

PURE AIR – SAFE DIVING

OUR SYSTEMS – YOUR SAFETY



› **MARINER320-D**
Diesel compressor



› **PE-NITROX MEMBRANE**
Nitrox generation



› **AERO-GUARD**
CO₂ Removal

IDEAL FILLING ROOM

BAUER KOMPRESSOREN supplies a complete end-to-end breathing air production system. It enables all users to configure their own bespoke turnkey solution tailored to their individual needs and requirements. The top priority is safety – in terms of both breathing air quality and operating safety.

4 B-KOOL

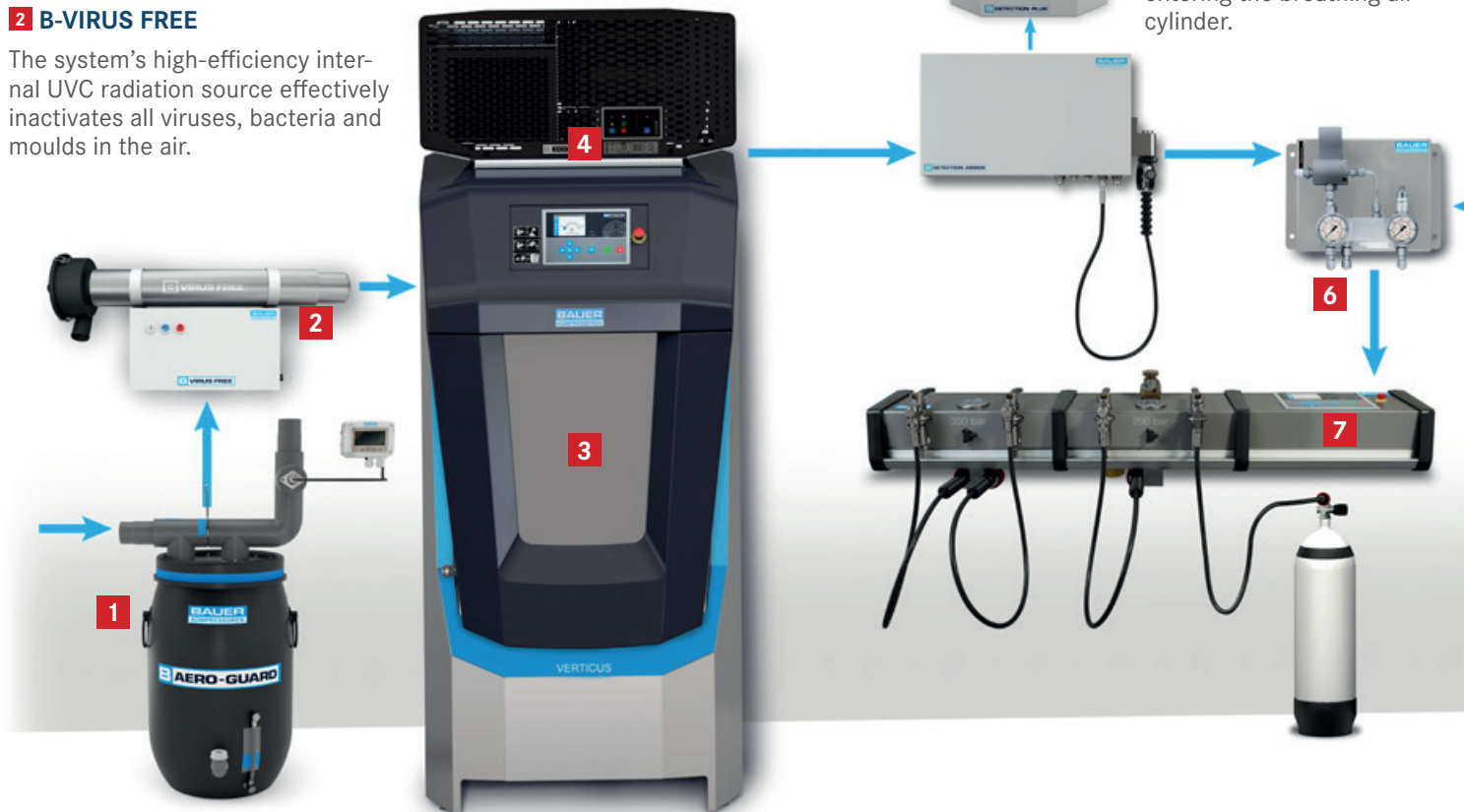
B-KOOL cools the saturated air after compression, so that the majority of its moisture passes into the final separator. Depending on the ambient operating conditions, this can extend the lifetime of the filter cartridges up to 11 times!

2 B-VIRUS FREE

The system's high-efficiency internal UVC radiation source effectively inactivates all viruses, bacteria and moulds in the air.

5 B-DETECTION PLUS

The system's ultra-sensitive sensors seamlessly monitor breathing air quality during compressor operation. If the preconfigured threshold values are exceeded, the compressor automatically shuts down, effectively preventing contaminated air from entering the breathing air cylinder.



1 AERO-GUARD

The system reliably reduces the CO₂ content of the intake air before compression.

optimizes the CO₂ content to 1/3 of the input concentration, a precise adjustment can now be made for maximum cartridge service life.

7 B-FILL

The modular filling panel is designed for wall mounting. It has a remote control function enabling it to be installed in a separate room. Maximum operating safety is assured by kink-proof extra-high-safety filling hoses and filling valves with non-return functions.

3 VERTICUS

The powerful high-pressure compressor with integrated P-Purification filter system produces the required volume of ultra-pure breathing air in compliance with DIN EN 12021:2014.

NEW!

The desired CO₂ value can be continuously adjusted to the different ambient concentrations using a lever. A sensor provides insight into the CO₂ concentration. Compared to the standard model, which

6 AUTOMATIC SELECTOR UNIT

The unit controls a rapid automatic filling process for one or more air cylinders connected to filling panels, drawing air from an intermediate storage bank and from the compressor simultaneously.

8 STORAGE BANK

The storage modules with safety valve, gauges and condensate drain stand on a base frame.



9 B-SAFE 300

Protects operator and filling room from accidents involving exploding breathing air cylinders or severed or detached filling hose connections.

10 B-CLOUD

Provides a continuous real-time overview of all operating data and archives them.

If an alert situation arises or maintenance actions are due, a push message is sent to your smartphone.

MOBILE COMPRESSORS

COMPACT LINE – REDEFINING MOBILE CLASSICS

For the past two decades, the legendary quality of the COMPACT LINE has set the benchmark for mobile breathing air compressors. Now, the new generation introduces an iconic design plus an array of sophisticated technical features. The remodeled fan guard optimizes the cooling airflow to the cylinders. Combined with a larger-sized intercooler, the new design has further boosted cooling efficiency significantly. Benefits for compressor operators include a more extensive range of potential uses in high-temperature locations.

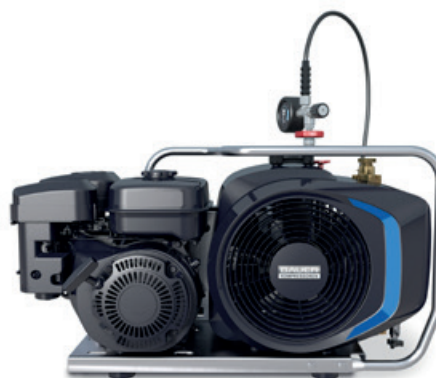


JUNIOR II 100 l/min | up to 330 bar

Ruggedness and reliability have elevated the JUNIOR to global best-seller status, with over 100,000 systems sold. The most compact of our mobile breathing air compressors, its small footprint and advanced technology make it the ideal choice for mobile applications.

OCEANUS 140 l/min | up to 330 bar

The OCEANUS is a byword for exceptional performance, with filling speeds up to 40 % faster than the JUNIOR II, although its dimensions and weight are virtually identical. Designed with challenging professional applications in mind, it is famous for its ruggedness, mobility and high charging rates. The base frame and handles are made from stainless steel to ensure corrosion resistance.



PROFI LINE – ALLROUND PERFORMANCE FOR PROFESSIONAL USE

The PROFI LINE II was specifically developed to deliver high charging rates for mobile applications. It is tailored to meet the challenges encountered by professionals. Created for continuous operation, the system is outstandingly suited for use in commercial and public filling stations.



CAPITANO/MARINER 140 – 320 l/min | up to 420 bar

BAUER KOMPRESSOREN's CAPITANO140 has the lowest weight of all PROFI LINE products. This compact compressor is legendary for its ruggedness and long life.

The MARINER line was developed to deliver high charging rates of up to 320 l/min. It is supplied complete with an integrated corrosion-resistant crash frame as standard, which provides ideal protection for the system and enables system accessories to be added.

MARINER DIESEL 320 l/min | up to 350 bar

The new MARINER320-D with diesel drive offers an enormous delivery capacity of 320 l/min. It is designed for both short and long-term runs. Its design makes it ideal for use in the harshest climatic conditions, such as those found on ships or drilling platforms.



STATIONARY COMPRESSORS

MINI-VERTICUS AND VERTICUS – POWERHOUSES

The MINI-VERTICUS and VERTICUS lines were developed to fulfil high-performance requirements in continuous operation. They combine the famously long service life of BAUER's legendary compressor blocks with outstandingly ergonomic cutting-edge design that prioritizes simple, straightforward operation and extra-low operating noise.

The advanced B-CONTROL MICRO +Net compressor control unit allows all the main compressor functions to be monitored and controlled. Teamed with B-DETECTION PLUS, the unit can also monitor breathing air quality.

With an Internet connection to BAUER's B-CLOUD, air quality monitoring can be performed globally and 24/7. Any smartphone with Apple iOS or Android operating system can be used as the control device by installing the free-to-download B-APP.

The modular concept can be combined with BAUER's extensive range of accessories to configure a system that is tailored to all customer requirements.

MINI-VERTICUS 150 – 320 l/min | up to 420 bar

This ultra-compact series matches the larger VERTICUS line in terms of functionality. It is the ideal choice where space is at a premium.

VERTICUS 450 – 680 l/min | up to 420 bar

The high-performance VERTICUS line is the system of choice for users requiring high charging rates.



KAP LINE – FOR THE HIGHEST REQUIREMENTS

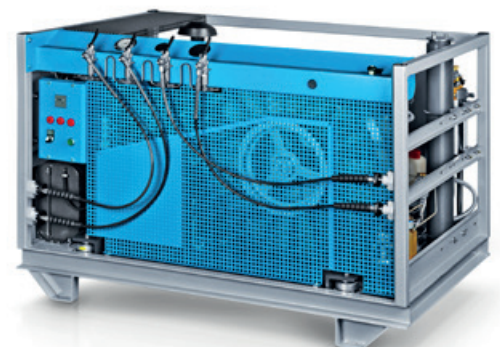
KAP-H | KAP-HN | KAP-DAH

370 – 680 l/min | up to 350 bar

Compressors in the KAP line have been developed specifically for tough continuous operation. Their hallmark ruggedness and durability has built them a legendary reputation over the decades.

Featuring a horizontal design with low centre of gravity, they are ideal for installation on boats.

The compressors are simple to operate using the B-CONTROL MICRO (installed as standard with the KAP-H and KAP-HN) with colour display, which provides intelligent control and secure monitoring of all basic functions.



MOBILE PE LINE

SO MOBILE, SO COMPACT

PE100 100 l/min | up to 330 bar

The second-generation PE100 likewise features the new fan protector. Alongside its iconic design, it improves cooling performance and thus expands the range of potential applications for the system.

The PE LINE has inherited its ruggedness and reliability from the COMPACT LINE. It has an ultra-compact footprint and is low in weight.

Available in three drive types – petrol, three-phase and single-phase motor – it is ideal for a wide range of applications.



MOBILE SYSTEMS WITH OPTIMIZED FEATURES AND FUNCTIONALITY

PE-TE/-TB LINE 200 - 300 l/min | up to 330 bar

The PE-TE/-TB line was specifically developed for mobile use. With a compact design and functional carrying frame, these compressors are easy to transport.

The BAUER P31 purification system for the petrol-driven PE250-TB and PE300-TB models delivers outstanding breathing air quality and extends filter cartridge life.

The sophisticated purification system has an integrated oil and water separator and pressure maintaining / non-return valve.



STATIONARY PE LINE

COMPACT AND ULTRA-EFFICIENT

PE-HE LINE 250 – 300 l/min | up to 330 bar

These compressors featuring horizontal design are among the most compact stationary systems in their class.

Thanks to the space-saving arrangement of compressor block and drive, the rugged and durable units in the PE-HE line take up next to no floor space, but deliver top performance.

They are also supplied with an automatic condensate drain system and the user-friendly BHW-CONTROL as standard.



PE-MVE LINE 200 – 300 l/min | up to 420 bar

The PE-MVE is the most compact vertical system in BAUER's portfolio. It is supplied with a soundproof cabinet as standard. The compressor offers an outstanding price/performance ratio as well as extremely low operating costs.

It is the ideal choice for all applications requiring mid-range charging rates where low noise and a compact footprint are vital.

Likewise included as standard are the automatic condensate drain and BHW-CONTROL unit for fully automated air cylinder filling.



PE-VE LINE 250 – 850 l/min | up to 420 bar

The PE-VE series offers impressive air delivery rates of up to 850 l/min.

The B-CONTROL MICRO electronic control unit features clear, functional menu-based operation for safe, secure and convenient use and enables the compressor to be controlled fully automatically.

The modular design of the PE-VE series enables the units to be ideally aligned to your needs.



THE BAUER OX RANGE

BAUER OX systems produce compressed breathing air with up to 40 % oxygen content (nitrox). To produce this a nitrox blend, users can choose from BAUER's B-BLENDING module, B-MEMBRANE system or PE-NITROX MEMBRANE system. All OX compressors feature designs and materials that are optimized for maximum safety of the nitrox compression process.

This ultra-high safety level is confirmed by EC-type examination certification issued by TÜV SÜD. An important aspect with respect to product liability in cases of accidents – especially for travel operators and hotels with diving centres on their premises.

MARINER320-E-OX 320 l/min | up to 330 bar

With its high charging rate, the MARINER320-E-OX is tailored to the needs of mobile use in commercial filling stations.

Depending on specific needs, it can be operated with an external membrane system or with an internal B-BLENDING module. The compact dimensions of the model make it the ideal choice for use on dive boats.

The new generation can be operated particularly easily and intuitively via B-CONTROL MICRO.



MINI-/VERTICUS-OX RANGE 260 – 450 l/min | up to 330 bar

The stationary nitrox models in the PREMIUM LINE series were developed and constructed to meet strict performance requirements for continuous operation in professional applications.

Depending on requirements, they offer charging rates of up to 450 l/min and combine a compact footprint with high performance – and ultra-quiet operation in the case of the SUPER SILENT models.

All systems can be operated in conjunction with a membrane system or an external B-BLENDING unit.



PE-VE-OX RANGE 320 – 700 l/min | up to 330 bar

The PE-VE-OX range is designed for use with a B-MEMBRANE or a PE-NITROX MEMBRANE system and offers charging rates of up to 700 l/min.

The range offers a unique combination of features tailored to users' needs at extremely attractive prices.

The B-CONTROL MICRO electronic control unit features clear, functional menu-based operation for safe, secure and convenient use and enables the compressor to be controlled fully automatically.



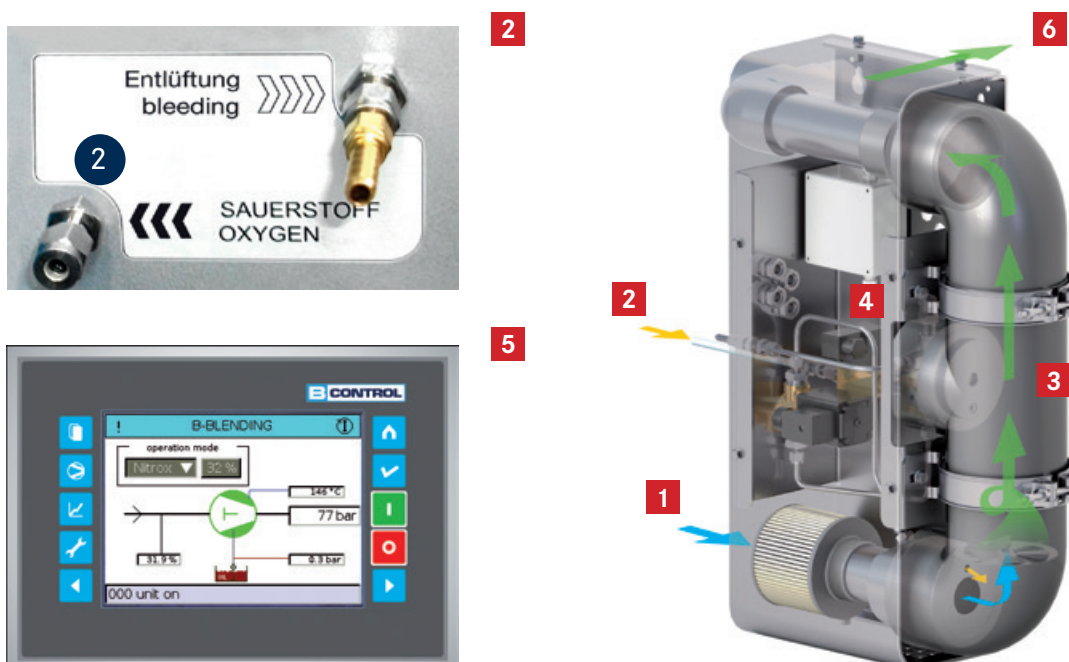
B-BLENDING – NITROX AT THE PUSH OF A BUTTON!

The BAUER B-BLENDING system combines easy operation with high safety.

Use B-BLENDING with our nitrox series compressors to produce nitrox blends with up to 40 % O₂ at low cost – even when space is at a premium.

The B-BLENDING system is particularly suitable for diving centres with low or medium nitrox needs seeking a simple, yet safe nitrox production system.

Fittable to charging rates up to 450 l/min.



- 1** Through the air filter, ambient air is drawn in and fed through a particle filter for pre-cleaning before it is directed into the blending duct.
- 2** Pure oxygen in breathing air quality is fed into the blending duct from an external oxygen cylinder. Quantities are precisely controlled by a proportional valve.
- 3** In the blending duct, the pre-cleaned ambient air and oxygen are combined in the proportion previously set by the user. The blending duct interior is designed to ensure homogeneous blending.
- 4** A sensor at the mid-point of the blending duct measures the oxygen content of the nitrox blend and sends feedback to the control unit.
- 5** The B-CONTROL built into the compressor is the control centre of the B-BLENDING system. It monitors the oxygen content of the nitrox blend in real time and regulates the oxygen feed via the proportional valve. The BAUER nitrox compressor shuts down immediately if a deviation from the setting is detected.
- 6** The nitrox blend is now compressed to its final pressure by the BAUER nitrox compressor.

SAFE AND COMPACT – BAUER MEMBRANE SYSTEMS

BAUER nitrox membrane systems offer a compact and safe solution of producing breathing air mixtures with oxygen content of up to 40 percent. All components are exactly matched for maximum safety. The systems are designed for reliable nitrox supply to stationary professional diving centres, safari boats, liveboards, yachts and cruise ships and for commercial diving missions.

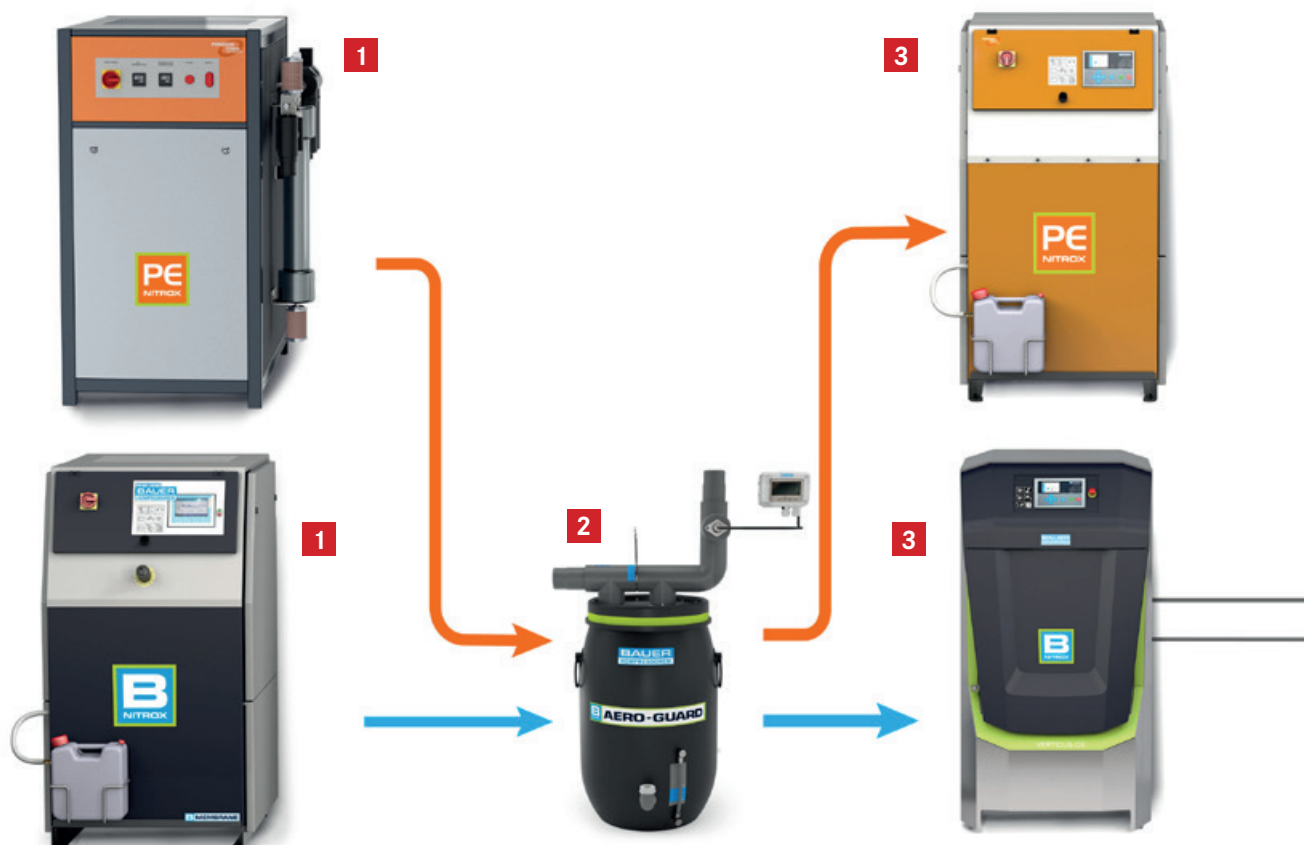
The membrane systems are ideal for professional diving centres that prioritize safety, high charging rates, low maintenance and low operating costs.

The PE-NITROX MEMBRANE is particularly attractively priced and has a robust and easy-to-use hardwire control system. If, on the other hand, you want access to extensive control options, the B-MEMBRANE is a tailor-made premium solution.

HIGH PRESSURE MODULE

The high-pressure compressors of the MARINER-OX, VERTICUS-OX and PE-VE-OX series are optimised for compression up to nitrox EAN 40, deliver reliable and economical operation.

- › Charging rate from 260 to 700 l/min
- › Available as open-unit and SUPER SILENT versions (VERTICUS-OX und PE-VE-OX series)
- › The low thermal stress of the BAUER blocks ensures a high level of safety during nitrox compression and maximises service life.
- › Online temperature monitoring on the cooling air and the final separator automatically shuts down the system if temperatures exceed the pre-set limits, ensuring maximum operating safety.



1 PE-NITROX MEMBRANE / B-MEMBRANE

Produces nitrox mixtures with oxygen content of up to 40 percent

2 AERO-GUARD-OX

CO₂-reduction

3 PE-VE-OX / VERTICUS-OX

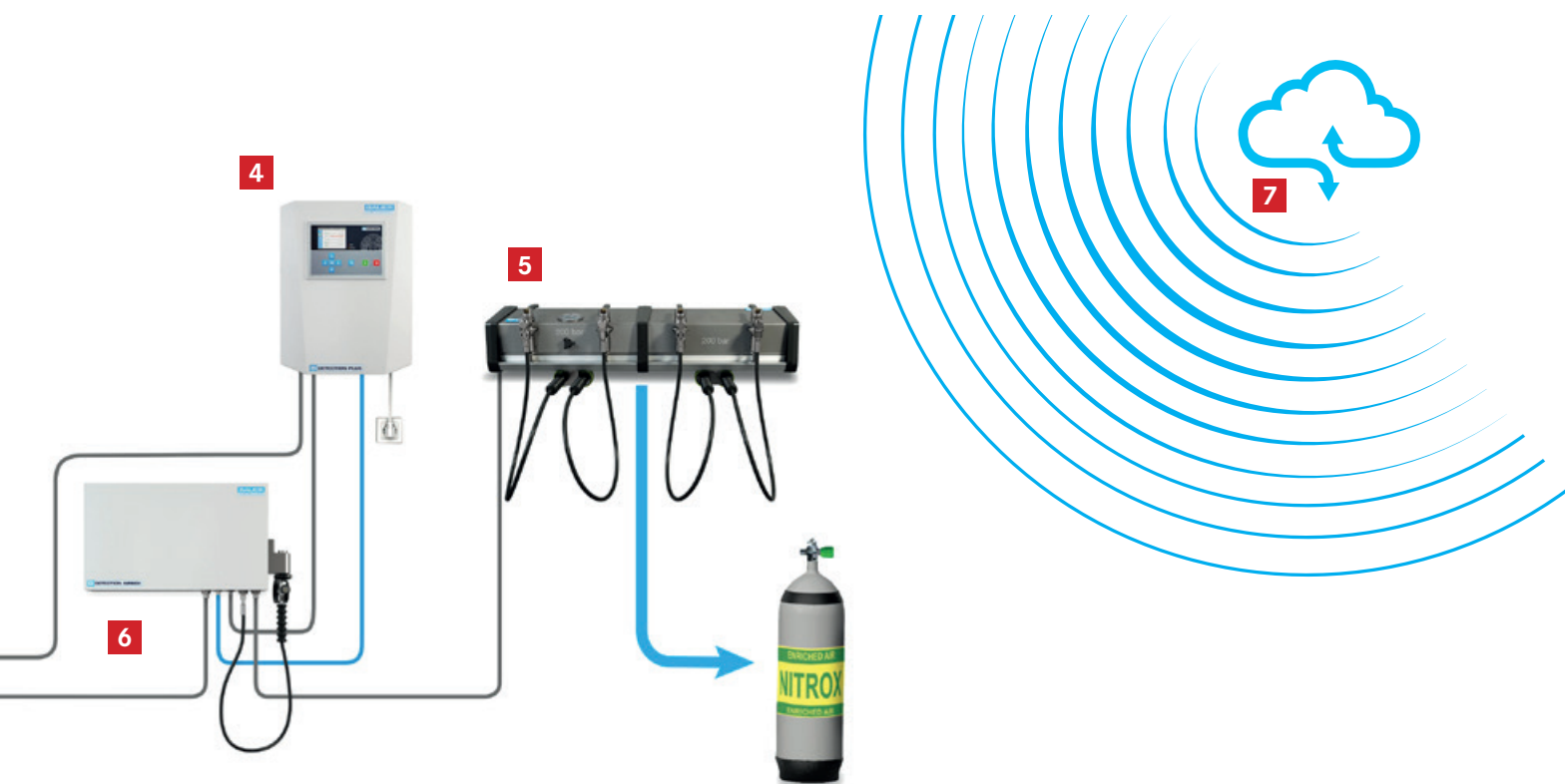
Compresses the nitrox mixture to pressures up to 300 bar

FUNCTION OF A BAUER MEMBRANE SYSTEM



- 1 Screw compressors** provide an intake pressure of approx. 10 bar, required to supply the oxygen membrane in the system. The screw compressor with ultra-efficient “rolling profile” is a product of ROTORCOMP (BAUER GROUP).
- 2 Refrigerant dryer** for efficient cooling and condensate separation. Enables oxygen mixture to be produced irrespective of the ambient temperature: the continuously cooled membrane delivers optimum efficiency at all times.
- 3 The Filter system** reliably removes oil and particles to protect the membrane from harmful influences and extend its service life.
- 4 The oxygen membrane** boosts oxygen content by separating N_2 from the breathing air. The oxygen content of the breathing air can be set at any level between 21 and 40 percent ¹.

¹ Maximum oxygen level depends on the specifications of the selected membrane system.



4 B-DETECTION PLUS s

Continuous monitoring of breathing air quality

6 B-DETECTION AIRBOX

Gas sampling unit

5 FILLING PANEL

For filling breathing air cylinders with nitrox

7 B-CLOUD

24/7 system monitoring and control management

THE BAUER 360° SAFETY CONCEPT



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