

BOGE AIR. THE AIR TO WORK.



SCROLL COMPRESSORS

E0 series



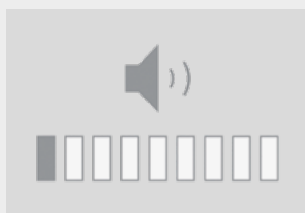
Super-compact and whisper-quiet – the BOGE EO series enhances the oil-free segment and literally fills any gap

THE DESIGN PRINCIPLE

The heart of BOGE EO compressors (Eccentric, Oil free) consists of one or more scroll compressors. Each operates with two compressor screws, with one being stationary while the other rotates eccentrically. Although the two spirals intermesh, they do not touch each other. The air taken in is continuously forced into an increasingly confined space, so producing pulsation-free compressed air which is absolutely free of oil. Efficiency is further improved with a two-stage aftercooler. Up to four compressors can be installed in one housing if high free air delivery rates are required.

A modular concept for an intelligent, compact system solution!

With an output of 4 to 22 kW, BOGE EO compressors deliver oil-free compressed air at 8 and 10 bar.



WHISPER-QUIET

The closer a compressor gets to the workplace, the more crucial the sound pressure level becomes. The design of the scroll compressor comes into its own here, with whisper-quiet operation and ultra-low vibration levels. Perfect for example in laboratories or hospitals.



OIL FREE

Scroll compressors can manage without oil lubrication because the aluminium screws in the compression chamber do not rub against each other. The advantage of this design: the guarantee of 100% high-quality, oil-free compressed air. A condensate cleaner is not necessary either.



EFFICIENT

focus control 2.0 is included as standard. It regulates up to four scroll units in the housing as well as up to four BOGE EO compressors horizontally with base load switching. Monitored by a multi-colour LCD display, efficiency for as many as 16 compressor units can be optimised here.



COMPACT

The smart configuration of components in BOGE EO compressors results in a very small footprint. This means they can be positioned next to the workplace – even as a system solution with integrated dryer. Astounding: They will even fit through a standard-sized door.

Oil-free air is a must when it comes to sensitive work environments.

This is what prompted BOGE to develop the EO series, as the low to mid-range oil-free performance segment (≤ 22 kW) did not however previously include compressors that were quiet and compact enough to be set up near the workplace. Its scroll compressors are not only extremely quiet, but also have very low vibration levels. A modular concept with 1 - 4 airends lets you match usage to demand, while offering maximum versatility – whether autonomous, used on a receiver, with an integrated or a separate refrigerant dryer or as a duplex unit.



THE SCROLL PRINCIPLE IN THE SMALLEST FORMAT

The latest model in the BOGE EO series is also the smallest: With the new EO 4, which is positioned in the 4 kW performance segment, BOGE is specifically catering for sensitive applications that depend on oil-free compressed air but can manage with lower outputs or appreciate even smaller dimensions.



EXAMPLE OF A SOLUTION: BOGE EO 6 D

Just how seriously BOGE takes the issue of space is shown by the example of the EO 6 D. In this variant the compressor and refrigerant dryer are fully integrated in the housing as a compact unit. The system is controlled either via **base** control supplied as standard or optional **focus** control 2.0.



EXAMPLE OF A SOLUTION: BOGE EO 16

The redundancy built into a triple unit ensures that it offers maximum flexibility and safety. The space required by the BOGE EO 16 is no bigger than the footprint of the duplex unit EO 11. If the compressors are operated with the same maintenance cycles, they can also be serviced at the same time. If required, free air delivery can also be raised at any moment. The EO 11 offers maximum flexibility by the subsequent installation of a third compressor stage or, alternatively, of an integrated refrigerant compressed air dryer (also at a later time).

APPLICATIONS



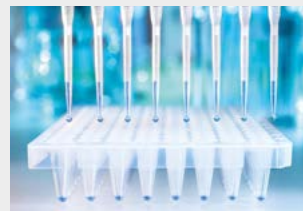
MEDICAL TECHNOLOGY

Sensitive work environments such as doctors' surgeries, laboratories and hospitals have relied on 100% oil-free compressed air from BOGE for years. And positioning has become even more flexible with the compact models from the EO series.



DENTISTS' SURGERIES

100% pure technical compressed air protects the health of patients while preventing highly sensitive equipment from contamination. The low-vibration, whisper-quiet operation of the compact EO 6 models even allow them to be set up in the treatment room.



PHARMACEUTICAL INDUSTRY

100% oil-free compressed air is an indispensable standard in the pharmaceutical industry. BOGE EO compressors do away with the residual risk of oil accidentally getting into the ambient air.



AGRICULTURE

Both milk producers and small-scale food processors appreciate the low-vibration, whisper-quiet operation of the scroll compressors, which offer 100% safety from contamination as well.

The latest generation of BOGE's belt-driven EO compressors has all benefits on its side: Thanks to a minimum number of moving parts and first-rate ease of servicing, these absolutely oil-free scroll compressors stand out with maximum flexibility, low maintenance and outstanding efficiency.

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FURTHER BENEFITS

DESIGNED WITH A COOL HEAD

The oil-free compression chamber made of quality die-cast aluminium not only yields high efficiency and guarantees a long service life, but also offers excellent heat dissipation properties – thanks to the compact design, integrated radial fan and superior workmanship of the aluminium components.

THE TWO-STAGE COOLING CONCEPT

A generously dimensioned surface cooler is responsible for primary cooling: Its cooling effect is reinforced by intelligent configuration in a separate area. The secondary cooler takes the form of a high-quality aftercooler made of aluminium, which achieves excellent compressed air outlet temperatures thanks to aluminium fins. This two-stage cooling concept thus ensures outstanding efficiency combined with a long service life for components.

BUILT-IN EASE OF MAINTENANCE

Characterised by extremely long maintenance intervals (8 [10] bar: around 10,000 [5,000] operating hours), these high-quality compressors also benefit in terms of service life from simple air end lubrication at four central points. Maintenance is fast and straightforward due to the easily accessible grease nipples and fact that no additional cover is needed for lubrication.

| BOGE type | Max. pressure | | Effective free air delivery* | | Motor rating | | Receiver volume | Emitted sound pressure levels** dB(A) | Dimensions | Compressed air outlet | Weight kg |
|--------------------|---------------|------|------------------------------|----------|--------------|---------|-----------------|--|--------------------|-----------------------|--------------|
| | bar | psig | l/min | cfm | kW | HP | liter | | B x T x H (mm) | inch | |
| EO 4 ¹⁾ | 8 | 116 | 410 | 14.5 | 4 | 5.5 | - | 60 | 670 x 1000 x 975 | G1/2 | 215 |
| EO 4 ¹⁾ | 10 | 145 | 340 | 12 | 4 | 5.5 | - | 60 | 670 x 1000 x 975 | G1/2 | 215 |
| EO 6 | 8 | 116 | 620 | 21.9 | 5.5 | 7.5 | - | 62 | 670 x 1000 x 975 | G1/2 | 250 |
| EO 6 | 10 | 145 | 490 | 17.3 | 5.5 | 7.5 | - | 59 | 670 x 1000 x 975 | G1/2 | 250 |
| EO 6 D | 8 | 116 | 620 | 21.9 | 5.5 | 7.5 | - | 62 | 670 x 1000 x 1385 | G1/2 | 336 |
| EO 6 D | 10 | 145 | 490 | 17.3 | 5.5 | 7.5 | - | 59 | 670 x 1000 x 1385 | G1/2 | 336 |
| EO 6 (D)R | 8 | 116 | 620 | 21.9 | 5.5 | 7.5 | 270 | 62 | 745 x 1785 x 1570 | G1/2 | 380(405) |
| EO 6 (D)R | 10 | 145 | 490 | 17.3 | 5.5 | 7.5 | 270 | 59 | 745 x 1785 x 1570 | G1/2 | 380(405) |
| EO 6 TR | 8 | 116 | 2 x 620 | 2 x 21.9 | 2 x 5.5 | 2 x 7.5 | 350 | 62 | 1005 x 1815 x 1625 | G1/2 | 647 |
| EO 6 TR | 10 | 145 | 2 x 490 | 2 x 17.3 | 2 x 5.5 | 2 x 7.5 | 350 | 59 | 1005 x 1815 x 1625 | G1/2 | 647 |
| EO 8 (D) | 8 | 116 | 820 | 29 | 8 | 11 | - | 64 | 915 x 1520 x 1460 | G1 | 520(550) |
| EO 8 (D) | 10 | 145 | 680 | 24 | 8 | 11 | - | 64 | 915 x 1520 x 1460 | G1 | 520(550) |
| EO 11 (D) | 8 | 116 | 1240 | 43.8 | 11 | 15 | - | 62 | 915 x 1520 x 1460 | G1 | 585(620) |
| EO 11 (D) | 10 | 145 | 980 | 34.6 | 11 | 15 | - | 59 | 915 x 1520 x 1460 | G1 | 585(620) |
| EO 16 | 8 | 116 | 1860 | 65.7 | 16.5 | 22 | - | 66 | 915 x 1520 x 1460 | G1 | 710 |
| EO 16 | 10 | 145 | 1470 | 51.9 | 16.5 | 22 | - | 63 | 915 x 1520 x 1460 | G1 | 710 |
| EO 17 | 8 | 116 | 1860 | 65.7 | 16.5 | 22 | - | 62 | 915 x 1520 x 1880 | G1 | 774 |
| EO 17 | 10 | 145 | 1470 | 51.9 | 16.5 | 22 | - | 59 | 915 x 1520 x 1880 | G1 | 774 |
| EO 22 | 8 | 116 | 2480 | 87.5 | 22 | 30 | - | 64 | 915 x 1520 x 1880 | G1 | 896 |
| EO 22 | 10 | 145 | 1960 | 69.2 | 22 | 30 | - | 61 | 915 x 1520 x 1880 | G1 | 896 |

¹⁾ also available with integrated refrigeration dryer, on a container with separate refrigeration dryer and as a dual system

* free air delivery measured according to ISO 1217, annex C

** sound pressure values measured according to DIN EN ISO 2151:2009