Panasonic

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VENTILATING FANS AND AIR MOVING EQUIPMENT

Print by :

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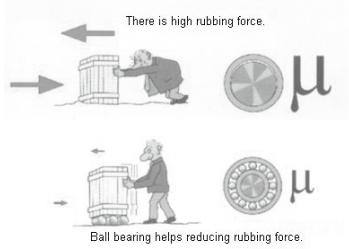
Certificate No. TH08/1291

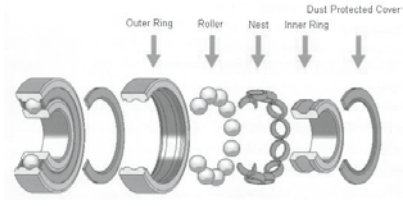
What's new in Panasonic VENTILATING FANS?

HP Motor (Half Pitch Motor)



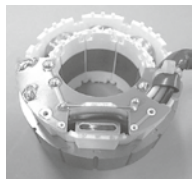
Picture 1 : Rubbing force reduction from using ball bearing

- **Long life from use of ball bearing**
  Ball bearing lubricated inside reduces friction on its surface and erosion. Thus it extends the lifetime. With its tight cover and dust protective sheets on both sides, the grease cannot be evaporated.
  Moreover, using ball bearing, the fan can operate up to 60,000 hours (approximately) under normal condition (compared to 10,000 hours of previous model).
- **Low power consumption**
  Use of ball bearing decreases wattage consumption on revolving the motor due to reducing rubbing force and increases efficiency of operating motor (illustrated on picture 1). It also promotes energy saving up to 30%.



Structure of ball bearing

- **Friendly to environment**
  Less use of varnish and grease and no hazardous chemical substances (RoHS Certificate).
- **Use fire-proof plastic for separated cores at stator**
  (Illustrated on picture 2)



Picture 2 (Fire-proof plastic)

- **Use state-of-the-art technology**
  The stator assembly can be divided into cores. Thus, it reduces chances of causing rubbing force till it is heated and causes short-circuit (illustrated on picture 3).
- **More accuracy on manufacturing process from using machine**

Old Motor

New Motor

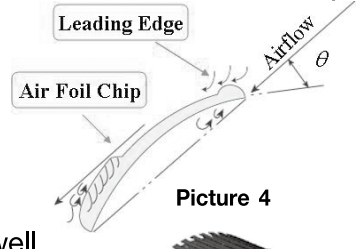
Picture 3 : Old motor is half assembly by manual whereas new motor is proceeded by machine and the cores are independently divided.

Blade

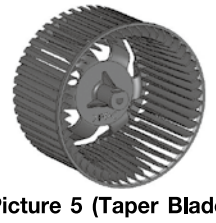
Leading edge

- **New advanced design**
- **Minimize noise level**
- **Control smooth airflow**
  For *Window and Wall Mount type,* blade design is changed on 2 parts (illustrated on picture 4) named as **leading edge** and **air foil chip.**
  -> Leading edge forms no obstacle to airflow that streamline airflow from every direction.
  -> Air foil chip is to reduce turbulence at rear edge, and curvature of front edge is improved for smooth airflow that minimize fan noise as well.
  For *Ceiling Mount type,* the **taper blade** is newly designed (illustrated on picture 5).
  -> New taper blade design effectively control the air turbulence surrounding the blade, achieved the strong and smooth ventilating performance by whole blade and noise reduction.

Air Foil Chip



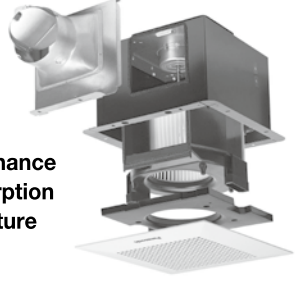
Picture 4



Picture 5 (Taper Blade)

Structure

- **Minimize noise transmission and reduce operating noise.**
  Distinctive structure of "*Resonance-Absorption Structure*" (illustrated on picture 6) in Ceiling Mount type minimizes the transmission of noise from the blower to outside. Besides, it also reduces the operation noise to low level.



Resonance Absorption Structure

Picture 6

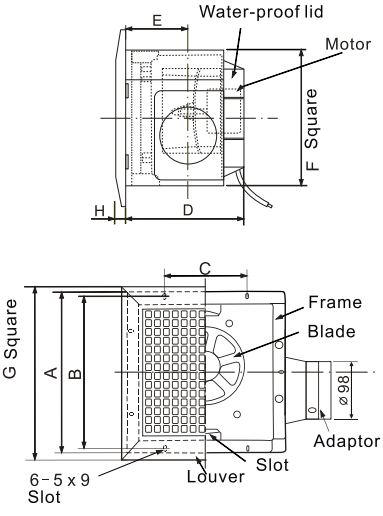
VENTILATING FANS

Features

- High efficiency
- Low noise
- Long life time
- Easy installation
- Safety
- Friendly to environment

CEILING MOUNT TYPE

SINGLE SPEED TYPE



FV-17CUT3, FV-24CUT3,
FV-24CDT3, FV-24CHT3

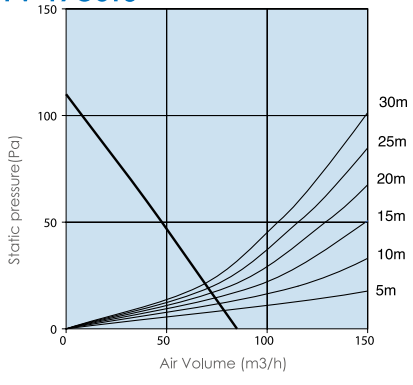
SPECIFICATIONS

Model	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (Kg)	Installation space W x L (mm)
	CMH	CFM					
FV-17CUT3	85	50	11	790	26	1.9	177 x 177
FV-24CUT3	140	82	14	705	26	2.9	240 x 240
FV-24CDT3	170	100	17	820	31	3	
FV-24CHT3	210	124	25	960	35	3	

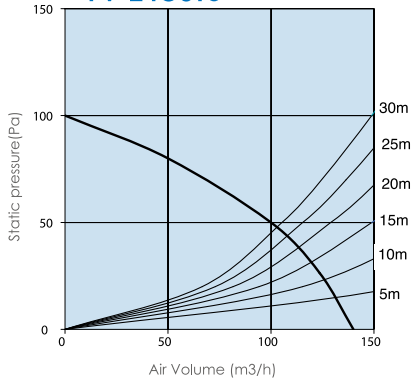
Note : The values in specification tables are representative characteristic values at 220 V, 50Hz, and 1 phase

PERFORMANCE CURVE

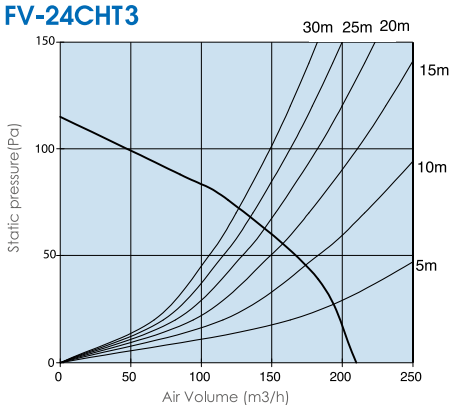
FV-17CUT3



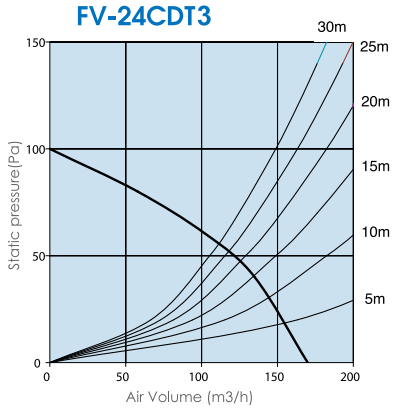
FV-24CUT3



FV-24CHT3



FV-24CDT3



L : The length of duct(m) (The diameter of duct : Ø100mm)

DIMENSIONS

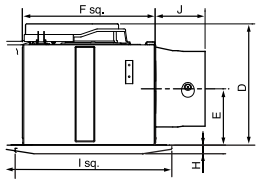
(mm)

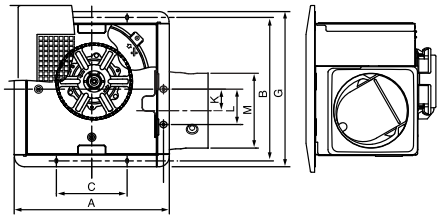
Model	Blade (Ø)	A	B	C	D	E	F	G	H	Duct Size (Ø)
FV-17CUT3	105	214	194	84	184	108	170	230	13	100
FV-24CUT3	148.5	278	255	140	200	110	230	290	16	
FV-24CDT3	148.5	278	255	140	200	110	230	290	16	
FV-24CHT3	148.5	278	255	140	200	110	230	290	16	

CEILING MOUNT TYPE

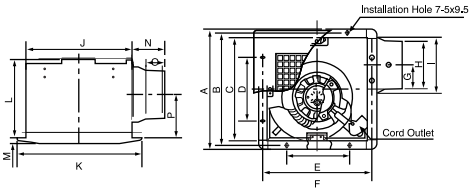
2 SPEED TYPE (AC MOTOR)

FV-27CH9, FV-32CD9, FV-32CH9





FV-38CD8, FV-38CH8



DC MOTOR

FEATURES

- Constant airflow
- Variable speed selection
- Delay timer
- Low noise
- Luxury designed louver
- Auto operation by motion sensor (FV-24JR1)

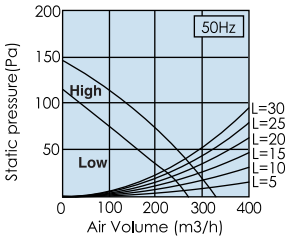
SPECIFICATIONS

Model		Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (Kg)	Installation space W x L (mm)
		CMH	CFM					
FV-27CH9	HI	330	194	28	570	34	4.4	270 x 270
	LO	260	153	23	480	30		
FV-32CD9	HI	430	253	42	590	36	5.2	320 x 320
	LO	300	176	32	460	28		
FV-32CH9	HI	530	312	55	710	41	5.6	320 x 320
	LO	400	235	45	570	34		
FV-38CD8	HI	640	376	90	645	44	9.7	385 x 385
	LO	430	253	66	456	35		
FV-38CH8	HI	800	471	122	790	50	10.4	385 x 385
	LO	525	309	89	540	40		

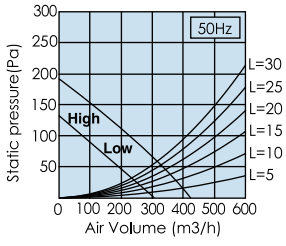
Note : The values in specification tables are representative characteristic values at 220 V, 50Hz, and 1 phase

PERFORMANCE CURVE

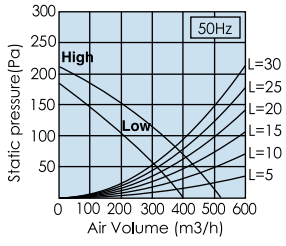
FV-27CH9



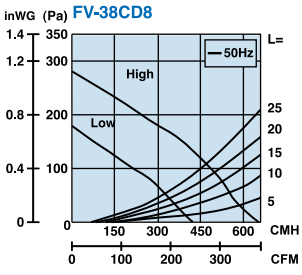
FV-32CD9



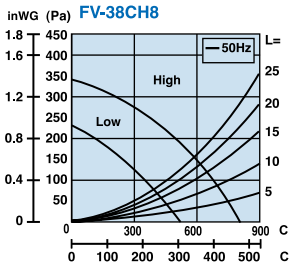
FV-32CH9



FV-38CD8



FV-38CH8



Model	Blade (Ø)	Duct Size (Ø)
FV-27CH9 FV-32CD9 FV-32CH9	190	150
FV-38CD8 FV-38CH8	230	

L : The length of duct(m)
(The diameter of duct : Ø150mm)

DIMENSIONS

(mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
FV-27CH9	307	284	140	240	112	260	284	19	330	100	43	70	148	-	-	-
FV-32CD9	357	334	190	240	112	310	334	19	380	100	68	70	148	-	-	-
FV-32CH9	357	334	190	240	112	310	334	19	380	100	68	70	148	-	-	-
FV-38CD8	422	399	375	255	255	374	72.3	142	158	376	450	250	22	108	55	127
FV-38CH8	422	399	375	255	255	374	72.3	142	158	376	450	250	22	108	55	127

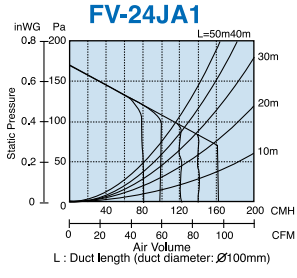
SPECIFICATIONS

Model	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (Kg)	Installation space W x L (mm)
	CMH	CFM					
FV-24JA1	160	94	7.5	725	31	3.6	240 x 240
FV-24JR1	160	94	8.3	725	31	3.6	240 x 240

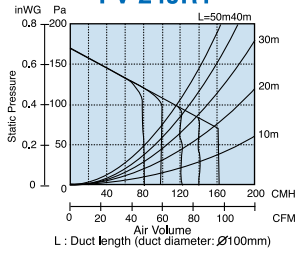
Note : The values in specification tables are representative characteristic values at 220 V, 50Hz, and 1 phase

PERFORMANCE CURVE

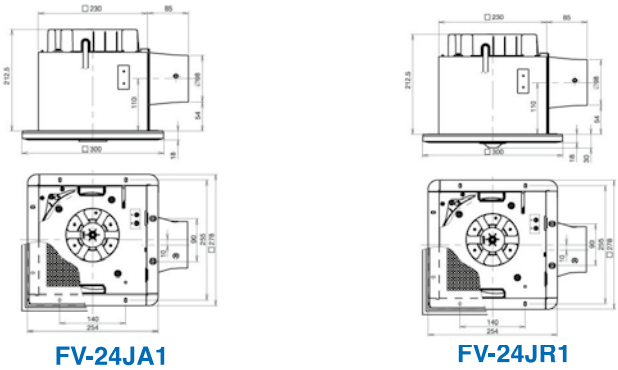
FV-24JA1



FV-24JR1

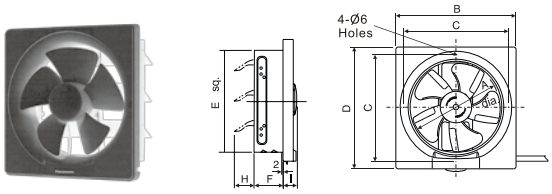


DIMENSIONS



FV-24JA1 FV-24JR1

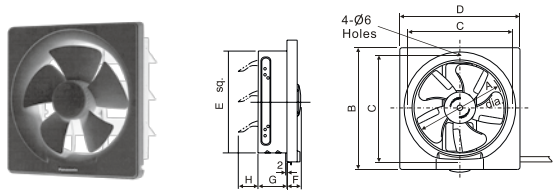
WALL MOUNT TYPE



FV-15AST1

DIMENSIONS (mm)

Model	A	B	C	D	E	F	G	H	I
FV-15AST1	155	240	195	254	170	75	55	54	52

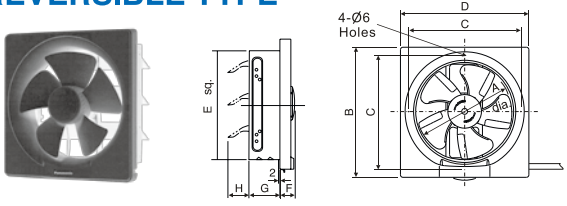


FV-20AUT3, FV-25AUT3, FV-30AUT3

DIMENSIONS (mm)

Model	A	B	C	D	E	F	G	H
FV-20AUT3	200	306	260	302	240	52	90	80
FV-25AUT3	250	356	310	352	290	38	90	63
FV-30AUT3	300	406	360	402	340	38	90	78

REVERSIBLE TYPE

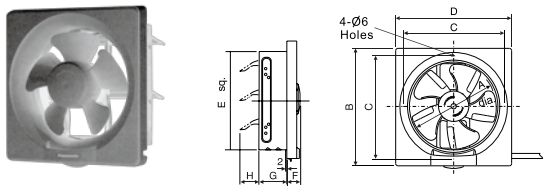


FV-20RUT2, FV-25RUT2, FV-30RUT2

DIMENSIONS (mm)

Model	A	B	C	D	E	F	G	H
FV-20RUT2	200	306	260	302	240	52	90	80
FV-25RUT2	250	356	310	352	290	38	90	63
FV-30RUT2	300	406	360	402	340	38	90	78

HI-LO TYPE



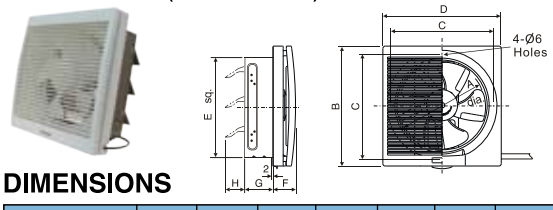
FV-20SUT2

DIMENSIONS (mm)

Model	A	B	C	D	E	F	G	H
FV-20SUT2	200	306	260	302	240	52	90	80

LOUVER TYPE

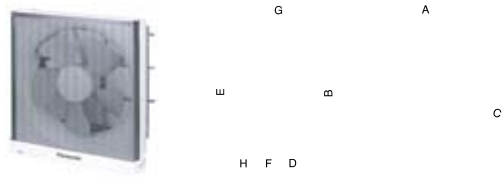
FV-20LUT3, FV-25LUT3, FV-30LUT1
FV-20RLT2 (Reversible), **FV-25RLT2** (Reversible)
FV-30RLT1 (Reversible)



DIMENSIONS (mm)

Model	A	B	C	D	E	F	G	H
FV-20LUT3	200	306	260	302	240	68	90	80
FV-25LUT3	250	356	310	352	290	63	90	63
FV-30LUT1	300	406	360	402	340	63	90	78
FV-20RLT2	200	306	260	302	240	68	90	80
FV-25RLT2	250	356	310	352	290	63	90	63
FV-30RLT1	300	406	360	402	340	63	90	78

KITCHEN TYPE



FV-25FUT1

DIMENSIONS (mm)

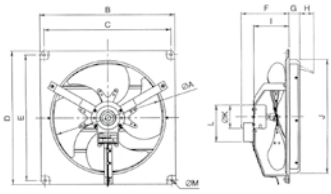
Model	A	B	C	D	E	F	G	H
FV-25FUT1	352	371	250	60	290	90	150	70

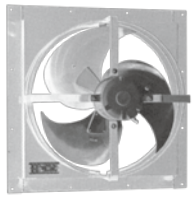
SPECIFICATIONS

Model		Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (Kg)	Grill Size W x L (mm)	Installation space W x L (mm)
		CMH	CFM						
FV-15AST1		290	170	15	1,480	31	1.4	240 x 254	170 x 170
FV-20SUT2	HI	552	325	20	1,260	35	2.1	302 x 306	250 x 250
	LO	426	251	18	930	28			
FV-20AUT3		580	341	20	1,250	40	2	302 x 306	250 x 250
FV-25AUT3		920	541	27	1,100	39	2.4	352 x 356	300 x 300
FV-30AUT3		1,152	678	31	890	39	2.7	402 x 406	350 x 350
FV-20RUT2	EX	580	341	20	1,260	36	2.1	302 x 306	250 x 250
	IN	400	235	15	1,150	45			
FV-25RUT2	EX	945	556	27	1,090	38	2.4	352 x 356	300 x 300
	IN	600	353	21	1,010	45			
FV-30RUT2	EX	1,164	685	31	885	39	2.8	402 x 406	350 x 350
	IN	698	411	24	760	43			
FV-20LUT3		546	321	20	1,190	37.5	2.2	302 x 306	250 x 250
FV-25LUT3		835	491	27	1,060	41	2.7	352 x 356	300 x 300
FV-30LUT1		930	547	31	820	41	3.1	402 x 406	350 x 350
FV-20RLT2	EX	546	321	20	1,240	39	2.4	302 x 306	250 x 250
	IN	370	218	15	1,190	45			
FV-25RLT2	EX	840	494	29	1,040	41	2.7	352 x 356	300 x 300
	IN	580	341	21	1,035	45			
FV-30RLT1	EX	990	583	31	830	42	3.1	402 x 406	350 x 350
	IN	594	350	25	770	43			
FV-25FUT1		835	491	34	1,100	42	2.8	352 x 371	300 x 300

Note : The values in specification tables are representative characteristic values at 220 V, 50 Hz, and 1 phase

INDUSTRIAL TYPE





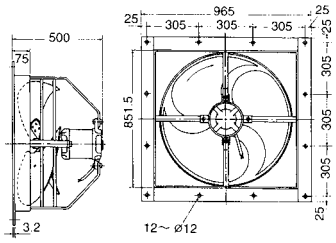
BV-30PDB

FV-30KUT, FV-40KUT, FV-50AET2

DIMENSIONS (mm)

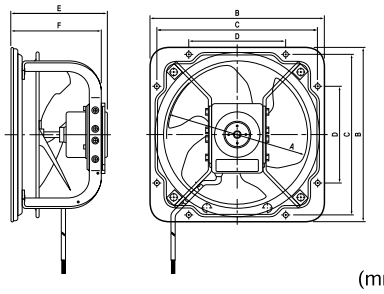
Model	A	B	C	D	E	F	G	H	I	J	K	L	M
FV-30KUT1	305	420	385	420	385	164	34	40	116	340	90	141	10
FV-40KUT1	410	510	480	510	480	181	40	52	133	434	90	141	10
FV-50AET2	520	650	600	650	600	283	48	63	181	526	175	–	12

DIMENSIONS (mm)



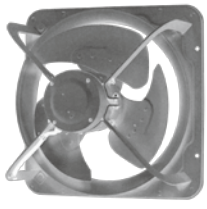
HIGH PRESSURE INDUSTRIAL TYPE

FV-25GS4, FV-30GS4, FV-35GS4

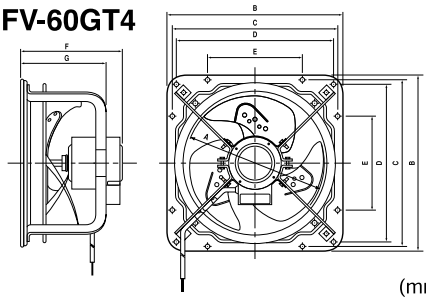


DIMENSIONS (mm)

Model	A	B	C	D	E	F	G
FV-25GS4	250dia.	327	298	165	171	164	10dia.
FV-30GS4	300dia.	378	349	210	200	187	10dia.
FV-35GS4	350dia.	467	434	250	236	219	12dia.



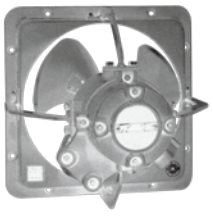
FV-40GS4, FV-45GS4, FV-50GS4, FV-60GS4, FV-45GT4, FV-50GT4, FV-60GT4



DIMENSIONS (mm)

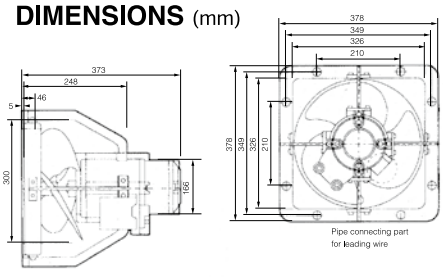
Model	A	B	C	D	E	F	G	H
FV-40GS4	400dia.	518	485	460	280	274	225	12dia.
FV-45GS4	450dia.	570	540	-	320	297	248	12dia.
FV-50GS4	500dia.	659	620	560	355	315	266	15dia.
FV-60GS4	600dia.	760	720	650	400	320	262	15dia.
FV-45GT4	450dia.	570	540	-	320	297	248	12dia.
FV-50GT4	500dia.	659	620	560	355	304	246	15dia.
FV-60GT4	620dia.	760	720	650	400	320	262	15dia.

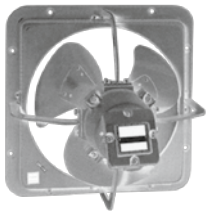
EXPLOSION-PROOF TYPE



FV-30XPT

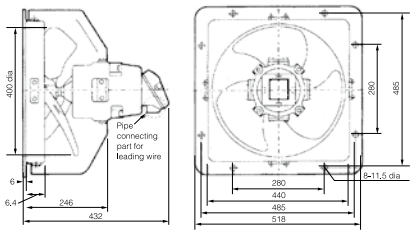
DIMENSIONS (mm)





FV-40XPT

DIMENSIONS (mm)

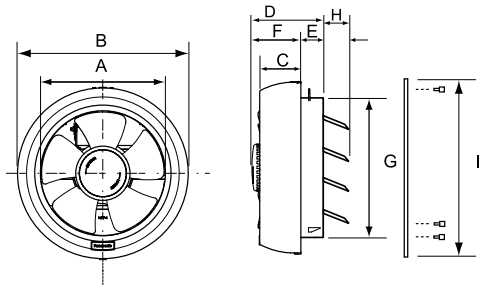


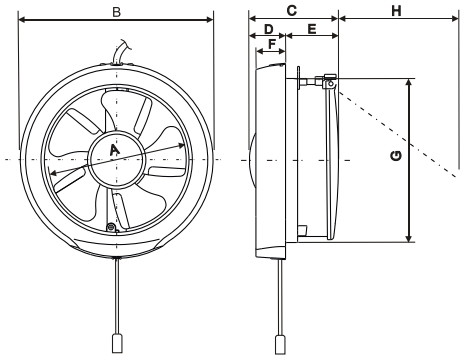
SPECIFICATIONS

Model	Phase	Voltage	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (Kg)
			CMH	CFM				
FV-30KUT	1	220	1,220	718	42	1,185	46	4.9
FV-40KUT			2,065	1,216	61	1,175	49	6.4
FV-50AET2			3,630	2,137	108	920	54	11.5
FV-30XPT			1,740	1,024	65	1,400	46	22
FV-25GS4			1,150	676	39	1,360	34	4.4
FV-30GS4			1,820	1,071	59	1,360	38	6.1
FV-35GS4			2,560	1,506	88	1,420	44	10.5
FV-40GS4			3,610	2,124	161	1,450	47	19
FV-45GS4			5,200	3,060	227	1,410	51	19
FV-50GS4			6,130	3,607	249	960	47	22.5
FV-60GS4			8,040	4,731	245	970	50	34
FV-45GT4	3	380	5,420	3,189	240	1,460	52	18.5
FV-50GT4			7,240	4,260	350	1,400	54	28.5
FV-60GT4			9,700	5,708	340	960	50	34
BV-30PDB			16,808	9,887	1,500	970	71	65
FV-40XPT			3,840	2,260	190	1,460	52	30

Remark : Wire guard, rain hood and shutter are supplied as accessories.

WINDOW MOUNT TYPE





FV-15WUT4, FV-20WUT4

FV-20WAT1

DIMENSIONS

(mm)

Model	A	B	C	D	E	F	G	H	I
FV-15WUT4	150	210	97	43	54	37.4	177	149	-
FV-20WUT4	200	271	98	36	62	36	237	201	-
FV-20WAT1	208	290	59	114	45	69	237	36	303

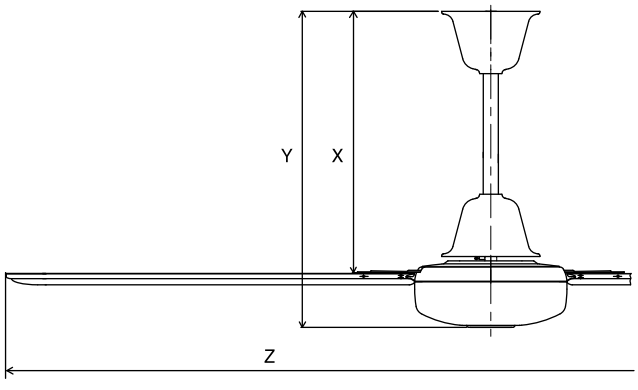
SPECIFICATIONS

Model	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (Kg)	Installation space (W x L)
	CMH	CFM					
FV-15WUT4	210	124	8.1	1,463	35	0.9	Ø 186 - 188
FV-20WUT4	360	212	16.4	1,042	32	1.1	Ø 247 - 250
FV-20WAT1	360	212	21.6	1,400	39	1.23	Ø 278 - 280

Note : The values in specification tables are representative characteristic values at 220 V, 50 Hz and 1 phase

CEILING FAN

BY-1547



DIMENSIONS

(mm)

Model	Pipe Type	Settting Length (X)	Total Length (Y)	Blade Length (Z)
BY-1547	13 inch	375	442	Ø 1,500

SPECIFICATIONS

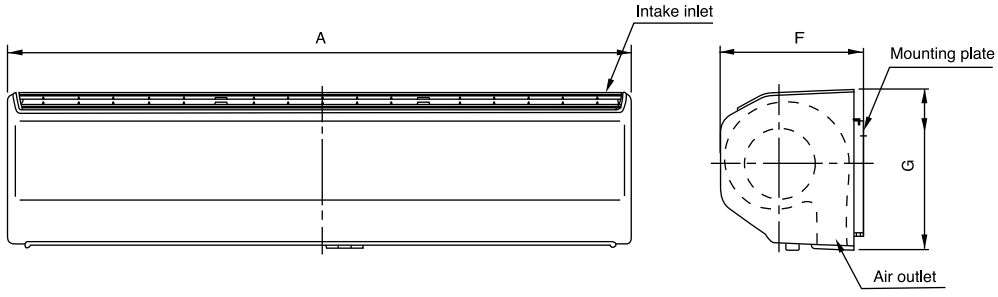
Model	Blade Size (Inch)	Air Volume		Air Velocity		Input (W)		Current (A)	Speed (rpm)		Speed Control	Weight (Kg)
		CMH	CFM	m/min	ft/min	Hi	Lo		Hi	Lo		
BY-1547	60	12,780	7,522	158	518	57-69.6	13.8-16.3	0.288	211-257	82-110	5	6.2

Note : The values in specification tables are representative characteristic value at 220 V, 50Hz, 1 phase.

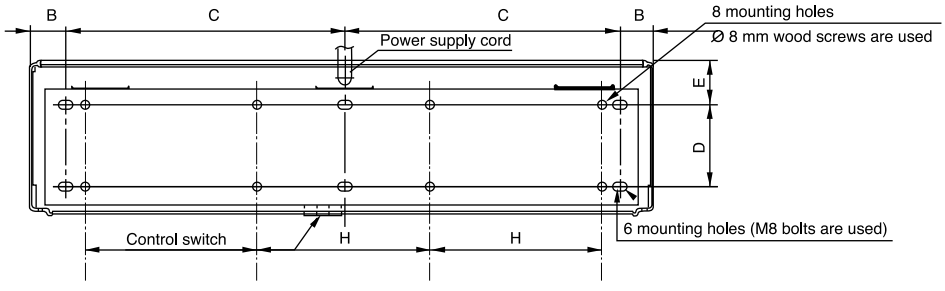
AIR CURTAINS

FY-10ESN FY-12ESN FY-14ESN
FY-10ELN FY-12ELN FY-14ELN

Front View



Back View



DIMENSIONS

(mm)

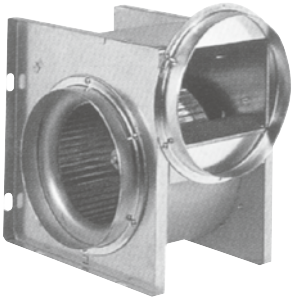
Model	A	B	C	D	E	F	G	H
FY-10ESN	900	50	400	120	63	205	226	250
FY-10ELN	1,200	200	400	120	63	205	226	250
FY-12ESN	900	50	400	120	63	205	226	250
FY-12ELN	1,200	200	400	120	63	205	226	250
FY-14ESN	900	50	400	120	63	205	226	250
FY-14ELN	1,200	200	400	120	63	205	226	250

SPECIFICATIONS

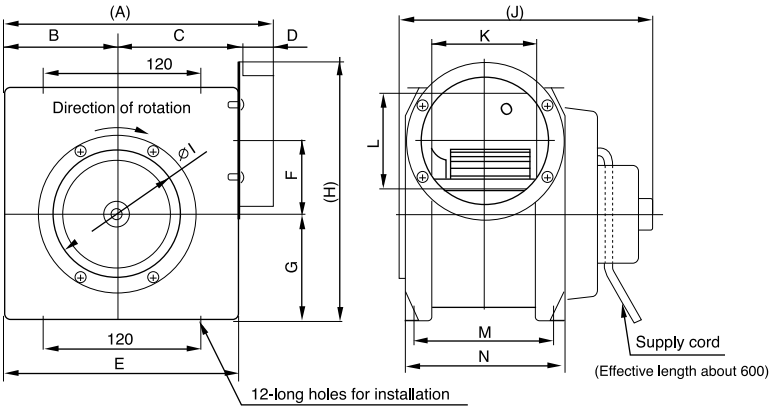
Model	Length (mm)	Air Volume (CMH)		Input (W)		Current (A)		Outlet Velocity (m/s)		Noise (dB(A))		Weight (Kg)
		Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	
FY-10ESN	900	750	630	72	62	0.40	0.29	13	11.1	46	42	12
FY-10ELN	1,200	1,000	830	96	74	0.54	0.35	13.1	11	46	42	14
FY-12ESN	900	1,050	960	176	155	0.82	0.69	16.9	15.8	55	50	13
FY-12ELN	1,200	1,420	1,320	224	200	1.04	0.90	17	15.8	56	51	15
FY-14ESN	900	1,340	1,168	257	218	1.14	0.99	21.9	19.1	62	59	13
FY-14ELN	1,200	1,867	1,668	333	290	1.52	1.32	22.5	20.1	63	61	15

Note : The values in specification tables are representative characteristic value at 220 V, 50Hz, 1 phase.

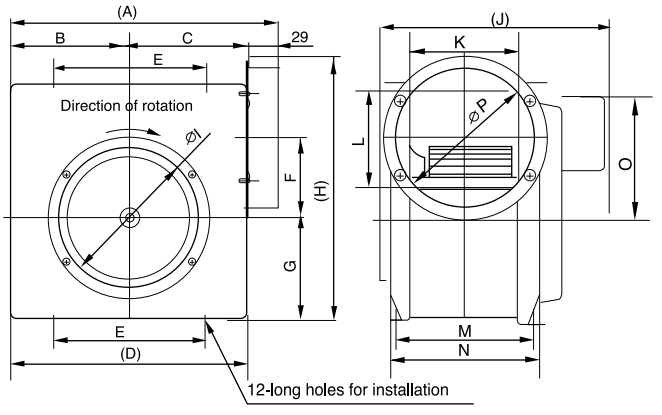
MINI SIROCCO FANS



FY-10CG1 FY-12CG1 FY-14CG1 FY-16CG1
FY-17CG1 FY-19CG1 FY-21CG1 FY-21CT1



FY-10CG1 · FY-12CG1 · FY-14CG1



FY-16CG1 · FY-17CG1 · FY-19CG1 · FY-21CG1 · FY-21CT1

DIMENSIONS

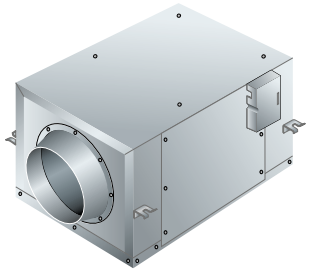
(mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
FY-10CG1	206	86	95	24	180	56	82	199	98	196	80	74	106	120	98	-
FY-12CG1	261	112	119	29	230	76	100	261	148	226	105	98	131	145	148	-
FY-14CG1	261	112	119	29	230	76	100	261	148	224	105	98	131	145	148	-
FY-16CG1	281	125	126	250	160	85	108	279	148	237	117	102	143	157	128	148
FY-17CG1	331	151	150	300	160	106	130	346	198	281	165	116	187	205	142	198
FY-19CG1	331	151	150	300	160	106	130	346	198	296	165	116	187	205	142	198
FV-21CG1	361	166	165	330	200	121	145	378	198	373	190	110	226	250	161	198
FV-21CT1																

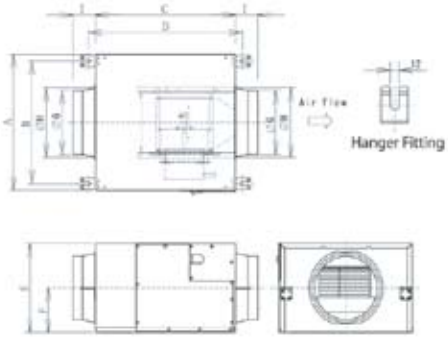
SPECIFICATIONS

Model		Phase	Voltage	Air Volume		Input (W)	Noise (dB(A))			Weight (kg)	Duct Size (mm)
				CMH	CFM		Suction	Casing	Discharge		
FY-10CG1		1	220	144	85	11	40	32	38	2.1	Ø100
FY-12CG1				258	152	21	39	34	39	3.1	Ø150
FY-14CG1				308	181	30	44.5	39	44.5	3.5	
FY-16CG1	Hi			495	291	49	50	43.5	50	5.1	
	Lo			365	214	41	44.5	38	44.5		
FY-17CG1	Hi			763	449	87	51	46	51	8.1	Ø200
	Lo			640	377	74	47	42.5	47		
FY-19CG1	Hi			947	557	117	55.5	50.5	55.5	9.1	
	Lo			821	483	109	54	49	54		
FY-21CG1	Hi			1,420	836	240	61	57	61	15	
	Lo			1,260	742	220	59.5	56	59.5		
FY-21CT1	Hi	3	380	1,450	853	253	61.5	57.5	61.5	15.5	
	Lo			1,090	641	175	55.5	51.5	55.5		

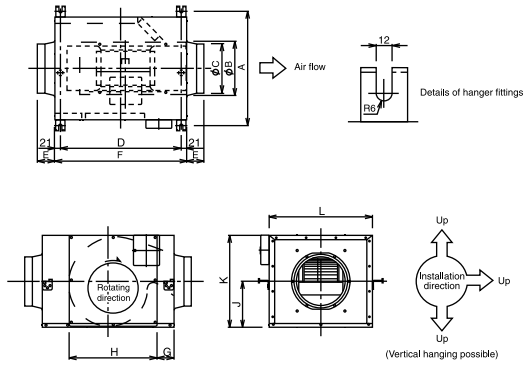
LOW-NOISE TYPE CABINET FANS



FV-12NS3
FV-15NS3
FV-18NF3
FV-18NS3
FV-20NS3
FV-23NL3
FV-25NS3
FV-25NF3
FV-23NUT1
FV-25NUT1
FV-28NUT1



FV-12NS3 • FV-15NS3 • FV-18NF3
FV-18NS3 • FV-20NS3 • FV-23NL3
FV-25NS3 • FV-25NF3



FV-23NUT1 • FV-25NUT1
FV-28NUT1

DIMENSIONS

(mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	Duct size (Ø)
FV-12NS3	290	250	291	335	184	92	97	112	51	-	-	-	100
FV-15NS3	290	250	302	346	206	103	145	163	60	-	-	-	150
FV-18NS3	316	276	338	382	232	116	145	163	60	-	-	-	150
FV-18NF3	376	336	397	441	254	127	195	211	70	-	-	-	200
FV-20NS3	416	376	441	485	272	136	195	211	70	-	-	-	200
FV-23NL3	468	424	469	513	298	149	195	211	70	-	-	-	200
FV-25NS3	494	450	505	549	334	167	240	255	85	-	-	-	250
FV-25NF3	494	450	505	549	334	167	240	255	85	-	-	-	250
FV-23NUT1	445	211	195	478	70	520	67	344	-	183	365	400	200
FV-25NUT1		255	240	548	85	590		364	-	190	380	400	250
FV-28NUT1	525			618		660	73	404	-	210	420	480	250

SPECIFICATIONS

Model		Phase	Voltage	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))	Weight (kg)
				CMH	CFM				
FV-12NS3	Hi	1	220	180	106	18	1,265	21	5.5
	Lo			145	85	17	1,020	17	
FV-15NS3	Hi			340	200	33	1,270	25	6.5
	Lo			275	162	29.5	1,100	22	
FV-18NS3	Hi			500	294	60	1,250	29	8.5
	Lo			405	238	55	1,100	27	
FV-18NF3	Hi			770	453	91	1,190	31	10
	Lo			620	365	80	1,000	29	
FV-20NS3	Hi			920	541	120	1,195	32	14
	Lo			720	424	113	1,000	29	
FV-23NL3	Hi			1,200	706	230	1,245	40	18
	Lo			900	530	170	985	34	
FV-25NS3	Hi			1,700	1,000	345	1,125	41	24
	Lo			1,380	812	265	950	38	
FV-25NF3	Hi			1,900	1,118	390	1,225	43	24
	Lo			1,600	942	325	1,070	40	

SPECIFICATIONS

Mode		Phase	Voltage	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))			Weight (kg)
				(CMH)	(CFM)			Suction	Casing	Discharge	
FV-23NUT1	Hi	1	220	1,192	701	233	1,300	46	38.5	62	19.7
	Lo			970	571	190	1,105	41.5	34	56.5	
FV-25NUT1	Hi			1,903	1,119	385	1,265	53.5	43.5	66.5	26.8
	Lo			1,540	906	330	1,117	48.5	39	61.5	
FV-28NUT1		3	380	2,652	1,560	650	1,310	55.5	46	69.5	32.4

Note : RPM data is for reference only, values may vary subject to different conditions.

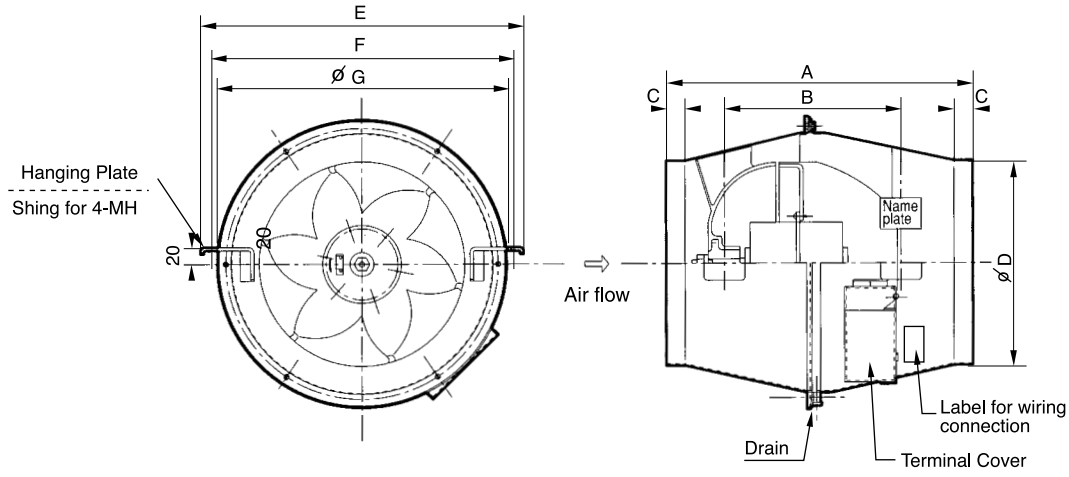
COMPACT AXIAL FLOW FANS

FY-25DSF1
FY-28DSM
FY-35DSM

FY-40DSL
FY-40DSH
FY-45DST
FY-45DSL

FY-40DTL
FY-40DTH
FY-45DTT
FY-45DTL

FY-45DTH



DIMENSIONS

(mm)

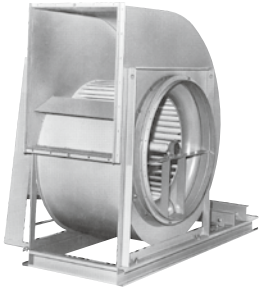
Model	A	B	C	D	E	F	G
FY-25DSF1	260	197	30	198	304	260	250
FY-28DSM	350	197	22	248	400	366	350
FY-35DSM	410	206	21.5	296	460	426	415
FY-40DSL, DSH, DTL, DTH	480		26	345	525	491	480
FY-45DSL, DTL, DTH, DST, DTT	540	218	25.5	391	588	554	546

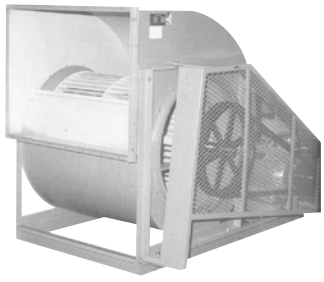
SPECIFICATIONS

Model		Phase	Voltage	Air Volume		Input (W)	Speed (rpm)	Noise (dB(A))			Weight (kg)	Duct Size (mm)
				CMH	CFM			Casing	Suction	Discharge		
FY-25DSF1	Hi	1	220	600	353	32	1,451	41	48	48	5	Ø 200
	Lo			550	323	24	1,423	39.5	46	46		
FY-28DSM	Hi			1,194	702	46	1,272	44.5	54.5	54	8	Ø 250
	Lo			1,050	618	45	1,195	42	52	51.5		
FY-35DSM	Hi			2,016	1,186	93	1,280	45.5	56.5	56	13	Ø 300
	Lo			1,782	1,048	80	1,209	43	54	53.5		
FY-40DSL	Hi			2,894	1,702	195	1,310	54	66	65.5	23	Ø 350
	Lo			2,765	1,626	185	1,286	52	64	63.5		
FY-40DSH	Hi			3,378	1,987	242	1,425	55	67	66.5	23	Ø 350
	Lo			3,146	1,850	217	1,396	53	65	64.5		
FY-45DST	Hi			4,224	2,484	433	1,460	58	68	68	37	Ø 400
	Lo			4,111	2,418	406	1,430	57.5	67.5	67.5		
FY-45DSL	Hi			4,898	2,881	523	1,445	58.5	68	68	37	Ø 400
	Lo			4,768	2,804	490	1,415	58	67.5	67.5		
FY-40DTL	Hi	3	380	2,943	1,731	206	1,358	54	66	65.5	20	Ø 350
	Lo			2,894	1,702	196	1,334	52	64	63.5		
FY-40DTH	Hi			3,210	1,888	249	1,405	55	67	66.5	20	Ø 350
	Lo			2,873	1,690	225	1,376	53	65	64.5		
FY-45DTT	Hi			4,154	2,443	424	1,435	58	68	68	37	Ø 400
	Lo			4,088	2,404	366	1,410	57.5	67.5	67.5		
FY-45DTL	Hi			4,817	2,833	479	1,425	58.5	68	68	37	Ø 400
	Lo			4,741	2,788	415	1,400	58	67.5	67.5		
FY-45DTH	Hi			5,454	3,208	526	1,475	59	68.5	68.5	37	Ø 400
	Lo			5,250	3,088	513	1,450	58.5	68	68		

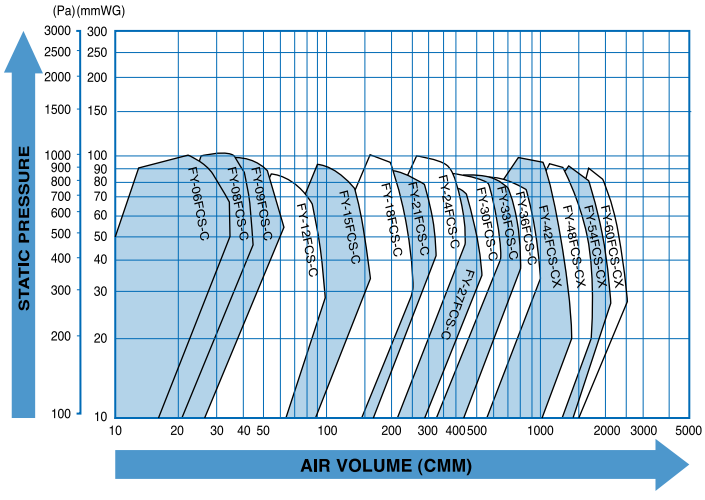
CENTRIFUGAL FANS

FORWARD CURVED MULTI-BLADE FANS

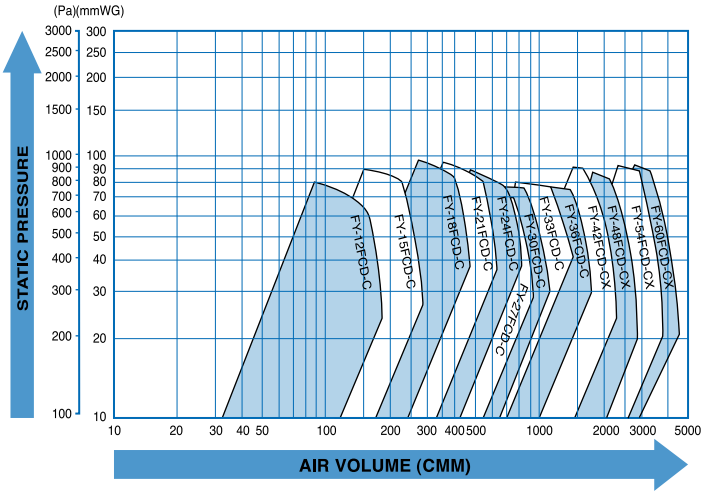




FAN SELECTION CHART (SWSI : DOUBLE-END BEARING, SINGLE SUCTION TYPE)



FAN SELECTION CHART (DWDI : DOUBLE-END BEARING, DOUBLE SUCTION TYPE)



AVAILABLE MODELS FOR FCS TYPE

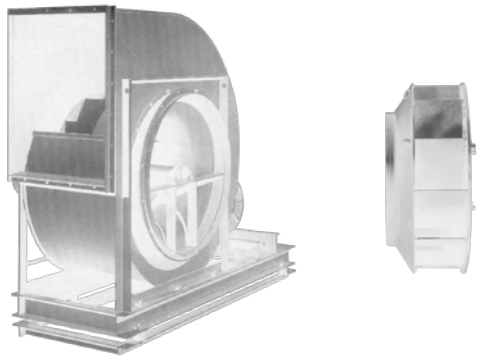
Model	Wheel Dia.		Approx. Weight of	Approx. Air Volume	
	mm	inch	Fan&Housing (Kg)	CMH	CFM
FY-06FCS-C	160	6	17	1,284	755
FY-08FCS-C	202	8	19	1,758	1,034
FY-09FCS-C	254	9	23	2,526	1,486
FY-12FCS-C	302	12	42	3,564	2,097
FY-15FCS-C	382	15	60	5,646	3,322
FY-18FCS-C	464	18	105	9,330	5,491
FY-21FCS-C	529.6	21	145	11,796	6,942
FY-24FCS-C	621.6	24	180	15,552	9,152
FY-27FCS-C	686	27	285	20,994	12,355
FY-30FCS-C	762	30	330	25,920	15,254
FY-33FCS-C	838	33	415	31,362	18,456
FY-36FCS-C	915	36	490	37,326	21,966
FY-42FCS-CX	1,065	42	740	50,802	29,897
FY-48FCS-CX	1,220	48	890	66,354	39,049
FY-54FCS-CX	1,370	54	1,330	82,230	48,392
FY-60FCS-CX	1,520	60	1,700	101,088	59,490

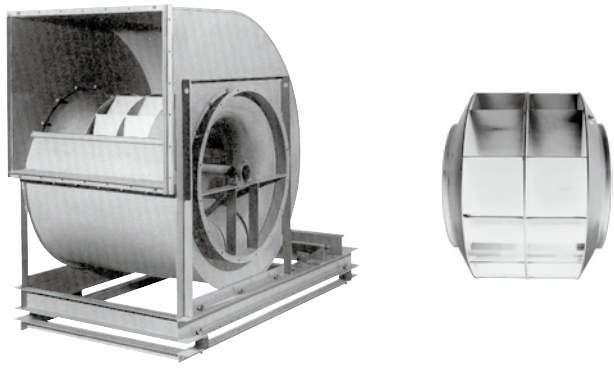
Remark : The approximate air value are measured at air velocity of 15 metre/second.

AVAILABLE MODELS FOR FCD TYPE

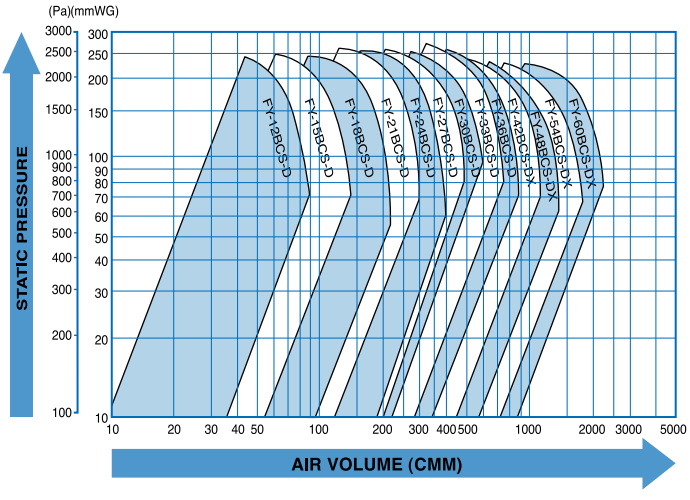
Model	Wheel Dia.		Approx. Weight of	Approx. Air Volume	
	mm	inch	Fan&Housing (Kg)	CMH	CFM
FY-12FCD-C	302	12	85	6,642	3,908
FY-15FCD-C	382	15	110	10,566	6,218
FY-18FCD-C	464	18	160	16,980	9,993
FY-21FCD-C	529.6	21	230	22,380	13,171
FY-24FCD-C	621.6	24	300	29,550	17,390
FY-27FCD-C	686	27	420	36,744	21,624
FY-30FCD-C	762	30	500	45,144	26,567
FY-33FCD-C	838	33	620	54,648	32,160
FY-36FCD-C	915	36	730	65,838	38,746
FY-42FCD-CX	1,065	42	1,120	84,066	49,473
FY-48FCD-CX	1,220	48	1,400	109,902	64,677
FY-54FCD-CX	1,370	54	2,050	149,994	88,271
FY-60FCD-CX	1,520	60	2,500	184,488	108,571

BACKWARD CURVE BLADE LIMIT-LOAD FANS

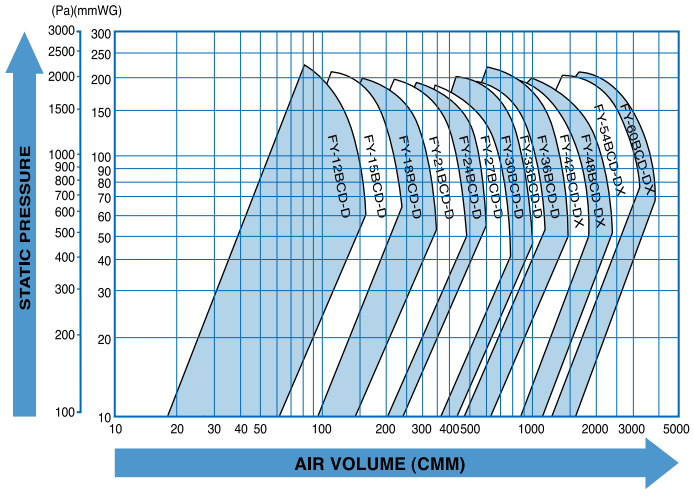




SELECTION CHART (SWSI : DOUBLE-END BEARING, SINGLE SUCTION TYPE)



SELECTION CHART (DWDI : DOUBLE-END BEARING, DOUBLE SUCTION TYPE)



AVAILABLE MODELS FOR BCS TYPE

Model	Wheel Dia.		Approx. Weight of	Approx. Air Volume	
	mm	inch	Fan&Housing (Kg.)	CMH	CFM
FY-12BCS-D	310	12	75	4,404	2,591
FY-15BCS-D	390	15	90	6,690	3,937
FY-18BCS-D	467	18	115	9,330	5,491
FY-21BCS-D	545	21	160	12,702	7,475
FY-24BCS-D	623	24	205	16,590	9,763
FY-27BCS-D	701	27	310	20,994	12,355
FY-30BCS-D	778	30	360	25,920	15,254
FY-33BCS-D	856	33	460	31,362	18,456
FY-36BCS-D	934	36	560	37,326	21,966
FY-42BCS-DX	1,090	42	870	50,802	29,896
FY-48BCS-DX	1,245	48	1,110	66,354	39,049
FY-54BCS-DX	1,401	54	1,540	82,230	48,392
FY-60BCS-DX	1,562	60	1,970	101,088	59,490

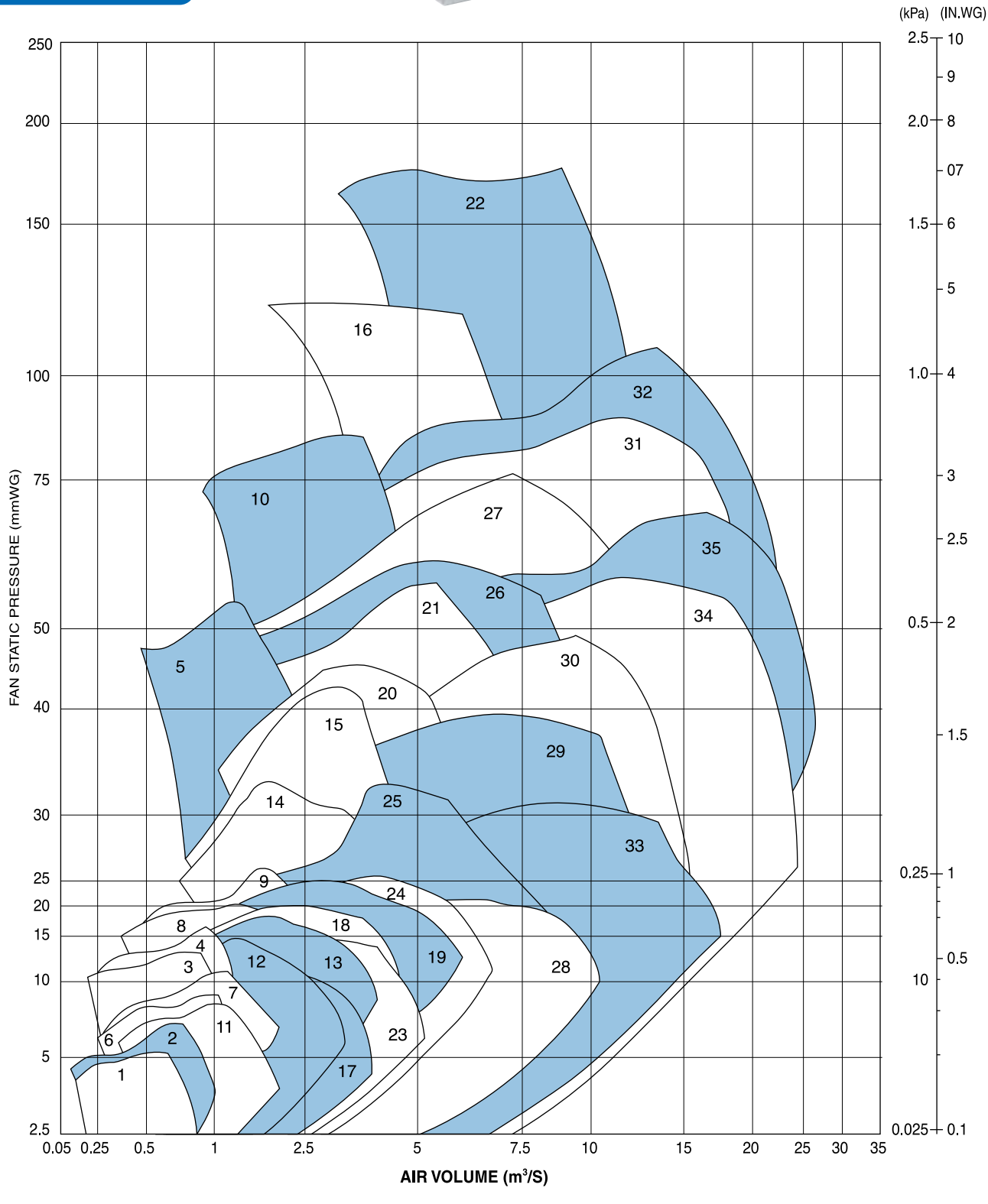
Remark : The approximate air value are measured at air velocity of 15 metre/second.

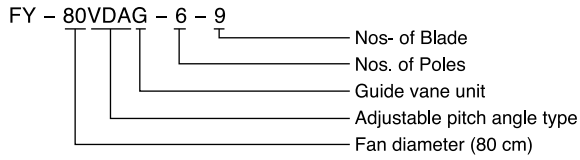
AVAILABLE MODELS FOR BCD TYPE

Model	Wheel Dia.		Approx. Weight of	Approx. Air Volume	
	mm	inch	Fan&Housing (Kg.)	CMH	CFM
FY-12BCD-D	310	12	90	7,344	4,322
FY-15BCD-D	390	15	115	11,598	6,825
FY-18BCD-D	467	18	170	16,200	9,534
FY-21BCD-D	545	21	235	22,074	12,990
FY-24BCD-D	623	24	300	28,686	16,882
FY-27BCD-D	701	27	490	34,992	20,593
FY-30BCD-D	778	30	570	43,416	25,550
FY-33BCD-D	856	33	720	52,272	30,762
FY-36BCD-D	934	36	890	61,692	36,306
FY-42BCD-DX	1,090	42	1,320	84,066	49,473
FY-48BCD-DX	1,245	48	1,820	109,902	64,677
FY-54BCD-DX	1,401	54	2,510	146,952	86,481
FY-60BCD-DX	1,562	60	3,130	181,116	106,587

ADJUSTABLE PITCH AXIAL FLOW FANS

FULLL SOLIDITY





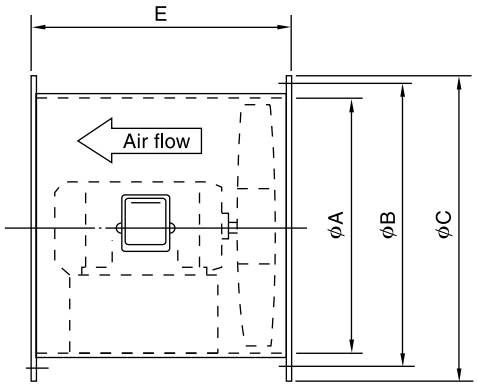
AVAILABLE MODELS

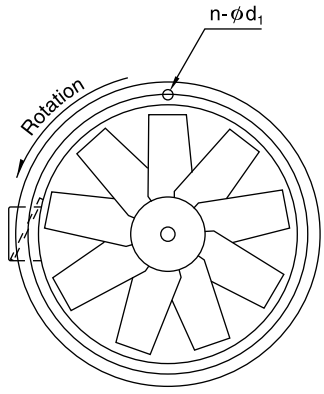
Chart No	Model	Diam. (mm)	Speed (rpm)	Pitch Angle	Output (kw)
1	FY-40VDA-6-7	400	960	4 - 36	0.2
2	FY-40VDAG-6-7	400	960	4 - 36	0.2
3	FY-40VDA-4-7	400	1450	4 - 30	0.2
				32 - 36	0.4
4	FY-40VDAG-4-7	400	1450	4 - 24	0.2
				26 - 34	0.4
5	FY-40VDA-2-9	400	2900	4 - 24	1.5
				26 - 34	2.2
				36	3.7
6	FY-50VDA-6-7	500	960	4 - 32	0.2
				34 - 36	0.4
7	FY-50VDAG-6-7	500	960	4 - 26	0.2
				28 - 36	0.4
8	FY-50VDA-4-7	500	1450	4 - 20	0.4
				22 - 34	0.75
				36	1.5
9	FY-50VDAG-4-7	500	1450	4 - 18	0.4
				20 - 26	0.75
				28 - 36	1.5
10	FY-50VDA-2-9	500	2930	4 - 10	2.2
				12 - 20	3.7
				22 - 28	5.5
				30 - 36	7.5
11	FY-60VDA-8-9	600	730	4 - 28	0.2
				30 - 36	0.4
12	FY-60VDA-6-9	600	960	4 - 26	0.4
				28 - 36	0.75
13	FY-60VDAG-6-9	600	960	4 - 20	0.4
				22 - 28	0.75
				30 - 36	1.5
14	FY-60VDA-4-9	600	1450	4 - 14	0.75
				16 - 28	1.5
				30 - 36	2.2
15	FY-60VDAG-4-9	600	1450	4 - 22	1.5
				24 - 26	2.2
				28 - 34	3.7
16	FY-60VDA-2-9	600	2950	8 - 10	5.5
				12 - 14	7.5
				16 - 22	11
				24 - 30	15
17	FY-70VDA-8-9	700	730	4 - 26	0.4
				28 - 36	0.75
18	FY-70VDA-6-9	700	960	4 - 22	0.75
				24 - 36	1.5
19	FY-70VDAG-6-9	700	960	4 - 18	0.75
				20 - 28	1.5
				30 - 34	2.2
				36	3.7
20	FY-70VDA-4-9	700	1450	4 - 14	1.5
				16 - 20	2.2
				22 - 30	3.7
				32 - 36	5.5
21	FY-70VDAG-4-9	700	1450	4 - 10	1.5
				12 - 16	2.2
				18 - 22	3.7
				24 - 28	5.5
				30 - 34	7.5
22	FY-70VDA-2-10	700	2950	6 - 8	11
				10 - 14	15
				16 - 18	18.5
				20	22
				22 - 28	30

Chart No	Model	Diam. (mm)	Speed (rpm)	Pitch Angle	Output (kw)
23	FY-80VDA-8-9	800	730	4 - 26	0.75
				28 - 36	1.5
24	FY-80VDA-6-9	800	960	4 - 22	1.5
				24 - 30	2.2
				34 - 36	3.7
25	FY-80VDAG-6-9	800	960	4 - 18	1.5
				20 - 24	2.2
				26 - 32	3.7
				34 - 36	5.5
26	FY-80VDA-4-9	800	1470	4 - 8	2.2
				10 - 16	3.7
				18 - 24	5.5
				26 - 30	7.5
				32 - 36	11
27	FY-80VDAG-4-9	800	1470	4 - 6	2.2
				8 - 12	3.7
				14 - 18	5.5
				20 - 22	7.5
				24 - 28	11
				30 - 34	15
28	FY-100VDA-8-12	1000	730	4 - 24	2.2
				26 - 36	3.7
29	FY-100VDA-6-12	1000	985	4 - 8	3.7
				20 - 24	5.5
				26 - 32	7.5
				34 - 36	11
30	FY-100VDAG-6-12	1000	985	4 - 14	3.7
				16 - 20	5.5
				22 - 24	7.5
				26 - 30	11
31	FY-100VDA-4-12	1000	1470	4 - 6	5.5
				8 - 10	7.5
				12 - 16	11
				18 - 20	15
				22 - 24	18.5
				26 - 28	22
				30 - 36	30
32	FY-100VDAG-4-12	1000	1470	4 - 6	5.5
				8	7.5
				10 - 14	11
				16 - 18	15
				20	18.5
				22	22
				24 - 28	30
33	FY-120VDA-8-12	1200	730	4 - 24	5.5
				26 - 32	7.5
				34 - 36	11
34	FY-120VDA-6-12	1200	985	4 - 14	7.5
				16 - 20	11
				22 - 26	15
				28 - 32	18.5
				34 - 36	22
35	FY-120VDAG-6-12	1200	985	4 - 12	7.5
				14 - 16	11
				18 - 22	15
				24	18.5
				26 - 28	22
				30	30

ADJUSTABLE PITCH AXIAL FLOW FANS

DIMENSIONS





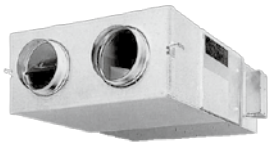
AVAILABLE MODELS

(mm)

Model	Frame No.	Code No.	Output (kw)				Numbers of blade	A	B	C	E	n-d1	Weight (Kg)
			2P	4P	6P	8P							
FY-40VDA	71	1	–	0.2, 0.4	0.2	–	7	400	440	466	300	12-10.5	25
	90L	2	1.5, 2.2	–	–		9				400		45
	112M	3	3.7								500		70
FY-50VDA	71	4	–	0.4	0.2	–	7	500	540	566	400	12-10.5	35
	80	5		0.75	0.4	0.2							40
	90L	6		1.5	0.75	–							45
	90L	7	2.2	–	–		9				500		65
	112M	8	3.7										90
	132S	9	5.5, 7.5								600		110
FY-60VDA	80	10	–	0.75	0.4	0.2	9, 6, 3	600	650	684	400	16-13.0	50
	90L	11		1.5	0.75	0.4							55
	100L	12		2.2	1.5	0.75							65
	112M	13		3.7	2.2	–							80
	132S	14	5.5, 7.5	–	–		9				600		150
	160M	15	11, 15								700		210
FY-70VDA	90L	16	–	1.5	0.75	0.4	9, 6, 3	700	750	784	500	16-13.0	70
	100L	17		2.2	1.5	0.75							75
	112M	18		3.7	2.2	1.5							95
	132S	19		5.5	3.7	–							110
	132M	20		7.5	–								120
	160M	21	11, 15	–			10				800		250
	160L	22	18.5										270
	180M	23	22										325
	180L	24	30										345
FY-80VDA	100L	25	–	2.2	1.5	0.75	9, 6, 3	800	850	885	500	16-13.0	105
	112M	26		3.7	2.2	1.5							125
	132S	27		5.5	3.7	2.2							140
	132M	28		7.5	5.5	–							155
	160M	29		11	7.5						700		220
	160L	30		15	–								235
FY-100VDA	132S	31	–	5.5	3.7	2.2	12, 8, 6	1000	1065	1109	500	24-13.0	200
	132M	32		7.5	5.5	3.7							215
	160M	33		11	7.5	5.5					700		290
	160L	34		15	11	7.5							315
	180M	35		18.5, 22	15	–							395
	180L	36		30	18.5								420
FY-120VDA	160M	37	–	–	7.5	5.5		1200	1265	1309	700	24-13.0	350
	160L	38			11	7.5							390
	180M	39			15	11							460
	180L	40			18.5, 22	15							500
	200L	41			30	–					800		560

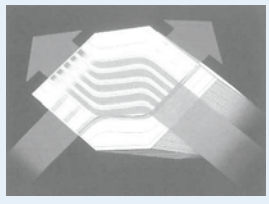
ENERGY RECOVERY VENTILATORS

- **Energy - saving ventilation**
- **Save installation work on compact and slim shape of counter-flow heat-exchange element.**
- **No regular cleaning for the counter-flow heat-exchange element**
- **Quiet operation**
- **All maintenance can be performed through a single inspection hole.**
- **Straight air supply/exhaust system used for easier installation**
- **Each unit can be mounted in reverse position.**



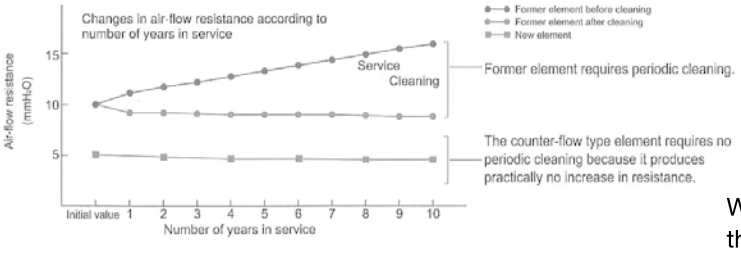
FY-250ZDY2 FY-350ZDY2 FY-500ZDY2 FY-800ZDY2 FY-01KZDY2A

FEATURES OF HEAT-EXCHANGE ELEMENTS

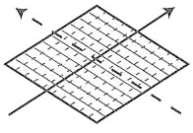


1. **Height of the element is approximately 20% reduced.**
   As shown in the vertical profile of the heat-exchange element (figure at right), we used an counter-flow type of heat-exchange system that reduces the element height from 287 mm to 230 mm, compared with a cross-flow heat-exchange element of equivalent capacity.
2. **Overall heat-exchange efficiency improved by approximately 6%.**
   We adopted an counter-flow type element that improved overall heat-exchange efficiency by about 6% and contributes significantly to reduce energy consumption.
3. **Long service life of heat-exchange element.**
   We used a non-woven cloth filter with a high dust collection efficiency and redesigned the airflow passage to achieve a durable heat-exchange element that requires no periodic cleaning.

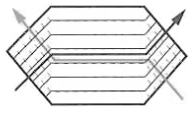
LONG SERVICE LIFE OF HEAT-EXCHANGE ELEMENTS



COMPARISON OF FORMER AND CURRENT ELEMENTS



Former
(cross-flow element)

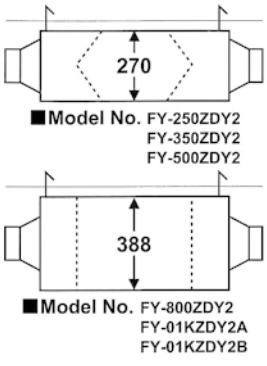


New
(counter-flow element)

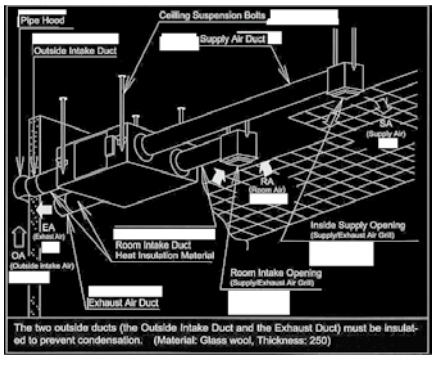
With the cross-flow element, air moves in a straight line across the element; with the counter-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.

SLIM BODY SHAPE AND IMPROVED INSTALLABILITY

Counter-flow heat-exchange element used for reduced noise and more compact and slim body shape.



- **Reference Sketch**



Model	Duct Size (Ø) Nominal Diameter
FY-250ZDY2	Ø150
FY-350ZDY2	Ø150
FY-500ZDY2	Ø200
FY-800ZDY2	Ø250
FY-01KZDY2A	Ø250

HEAT-EXCHANGE VENTILATION AND NORMAL VENTILATION

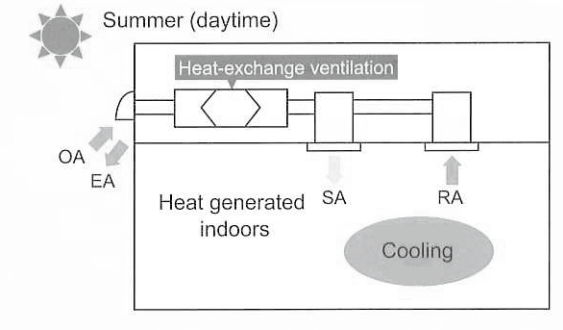
Energy-saving ventilation can be achieved through the proper use of heat-exchange ventilation and normal ventilation.

- **Heat-exchange ventilation**
  When a room is cooled or heated, the exhausted cooling/heating energy is recovered by means of heat-exchange ventilation.

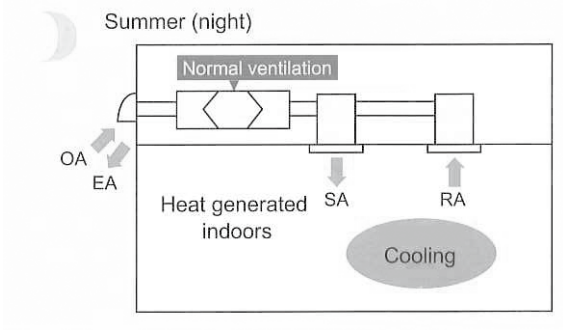
- **Normal ventilation**

  When rooms are not cooled or heated, that is, when there is little difference between the indoor and outdoor air conditions. In addition, at night during the hot season, when the outside air temperature drops, the outside air is drawn inside without heat exchange, alleviating the load on the air-conditioning equipment.

Heat-exchange ventilation



Normal ventilation



SPECIFICATIONS

Model			Air Volume		Input (W)	Noise (dB)	External SP (Pa)	Enthalpy Exchange Eff. (%)		Weight (Kg)
			CMH	CFM				Cooling	Heating	
FY-250ZDY2	Heat Exchange Ventilation	Extra high	250	148	104-109	27-28	90	63	70	29
		High	250	148	99-114	26-27	80	63	70	
		Low	170	100	79-90	21-22	37	66	73	
	Normal Ventilation	Extra high	250	148	103-119	27-28	90	-	-	
		High	250	148	98-114	26.5-27.5	80	-	-	
		Low	170	100	79-90	21.5-22.5	37	-	-	
FY-350ZDY2	Heat Exchange Ventilation	Extra high	350	207	137-154	31-32	95	66	69	37
		High	350	207	124-137	29-30	65	66	69	
		Low	280	165	117-128	25-26	42	69	71	
	Normal Ventilation	Extra high	350	207	133-151	31-32	95	-	-	
		High	350	207	119-132	30-31	65	-	-	
		Low	280	165	113-125	26-27	42	-	-	
FY-500ZDY2	Heat Exchange Ventilation	Extra high	500	295	188-214	33-34	105	62	67	43
		High	500	295	169-188	31-32	70	62	67	
		Low	370	218	151-166	25-26	38	67	71	
	Normal Ventilation	Extra high	500	295	184-210	34-35	105	-	-	
		High	500	295	161-182	32-33	70	-	-	
		Low	370	218	145-164	26.5-27.5	38	-	-	
FY-800ZDY2	Heat Exchange Ventilation	Extra high	800	472	316-347	38-39	140	65	71	71
		High	800	472	309-329	36.5-37.5	110	65	71	
		Low	650	384	302-327	32-34	70	68	74	
	Normal Ventilation	Extra high	800	472	309-337	38.5-39.5	140	-	-	
		High	800	472	300-325	37-38	110	-	-	
		Low	650	384	297-316	33-35	70	-	-	
FY-01KZDY2A	Heat Exchange Ventilation	Extra high	1,000	590	399-445	37.5-38.5	90	65	71	83
		High	1,000	590	360-399	36-37	55	65	71	
		Low	810	478	332-367	31-33	35	68	73	
	Normal Ventilation	Extra high	1,000	590	392-438	38-39	90	-	-	
		High	1,000	590	358-392	36.5-37.5	55	-	-	
		Low	810	478	329-362	31.5-33.5	35	-	-	

Note : The values in specification tables are representative characteristic values at 220 V, 50Hz, and 1 phase

• USE CONDITION

- **Outdoor air conditions**

  Temperature range -10°C ~ 40°C

  Relative humidity 85% or less
- **Indoor air conditions**

  Temperature range -10°C ~ 40°C

  Relative humidity 85% or less
- **Installation requirements**

  Same as the indoor air conditions

  “Indoor air here means air in air-conditioned living rooms. Its use in refrigerators or other places where temperature can fluctuate greatly is prohibited even if a temperature range is acceptable.”

TECHNICAL DATA

No	Parts Name	Qty.	Material	Remarks
1	Frame	1	Galvanized sheets	
2	Adapter	4	ABS : FY-250•350•500ZDY2, Galvanized sheets : FY-800ZDY2, 01KDY2A	
3	Electrical Equipment Box	1		
4	Inspection Cover	1	Galvanized sheets	
5	Fan	2	ABS	
6	Motor	2		
7	Heat Exchange Element	*	Special paper + Resin	
8	Filter	2	Nylon-Polyester Fiber	Collection Efficiency AFI 82%
9	Damper	1		
10	Damper Motor	1		
11	Ceiling Suspension Fixture	4	Galvanized sheets	

FINE FACTORY FAN

FY-45DSLS

FEATURES

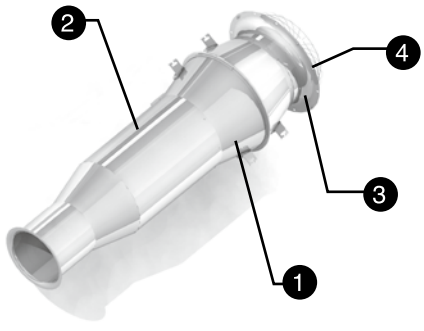
Temperature reduction ventilation for factory

- Respond to Thai law on temperature control in factory by type of work.

Type of work	Means	Temperature	Example	Section
Light work	Work under less force or energy	Under 34^{0}C	Writing & typing work, secondary data record, product inspection, assembly of small pieces of work, machine control by foot, stand & walk around machine	Assembly, Office
Meduim work	Work with medium force	Under 32^{0}C	Lifting, towing, pulling & pushing works or remove things using medium force, lifting a big part in-out of a machine	Injection, Press
Heavy work	Work with greater force or energy	Under 30^{0}C	Wood-sawing work, hard-wood boring work, pounding work with large heavy hammer, lifting work or removing, heavy object up the high place or slope, melt oven of work	Die Cast

- Improve working environment by air intake from outside and exhaust heat out of the factory in order to reduce body temperature by wind.
- Environmental preservation
- Ventilating utilization at car park in the building.

PRODUCT AND ACCESSORIES

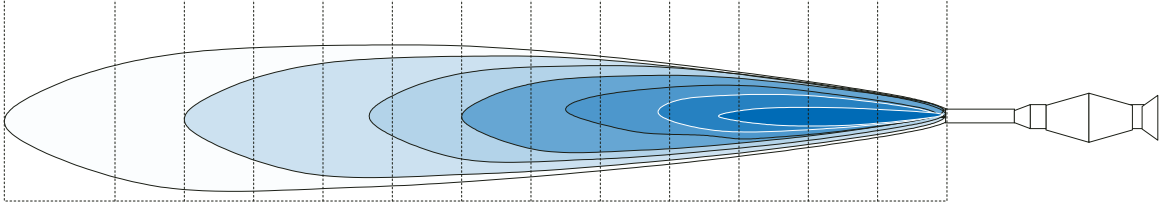


1. Compact Axial Flow Fan
2. Duct (Exhausting wind in long distance)
3. Inlet Cone
4. Wire Guard

CHARACTERISTIC OF LONG DISTANCE DUCT

Narrow wind diffusion radius but long wind velocity

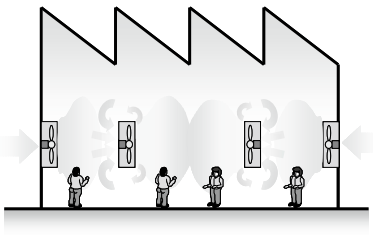
20m	15m	12m	10m	9m	8m	7m	6m	5m	4m	3m	2m	1m	Longitudinal coverage	
1 m/s	1.3 m/s	1.5 m/s	1.7 m/s	1.85 m/s	2.1 m/s	3 m/s	3.25 m/s	4.20 m/s	5.45 m/s	6.55 m/s	8.28 m/s	14.1 m/s	Attainment velocity of the wind	Central portion / Velocity of wind
0.32m	1.80m	1.95m	1.82m	1.85m	1.88m	1.86m	1.70m	1.60m	1.27m	0.76m	0.55m	0.42m	Velocity of the wind diffusion radius	1m/s or more
		0.15m	0.45m	0.76m	1.13m	1.55m	1.54m	1.37m	0.99m	0.66m	0.50m	0.39m		1.5m/s or more
					0.45m	1.18m	1.37m	1.20m	0.82m	0.61m	0.44m	0.36m		2m/s or more
						0.14m	0.89m	0.7m	0.62m	0.46m	0.37m	0.32m		3m/s or more
								0.10m	0.42m	0.35m	0.30m	0.28m		4m/s or more
									0.35m	0.26m	0.24m	0.25m		5m/s or more
										0.15m	0.20m	0.22m		6m/s or more



APPLICATION SAMPLES

1. **Fan cannot intake outside air into inside factory.**
   - There is limitation on the distance of air circulating by fans within the factory. In case of air circulating at the center of factory in which wind may pass, the high temperature spreads everywhere.
   - If connecting the duct with Compact Axial Flow Fan, it can exhaust the wind at long distance and cause comfortable temperature at that place.

Before



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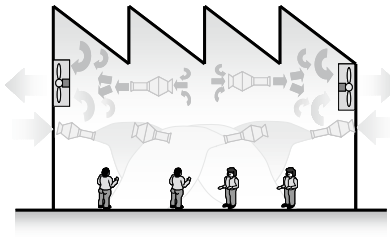
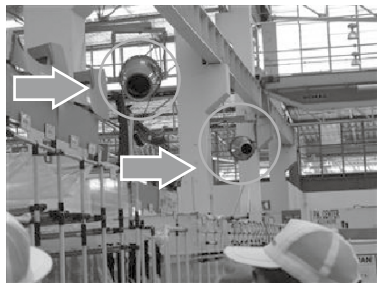
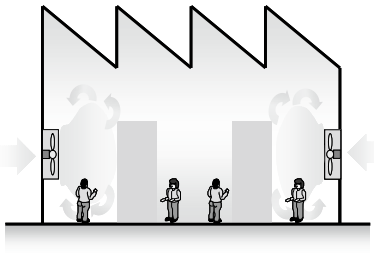


Sample



2. **There are equipments obstructing the wind such as machine, etc.**
   - Stuffy weather from obstructing equipments such as machine blocking the wind will cause uncomfortable atmosphere for work.
   - Fine Factory Fan (Compact Axial Flow Fan connecting with duct) intakes air from outside into the factory to create comfortable air.

Before



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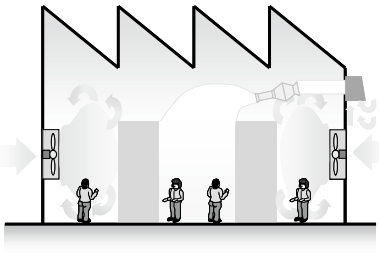
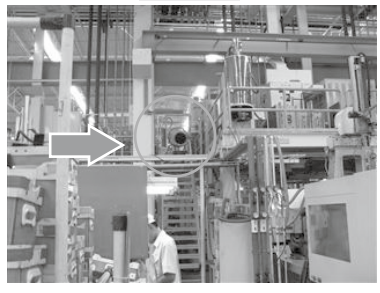
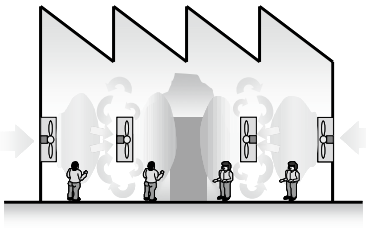


Sample



3. **There is high temperature inside the factory.**
   - There are machines emitting hot temperature to the center of factory and not being able to ventilate air from outside to that area. The hot temperature is still floating within the factory.
   - Fine Factory Fan can intake air from outside to inside the factory and exhaust hot temperature to outside.

Before



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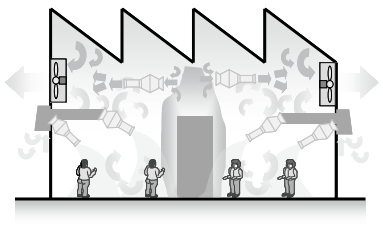

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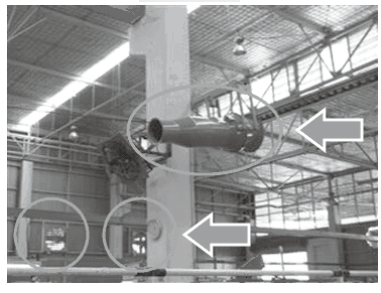
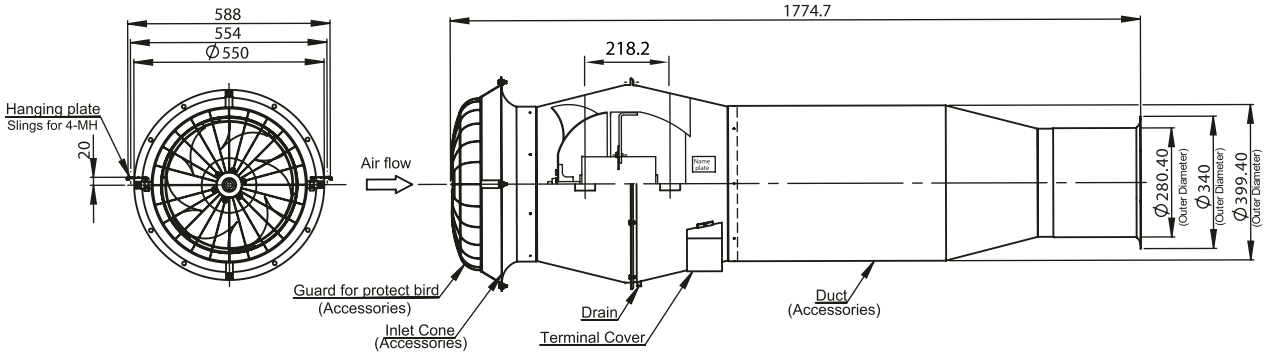


DIMENSIONS (mm.)



SPECIFICATIONS

Model	Phase	Voltage	Input (W)	Noise (dB(A))			Weight (kg)	Installed Area
				Casing	Suction	Discharge		
FY-45DSL-SP	1	220	523	58.8	68	68	54.4	Inside building