BAUER KOMPRESSOREN

B-BLENDING SYSTEM

The safe and secure solution for blending Nitrox

- **260 – 450 l/min**
- **225 bar**

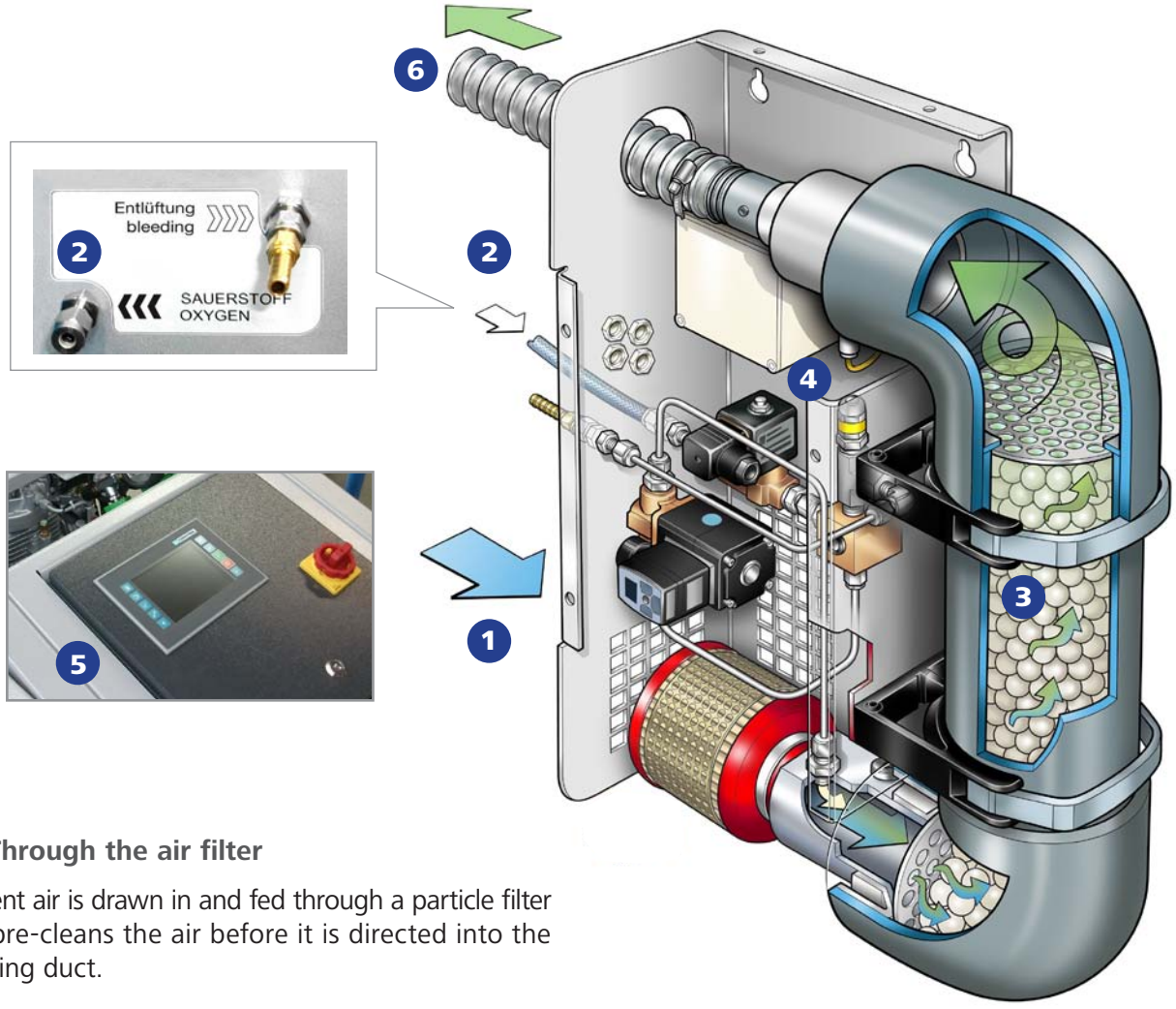
- TÜV-CERTIFIED SAFETY
- NITROX BLEND UP TO 40 % O_2
- COMPACT DESIGN

BAUER's B-BLENDING System combines easy operation with TÜV-certified safety

Use B-BLENDING with our Nitrox series compressors to produce Nitrox blends with up to 40 % O_2 at low cost – even when space is at a premium.
B-BLENDING is available as an integrated compressor unit or wall-mounted external unit.
Keeping you flexible.

How B-BLENDING works

Uncompromising safety was our top priority in the development of B-BLENDING. By combining mechanical and electronic safety systems, we ensure that the oxygen content of the gas blend complies precisely with your settings at all times – independent of external factors. To eliminate operating errors, we focused on designing a clear, easy-to-operate user interface.



1 Through the air filter

ambient air is drawn in and fed through a particle filter that pre-cleans the air 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 exactly controlled by a proportional valve.

3 In the blending duct

the pre-cleaned ambient air and oxygen are combined in a proportion previously set by the user.
The blending duct is designed to ensure a homogeneous blend result.

4 A sensor

at the exit of the blending duct measures the oxygen content of the nitrox blend and sends feedback to the control unit.

5 B-CONTROL II, the compressor control unit,

is the control center of the B-BLENDING system. It monitors the oxygen content of the Nitrox blend produced and regulates the oxygen feed via the proportional valve. In the event of deviation from the setting the BAUER Nitrox compressor immediately shuts down.

6 The Nitrox blend

is then compressed to its final pressure by the BAUER Nitrox compressor.

BAUER Nitrox systems

Open or noise-insulated, mobile or stationary – BAUER's range of Nitrox systems offers the ideal model for virtually all applications. All BAUER Nitrox compressors are built for your safety, equipped with temperature sensors for each compressor stage to monitor the specified compressor operating temperature. All parts and oils used in the systems are suitable for use in high-oxygen environments.
If your Nitrox requirements increase over time, all systems in the BAUER Nitrox range can be retrofitted as full-scale membrane systems using the appropriate components from the BAUER B-NITROX portfolio.

MARINER 320 Nitrox with B-BLENDING

MARINER 320 is the highest-performance mobile system from BAUER KOMPRESSOREN's PROFI-LINE.
The system's Nitrox model is the ideal partner for diving ship applications.

- Ultra-lightweight aluminum chassis offers outstanding corrosion protection, and stainless-steel interstage and afterstage coolers can cope with the toughest climatic conditions.
- Heavy-duty drives are suitable for both short-time and continuous operation.
- One P 41 filter cartridge fills up to 530[1] diving cylinders.

[1] 10-liter diving cylinder at 20 °C ambient temperature and 200 bar

VERTICUS 5 NITROX with B-BLENDING

The Nitrox models in the VERTICUS range deliver volumes of up to 450 l/min. They combine compact footprints with high performance and - in the SUPER-SILENT series - with ultra-low operating noise.

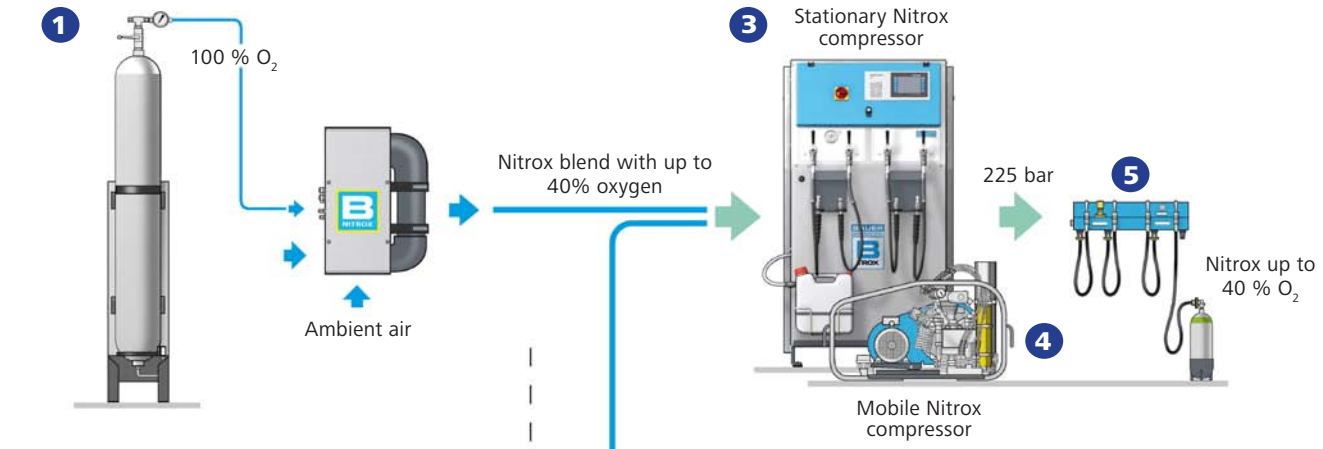
- Compressor blocks feature heavy-duty drive units designed for continuous operation, to ensure long operating life and cost-effectiveness.
- The P 61 purification system has extra-long-life cartridges for reliable supply of pure breathing air to a quality standard that exceeds the DIN EN 12021[2] standard.
- The optional B-SECURUS monitors moisture saturation of the filter cartridge, displays a timely warning signal when saturation approaches and shuts down the system[3].

[2] when used with the BAUER AERO-GUARD system, if the standard limit of CO_2 concentration in the intake air is exceeded

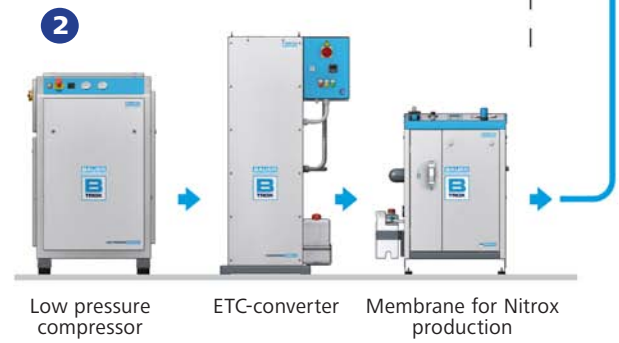
[3] measurements based on saturation by moisture

The BAUER B-NITROX system variants

B-BLENDING system



Membrane system



1 **B-BLENDING system:** Pure oxygen and pre-cleaned ambient air are combined to form a homogeneous gas blend.

2 **Membrane system:** To achieve the desired proportion of oxygen, the corresponding amount of nitrogen is separated from the breathing air.

3 **Stationary:** Compressor of the VERTICUS NITROX range

4 **Mobile:** BAUER MARINER 320-NITROX

5 **External filling panel** with Nitrox connections

Technical Data

Model	Drive	Charging rate[1]	R.P.M	Filling rate[2]	Drive	Power consumption[3]	Filter system	Dimensions (approx. cm)			Weight net.
max. 225 bar		l/min	min^{-1}	min	kW	kW		L	W	H	approx. kg
Mobile Nitrox compressors											
MARINER 320-OX	3-phase	320	1450	0,6	7,5	6,5	P 41	130	65	70	154
Stationary Nitrox compressors											
V 12.14-OX-5.5-5	3-phase	260	1185	0,8	5,5	5,6	P 61 or P 81[4]	114 / 148[5]	83	152	305 / 395[5]
V 12.14-OX-7.5-5	3-phase	320	1450	0,6	7,5	6,5					310 / 400[5]
V 15.1-OX-11-5	3-phase	450	1320	0,4	11	9,6					350 / 440[5]

[1] cylinder filling from 0 to 200 bar

[2] filling rate for 1 liter cylinder capacity from 0 to 200 bar

[3] power consumption by 200 bar

[4] optional

[5] Super-Silent-version

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Subject to technical modifications