

SCREW COMPRESSORS

Nature does not waste energy.

Our screw compressors are also built using this principle.



Intelligent engineering from BOGE: The three main sections of the BOGE screw compressor (electrics & drive, compressor, independent cooling unit) are strategically aligned in the main cooling air flow: for maximum efficiency and service life.

Efficiency made easy: According to our engineers, the design of the BOGE screw compressor is very much based on the principles of nature. High outputs, effective oil separation, and an extremely long service life of the component parts ensure that energy consumption is optimized.

THERMAL ADVANTAGE: THE BOGE COOLING AIR FLOW.

Warm air rises: Our engineers harnessed this simple law of physics in order to make BOGE screw compressors even more efficient and to prolong their service life. Cooling air is taken in at the lowest point in the package by a separate cooling air fan and is drawn over the component parts upwards before leaving the compressor at the highest point – our so called chimney effect. This main cooling air flow is many times higher than the actual cooling air flow of the integrated motor fan. Due to chimney principle, the system keeps cooling even during load reversal.

Efficiency advantage: The intake filter is positioned in the coolest part of the cooling airflow and takes in the air for compression at the lowest temperature. This results in an optimized volumetric efficiency and output from the compressor. The air/oil cooler, on the other hand, is positioned at the top of the compressor. The cooler is generously dimensioned and, in conjunction with the cooling airflow, provides for the lowest possible internal cabinet temperature as well as discharge compressed air temperature. When connected directly to ducting, the cooling air can be removed without any problems or recovered and easily redirected to supplement space heating. Service life advantage: Motor, switch cabinet and all electric components are positioned at the intake of the main cooling airflow and benefit from the coolest air. As a result these components do not overheat either in load or in idle mode which means their service life is extended considerably. There are no heat sinks within the cabinet in either operating mode.

GRAVITY ADVANTAGE: THE BOGE OIL SEPARATION SYSTEM.

Oil always flows to the lowest point:

Therefore our engineers have positioned the oil pre-separator horizontally at the lowest point of the system. Also due to rapid reduction of the compressed air speed after compression bulk oil "rains" from the compressed air into the reservoir – a most efficient form of oil pre-separation.

Efficiency advantage: The BOGE oil separation system is designed to minimize internal pressure losses and to ensure a residual oil content of 1-3 ppm in every operating phase. The horizontal combi-tank ensures a low foam level at load reversal virtually eliminating the risk of bulk oil reaching the separator cartridges.

Long-life service advantage: BOGE oil separator cartridges have a long service life – not only as a result of the highly effective oil pre-separation but also because of the large safety distance between the oil surface and the separator that prevents the oil from migrating into the separator cartridge.

Quality in its most efficient form: **The BOGE airend.**



The heart of every BOGE screw compressor:

The reliable and efficient airend.

Everything is cutting edge: The BOGE airend is the heart of the BOGE screw compressor. Engineered to exacting tolerances, the BOGE airend combines quality and efficiency with long service life making it one of the best of its kind and a sound, long-term investment for our customers.

PREMIUM QUALITY MADE IN GERMANY

Maximum reliability

BOGE airends are manufactured on stateof-the-art production lines and are examples of the finest German engineering. Lowest manufacturing tolerances combined with quality materials ensures the dependability of each airend. Computer controlled testing further ensures that every single airend meets our high quality standards. The longest possible service life is also assured thanks to generously dimensioned axial and radial bearings.

Maximum efficiency

The screw profile of the BOGE airend has been optimized using the latest technological advancements providing maximum efficiency over the entire service life. We calculate the best possible specific power characteristics of each airend to ensure the best output per kW or HP while ensuring the airend continuously operates at its optimal speed.







THE COMPRESSION PROCEDURE

1 Intake:

The air passes through the intake opening into the rotors that are open on the suction side.

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Compressing:

As the screw rotates the air intake opening closes. The volume in the chambers is reduced and pressure increases. During this procedure, oil is injected to lubricate the rotor bearings, to seal the rotors, and to dissipate the heat of compression.

(4) Discharge:

Compression is completed, final pressure is reached, and discharge starts.



Energy prices cannot be controlled. **But energy efficiency can.**

INTELLIGENT CONTROL

The BOGE control and monitoring concept is your key to more efficient operation. We have the optimal control system for every type of application: from monitoring central machine parameters to specific synchronization of up to 16 different compressors.

Optimized output: BOGE compressor controllers.

FOCUS

FOCUS is the latest state-of-the-art energy efficient controller to come from BOGE. A large-scale LC display clearly shows error and maintenance messages, operating states and all operating parameters. (Additionally the operating status of a frequency controlled compressor and/or the workload of fixed speed compressors are displayed).



Synchronized output: BOGE Master controllers.

TRINITY

With the **tri**nity controller from BOGE you can control up to three compressors of equal or different size or implement an automatic base load switching control. The adjustable base load switching cycle enables a constant load operation of all the installed compressors. **tri**nity can be installed into the compressor switch cabinet or provided as a separate wall mounting cabinet version.



AIRTELLIGENCE

airtelligence is designed to control up to 16 compressors of different makes and sizes in a multi-compressor system. It operates by selecting the appropriate compressor combination to meet the compressed air demand and to proficiently configure your system to ensure best possible operating efficiency: load/idle run switch cycles are minimized and expensive idle run times virtually eliminated. **air**telligence: For a cost-effective and safe operation!



AIRTELLIGENCE PROVIS

Seeing is believing: **airtelligence** PROVIS synchronizes up to 16 compressors and visualizes the central parameters. As a result energy costs can be closely monitored via an interface to a web server where you can view this data at anytime and anywhere around the world.



Energy costs need not go off course: because BOGE's energy efficiency solutions offer a number of options that save energy. It is calculated that energy costs account for around 75 percent of the lifetime costs of compressed air generation. This makes energy optimization essential for any compressed air user. Significant sustainable savings can be created by continually auditing and optimizing your installation. You should therefore rely on a partner who, as an energy expert, is ready and able to support you before and after your decision to purchase compressed air products. Welcome to BOGE!

INTELLIGENT SAVINGS

Perfectly controlled output: BOGE frequency controlled screw compressors

When there is a fluctuating compressed air demand, the BOGE frequency controlled screw compressors works strictly in accordance with the compressed air demand by producing the exact volume of compressed air at the pressure required.

The volume flow is continually adjusted between 25 and 100 percent – correctly specified frequency controlled compressors should eliminate expensive idling times and even out air demand fluctuations. Energy costs can therefore be reduced considerably.

When a frequency controlled compressor is used alongside a fixed speed compressor additional advantages can be achieved. The flexible speed adaptation of the airend also allows for pressure adaptation. Changing the pressure value of the frequency compressor automatically synchronizes the output quantity. A 190 psig machine can therefore be transformed into a 125 psig machine yielding a correspondingly higher output – without any expensive



remodeling or design related modifications. All pressures and intermediate pressures are available with the best possible outputs. It takes little or no investment for a compressed air user to save as much as 30 percent of their compressed air related energy costs. Be sure to take advantage of BOGE's energy efficiency solutions to save energy costs. Examples:

Leak detection

A single 1/4" diameter leaking hole causes losses of 122 cfm – this equates to several thousand dollars a year of energy costs. Comprehensive leak detection from BOGE will identify any leaks within your compressed air network.

Heat recovery

Most of the energy used to generate compressed air is rejected in the form of heat. This heat can be recovered: e.g. for space heating or for the heating of domestic water. Up to 85 percent of the input electrical energy can be recovered: Our energy experts will be pleased to advise you!

Savings potential of up to 30 % is possible

with a frequency controlled compressor:

- minimized idling time
- pressure reduction
- · load cycles virtually eliminated.



AIReport

Does your compressor station still meet your specific site requirements? Oversized or obsolete components can be the source of high energy costs. The AIReport system helps to detect weak points within a compressed air system by monitoring compressed air generation, treatment and distribution over a set period of time (e.g. one week, two weeks or even a month): this tool will help you save energy!



The BOGE sign for efficient compressed air solutions: Wherever it is displayed, users can be assured of a particularly efficient BOGE solution helping to save a great deal of money!

Why don't our compressors cost less? Because our customers can't afford that.



QUALITY PAYS OFF

Purchase costs represent only a small portion of a compressors life cycle investment costs. Because BOGE compressors are designed to provide trouble-free and efficient operation for a long period of time, they are in many cases the most cost effective solution below the line. It is therefore not without good reason that users around the world increasingly rely on premium quality made by BOGE!

Industry and Trade deserve quality solutions: And, our customers have come to rely on BOGE for uncompromising quality and intelligent engineering "Made in Germany". More than 100,000 compressed air users around the world know that such values pay off in the long run: because a reliable, efficient and durable supply of compressed air is paramount to the operation of their business.



German engineering

The use of high quality materials and a reduced number of wearing parts makes the BOGE product as efficient and reliable as our demanding customers rightfully expect. The entire BOGE production process is subject to permanent quality control – from inspection of incoming material to final inspection and testing – with all positions closely monitored by experienced quality officers. And when it comes to product development, BOGE ranks among the first for German engineering: Repeatedly our innovations are considered as industry trendsetters and are often protected by Worldwide patents.



Strict guidelines

The prototypes of newly developed BOGE products are subjected to all kinds of practical tests. For example fatigue tests under extreme conditions are carried out to determine the product's readiness for the market prior to release for series production. No BOGE product leaves the Bielefeld facility without completing a personal final inspection protocol. This document has to be signed off by our employee.



Permanent optimization

All BOGE products are subject to permanent quality audits and assessed according to the latest industry standards and practical experience – which translates into continuous improvement for the benefit of our customers. You are welcome to contact our energy efficiency experts for more details on how to realize additional savings potentials in your compressed air system. Use the BOGE AlReport or carry out leak detection in order to save ready cash: **Please do not hesitate to contact us!**

Powerful in every detail:

The design advantages of the BOGE S series.



INTAKE FILTER WITH PAPER MICROFILTER INSERT

quietly intakes air from the cool section of the cooling air flow while at the same time intensively cleans it to ensure the longest possible service life of all downstream components. The compressor operates trouble-free even in dusty conditions.



MULTIFUNCTIONAL INTAKE CONTROL

ensures a valve-less oil circuit without oil stop or check valve and the lowest possible internal pressure losses. It hermetically seals to prevent discharge of oil vapors. A fully unloaded start helps to save energy. The Multifunction control is effectively safe in operation and in the event of shutdown fails safe.





AIREND WITH ELECTRIC MOTOR

The airend is driven by a class F, TEFC standard motor which is located in the coolest section of the compressor. BOGE motors have genuine power reserves and are therefore not overloaded. Effective in 2012 all motors are IE3 premium efficiency motors. Intelligent design advantage: The award winning BOGE S series design incorporates a clever cabinet layout with a high quality finish and maximum efficiency. Every component part incorporates the decade long know-how of our engineers – advantages paid back through reliable daily operation.



COOLER SECTION

The self-sufficient section, where the highest cooling air temperatures occur, is located at the top of the compressor in the cooling air discharge and houses a generously dimensioned aftercooler with separate cooling air fan and cooling air guiding hood. The cooling air either discharges to the atmosphere or ideally, as heat recovery, to supplement space heating via ducting.



EASY MAINTENANCE

All maintenance parts are easily accessible from one side of the compressor. This reduces maintenance costs to a minimum.



INTERNAL PIPEWORK

All oil carrying pipes are made of steel terminating with high quality precision threaded joints that are leak proof and safe even under highest pressures. The entire machine utilizes only one hose on the clean air side which also serves for vibration damping.



BOGE SAFETY OIL SEPARATION SYSTEM

Includes horizontal oil separation reservoir, directly mounted airend and external oil separator cartridge. This innovative system ensures oil separation with virtually no pressure losses and a residual oil content of only 1-3 ppm in every operating phase. The external oil separator cartridge is minimally loaded: a guarantee for long service life.



INTEGRATED SWITCH CABINET

The switch cabinet is integrated into the screw compressor housing. It is fully pre-wired and ready for use. The cabinet also houses a quick fit modular microprocessor compressor controller.



OPTIONAL WATER COOLING The larger high volume BOGE screw compressors are available as water cooled (40-350 HP).

Screw compressor S 40-2 to S 341

Effective free air delivery: 135 - 1498 cfm, 3.82 - 42.43 m³/min Pressure range: 100 - 190 psig, 7 - 13 bar Motor range: 30 - 340 HP, 22 - 250 kW





VALVE-LESS OIL CIRCUIT

The BOGE screw compressor is designed with a valve-less oil circuit eliminating the need for oil stop or check valves. This function provides maximum operating safety.



DECOUPLED UNIT

A sub-frame mounted on vibration damping feet prevents transmission of structure borne sound. A rigid basic frame allows easy transportation by forklift.



EFFICIENCY

The specially designed BOGE airend provides high output volumes at low energy consumption – for reliable and energy efficient compressed air supply.



CONTROL

The BOGE FOCUS control is the standard compressor control and provides numerous control and monitoring features.

| BOGE | Max. | | Effective free | | Motor power | | | | Dimensions ¹⁾ | Dimensions ²⁾ | Compressed | Weight | Weight |
|---------|----------|------------|----------------|--------------|----------------|-----|------------|----------|--------------------------|------------------------------|-----------------------------------|--------|----------|
| Model | pressure | | air delivery* | | Main drive Far | | n | silenced | super-silenced | air | silenced | super- | |
| | | | | | mo | tor | mo | tor | W x D x H | W x D x H | | | silenced |
| | psig | bar | cfm | m³/min | HP | kW | HP | kW | inches | inches | outlet | lbs. | lbs. |
| S 40-2 | 100 | 7 | 195 | 5.53 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1630 | 1700 |
| | 115/125 | 8/8.6 | 183 | 5.17 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1630 | 1700 |
| | 150 | 10 | 163 | 4.63 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ / ₄ | 1630 | 1700 |
| 0 50 0 | 190 | 13 | 135 | 3.82 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ / ₄ | 1630 | 1700 |
| S 50-2 | 115/105 | | 235 | 6.65 | 50 | 37 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 16/5 | 1740 |
| | 115/125 | 8/8.6 | 224 | 6.35 5.70 | 50 | 3/ | 2.4 | 1.8 | 64 X 38 X 57 | 64 X 38 X 77 | NPT 11/4 | 1675 | 1740 |
| | 100 | 10 | 204 | 0.70 | 50 | 37 | 2.4 | 1.0 | 64 x 36 x 57 | 64 x 30 x 77 | NPT 174 NPT 11/ | 1675 | 1740 |
| S 60-2 | 100 | 7 | 258 | 7.30 | 60 | 45 | 2.4 | 1.0 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ /. | 1850 | 1920 |
| 0 00 2 | 115/125 | 8/8.6 | 247 | 7.00 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ / ₄ | 1850 | 1920 |
| | 150 | 10 | 224 | 6.34 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ / ₄ | 1850 | 1920 |
| | 190 | 13 | 190 | 5.36 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1850 | 1920 |
| S 61-2 | 100 | 7 | 286 | 8.09 | 60 | 45 | 3.5 | 2.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 2570 | 2670 |
| | 115/125 | 8/8.6 | 272 | 7.70 | 60 | 45 | 3.5 | 2.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 2570 | 2670 |
| | 150 | 10 | 244 | 6.92 | 60 | 45 | 3.5 | 2.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 2570 | 2670 |
| _ | 190 | 13 | 207 | 5.87 | 60 | 45 | 3.5 | 2.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 2570 | 2670 |
| S 75-2 | 100 | 7 | 346 | 9.80 | 75 | 55 | 3.5 | 2.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 2680 | 2790 |
| | 115/125 | 8/8.6 | 329 | 9.33 | /5 | 55 | 3.5 | 2.6 | /9 x 42 x 5/ | /9 x 42 x // | NPI 11/2 | 2680 | 2790 |
| | 150 | 10 | 293 | 8.30 | 75 | 55 | 3.5 | 2.6 | 79 X 42 X 57 | 79 X 42 X 77 | NPT 11/2 | 2680 | 2790 |
| S 100-2 | 100 | 13 | 201 | 10 71 | 100 | 75 | 5.5 6.2 | 2.0 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 172 | 2000 | 2790 |
| 3 100-2 | 115/125 | 7 8/8 6 | 449 | 12.71 | 100 | 75 | 6.2 | 4.0 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 1 ¹ / | 2755 | 2865 |
| | 150 | 10 | 371 | 10.50 | 100 | 75 | 6.2 | 4.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 1 ¹ / ₂ | 2755 | 2865 |
| | 190 | 13 | 325 | 9.20 | 100 | 75 | 6.2 | 4.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 1 ¹ / ₂ | 2755 | 2865 |
| S 101 | 100 | 7 | 480 | 13.60 | 100 | 75 | 6.2 | 4.6 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 2 ¹ / ₂ | 4080 | 4210 |
| | 115/125 | 8/8.6 | 463 | 13.10 | 100 | 75 | 6.2 | 4.6 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 4080 | 4210 |
| | 150 | 10 | 403 | 11.40 | 100 | 75 | 6.2 | 4.6 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 4080 | 4210 |
| | 190 | 13 | 346 | 9.80 | 100 | 75 | 6.2 | 4.6 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 4080 | 4210 |
| S 125 | 100 | 7 | 580 | 16.43 | 125 | 90 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 2 ¹ / ₂ | 4190 | 4315 |
| | 115/125 | 8/8.6 | 554 | 15.70 | 125 | 90 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 2 ¹ / ₂ | 4190 | 4315 |
| | 150 | 10 | 484 | 13.70 | 125 | 90 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 4190 | 4315 |
| 0.150 | 190 | 13 | 424 | 12.00 | 125 | 90 | 8.5 | 6.3 | 93 x 53 x 69 | 93 X 53 X 89 | NPT 21/2 | 4190 | 4315 |
| 5 100 | 115/125 | / ۵۵/۵ | 650 | 19.40 | 150 | 110 | 0.0 | 6.3 | 93 X 33 X 69 | 93 X 33 X 69 03 x 53 x 80 | NPT 272 NPT 21/ | 4000 | 4700 |
| | 150 | 0/0.0 | 576 | 16.40 | 150 | 110 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 69 | NPT 21/ | 4565 | 4700 |
| | 190 | 13 | 501 | 14 20 | 150 | 110 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 4565 | 4700 |
| S 151 | 100 | 7 | 706 | 20.00 | 150 | 110 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5090 | 5315 |
| | 115/125 | 8/8.6 | 685 | 19.40 | 150 | 110 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5090 | 5315 |
| | 150 | 10 | 600 | 17.00 | 150 | 110 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5090 | 5315 |
| | 190 | 13 | 508 | 14.40 | 150 | 110 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5090 | 5315 |
| S 180 | 100 | 7 | 862 | 24.40 | 175 | 129 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5400 | 5620 |
| | 115/125 | 8/8.6 | 823 | 23.30 | 175 | 129 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5400 | 5620 |
| | 150 | 10 | 735 | 20.80 | 175 | 129 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3″ ANSI | 5400 | 5620 |
| 0.000 | 190 | 13 | 629 | 17.80 | 1/5 | 129 | 10.0 | 1.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3" ANSI | 5400 | 5620 |
| S 220 | 115/105 | | 1024 | 29.00 | 200 | 150 | 10.0 | 1.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3 ANSI | 5/35 | 5955 |
| | 115/125 | 8/8.6 | 895 | 27.90 | 200 | 150 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3 ANSI | 5/35 | 5955 |
| | 100 | 10 | 000 766 | 25.10 | 200 | 150 | 10.0 | 7.5 | 101 x 63 x 79 | 101 x 63 x 99 | 3 ANSI 3″ ANSI | 5735 | 5055 |
| S 271 | 100 | 7 | 127/ | 36.00 | 200 | 200 | 12.5 | 9.2 | 122 x 72 2 v 85 5 | 122 x 72 2 x 10/ 1 | | 9020 | 101/0 |
| 0211 | 115/125 | 8/86 | 1225 | 34 70 | 270 | 200 | 12.5 | 9.2 | 122 x 72 2 x 85 5 | 122 x 72.2 x 104.1 | 4" ANSI | 9920 | 10140 |
| | 150 | 10 | 1077 | 30.50 | 270 | 200 | 12.5 | 9.2 | 122 x 72.2 x 85.5 | 122 x 72.2 x 104.1 | 4″ ANSI | 9920 | 10140 |
| | 190 | 13 | 872 | 24.70 | 270 | 200 | 12.5 | 9.2 | 122 x 72.2 x 85.5 | 122 x 72.2 x 104.1 | 4″ ANSI | 9920 | 10140 |
| S 341 | 100 | 7 | 1498 | 42.43 | 340 | 250 | 12.5 | 9.2 | 122 x 72.2 x 85.5 | 122 x 72.2 x 104.1 | 4" ANSI | 11020 | 11240 |
| | 115/125 | 8/8.6 | 1441 | 40.80 | 340 | 250 | 12.5 | 9.2 | 122 x 72.2 x 85.5 | 122 x 72.2 x 104.1 | 4" ANSI | 11020 | 11240 |
| | 150 | 10 | 1310 | 37.10 | 340 | 250 | 12.5 | 9.2 | 122 x 72.2 x 85.5 | 122 x 72.2 x 104.1 | 4" ANSI | 11020 | 11240 |
| | 190 | 13 | 1119 | 31.70 | 340 | 250 | 12.5 | 9.2 | 122 x 72.2 x 85.5 | 122 x 72.2 x 104.1 | 4" ANSI | 11020 | 11240 |

* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 20°C ambient temperature and maximum pressure. Emitted sound pressure values from 68 dB(A) according to DIN EN ISO 2151:2009

¹⁾ Super-silenced at the intake end

²⁾ Super-silenced at the intake end and discharge end

Screw compressor **SF 40** to **SF 150** with frequency control



Effective free air delivery: 34 - 685 cfm, 0.96 - 19.4 m³/min Pressure range: 100 - 190 psig, 7 - 13 bar Motor range: 40 - 150 HP, 30 - 110 kW





FREQUENCY CONTROL

The frequency converter ensures a continuous volume flow between 25 and 100 percent automatically adapting to the momentary demand of the compressed air system. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.



INTERNAL PIPEWORK

All oil carrying pipes are made of steel terminating with high quality precision threaded joints that are leak proof and safe even under the highest pressures. The entire machine utilizes only one hose on the clean air side which also serves for vibration damping.



ENERGY SAVING

Tighter/reduced system pressure virtually eliminates off load running, and in turn reduces start-up current peaks, and contributes to potential energy savings of up to 40%



CONTROL

The BOGE FOCUS control is the standard compressor control and provides numerous control and monitoring features.

Advantage through distinctly reduced energy consumption: The integrated frequency control of the SF series reduces idling times and eliminates pressure fluctuations. Using less compressed air means using less energy because the volume flow is continuously adapted to demand. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.

For maximized efficiency and air delivery: This range of screw compressors is ideal for the efficient operation of larger volumes of air. The integrated frequency converter ensures a continuous volume flow between 25 and 100 percent by automatically adapting to the momentary demand of the compressed air system – an advantage with big pay back due to distinctly reduced energy costs.

| BOGE | Max. pressure | | c. Effective free ure air delivery* | | Motor power | | | | Dimensions ¹⁾ | Dimensions ²⁾ | Compressed | Weight | Weight |
|----------|------------------|-------|--|---------------------|-------------|-----|-------|-----|--------------------------|--------------------------|-----------------------------------|----------|----------|
| Model | | | | | Main drive | | Fan | | silenced | super-silenced | air | silenced | super- |
| | | | | | motor | | motor | | WxDxH | W x D x H | | | silenced |
| | psig | bar | cfm | m ³ /min | HP | kW | HP | kW | inches | inches | outlet | lbs. | lbs. |
| SF 40-2 | 100 | 7 | 49-195 | 1.38- 5.53 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1730 | 1795 |
| | 115/125 | 8/8.6 | 46-183 | 1.29- 5.17 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ / ₄ | 1730 | 1795 |
| | 150 | 10 | 41-163 | 1.16- 4.63 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1730 | 1795 |
| | 190 | 13 | 34-135 | 0.96- 3.82 | 40 | 30 | 1.5 | 1.1 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 1 ¹ / ₄ | 1730 | 1795 |
| SF 60-2 | 100 | 7 | 64-258 | 1.82- 7.30 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1915 | 2018 |
| | 115/125 | 8/8.6 | 62-247 | 1.75- 7.00 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1915 | 2018 |
| | 150 | 10 | 56-223 | 1.58- 6.34 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1915 | 2018 |
| | 190 | 13 | 47-189 | 1.34- 5.36 | 60 | 45 | 2.4 | 1.8 | 64 x 38 x 57 | 64 x 38 x 77 | NPT 11/4 | 1915 | 2018 |
| SF 100-2 | 100 | 7 | 114-457 | 3.20-13.00 | 100 | 75 | 6.2 | 4.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 3305 | 3415 |
| | 115/125 | 8/8.6 | 107-427 | 3.00-12.10 | 100 | 75 | 6.2 | 4.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 3305 | 3415 |
| | 150 | 10 | 93-371 | 2.60-10.50 | 100 | 75 | 6.2 | 4.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 3305 | 3415 |
| | 190 | 13 | 81-325 | 2.30- 9.20 | 100 | 75 | 6.2 | 4.6 | 79 x 42 x 57 | 79 x 42 x 77 | NPT 11/2 | 3305 | 3415 |
| SF 150 | 100 | 7 | 171-685 | 4.90-19.40 | 150 | 110 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 5290 | 5425 |
| | 115/125 | 8/8.6 | 162-650 | 4.60-18.40 | 150 | 110 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 5290 | 5425 |
| | 150 | 10 | 144-575 | 4.08-16.30 | 150 | 110 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 5290 | 5425 |
| | 190 | 13 | 126-501 | 3.55-14.20 | 150 | 110 | 8.5 | 6.3 | 93 x 53 x 69 | 93 x 53 x 89 | NPT 21/2 | 5290 | 5425 |

* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 20°C ambient temperature and maximum pressure. Emitted sound pressure values from 72 dB(A) according to DIN EN ISO 2151:2009

Screw compressor **SLF 30** to **SLF 271** with frequency control



Effective free air delivery: 37 - 1280 cfm, 1.06 - 36.26 m³/min Pressure range: 100 - 190 psig, 7 - 13 bar Motor range: 30 - 270 HP, 22 - 200 kW



SLF 30 (optionally with radial fan)



FREQUENCY CONTROL

The frequency converter ensures a continuous volume flow between 25 and 100 percent automatically adapting to the momentary demand of the compressed air system. The soft starting also avoids undue wear and tear and prolongs the service life of the compressor.



MAXIMUM EFFICIENCY

The specially designed BOGE airend provides high output volumes at low energy consumption – for reliable and energy efficient compressed air supply. Tighter/reduced system pressure virtually eliminates off load running, which in turn reduces start-up current peaks, and contributes to potential energy savings of up to 40%.



CONTROL

The BOGE FOCUS control is the standard compressor control and provides numerous control and monitoring features.



PROTECTION

A full range of high performance synthetic lubricants are available for various applications. Extending lubricant change intervals and protecting your equipment. **Best specific working point:** When frequency controlled the SLF series compressors automatically adjust to the air demand while controlling the pressure perfectly. In the event of a change of the pressure value, the output automatically adjusts. A 190 psig machine thus regulated to a 125 psig machine yields a correspondingly higher output – without any expensive remodeling or design related modifications.

| BOGE | Max. | | Effective free | | Motor power | | | | Dimensions ¹⁾ | Dimensions ²⁾ | Com- | Weight | Weight |
|---------|----------|-------|----------------|------------|-------------|-----|-------|------|--------------------------|--------------------------|-----------------------------------|----------|----------|
| Model | pressure | | air delivery* | | Main drive | | Fan | | silenced | super-silenced | pressed | silenced | super- |
| | | | | | motor | | motor | | W x D x H | W x D x H | air | | silenced |
| | psig | bar | cfm | m³/min | HP | kW | HP | kW | inches | inches | outlet | lbs. | lbs. |
| SLF 30 | 100 | 7 | 37.4- 143 | 1.06- 4.04 | 30 | 22 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 76.5 | NPT 11/4 | 1543 | 1609 |
| | 115/125 | 8/8.6 | 37.4- 137 | 1.06- 3.87 | 30 | 22 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 76.5 | NPT 11/4 | 1543 | 1609 |
| | 150 | 10 | 37.4- 117 | 1.06- 3.30 | 30 | 22 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 76.5 | NPT 11/4 | 1543 | 1609 |
| | 190 | 13 | 37.4- 94.6 | 1.06- 2.68 | 30 | 22 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 76.5 | NPT 1 ¹ / ₄ | 1543 | 1609 |
| SLF 40 | 100 | 7 | 37.4- 186 | 1.06- 5.28 | 40 | 30 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 76.5 | NPT 11/4 | 1698 | 1786 |
| | 115/125 | 8/8.6 | 37.4- 178 | 1.06- 5.05 | 40 | 30 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 76.5 | NPT 11/4 | 1698 | 1786 |
| | 150 | 10 | 37.4- 160 | 1.06- 4.53 | 40 | 30 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 77 | NPT 11/4 | 1698 | 1786 |
| | 190 | 13 | 37.4- 135 | 1.06- 3.82 | 40 | 30 | 1.5 | 1.1 | 74 x 38 x 57 | 74 x 38 x 77 | NPT 1 ¹ / ₄ | 1698 | 1786 |
| SLF 51 | 100 | 7 | 53.3- 248 | 1.51- 7.01 | 50 | 37 | 2.4 | 1.8 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2249 | 2359 |
| | 115/125 | 8/8.6 | 53.3- 237 | 1.51- 6.71 | 50 | 37 | 2.4 | 1.8 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2249 | 2359 |
| | 150 | 10 | 51.9- 213 | 1.47- 6.04 | 50 | 37 | 2.4 | 1.8 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2249 | 2359 |
| | 190 | 13 | 48.4- 176 | 1.37- 4.98 | 50 | 37 | 2.4 | 1.8 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2249 | 2359 |
| SLF 61 | 100 | 7 | 54.7- 290 | 1.55- 8.22 | 60 | 45 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2535 | 2646 |
| | 115/125 | 8/8.6 | 54.7- 278 | 1.55- 7.87 | 60 | 45 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2535 | 2646 |
| | 150 | 10 | 53.3- 244 | 1.51- 6.92 | 60 | 45 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2535 | 2646 |
| | 190 | 13 | 50.1- 208 | 1.42- 5.90 | 60 | 45 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2535 | 2646 |
| SLF 75 | 100 | 7 | 54.7- 344 | 1.55- 9.75 | 75 | 55 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2800 | 2910 |
| | 115/125 | 8/8.6 | 54.7- 329 | 1.55- 9.33 | 75 | 55 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2800 | 2910 |
| | 150 | 10 | 53.3- 297 | 1.51- 8.40 | 75 | 55 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2800 | 2910 |
| | 190 | 13 | 51.6- 256 | 1.42- 7.26 | 75 | 55 | 3.5 | 2.6 | 80 x 43 x 57 | 80 x 43 x 77 | NPT 11/2 | 2800 | 2910 |
| SLF 101 | 100 | 7 | 149- 503 | 4.22-14.25 | 100 | 75 | 6.2 | 4.6 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4850 | 4982 |
| | 115/125 | 8/8.6 | 149- 482 | 4.22-13.64 | 100 | 75 | 6.2 | 4.6 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4850 | 4982 |
| | 150 | 10 | 147- 435 | 4.16-12.33 | 100 | 75 | 6.2 | 4.6 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4850 | 4982 |
| | 190 | 13 | 141- 374 | 4.00-10.58 | 100 | 75 | 6.2 | 4.6 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4850 | 4982 |
| SLF 125 | 100 | 7 | 149- 579 | 4.22-16.41 | 125 | 90 | 8.5 | 6.34 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4960 | 5093 |
| | 115/125 | 8/8.6 | 149- 554 | 4.22-15.70 | 125 | 90 | 8.5 | 6.34 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4960 | 5093 |
| | 150 | 10 | 147- 507 | 4.16-14.36 | 125 | 90 | 8.5 | 6.34 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4960 | 5093 |
| | 190 | 13 | 141- 443 | 4.00-12.56 | 125 | 90 | 8.5 | 6.34 | 95 x 52.5 x 69 | 95 x 52.5 x 89 | NPT 21/2 | 4960 | 5093 |
| SLF 221 | 100 | 7 | 228-1041 | 6.46-29.48 | 220 | 160 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 9921 | 10141 |
| | 115/125 | 8/8.6 | 228- 996 | 6.46-28.21 | 220 | 160 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4″ ANSI | 9921 | 10141 |
| | 150 | 10 | 218- 885 | 6.18-25.06 | 220 | 160 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 9921 | 10141 |
| | 190 | 13 | 193- 719 | 5.46-20.36 | 220 | 160 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 9921 | 10141 |
| SLF 271 | 100 | 7 | 228-1280 | 6.46-36.26 | 270 | 200 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 10362 | 10582 |
| | 115/125 | 8/8.6 | 228-1225 | 6.46-34,70 | 270 | 200 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 10362 | 10582 |
| | 150 | 10 | 218-1077 | 6.18-30.50 | 270 | 200 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 10362 | 10582 |
| | 190 | 13 | 193- 872 | 5.46-24.70 | 270 | 200 | 10 | 7.46 | 124 x 75 x 84.5 | 124 x 75 x 104 | 4" ANSI | 10362 | 10582 |

* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 20°C ambient temperature and maximum pressure. Emitted sound pressure values from 70 dB(A) according to DIN EN ISO 2151:2009

 Over 100,000 compressed air users expect more when it comes to their compressed air supply.

BOGE air provides them with the air to work.

For more than three decades BOGE screw compressors "Made in Germany" have stood the test of time: in industry and trade – from the one-man workshop to the automotive industry and the large refineries. Today, BOGE screw compressors have much more to offer than just compressed air: state-of-the-art technology, a modular design concept and maximum energy efficiency ensures that they meet the high reliability and efficiency standards customers have come to expect from BOGE. Service your added value! Maximized reliability and economic efficiency are not the only technical advantages that BOGE has to offer. Our comprehensive service support program will ensure your BOGE compressed air system remains in tip top condition. Wherever you need us, whatever we can do for you: BOGE Service Support is always readily available close by – competent, to the highest standards, and always one step ahead.

евосе best*cair*

BOGE EXTENDED WARRANTY

BOGE Genuine Parts enable you to extend your factory warranty up to 5 years: 2 years factory warranty with 3 years additional Genuine Parts warranty – the choice is yours. Furthermore, Genuine Parts ensures manufacturer's recommended maintenance schedule of new and existing equipment at the specified service intervals.



BOGE ORIGINAL PARTS

Only original BOGE spare parts have the manufacturer's technological edge. You can be confident when opting for BOGE original spare parts in the service of your BOGE compressed air system will ensure that the integrity of the compressor is maintained, efficiency is retained and your peace of mind is sustained.



ALWAYS NEARBY

BOGE has a network of dedicated service technicians and certified partners at its disposal to help you worldwide with your installation, upgrading, commissioning or approval, maintenance, repair, or inspection: You can rely on the know-how and experience of our qualified experts – at all times. **Hotline Mobile Service: 770-874-1570**

For more information email usa@boge.com



EMERGENCY ASSISTANCE

In the case of an emergency where immediate technical support is required, the BOGE product support trouble shooters or the BOGE Helpline team are available to you 24/7.

BOGE: 770-874-1570



AIR AUDITS

By analyzing your existing compressed air system, our energy efficiency experts can identify where savings can be made. The BOGE AIReport includes measurement of: dew point control, vibration control, leakage, noise, oil check and TAN check.



TRAINING COURSES

The BOGE Training Courses were established in order to train and certify internal employees and external partners as qualified BOGE Service Technicians. Attendance of Training Courses held in the in-house training center further assist in refreshing existing BOGE Service Technician's knowledge at regular intervals. For four generations, customers from mechanical engineering, industry and trade have relied on BOGE know-how when it comes to planning, developing and manufacturing compressed air systems. They are fully aware of the fact that BOGE AIR is more than just ordinary compressed air: utmost safety, outstanding efficiency, excellent quality, maximized flexibility along with dependable service are the ingredients to transform BOGE AIR into air to work with – in Germany, in Europe and in more than 80 countries around the world.

Our ranges of services include the following:

- Energy efficient systems development
- Plant design and engineering
- · System control and visualization
- Oil injected screw compressors
- Compressed air treatment
- Compressed air distribution and storage
- Compressed air accessories
- Compressed air service



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