



## Sound-insulated inline mixed-flow fans

# Iso-Mix

Air capacity – up to 1920 m<sup>3</sup>/h

### Use

- Supply and exhaust ventilation systems installed in various premises with high requirements to the noise level.
- For ventilation air ducts requiring high pressure, powerful air flow and low noise level.
- Compatible with Ø 100 up to Ø 315 mm air ducts.

### Design

- The casing is made of polymer-coated steel, internally filled with 50 mm mineral wool thermal- and sound-insulating layer.
- Special inner perforation of the casing and sound-insulating material are designed for wide-frequency sound absorbing.
- Mixed-flow impeller made of high-quality plastic.
- The diffuser, the specially profiled impeller and directing vanes provide high performance and powerful pressure combined with low noise operation.
- External airtight terminal block on the fan casing for power supply.
- Mounting brackets on the fan casing for mounting to the floor, to the wall or ceiling.

### Motor

- Double-speed single-phase high-efficient motor with low energy demand on ball bearings.
- Overheating protection by built-in thermal switches.
- Motor ingress protection rating IPX4.

### Speed control

- Speed selection with a built-in speed switch (US option) or an external multi-speed switch (special accessory).
- Smooth speed control is possible either with an integrated speed switch (FR option), an external thyristor or transformer speed controller (special accessory) when connected to the maximum speed terminal.

### Mounting

- Due to its compact design the fan is the ideal solution for mounting in limited spaces.
- The fan is suitable for mounting in any section of the ventilation system from intake to the end of the ductwork.
- Wall or ceiling mounting with a special mounting plate on the fan casing.

### Modifications and options

- **T** – adjustable run-out timer regulated from 2 to 30 minutes.
- **US** – three-position speed switch integrated in the fan.

- **FR** – built-in smooth speed controller from 0 to 100 %. The fan is supplied with a pre-wired power cable with IEC plug as a standard. The cable modification with a standard electric plug is also available (FR1).



- **G** – smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 4 m cable. The fan is supplied with a pre-wired power cable with IEC plug as a standard. The cable modification with a standard electric plug is also available (G1).

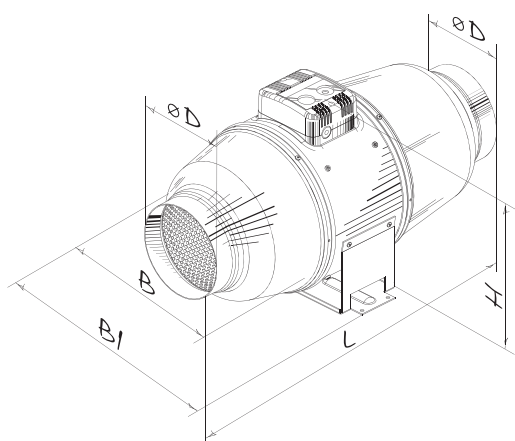


- **G1** – smooth speed controller with an electronic thermostat and a temperature sensor integrated into the air duct. The fan is supplied with a pre-wired power cable with IEC plug as a standard. The cable modification with a standard electric plug is also available (G1).
- G and G1 options enable automatic speed control depending on indoor temperature. The best solution for ventilation of premises with permanent temperature control, e.g. greenhouses.

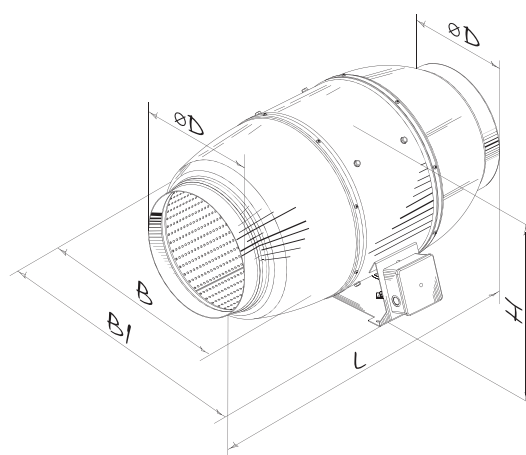
- **W** – pre-wired power cable and IEC plug as a standard. Modification with a standard electric plug is available (W1).

## Overall dimensions

Type	Dimensions [mm]					Weight [kg]
	∅D	B	B1	L	H	
Iso-Mix 100	98	214	243	505	251	4.6
Iso-Mix 125	123	214	243	474	251	4.6
Iso-Mix 150	148	247	273	579	263	6.1
Iso-Mix 160	159	281	327	566	284	6.3
Iso-Mix 200	198	293	386	550	295	8.0
Iso-Mix 250	248	358	445	658	360	15.0
Iso-Mix 315	313	432	520	780	434	25.0



Iso-Mix 100 – Iso-Mix 150



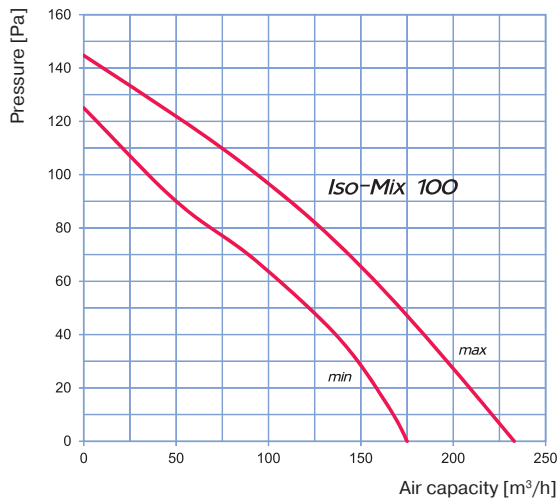
Iso-Mix 160 – Iso-Mix 315

ErP data	
Overall efficiency	η, (%)
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m <sup>3</sup> /h]
Static pressure	[Pa]
Speed	[n/min <sup>-1</sup> ]
Specific ratio	SR

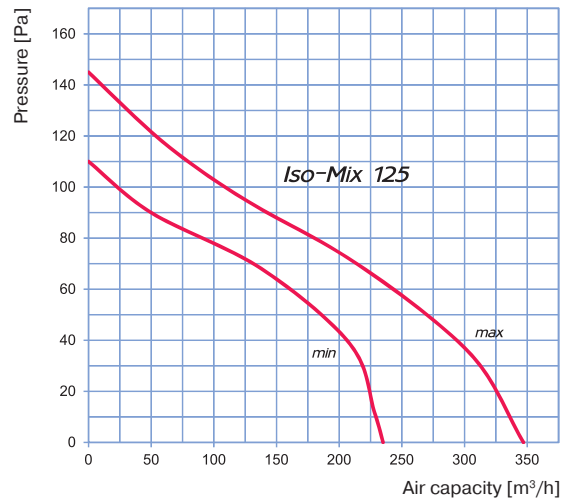
## Specifications

Parameters	Iso-Mix 100*		Iso-Mix 125*		Iso-Mix 150* Iso-Mix 160*	
	min	max	min	max	min	max
Speed						
Voltage [V / 50 /60 Hz]	1 ~ 230		1 ~ 230		1 ~ 230	
Power [W]	24	26	25	29	45	52
Current [A]	0.10	0.11	0.11	0.13	0.20	0.23
Maximum air capacity [m³/h]	175	233	235	347	410	550
RPM [min <sup>-1</sup> ]	2015	2610	1660	2315	1985	2640
Sound pressure level at 3 m distance [dBA]	24	29	23	28	26	33
Max. operating temperature [°C]	60					
SEC class	-		-		C	
Ingress protection rating	IPX4		IPX4		IPX4	

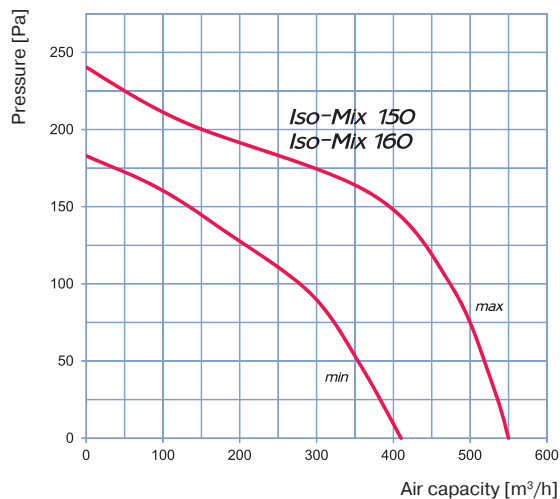
\* Compliant to the ErP-regulation (EC) 327/2011, the power consumption at optimum efficiency is < 125W.



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	42	19	18	29	35	39	39	31	24
L <sub>WA</sub> to outlet, [dBA]	45	20	19	30	38	42	35	35	23
L <sub>WA</sub> to environment, [dBA]	34	15	14	17	25	29	21	22	14





Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	47	19	21	35	38	42	41	35	28
L <sub>WA</sub> to outlet, [dBA]	46	21	24	35	39	41	43	37	29
L <sub>WA</sub> to environment, [dBA]	35	17	20	23	27	28	22	21	15

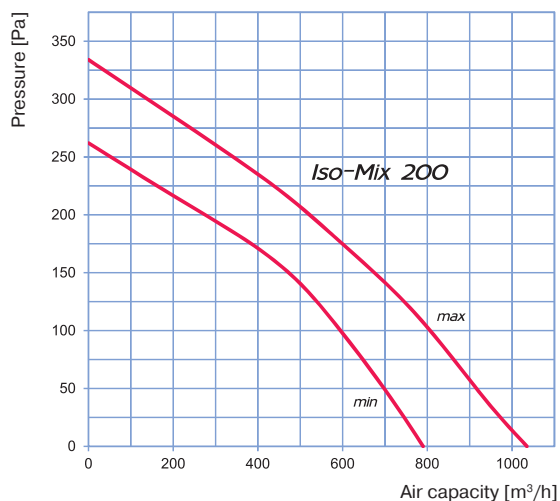


Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	61	25	33	49	55	53	55	53	39
L <sub>WA</sub> to outlet, [dBA]	59	35	36	51	55	55	55	50	42
L <sub>WA</sub> to environment, [dBA]	39	19	22	39	35	36	33	24	21

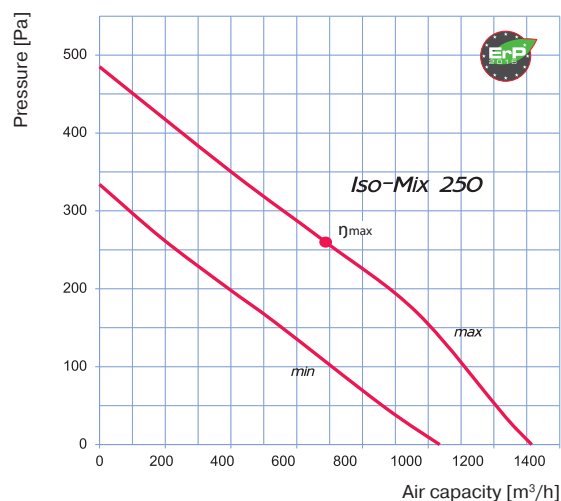
## Specifications

Parameters	Iso-Mix 200*		Iso-Mix 250 		Iso-Mix 315 	
	min	max	min	max	min	max
Speed						
Voltage [V / 50 /60 Hz]	1 ~ 230		1 ~ 230		1 ~ 230	
Power [W]	78	110	127	178	213	313
Current [A]	0.35	0.49	0.52	0.79	0.93	1.41
Maximum air capacity [m³/h]	790	1035	1035	1315	1510	1920
RPM [min <sup>-1</sup> ]	2000	2460	1960	2460	2120	2620
Sound pressure level at 3 m distance [dBA]	31	36	34	38	36	40
Max. operating temperature [°C]	60					
SEC class	C		-		-	
Ingress protection rating	IPX4		IPX4		IPX4	

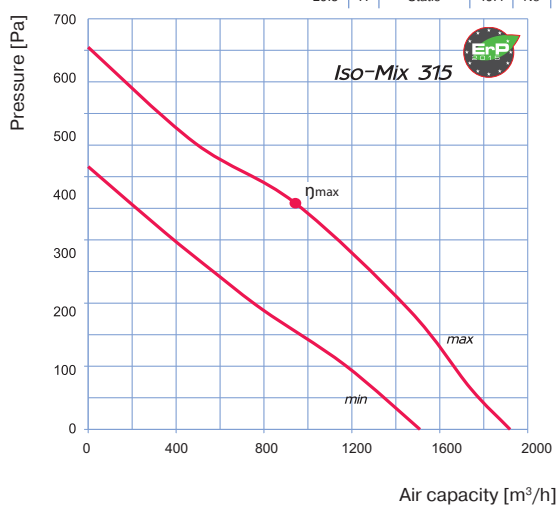
\* Compliant to the ErP-regulation (EC) 327/2011, the power consumption at optimum efficiency is < 125W.



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet, [dBA]	62	26	38	54	57	58	55	52	48
L <sub>WA</sub> to outlet, [dBA]	65	28	42	48	62	60	62	50	44
L <sub>WA</sub> to environment, [dBA]	45	22	30	31	38	41	42	29	22



Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
L <sub>WA</sub> to inlet, [dBA]	65	29	41	57	60	61	58	55	51	
L <sub>WA</sub> to outlet, [dBA]	75	31	45	58	65	73	65	53	47	
L <sub>WA</sub> to environment, [dBA]	55	25	33	48	41	53	49	41	29	
η <sub>i</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
29.5	A	Static	49.4	No	0.172	0.78	688	260	2440	1



Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
L <sub>WA</sub> to inlet, [dBA]	69	35	47	62	61	64	67	58	55	
L <sub>WA</sub> to outlet, [dBA]	75	40	53	69	69	70	65	55	51	
L <sub>WA</sub> to environment, [dBA]	58	25	32	41	51	55	52	49	37	
η <sub>i</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
30.9	A	Static	46.7	No	0.31	1.4	943	358	2590	1