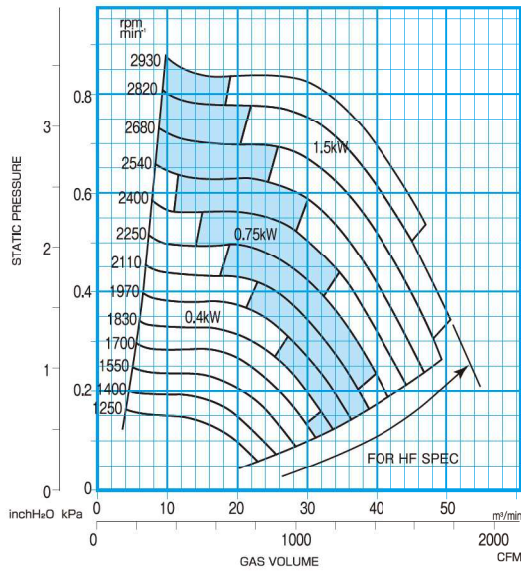
CAPACITY RANGE CHART



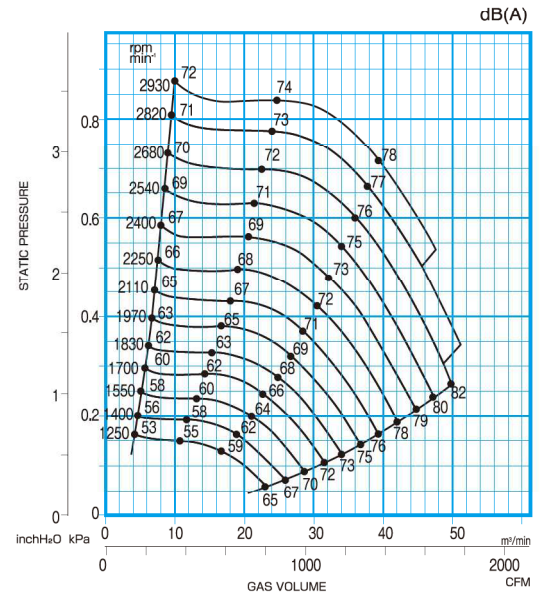
CES-V CAPACITY RANGE CHART

CES101V

CAPACITY RANGE CHART

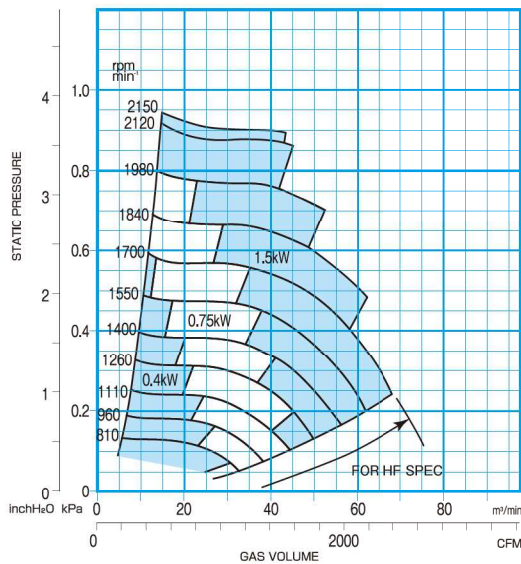


SOUND LEVEL

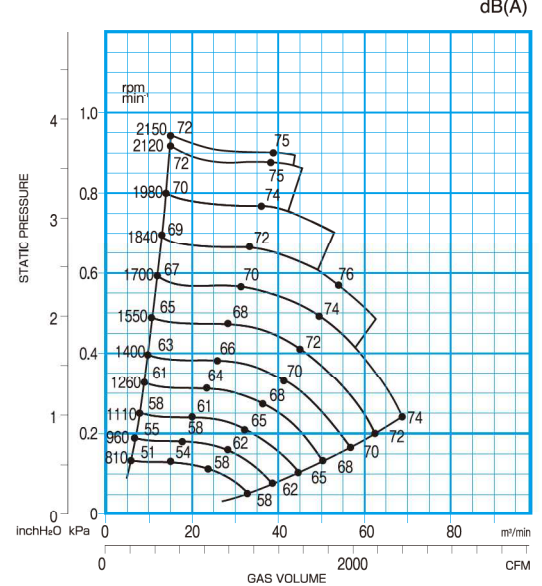


CES151V

CAPACITY RANGE CHART

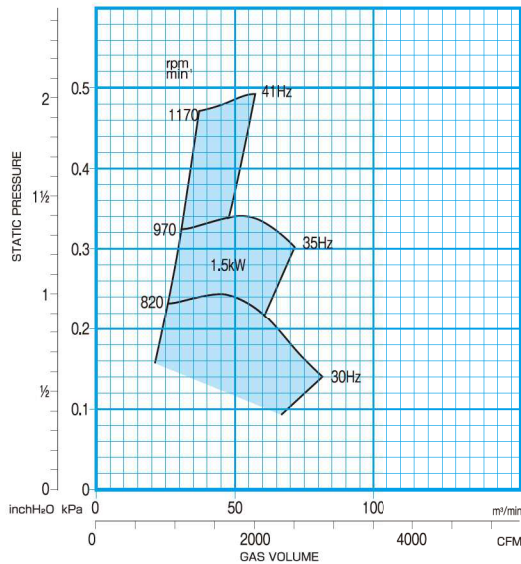


SOUND LEVEL

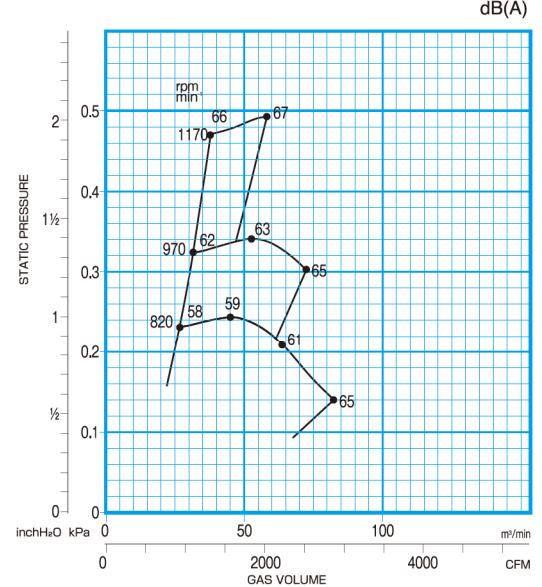


CES201V

CAPACITY RANGE CHART

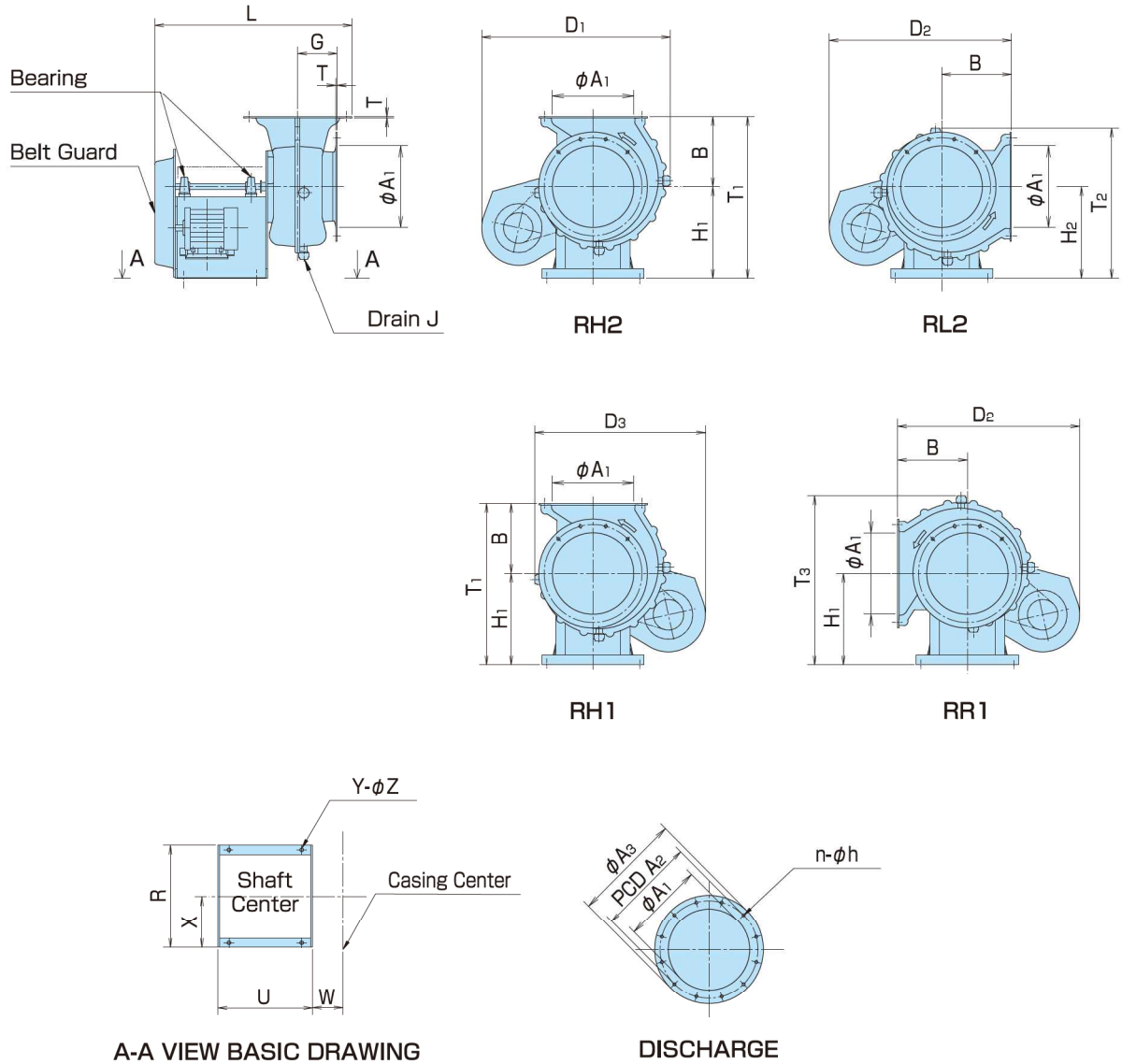


SOUND LEVEL



DIMENSIONS

CES101·151·201



A-A VIEW BASIC DRAWING

DISCHARGE

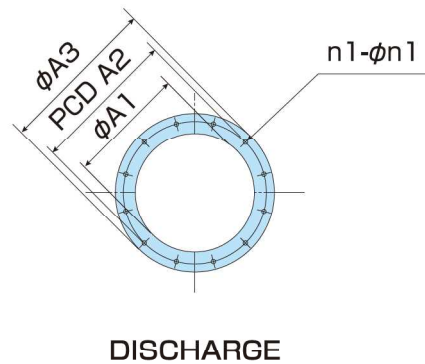
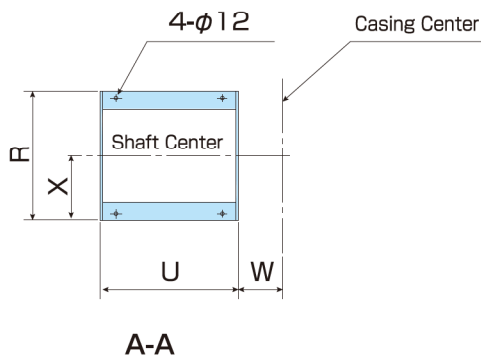
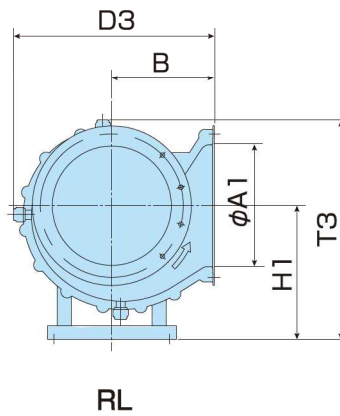
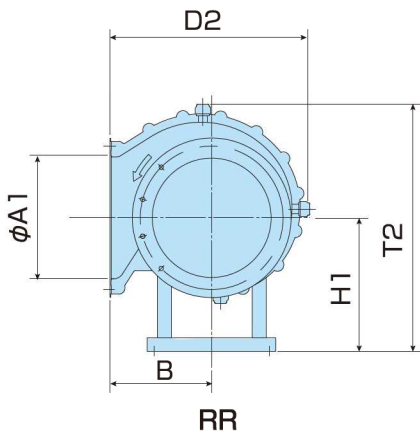
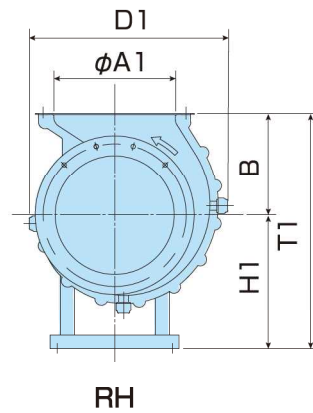
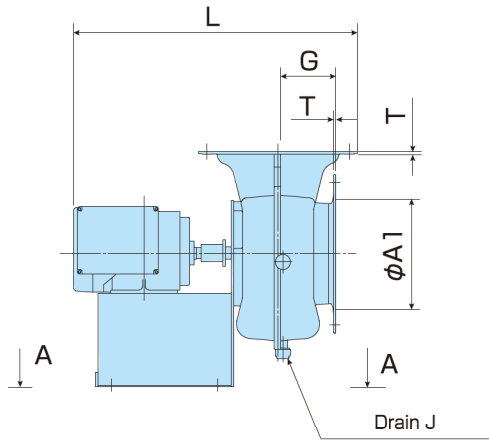
MODEL	CASING BODY										FLANGES						
	L	H ₁	H ₂	B	D ₁	D ₂	D ₃	T ₁	T ₂	T ₃	G	φA ₁	PCD A ₂	φA ₃	n	h	T
CES101	658	300	300	230	625	600	562	530	492	555	130	268	322	358	12	10	3
CES151	812	320	380	300	755	735	675	620	620	640	160	320	382	421	16	12	3
CES201	913	400	500	400	867	860	758	800	798	807	200	422	482	520	20	14	3.5

MODEL	BASE							BODY WEIGHT(Kg)		BEARING
	DRAIN	R	U	W	X	Y	Z	STANDARD		
CES101	PF1/2"	336	312	100	168	4	12	18	UCP204	
CES151	PF1/2"	430	406	128	215	4	12	25	UCP205	
CES201	PF1/2"	580	406	160	290	4	12	42	UCP205	

※BODY WEIGHT : Not Including Motor Weight.

DIMENSIONS

CES101D·151D·201D

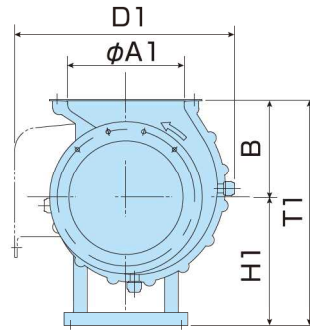
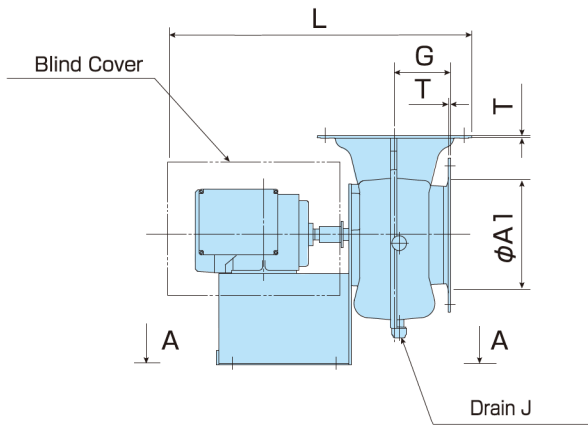


MODEL	CASING BODY									FLANGES					
	L	H1	B	D1	D2	T1	T2	T3	G	φA1	PCD A2	φA3	n1	h2	T
CES101D	642	300	230	447	452	530	556	492	130	268	322	358	12	10	3
CES151D	750	380	300	560	578	680	700	620	160	320	382	421	16	12	3
CES201D	852	500	400	705	753	900	907	798	200	422	482	520	20	14	3.5

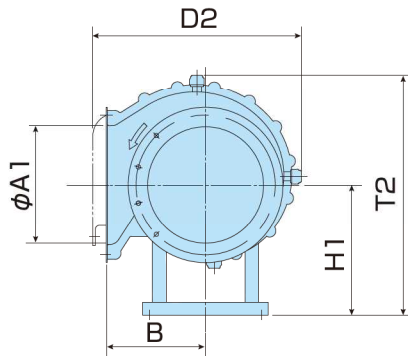
MODEL	BASE				BODY WEIGHT(Kg)
	R	U	W	X	STANDARD
CES101D	290	312	100	145	16
CES151D	290	346	128	145	19
CES201D	370	366	160	185	36

※BODY WEIGHT : Not Including Motor Weight.

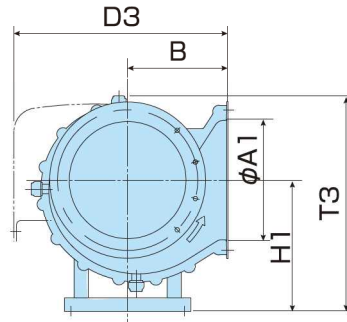
CES101V·151V·201V



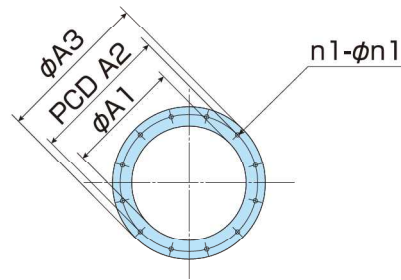
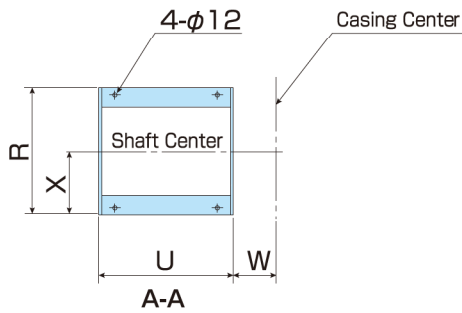
RH



RR



RL



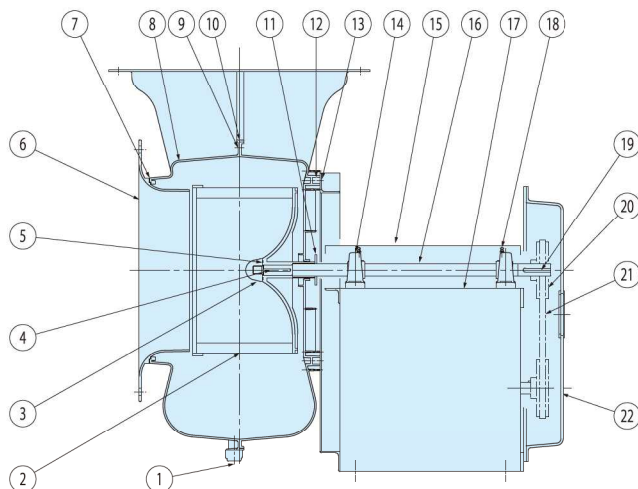
DISCHARGE

MODEL	CASING BODY												FLANGES						
	L	H1	B	D1	D2	D3	D4	D5	T1	T2	T3	G	$\phi A1$	PDC A2	$\phi A3$	n1	h1	T	
CES101V	705	300	230	516	483	491	448	452	530	556	492	130	268	322	358	12	10	3	
CES151V	789	380	300	581	579	579	560	579	680	700	620	160	320	382	421	16	12	3	
CES201V	910	500	400	709	753	753	705	753	900	907	798	200	422	482	520	20	14	3.5	

MODEL	BASE				BODY WEIGHT(Kg)
	R	U	W	X	STANDARD
CES101V	290	312	100	145	18
CES151V	290	346	128	145	23
CES201V	370	366	160	185	40

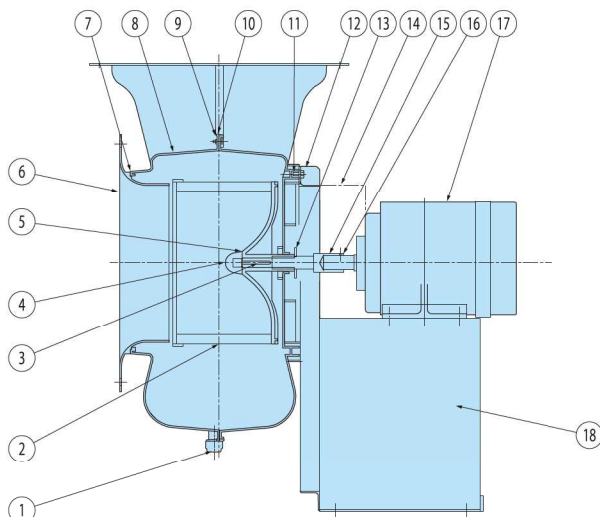
※BODY WEIGHT : Not Including Motor Weight.

CES101·151·201



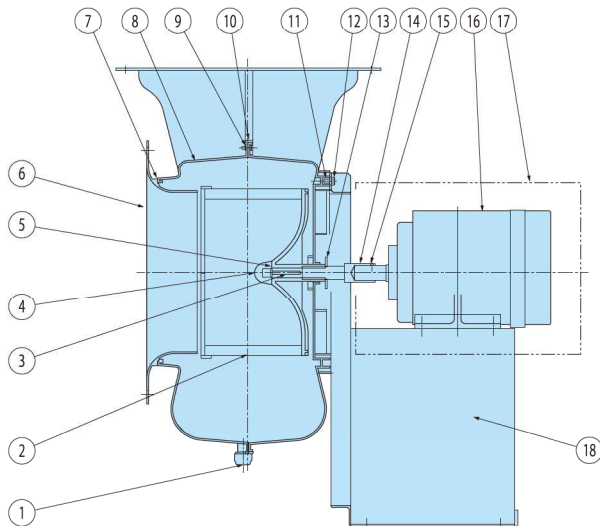
No.	NAME OF PART	MATERIALS	QTY
1	Drain Plug	PE	3
2	Impeller	PP(GF)	1
3	Impeller Nut	PP	1
4	Impeller Key	S45C	1
5	O-Ring	Chloroprene	1
6	Suction Cone	PP(GF)	1
7	Packing	PE	1
8	Casing	PP(GF)	1
9	Casing Bolt	SUS304	1set
10	Casing Gasket	PE	1
11	Gas Separator	PE	1
12	Insert Nut	Brass	1set
13	Casing Set Bolt	SUS304	1set
14	Bearing	SUJ2	2
15	Shaft Guard	FRP	1
16	Shaft	S35C	1
17	Base	SS400	1
18	Grease Nipple	Brass	2
19	V-Pulley Key	S45C	1
20	V-Pulley	FC200	1set
21	V-Belt	Rubber	1set
22	Belt Guard	FRP	1

CES101D·151D·201D



No.	NAME OF PART	MATERIALS	QTY	
1	Drain Plug	PE	3	PF1/2"
2	Impeller	FRPP	1	
3	Impeller Key	S45C	1	
4	Impeller Nut	PP	1	
5	O-Ring	Chloroprene	1	
6	Suction Cone	FRPP	1	
7	Packing	PE	1	
8	Casing	FRPP	1	
9	Casing Bolt	SUS304	1set	
10	Casing Gasket	PE	1	
11	Insert Nut	Copper Pyrites	1set	
12	Casing Set Bolt	SUS304	1set	
13	Gas Separator	PE	1	
14	Shaft Guard	FRP	1	
15	Shaft	S45C	1	
16	Shaft Set Screw	SUS304	1set	
17	Motor	----	1	
18	Base	SS400	1	

CES101V·151V·201V



No.	NAME OF PART	MATERIALS	QTY	
1	Drain Plug	PE	3	PF1/2"
2	Impeller	FRPP	1	
3	Impeller Key	S45C	1	
4	Impeller Nut	PP	1	
5	O-Ring	Chloroprene	1	
6	Suction Cone	FRPP	1	
7	Packing	PE	1	
8	Casing	FRPP	1	
9	Casing Bolt	SUS304	1set	
10	Casing Gasket	PE	1	
11	Insert Nut	Copper Pyrites	1set	
12	Casing Set Bolt	SUS304	1set	
13	Gas Separator	PE	1	
14	Shaft	S45C	1	
15	Shaft Set Screw	SUS304	1set	
16	Motor	----	1	
17	Sunshade Cover	FRP	1	
18	Base	SS400	1	