inWave 150/160

Sound-insulated inline mixed-flow fans

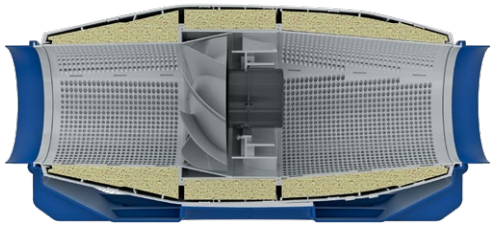
Use

- 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.

Air flow:
up to 540 m³/h
150 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 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.
- Wall or ceiling mounting with a special bracket on the fan casing.

Designation key

Series	Duct diameter [mm]	Options
inWave	150/160	**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

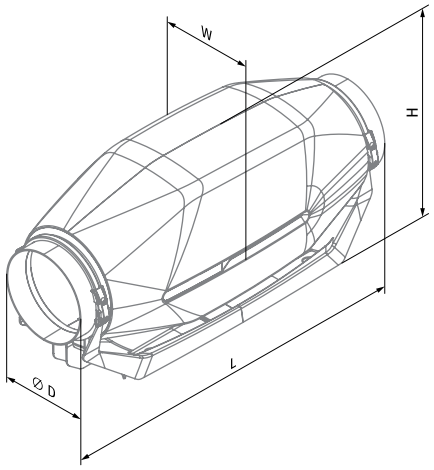
Modifications and options

- **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.
- 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.
- **W:** power cable with plug.

Dimensions [mm]

Type	∅ D	H	L	W	Weight [kg]
inWave 150/160 (spigot 150 mm)	149	273	606	253	5.0
inWave 150/160 (spigot 160 mm)	149	273	606	253	5.0

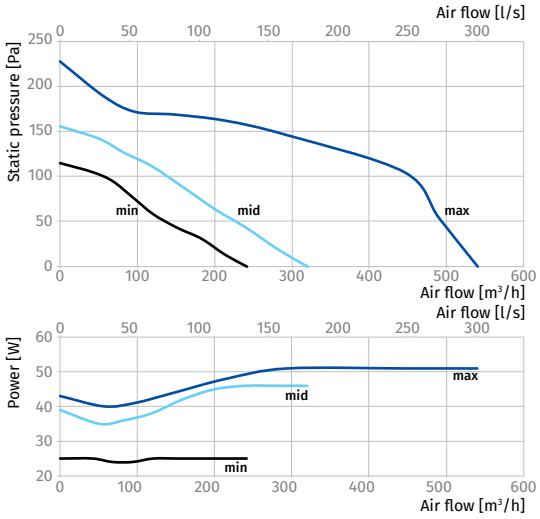


Technical data

Parameters	inWave 150/160		
Spigot	150/160		
Speed	min	mid	max
Voltage [V]	1 ~ 230		
Frequency [Hz]	50		
Power [W]	25	46	51
Current [A]	0.20	0.21	0.24
Maximum air flow [m³/h (l/s)]	242 (67)	320 (89)	540 (150)
RPM [min⁻¹]	1982	2374	2738
Sound pressure at 3 m [dBA]	20	26	33
Max. transported air temperature [°C]	-25...+55		
IP rating	IPX4		
Motor IP rating	IP20		
ErP	2018		

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

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 inlet [dBA]	**61**	37	56	59	48	41	38	41	34	**41**	**51**
L_{WA} to outlet [dBA]	**60**	32	52	58	47	37	36	41	35	**39**	**49**
L_{WA} to environment [dBA]	**53**	33	50	49	40	35	30	30	24	**33**	**43**



SOUND-INSULATED INLINE FANS