Sound-insulated inline mixed-flow fan
Iso-Mix

APPLICATION

Iso MIX fans are specially designed for supply and exhaust ventilation of premises requiring with high requirements to noise level. These fans are enclosed in a specially designed sound-insulated casing that ensures silent fan operation in combination with high aerodynamic characteristics. These fans are featured with wide capabilities and high performance of axial and centrifugal fans thus providing powerful air stream and high pressure. The fans are compatible with Ø 100 to 315 mm.

Areas of Application : Best Solution for Ventilation in libraries, conference halls, educational institutions, kindergartens, health care and child care facilities etc. where noise is a major criteria.

DESIGN

- The fan Casing made of polymer-coated steel.
- The inner casing is 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. The inner casing perforation let sound waves pass through the holes and fall at a specific angle to the sound-absorbing layer
- The inner casing and the impeller are made of high-quality durable plastic.
- The diffuser, the specially profiled impeller and the directing vanes at outlet from the fan casing distribute air flow in such a way as to attain the best combination of high performance, enhanced pressure and low noise.

- 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

- ISO Mix fans are equipped with double-speed single phase high efficient motor on ball bearings with low energy demand.
- Motor equipped with built in thermal overload protection.
- Maintenance-free ball bearings for 40 000 hrs non-stop operation.
- Motor has IP X4 ingress protection rating.

SPEED CONTROL

- The built-in switch (option US) or external switch for multi-speed switch (available upon separate order).
- Smooth speed control is possible with a built-in speed controller (option FR) or an external thyristor speed controller(available upon separate order).

MOUNTING

- Due to compact design the fan is the ideal solution for mounting in limited spaces, including space behind a false ceiling.
- The fan can be installed in any section of the ventilation system from intake to the end of the ductworks.
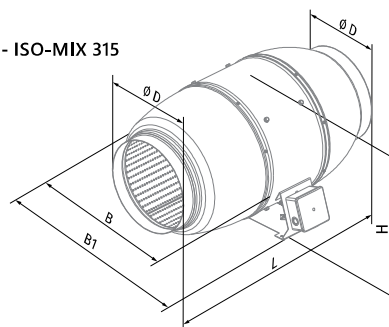- Wall or ceiling mounting with a mounting plate.

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 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
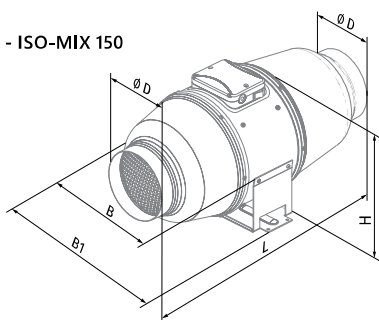
ISO-MIX 200 - ISO-MIX 315

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SPECIFICATIONS

Parameters	ISO-MIX 100		ISO-MIX 125	
Speed	min	max	min	max
Voltage [V / 50-60 Hz]	1~230		1~230	
Power [W]	24	26	25	29
Current [A]	0.10	0.11	0.11	0.13
Maximum air flow [m³/h (l/s)]	175 (49)	233 (65)	235 (65)	347 (96)
RPM [min⁻¹]	2015	2610	1660	2315
Sound pressure level at 3m [dBA]	24	29	23	28
Max. transported air temperature [°C]	+60		+60	
Motor Protection	IP44		IP44	
Erp	-		-	

ISO-MIX 100

Sound power level, A-weighted	Total	Octave Frequency Bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to input [dBA]	55	29	45	51	49	48	35	26	14	34	44
L$_{wA}$ to output [dBA]	53	30	35	38	52	45	38	38	25	33	43
L$_{wA}$ to environment [dBA]	44	29	31	36	38	39	36	31	24	24	34

ISO-MIX 125

Sound power level, A-weighted	Total	Octave Frequency Bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to input [dBA]	60	32	50	56	54	53	38	29	16	39	49
L$_{wA}$ to output [dBA]	58	40	43	50	52	54	50	43	33	38	48
L$_{wA}$ to environment [dBA]	44	35	38	39	37	29	23	18	12	23	33
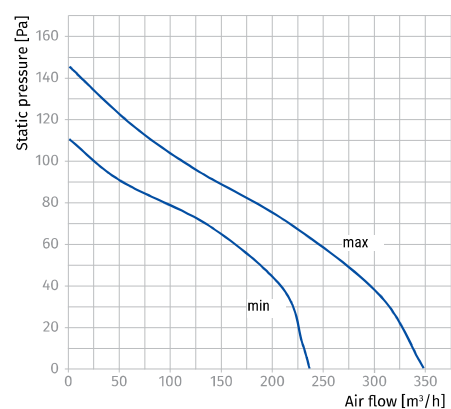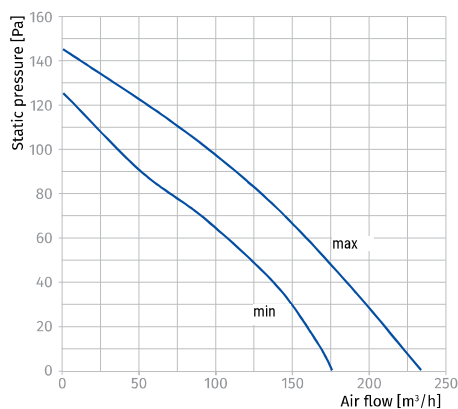
SPECIFICATIONS

Parameters	ISO-MIX 150		ISO-MIX 200	
Speed	min	max	min	max
Voltage [V / 50-60 Hz]	1~230		1~230	
Power [W]	45	52	78	110
Current [A]	0.20	0.23	0.35	0.49
Maximum air flow [m³/h (l/s)]	410 (114)	550 (153)	790 (219)	1035 (288)
RPM [min⁻¹]	1985	2640	2000	2460
Sound pressure level at 3m [dBA]	26	33	31	36
Max. transported air temperature [°C]	+60		+60	
Motor Protection	IP44		IP44	
Erp	2018		2018	

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ISO-MIX 150

Sound power level, A-weighted	Total	Octave Frequency Bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to input [dBA]	59	32	49	55	53	52	38	28	15	38	48
LwA to output [dBA]	62	36	41	44	61	53	44	44	29	41	51
LwA to environment [dBA]	47	37	40	41	40	38	29	22	19	26	36
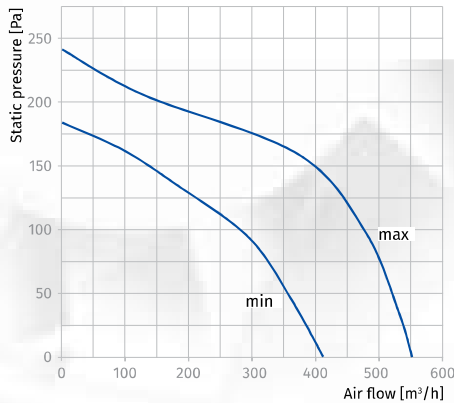
ISO-MIX 200

Sound power level, A-weighted	Total	Octave Frequency Bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to input [dBA]	63	34	53	60	57	56	41	31	17	43	53
LwA to output [dBA]	62	43	46	53	56	58	53	46	36	41	51
LwA to environment [dBA]	52	40	46	46	44	41	37	35	30	31	41
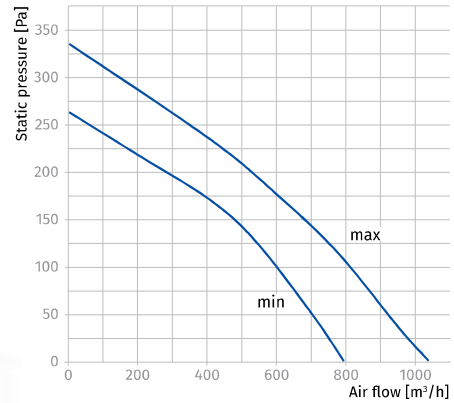
SPECIFICATIONS

Parameters	ISO-MIX 250		ISO-MIX 315	
Speed	min	max	min	max
Voltage [V / 50-60 Hz]	1~230		1~230	
Power [W]	127	178	230	330
Current [A]	0.52	0.79	0.93	1.41
Maximum air flow [m³/h (l/s)]	1035 (288)	1315 (365)	1510 (419)	1920 (533)
RPM [min⁻¹]	1960	2460	2120	2620
Sound pressure level at 3m [dBA]	34	38	36	40
Max. transported air temperature [°C]	+60		+60	
Motor Protection	IP44		IP44	
Erp	2018		2018	

ISO-MIX 250

Sound power level, A-weighted	Total	Octave Frequency Bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to input [dBA]	66	36	56	63	60	59	43	32	17	45	55
LwA to output [dBA]	64	37	42	46	63	55	46	46	30	43	53
LwA to environment [dBA]	55	44	48	51	47	44	37	31	25	34	44
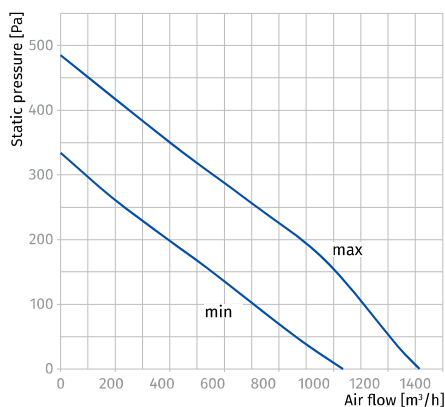
ISO-MIX 315

Sound power level, A-weighted	Total	Octave Frequency Bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LwA to input [dBA]	67	36	57	63	61	59	43	32	18	46	56
LwA to output [dBA]	65	45	48	56	59	61	56	48	37	44	54
LwA to environment [dBA]	56	47	47	52	50	45	41	37	29	36	46

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