

inWave 100/125

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 and 125 mm air ducts.

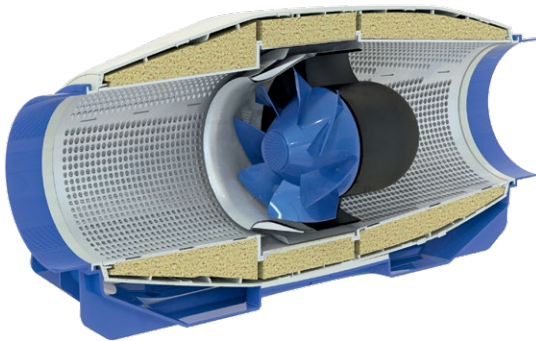


Air flow:
up to 320 m³/h
89 l/s



Design

- The casing is made of high-quality durable plastic, 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

- Single-phase three-speed high-efficient motor with low energy demand on ball bearings.
- Overheating protection due to built-in thermal switches.

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 according to installation manual.
- Wall or ceiling mounting with a special bracket on the fan casing.

Designation key

Series	Duct diameter [mm]	Options
inWave	100/125	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, power cable with mains plug W: power cable with plug

Accessories

Silencers	Filter boxes	Electric heaters	Water heaters	Backdraft air dampers	Air dampers	Clamps	Speed switches	Speed controllers			
SD	KFBK KFBT	EKH	WKH	VRV	VK / VKA	K	CDP-3/5	CDT1 E	CDT E1.8	CDTE E... TP	

Modifications and options

- o **T:** turn-off delay timer adjustable from 2 to 30 minutes.
- o **US:** three-position speed switch.
- o **FR1:** smooth speed controller adjustable from 0 to 100 % and power cable with mains plug.



inWave 100/125 (spigot 100 mm)

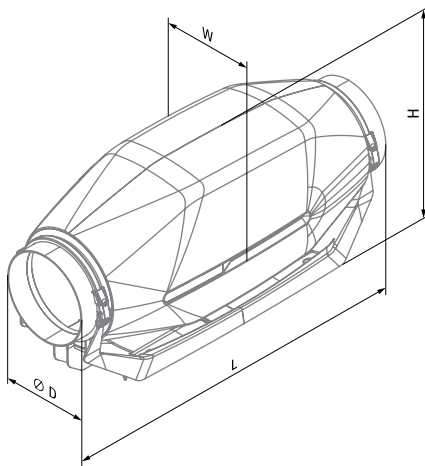


inWave 100/125 (spigot 125 mm)

- o **G1:** speed controller, temperature controller with external temperature sensor (cable length 4 m), power cable with mains plug.
- o The **G1** modification enables automatic speed control depending on indoor temperature. The optimal ventilation solution for premises requiring permanent temperature control as greenhouses, orangeries, etc.
- o **W:** power cable with plug.

Dimensions [mm]

Type	Ø D	H	L	W	Weight [kg]
inWave 100/125 (spigot 100 mm)	100	224	579	207	3.6
inWave 100/125 (spigot 125 mm)	125	224	502	207	3.6



Technical data

Parameters	inWave 100/125						inWave 100/125					
	100						125					
Spigot diameter	100						125					
Speed	min	med	max	min	med	max	min	med	max	min	med	max
Voltage [V]	1 ~ 230			1 ~ 230			1 ~ 230			1 ~ 230		
Frequency [Hz]	50			60			50			60		
Power [W]	9	12	21	10	13	25	9	13	21	10	13	26
Current [A]	0.08	0.09	0.10	0.09	0.10	0.12	0.81	0.09	0.10	0.09	0.10	0.12
Maximum air flow [m³/h (l/s)]	119 (33)	165 (46)	220 (61)	116 (32)	146 (41)	240 (67)	173 (48)	240 (67)	320 (89)	161 (45)	204 (57)	320 (89)
RPM [min ⁻¹]	2318	2670	2806	1926	2370	3252	2252	2662	2810	1894	2402	3242
Sound pressure at 3 m [dBA]	16	21	27	16	21	27	16	21	25	16	21	25
Transported air temperature [°C]	-25...+55			-25...+55			-25...+55			-25...+55		
IP rating	IPX4			IPX4			IPX4			IPX4		
Motor IP rating	IP44			IP44			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).

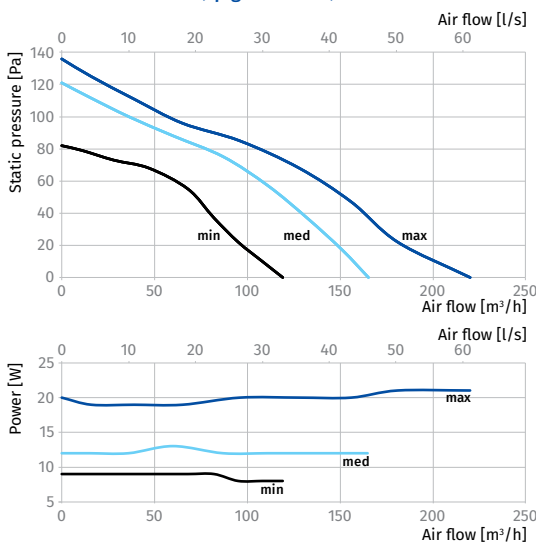
INWAVE 100/125 (SPIGOT 100 MM)

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 inlet [dBA]	56	36	49	53	49	47	43	36	29	36	46
LWA to outlet [dBA]	56	31	44	53	50	42	40	36	28	35	45
LWA to environment [dBA]	47	30	41	43	40	40	35	26	21	27	37

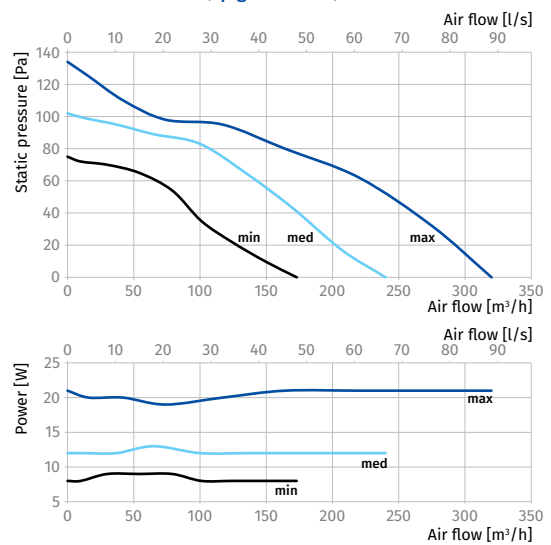
INWAVE 100/125 (SPIGOT 125 MM)

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 inlet [dBA]	56	36	49	53	49	46	42	36	28	36	46
LWA to outlet [dBA]	56	31	44	53	50	42	40	36	28	35	45
LWA to environment [dBA]	45	28	39	40	38	38	33	25	20	25	25

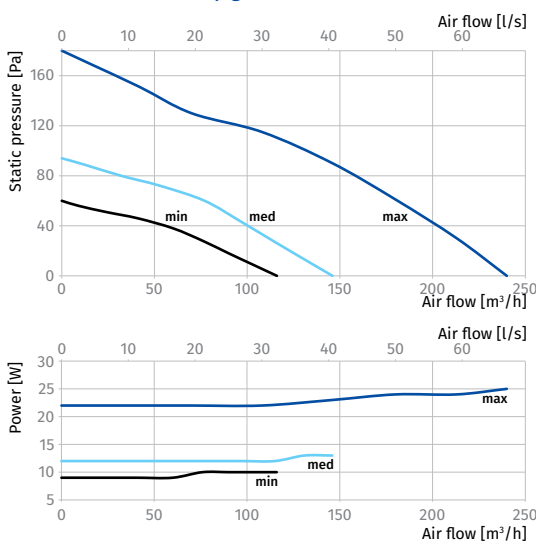
inWave 100/125 (spigot 100 mm) 50 Hz



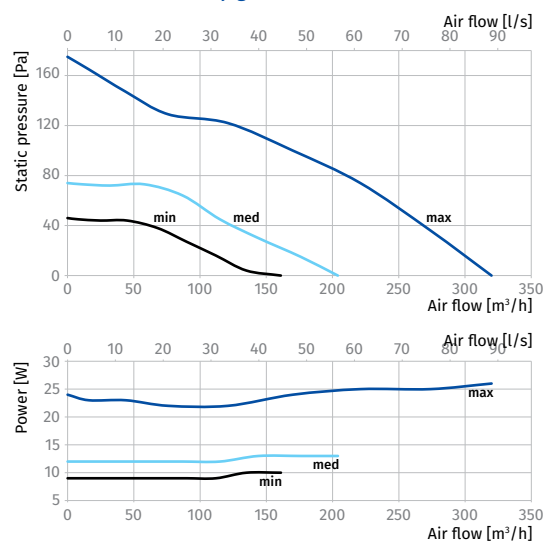
inWave 100/125 (spigot 125 mm) 50 Hz



inWave 100/125 (spigot 100 mm) 60 Hz



inWave 100/125 (spigot 125 mm) 60 Hz



SOUND-INSULATED INLINE FANS