

# INLINE MIXED FLOW FANS

The solution for low demand ventilation in general commercial and residential systems



# SIGRIST DESIGN

Sigrist Design is an Australian owned and operated company with over 30 years of experience designing and manufacturing custom ventilation solutions.

With a head office and manufacturing facility located in Queensland, dust management and air filtration products are our focus. The Sigrist Design team has experienced design engineers, sheet metal fabricators, welders and site installation crews.

Predominantly dealing in ventilation, fans, air filtration and dust collection with a majority of products being manufactured in house, we design and manufacture for industrial, commercial, building and construction markets. Our team of salespeople, workshop technicians and engineers are experienced in these fields and more than capable of tackling different and challenging design problems that lie within our diverse manufacturing capabilities.





# SIM-B RANGE



Our silent inline mixed flow fans provide **ultra** low noise levels. Using an integral silencer built into the fan housing, our silent mixed flow fans come complete with a lead, plug and a pre-wired two speed switch, providing high and low speeds depending on your requirements.

The motor housing can unclip from duct connections for ease of service. This whisper quiet solution is used for lower air volume ventilation in general commercial and residential systems.

Commonly used in room air transfer, toilet exhaust and general supply or exhaust ventilation applications where performance and sound levels are critical, within a restricted space. The terminal block can be rotated to four positions.

# IM-B RANGE



Our inline mixed flow fans provide low noise levels and incorporate a hybrid impeller design. Supplied complete with a lead, plug and a pre-wired two speed switch, providing high and low speeds depending on your requirements.

The motor housing can unclip from duct connections for ease of service. This quiet solution is used for lower air volume ventilation in general commercial and residential systems. Commonly used in room air transfer, toilet exhaust and general supply or exhaust ventilation applications where performance levels are critical within a restricted space.

# **FEATURES**



Highly suited to areas with restricted space where the compact design comes into its own, including ceiling spaces and between false ceilings.



High or low speed operation.



Speed controllable with potentiometer controller (suitable for high fan speed setting only).



Compatible with 100mm duct up to 315mm duct.



Can be installed in parallel or series configuration for higher pressures or flows.



Easy motor/impeller dismount system.



Airflow tests to ISO 5801



Noise tests to ISO 13347-2:2004 and ISO 10302



# SIM-B RANGE

#### **FEATURES**

The SIM-B range is a silent inline duct silent mixed flow fan, which is used for general ventilation when low noise is required.

#### **APPLICATION**

This fan can be applied in;

- Hospitals
- Surgical wards
- Libraries
- Offices

### CONSTRUCTION

This silent inline mixed flow fan is manufactured from a polymer coated steel casing with a plastic impeller.

#### **MOTORS**

There is one motor option available for this inline fan. This is a single-phase motor, with two speed options which has been pre-installed by the manufacturer.

#### SPECIAL FEATURES



IPX4 protection rating



High quality bearings



Dual speed control



50 mm thick sound/ thermal insulation



Thermal overload switch

### **DIMENSIONS**

MODEL	В	B1	D	Н	L
SIM-B-150-2E	247	273	148	263	579
SIM-B-200-2E	293	386	198	295	550
SIM-B-250-2E	358	445	248	360	658
SIM-B-315-2E	432	520	313	434	780

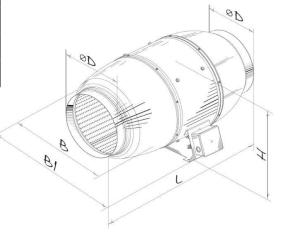
#### **HOW TO ORDER**



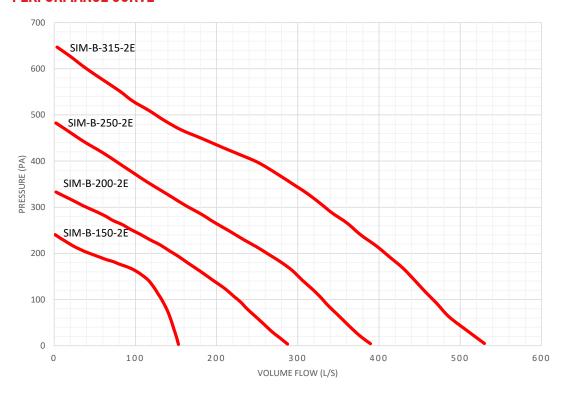
В

2E

— DIAMETER



# PERFORMANCE CURVE



# **NOISE DATA**

	SPECTRUM (HZ) – SWL	125	250	500	1K	2K	4K	8K	DBA @ 3M – SPL
SIM-B-150-2E	Environment S1	56	50	43	38	30	23	18	25
SIM-B-150-2E	Environment S2	63	57	50	45	35	27	22	32
SIM-B-200-2E	Environment S1	62	55	47	41	38	36	29	31
SIM-B-200-2E	Environment S2	68	61	52	45	42	40	33	36
SIM-B-250-2E	Environment S1	64	60	50	44	38	32	24	34
SIM-B-250-2E	Environment S2	65	62	56	49	45	40	30	37
SIM-B-315-2E	Environment S1	63	61	53	45	42	38	28	35
SIM-B-315-2E	Environment S2	37	63	58	50	47	44	34	38

# **TECHNICAL DATA**

MODEL	ELECTRICAL Supply (V,PH,HZ)	MOTOR POWER (KW)	FULL LOAD Current (A)	MOTOR POLES (EA)	FAN SPEED (RPM)	SPEED SETTING	MASS (KG)
SIM-B-150-2E	240, 1, 50	0.045, 0.052	0.2, 0.23	2	1985, 2640	1,2	6.1
SIM-B-200-2E	240, 1, 50	0.078, 0.11	0.35, 0.49	2	2000, 2460	1,2	8
SIM-B-250-2E	240, 1, 50	0.127, 0.178	0.52, 0.79	2	1960, 2460	1,2	15
SIM-B-315-2E	240, 1, 50	0.213, 0.313	0.93, 1.41	2	2120, 2620	1,2	25





#### **FEATURES**

The IM-B range is an all-round performer used for general ventilation. This fan comes in six different size options which provide varying rates of airflow.

#### **APPLICATION**

The IM-HG range is best applied in areas such as:

- Offices
- Bathrooms
- Kitchens

### CONSTRUCTION

This In-Line Mixed Flow Fan is manufactured from low-flammability polypropylene.

#### **MOTORS**

There is one motor option available for this size fan. This is a single-phase motor which has been pre-installed by the manufacturer. It also includes a 1.2 m power lead with a 3-pin plug.

#### SPECIAL FEATURES



IPX4 protection rating



High quality bearings



Quick release clamps



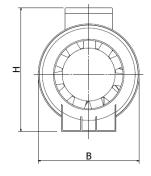
Two speed settings

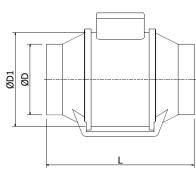
### **DIMENSIONS**

MODEL	В	D	D1	Н	L
IM-B-100-2E	D	98	164	241	303
IM-B-125-2E	D1	123	164	241	258
IM-B-150-2E	Н	148	187	251	289
IM-B-200-2E	L	199	209	261	296
IM-B-250-2E	287	247	257	323	383
IM-B-315-2E	362	310	323	408	445

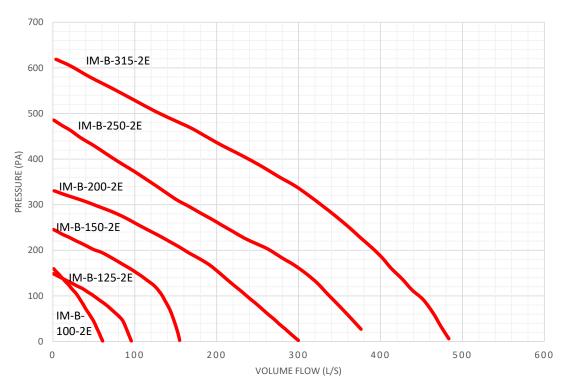
#### **HOW TO ORDER**







# PERFORMANCE CURVE



### **NOISE DATA**

	SPECTRUM (HZ) – SWL	125	250	500	1K	2K	4K	8K	DBA @ 3M - SPL
IM-B-100-2E	Environment S1	39	53	43	43	37	32	20	27
IM-B-100-2E	Environment S2	45	62	54	50	44	39	25	36
IM-B-125-2E	Environment S1	48	55	48	40	36	25	15	29
IM-B-125-2E	Environment S2	43	59	49	47	46	37	23	33
IM-B-150-2E	Environment S1	46	57	51	45	43	35	22	32
IM-B-150-2E	Environment S2	53	65	62	57	62	48	34	45
IM-B-200-2E	Environment S1	58	58	57	55	55	47	33	40
IM-B-200-2E	Environment S2	59	63	63	60	61	54	40	46
IM-B-250-2E	Environment S1	67	66	64	59	57	46	31	45
IM-B-250-2E	Environment S2	66	72	72	66	64	54	39	52
IM-B-315-2E	Environment S1	67	62	60	57	55	47	35	42
IM-B-315-2E	Environment S2	67	75	69	67	66	59	47	52

# **TECHNICAL DATA**

MODEL	ELECTRICAL Supply (V,PH,Hz)	MOTOR POWER (KW)	FULL LOAD Current (A)	MOTOR POLES (EA)	FAN SPEED (RPM)	SPEED SETTING	MASS (KG)
IM-B-100-2E	240, 1, 50	0.023, 0.025	0.1, 0.11	2	1980, 2545	1,2	1.68
IM-B-125-2E	240, 1, 50	0.025, 0.03	0.11, 0.13	2	1935, 2265	1,2	1.79
IM-B-150-2E	240, 1, 50	0.042, 0.05	0.18, 0.2	2	1940, 2620	1,2	3.18
IM-B-200-2E	240, 1, 50	0.076, 0.108	0.34, 0.48	2	1915, 2380	1,2	3.23
IM-B-250-2E	240, 1, 50	0.125, 0.177	0.54, 0.79	2	1955, 2440	1,2	7.83
IM-B-315-2E	240, 1, 50	0.227, 0.315	0.99, 1.42	2	2115, 2505	1,2	11.7



# **HEAD OFFICE**

Unit 3, 848 Boundary Road, Richlands, QLD, 4077 Australia

# **EMAIL**

sales@sigristdesign.com.au

# **PHONE**

07 3271 4415

WWW.SIGRISTDESIGN.COM.AU











