M.E.C
MARCLIFF ENGINEERING CO. PTY LTD

MARCLIFF ENGINEERING CO. VENTILATIONS

4th Edition



HVAC Products

Brackets & Hardware

Plumbing Products

Electrical Products

41 Cawarra Road, Caringbah, NSW 2229

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FANS

Your Air Solutions Partner





FANMF - Mixed Flow Inline Duct Fan

- Fan body is made of environmental protection material with beautiful lines and light weight, double insulation.
- Fan blade is designed with hydromechanical principles for optimal airflow and air pressure, high efficiency working, low energy consumption and low noise.
- Joint design facilitates installation and dismounting for easy installation and maintenance.
- Outer rotor motor with Japanese brand NMB ball bearing, long working life over 50000 hours.
- Protection class: IP44
- Can be designed with user friendly features such as time delay, temperature sense, humidity sensor or other customised functions.
- Operating temperature range: -20ºC ~ 60ºC
- Perfect for homes, apartments, offices, public places, hotels, hospitals, gyms etc.

FEATURES & MOUNTING



Hydromechanical wind circle designed to achieve the highest efficiency



High Performance hydromechanical fan blades



Safer mounting base designed according to safety requirements and fan structure for easy installation



Sealing ring in connection box, protection class IP44

1 Fix the support



2 Couple the ducts



3 Fix the fan body



4 Make the connections



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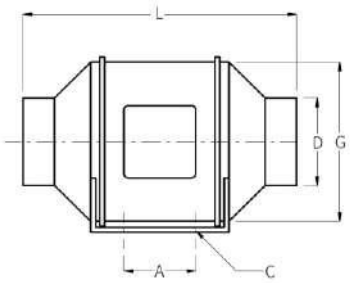
36 WOODFIELD BLVD, CARINGBAH NSW 2229

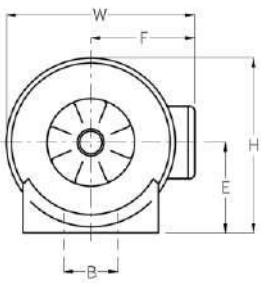
FANMF - Series Mixed Flow Inline Duct Fan

Performance Parameter

Model	Speed	Voltage /Frequency (V/Hz)	Current (Amps)	Power (W)	Speed (RPM)	Airflow		Air Pressure (Pa)	Noise (dB)	Net Weight (kgs)
						(m^3/h)	(l/s)			
FANMF-100	H	220~240/50	0.12	26	2200	198	55.0	156	31	1.5
	L		0.11	23	1850	165	45.8	131	26	
	H	100~120/60	0.31	35	2200	198	55.0	156	31	
	L		0.28	30	1850	165	45.8	131	26	
FANMF-125	H	220~240/50	0.14	33	2250	284	78.9	159	32	1.5
	L		0.13	28	1850	248	68.9	106	26	
	H	100~120/60	0.35	38	2250	284	78.9	300	32	
	L		0.31	32	1850	248	68.9	240	26	
FANMF-150	H	220~240/50	0.22	54	2550	530	147.2	300	33	2.6
	L		0.19	44	1850	410	113.9	240	29	
	H	100~120/60	0.55	62	2550	530	147.2	352	33	
	L		0.45	49	1850	410	113.9	274	29	
FANMF-200	H	220~240/50	0.53	128	2450	840	233.3	352	63	4.9
	L		0.52	123	1950	690	191.7	274	55	
	H	100~120/60	1.60	165	2450	840	233.3	488	63	
	L		1.30	135	1950	690	191.7	371	55	
FANMF-250	H	220~240/50	1.20	225	2450	1405	390.3	488	66	7.5
	L		1.75	165	1950	1064	295.6	371	58	
	H	100~120/60	2.60	290	2450	1405	390.3	693	66	
	L		1.80	210	1850	1064	295.6	435	58	
FANMF-315	H	220~240/50	1.90	390	2350	2206	612.8	693	69	11.0
	L		1.40	275	1650	1750	486.1	435	61	
	H	100~120/60	3.70	412	2350	2206	612.8	693	69	
	L		3.00	330	1650	1750	4861	435	61	

Dimensions



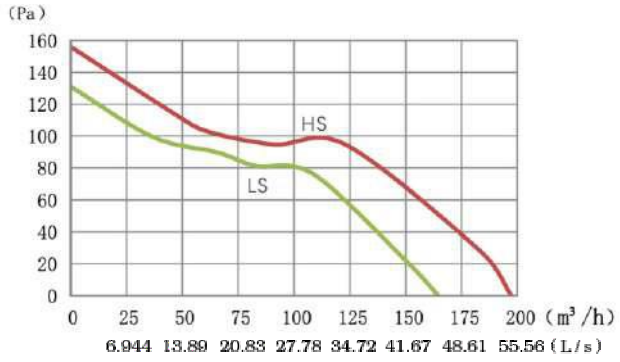


Model	A	B	C	ØD	E	F	ØG	L	W	H
FANMF-100	80	60	4-Ø4.5	97	99	116	163	302	204	195
FANMF-125	80	60	4-Ø4.5	123	99	116	163	257	204	195
FANMF-150	80	60	4-Ø5.5	147	109	127	187	313	227	208
FANMF-200	100	94	4-Ø5.5	197	125	137	205	302	249	237
FANMF-250	150	150	4-Ø8*11	247	250	174	261	383	310	286
FANMF-315	181	178	4-Ø8*11	312	187	216	325	446	386	357

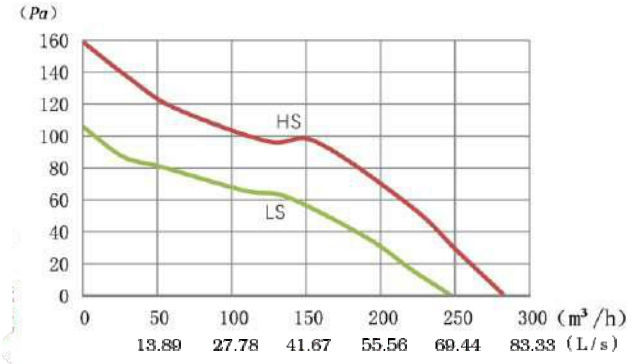
FANMF - Series Mixed Flow Inline Duct Fan

Performance Curves

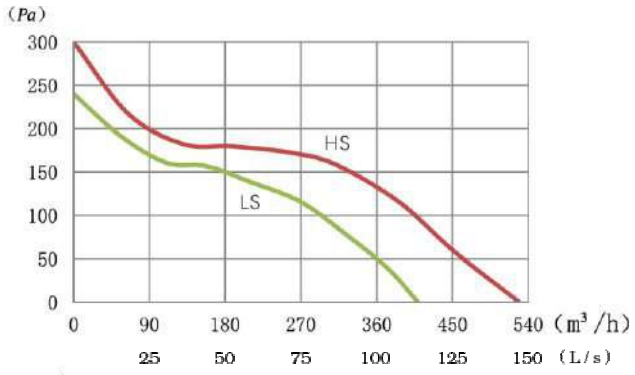
FANMF-100



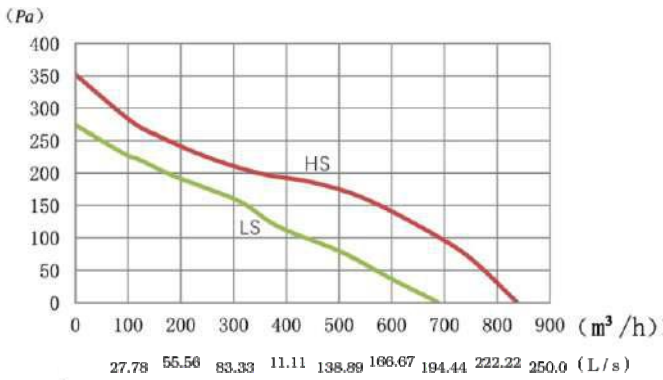
FANMF-125



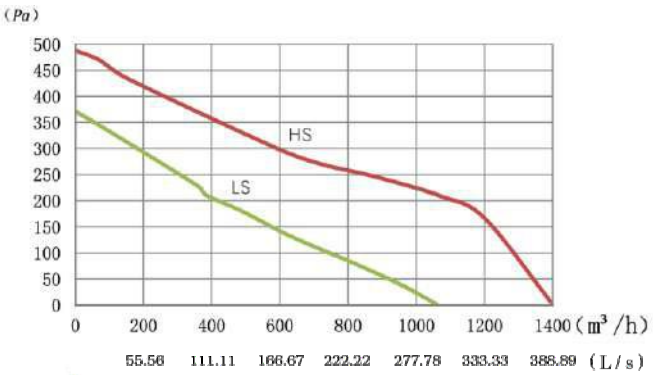
FANMF-150



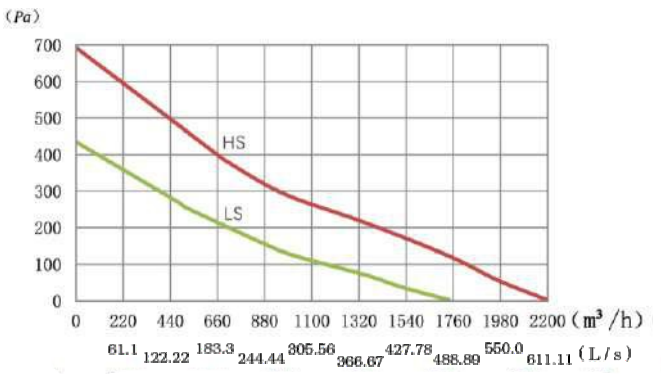
FANMF-200



FANMF-250



FANMF-315





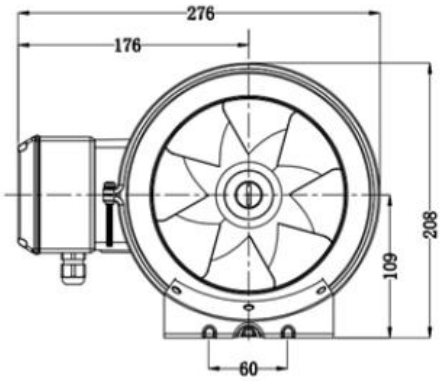
Your Air Solutions Partner

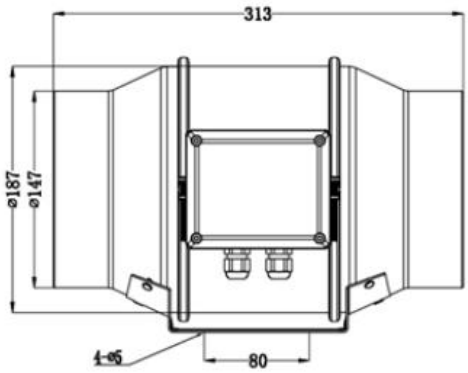


FANMEF - Eco-Watt Mixed-flow Inline Duct Fan

- High efficiency and energy saving: use a DC variable frequency motor (permanent magnet synchronous motor) for lower energy consumption.
- Meets EU ERP2018 energy efficiency standards.
- Free speed control: 0-10V voltage speed control and PWM signal speed control.
- Stable performance: set with slow starting, no influence during voltage fluctuation.
- Long durability: low vibration, low noise and continuous operation.
- Protection class: IP44
- Operating temperature range: -20ºC ~ 60ºC

DIMENSIONS





TECHNICAL SPECIFICATIONS

Model	Voltage	Current (Amps)	Power (W)	Speed (RPM)	Airflow		Air Pressure (Pa)	Net Weight (kgs)
					(m^3/h)	(m^3/s)		
FANMEF-150	100~140	0.47 MAX 0.94	70	3000	647	179.7	503	2.6
FANMEF-200	100~120 200~220	2.1 1.05	165	3000	1250	347.2	746	4.9

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FANMEF100

- **High Efficiency Performance :** FANMEF is designed for air circulation, effectively removing heat, moisture, and odours from your space. Ideal for any rooms that requires ventilation
- **Easy Installation :** FANMEF is easy to install. Its compact design fits most wall thickness, making it easy to install.
- **Energy Efficient :** With its low power consumption, this fan helps reduce your energy bills, making eco-friendly and cost-effective choice
- **Sturdy & Safe :** Made with premium quality materials, making it safe and sturdy

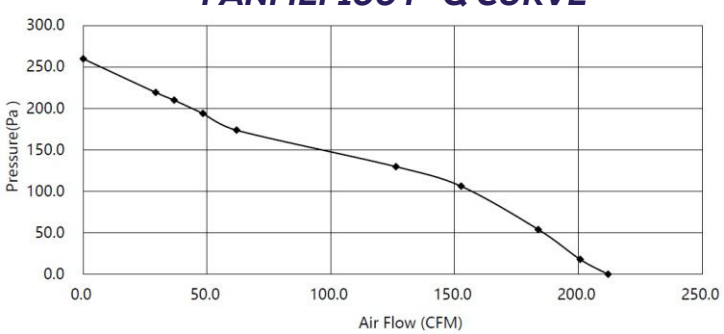


TEST METHOD
Test Equipment: Wind Tunnel Test
Standard: AMCA210

TEST CONDITION		
Ambient Temperature	22.5	°C
Relative Humidity	46.5	%RH
Atmospheric Pressure	947.2	hPa
Input Voltage	109	VDC
Operating Speed	3586	rpm
Maximum Static Pressure	260.0	Pa
Maximum Flow Rate	100.05	l/s

POINTS	PRESSURE		AIR FLOW		SPEED	VOLTAGE	CURRENT	POWER	NOISE
	mmH_2O	Pa	m^3/h	l/s	rpm	V	A	W	dB-A @ 3m
1	26.5	260.0	0.0	0.0	3586	109	0.43	26.9	0
2	22.4	219.4	48	13.83	3536	109	0.45	28.4	16.2
3	21.4	210.0	60	17.32	3530	109	0.46	28.5	17.4
4	19.8	194.0	84	22.80	3523	109	0.46	29	18.8
5	17.7	173.9	108	29.21	3530	109	0.46	28.9	20.1
6	13.3	129.9	216	59.61	3543	109	0.45	28.5	24.4
7	10.8	106.3	258	72.02	3453	109	0.46	29.1	25.4
8	5.5	54.1	312	86.74	3100	109	0.44	27.3	26.4
9	1.8	18.1	342	94.72	2978	109	0.43	26.8	27
10	0.0	0.0	360	100.05	3000	109	0.44	27.7	28

FANMEF100 P-Q CURVE





FANMEF125

- **High Efficiency Performance :** FANMEF is designed for air circulation, effectively removing heat, moisture, and odours from your space. Ideal for any rooms that requires ventilation
- **Easy Installation :** FANMEF is easy to install. Its compact design fits most wall thickness, making it easy to install.
- **Energy Efficient :** With its low power consumption, this fan helps reduce your energy bills, making eco-friendly and cost-effective choice
- **Sturdy & Safe :** Made with premium quality materials, making it safe and sturdy

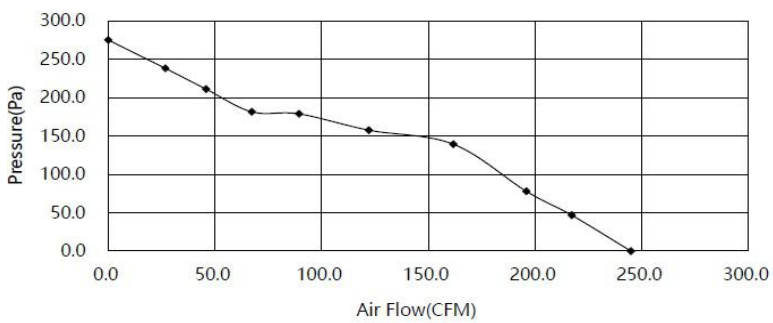


TEST METHOD
Test Equipment: Wind Tunnel Test
Standard: AMCA210

TEST CONDITION		
Ambient Temperature	22.5	°C
Relative Humidity	46.5	%RH
Atmospheric Pressure	953.6	hPa
Input Voltage	109	VDC
Operating Speed	2907	rpm
Maximum Static Pressure	275.0	Pa
Maximum Flow Rate	115.63	l/s

POINTS	PRESSURE		AIR FLOW		SPEED	VOLTAGE	CURRENT	POWER	NOISE
	mmH_2O	Pa	m^3/h	l/s	rpm	V	A	W	dB-A @ 3m
1	28.1	275.0	0.0	0.0	3300	109	0.26	32.3	0
2	24.3	238.1	48	12.60	3353	109	0.26	35.7	15.8
3	21.5	211.0	84	21.66	3440	109	0.26	35.5	18.8
4	18.5	181.4	126	31.76	3473	109	0.24	33.5	21.1
5	18.2	178.7	168	42.19	3507	109	0.24	33.7	22.8
6	16.1	157.5	228	57.67	3493	109	0.25	33.7	24.6
7	14.2	139.2	300	76.36	3407	109	0.29	39.7	26.2
8	7.9	77.9	366	92.50	2987	109	0.25	36.2	27.3
9	4.8	46.7	402	102.51	2933	109	0.25	34	27.9
10	0.0	0.0	456	115.63	2907	109	0.25	31	29

FANMEF125 P-Q CURVE





FANMEF150

- **High Efficiency Performance :** FANMEF is designed for air circulation, effectively removing heat, moisture, and odours from your space. Ideal for any rooms that requires ventilation
- **Easy Installation :** FANMEF is easy to install. Its compact design fits most wall thickness, making it easy to install.
- **Energy Efficient :** With its low power consumption, this fan helps reduce your energy bills, making eco-friendly and cost-effective choice
- **Sturdy & Safe :** Made with premium quality materials, making it safe and sturdy

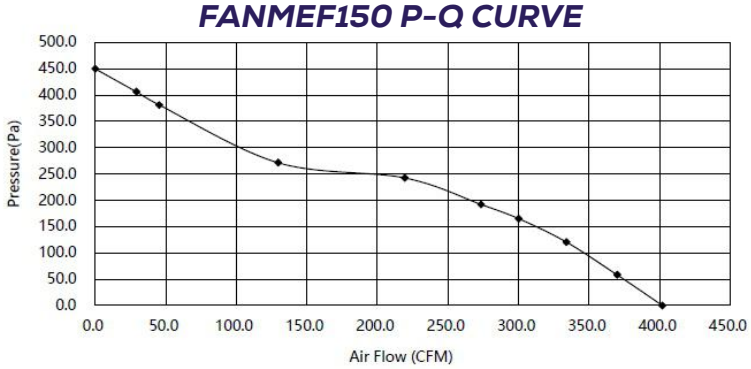


TEST METHOD
Test Equipment: Wind Tunnel Test
Standard: AMCA210

TEST CONDITION		
Ambient Temperature	22.5	°C
Relative Humidity	46.5	%RH
Atmospheric Pressure	950.4	hPa
Input Voltage	109	VDC
Operating Speed	2881	rpm
Maximum Static Pressure	450.0	Pa
Maximum Flow Rate	189.72	l/s

POINTS	PRESSURE		AIR FLOW		SPEED	VOLTAGE	CURRENT	POWER	NOISE
	mmH_2O	Pa	m^3/h	l/s	rpm	V	A	W	dB-A @ 3m
1	45.9	450.0	0.0	0.0	3523	109	0.98	0.98	0
2	41.5	406.4	48	13.73	3495	109	0.99	0.99	17.2
3	38.9	381.2	78	21.38	3501	109	0.99	0.99	19.9
4	27.7	271.6	222	61.16	3666	109	0.99	0.99	26.9
5	24.8	242.6	372	103.55	3180	109	0.99	0.98	30.2
6	19.6	192.1	468	129.08	2978	109	1	0.98	31.6
7	16.8	165.1	510	141.63	2923	109	0.99	0.97	32.1
8	12.3	120.6	570	157.63	2883	109	0.97	0.97	32.8
9	5.9	58.2	630	174.62	2860	109	0.98	0.97	33.4
10	0.0	0.0	684	189.72	2881	109	0.98	0.97	34

FANMEF150 P-Q CURVE





FANMEF200

• **High Efficiency Performance :** FANMEF is designed for air circulation, effectively removing heat, moisture, and odours from your space. Ideal for any rooms that requires ventilation

• **Easy Installation :** FANMEF is easy to install. Its compact design fits most wall thickness, making it easy to install.

• **Energy Efficient :** With its low power consumption, this fan helps reduce your energy bills, making eco-friendly and cost-effective choice

• **Sturdy & Safe :** Made with premium quality materials, making it safe and sturdy

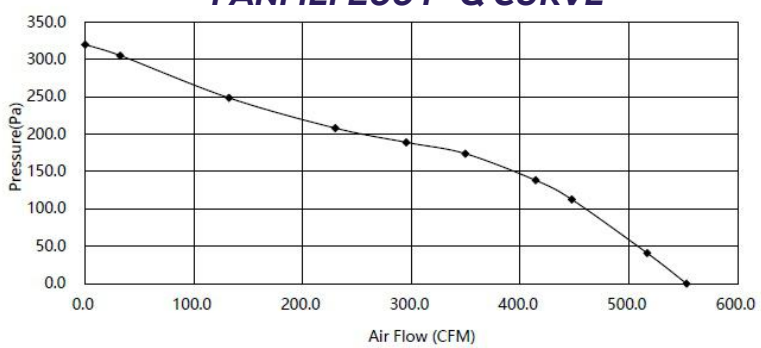


TEST METHOD
Test Equipment: Wind Tunnel Test
Standard: AMCA210

TEST CONDITION		
Ambient Temperature	22.5	°C
Relative Humidity	46.5	%RH
Atmospheric Pressure	956.3	hPa
Input Voltage	219	VDC
Operating Speed	1961	rpm
Maximum Static Pressure	320.0	Pa
Maximum Flow Rate	260.99	l/s

POINTS	PRESSURE		AIR FLOW		SPEED	VOLTAGE	CURRENT	POWER	NOISE
	mmH_2O	Pa	m^3/h	l/s	rpm	V	A	W	dB-A @ 3m
1	32.7	320.0	0.0	0.0	2371	218	0.44	62	0
2	31.2	305.3	54	15.20	2380	218	0.44	62.1	21.4
3	25.4	248.6	228	62.49	2476	218	0.45	63.1	31.7
4	21.2	208.2	390	108.55	2428	218	0.44	62.3	35.4
5	19.3	189.1	504	139.37	2268	218	0.44	61.4	37.1
6	17.7	173.9	594	164.99	2108	218	0.43	61	38.3
7	14.1	138.2	708	195.53	2038	218	0.43	61.2	39.5
8	11.5	112.6	762	211.20	2016	218	0.43	61.4	40.1
9	4.2	40.8	882	243.95	1975	218	0.43	61.3	41.3
10	0.0	0.0	942	260.99	1961	218	0.44	61.4	42

FANMEF200 P-Q CURVE





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FANS



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Low Profile Body

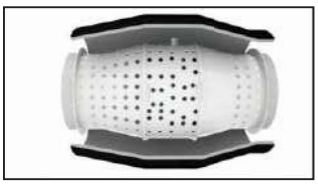
FANMFS - Silent Mixed Flow Inline Duct Fan

- Fan body is made of environmental protection material with beautiful lines and light weight, double insulation.
- Fan blade is designed with hydromechanical principles for optimal airflow and air pressure, high efficiency working, low energy consumption and low noise.
- Fan inside produced with two-layer sound absorbent and sound wave holes, to reduce noise level.
- Double diameter connection, sealing-up, leak-proof and shockproof.
- Backdraft damper designed inside, to prevent return air and insects.
- Joint design facilitates installation and dismounting for easy installation and maintenance.
- Outer rotor motor with Japanese brand NMB ball bearing, long working life over 50000 hours.
- Protection class: IP44
- Can be designed with user friendly features such as time delay, temperature sense, humidity sensor or other customised functions.
- Operating temperature range: -20ºC ~ 60ºC
- These fans address ventilation needs in places where people work and live and low sound level is required, such as meeting room, office, hotel, public place, residence, hospital, gym etc.

FEATURES & DIMENSIONS



High performance hydromechanical fan blades



Ultra quiet design with two-layer sound absorbent and sound wave holes



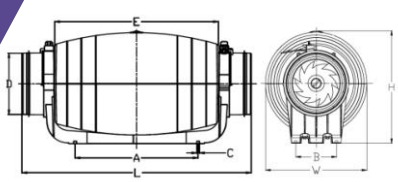
Joint design simplifies installation and dismounting - Double diameter connection



Backdraft damper designed inside to prevent insects



Easy installation and maintenance



Nom Size	A	B	C	ØD	E	L	W	H
125	248	82	4-Ø5.5	97/123	330	580/462	205	225
150	251	95	4-Ø5.3	149/158	352	488	221	244
200	339	128	4-Ø5.6	198	436	567	262	301

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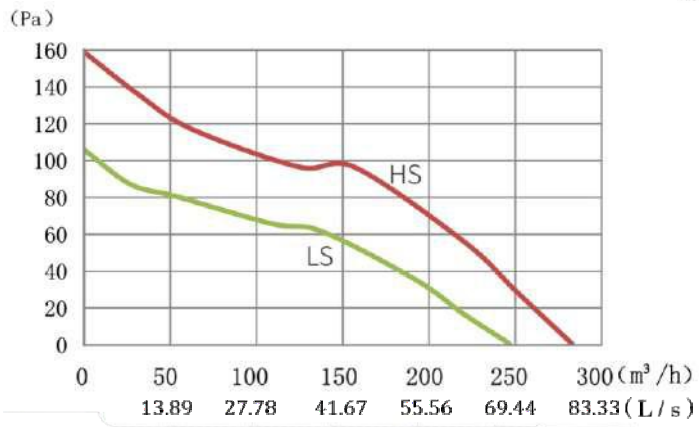
FANMFS - Series Silent Mixed Flow Inline Duct Fan

Performance Parameter

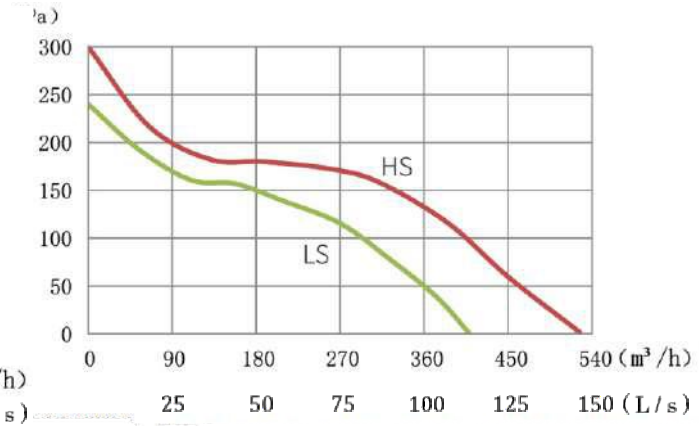
Model	Speed	Voltage /Frequency (V/Hz)	Current (Amps)	Power (W)	Speed (RPM)	Airflow		Air Pressure (Pa)	Noise (dB)	Net Weight (kgs)
						(m^3/h)	(m^3/s)			
FANMFS-125	H	220~240/50	0.14	33	2250	284	78.9	159	25	2.8
	L		0.13	28	1850	248	68.9	106	22	
	H	100~120/60	0.35	38	2250	284	78.9	159	25	
	L		0.31	32	1850	248	68.9	106	22	
FANMFS-150	H	220~240/50	0.25	50	2550	530	147.2	300	31	4.0
	L		0.20	43	1850	410	113.9	240	26	
	H	100~120/60	0.55	62	2550	530	147.2	300	31	
	L		0.45	49	1850	410	113.9	240	26	
FANMFS-200	H	220~240/50	0.57	128	2450	840	233.3	352	35	5.9
	L		0.52	123	1950	690	191.2	274	29	
	H	100~120/60	1.60	160	2450	840	233.3	352	35	
	L		1.30	135	1950	690	191.2	274	29	

Performance Curves

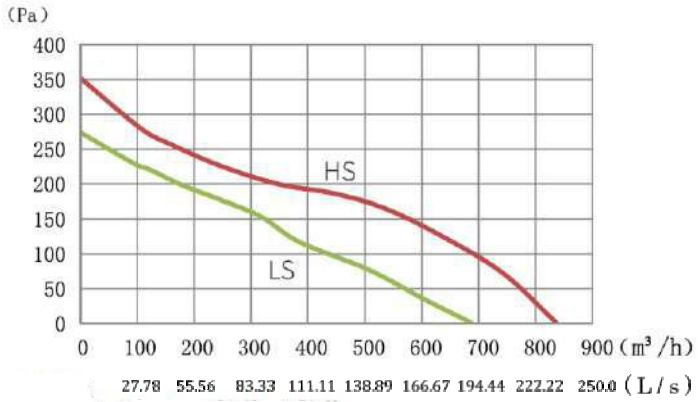
FANMFS-125



FANMFS-150



FANMFS-200



FANS



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FANDV - Centrifugal Ceiling Exhaust Fans Header Box Fan

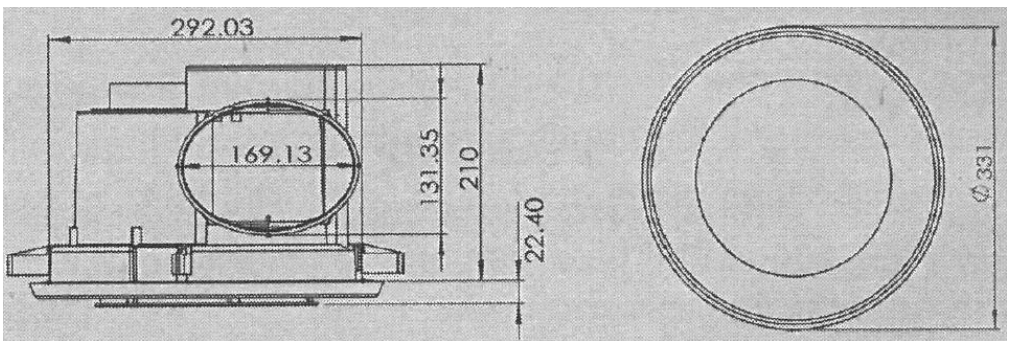


- Suitable for small bathrooms, ensuites and laundry rooms
- Back-draft shutter included
- 150mm Clip on Connection Spigot
- Side ducted exhaust fan
- Flex and plug included
- Toilets & powder rooms and laundries
- Designed for longer duct runs

SAA

The Centrifugal Ceiling Exhaust Fans by MEC is a stylish and slimline exhaust fan unit designed for use in small bathrooms, laundry rooms and toilets. Composed of durable acrylic the white fascia on the Centrifugal Ceiling Exhaust Fan features a 331mm diameter and a powerful yet quiet ball bearing exhaust with a 330m³/hr extraction rate. The Centrifugal Ceiling Exhaust Fan has a low profile of 200mm (min. installation depth 210mm required) allowing installation in limited ceiling spaces. The MEC Fan Ceiling exhaust fans come complete with a flex and plug for easy installation (providing there is an existing GPO outlet available in the ceiling).

DIMENSIONS & SPECIFICATIONS



Model	Voltage	Frequency	Power	Duct	Cut out Size
FANDV150	220-240V	50 Hz	60 W	100/150mm	300mm Dia
FANDV150L	220-240V	50 Hz	60 W Fan + 18 W LED	100/150mm	300mm Dia

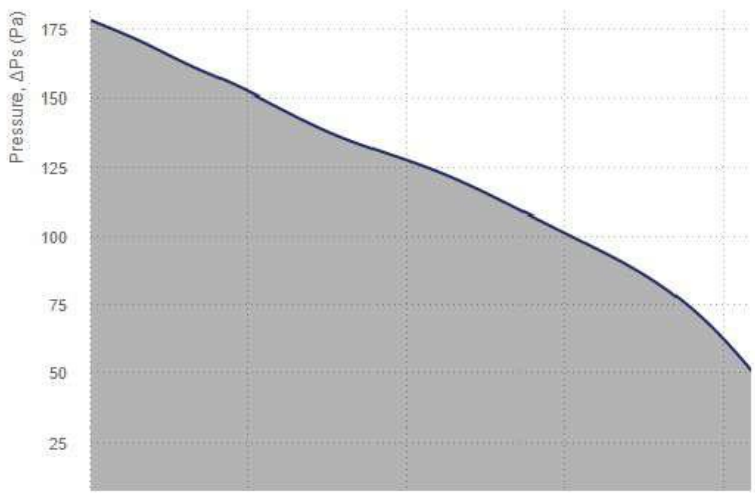
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FANDV - Series

Centrifugal Ceiling Exhaust Fans
Header Box Fan

Capacity Diagram

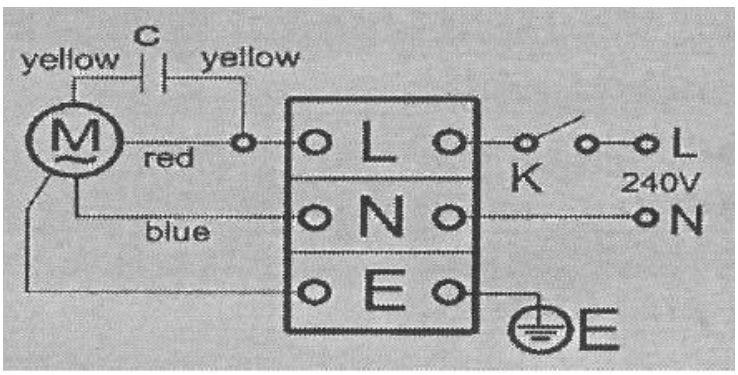


Fan Specifications:

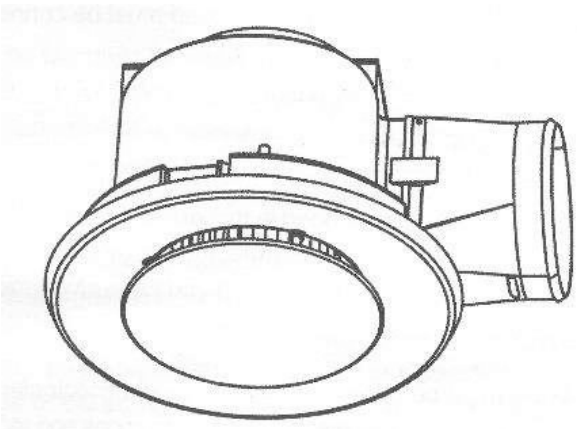
Flow Rate	330 m^3/h or 91 l/s
Sound Level at 3m	39 dBA
Design	Centrifugal
Type	Exhaust
Power	60 W
Amps	0.27 A

Wiring Diagram

Wiring (Ensure the power is turned OFF)
Please comply with local wiring rules when wiring.









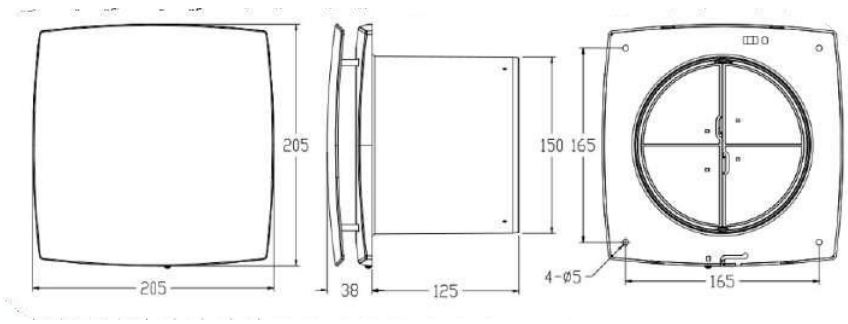
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FANSL - Axial Exhaust Fan



- Modern design and good looking.
- Fan frame and blade are made of high-quality durable ABS plastic, UV resistant.
- Fan blade design makes it high efficiency working and long working life.
- Fan designed with ultra thin front panel and insect screen.
- Fan with reliable low-watt motor, continuous operation.
- Protection class: Ip34.
- The fans are directly mounted into the ventilation shaft.
- In case of remote location of ventilation shaft, connect a flexible air duct to the fan with a clamp.
- Fix the fan to wall by self-tapping screws.
- Suitable for ceiling mounting.
- Designed for continuous or periodic exhaust ventilation area such as bathroom, showers, kitchens and other spaces.

DIMENSIONS & SPECIFICATIONS



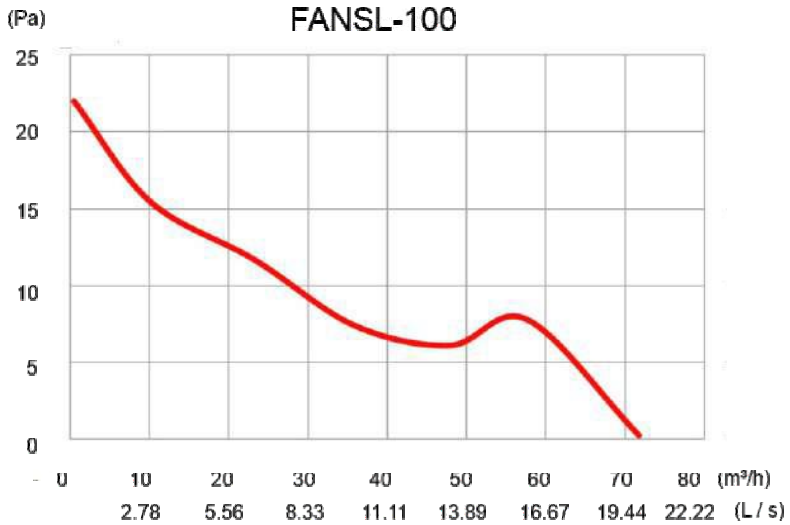
Model	Voltage /Frequency (V/Hz)	Current (Amps)	Power (W)	Speed (RPM)	Airflow		Air Pressure (Pa)	Net Weight (kgs)
					(m^3/h)	(m^3/s)		
FANSL-100	220~240/50	0.07	12	2300	72	20	20	0.6
FANSL-150	220~240/50	0.17	22	2350	201	55.8	55	1.0
	100~120/60	0.40	25	2350	201	55.8	55	

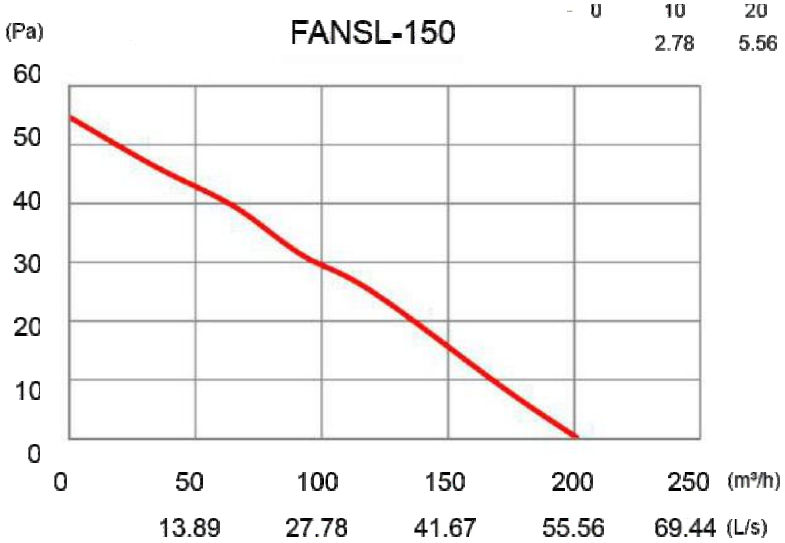
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FANSL - Series Axial Exhaust Fan

Performance Curves





Smart silent exhaust fan

It`s a smart silent exhaust fan which can adjust speed automatically by according to sensing the changes on environmental temperature, humidity and air VOC value.

Function

- Automatically switch to high or low speed, standard setting mode accordingly to learning environmental temperature, humidity and air quality VOC value change.
- Automatically switch to high or low speed accordingly to sensing environmental temperature, humidity and air quality VOC value change.
- Delete environmental temperature.
- Detect environmental humidity.
- Detect air quality VOC value.
- Automatically determine the high or low speed switching timing.

Bang! Coming soon



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FANS

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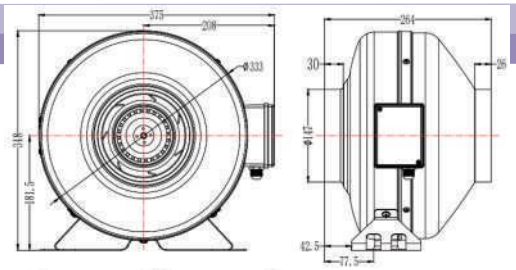


FANMAN - Circular Centrifugal Fan

- Insulation Class: F
- Protection class: IP44
- Iron Casing and ABS(FR) connection box
- Japanese NSK Ball Bearing, continuous operation of 50000h
- External rotor motor with low-temperature rise.
- With CE and UL certification.
- Backward-curved centrifugal impeller using PA66(FR).
- Motor is equipped with automatic reset thermal overload protection.
- Operating temperature range: -20℃~60℃.

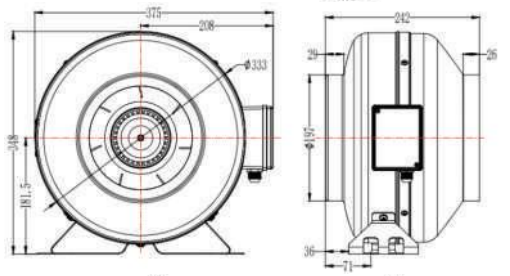
FANMAN150

Model	Voltage/ Frequency (V/Hz)	Current (Amps)	Power (W)	Rotated Speed (RPM)	Airflow (M^3/H)	Air Pressure (Pa)	Net Weight (kg)
FANMAN150	220~240/50	0.58	110	2450	680	446	4.30
	100~120/60	1.30	140	2550	707	483	



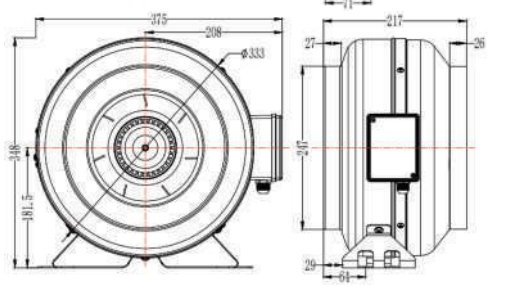
FANMAN200

Model	Voltage/ Frequency (V/Hz)	Current (Amps)	Power (W)	Rotated Speed (RPM)	Airflow (M^3/H)	Air Pressure (Pa)	Net Weight (kg)
FANMAN200	220~240/50	0.75	175	2420	945	674	5.20
	100~120/60	1.60	180	2420	945	700	



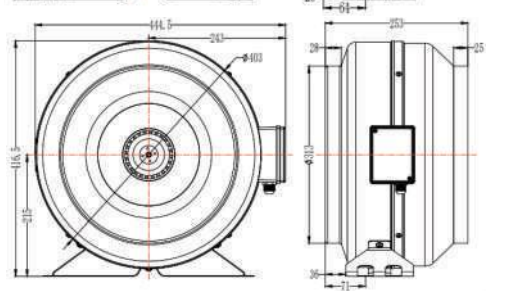
FANMAN250

Model	Voltage/ Frequency (V/Hz)	Current (Amps)	Power (W)	Rotated Speed (RPM)	Airflow (M^3/H)	Air Pressure (Pa)	Net Weight (kg)
FANMAN250	220~240/50	0.80	175	2420	979	654	5.10
	100~120/60	1.60	180	2420	979	677	



FANMAN315

Model	Voltage/ Frequency (V/Hz)	Current (Amps)	Power (W)	Rotated Speed (RPM)	Airflow (M^3/H)	Air Pressure (Pa)	Net Weight (kg)
FANMAN315	220~240/50	1.28	225	2520	1660	738	6.62
	100~120/60	2.80	335	2800	1840	900	



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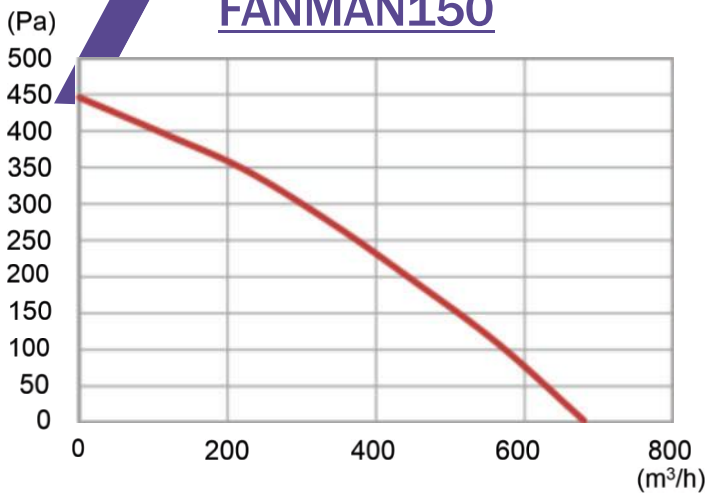
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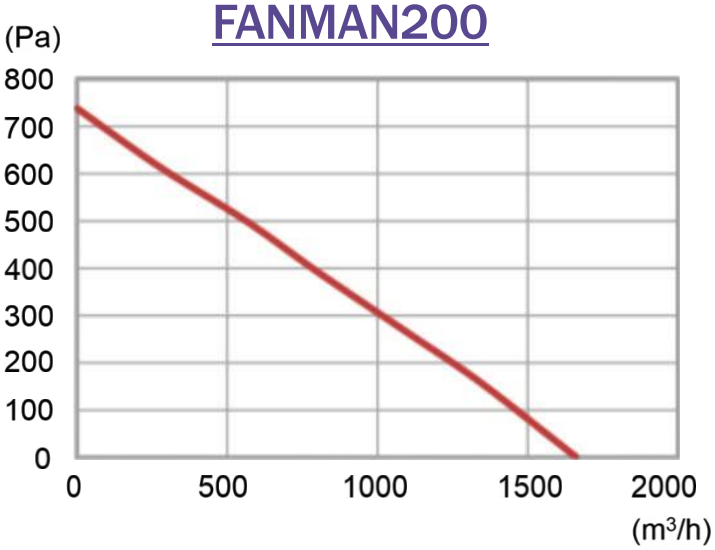
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PERFORMANCE CURVES

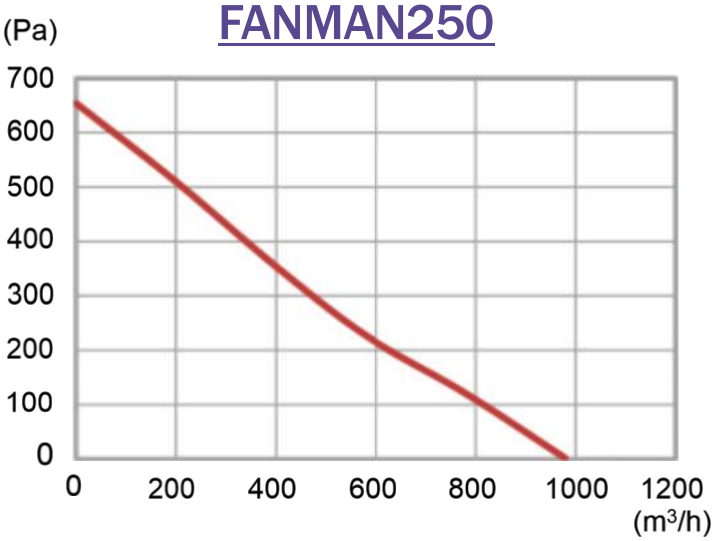
FANMAN150



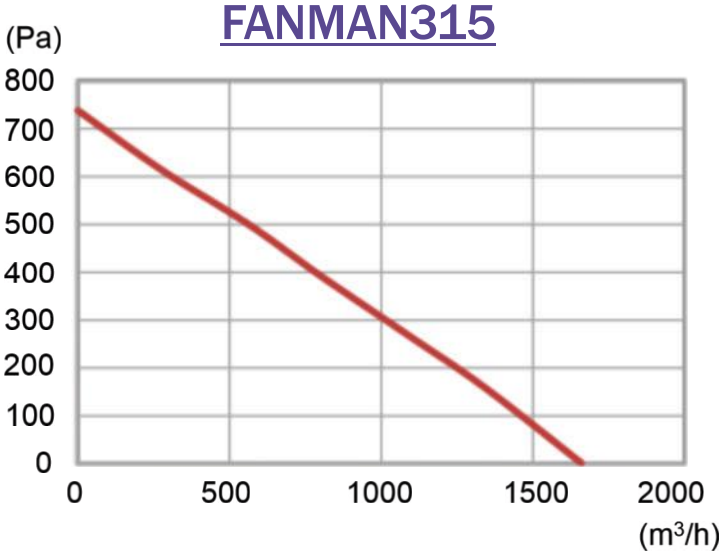
FANMAN200

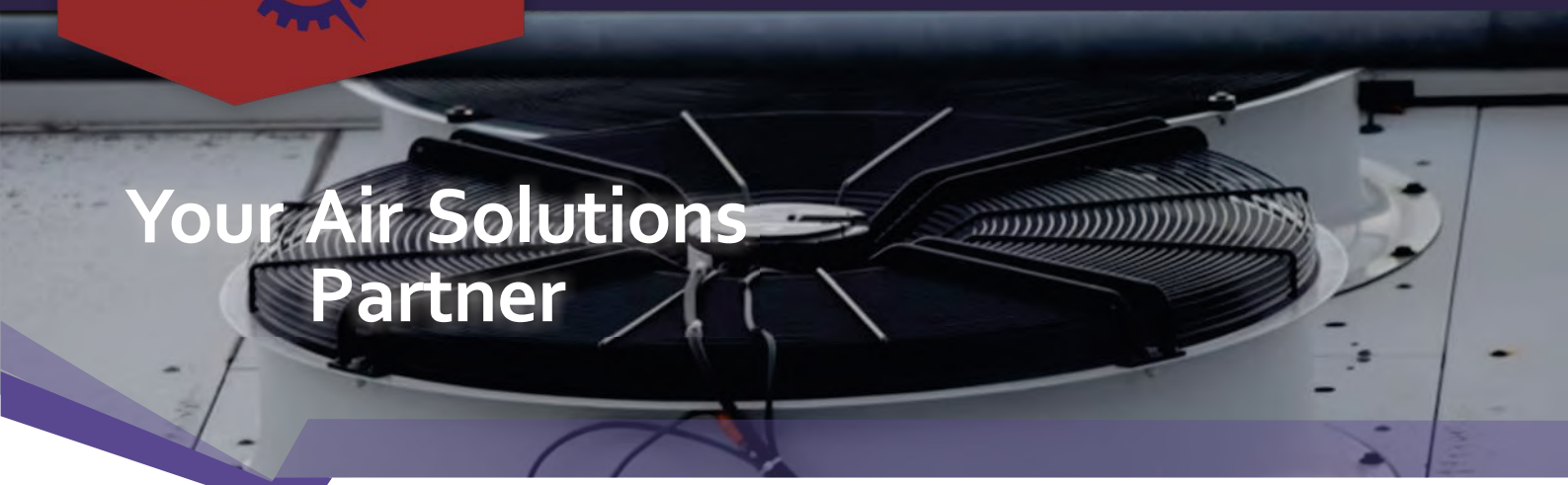


FANMAN250



FANMAN315





Your Air Solutions Partner

FANAX - Inline Axial Fan

- Available in 150mm, 200mm & 250mm
- Mounting foot fitted as standard
- Plug and lead fitted
- Fixed speed



SPECIFICATIONS

Fan Code	Fan Dia	1/s	Fan Speed	dBA@3M	KW	AMPS
FANAX150	150mm	83	2700rpm	41	0.038	0.3
FANAX200	200mm	210	2500rpm	51	0.065	0.45
FANAX250	250mm	370	2700rpm	52	0.072	0.85

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