





# SILENTFLOW Blower Package Pressure and Vacuum



### Range

The SilentFlow range is made up a group of rotary lobe blowers designed to circulate air or neutral gases in a non-hazardous environment. This range incorporates recent requirements of EPD (European Pressure Directive) and CE safety issues.

- Flow Rates : 100 m³/h (60 CFM)up to 14 000 m³/h (8150 CFM)
- Differential Pressure up to 1 000 mbar (15 PSIG)
- Vacuum up to 500 mbar absolute (15 "Hg)

### Benefits

- Package is totally CE compliant and silencers are EPD compliant
- Environmentally acoustic treatment in accordance with current standards.
- Hot-air extraction by means of a high capacity, electrically operated ventilation fan whatever the operating temperature and whatever the speed of the blower.
- The belt tension is adjusted automatically by the motor weight with pivot base.
- «Plug and Play» design, factory assembled package.



### **Applications**

- Water treatment (Biological aeration, filters cleaning)
- Pneumatic conveying
- Combustion air
- Vacuum centralised Cleaning
- Fluidisation
- Homogeneisation
- Gas Compression
- Easy access to package, easy maintenance.
- Each package is designed and built to ensure the smallest foot print. Silent Flow packages can be installed side by side without loss of access for maintenance or ventilation purposes. The reduced footprint gives the benefit for installations where space is a premium.
- The Silent Flow Blower Package can operate with the acoustic doors open as a drive guard is always included.



## Package components



### Acoustic enclosure

The enclosure is built to withstand harsh weather conditions and ensure a long life. Forced ventilation is by a motorized fan unit. The acoustic material lining the walls is flame-retardant. The plenums for inlet and outlet air are specific sized and acoustically treated to reduce the potential for noise breakout to the outside of the enclosure.

### ■ Transmission

Silentflow packages are fitted with a Belt pulley transmission. Our belt tensioning system allows automatic adjusment of the motor position. That mechanism permits the installation of motors of various designs and weights (iron and light alloy enclosures, NEMA standards, IEE 841, etc). Following the first start-up, you will save maintenance time on subsequent Belt/Pulley adjustments.



### ■ The suction filter-silencer

Combined sound attenuation and filtering functions. Filtration protects blowers against premature wear and tear.

The Suction Filter Silencer is designed with a special deflector to reduce the inlet pulsations and meeting the latest acoustic standards. (available in canalised version).



### ■ Discharge Assembly

Comprising of a pipe fitted with a factory-calibrated safety relief valve isolated pressure gauge, check valve and a flexible connector.

### ■ Check valve

Made of aluminium and « santoprene », this valve is totally corrosion-proof. The full bore minimizes pressure losses.

### ■ The base frame Silencer

The base frame is manufactured in carbon steel and designed to incorporate a reactive silencer capable of operatin across the complete noise frequency spectrum.

### ■ The safety relief valve

The safety valve spring type is made iron / steel and is precalibrated at the factory.

### Options

- Thermostat at discharge
- · Pressure switch at discharge
- Thermostat inside the enclosure
- Starting valve
- Outdoor enclosure adder «wet weather application»

### ■ Installation

All blower packages are supplied fully assembled on a palletized base provided with a ground connection. The silencer base is connected to the base by a braided strap. The standard «Pressure» version packages have a presure gauge connected to the discharge and an inlet filter restriction indicator.

### ■ Maintenance

Blowers come with an oil change system consisting of two check valves with internal pistons and safety caps (one per housing).



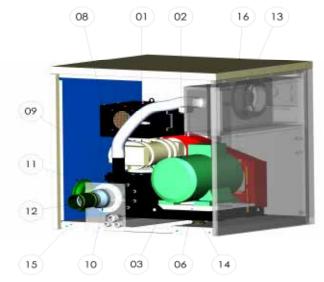
# Range

Silentflow	Blower	Max flow (m³/h)	Delta P max. (mbar)	Vacuum max. (mbar)	Length (with connection) (mm)	Width (mm)	Height (mm)
SF00_0.5	S2H22	100	700	500	770 (1 067)	720	850
SF00_1.3	S2H31	220	950	500	770 (1 067)	720	850
SF00_1.5	S2H32	300	700	500	770 (1 067)	720	850
SF0_2	NX 2	450	1 050	500	1 200 (1 810)	1 000	1210
SF0_3.5	S2H42	600	620	500	1 200 (1 810)	1 000	1210
SF0_3	NX 3	650	1 000	500	1 200 (1 810)	1 000	1210
SF0_5.5	S2H52	900	550	500	1 200 (1 810)	1 000	1210
SF1_5	NX 5	1 000	1 000	500	1 240 (1 472)	1 400	1 390
SF1_8	NX 8	1 480	1 050	500	1 240 (1 472)	1 400	1 390
SF2_12	NX 12	2500	1 000	500	1 560 (1 780)	1 660	1410
SF2_18	NX 18	3 000	1 050	500	1 560 (1 780)	1 660	1410
SF3_26	NX 26	4200	1 000	500	1 850 (2 305)	2000	1890
SF3_43	NX 43	4700	1 000	500	1 850 (2 305)	2000	1890
SF4_55	SN855	6 000	1 100	500	2 660 (3 440)	1810	2 640
SF4_70	SN870	6500	900	500	2 660 (3 440)	1810	2 640
SF5_90	SN890	8 000	900	500	2780 (2960)	2200	2795
SF5_110	SN8110	10500	600	500	2780 (2960)	2200	2795
SF5_170	SN8170	14000	850	500	2780 (2960)	2 200	2 795



## Configuration (examples)

### Pressure Blower Package



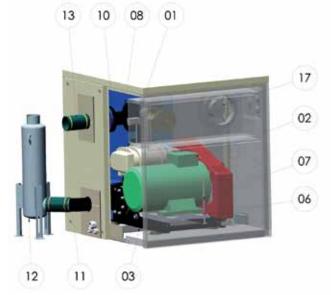
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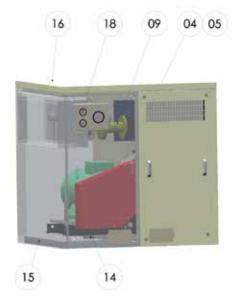
- 01 Blower
- 02 Motor
- 03 Silencer base frame
- 04 V-belt drive
- 05 Drive quard
- 06 Motor arms
- 07 Tensionning device
- 08 Filter silencer
- 09 Relief valve
- 10 Non return valve

- 11 Unloading valve (option)
- 12 Flexible connecting pipe
- 13 Air fan
- 14 Anti vibratov support
- 15 Anchor bolt
- 16 Acoustic enclosure
- 17 Pressure gauge
- 18 Fouling indicator
- 19 Temperature gauge (option)

### Vacuum Exhauster Package



- 01 Blower
- 02 Motor
- 03 Silencer base frame
- 04 V-Belt drive
- 05 Drive guard
- 06 Motor arms
- 07 Tensioning device
- 08 Filter silencer
- 09 Relief valve
- 10 No return valve



- 11 Silencer connecting pipe
- 12 Outlet silencer (option)
- 13 Flexible connecting pipe
- 14 Anti vibratory support
- 15 Anchor bolt
- 16 Acoustic enclosure
- 17 Fan
- 18 Fouling switch (no visible)
- 19 Temperature gauge (option)
- 20 Pressure gauge

# **Examples of**

### Package without acoustic enclosure



Package in direct drive with acoustic enclosure



Package in version ATEX with acoustic enclosure



### **Applications**

Biological aeration
Agitation
Filters cleaning
Wastes Treatment
Pneumatic conveying
Feeding membrane filters
Combustion air
Desulfurization
Centralised cleaning
Dust
Homogeneization
Fluidisation
Pneumatic handling
Gas Compression
Gas transfer

### Markets

Wastewater or drinking water treatment

Cement works

Chemical or petrochemical industries

Food industries

Thermal power plants

Metallurgical industries

Paper Industry

# Other Solutions for your applications Low pressure (air/gas)

### Oil free screw compressors HCS and L-Series

■ - 500 mbar eff. à 3 500 mbar g.



■ 600 m<sup>3</sup>/h à 8 200 m<sup>3</sup>/h



### Multistage centrifugal blowers SME & V-CENTRIF Series

■ - 500 mbar eff. à 1520 mbar g.



■ 850 m<sup>3</sup>/h à 62 000 m<sup>3</sup>/h



### **Process Blowers**

For process gases, Hibon also has a range of blowers and process groups according to specific requests (nitrogen, hydrogen ...)

### Service

■ Maintenance and repairs











■ Spare parts





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