

# AXIAL FLOW FANS COMPONENT WEIGHTS

Detailed below are the weights of the components that make up various products, the details have been broken up as follows: -

## Housing/Casing Weights

- Table 1. - Single stage axial flow fans – AP & APS Series
- Table 2. - Belt driven axial flow fans – APB Series
- Table 3. - Bifurcated axial flow fans – BFA Series
- Table 4. - Square plate axial flow fans – SQA & SQB Series
- Table 5. - Alpha/Beta Industrial roof units – RVLE & RDLE
- Table 6. - New Generation roof units – RVE, RSS, RDE, RSS
- Table 7. - High Capacity and Smoke Spill roof units – HC & SS

## Impeller Weights

- Table 8. – impeller weights from 315 to 2000mm diameter

## Motor Weights

- Table 9. – motor weights

## Ancillary Equipment Weights

- Table 10. – ancillary equipment weights

Note:- refer to Fantech for any fan/motor combination not listed.

## Example

To determine the weight of an AP Series axial flow fan - 1400mm diameter, 6 pole with 9 blade aluminium impeller 400 dia. hub and 30kW motor.

1. Casing weight, Table 1. for D225M motor frame	256
2. 9 blade impeller weight, Table 8.	53
3. 30kW, 16 rev/sec motor Frame Size D225M, Table 9.	330
4. 2 Matching Flanges & 2 Mounting Feet Table 10.	73.6
	<hr/> 713kg <hr/>

Reminder Note: As motor weights can vary by a factor of 1.5:1 from one manufacturer to another, please check with our Sales Engineers if the unit weight is critical to the building design.

## HOUSING/CASING WEIGHTS



**Table 1.**

**AP & APS Series - single stage axial flow fans**  
**AP.CR Series - single stage x 2**

### Motor Frame Size

Model AP & APS	D80/ D90		D100/ D112		D132		D160/ D180		D200		D225		D250		D280	
	031	10	15													
040	13	18														
050	16	23														
056	19	27	31													
063	22	30	34													
071	26	35	39													
080	29	40	44	57												
100	47	64	69	89												
125			88	172	209	227	239	283								
140			99	193	235	256	269	319								
160			113	221	270	294	310	367								
180			235	292	347	374	392	457								
200			261	325	386	417	437	510								



**Table 3.**

**BFA Series - bifurcated axial flow fans**

### Motor Frame Size

Model BFA	D80/ D90		D100/ D112		D132		D160/ D180		D200/ D225	
	040	26								
050	32									
056	36	44	47							
063	41	48	52							
071	47	56	59							
080	53	66	66							
100	83	98	103	138	278					
125		122	128	171	346					

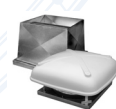


**Table 4.**

**SQA & SQB Series - square plate axial flow fans**

### Motor Frame Size

Model SQA & SQB	D80/ D90		D100/ D112		D132		D160/ D180	
	031	11	12					
040	14	15						
050	17	20						
056	21	23	29					
063	23	26	36	44				
071	26	29	40	49				
080	31	38	46	57				
100	50	56	72	87				
125		72	91	111				



**Table 5.**

**RDLE, RVLE Series -  
Alpha/Beta Industrial axial flow roof units**

### Motor Frame Size

Model RDLE & RVLE	D80/ D90		D100/ D112		D132		D160/ D180		D200/ D225	
	071	49	51							
080	66	68	71							
100		90	94							

# AXIAL FLOW FANS COMPONENT WEIGHTS



**Table 6.**  
RVE, RSS, RDE & RDS - New Generation axial flow roof units

Model RDE/S & RVE/SS	Motor Frame Size				
	D80/ D90	D100/ D112	D132	D160/ D180	D200/ D225
031	20	25			
040	28	33			
050	38	44			
056	38	47	47	59	
063	55	63	63	78	
071	57	67	67	82	
080	71	85	86	100	
100	106	123	128	148	253
125	153	174	174	282	338



**Table 7.**  
HC & SS Series - High Capacity & Smoke Spill axial flow roof units

Model HC & SS	Motor Frame Size							
	D80/ D90	D100/ D112	D132	D160/ D180	D200	D225	D250	D280
050	38	45						
056	40	47	51	60				
063	54	62	67	77				
071	60	69	73	84				
080	70	84	85	99				
100		122	127	147	238	252		
125		154	161	262	300	328		
140			192	310	350	371	384	435
160			227	362	410	433	449	508
180			361	418	473	500	518	583

## ANCILLARY EQUIPMENT WEIGHTS

**Table 10.**  
Approximate ancillary equipment weights

Fan Dia. mm	Matching Flanges kg, each	Mounting Feet kg, each	Inlet Cones		Wire Guards kg, each
			No Guard	With Guard	
315	0.7	0.6	2.5	3.6	1.1
400	1.0	1.0	4.5	6.1	1.6
500	1.3	1.6	6.2	8.4	2.2
560	1.4	2.1	7.5	10.0	2.5
630	1.6	2.5	9.0	11.6	2.6
710	4.7	2.7	11.1	14.3	3.2
800	5.2	3.2	14.4	17.9	3.5
1000	7.4	8.0	20.0	26.1	6.1
1250	9.1	14	29.0	36.8	7.8
1400	17.8	19	29.7	39.3	9.6
1600	20.3	23	51.3	60.9	9.6
1800	22.8	35	81.2	93.7	12.5
2000	25.3	40	83.2	95.7	12.5

## IMPELLER WEIGHTS

**Table 8.**  
Approximate impeller weights

Number of blades	Hub Dia. mm	Max. Dia. mm	Weight, kg			
			GRP	Nylon	Alum.	Anti- static
5	150	900	1.1	1.8	2.6	1.1
10	150	900	2.1	2.5	4.1	2.1
7	250	1000	3.3	3.6	4.9	3.3
14	250	1000	4.2	4.7	7.3	4.2
3	255	1300	5.0	-	7.9	5.2
6	255	1300	6.3	-	11.9	6.6
3	350	1400	9.5	-	12.6	9.6
6	350	1400	10.8	-	16.6	11.1
9	350	1400	12.1	-	20.6	12.5
12	350	1400	13.4	-	24.6	14.0
3	400	1800	19	-	27	-
6	400	1800	24	-	40	-
9	400	1800	29	-	53	-
3	550	2000	25	-	33	-
6	550	2000	30	-	46	-
9	550	2000	35	-	58	-
12	550	2000	40	-	71	-

## MOTOR WEIGHTS

**Table 9.**  
Approximate motor weights

Motor Frame	Shaft Dia. mm	App. wt. kg	Motor kW ratings			
			48 r/s	24 r/s	16 r/s	12 r/s
D71	14	11	0.37	0.37	-	-
D71	14	16	0.55	-	-	-
D80	19	18	0.75	0.55	0.37	-
D80	19	22	1.1	0.75	0.55	-
D90S	24	25	1.5	1.1	0.75	-
D90L	24	30	2.2	1.5	1.1	0.55
D100L	28	38	3	2.2	1.5	0.75
D100L	28	44	-	3	-	1.1
D112M	28	52	4	4	2.2	1.5
D132S	38	73	5.5/7.5	5.5	3	2.2
D132M	38	87	-	7.5/10	4/5.5	3
D160M	42	130	11/15	11	7.50	4/5.5
D160L	42	150	18.50	15	11	7.50
D180M	48	185	22	18.50	-	-
D180L	48	200	-	22	15	11
D200L	55	265	30/37	30	18.5/22	15
D225S	55/60	310	-	37	-	18.50
D225M	55/60	330	45	45	30	22
D250S	60/70	430	-	-	37	30
D250M	60/65	430	55	55	45	37
D280S	65/70	660	75	75	55	45
D280M	65/80	700	90	90	75	55