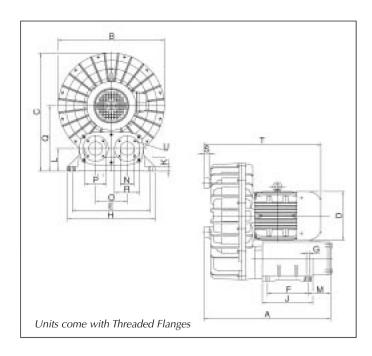
## REGENERATIVE BLOWERS





## DIMENSIONS IN INCHES ±1/8"

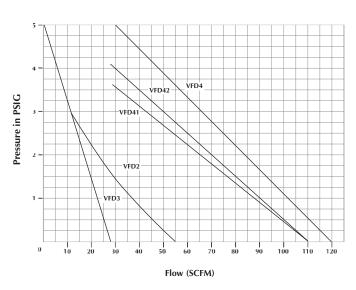
FECOA Model Number	А	В	С	D	Е	F	G	Н	J	K	L
VFD2/VFD2S	13.11	11.65	12.13	5.43	7.87	3.94	0.35	8.66	4.72	0.39	2.05
VFD3/VFD3S	14.37	11.10	11.85	5.43	7.87	3.94	0.35	8.66	4.72	0.39	2.05
VFD41/VFD41S	14.06	14.09	14.76	6.14	8.66	4.72	0.43	9.84	5.91	0.47	2.36
VFD42/VFD42S	14.06	14.09	14.76	6.93	8.66	4.72	0.43	9.84	5.91	0.47	2.36
VFD4	14.06	14.09	14.76	6.93	8.66	4.72	0.43	9.84	5.91	0.47	2.36
VFD5	16.54	15.20	16.46	6.93	12.20	6.30	0.51	13.78	7.87	0.47	3.15
VFD5D	19.72	16.54	18.50	8.58	12.20	6.30	0.51	13.78	7.87	0.71	3.54
VFD6	17.13	15.59	16.65	6.93	12.20	6.30	0.51	13.78	7.87	0.47	3.15
VFD6D	27.01	18.50	21.14	8.58	14.37	10.24	0.55	16.54	11.81	0.71	4.02
VFD8	24.80	19.69	20.94	10.16	14.37	10.24	0.55	16.54	11.81	0.71	3.35
VFD9	27.36	22.05	23.82	10.16	15.75	14.96	0.67	17.72	16.93	0.79	3.74

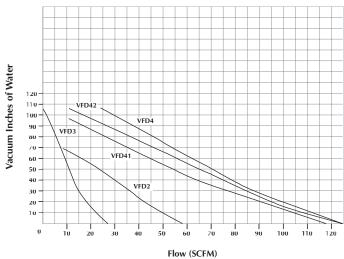
									Weight	Flanges inlet &	
FECOA Model Number	М	N	0	Р	Q	R	S	Т	U	lbs/kg	outlet NPT
VFD2/VFD2S	3.78	1.50	3.54	2.28	6.30	2.76	0.67	13.11	M5	33.1/15	3/4"
VFD3/VFD3S	3.78	0.94	3.54	1.89	6.30	2.36	0.67	14.37	M5	37.5/17	3/4"
VFD41/VFD41S	2.60	1.77	3.54	2.68	7.72	3.11	0.67	14.06	M5	46.7/21.2	1 1/2"
VFD42/VFD42S	2.60	1.77	3.54	2.68	7.72	3.11	0.67	14.06	M5	58.4/26.5	1 1/2"
VFD4	2.60	1.77	4.92	2.68	7.72	3.11	0.67	14.06	M5	58.4/26.5	1 1/2"
VFD5	2.83	2.17	4.92	3.35	8.86	3.94	0.67	16.54	M6	76.1/34.5	2"
VFD5D	3.54	2.17	4.92	3.35	10.24	3.94	0.79	18.82	M6	124.6/56.5	2"
VFD6	2.83	2.17	4.92	3.35	8.86	3.94	0.67	17.13	M6	78.3/35.5	2"
VFD6D	5.63	2.56	5.71	4.33	11.89	5.12	0.79	27.01	M8	198.5/90	2 1/2"
VFD8	5.63	2.56	5.71	4.33	11.10	5.12	0.79	24.80	M8	233.7/106	2 1/2"
VFD9	2.28	3.15	6.30	4.65	12.80	5.71	0.98	27.36	M8	264.6/120	3"

# Performance Data

### **PRESSURE**

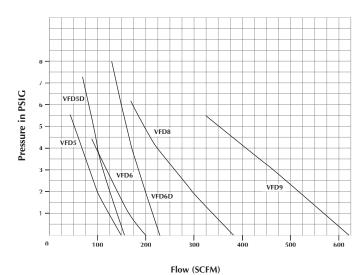
## **V**ACUUM

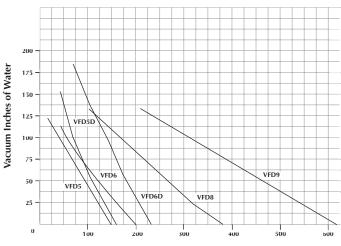




## **PRESSURE**

## **V**ACUUM





Flow (SCFM)

# TECHNICAL INFORMATION

### **FUNCTION**

Impeller and side channel facing each other form a circular working chamber which is intersected between intake and discharge port. The rotation of the impeller causes a radial pressure rise in the cellular-shaped vanes which leads to a differential pressure distribution between channel and impeller resulting in a rotational flow between channel and cellular vanes. The pressure generated by the vanes ensures a further acceleration in the direction of rotation leading to a helical flow motion through the blower and a high pressure increase.

### **DESIGN**

The blowers are directly driven by asynchronous squirrel cage motors made by Elektror. The sealed bearings ensure maintenance-free operation. Standard equipment silencers are mounted on the discharge and intake side thereby reducing the noise level considerably. All blower and motor parts are cast aluminum and therefore highly resistant to corrosion.

The ribs on the blower housing provide for good heat dissipation, further assisted by the air flow of the motor fan. All blowers are equipped generally with base plate on the silencer and rubber feet for mounting in a vertical or horizontal position.

### **OPERATING PERFORMANCE**

The blowers may be operated – pulsation-free – over the whole range of their performance curves. They are designed for the conveying of air as well as for generating pressure or vacuum. The use of the units for corrosive toxic media, air of high humidity and medium temperatures exceeding +40°C is subject to a detailed clarification. The conveying of explosive gases is not permitted. The units are to be installed in weather-protected places and must not be exposed to strain by vibrations, shocks and percussions.

If the media to be conveyed contains solid particles or other pollutants, they are to be removed before entering the blower by installing a filter – or similar device – on the intake side.

Blowers with limited performance curves in the high pressure range should be fitted – depending on the application – with the relative pressure relief valves in order to avoid an overload of the motor. Pressure relief valves can be mounted directly on the discharge port, vacuum relief valves directly on the intake port of the blower. Adjustment of the permitted maximum pressure of the blower is made in the factory. It is possible to adjust the valves below the maximum pressure.

The rated values indicated in the performance curves are valid within a tolerance of +10%.

The drive motors are manufactured in accordance with EN 60034-1 (VDE 0530 Part 1), amply dimensioned and suited for continuous operation. As a standard the motor insulation is class B and enclosure IP 54. Permitted ambient temperatures range from -20°C to +40°C, blowers can be speed controlled via AC inverter. Details about the installation and operation blowers may be obtained from the respective installation and operating instructions.

### FIELDS OF APPLICATION

The blowers offer a wide field of application facilities wherever the use of air as energy supply leads to optimum results. The fields of application listed below present just a small segment. There are a wide range of possible applications for these units.

- Pneumatic air tube systems
- Pneumatic conveying systems
- Vacuum cleaning systems
- Vacuum lifting gear
- Vacuum transport system
- Bottle-filling stations
- Printing machines
- Screen printing machines
- Air-cushion tables
- Drying systems
- Welding fume extraction
- Textile machinery
- Agricultural machines
- Dental equipment
- Water treatment
- Fish pond aeration
- Aquarium aeration
- Aeration of galvanic tanks
- Air Knife systems

#### ACCESSORIES

A variety of accessories allow for a convenient installation of the blowers.