

Iso-Mix

Sound-insulated inline mixed-flow fans

Use

- Supply and extract 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.



Air flow:
up to 1920 m³/h
533 l/s



Power:
from 24 W



Noise level:
from 23 dBA



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 diffusor, 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 (three-speed for Iso-Mix 200) single-phase high-efficient motor with low energy demand on ball bearings.
- Overheating protection due to 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 controller (specially ordered accessory).
- Smooth speed control is possible either with an integrated speed controller (FR1 option), an external thyristor or transformer speed controller (specially ordered 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:** turn-off delay timer adjustable from 2 to 30 minutes.
- US:** three-position speed switch.
- FR1:** smooth speed controller adjustable from 0 to 100 % and power cable with mains plug.



- G1:** speed controller, temperature controller with external temperature sensor (cable length 4 m), power cable with mains plug.



- GT1:** speed controller, temperature controller with external temperature sensor (cable length 4 m), 5 min timer switch and power cable with mains plug.
- GI1:** speed controller, temperature controller with integrated temperature sensor and power cable with mains plug.
- GTI1:** speed controller, temperature controller with integrated temperature sensor, 5 min timer switch and power cable with mains plug.
- The **G1** and **GI1** modifications enable automatic speed control depending on indoor temperature. The optimal ventilation solution for premises requiring permanent temperature control as greenhouses, orangeries, etc.
- W1:** power cable with mains plug.

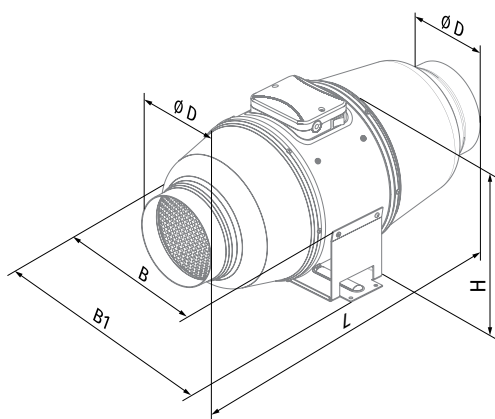
Accessories

Silencers	Filter boxes	Electric heaters	Water heaters	Backdraft air dampers	Air dampers	Clamps	Temperature controllers	Speed controllers	Timers/Sensors
SD	KFBK / KFBT	EKH	WKH	VRV	VK / VKA	K	MLCD E2	CDP / CDT	TE(TI) / HSE(HSI) / LSE(LSI) / IRSE(IRSI)

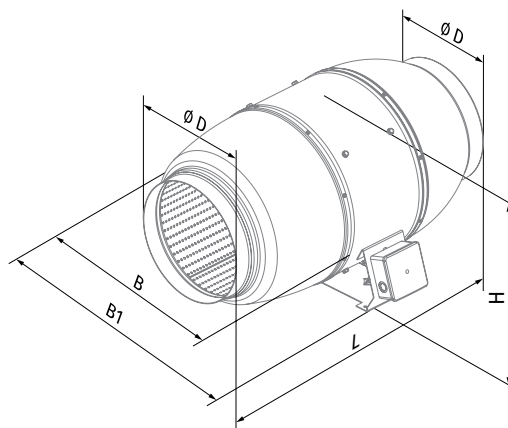
Designation key		
Series	Duct diameter [mm]	Options
Iso-Mix	100; 125; 150; 160; 200; 250; 315	<p>T: turn-off delay timer adjustable from 2 to 30 minutes</p> <p>US: three-position speed switch</p> <p>FR1: smooth speed controller adjustable from 0 to 100 % and power cable with mains plug</p> <p>G1: speed controller, temperature controller with external temperature sensor, power cable with mains plug</p> <p>GT1: speed controller, temperature controller with external temperature sensor, 5 min timer switch and power cable with mains plug</p> <p>GI1: speed controller, temperature controller with integrated temperature sensor and power cable mains plug</p> <p>GTI1: speed controller, temperature controller with integrated temperature sensor, 5 min timer switch and power cable with mains plug</p> <p>W1: power cable with mains plug</p>

Overall dimensions [mm]

Type	∅ D	B	B1	L	H	Weight [kg]
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
Iso-Mix 250	248	358	445	658	360	15
Iso-Mix 315	313	432	520	780	434	25



Iso-Mix 100 – Iso-Mix 150



Iso-Mix 160 – Iso-Mix 315

Technical data

Parameters	Iso-Mix 100		Iso-Mix 125	
	min	max	min	max
Speed				
Voltage [V]	1 ~ 230		1 ~ 230	
Frequency [Hz]	50/60		50/60	
Power [W]	24	26	25	29
Current [A]	0.10	0.11	0.11	0.13
Maximum air flow [m ³ /h (l/s)]	175 (49)	233 (65)	235 (65)	347 (96)
RPM [min ⁻¹]	2015	2610	1660	2315
Sound pressure at 3 m [dBA]	24	29	23	28
Max. transported air temperature [°C]	+60		+60	
SEC class	-		-	
IP rating	IPX4		IPX4	
Motor IP rating	IP44		IP44	
ErP	-		-	

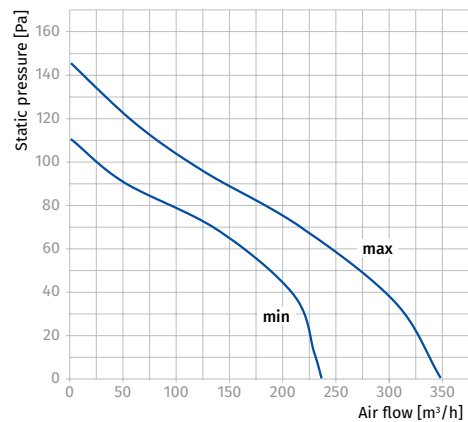
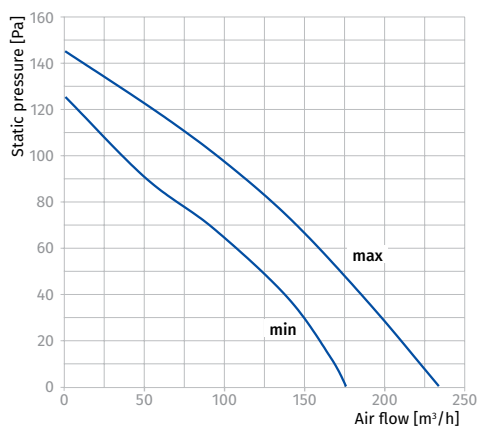
To comply with ErP 2018 it is necessary to use a speed controller and local demand control typology (connect the sensor).

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		
Min speed											
LWA to inlet [dBA]	55	29	45	51	49	48	35	26	14	34	44
LWA to outlet [dBA]	53	30	35	38	52	45	38	38	25	33	43
LWA to environment [dBA]	44	29	31	36	38	39	36	31	24	24	34
Max speed											
LWA to inlet [dBA]	61	33	51	57	55	54	39	29	16	40	50
LWA to outlet [dBA]	58	33	38	41	57	50	41	41	27	37	47
LWA to environment [dBA]	49	36	42	45	44	37	34	24	18	29	39

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		
Min speed											
LWA to inlet [dBA]	60	32	50	56	54	53	38	29	16	39	49
LWA to outlet [dBA]	58	40	43	50	52	54	50	43	33	38	48
LWA to environment [dBA]	44	35	38	39	37	29	23	18	12	23	33
Max speed											
LWA to inlet [dBA]	64	35	54	60	58	56	41	31	17	43	53
LWA to outlet [dBA]	61	35	40	44	60	53	44	44	29	40	50
LWA to environment [dBA]	48	35	40	44	43	38	34	25	20	28	38



Parameters	Iso-Mix 150, Iso-Mix 160			Iso-Mix 200		
Speed	min	max		min	mid	max
Voltage [V]	1 ~ 230			1 ~ 230		
Frequency [Hz]	50/60			50/60		
Power [W]	45	52		82	100	110
Current [A]	0.20	0.23		0.37	0.44	0.49
Maximum air flow [m³/h (l/s)]	410 (114)	550 (153)		731 (203)	961 (267)	1035 (288)
RPM [min⁻¹]	1985	2640		2376	2382	2445
Sound pressure at 3 m [dBA]	26	33		30	34	36
Max. transported air temperature [°C]	+60			+60		
SEC class	C			C		
IP rating	IPX4			IPX4		
Motor IP rating	IP44			IP44		
ErP	2018			2018		

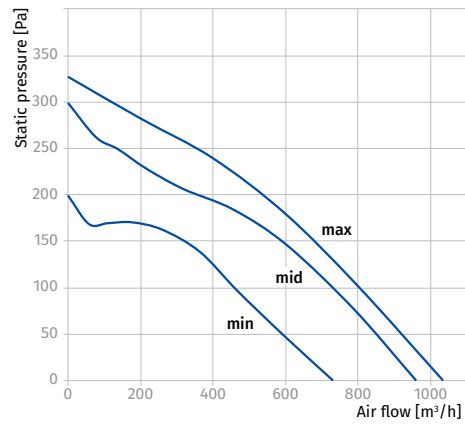
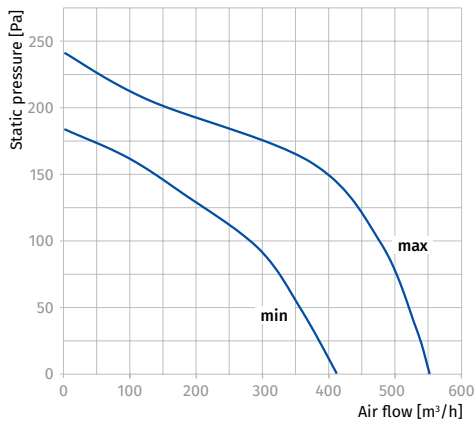
To comply with ErP 2018 it is necessary to use a speed controller and local demand control typology (connect the sensor).

ISO-MIX 150, ISO-MIX 160

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
Min speed											
LWA to inlet [dBA]	59	32	49	55	53	52	38	28	15	38	48
LWA to outlet [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
Max speed											
LWA to inlet [dBA]	68	37	58	65	62	61	44	33	18	48	58
LWA to outlet [dBA]	66	38	43	47	65	57	47	47	31	45	55
LWA to environment [dBA]	53	44	47	48	47	45	34	26	23	33	43

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		
Min speed											
LWA to inlet [dBA]	63	34	53	60	57	56	41	31	17	43	53
LWA to outlet [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
Max speed											
LWA to inlet [dBA]	69	38	59	66	63	62	45	34	18	49	59
LWA to outlet [dBA]	67	39	44	48	66	58	48	48	32	47	57
LWA to environment [dBA]	57	44	52	52	49	45	41	39	34	36	46



Parameters	Iso-Mix 250		Iso-Mix 315	
Speed	min	max	min	max
Voltage [V]	1 ~ 230		1 ~ 230	
Frequency [Hz]	50/60		50/60	
Power [W]	127	178	230	330
Current [A]	0.52	0.79	0.93	1.41
Maximum air flow [m ³ /h (l/s)]	1035 (288)	1315 (365)	1510 (419)	1920 (533)
RPM [min ⁻¹]	1960	2460	2120	2620
Sound pressure at 3 m [dBA]	34	38	36	40
Max. transported air temperature [°C]	+60		+60	
SEC class	-		-	
IP rating	IPX4		IPX4	
Motor IP rating	IP44		IP44	
ErP	2018		2018	

To comply with ErP 2018 it is necessary to use a speed controller and local demand control typology (connect the sensor).

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		
Min speed											
LWA to inlet [dBA]	66	36	56	63	60	59	43	32	17	45	55
LWA to outlet [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
Max speed											
LWA to inlet [dBA]	69	38	59	66	63	62	45	34	18	49	59
LWA to outlet [dBA]	75	43	50	54	74	65	54	54	36	54	64
LWA to environment [dBA]	58	47	49	53	53	49	44	39	31	38	48

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		
Min speed											
LWA to inlet [dBA]	67	36	57	63	61	59	43	32	18	46	56
LWA to outlet [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
Max speed											
LWA to inlet [dBA]	70	38	60	67	64	62	45	34	18	49	59
LWA to outlet [dBA]	71	50	53	62	65	67	62	53	41	50	60
LWA to environment [dBA]	60	51	52	54	55	50	46	43	35	40	50

