

VENTS Stream series



Inline mixed-flow fans in sound- and heat-insulated casing with the air flow up to **320 m³/h**

Application

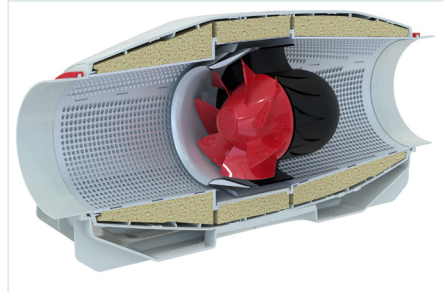
VENTS Stream series of duct fans in a special sound-insulated casing, which ensures silent operation of the fan with high aerodynamic characteristics. Compatible with air ducts with a diameter of 100, 125 mm.

VENTS Stream fans combine the wide capabilities and high performance characteristics of axial and centrifugal fans, providing a powerful air flow and high pressure.

They are used in supply and exhaust ventilation systems of various commercial and industrial premises with increased noise level requirements (libraries, conference rooms, educational institutions, kindergartens, etc.).

Design

The casing and impeller are made of high quality and durable plastic. The casing is internally heat- and sound-insulated with a 50 mm mineral wool layer.



The special perforation of the casing and the sound-absorbing material ensure sound attenuation in a wide frequency range. The diffuser, the specially profiled impeller and the directing vanes at the outlet of the fan casing distribute the air flow in such a way as to attain the best combination of high performance and high pressure at low noise level.

The fan casing is equipped with an external sealed terminal box for connection to power mains.

Electric motor

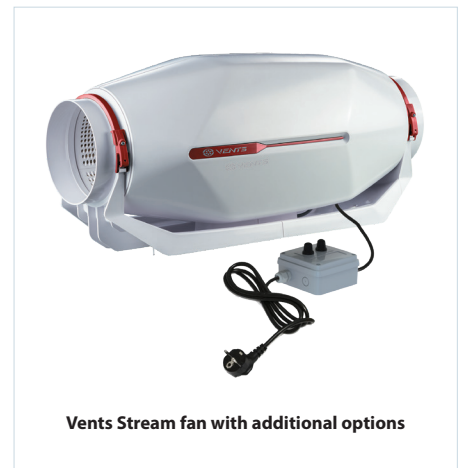
Single-phase energy efficient three-speed motors with low energy demand are used. The fan motors are equipped with thermal fuses for overload protection. The ball bearings provide a long service life (about 40 000 hours of continuous operation).

Speed control

The three-speed motor can be controlled using a built-in switch (option "V") or an external switch (purchased separately).

A built-in speed controller (option "P"), an external TRIAC or autotransformer speed controller (available upon separate order) enable smooth motor speed control when connected to the maximum speed terminal.

The models with the "T" option are equipped with a turn-off delay timer, adjustable from 2 to 30 minutes.



Mounting

The fans are designed to be mounted with round air ducts. The fan's casing is equipped with mounting brackets for floor, wall and ceiling mounting.

When mounting, provide access for fan's maintenance. Electric wiring and installation must be carried out according to the wiring diagram on the terminal box.

Multiple fans may be installed in a single system in parallel to increase air flow or in sequence to increase working pressure.

Designation key

Series	Air duct diameter	Options
VENTS Stream	100/125	<p>T: adjustable turn-off delay timer, from 2 to 30 min.</p> <p>Un: speed controller with an electronic thermostat and a temperature sensor, fixed on a 4 m cable. Temperature-based operation logic.</p> <p>R: power cord with a mains plug.</p> <p>V: three-position speed switch.</p> <p>P: integrated smooth speed controller.</p>

Accessories



Silencer

Filters

Heaters

Backdraft damper

Air damper

Clamps

Speed switch
P3-1-300

Speed controllers
RS...PS

Speed controllers
RS...-T

Speed controllers
RS-1-400

■ Fan with electronic temperature and speed control module (Un option).

The ideal solution for ventilation of premises with high demands to permanent temperature control e.g. greenhouses.

A fan with an electronic temperature and speed module provides automatic control of impeller rotation speed (air flow) depending on the air temperature in the air duct or in the room.

The front panel of the electronic module has the following control knobs:

- controller for impeller speed presetting
- electronic thermostat operation threshold controller
- thermostat operation indicator.

■ Fan operation algorithm with electronic temperature and speed control module

Set the desired air temperature (thermostat threshold) by turning the thermostat control knob and the minimum rotation speed (air flow) by turning the speed control knob.

If the temperature rises and exceeds the set thermostat threshold, the automation switches the fan to the maximum rotation speed (maximum air flow).

When the air temperature drops below the set thermostat threshold, the automation switches the fan motor to the previously set rotation speed.

To prevent frequent switching of motor speeds in case when the temperature in the air duct is equal to the set temperature threshold, a speed switching delay has been introduced into the algorithm.

When the air temperature exceeds the set thermostat threshold by 2 °C, the fan switches to an increased speed.

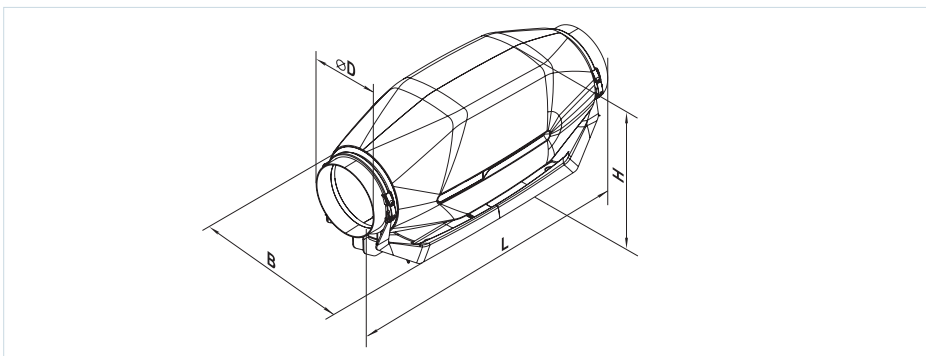
The fan switches to the set (reduced) speed after the temperature drops below the set temperature threshold.

This algorithm is used to maintain the air temperature with an accuracy of 2 °C.

Fan speed changes are infrequent.

Fan dimensions

Model	Dimensions [mm]			
	∅D	B	L	H
Stream 100/125 (spigot 100 mm)	100	207	579	224
Stream 100/125 (spigot 125 mm)	125		502	



**Stream 100/125
(spigot 100 mm)**

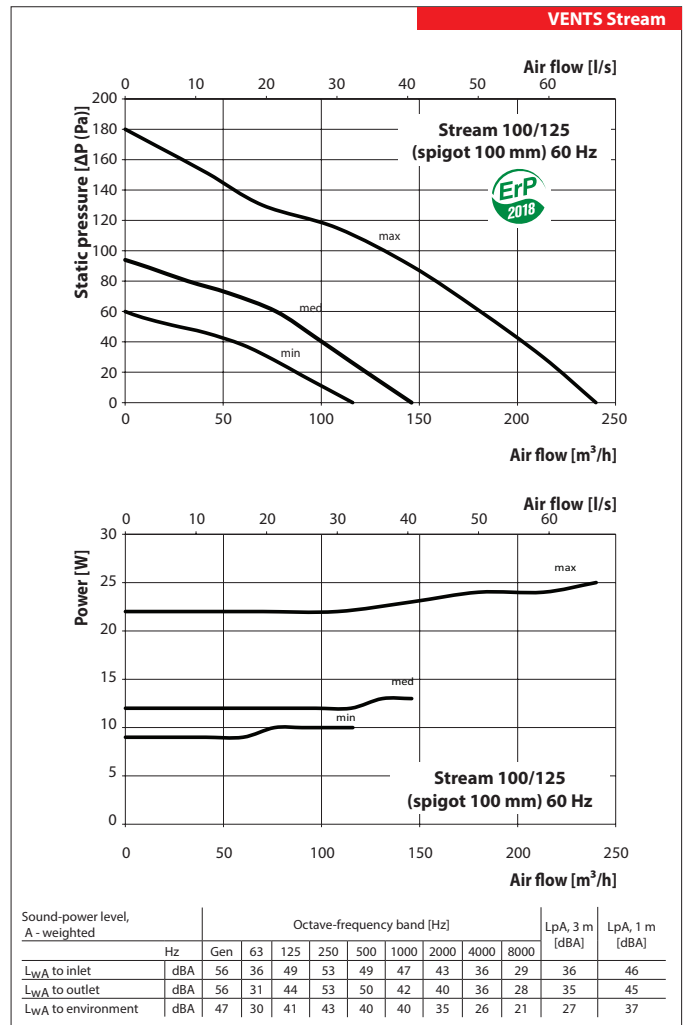
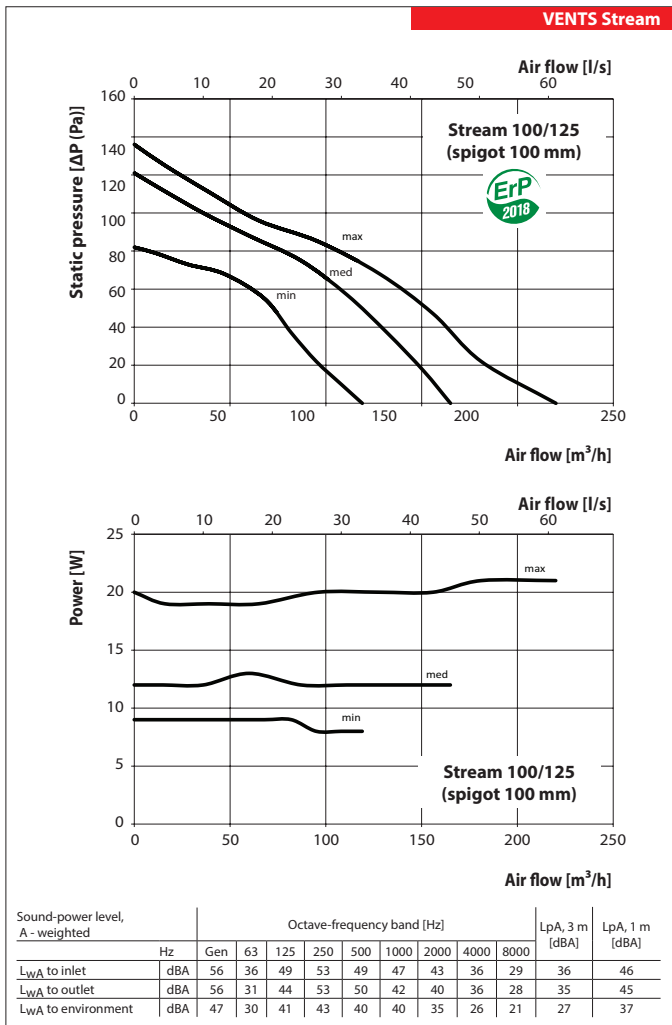


**Stream 100/125
(spigot 125 mm)**

SOUND-INSULATED FANS

Technical data

Spigot diameter	Stream 100/125			Stream 100/125		
	100	100	100	100	100	100
Speed	Min.	Mid.	Max.	Min.	Mid.	Max.
Voltage [V]	1~230			1~230		
Frequency [Hz]	50			60		
Power [W]	9	12	21	10	13	25
Current [A]	0,08	0,09	0,10	0,09	0,10	0,12
Maximum air flow [m³/h]	119	165	220	116	146	240
Maximum air flow [l/s]	33	46	61	32	41	67
RPM [min⁻¹]	2318	2670	2806	1926	2370	3252
Noise level at 3 m [dBA]	16	21	27	16	21	27
Transported air temperature [°C]	-25...+55			-25...+55		
Weight [kg]	3,6			3,6		
Protection rating	IPX4			IPX4		
Motor protection rating	IP44			IP44		
ERP	2018					



Technical data

Spigot diameter	Stream 100/125			Stream 100/125		
	125	125	125	125	125	125
Speed	Min.	Mid.	Max.	Min.	Mid.	Max.
Voltage [V]	1~230			1~230		
Frequency [Hz]	50			60		
Power [W]	9	13	21	10	13	26
Current [A]	0,81	0,09	0,10	0,09	0,10	0,12
Maximum air flow [m ³ /h]	173	240	320	161	204	320
Maximum air flow [l/s]	48	67	89	45	57	89
RPM [min ⁻¹]	2252	2662	2810	1894	2402	3242
Noise level at 3 m [dBA]	16	21	25	16	21	25
Transported air temperature [°C]	-25...+55			-25...+55		
Weight [kg]	3,6			3,6		
Protection rating	IPX4			IPX4		
Motor protection rating	IP44			IP44		
ERP	2018					

