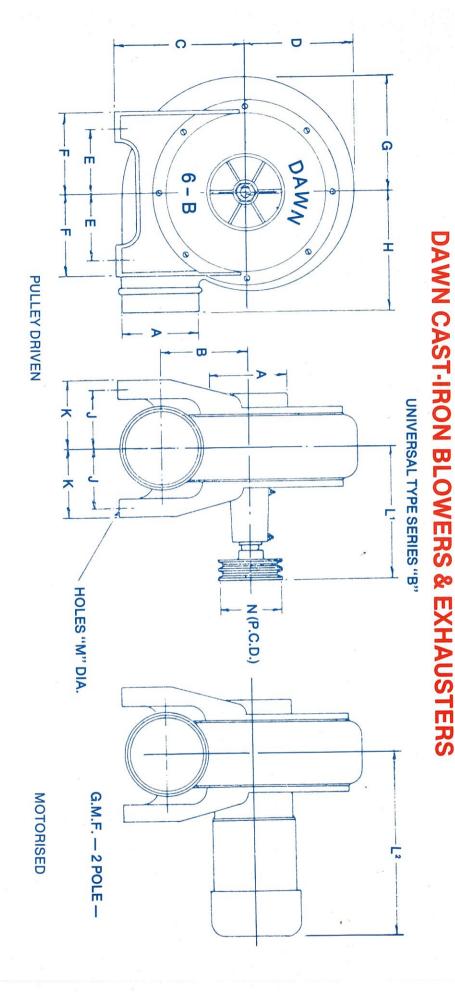
All dimensions in millimetres.

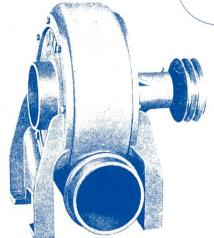
-							
	6 B	5 B	4 B	3%B	3 B	2½B	FAN No.
	165	140	115	100	90	75	A
	185	160	145	125	110	75	Φ.
	275	250	225	200	175	125	C
	225	195	175	150	135	100	D
	140	115	115	90	90	50	ш
	175	150	145	125	115	75	П
	250	215	190	165	145	110	D
	250	215	200	175	150	115	I
	125	115	100	90	75	65	ر
	145	130	115	100	85	75	7
	275	265	210	200	150	150	Ľ.
	395	380	360	360	350	350	۲,
	15	15	10	10	10	10	3
	125	125	100	90	75	65	z
	2B	2B	2A	1A	1A	1A	PULLEY ROPES



DAWN Cast Iron Exhaust Fans

Maric

UNIVERSAL SERIES "B"



A completely new range of DAWN Centrifugal Fans has been introduced to supersede the range of DAWN Cast Iron Blowers and Exhausters which have been in production for many years.

There are six sizes in the range: $2\frac{1}{2}$ -B, 3-B, $3\frac{1}{2}$ -B, 4-B, 5-B, & 6-B.

WEIGHTS OF 'B' SERIES BLOWERS

Motorised	Pulley Drive
63 kg	57 kg
45 kg	38 kg
	32 kg
	23 kg
	14 kg
18 kg	11 kg
	63 kg 45 kg 41 kg 29 kg 23 kg

DAWN 4-B BELT DRIVEN FAN

NEW FEATURES:

- a. All 16 Angular Positions of Discharge clockwise or counter-clockwise, as detailed in BS-848; Part 1:1963 Appendix B, may be obtained from single fan.
- b. Sealed Bearings have additional Dust Protection.
- c. Higher Fan Efficiency, for more economical operation.
- d. Stronger and more Compact Construction.
- e. Standardization of Components.
- f. Inlets and Outlets of the same size for greater convenience when installing in ducting.

CONSTRUCTION:

All six sizes are available as Belt Driven units or as Direct Coupled motorised, Single or Three phase. BELT DRIVEN: The robust cast iron Case is designed to give long life when abrasive or corrosive materials are carried in the air stream. There are spigots of similar size at Inlet and Outlet to take Duct connections. The bearing housing forms part of the drive side cheek and houses two single row dust sealed bearings which carry a toughened steel spindle to which is attached a cast impeller. Additional dust protection is provided where the spindle enters the case. The bearings are grease lubricated. The impeller is cast in one piece and has six equi-spaced blades projecting from a shallow coned centre, its rigid construction will ensure many years of trouble free service. The standard impeller is cast aluminium for motorized units and gun metal for pulley drive units except size 6B which is cast steel. Cast aluminium impellers can be supplied for all pulley drive units if required.

MANUFACTURED BY:

DAWN TOOLS & VICES

1 NORRIS STREET, NORTH COBURG, VIC., 3058, AUSTRALIA —

PHONE: 350 3811 (6 Lines)



OBTAINABLE FROM:

MOTORISED: All construction details of the direct coupled Motorised units are the same as for Belt Driven except: The Drive side Cheek has bolted to it a Face-mounted 2 Pole 50 Hz Motor the shaft of which carries the Impeller. These are also double protected Dust Sealed. The standard Motor sizes are as follows:

2½-B, 0.18 kW 4-B. 0.56 kW 3-B, 0.18 kW 5-B, 0.75 kW 3½-B, 0.37 kW 6-B, 1.5 kW

For all Mounting Dimensions see page 4. Standard impellers cast Aluminium.

APPLICATIONS:

These Fans are designed primarily for the CONVEYING of solid materials such as; Sawdust, Bakelite Dust, Asbestos Dust, Cotton, Wool, etc., and for EXHAUSTING of Dust from Grinding and Polishing Wheels, Leather, Flock and Kapok, Woodworking and general Textile machinery. They are ideal also for the removal of Dust, Fumes, and Smoke.

for the removal of Dust, Fumes, and Smoke.
They are also used as BLOWERS for general drying applications, for supplying supplementary combustion air to fire boxes, for cooling air blast to electrical equipment, for laboratory work requiring relatively small volume of air in the pressure range 0.12 kPa to 2.5 kPa, and for many other Blowing or Exhausting duties within the capacities shown in the Performance Tables on opposite page.

PERFORMANCE:

The Performance Tables shown opposite are taken from actual tests performed in accordance with BS-848: Part 1:1963. Test Method No. 3. Test readings have been corrected to Standard Air conditions which, according to the above specification is, "Atmospheric air having a weight per unit volume of 0.0012 kg/m³ i.e., Air at 20°C temperature, 100 kPa barometric pressure, 62% relative humidity. Linear velocities are given in the Tables to assist in selection of a Fan for Conveying or Exhausting of solid materials.

kW shown in the Tables is the Fan requirement at each point of rating, transmission losses of the drive must be added in selecting motor size.

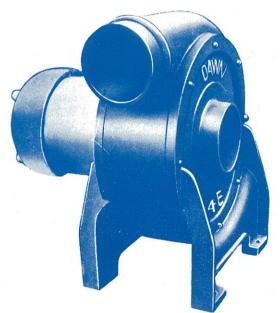
OPERATION CHARACTERISTICS:

These Fans operate in conjunction with a duct system of varying lengths and diameters depending on the actual number of branch ducts and length of air travel, and they may either exhaust materials or merely exhaust or blow air. The system resistance is different in every case and the required air volume is a function of the particular job to be done. Each application means a separate volume-

static pressure relationship and hence the fans are required to operate over a speed range to achieve the particular conditions required in each application. This means that they must generally be belt driven to alter fan shaft speed from the motor drive speed.

"DAWN" MILL Exhaust Fans:

If the capacity your application requires exceeds the capacity of this range of Fans, may we refer you to the "DAWN" Fabricated Steel MILL EXHAUST range with capacities up to 9400 L/s @ 2.5 kPa. Static Pressure resistance.



"DAWN" 4-B MOTORISED FAN

DAW			IRC	NE	XHA	AUS	T FA	INS		_	U	UNIVERSAL SERIES "B"					
PERFORMANCE		ES: 0.18	0.05	0.07	0.5	0.6	0.75	10	1.05	4.5	4.75	2.0	0.05	0.5	0.75	0.0	
⟨Pa 0.06 No. 2½ B — 2850 r/min		100	0.25	0.37	0.5	0.6	0.75	1.0	1.25 Test Du	1.5 ct Area –	1.75 - 0.003 m	2.0	2.25	2.5	2.75	3.0	
_/s 50 m/s 16	46 14	40 13	29 9	nd													
KW 0.03 3500 r/min.	0.023	0.023	0.015	0.015								-					
Ús n/s	60 19	54 17	48 15	35 11	nd									-			
kW 1000 r/min.	0.045	0.0375	0.0375	0.03	0.023		-										
Js n/s	71 22	66 21	62 20	47 15	40 13	nd			- 1				0				
W No. 3 B — 2000 r/min.	0.11	0.098	0.083	0.045	0.0375				Toot Du	ot Aron	0.0046 n	22					
Js 68 m/s 15	58 13	45 10	39 9	nd					rest Du	Ci Alea -	0.00461						
W 0.06	0.0375			0.03													
2850 r/min. L/s 103	97	92	88 19	74	62	49	nd										
n/s 23 kW 0.17	21 0.16	20 0.15	0.13	16 0.12	0.11	11 0.11	0.11										
3500 r/min. _/s	125	122	120	110	99	88	78	58	nd								
n/s (W	27 0.29	27 0.28	27 0.25	0.24	22 0.23	19 0.22	17 0.22	13 0.2	0.19								
4000 r/min. ⊿s		141	137	130	124	115	110	88	69	nd							
n/s kW		31 0.56	30 0.56	29	27 0.48	25 0.47	24 0.36	17 0.32	15 0.29	0.25							
1500 r/min.		0.00	7.554.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						05						
Js n/s			160 35	158 35	152 33	143 32	134 30	117 26	101 22	86 19	65 14	nd					
W No. 3½ B — 2000 r/min			0.80	0.70	0.54	0.53	0.53	0.50	0.47 Test Du	0.44 ct Area –	0.37 0.0062 n	0.34	1				
Js n/s	118 19	106 17	94 15	59 10	nd								Í				
2850 r/min.	0.16	0.14	0.12	0.11	0.09		-										
Js n/s		167 27	160 26	143 23	127 21	106 17	76 13	nd									
:W		0.41	0.35	0.33	0.32	0.31	0.30	0.25									
3500 r/min. Js			207	200	188	174	160	127	68	nd							
n/s :W			33 0.68	32 0.68	30 0.67	28 0.65	26 0.65	21 0.63	11 0.43	0.33							
1000 r/min. Js				235	227	216	205	181	150	111	nd						
n/s :W			- 2	38 1.2	37 1.1	35 1.1	33 1.1	29 0.98	24 0.90	18 0.68	0.49						
500 r/min. Js					244		228	205	179	148	115	68	nd				
n/s					40 1.28		37	33 1.2	29 1.13	24	19	11 0.69	0.63				
No. 4 B — 2000 r/min.	457		100					1		ct Area –	0.0081 n		0.00				
Js n/s	157 20		133 17	11	90		nd										
:W 2850 r/min.	0.22		0.17		0.11		0.07										
Js n/s	244 30		233 29		202 25		185 23	139 17	82 10	nd							
500 r/min.	0.47		0.44		0.41		0.20	0.33	0.22	0.14							
Js n/s	315 39		299 37		276 34		251 31	233 29	209 26	173 21	138 17	nd					
KW .	0.83		0.75	71	0.75		0.74	0.71	0.64	0.62	0.5	0.5					
4000 r/min. Js			346 43	-	321		308	285	266	255	228	191	165	90	nd		
n/s kW			1.43		40 1.28		38 1.2	35 1.13	33 1.13	30 1.05	28 0.98	0.90	20 0.83	11 0.47	0.45		
No. 5 B — 2000 r/min. Us	270		229		162		nd		Test Duc	t Area –	0.0127 m	2					
n/s :W	21 0.33		18 0.31		13 0.29		0.19										
2850 r/min. Js	398		390		345		304	257	192	nd			100				
n/s W	32 0.75		31 0.74		27 0.71		24 0.68	20 0.65	15 0.53	nd 0.35							
500 r/min.			Tana anna				A CONTRACTOR	- Annaca	estructus.	lane and		-					
Js n/s	479 38		475 38		453 36		422 33	395 31	355 28	304 24	257 20	nd					
000 r/min.	1.55		1.52		1.45		1.33	1.26	1.23	1.13	1.03	0.94					
Js n/s	555 44		545 43		520 41		498 39	475 37	447 36	414 33	378 30	336 27	294 23	229 18	nd		
:W	2.24		2.12		2.01		1.87	1.85	1.79	1.79	1.73	1.65	1.58	1.28	1.2		
lo. 6 B — 2000 r/min. Js	468		456		369		287	nd	Test D	uct Area	— 0.0182	m²					
n/s W	26 0.64		25 0.63		20 0.56		16 0.52	0.45									
850 r/min. <i>J</i> s			672		620		573	510	456	405	331	235	nd				
n/s W			37 1.60		34 1.57		32 1.53	28 1.51	25 1.49	22 1.46	18 1.30	13 0.98	0.90				
500 r/min. Js			827		792		750	712	672	620	573	524	498	420	360	225	
n/s			46		43		41	39	37	34	32	29	27	439 24	369 20	235 13	

@ 4000 r/min. the No. 6 B gives 262 L/s @ 3.72 kPa using 2.04 kW.

4000 r/min