

Section 1 - Demand Control Ventilation



- Eleven sizes are offered from 315mm to 1000mm diameter.
- Volume flows of up to 19m³/s
- Static pressures up to 800 Pa
- High energy efficiency
- Low installed noise levels
- Motor protection IP55
- All casings are hot dipped galvanised
- Overheat protection is fitted as standard
- Inverter controllable

Sizes

31JM - (315mm) to 100JM - (1000mm).

Fan Performance

All fans are tested to the latest internationally recognised standard ISO5801 Part 1 (1997), installation category D (AMCA approved) for aerodynamic performance and BS848 Part 2 (1985) for acoustic performance. Coupled with a wide range of fan diameters, the adjustable pitch Aerofoil impeller gives the exact performance required, with a non overloading fan characteristic.

Impellers

A unique high efficiency aerofoil section blade with a purposely smoothed hub and clamp plate for adjustable pitch angle availability. The Fläkt Woods impellers are all high pressure die cast to offer thin aerofoil sections for low generation of noise. Every cast aluminium component is X-ray examined using Real Time Radiography inspection prior to assembly. The maximum pitch angles shown allow for speed control by frequency inverter (3ph only).

Motors

All motors are totally enclosed air stream rated class F insulation. Constructed from aluminium or cast iron as standard with special "T" slot or pad mounted fixings. Single speed motors are suitable for speed control by voltage regulation where indicated. Three phase motors are suitable for use with frequency inverters. Suitable for horizontal through to vertical shaft operation. Supplied IP55, with removable drain plugs. Sealed for life bearings lubricated with wide temperature range grease. The BT, CT, F22 and PM112 motors are all fitted with overheat protection thermostat as standard. D motors are fitted with Thermistor OHP. These motors are suitable for inverter speed control down to 20% of full speed.

Electrical Supply

220 - 240V / 50Hz / 1 ϕ using ICU1.5 remote mounted.
All 1 ϕ fans are speed controllable using the Fläkt Woods iFan Intelligent Control Unit (ICU1.5), connected via cable and plug, installed in customer weather proof area.

380 - 420V / 50Hz / 3 ϕ using ICM3 remote mounted.
All 3 ϕ fans are speed controllable using the Fläkt Woods iFan Intelligent Control Unit (ICM3), installed in customer weather proof area, maximum 30°C ambient.

Temperature Range

-40°C to 50°C as standard. (All motors not suitable for starting at temperatures lower than -20°C.)
Most standard 3 ϕ fans can be offered for a one off emergency operation at 200°C for 2 hours.

Casings

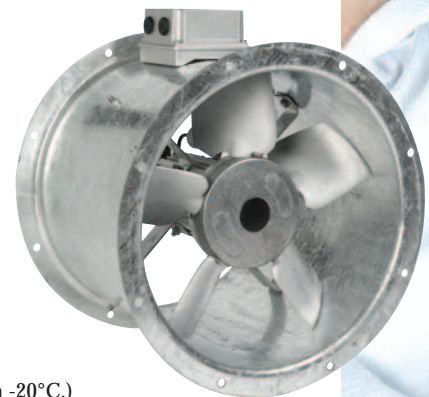
JM Aerofoil fans are available in either a long cased form, complete with an externally mounted pre-wired electrical terminal box, or short cased for duct or plate installation. Casings are spun from sheet steel with integral pre-drilled and radiused inlet flanges. The galvanised finish gives a high resistance to corrosion and is ideal for external as well as internal use.

Accessories

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

Mounting

Mounting kit for ICU1.5 available, refer section 1.8.

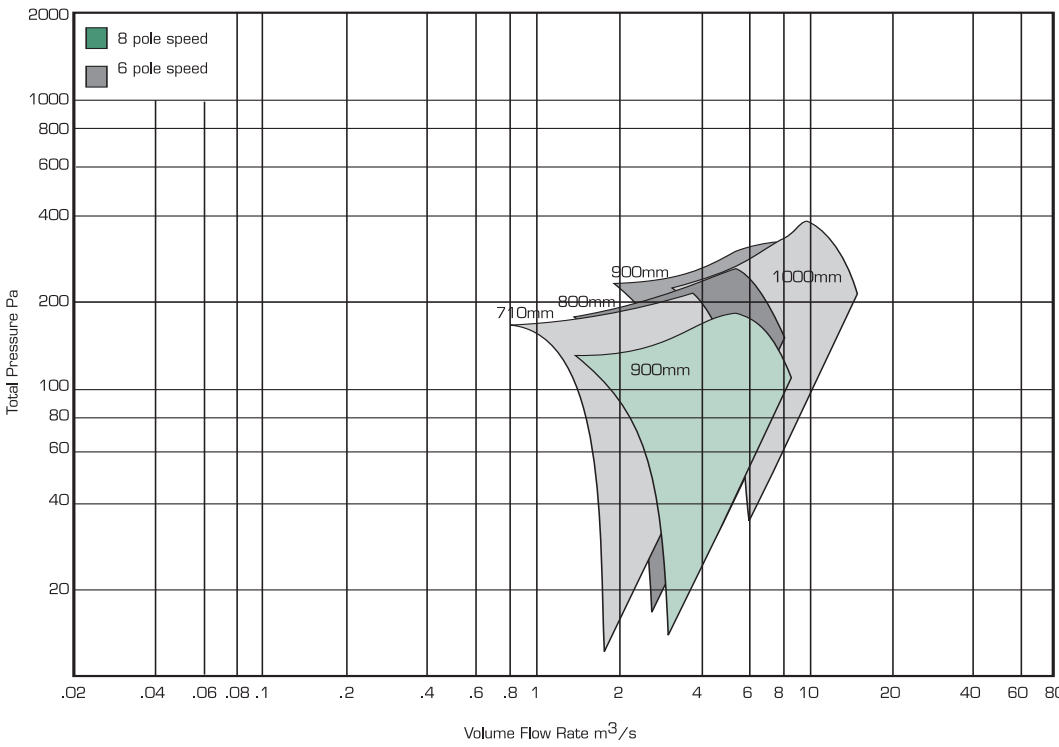
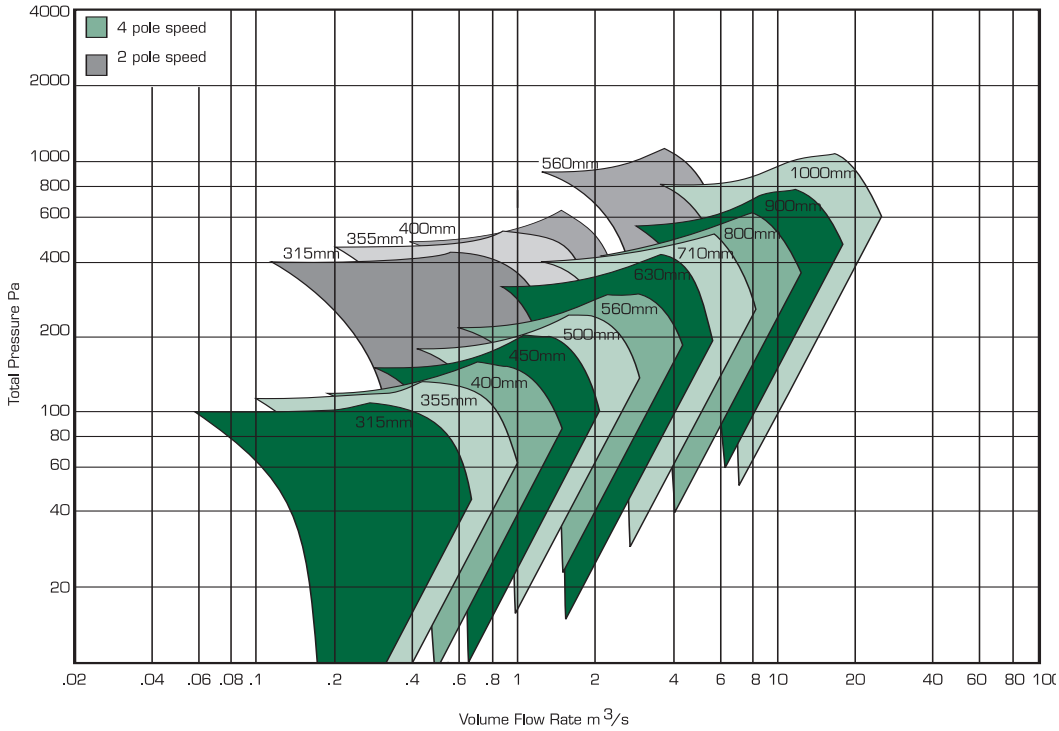


Electrical Details

Product Code	Speed rev/min	Motor	220-240V/50Hz/1ϕ						
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current (at 230V) (A)	Starting Current (at 230V) (A)	Controller	Sound Level dBA
35JM/16/4/5/...	1420	BT4	DX361460	30-40	0.13	1.05	1.75	ICU1.5	49
40JM/16/4/5/...	1420	BT9	DX411452	36-40	0.32	2.2	5	ICU1.5	52
45JM/16/4/5/...	1420	BT9	JL461452	24-30	0.32	2.2	5	ICU1.5	52
45JM/16/4/5/...	1420	CT5	DX461466	32-40	0.39	2.9	5.6	ICU1.5	56
50JM/16/4/5/...	1420	CT5	DX511464	32-34	0.52	3.9	7.8	ICU1.5	57
50JM/20/4/6/...	1420	BT9	DX511455	16-20	0.32	2.2	5	ICU1.5	53
50JM/20/4/6/...	1420	CT5	DX511466	28-32	0.52	3.9	7.8	ICU1.5	56
56JM/16/4/5/...	1420	CT5	JL571453	18-20	0.52	3.9	7.8	ICU1.5	57

Product Code	Speed rev/min	Motor	380-420V/50Hz/3ϕ						
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current (at 400V) (A)	Starting Current (at 400V) (A)	Controller	Sound Level dBA
31JM/16/4/5/...	1420	BT4	DX341460	8-40	0.13	0.50	1.15	ICM3	44
31JM/16/2/5/...	2840	BT9	DX341202	8-34	0.58	1.45	5.7	ICM3	61
35JM/16/4/5/...	1420	BT5	DX381460	8-40	0.18	0.63	1.85	ICM3	49
35JM/16/2/5/...	2840	CT5	DX381210	8-32	0.95	2.5	8	ICM3	64
40JM/16/4/5/...	1420	BT9	DX431452	8-40	0.29	0.97	3	ICM3	52
40JM/16/2/5/...	2840	CT9	DX431203	8-32	1.6	3.8	17.5	ICM3	66
45JM/16/4/5/...	1420	CT5	DX481460	8-40	0.52	1.7	4.7	ICM3	56
50JM/16/4/5/...	1420	CT5	DX531460	8-30	0.54	1.8	4.9	ICM3	57
50JM/20/4/6/...	1420	CT5	DX531462	8-28	0.54	1.8	4.9	ICM3	56
56JM/16/4/5/...	1420	CT9	DX591453	8-28	0.83	2.30	8.6	ICM3	58
56JM/20/4/6/...	1420	CT9	DX591458	8-32	1.15	3.2	11	ICM3	61
56JM/20/2/6/...	2910	PM112	EX591201	8-24	6.2	11.64	100	ICM3	73
63JM/20/4/6/...	1420	CT9	DX661453	8-20	1.15	3.2	11	ICM3	61
63JM/20/4/6/...	1420	F22	DX661454	8-32	2.1	5	27	ICM3	61
71JM/20/6/6/...	900	CT9	JL741652	8-18	0.5	1.5	4.5	ICM3	53
71JM/20/6/6/...	900	F22	EX741653	8-36	1.35	3.4	15	ICM3	55
71JM/20/4/6/...	1440	F22	EX741401	8-24	2.7	5.77	30	ICM3	65
71JM/20/4/6/...	1440	PM112	DX741404	8-36	4.4	9.3	55	ICM3	68
80JM/20/6/6/...	935	F22	EX831651	8-28	1.35	3.4	15	ICM3	58
80JM/20/6/6/...	935	F22	JL831452	8-36	2.5	6.42	26	ICM3	60
80JM/20/4/6/...	1440	PM112	JL831412	8-24	4.4	9.33	55	ICM3	69
80JM/25/4/9/...	1440	PM112	EX831405	8-22	4.4	9.33	55	ICM3	71
80JM/25/4/9/...	1440	*D132S	EX831408	8-26	6.6	12.6	84.4	ICM3	71
90JM/25/8/9/...	695	F22	JL931802	8-32	1.4	4.93	18	ICM3	58
90JM/25/6/6/...	935	F22	JL933602	8-32	2.5	6.42	26	ICM3	65
90JM/25/6/9/...	935	F22	JL931602	8-24	2.5	6.42	26	ICM3	63
90JM/25/4/9/...	1440	*D132M	EX931403	8-24	9	12.6	84.4	ICM3	74
90JM/25/4/9/...	1440	*D160M	EX931406	8-32	13.2	25.4	127	ICM3	75
100JM/25/6/6/...	950	F22	EX133652	8-18	2.1	5.74	24	ICM3	68
100JM/25/6/9/...	960	*D132M	JL131609	8-34	6.6	14.3	78.7	ICM3	71
100JM/25/4/6/...	1450	*D132M	EX133402	8-22	9	12.6	84.4	ICM3	79
100JM/25/4/9/...	1470	*D160M	JL131419	8-22	13.2	25.4	127	ICM3	79
100JM/25/4/9/...	1470	*D160L	EX131405	8-28	18	34.8	171	ICM3	79

Performance



For a full range of accessories, please refer to section 1.8 or 9.1 (which covers all accessories).

For JM dimensions and drawings please see section 5.1