

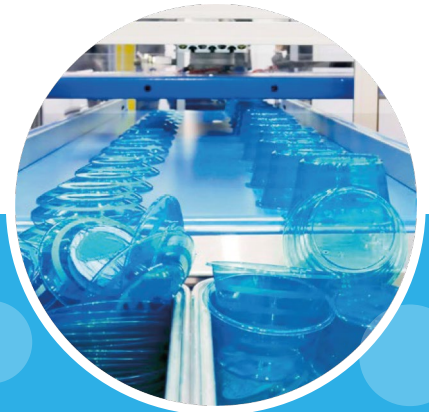


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SIDE CHANNEL BLOWERS

SCB



VFD

SCB-VFD blowers are equipped with a frequency converter. This ensures a smoother start and stop of the blower, without unnecessary noise

Ex

Side channel compressors of the SCB-Ex series in explosion-proof design comply with Customs Union Technical Regulations on safety of equipment for working in hazardous environments. (CU TR 012/2011)

IE2 / IE3

All blowers are equipped with electric motors with energy efficiency class IE2 as standard, optional IE3



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Single-stage blowers provide high performance with relatively small pressure drops. Double-stage blowers have two impellers and provide a greater pressure drop, but lower flow compared to single-stage blowers.

A unique feature of this type of equipment is the absence of friction pairs in the working area, which allows you to work without the use of lubricants and ensures high reliability of equipment for use in any production. Blowers can operate in compression mode and in vacuum mode. Therefore, they are also called side channel compressors, gas blowers or vortex vacuum pumps.

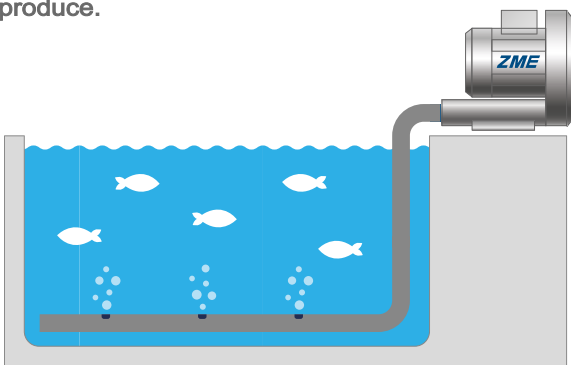
● ADVANTAGES

- 1 Compact and light weight.** The blowers have a monoblock design. The impeller is mounted on an elongated shaft of the electric motor. The housing and impeller are made in aluminum.
- 2 Low wear.** With proper operation, the side channel compressor has a long service life and does not require special maintenance.
- 3 Purity of supplied air.** The air exiting through the blower body is not gets dirty, which allows it to be supplied to consumers without additional cleaning. The air filter is installed to protect the blower itself from dust and dirt from the external environment.
- 4 Flow uniformity.** SCB blowers create a smooth (pulsation-free) air flow.
- 5 Low noise level.** Blower noise levels range from 46 to 75 dB(A) depending on the size and power of the blower. Typically, vortex blowers are not require additional soundproofing casings.

● TYPICAL APPLICATIONS

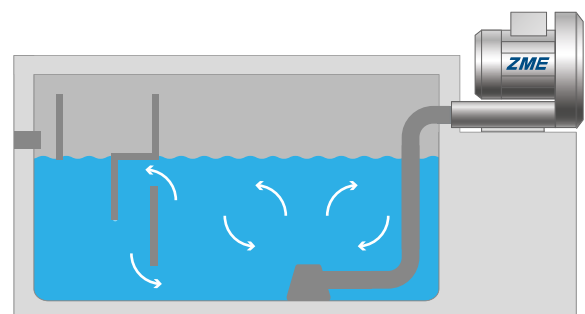
Aeration of fish ponds

The side channel blower saturates the water with oxygen, which is necessary for the fish to grow and reproduce.



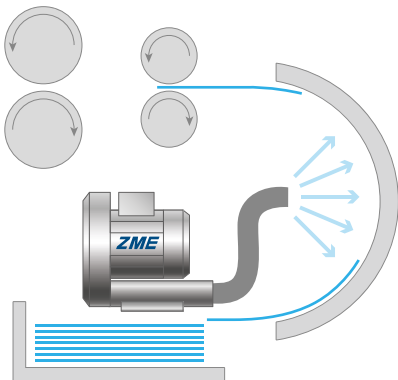
Wastewater treatment

The blower saturates the purified water with oxygen for efficient aerobic process biological treatment.



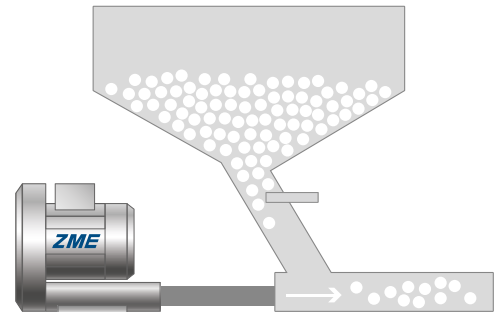
Printing business

The blower presses sheets against the rollers in vacuum mode and inflates sheets in pressure mode.



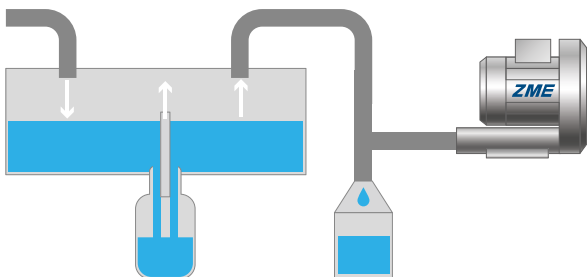
Pneumatic transport

The blower moves the bulk material or helps it pour out of the hopper under its own weight.



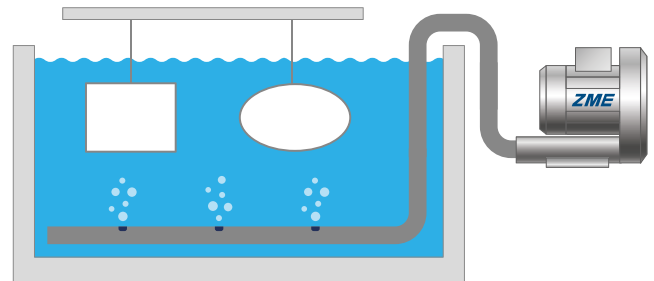
Bottling drinks

The blower operates in vacuum mode and removes air from the bottle when it is filled.



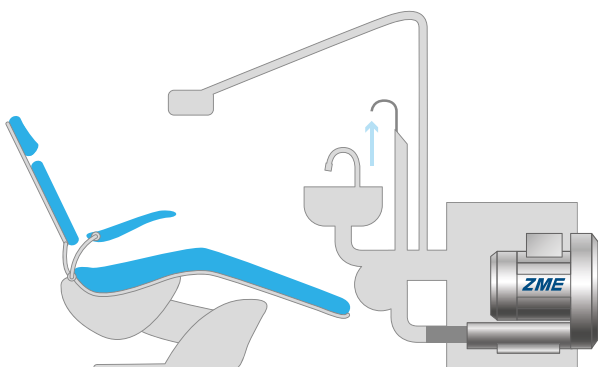
Galvanization

High-pressure air supply to the galvanic bath. The air enhances the circulation of the liquid for fast and uniform coating of the parts.



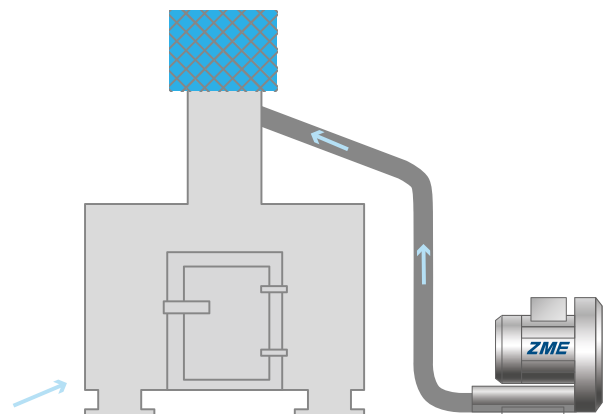
Dentistry

The blower works like a vacuum cleaner to remove tooth crumbs.



Boilers and burners

Air supply to the chimney to improve boiler draft.



SINGLE-STAGE BLOWERS

Model	Capacity, m ³ /h	Max. vacuum, mbar rel.	Max. overpressure, mbar	Motor power, kW	Sound pressure level, dB(A)	Weight, kg
SCB 001 A1	55	- 70	80	0.2	46	5
SCB 001 A3		- 80	90	0.2	46	5
SCB 101 A1	70	- 110	110	0.25	48	7
SCB 101 A3		- 110	120	0.25	48	8
SCB 201 A1	80	- 110	110	0.37	53	11
SCB 201 A3		- 120	130	0.4	53	9
SCB 301 A1	100	- 150	150	0,7	55	14
SCB 301 A3		- 150	150	0,7	55	12
SCB 401 A1	145	- 150	190	1.1	63	16
SCB 401 A3		- 170	200	1.3	63	17
SCB 401 VFD	110-250	- 170	200	1,1-2,2	63-74	18
SCB 501 A1	210	- 190	200	1.5	64	24
SCB 501 A3		- 170	170	1.3	64	22
SCB 501 B3		- 220	270	2.2	64	25
SCB 501 VFD	170-350	- 300	290	2,2-3,8	63-75	28
SCB 601 A3	318	- 190	190	2.2	69	30
SCB 601 B3		- 260	270	3.0	69	36
SCB 601 VFD	230-520	- 340	360	4-6,9	69-80	47
SCB 701 A3	420	- 220	200	3.0	70	37
SCB 701 B3		- 260	280	4.0	70	43
SCB 701 VFD	300-680	- 260	290	4-6,9	70-81	44
SCB 801 A3	530	- 200	200	4.0	70	54
SCB 801 B3		- 300	300	5.5	70	63
SCB 801 C3		- 320	430	7.5	70	66
SCB 801 VFD	400-850	- 350	430	7,5-12	71-81	75
SCB 901 A3	700	- 200	190	5.5	70	66
SCB 901 B3		- 270	260	7.5	70	69
SCB 901 VFD	520-1150	- 270	260	7,5-12	70-81	143
SCB 1001 A3	1050	- 190	190	8.5	74	93
SCB 1001 B3		- 290	280	12.5	74	116
SCB 1001 C3		- 340	460	18.5	74	126
SCB 1001 VFD	780-1420	- 400	460	18,5-26	74-82	138
SCB 1101 A3	1370	- 190	180	12.5	75	121
SCB 1101 B3		- 310	320	18.5	75	131
SCB 1101 VFD	950-1900	- 310	320	18,5-26	75-85	135

The manufacturer reserves the right to make technical changes

These models of blowers can be made in explosion-proof design and equipped with control and measuring devices for use at hazardous production areas. See the section "Side channel compressors of the SCB-EX series" below.

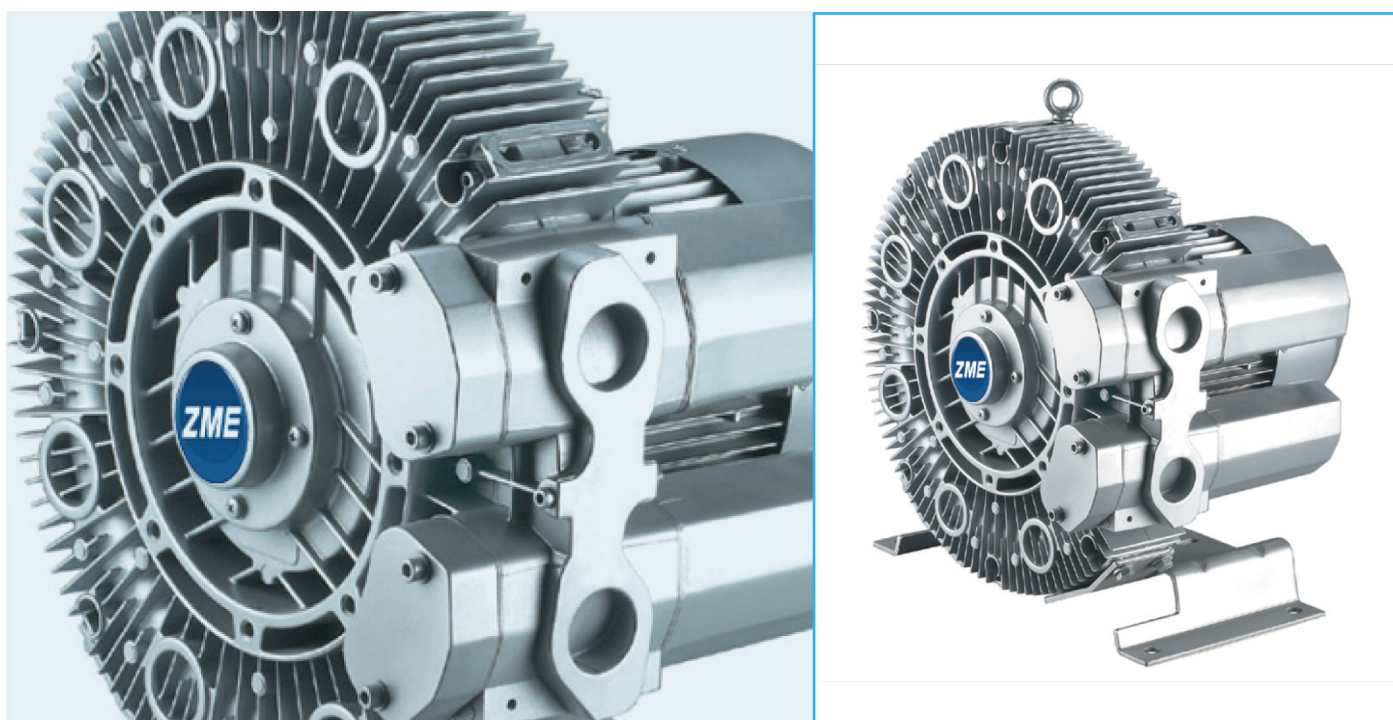


SINGLE-STAGE HIGH-PRESSURE BLOWERS

Model	Capacity, m ³ /h	Max. vacuum, mbar rel.	Max. overpressure, mbar	Motor power, kW	Sound pressure level, dB(A)	Weight, kg
SCB 203 A1	47	- 230	290	0.55	57	18
SCB 203 A3		- 230	290	0.55	57	16
SCB 203 VFD	36-85	- 260	280	0.55-0.95	57-74	16
SCB 303 A1	66	- 250	350	0.94	57	18
SCB 303 A3		- 280	350	0.81	57	17
SCB 303 VFD	50-110	- 410	490	1.5-2.6	57-76	26
SCB 403 A1	87	- 300	380	1.1	58	23
SCB 403 A3		- 300	380	1.1	58	23
SCB 403 VFD	70-145	- 410	500	2.2-3.8	58-77	30
SCB 503 A3	120	- 310	360	1.5	64	26
SCB 503 B3		- 310	470	2.2	64	29
SCB 503 VFD	90-200	- 400	460	2.2-3.8	64-78	31
SCB 603 A3	165	- 340	360	2.2	65	32
SCB 603 B3		- 340	480	3.3	65	35
SCB 603 VFD	125-265	- 400	600	4-6.9	65-77	46
SCB 703 A3	315	- 350	390	4	65	62
SCB 703 B3		- 350	500	5.5	65	65
SCB 703 VFD	230-600	- 450	450	9.5	70-83	77
SCB 803 A3	480	- 380	330	5.5	70	88
SCB 803 B3		- 380	500	7.5	70	96
SCB 803 VFD	355-800	- 420	450	7.5-12.9	69-82	104

The manufacturer reserves the right to make technical changes

These models of blowers can be made in explosion-proof design and equipped with control and measuring devices for use at hazardous production areas. See the section "Side channel compressors of the SCB-EX series" below.



DOUBLE-STAGE BLOWERS

Model	Capacity, m ³ /h	Max. vacuum, mbar rel.	Max. overpressure, mbar	Motor power, kW	Sound pressure level, dB(A)	Weight, kg
SCB 202 A3	85	- 210	240	0.7	55	15
SCB 302 A1	120	- 240	280	1.1	58	17
SCB 302 A3		- 280	290	1.3	58	18
SCB 402 A1	150	- 280	290	1.5	66	26
SCB 402 A3		- 280	280	1.6	66	25
SCB 402 B3		- 330	420	2.2	66	27
SCB 402 VFD	115-260	- 420	440	2.2-3.8	66-77	28
SCB 502 A3	230	- 340	410	3.0	72	40
SCB 502 B3		- 390	440	4.0	72	44
SCB 502 C3		- 560	680	5.5	72	65
SCB 502 VFD	160-375	- 460	480	4-6.9	72-83	45
SCB 602 A3	320	- 360	380	4.3	73	54
SCB 602 B3		- 440	500	5.5	73	66
SCB 602 VFD	230-520	- 460	660	7.5-12	73-83	86
SCB 702 A3	520	- 400	400	7.5	74	86
SCB 702 B3		- 430	600	11.0	74	104
SCB 702 VFD	400-850	- 490	750	15-24	74-84	125
SCB 802 A3	900	- 280	370	11.0	74	110
SCB 902 A3	1110	- 410	370	16.5	74	197
SCB 902 B3		- 440	500	20.0	74	204
SCB 902 VFD	820-1550	- 460	590	25-35	74-87	212
SCB 1002 A3	1940	- 220	200	20.0	75	212
SCB 1002 B3		- 310	280	25.0	75	219
SCB 1002 VFD	1450-2600	- 300	300	25-35	75-87	324
SCB 1102 A3	2050	- 250	230	20.0	75	230
SCB 1102 B3		- 310	280	25.0	75	235

The manufacturer reserves the right to make technical changes

These models of blowers can be made in explosion-proof design and equipped with control and measuring devices for use at hazardous production areas. See the section "Side channel compressors of the SCB-EX series" below.



● TWO-STAGE HIGH-PRESSURE BLOWERS

Model	Capacity, m ³ /h	Max. vacuum, mbar rel.	Max. overpressure, mbar	Motor power, kW	Sound pressure level, dB(A)	Weight, kg
SCB 204 A1	47	- 370	600	1.5	58	30
SCB 204 A3		- 370	490	0.81	58	24
SCB 204 B3		- 370	650	1.5	58	28
SCB 204 VFD	38-85	- 670	740	1.5-2.6	58-74	29
SCB 304 A1	65	- 400	550	1.5	59	32
SCB 304 A3		- 440	540	1.5	59	30
SCB 304 VFD	50-110	- 560	600	1.5-2.6	59-76	31
SCB 404 A3	87	- 480	450	1.5	61	33
SCB 404 B3		- 500	750	3.3	61	39
SCB 404 VFD	65-150	- 550	790	3-5.2	61-79	42
SCB 504 A3	120	- 470	460	2.2	64	40
SCB 504 B3		- 500	820	4.0	64	51
SCB 504 VFD	95-205	- 540	830	4-6.9	64-78	52
SCB 604 A3	165	- 460	500	3.3	67	48
SCB 604 B3		- 460	740	5.7	67	65
SCB 604 VFD	125-270	- 520	820	5.5-9.5	67-80	68
SCB 704 A3	320	- 530	700	7.5	71	97
SCB 704 B3		- 530	870	11	72	120
SCB 704 C3		- 680	1020	15	72	136
SCB 704 VFD	240-600	- 580	930	11-19	72-89	132
SCB 804 A3	480	- 530	630	11	70	145
SCB 804 B3		- 530	890	15	70	156
SCB 804 C3		- 610	1020	18.5	71	195
SCB 804 VFD	355-790	- 540	890	15-26	70-84	171

The manufacturer reserves the right to make technical changes

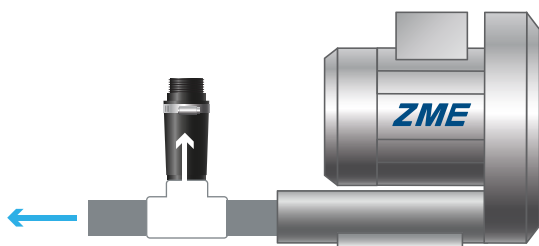
These models of blowers can be made in explosion-proof design and equipped with control and measuring devices for use at hazardous production areas. See the section "Side channel compressors of the SCB-EX series" below.



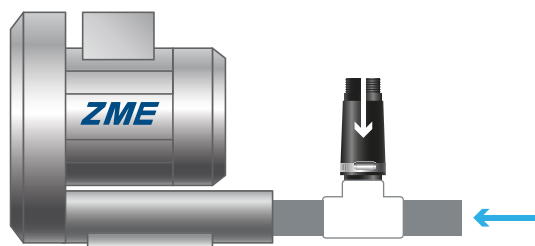
SAFETY VALVES

Safety valves are designed to prevent overheating of SCB blowers when the permissible value of suction vacuum or excess discharge pressure is exceeded.

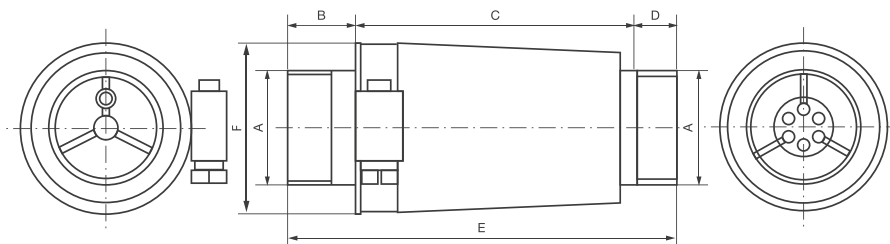
Compression mode



Vacuum mode

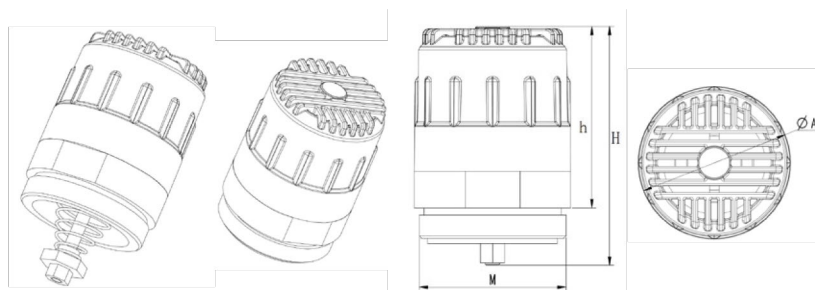


RV series (material: PVC)



Model	Connection ØA	Main dimensions, mm				
		B	C	D	E	ØF
RV-01	G1 1/4"	23	98	21	142	59
RV-02	G1 1/4"	23	98	21	142	59

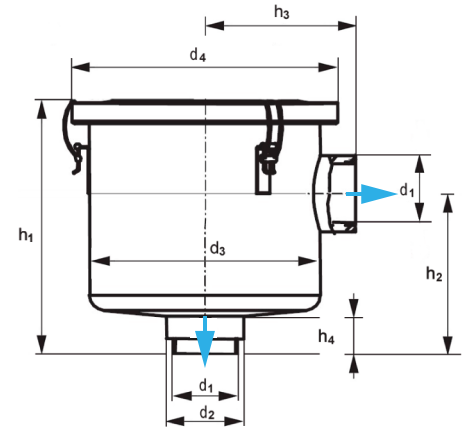
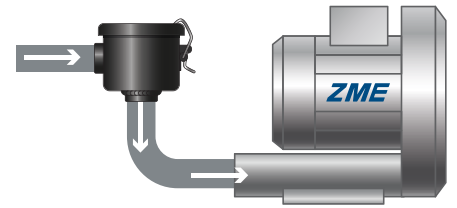
2VX4 series (material: carbon steel)



Model	Connection M	Main dimensions, mm		
		H	h	ØA
2BX4 140	G 1 1/4"	98	74	46
2BX4 141	G 1 1/2"	98	74	52
2BX4 142	G 2"	98	74	64
2BX4 144	G 3"	98	74	92

AIR FILTERS FG SERIES

Air filters are used to protect the internal parts of blowers from dust and solid mechanical particles contained in the enterprise environment. Filters are selected, as a rule, based on throughput. The degree of air purification by a filter with a paper cartridge is 5 microns.



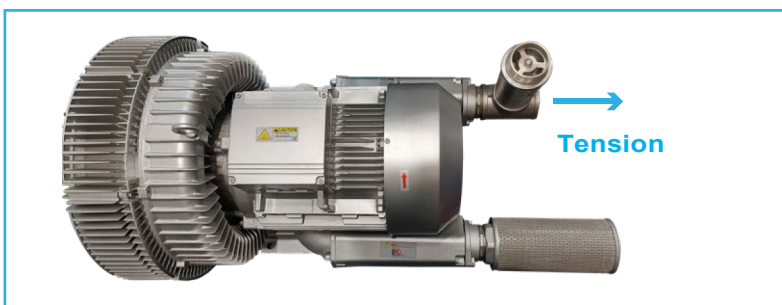
Model	Connection ØA	Inlet capacity, m ³ /h	Weight, kg	d1	d2	d3	d4	h1	h2	h3	h4
FG 110	G 1 1/4"	108	1,5	G1 1/4	48	125	145	116	68	77	146
FG 150	G 1 1/2"	150	2,3	G1 1/2	53	172	188	167	111	100	16
FG 300	G 2"	300	4,3	G2	68	194	217	256	129	110	20
FG 400	G 2 1/2"	400	4,3	G2 1/2	86	194	217	256	129	110	13
FG 1000	G 4"	970	14,5	G4	123	268	272	263	147	197	74

The manufacturer reserves the right to make technical changes

PROTECTIVE FILTERS FGB SERIES

Protective filters are designed to protect against the ingress of mechanical impurities and anything foreign into the suction pipe, incl. personnel.

There are no replacement cartridges. Screw-on installation. Selection for the blower model is carried out only by connection.


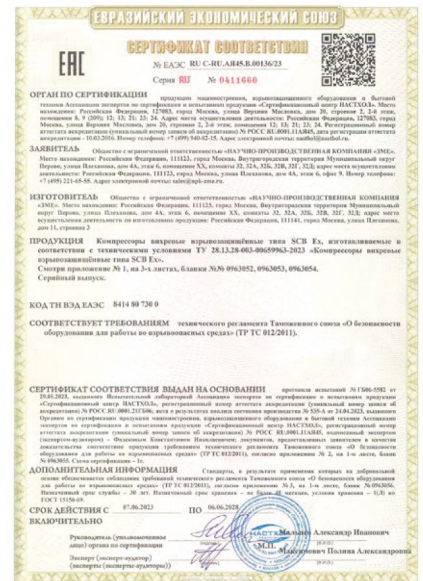


Model	FGB 32	FGB 40	FGB 50	FGB 65	FGB 80	FGB 100
Filtration degree	Metal mesh with a cell of 120 microns					
Connection	G1 1/4"	G1 1/2"	G2"	G2 1/2"	G3"	G4"

The manufacturer reserves the right to make technical changes

Side channel compressors of the SCB-Ex series in explosion-proof design are used for compression and transportation of explosive gases and gas mixtures, such as natural gas, biogas and other flammable gases.

Complies with the requirements of the Customs Union Technical Regulations on safety of equipment for working in hazardous environments. (CU TR 012/2011)

Biogas must be understood as natural gas, which is used as a source of heat and energy, namely in city boiler houses, office buildings, apartment buildings and private houses. In addition, biogas can be obtained from waste from livestock complexes and farms.



Side channel compressors of the SCB-Ex series pump and compress all types of flammable gases based on chemical and petrochemical enterprises:

- to increase the inlet pressure in turbines for combined heat and power (TPP)
- at treatment facilities for biogas transportation
- on biogas units for supplying biomethane to the gas distribution network

The SCB-Ex series has a sealed and intrinsically safe design. The compressors are equipped with clutches, electric motors and control devices in explosion-proof design. The material of the working chamber is aluminum alloys, the material of the coupling protection is brass.



Monobloc design for compact installation as part of other equipment



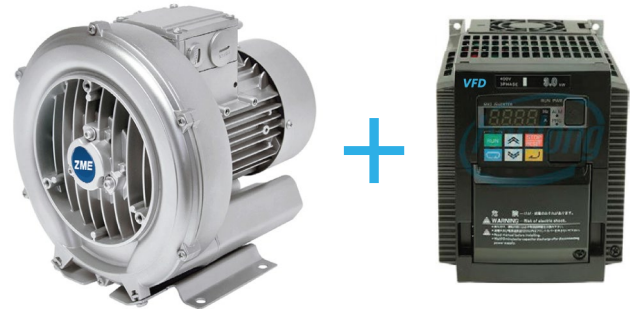
Version on a base frame with coupling

● VARIABLE FREQUENCY BLOWERS, VFD SERIES

SCB-VFD blowers are equipped with frequency converter, thanks to which start and stop blower operation occurs more smoothly, without unnecessary noise.

The mechanical load on the blower parts is reduced. The operating range of the blower has been significantly expanded and can be adjusted depending on the set values of vacuum or discharge pressure.

Frequency adjustment range 37-87 Hz.



● ALL OUR BLOWERS:



Receive a 3-year warranty under normal operating conditions, as SPC "ZME" carefully monitors the quality of products sold.

IE2 / IE3



Equipped with electric motors with energy efficiency class IE2 standard, IE3 optional.



Used by our engineers to design and manufacture blower systems for a variety of technical applications.

● CONTACTS



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SIDE CHANNEL BLOWERS

SCB



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