

## **JM Bifurcated Aerofoil**

Fläkt Woods Bifurcated fans are available for elevated temperatures, processes, fume extraction or contaminated air applications. They can be used in either recirculation or ventilated to air systems.

Fans can be operated continuously at temperatures up to 200°C.

Fläkt Woods bifurcated fans are the choice for all applications which require motors outside the process airstream.

- Fans tested to ISO 5801 Part 1
- Acoustic tested to BS848 Part 2
- Motor out of airstream
- Continuous operation up to 200°C
- Fixed pitch or adjustable pitch alternatives
- Impeller parts X-rayed to ensure casting quality
- Can be multi-staged for higher pressure applications

# JM Bifurcated Aerofoil

- 400mm - 630mm diameter
- Volume flow up to 5m<sup>3</sup>/s
- Static pressures up to 1000 Pa
- Suitable for temperatures up to 200°C
- Motor protection IP55
- All casings are hot dipped galvanised
- All aluminium cast components are x-ray examined
- Multi-stage is available for higher pressures
- All casings are hot dipped galvanised
- Inverter speed controllable

## Sizes

40JM.Bif - 400mm, 50JM.Bif - 500mm, 63JM.Bif - 630mm  
Larger Bifurcated fans are available please contact Fläkt Woods for details.

## Fan Performance

Coupled with the above fan diameters the fully adjustable pitch Aerofoil impeller gives the exact performance required with a non overloading fan characteristic. Higher pressures are obtained by multi-staging the Bifurcated Aerofoil fan.

## 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 component is X-rayed using Real Time Radiography inspection prior to assembly. The maximum pitch angles shown allow for speed control by frequency inverter.

## Motors

All motors are totally enclosed fan cooled class F insulation with protection to IP55. All motors are supplied with sealed for life bearings or extended lubricators.

These motors are suitable for inverter speed control down to 20% of full speed.

## Electrical Supply

380 - 420V / 50Hz / 3φ

## Temperature Range

Up to 200°C continuous operation.

## Casings

Bifurcated fans are available long case only. The casing covers both impeller and motor and has a duct mounted terminal box. The hot dipped galvanised casing gives a high resistance to corrosion.

## Accessories

Silencers, Mounting feet, Vibration isolators, Matching flanges, Flexible connectors, Guards, Bell mouth inlets.

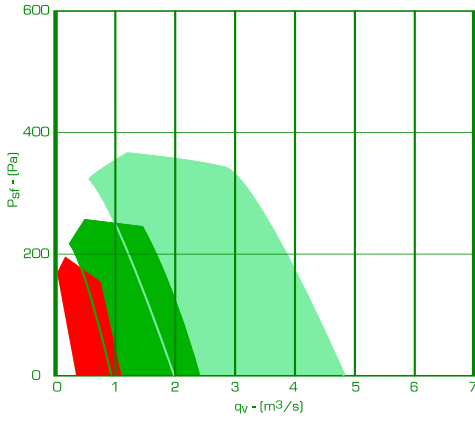


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## Performance

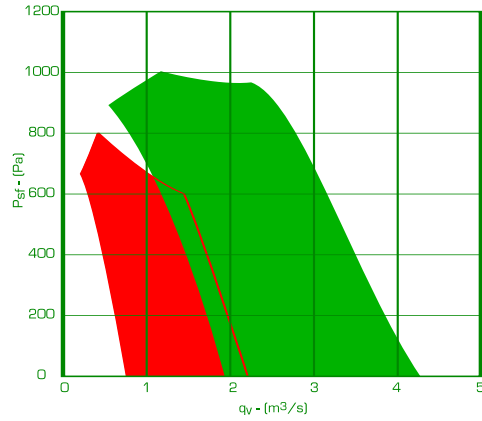
### 4 Pole

40JM/20/4/6/... 50JM/20/4/5/... 63M/20/4/6/...



### 2 Pole

40JM/20/2/6/... 50JM/20/2/6/...



## Electrical Data

200°C

Product Code	Speed rev/min	Motor	380-420V/50Hz/3 $\phi$						Sound Level dBA
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current [at 400V] (A)	Starting Current [at 400V] (A)	Speed Controller Inverter	
40JM.Bif/20/4/6/...	1440	F22	JN245005	40	0.5	1.49	9.5	FWD1	58
40JM.Bif/20/2/6/...	2950	F22	JN245004	32	2.0	4.25	32	FWD2	74
50JM.Bif/20/4/6/...	1440	F22	JN275007	32	0.75	21	14	FWD1	63
50JM.Bif/20/2/6/...	2950	F22	JN275004	24	4.0	8.04	68	FWD4	79
63JM.Bif/20/4/6/...	1440	F22	JN305002	30	2.0	4.4	27	FWD2	70

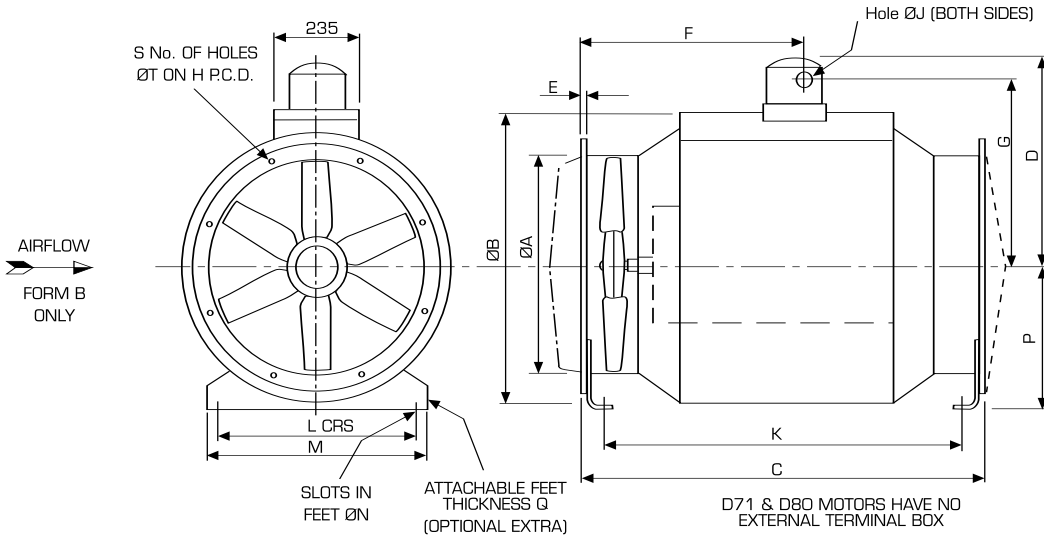
Sound pressure levels quoted are average dBA at 3m distance over a sphere, under free field conditions and are presented for comparative purposes only.



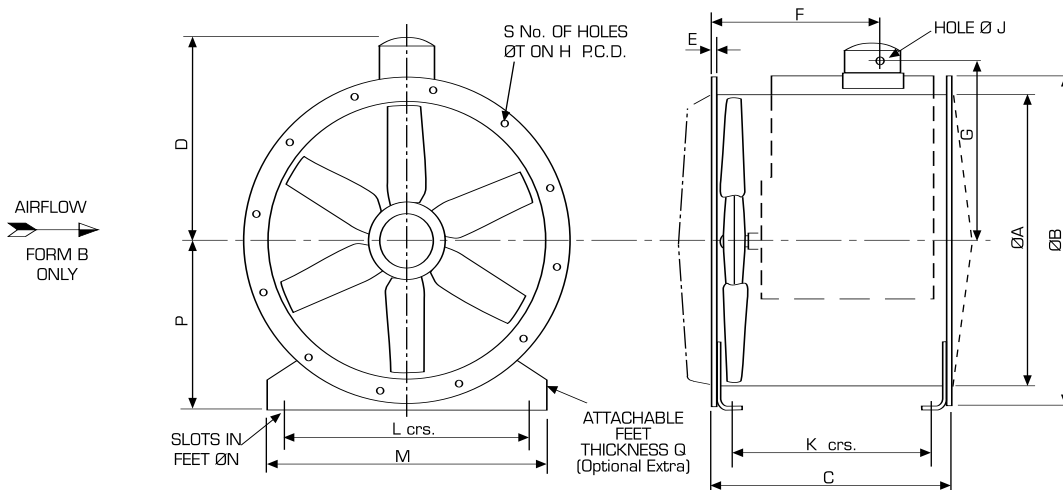
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## Dimensions

### 40JM.Bif-50JM.Bif



### 63JM.Bif



Product Code	Motor Range	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	S	T	Weight (kg)
40JM.Bif/20/4/6/40	F22	400	524	727	367	3	375	332	450	27	641	350	400	10	250	3	8	12	72
40JM.Bif/20/2/6/40	F22	400	524	727	367	3	375	332	450	27	641	350	400	10	250	3	8	12	83
50JM.Bif/20/4/6/32	F22	500	610	787	408	3	375	371	560	27	691	450	500	10	315	3	12	12	83
50JM.Bif/20/2/6/32	F22	500	610	787	408	3	430	371	560	27	691	450	500	10	315	3	12	12	93
63JM.Bif/20/4/6/30	F22	630	724	816	436	3	400	400	690	27	530	580	630	14	400	3	12	12	112

All dimensions shown in mm.

For a full range of accessories including silencers, speed controllers and mountings, please refer to page 33.