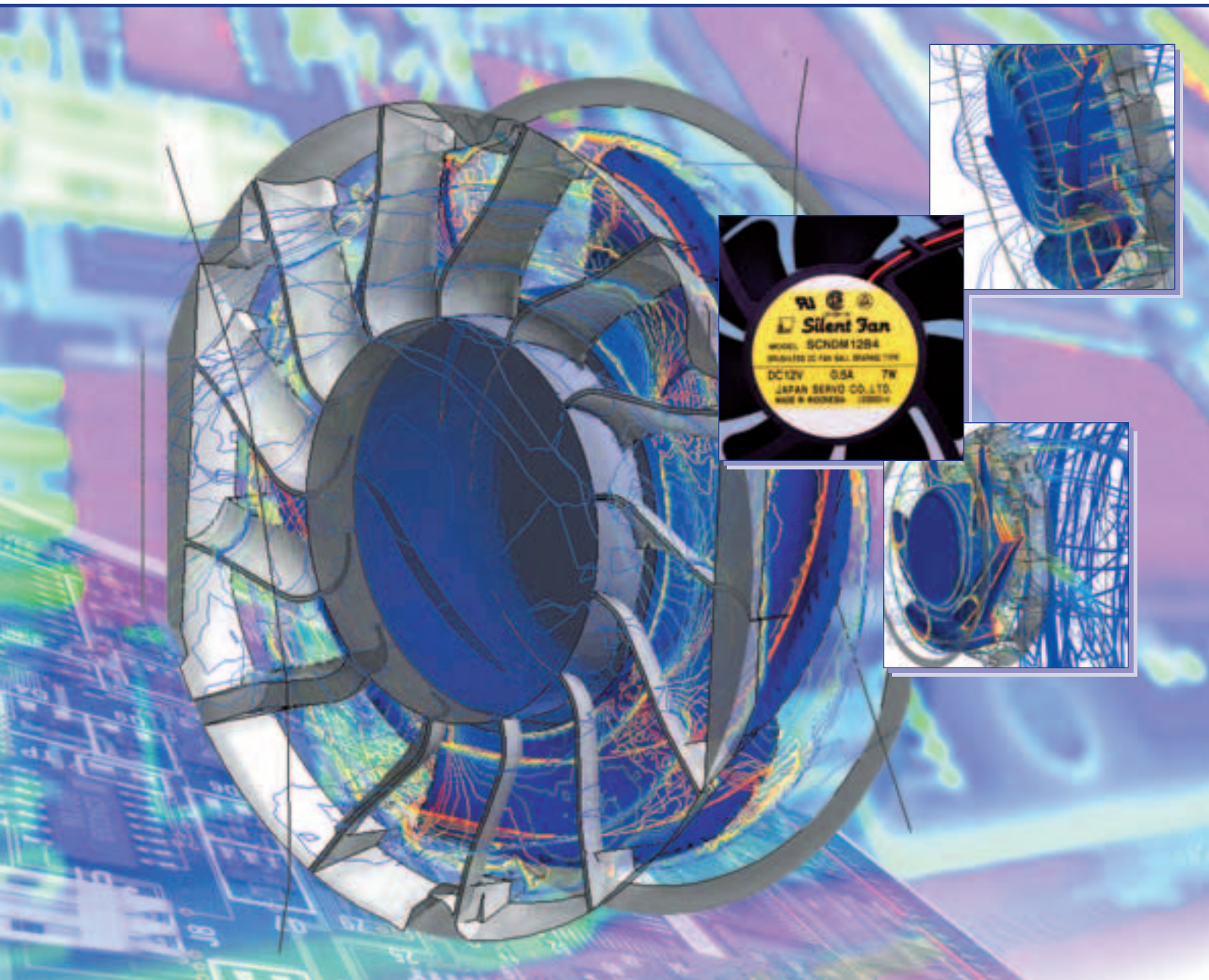


# ***DC axial fans***

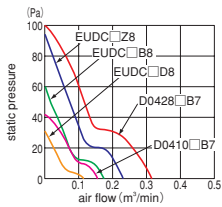
## ***Specification data***

The best cooling solution will be found by best choice of air moving devices



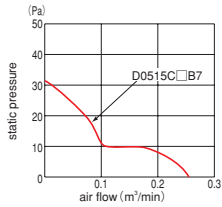
# Industrial standard BOX style fans

## Size 40 (1.6")



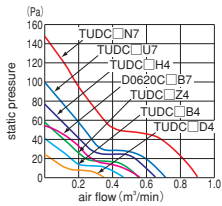
Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range	
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start			
10	0.15	5	41	0.17	25	6200	0.8	5	4.5 ~ 5.5	160		D0410C05B7AZ-00	-10 ~ +60	
								12	7 ~ 13.8	70		D0410C12B7AZ-00		
13	0.23	8	79	0.32	37	9000	1.5	12	7.2 ~ 13.8	130	270	EUDC12Z8	-20 ~ +70	
								12	7.2 ~ 13.8	75	190	EUDC12B8		
								1.1	24	14.4 ~ 27.6	50	100		EUDC24B8
28	0.12	4	30	0.12	26	5200	0.5	12	8.4 ~ 13.8	40	90	EUDC12D8	-20 ~ +80	
								2.3	12	7 ~ 15.5	195			D0428C05B7AZ-00
								2.3	12	7 ~ 15.5	195		D0428C12B7AZ-00	-10 ~ +60
								2.3	24	12 ~ 27.6	95		D0428C24B7AZ-00	

## Size 52 (2")



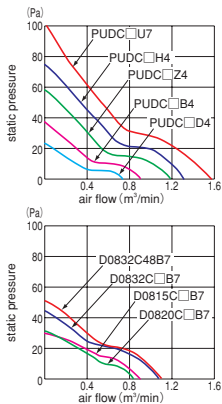
Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start		
15	0.26	9	32	0.13	27	4600	1.2	12	7 ~ 13.8	100		D0515C12B7AZ-00	-10 ~ +60
								24	14 ~ 27.6	50		D0515C24B7AZ-00	

## Size 60 (2.4")



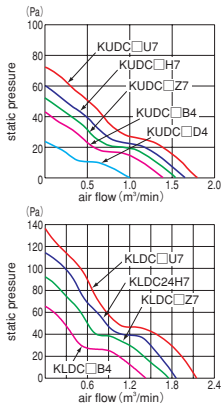
Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code*		temperature usage range
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start	none ribbed	ribbed	
20	0.42	15	32	0.13	31	4200	1.6	12	10.2 ~ 13.8	130			D0620C12B7AZ-00	-10 ~ +60
								24	20.4 ~ 27.6	70		D0620C24B7AZ-00		
	0.55	19	53	0.21	41	5600	3.4	48	43 ~ 53	70			D0620C48B7AZ-00	
25	0.87	31	130	0.52	46	6800	4.2	12	7.2 ~ 13.8	350	1430	TUDC12N7F	TUDC12N7	-20 ~ +60
								24	12 ~ 27.6	170	700	TUDC24N7F	TUDC24N7	
	0.74	26	100	0.40	39	5700	2.5	12	6 ~ 13.8	210	790	TUDC12U7F	TUDC12U7	-20 ~ +60
								24	7.2 ~ 13.8	220	710	TUDC12H4F	TUDC12H4	
	0.65	23	75	0.30	37	5000	2.6	24	12 ~ 27.6	110	360	TUDC24H4F	TUDC24H4	-20 ~ +60
								2.5	48	24 ~ 55.2	50		TUDC48H4	
0.55	19	59	0.24	32	4300	1.8	12	7.2 ~ 13.8	140	550	TUDC12Z4F	TUDC12Z4	-20 ~ +70	
							24	12 ~ 27.6	80	270	TUDC24Z4F	TUDC24Z4		
0.47	17	39	0.16	27	3650	1.4	12	7.2 ~ 13.8	130	380	TUDC12B4F	TUDC12B4	-20 ~ +70	
							24	12 ~ 27.6	70	190	TUDC24B4F	TUDC24B4		
0.35	12	24	0.09	20	2750	0.9	12	8.4 ~ 13.8	80	210	TUDC12D4F	TUDC12D4	-20 ~ +70	
							24	14.4 ~ 27.6	40	110	TUDC24D4F	TUDC24D4		

## Size 80 (3.2")



Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code*		temperature usage range
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start	none ribbed	ribbed	
15	0.91	32	29.4	0.12	31	3100	2.4	12	7.2 ~ 13.8	200			D0815C12B7AZ-00	-10 ~ +60
								24	14 ~ 27.6	100		D0815C24B7AZ-00		
20	0.84	30	29.4	0.12	31	2900	2.5	12	10.2 ~ 13.8	210			D0820C12B7AZ-00	-10 ~ +60
								24	20.4 ~ 27.6	120		D0820C24B7AZ-00		
25	1.58	56	100	0.40	47	4560	4.0	12	7.2 ~ 13.8	340	1080	PUDC12U7	PUDC12U7R	-20 ~ +60
								24	12 ~ 27.6	190	510	PUDC24U7	PUDC24U7R	
	1.32	47	73.5	0.30	40	3900	3.8	12	7.2 ~ 13.8	320	730	PUDC12H4	PUDC12H4R	-20 ~ +60
								24	12 ~ 27.6	160	340	PUDC24H4	PUDC24H4R	
	1.2	42	58.8	0.24	35	3500	2.4	12	7.2 ~ 13.8	160	520	PUDC12Z4	PUDC12Z4R	-20 ~ +70
								24	12 ~ 27.6	100	200	PUDC24Z4	PUDC24Z4R	
0.94	33	38.22	0.15	30	2800	1.5	12	7.2 ~ 13.8	140	320	PUDC12B4	PUDC12B4R	-20 ~ +70	
							24	12 ~ 27.6	70	180	PUDC24B4	PUDC24B4R		
0.73	26	24.5	0.10	23	2150	1.0	12	8.4 ~ 13.8	80	180	PUDC12D4	PUDC12D4R	-20 ~ +70	
							24	14.4 ~ 27.6	40		PUDC24D4	PUDC24D4R		
32	1.05	37	43	0.17	33	3150	1.9	12	10.2 ~ 13.8	160			D0832C12B7AZ-00	-10 ~ +60
								24	20.4 ~ 27.6	90		D0832C24B7AZ-00		
								2.9	48	43 ~ 53	60		D0832C48B7AZ-00	

## Size 92 (3.6")



Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code*		temperature usage range
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start	none ribbed	ribbed	
25	1.8	64	70	0.28	41.5	3450	4.2	12	7.2 ~ 13.8	350	880	KUDC12U7	KUDC12U7V	-20 ~ +60
								4.8	24	12 ~ 27.6	200	460	KUDC24U7	
	1.66	59	60	0.24	39	3200	3.2	12	7.2 ~ 13.8	270	690	KUDC12H7	KUDC12H7V	-20 ~ +70
								3.6	24	12 ~ 27.6	150	350	KUDC24H7	
	1.55	55	52	0.21	37	2950	3.0	12	7.2 ~ 13.8	250	550	KUDC12Z7	KUDC12Z7V	-20 ~ +70
								3.3	24	12 ~ 27.6	140	320	KUDC24Z7	
1.4	49	43	0.17	34	2750	2.8	12	7.2 ~ 13.8	230	480	KUDC12B4	KUDC12B4V	-20 ~ +70	
							24	12 ~ 27.6	130	240	KUDC24B4	KUDC24B4V		
1	35	24	0.10	26	1950	1.2	12	8.4 ~ 13.8	110	240	KUDC12D4	KUDC12D4V	-20 ~ +70	
							1.3	24	14.4 ~ 27.6	60	110	KUDC24D4		KUDC24D4V
32	2.1	74	140	0.56	48	4800	5.7	12	6 ~ 13.8	470	1700		KLDC12U7	-20 ~ +60
								6.2	24	12 ~ 27.6	260	870		
	1.9	67	115	0.46	45	4150	4.6	24	12 ~ 27.6	190	690	KLDC24H7F	KLDC24H7	-20 ~ +70
								4.0	12	7.2 ~ 13.8	340	960	KLDC12Z7F	
1.7	60	86	0.35	43	3800	3.6	24	12 ~ 27.6	150	480	KLDC24Z7F	KLDC24Z7	-20 ~ +70	
							12	7.2 ~ 13.8	280	570	KLDC12B4F	KLDC12B4		
1.5	53	65	0.26	39	3200	3.5	24	12 ~ 27.6	140			KLDC24B4F	KLDC24B4	

\* All models shown above are recognized by UL, CSA, TUV standards.

\* Ribbed option ; to reinforce the flange against tightening force

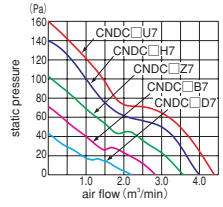
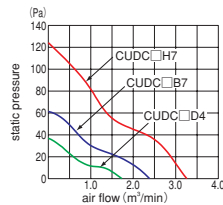
Suffix code in ribbed venturi column is showing as follows

R: Ribbed flange venturi, V: Spacers are attached to the corners of flange, F: Not ribbed flange (open flange)

\*Detail of specifications are shown on general catalogue

# Industrial standard BOX style fans

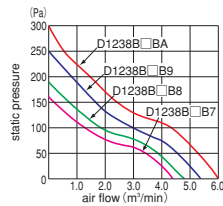
## Size 120 (4.7")



Thk mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code*		temperature usage range
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start	none ribbed	ribbed	
25	3.25	115	125	0.50	50	3700	6.5	12	8.4 ~ 13.8	540	2120	CUDC12H7		-20 ~ +70
								24	19.2 ~ 27.6	270	1180	CUDC24H7		
								48	40.8 ~ 55.2	140	450	CUDC48H7		
25	2.4	85	60	0.24	42	2650	3.7	12	6 ~ 13.8	280	740	CUDC12B7	CUDC12B7R	-20 ~ +60
								24	12 ~ 27.6	160	390	CUDC24B7	CUDC24B7R	
								48	24 ~ 55.2	80	190	CUDC48B7	CUDC48B7R	
25	1.7	60	36	0.14	34	1950	2.0	12	8.4 ~ 13.8	160	380	CUDC12D4	CUDC12D4R	-20 ~ +60
								24	14.4 ~ 27.6	90	190	CUDC24D4	CUDC24D4R	

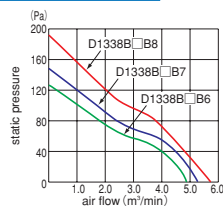
Thk mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code*		temperature usage range
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start	none ribbed	ribbed	
38	4.4	155	160	0.64	52	3800	11.2	12	8.4 ~ 13.8	930	2100	CNDC12U7		-20 ~ +70
								24	19.2 ~ 27.6	450	2000	CNDC24U7		
								48	40.8 ~ 55.2	225	1000	CNDC48U7		
38	4.0	140	140	0.56	51	3550	9.1	12	8.4 ~ 13.8	760	2080	CNDC12H7		-20 ~ +70
								24	19.2 ~ 27.6	390	1970	CNDC24H7		
								48	40.8 ~ 55.2	195	985	CNDC48H7		
38	3.5	105	105	0.42	49	3200	8.6	12	7.2 ~ 13.8	710	2350	CNDC12Z7		-20 ~ +70
								24	12 ~ 27.6	370	1200	CNDC24Z7		
								48	24 ~ 55.2	180	600	CNDC48Z7		
38	2.8	70	70	0.28	40	2650	4.6	12	7.2 ~ 13.8	380	1330	CNDC12B7		-20 ~ +70
								24	12 ~ 27.6	200	640	CNDC24B7	CNDC24B7V	
								48	24 ~ 55.2	100	320	CNDC48B7		
38	2.1	44	44	0.18	32	1950	2.6	12	8.4 ~ 13.8	200		CNDC12D7	CNDC12D7V	-20 ~ +70
								24	14.4 ~ 27.6	110		CNDC24D7		

### Diecasted aluminum venturi



Thk mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range	
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start			
38	6.2	219	300	1.21	62	5500	26.9	48	36 ~ 55.2	560		D1238B48BAAZ-00	-20 ~ +70	
								19.8	12	8.4 ~ 13.8	1650			D1238B12B9AZ-00
								19.7	24	16.8 ~ 27.6	820	2600		D1238B24B9AZ-00
								19.2	48	36 ~ 55.2	400			D1238B48B9AZ-00
	4.8	169	185	0.74	56	4400	14.4	12	8.4 ~ 13.8	1200		D1238B12B8AZ-00		
								13.9	24	16.8 ~ 27.6	580			D1238B24B8AZ-00
								15.4	48	36 ~ 55.2	320			D1238B48B8AZ-00
								14.4	12	8.4 ~ 13.8	1200			D1238B12B7AZ-00
	4.4	155	160	0.64	54	4000	14.4	24	16.8 ~ 27.6	600	1600	D1238B24B7AZ-00		
								12	8.4 ~ 13.8	250		D1238B48B7AZ-00		

## Size 127 (5")

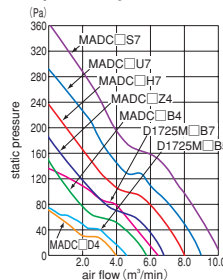


### Diecasted aluminum venturi

Thk mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range	
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start			
38	5.8	205	185	0.74	58	4500	19.8	12	8.4 ~ 13.8	1650		D1338B12B8AZ-00	-20 ~ +70	
								19.7	24	16.8 ~ 27.6	820			D1338B24B8AZ-00
								21.1	48	36 ~ 55.2	440			D1338B48B8AZ-00
								16.2	12	8.4 ~ 13.8	1350			D1338B12B7AZ-00
	5	177	150	0.60	54	3900	15.6	24	16.8 ~ 27.6	650		D1338B24B7AZ-00		
								16.8	48	36 ~ 55.2	350			D1338B48B7AZ-00
								12	8.4 ~ 13.8	1000		D1338B12B6AZ-00		
								24	16.8 ~ 27.6	500		D1338B24B6AZ-00		
	4.6	162	130	0.52	51	3400	12	48	36 ~ 55.2	250		D1338B48B6AZ-00		

## Size 172 (6")

### Ellipse style

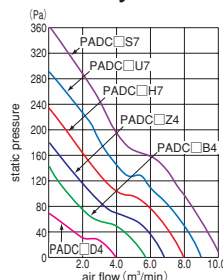


### Diecasted aluminum venturi

Thk mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range	
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start			
25	6.4	226	135	0.54	57	3400	24	24	20.4 ~ 27.6	1000		D1725M24B7AZ-00	-10 ~ +60	
							25	48	40.8 ~ 55.2	520		D1725M48B7AZ-00		
							16	12	10.2 ~ 13.8	1300		D1725M12B5AZ-00		
51	10.2	360	360	1.45	64	4800	47.5	48	40.8 ~ 55.2	990	2600	MADC48S7	-20 ~ +60	
								33.6	48	40.8 ~ 55.2	700	2600		MADC48U7
								30	12	8.4 ~ 13.8	2500	5800		MADC12H7
								25.2	24	12 ~ 27.6	1050	2700		MADC24H7
	8	282	235	0.95	57	3800	28.8	48	40.8 ~ 55.2	600	1100	MADC48H4		
								12	8.4 ~ 13.8	1500		MADC12Z4		
								24	12 ~ 27.6	790		MADC24Z4		
								48	28.8 ~ 55.2	400		MADC48Z4		
	6.8	240	176	0.71	54	3200	19	12	8.4 ~ 13.8	1080		MADC12B4		
								24	12 ~ 27.6	540		MADC24B4		
								48	28.8 ~ 55.2	270		MADC48B4		
								12	8.4 ~ 13.8	420		MADC12D4		
5.8	205	140	0.56	49.5	2800	13	24	12 ~ 27.6	540		MADC24D4			
							48	28.8 ~ 55.2	270		MADC48D4			
							12	8.4 ~ 13.8	420		MADC12D4			
							24	12 ~ 27.6	210		MADC24D4			

## Size 172 (6.9")

### Round style



### Diecasted aluminum venturi

Thk mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range	
	m³/min	cfm	Pa	inH₂O				Rating	usage range	Rating	Start			
51	10.2	360	360	1.45	62	4800	47.5	48	40.8 ~ 55.2	990	2600	PADC48S7	-20 ~ +60	
								33.6	48	40.8 ~ 55.2	700	2600		PADC48U7
								30	12	8.4 ~ 13.8	2500	5800		PADC12H7
								25.2	24	12 ~ 27.6	1050	2760		PADC24H7
	8	282	235	0.95	55	3800	28.8	48	40.8 ~ 55.2	600	1100	PADC48H4		
								12	8.4 ~ 13.8	1500		PADC12Z4		
								24	12 ~ 27.6	790		PADC24Z4		
								48	28.8 ~ 55.2	400		PADC48Z4		
	6.8	240	176	0.71	50	3200	19	12	8.4 ~ 13.8	1080		PADC12B4		
								24	12 ~ 27.6	540		PADC24B4		
								48	28.8 ~ 55.2	270		PADC48B4		
								12	8.4 ~ 13.8	420		PADC12D4		
5.8	205	140	0.56	46	2800	13	24	12 ~ 27.6	540		PADC24D4			
							48	28.8 ~ 55.2	270		PADC48D4			
							12	8.4 ~ 13.8	420		PADC12D4			
							24	12 ~ 27.6	210		PADC24D4			

Diecasted aluminum fans are available for painting option (black)  
Any type of rotation detector is available for all fans on the table (factory option)

# Cooling Solution with minimized noise

## Silent fan series

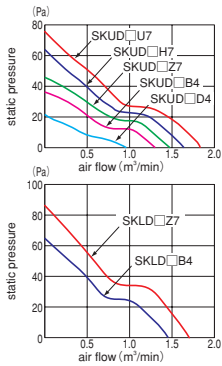
Design with round-shaped inlet to minimize turbulence

Generates a flow low in noise by addressing minimized turbulence and well-studied blade structure.



### Size 92 (3.6")

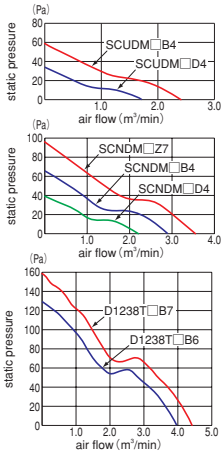
#### 100 (3.94") dia. round face inlet and 92 (3.6") square outlet flange



Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range
	m <sup>3</sup> /min	cfm	Pa	inH <sub>2</sub> O				Rating	usage range	Rating	Start		
25	1.8	60	72	0.26	39	3500	4.2	12	7.2 ~ 13.8	350	880	SKUD12U7	-20 ~ +60
							4.8	24	12 ~ 27.6	200	460	SKUD24U7	
	1.65	55	60	0.22	36	3150	3.2	12	7.2 ~ 13.8	270	690	SKUD12H7	
							3.6	24	12 ~ 27.6	150	350	SKUD24H7	
	1.45	51	45	0.18	34	2900	3.0	12	7.2 ~ 13.8	250	550	SKUD12Z7	
							3.3	24	12 ~ 27.6	140	320	SKUD24Z7	
	1.3	46	35	0.14	31	2600	2.9	12	7.2 ~ 13.8	230	480	SKUD12B4	
							2.8	24	12 ~ 27.6	130	240	SKUD24B4	
	0.95	34	22	0.09	24	1950	1.4	12	8.4 ~ 13.8	110	240	SKUD12D4	
							2.4	24	14.4 ~ 27.6	60	110	SKUD24D4	
32	1.7	60	86	0.35	41	3800	4.0	12	7.2 ~ 13.8	340	960	SKLD12Z7	-20 ~ +60
							3.6	24	12 ~ 27.6	150	480	SKLD24Z7	
	1.5	53	65	0.26	35	3200	1.2	12	7.2 ~ 13.8	280	570	SKLD12B4	-20 ~ +70
							2.4	24	14.4 ~ 27.6	140	110	SKLD24B4	

### Size 120 (4.7")

#### 128 (5") dia. round face inlet and 120 (4.7") square outlet flange



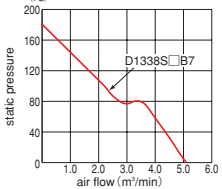
Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range
	m <sup>3</sup> /min	cfm	Pa	inH <sub>2</sub> O				Rating	usage range	Rating	Start		
25	2.4	85	57	0.23	40	2650	4.5	12	7.2 ~ 13.8	380	740	SCUDM12B4	-20 ~ +60
								24	12 ~ 27.6	200	390	SCUDM24B4	
	1.7	60	33	0.13	31	1950	2.0	12	8.4 ~ 13.8	170	380	SCUDM12D4	
								24	14.4 ~ 27.6	90	110	SCUDM24D4	
38	3.5	124	95	0.38	46	3200	8.6	12	7.2 ~ 13.8	710	2350	SCNDM12Z7	-20 ~ +70
							9.0	24	12 ~ 27.6	370	1200	SCNDM24Z7	
							10	48	24 ~ 55.2	210	110	SCNDM48Z7	
	3	106	64	0.26	40	2650	7.0	12	7.2 ~ 13.8	500	1050	SCNDM12B4	
							24	12 ~ 27.6	320	560	SCNDM24B4		
	2.2	78	39	0.16	30	1950	6.0	48	24 ~ 55.2	120	110	SCNDM48B4	
							12	8.4 ~ 13.8	230	630	SCNDM12D4		
							24	14.4 ~ 27.6	130	310	SCNDM24D4		

#### 120 (4.7") dia. round face inlet and 120 (4.7") square outlet flange

Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range
	m <sup>3</sup> /min	cfm	Pa	inH <sub>2</sub> O				Rating	usage range	Rating	Start		
38	4.4	155	160	0.64	50	4000	10	12	8.4 ~ 13.8	830	1500	D1238T12B7AZ-00	-20 ~ +70
							11.7	24	18 ~ 27.6	490	1040	D1238T24B7AZ-00	
							11	48	33.6 ~ 55.2	230	350	D1238T48B7AZ-00	
	4	141	130	0.52	47.5	3600	7.5	12	8.4 ~ 13.8	630	1050	D1238T12B6AZ-00	
							8.5	48	33.6 ~ 55.2	180	330	D1238T48B6AZ-00	

### Size 127 (5")

#### 127 (5") dia. round face inlet and 127 (5") square outlet flange



Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range
	m <sup>3</sup> /min	cfm	Pa	inH <sub>2</sub> O				Rating	usage range	Rating	Start		
38	5.1	180	185	0.74	53	4300	16.8	48	36 ~ 55.2	350	950	D1338S48B7AZ-00	-20 ~ +70

# Cooling Solution with high efficiency

## High pressure G1751 series

A new high efficiency axial flow fan created using the newly-introduced digital analysis technique  
Addresses high static pressure that matches the diagonal flow fans.

To improve static pressure, diagonal flow fans are generally used.

Diagonal flow fans generate a flow that spreads in centrifugal directions.

Thus it causes a problem in which the intended cooling air flow is not obtained at the back of the fan axis.

G1751M solves this problem and generates an air flow that is straight in the axis direction while addressing a high static pressure.

It is designed for large, high pressure resistance cooling cabinets and has capacity equivalent to that of the conventional 200(8") dia. size.

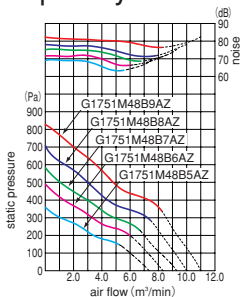
G1751M fan is intended to use under high pressure condition,

When low pressure and higher air flow is needed, then MADC fan is recommended.



### Size 172 (6")

#### Ellipse style



Th'k mm	Max. air flow		Max. static pressure		Noise dB	Speed r/min	input W	voltage V		current mA		Model code	temperature usage range
	m <sup>3</sup> /min	cfm	Pa	inH <sub>2</sub> O				Rating	usage range	Rating	Start		
51	11.2	395	840	3.38	76	6800	120	48	36 ~ 50.4	2500	5000	G1751M48B9AZ-00	-20 ~ +50
	10.0	353	710	2.85	71	6200	86	48	36 ~ 60	1800	4400	G1751M48B8AZ-00	-20 ~ +60
	9.2	325	580	2.33	69	5600	62.4	48	36 ~ 60	1300	4400	G1751M48B7AZ-00	
	8.3	293	490	1.97	66.5	5100	50.0	48	36 ~ 60	1040	2700	G1751M48B6AZ-00	
	7.3	258	360	1.45	63	4500	36.0	48	36 ~ 60	750	2550	G1751M48B5AZ-00	



Proposing the best cooling solution for the customers.

Addressing the customer demands into commercialization in a short period of time.

With these two points as targets, Japan Servo proactively promotes commercialization (introduction of CAD, CAE, DA) in product development process.

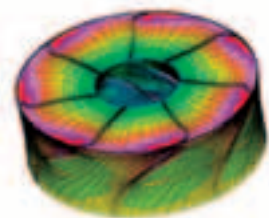
For fan and blower products, Japan Servo challenges new technology in many fields including aerodynamic analysis based on fluid simulation analysis, analysis of rotary magnetic field on motor iron-core, resin flow within the die for precision-molded products, and stress analysis under high-temperature conditions for propeller so that the best products can be developed within a short period of time utilizing digital engineering.

The outcomes have been seen not only in the new products of axial fans described in this catalog but also development of low-noise centrifugal blower, unique fans ordered specially for customers, and designing of assembled tray unit.

Furthermore, the automatic propeller designing system which Japan Servo has developed based on these fundamental analyzing technologies has already started. This system creates the optimal propeller design by calculating possibilities for all shapes when the desired static pressure and flow rate performance are input.

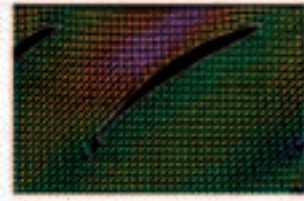
With these latest technologies that are continued to be improved, Japan Servo continues to provide new products following the concept of "providing the best solution for the customers."

## Fluid analysis and propeller design

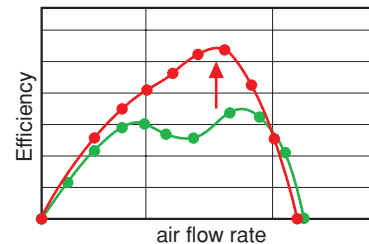


### Example of analysis results on flowline in propeller

Velocity and static pressure are expressed in a color scale and the air flow direction as vector line diagram so that the air behavior for each load condition is visualized.

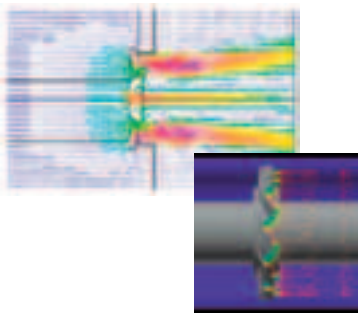


Flow at the axis block is checked by extracting an optional blade cross section.

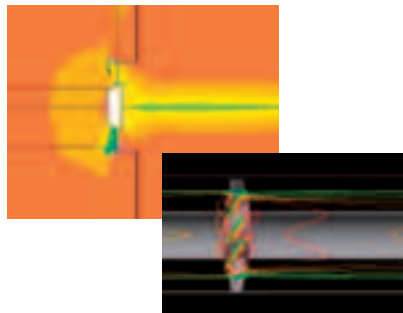


Several hundred propeller shapes are put to trial calculation to select the shape with best efficiency.

### Air flow velocity distribution in forward/backward direction of the fan



### Static pressure distribution in forward/backward direction of the fan



The propeller selected in automatic calculation is output as a 3D data.



Visit our website at <http://www.japanservo.com/>  
for more information and to request a CD-ROM Version of our product catalog.

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