

Adjustable Pitch

Aerofoil Fan

JM High Temperature

The Woods JM high temperature range is designed for ventilation of hot fire smoke applications. Fans are available proven to 300°C for 90 minutes or 400°C for two hours operation. The JM high temperature range is available in 8 sizes from 315mm to 1000mm with volume flows up to 21m³/s at static pressures of 700 Pa.

The JM High Temperature range incorporates all of the proven qualities of the JM Aerofoil range with additional protection to cope with the high temperatures. All of the fans offered are approved for use by the Loss Prevention Certification Board (LPCB).

Sizes

31JM - 315mm, 35JM - 355mm, 40JM - 400mm, 45JM - 450mm, 63JM - 630mm, 71JM - 710mm, 80JM - 800mm, 100JM - 1000mm

Fan Performance

JM H.T. Series are tested to the latest internationally recognised standards ISO5801 (1997) installation category D for aerodynamics performance and BS848 Part 2 (1985) for acoustic performance.

Coupled with the above fan diameters, the adjustable pitch aerofoil impellers give the exact performance required with a non-overloading power characteristic.

Impellers

JM H.T. Series – categories HT300/1.5 and HT400/2 use a Woods JM Aerofoil impeller, die cast in aluminium alloy, and X-ray inspected to ensure stable casting – essential for emergency high temperature operation.

Motors

Woods H.T. Series fans utilise a totally enclosed squirrel cage motor

The grades of motor insulation have been selected to meet the specific requirements for each of the H.T. Categories.

Electrical Supply

400 V / 50 Hz / 3 φ

Temperature Range

Fans are offered in accordance with test standard BS7346 Part 2.

All Woods H.T. Series fan motors are sized to run the fans continuously at normal ambient temperatures (-40°C to 50°C), as well as operation at their emergency high temperature category.

Standard JM Aerofoil fans are suitable for emergency use in category HT200/2.

HT200/2 and HT400/2 JM fans are approved by CTICM, France – Certificate numbers 94-A-468 (200/2) and 94-E-381 (400/2). Fans offered are approved by LPCB. (Certificate 386A-01).

Casings

The cylindrical casing, housing the fan, is made of steel, hot dipped galvanised after manufacture.

Ancillary Equipment

Silencers, Mounting feet, Vibration isolators, Matching flanges, Flexible connectors, Air operated non return dampers, Guards, Bell mouth inlets.

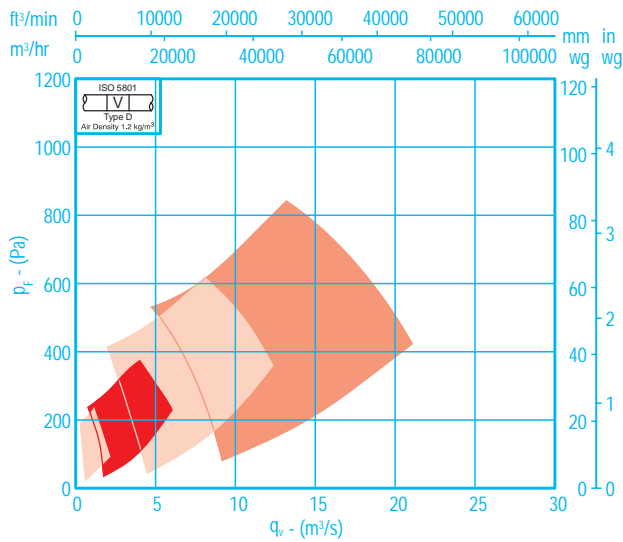


For further information, please contact your local sales centre

JM HT 300/1.5

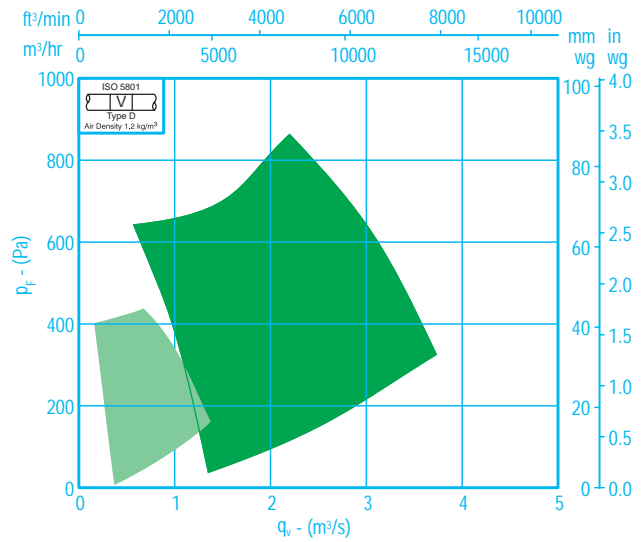
4 Pole

50JM/20/4/6/... 63JM/20/4/6/... 80JM/25/4/9/... 100JM/25/4/9/...



2 Pole

31JM/16/2/5/... 45JM/20/2/6/...



Code	Speed rev/min	m³/s at Pa (Static)								
		0	50	100	150	200	250	300	400	500
31JM/16/2/5/40	2840	1.35	1.28	1.25	1.17	1.10	1.02	0.92		
45JM/20/2/6/32	2910	3.75	3.60	3.58	3.50	3.40	3.30	3.20	3.10	2.80
50JM/20/4/6/32	1420	2.6	2.4	2.2	1.9	1.6				
63JM/20/4/6/36	1420	5.90	5.64	5.26	4.96	4.60	4.20			
80JM/25/4/9/36	1440	12.2	11.9	11.5	11.1	10.7	10.2	9.9	8.8	
100JM/25/4/9/28	1470	21.0	20.7	20.0	19.5	19.1	18.9	18.7	18.1	16.8

Electrical Data

Product Code	Speed (rev/min)	Motor	400 V / 50 Hz / 3φ					
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current (A)	Starting Current (A)	Sound Level dB(A)
31JM/16/2/5/...	2840	D80A	349230	8-40	0.9	2.2	12.1	70
45JM/20/2/6/...	2910	D100/L	489230	8-32	3.5	6.9	26.3	74
50JM/20/4/6/...	1420	D80A	539430	8-32	0.65	1.9	7.4	62
63JM/20/4/6/...	1420	D100/LA	669430	8-36	2.5	5.9	34.2	65
80JM/25/4/9/...	1440	DF132/M	839430	8-36	10	20	140	76
100JM/25/4/9/...	1470	DF160/L	139430	8-28	17.3	32	240	87

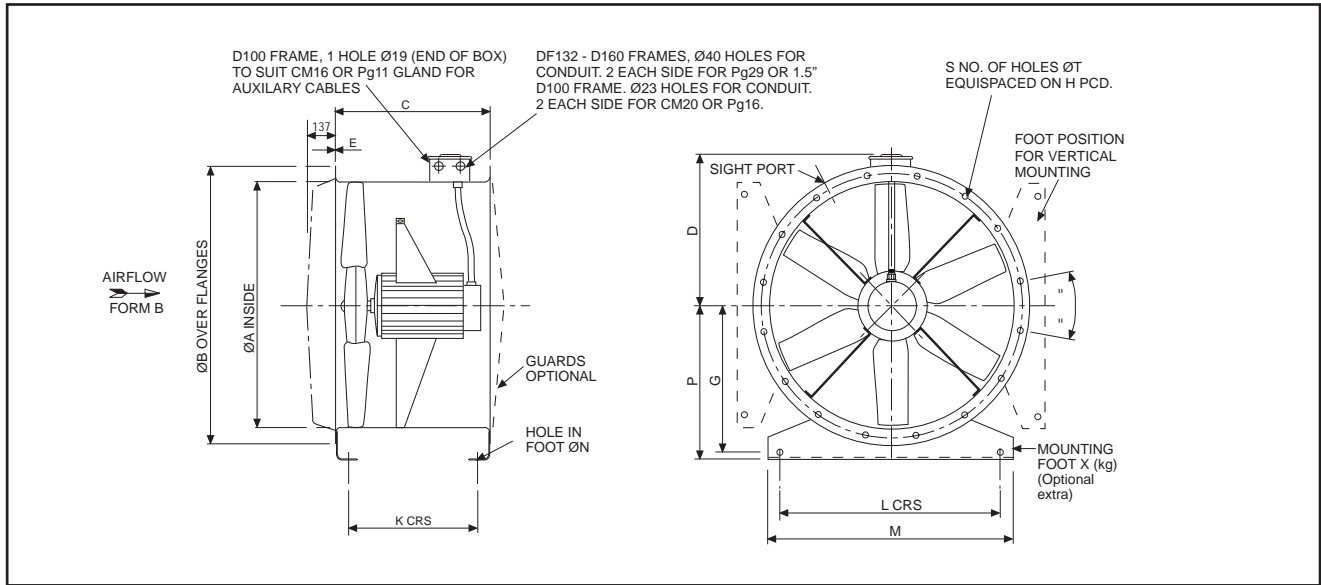
Sound pressure levels quoted are average dB(A) at 3 m distance over a sphere, under free field conditions and are presented for comparative purposes only. Performance shown at emergency operating temperatures.

Standard

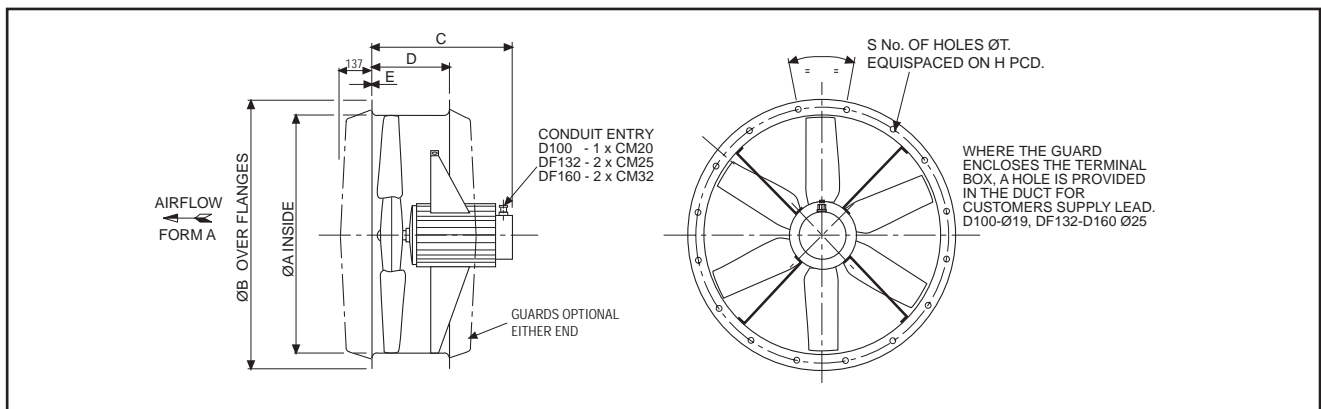
Super Standard

Dimensions

Long Cased



Short Cased



Code	Motor	A	B	C	D	E	G	H	K	L	M	N	P	S	T	X (kg)	Weight (kg)
Long Cased																	
31JM/16/2/5/40	D80/A	315	395	375	235	2.5	175	355	289	265	315	10	200	8	10	0.8	31
45JM/20/2/6/32	D100/L	450	530	520	306	3	255	500	434	400	450	10	280	8	12	1.5	54
50JM/20/4/6/32	D80/A	500	594	375	338	2.5	290	560	289	450	500	10	315	12	12	2.0	39
63JM/20/4/6/36	D100/L	630	724	520	403	3	375	690	434	580	630	10	400	12	12	2.4	75
80JM/25/4/9/36	DF132/M	800	894	520	525	5	485	860	404	750	800	12	510	16	12	5.8	163
100JM/25/4/9/28	DF160/L	1000	1106	625	625	5	547	1070	545	950	1000	12	574	16	15	6.2	317
Short Cased																	
45JM/20/2/6/32	D100/L	450	530	404	225	3	-	500	-	-	-	-	-	8	12	-	41
63JM/20/4/6/36	D100/L	630	724	392	225	3	-	690	-	-	-	-	-	12	12	-	58
80JM/25/4/9/36	DF132/M	800	894	481	260	4	-	860	-	-	-	-	-	16	12	-	129
100JM/25/4/9/28	DF160/L	1000	1106	577	300	5	-	1070	-	-	-	-	-	16	15	-	260

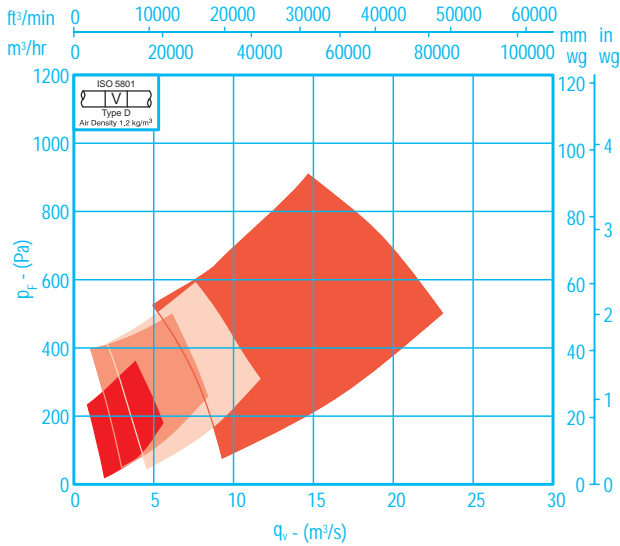
All dimensions shown in mm

For a full range of ancillaries including silencers, speed controllers and mounting accessories, please refer to pages 95-99.

JM HT 400/2

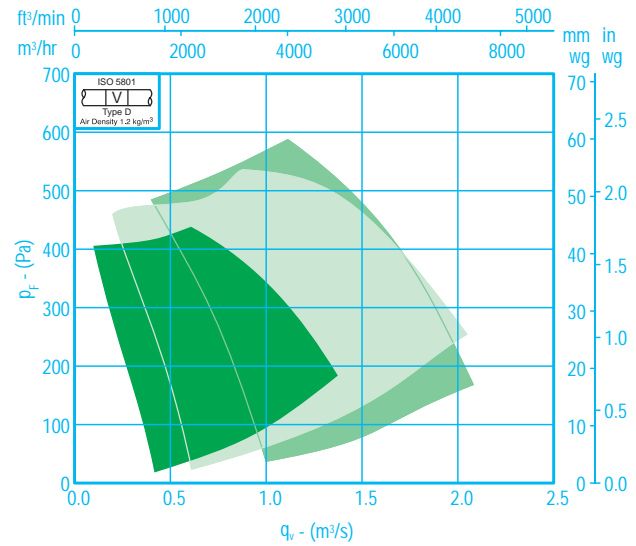
4 Pole

63JM/20/4/6/... 71JM/25/4/9/... 80JM/25/4/9/... 100JM/25/4/9/...



2 Pole

31JM/16/2/5/... 35JM/16/2/5/... 40JM/16/2/5/...



Code	Speed rev/min	m³/s at Pa (Static)									
		0	50	100	150	200	250	300	400	500	
31JM/16/2/5/40	2840	1.30	1.20	1.18	1.10	1.05	0.98	0.90			
35JM/16/2/5/40	2840	2.00	1.93	1.90	1.82	1.73	1.65	1.55	1.27		
40JM/16/2/5/24	2840	2.07	2.0	1.93	1.83	1.80	1.75	1.62	1.46	1.2	
63JM/20/4/6/32	1420	5.40	5.20	4.90	4.60	4.20	3.82				
71JM/25/4/9/36	1440	8.1	7.8	7.6	7.2	7.0	6.6	6.2			
80JM/25/4/9/32	1440	11.2	10.9	10.6	10.3	9.80	9.5	9.0	8.4		
100JM/25/4/9/18	1450	16.0	15.4	14.9	14.3	14.0	13.7	13.0	12.0	10.5	
100JM/25/4/6/32	1450	21.0	20.4	19.9	19.3	18.8	18.1	17.3	15.6	14.2	

Electrical Data

Product Code	Speed (rev/min)	Motor	400 V / 50 Hz / 3φ					Sound Level dB(A)
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current (A)	Starting Current (A)	
31JM/16/2/5/...	2840	D80/A	349240	8-40	0.75	1.8	9.9	64
35JM/16/2/5/...	2840	D80/B	389240	8-40	1.1	2.5	8.0	67
40JM/16/2/5/...	2840	D80/B	439240	8-24	1.1	2.5	8.0	67
63JM/20/4/6/...	1420	D100/LA	669440	8-32	2.2	5.0	29	63
71JM/25/4/9/...	1440	DF132/MS	749440	8-36	5.5	10.7	73	71
80JM/25/4/9/...	1440	DF132/M	839440	8-32	7.5	14.5	109	73
100JM/25/4/9/...	1450	DF160/LM	139442	8-18	11	20	130	83
100JM/25/4/9/...	1450	DF160/L	139440	20-32	15	27	194	83

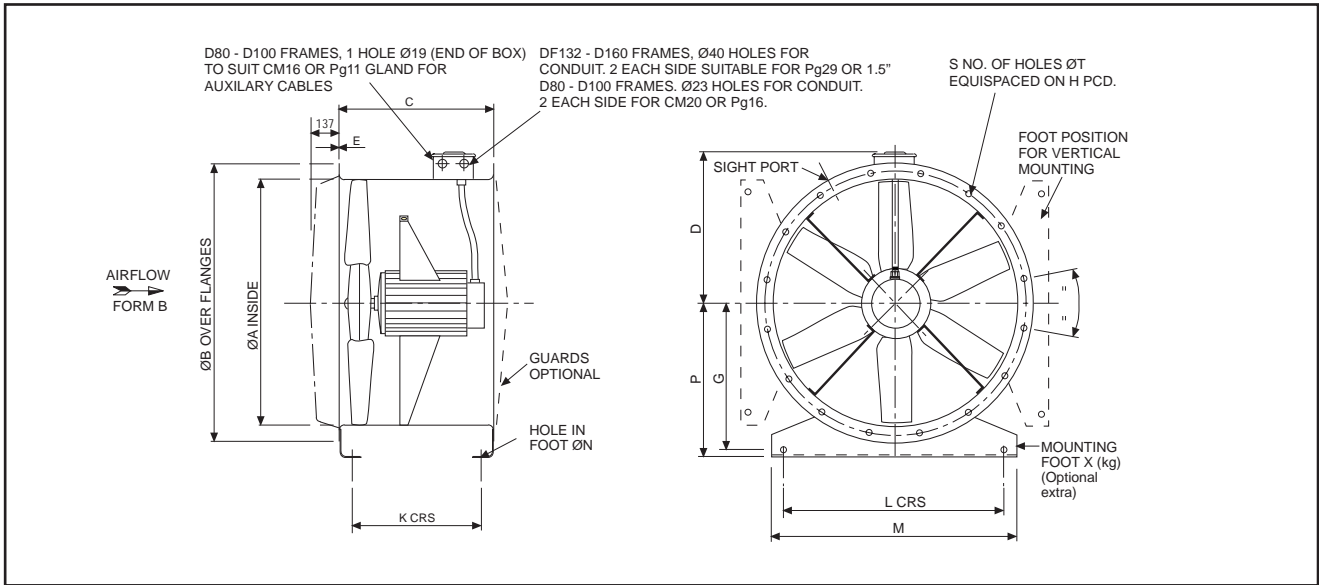
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Standard

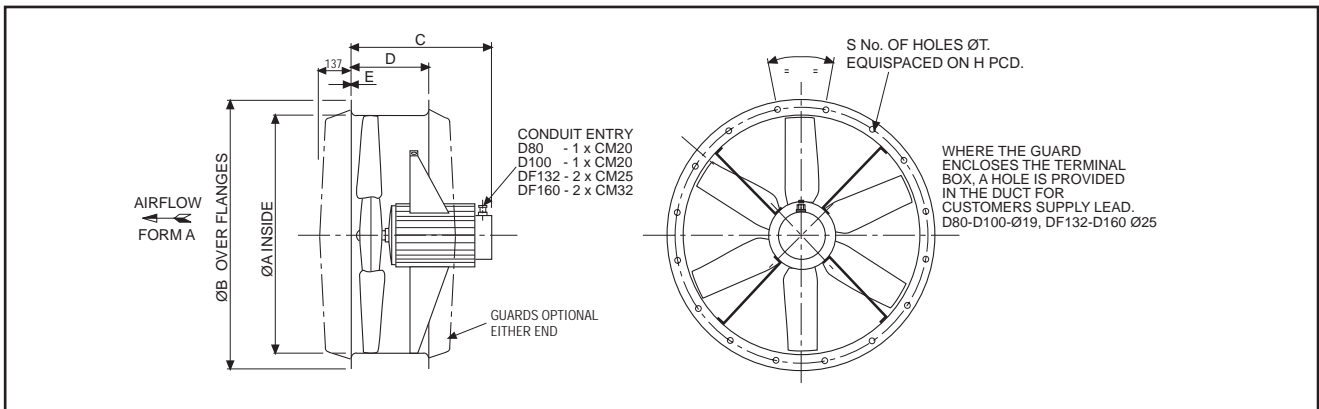
Super Standard

Dimensions

Long Cased



Short Cased



Code	Motor	A	B	C	D	E	G	H	K	L	M	N	P	S	T	X (kg)	Weight (kg)
Long Cased																	
31JM/16/2/5/...	D80/A	315	395	375	235	2.5	175	355	290	265	315	10	200	8	10	0.8	31
35JM/16/2/5/...	D80/B	355	435	375	258	2.5	200	395	290	305	355	10	225	8	10	1.1	32
40JM/16/2/5/...	D80/B	400	480	375	279	2.5	255	450	290	350	400	10	250	8	12	1.2	35
63JM/20/4/6/...	D100/LA	630	724	520	403	3	375	690	434	580	630	10	400	12	12	2.4	77
71JM/25/4/9/...	DF132/MS	710	804	520	480	4	415	770	402	660	710	12	440	16	12	4.5	147
80JM/25/4/9/...	DF132/M	800	894	520	525	3	485	860	400	750	800	12	510	16	12	5.8	163
100JM/25/4/6/...	DF160/L	1000	1106	625	625	5	547	1070	545	950	1000	12	574	16	15	6.2	317
Short Cased																	
40JM/16/2/5/...	D80/B	400	480	347	180	2.5	-	450	-	-	-	-	-	8	12	-	29
63JM/20/4/6/...	D100/LA	630	724	392	225	3	-	690	-	-	-	-	-	12	12	-	58
71JM/25/4/9/...	DF132/MS	710	804	481	260	4	-	770	-	-	-	-	-	16	12	-	125
80JM/25/4/9/...	DF132/M	800	894	481	260	4	-	860	-	-	-	-	-	16	12	-	129
100JM/25/4/6/...	DF160/L	1000	1106	577	300	5	-	1070	-	-	-	-	-	16	15	-	260

All dimensions shown in mm

For a full range of ancillaries including silencers, speed controllers and mounting accessories, please refer to pages 95-99.