





## Breathing air supply systems

Stationary and mobile solutions



### BartelsRieger breathing air supply systems

We design, manufacture, service and provide training in close partnership with our customers to ensure that breathing air and respiratory protection technology is available wherever it is needed.

Respiratory protection is part of everyday life in almost all industries. Many groups of people come into contact with hazardous substances on a daily basis, from aerosols and dusts to highly toxic gases, in the chemical, petrochemical, automotive, pharmaceutical and food industries, as well as in fire and rescue services and many other areas. With more than 160 years of experience in respiratory protection technology, BartelsRieger is your reliable partner for comprehensive solutions in the field of mobile and stationary breathing air supply.

Stationary breathing air supply systems are semi-flexible solutions in the form of individually configurable stations. They are connected to multiple cylinders or bundles of cylinders simultaneously to provide sufficient and continuous breathing air.

Mobile breathing air supply systems are available as a flexible solution for air supply, emergency and escape air supply, air monitoring and air filtration, even in harsh outdoor environments or for maintenance work.

BartelsRieger is a one-stop shop for everything you need regarding breathing air applications, from breathing air resources such as cylinders and compressors to compressed air line breathing apparatus.

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## Stationary breathing air supply

### Continuous air supply without downtime

A fixed breathing air station controls the supply of breathing air from multiple sources, such as one or more high-pressure cylinder bundles. A high-quality power pressure reducer with operating indicator provides users with the required working pressure. An automatic switchover block activates another filled breathing air source as soon as the residual pressure of the first cylinder is reached. This ensures a continuous air flow without downtime.



### BR55

#### Semi-flexible solution for maximum air demand

### Explanation of operation and protection of the BR 55 breathing air station

The BR55 is designed for use with breathing air cylinders or cylinder bundles with a maximum filling pressure of 300 bar. If required, the system is scalable using infeed manifolds (Vareo distributors) to allow multiple cylinders or bundles to be connected simultaneously.



High pressure is first reduced to line pressure (~ 25-35 bar) by main pressure reducers on the left and right. A subsequent working pressure reducer provides the required working pressure (0-10 bar).

The breathing air station is designed for a maximum capacity of 250 Nm<sup>3</sup>/h. It is protected by 1 relief valve and 1 safety valve, which are designed to exclude the possibility of the individual components exceeding the pressure in case of a defect.

- » Standard technology protection through robust stainless steel cabinet
- » 2 fixed preset main pressure reducers, each with a high and medium pressure gauge
- » Automatic switchover block
- » Optional: 2 contact pressure gauges for connection to a control centre
- » Connecting fittings
- » 1 shut-off valve
- » Stainless steel base plate
- » Optional: High pressure warning whistle
- » Safety/relief valve

#### 100 % continuous air supply

100 % system solution for every stationary requirement

scalable air supply



## BartelsRieger AirMobile series

### Flexible air supply systems down to the last detail

With the **AirMobile** series, BartelsRieger covers almost all requirements for mobile respiratory protection applications. In addition to the safe air source with complete pneumatic systems, operating and monitoring panels, the systems are ready to use with storage space for equipment and compressed air supply hoses, as required.

### Trailer systems

#### Systems for high breathing air demand or long distances

Breathing air trailer systems provide flexible breathing air even for longer distances or greater air requirements. Approved for use on public roads, the systems can be moved to different locations within very short time. A self-contained pneumatic module ensures fast, flexible and easy handling when in use and is easy to maintain.

The unit accommodates up to four 50l/300 bar breathing air cylinders and a pneumatic module with pressure reducer, pressure gauge and filling port. A support wheel and two parking supports, a cover with gas pressure damper as well as overrun and park brake for the usual comfort.

- » Breathing air supply for up to 4 users simultaneously
  - » Available with up to 4 high-pressure breathing air cylinders of 50 I/300 bar each
    - » Breathing air supply up to 41,400 litres
      - » Storage space for accessories
        - » Lightweight construction due to aluminium chassis

#### **Pneumatic panels**

- » Pressure reducer DM 1900 reduces high pressure to a working pressure of 5-6 bar
  - » Filling and feed connection: 300 bar
  - » Warning device in the panel sounds at residual pressure of approx. 35 ±5 bar
- » Medium pressure gauge: 0-16 bar; high pressure gauge: 0-400 bar
- » Flexible high-pressure connecting hoses for connection to the compressed gas cylinders
- » Relief valve can be used manually as a vent valve

### 100 % system solution

for mobile breathing air supply

### 100 % quality advantage

due to stainless steel base frame modules

### Up to 4 equipment carriers

can be supplied simultaneously

### 100 % mobile

Approved for use on public roads

### AirMax BASE

#### Breathing air trailer for 4 breathing air cylinders



Scan for more product details

- Calculated air supply for a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 1120 min; High respiration: 100 l/min = approx. 560 min
- » Breathing air supply: Accommodates up to 4 breathing air cylinders of 50 l/300 bar (approx. 41,400 litres of breathing air supply)
- » Supply for up to 2 persons wearing respirators

### AirMax PRO

Breathing air trailer for 4 breathing air cylinders and two hose reels

- Calculated air supply for a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 560 min; High respiration: 100 l/min = approx. 280 min
- » 2 automatic hose reels made of stainless steel incl. compressed air supply hose DZS 9 à 50 m
- » Supply for up to 4 persons wearing respirators



### AirMax COMPRESSOR

## Autonomous breathing air supply for up to two compressed air line breathing apparatus with demand valve

- » Unlimited and continuous air supply for compressed air line breathing apparatus through compressor technology
- » Storage space for accessories
- » Lightweight construction due to aluminium chassis
- » Galvanised sheet steel frame
- » 2 supports and 1 support wheel
- » Approved for public road traffic
- » Total weight 500 kg, unladen weight 188 kg, payload 312 kg
- » Crate interior dimensions (LxWxH) 181x101x83 cm, load floor height 49 cm, tyre size 145/80R13

#### Compressed air filter

- » 3-stage (cyclone separator, particle filter and activated carbon)
- » Pressure reducer included
- » Pressure gauge
- » 2 extraction couplings AK2
- » Designed for up to 2 compressed air line breathing apparatus



#### Optionally available: Power generator

- » Drive motor: Single-cylinder 4-stroke petrol engine, 6.4 kW at 3,000 rpm
- » Generator power: 5.5 KW, 50 Hz, 230 V
- » Outlets: 2 x 230 V/16 A, 1 x CEE 230 V/32 A
- » Safety class: IP 54

### AirMax MEMBRANE COMPRESSOR

with stainless steel frame

The compressor, which operates on the membrane compressor principle without oil lubrication, provides a continuous air supply for respirators. The compressed air is also cleaned of odours

and dust from the inlet air by a three-stage filter unit.

The base frame made of a sturdy stainless steel tube construction serves as protection and facilitates transport. The compressor must be positioned at an appropriate distance from the contaminated work area to ensure that only clean ambient air is drawn in.

#### Stainless steel membrane compressor

- » Maximum pressure: 6 bar
- » Suction capacity: 600 l/min
- » Motor power: 230 V, 2.2 kW
- » Stainless steel frame design
- » Weight: 15 kg

### 💙 100 % continuous air supply

- 100% mobile-approved for use on public roads
  - V Up to 2 users simultaneously

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ARTELS

## Breathing air cylinder trolley systems

### Long-term use with maximum mobility

The safest way to use respirators in confined spaces or over long distances is to use an easy-to-manoeuvre mobile breathing air supply and compressed air line breathing apparatus.

**Air2go** breathing air cylinder trolley systems on stable stainless steel chassis are used for the safe transport of compressed gas cylinders for breathing air with up to two hose reels and compressed breathing air supply hoses (DZS9). They are exceptionally easy to move around.

- » Serves up to 4 users simultaneously
- » Can be combined with various cylinder sizes and max. 2 high-pressure breathing air cylinders à 50 l/300 bar
- » Breathing air supply up to 28.000 litres
- » Storage space for accessories
- » Stainless steel chassis

#### **Pneumatic panels**

- » Pressure reducer DM 1900 reduces high pressure to working pressure of 5-6 bar
- » Warning device in the panel sounds at residual pressure of approx. 35 ±5 bar
- » Filling and feed connection: 300 bar
- » Medium pressure gauge: 0-16 bar; high pressure gauge: 0-400 bar
- » Flexible high-pressure connecting hoses for connection to the compressed gas cylinders
- » Safety valve can be used manually as a vent valve

100% system solution for mobile breathing air supply 100% quality advantage due to stainless steel base frame Up to 4 users can be supplied simultaneously



### Air2go MAX

#### Modular breathing air cylinder trolley

- » 2 breathing air cylinders à 50 l/300 bar, up to 28.000 litres of breathing air supply
- » Calculated air supply when using a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 560 min; High respiration: 100 l/min = approx. 280 min
- » Supplies up to 4 air hose units with demand valve
- » 2 manual stainless steel hose reels with DZS 9 air supply hose (maximum length 50 m each)
- » Spacious stainless steel compartment for compressed air line breathing apparatus and accessories
- » Crane eye for loading the complete breathing air cylinder trolley
- » Swivel wheels with total locking brake and adjustable push handle
- » Compressed gas cylinders including pneumatics can be separated from the carriage as a unit
- » The rear, steerable and lockable wheels are electrostatically dissipative
- » 4-wheel safety chassis

### Air2go FW 2500

## Breathing air cylinder trolley system solution for maximum handling

- » Stainless steel chassis
- » 2 breathing air cylinders à 50 l/300 bar, up to 28.000 litres of breathing air supply
- » Calculated air supply when using a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 560 min; High respiration: 100 l/min = approx. 280 min
- » Supplies up to 4 air hose units with demand valve
- » 2 manual stainless steel hose reels with locks
- » Compressed air supply hose DZS 9 (maximum length 50 m each)
- » Removable stainless steel storage crate to hold respirators
- » The rear, steerable and lockable wheels are electrostatically dissipative
- » Lifting device for safe loading





### Air2go LIGHT

#### The lightest and most flexible breathing air cylinder trolley

#### Product details

- » Stainless steel chassis
- » Designed to hold 2 breathing air cylinders à 50 l/300 bar
- » Breathing air supply up to 28,000 litres
- » Mounting device for AirBox with DM1900 (pressure reducer) for connecting compressed air line breathing apparatus
- » Calculated air supply when using compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 560 min; High respiration: 100 l/min = approx. 280 min
- » With craneability solution according to DGUV-R-109-017 DIN EN 13155
- » Electrostatic discharge capacity
- » Hose holders for transport

### 100 % robust

High-quality stainless steel frame for maximum load capacity, quality & durability

### 80 % faster handling

Tensioning straps for cylinder holder with ball locking bolts as quick release system

### 100 % modular

Device for optional attachment of a pressure reducer system (Airbox)

### 100 % ergonomic relief

Support wheel with angles for individual ergonomic adjustment

### 100 % craneable

acc. to DGUV-R-109-017 DIN EN 13155



### Air2go MINI

#### Breathing air cylinder trolley with a manual hose reel

- » Designed to hold 2 breathing air cylinders of 6.8 I/300 bar or 9 I/300 bar
- » Breathing air supply up to 5,100 litres
- Calculated air supply when using a compressed air hose unit with demand valve (6.8 litre cylinders): Low respiration: 50 l/min = approx. 76 min; High respiration: 100 l/min = approx. 38 min
- Calculated air supply when using a compressed air hose unit with demand valve (9 litre cylinders): Low respiration: 50 l/min = approx. 102 min; High respiration: 100 l/min = approx. 51 min
- » Manual hose reel for compressed air supply hose DZS 9 (length up to 50 m)
- » Supply of 2 compressed air line breathing apparatus
- » Weight with cylinders approx. 50 kg
- » Crane eye for loading the complete breathing air cylinder trolley

#### **Pneumatic panels**

- » Pressure reducer DM 1900 reduces high pressure to working pressure of 5-6 bar
- » Warning device in the panel sounds at residual pressure of approx. 35 ±5 bar
- » Filling and feed connection: 300 bar
- » Medium pressure gauge: 0-16 bar; high pressure gauge: 0-400 bar
- » Flexible high-pressure connecting hoses for connection to the compressed gas cylinders
- » Relief valve can be used manually as a vent valve



Scan for more product details

### 100 % modular

Designed to hold 2 pressurised breathing air cylinders of 6.8 litres or 9 litres each

#### 100 % manoeuvrable

50 kg total weight

#### 100 % robust

High-quality stainless steel frame for maximum load capacity, quality & durability

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## Mobile case and container systems

### Fully contained systems for the smallest spaces

Enclosed case and container solutions provide complete protection of the cylinders and other elements from the environment. The systems are designed as a complete solution and provide breathing air for a user even in the smallest of spaces.

The systems are designed for operation in an upright or lying position for supplying compressed air line breathing apparatus with a demand valve.

- » Additional storage space for accessories
- » Robust construction due to stainless steel chassis
- » Medium pressure outlet extraction couplings AK2



#### Pneumatic panels

- » Pressure reducer **DM 1900** reduces high pressure to working pressure of 5-6 bar
- » Warning device in the panel sounds at residual pressure of approx. 55 ±5 bar
- » Filling and feed connection: 300 bar
- » Medium pressure gauge: 0-16 bar; high pressure gauge: 0-400 bar
- » Flexible high-pressure connecting hoses for connection to the compressed gas cylinders
- » Relief valve can be used manually as a vent valve



### Air2go MAC 3603

#### Mobile breathing air container with 3 breathing air cylinders

- » Calculated air supply when using a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 114 min; High respiration: 100 l/min = approx. 57 min
- » Breathing air supply: Holds 3 breathing air cylinders, each with a volume of 6.0 or 6.8 I/300 bar (approx. 5,700 litres of breathing air supply)
- » Extendable transport handle and attachment for lifting the device
- » Weight with cylinders approx. 57 kg
- » Storage space for accessories, compressed air line breathing apparatus equipment (full face mask, compressed air supply hose DZS9)
- » Supplies up to 2 users simultaneously

### Air2go TAV

#### Transportable breathing air supply

- » 2 breathing air cylinders à 6.8 l/300 bar for a breathing air supply of up to 3,800 litres
- » Calculated air supply when using a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 76 min; High respiration: 100 l/min = approx. 38 min
- » Carrying strap and transport roller
- » Weight with cylinders approx. 27 kg

Further TAV versions in the product range please contact us for more information.

## Compact breathing air supply Convenient handling and space-saving storage

### System electrostatically dissipative

### 100 % system protection

#### 100 % robust

High-quality stainless steel frame for maximum load capacity, quality & durability

**V** Space-saving storage

**V** 100 % system protection

💙 Housing made of aluminium ducting

## AirSafe – Mobile emergency air supply systems

### Backup systems for the tightest spaces and more comfort

BartelsRieger's back-up breathing air systems provide additional protection for the respirator user in the event of failure of the primary breathing air supply. The systems are mounted in robust cases that ensure safe storage of pneumatics and emergency air supply. If the air supply from the breathing air source is interrupted, e.g. due to a break in the compressed air supply hose or a compressor failure, the valve automatically switches to the additional emergency air supply from a breathing air cylinder.

The back-up systems are designed for operations where the local conditions do not permit the installation of a breathing air supply with cylinder batteries directly near to the user. In addition, these back-up systems do not have to be carried on the person, which means that users can work with less weight and greater comfort.

Depending on the version, the design also allows the integration of filtration technology, high-pressure bypass and other features for the safe use of air compressors.

#### Features

- » The emergency air supply is connected to the compressed air hose unit via an automatic changeover valve (AUV)
- » The systems have a permanently installed pressure reducer and are equipped with a residual pressure warning device
- » All systems are installed in robust cases that ensure maximum mobility with a high level of comfort thanks to castors and extendable handles
- » Our portfolio includes products for the safe use of compressed air from air line systems, breathing air cylinder batteries and air compressors





### AirSafe MAX

## Medium and high pressure feed with compressed air filter in a mobile case solution

In combination with a flexible high-pressure hose, the **AirSafe MAX** allows bridging distances of up to 100 m between the operation site and the high-pressure supply source (e.g. breathing air cylinder battery).

In the event of a malfunction of the high-pressure supply, the automatic change-over valve activates the integrated emergency air supply without interruption. At the same time a warning signal sounds in the case from the demand valve of the compressed air line breathing apparatus, to prompt the user to retreat.

- » Waterproof and dustproof case made of impact-resistant, acid-proof polymer
- » 2-fold high-pressure input enables parallel connection of several systems or cylinder batteries
- » Designed for the use with compressed air line breathing apparatus with demand valve
- » Case including wheels and extendable handles
- » 2 filling and feed connections: 300 bar, medium pressure feed connection: 6 bar
- » Emergency air supply: Holds 2 breathing air cylinders of 6.8 I/300 bar each (approx. 3,800 litres of breathing air supply)
- » Low respiration: 50 l/min = approx. 76 min, high respiration: 100 l/min = approx. 38 min



Scan for more product details

#### Equipment

- » Pressure reducer
- » Automatic change-over valve AUV
- » 2 x filling and feed connections: 300 bar
- » Medium pressure feed connection: 6 bar
- » Medium pressure outputs: AK2 Coupling
- » Medium pressure gauge: 0-16 bar
- » High pressure manometer: 0-400 bar
- » Acoustic warning device with active NLV
- » Additional residual NLV warning device approx. 35 ±5 bar

### Bridging up to 100 m

between the point of use and the high-pressure supply source

115afe 2033-0

#### Lower G26 requirements

due to reduced weight for the user

#### 100 % mobile

due to castors and extendable handles

### 100 % redundant

through an integrated emergency air supply

### AirSafe ALW 1683-C

#### Medium pressure feed with compressed air filter ALW 1683-C

The use of the **AirSafe ALW 1683-C** with integrated filtration technology is suitable as an emergency air supply if, for example, an operational compressed air network or medium-pressure compressor is used as the regular breathing air source. This means that breathing air preparation and the emergency air supply are located directly at the user's workplace as a safety device.

- » Waterproof and dustproof case made of impact-resistant, acid-proof polymer
- » Integrated breathing air preparation with 2 separate stages: Coalescence filter and activated carbon filter
- » Emergency air supply: Breathing air cylinder 6.8 litres/300 bar (up to 3,800 litres of breathing air supply)
- » Designed for the use with compressed air line breathing apparatus with demand valve
- » Case including wheels and extendable handles
- » Medium pressure outputs: 2 AK2 extraction couplings
- » Medium pressure gauge: 0-16 bar; high pressure gauge: 0-400 bar
- » Acoustic warning device with active emergency
- » Emergency residual pressure warning device: approx. 35 ±5 bar
- » Weight with cylinder approx. 35 kg
- » Calculated air supply when using a compressed air line breathing apparatus with demand valve: Low respiration: 50 l/min = approx. 38 min; High respiration: 100 l/min = approx. 19 min
- » Pressure reducer
- » Automatic change-over valve (AUV)



Scan for more product details

Airsafe

ALW 1683-C

HANNES V

#### Lower G26 requirements

due to reduced unit weight for the user

### 100 % mobile

due to castors and extendable handles

### 100 % redundant

through integrated emergency air supply

### AirSafe MINI

#### Mobile emergency air supply – compact case solutions

- » Waterproof and dustproof case made of impact-resistant, acid-proof polymer
- » Monitoring of the feed pressure (max. 6 bar) by the control of the back-up system. If the pressure falls below 3.5 bar, uninterrupted switchover to the emergency air supply with simultaneous sounding of an acoustic warning signal
- » The emergency air supply consists of an easily replaceable compressed air cylinder (2 I/300 bar) secured by a mounting clamp, with pressure reducer and automatic change-over valve (AUV)
- » Easily accessible pneumatic components
- » Breathing air inlet and outlet accessible from the outside (AK2 coupling system)



### Lower G26 requirements

due to reduced unit weight for the user

### 100 % revision-friendly

through exchangeable pneumatic components for optimal servicing

### 100 % leak-tight case

Water- and dust-tight operation in closed condition

### 100 % mobile

due to castors and extendable handles



irSafe MINI

BARTELS



#### 20 Accessories

AIRBOX

### AirBox

#### Flexible breathing air conversion from high to medium pressure

This system allows the safe connection of up to 2 high-pressure sources (e.g. cylinder battery) using flexible high pressure hoses (length up to 50 m), to supply breathing air for up to 4 people.

- » Waterproof and dustproof case made of impact-resistant, acid-proof polymer
- » Residual pressure warning device
- » Outlet pressure: 5.5 bar
- » Weight: 10,5 kg



#### Pneumatics

- » Pressure reducer DM 1900 reduces high pressure 300 bar to working pressure of 5-6 bar
- » Warning device in the panel sounds at residual pressure of approx. 35 ±5 bar
- » Filling and feed connection: 300 bar
- » Medium pressure gauge: 0-16 bar; high pressure gauge: 0-400 bar
- » Flexible high-pressure connecting hoses for connection to the compressed gas cylinders
- » Relief valve can be used manually as a vent valve

### Up to 4 users simultaneously

Delivery capacity up to 1,900 l/min for simultaneous supply of up to 4 users

### 100% system protection

In a waterproof and dustproof case made of impact-resistant, acid-proof polymer

### 100 % modular case solution

in combination with Air2go LIGHT

### 100 % system safety

with warning signal, safety and venting valve, pressure gauge displays for high and medium pressure



### Pressure reducer

#### 1900 series

The cylinder pressure reducer reduces the cylinder pressure to the working pressure of the compressed air line breathing apparatus. If the cylinder pressuredrops below 35 ±5 bar, the pressure reducer automatically switches to the warning pressure. At the same time, a warning signal sounds on the pressure reducer and on the warning device on the equipment carrier.

The air supply in the compressed gas cylinder is indicated on the high pressure gauge. The medium pressure gauge is used to display the working pressure and signals the breathing activity of the wearer of the unit by fluctuations of the pointer.

Via the relief valve/safety valve , it is possible to vent the system by manual operation even when the cylinder valve is closed.

- » Inlet pressure: 300 bar; operating pressure: 5.5 ±1 bar; warning pressure: >7 bar
- » High pressure gauge: 0-400 bar; medium pressure gauge: 0-16 bar
- » Delivery capacity: max. 1,900 l/min
- » Input connection: G 5/8" according to DIN EN 144-2
- » Output connections: 2 or 4 breathing air couplings AK2 system
- » Relief valve can be used manually as a vent valve
- » Warning: Medium pressure warning whistle (MDW) or intermittent medium pressure warning whistle (iMDW)
- » Residual pressure warning at 35 ±5 bar cylinder pressure

In the standard version, the **DM 1900** pressure reducer is equipped with a medium pressure warning device (MDW), which emits an acoustic warning signal above 90 db(A) at a residual cylinder pressure of 40-30 bar.

The **DM 1900-iMDW** pressure reducer with intermittent warning device is particularly suitable for noisy working environments. In addition, less breathing air is consumed for the acoustic warning signal.





### AirPure W

#### Compressed air filter as wall unit

Ready-to-use wall-mounted filter combination for up to three compressed air line breathing apparatus consisting of:

- 1. Step 5 micron filtration with water separator and automatic condensate drain
- 2. Step 0.01 micron filtration and automatic condensate drain
- 3. Step activated carbon filtration and manual condensate drain <0.003 mg/sqm residual oil content
- » With pressure reducer and manometer
- » Connections: Inlet R ¾" and outlet R ¼" internal thread



Details about the product

### AirPure K

#### Compressed air filter as a case system

Ready-to-use filter combination for up to two compressed air hose units in robust case, consisting of:

- 1. Step 5 micron filtration with water separator and automatic condensate drain
- 2. Step 0.01 micron filtration and automatic condensate drain
- 3. Step activated carbon filtration and manual condensate drain <0.003 mg/sqm residual oil content
- $\ensuremath{\,{\scriptscriptstyle >}}$  With pressure reducer, manometer and condensate collection container
- » Connections: Inlet R ¾" and outlet R ¼" internal thread
- » Max. working pressure: 16 bar



### 💙 For stationary and mobile use

- 3-fold filtration graduated filtration for very high breathing air quality
- Compressed air becomes breathing air in combination with compressed air networks or medium-pressure compressors

## Compressed air cylinder

### Breathing air composite cylinders for cylinder trolleys and trailers

### Breathing air composite cylinder with 6.8 l/300 bar

Breathing air composite cylinder with 6.8 I capacity and 300 bar filling pressure, with cylindrical M18x1.5 thread. The valves are approved according to EN 144.

- » Air volume: approx. 1,900 litres
- » Lifetime PET-Liner: 30 years
- » Lifetime Alu-Liner: unlimited
- » Delivery including initial commissioning



### Breathing air steel cylinder with 501/300 bar

Breathing air steel cylinder with 50 l capacity and 300 bar filling pressure, equipped with a 300 bar cylinder valve with valve cap.

- » Air volume: approx. 14,000 litres
- » Lifetime: 10 years
- » Delivery including initial commissioning



### Breathing air steel cylinder with 2 l/300 bar

Breathing air steel cylinder with 2 l capacity and 300 bar filling pressure, equipped with a 300 bar cylinder valve with valve cap.



- » Relaxed air volume: approx. 500 litres
- » Lifetime: 10 years
- » Delivery including initial commissioning



### Compressed breathing air supply hose (DZS)

#### **Certified respirator**

BartelsRieger compressed breathing air supply hoses are assembled to specific lengths and equipped with a firmly integrated safety breathing air coupling and a corresponding plug-in nipple. Specific properties include bond tensile strength, kink resistance, heat and flame resistance and electrostatic discharge capability.

#### The hoses are marked according to EN 14593-1 with:

- (H) heat resistant
- (S) antistatic
- (F) flame resistant

They are available in various individual lengths from 5-50 m. If required, up to max. 3 individual hoses can be combined to achieve a greater range of hoses. The total length is limited to 50 m.

- » Available in working lengths from 5-50 m
- » Inner diameter 9.5 mm
- » Including breathing air coupling AK2 and plug-in nipple

#### Stainless steel hose reel

Convenient transport and longer service life of compressed breathing air supply hoses

Stainless steel hose reels feature a specially sealed swivel joint for easy transport and unwinding and rewinding of the compressed air supply hose during use.



- » Automatic hose reel for compressed air supply hoses up to a length of 50 m
- » Manual hose reel for compressed air supply hoses with a length of 35-50 m







### Compressed breathing air supply hoses with RFID chip

#### Certified according to EN 14593-1/EN 14594

BartelsRieger uses RFID chip technology to label compressed air hoses to keep relevant information traceable throughout their life cycle.

- » Permanent and clear marking for compressed breathing air supply hoses
- » Uncomplicated, secure identification in the warehouse and in use
- » Seamless tracking of deployment times and locations
- » Inventory and service planning for respiratory protection equipment – thereby guaranteed availability

RFID technology can be combined with all BartelsRieger product solutions.

### 100 % certified

according to EN 14593-1/EN 14594 – respiratory protective devices

### 100 % tensile strength bindings

kink-resistant, heat- and flame-resistant and electrostatically dissipative

100 % combinability

of the hoses in different lengths

### SCBA – Self-contained breathing apparatus RN

#### SCBA RN series - breathing apparatus with warning device in demand valve

All units in the RN range (with steel or composite cylinders) are available in positive pressure versions. They are approved for firefighting use. As a special feature, the demand valves are equipped with a special warning device in the unit that responds when the cylinder pressure drops.

Lightweight plastic backpack, antistatic, with integrated carrying handle, universal cylinder strap and adjustable padded straps with quick-release fastener, pressure reducer, high-pressure gauge, positive pressure demand valve with threaded connection M 45x3 according to din EN 148-3 and integrated warning device, positive pressure full-face mask TR 2002 according to EN 136 class 3, with threaded connection M 45x3 according to EN 148-3 and scratch-resistant, solvent-resistant visor.

Demand valve with integrated acoustic patented warning device

Ergonomic back-plate comfortably distributing the weight and keeping the SCBA stable on the operator's back

Photoluminescent gauge with scale also , in PSI, up to 360 bar and with colored exhaustion area between 50 and 0 bar

Piston pressure reducer whose outlet pressure stays constant while the cylinder pressure decreases Panoramic mask in overpressure with broad field of vision

Adjustable and padded harness which improves comfort and allows prolonged use of the set

> Cylinder anchorage with new locking device and retro-reflecting strap

Valve grip preventing accidental opening or closing of the cylinder

V Warning device in the demand valve

Available with positive pressure connection M 45x3 or ESA plug-in connection



## Full face masks

### Full face masks for highest demands (DIN EN 136, class 3)

Full face masks protect the wearer from respiratory toxins or particles and are used in conjunction with respiratory filters or with compressed air line breathing apparatus.

As a self-contained breathing connection, full-face masks cover the entire face and provide the desired protection when used with the breathing air supply systems described in this brochure.

### Full face mask BRK 820

#### Effective industrial respiratory protection

The **BRK 820** full-face mask is available in various designs, can be used universally and offers a distortion-free, wide-angle field of vision thanks to the heat-resistant polycarbonate visor.

The powerful phonic membrane ensures good speech communication. All screw-in filters with Rd40 round thread connection, as well as all plug-in filters with reusable filter holder and compressed air line breathing apparatus with negative pressure demand valve, can be connected via the round thread connection piece according to EN148-1. The fully adjustable strap ensures optimum comfort.

In addition, the **BRK 820** is also available in a positive pressure version with M45x3or ESA-plug-in connection.



# Full face mask with round threaded connection Rd40 according to EN 148-1

Full face mask BRK 820

- » DIN EN 136, Class 3 (CL3)
- » Weight: Approx. 610 g
  - » Lens material: Polycarbonate
  - » Material: Rubber
    - » Threaded connection: Rd40
    - according to EN 148-1

#### Full face mask BRK 820V

- » DIN EN 136, Class 3 (CL3)
- » Weight: Approx. 670 g
- » Lens material: Laminated glass lens
- » Material: Rubber
- » Threaded connection: Rd40 according to EN 148-1

#### Full face mask BRK 820 G

- » DIN EN 136, Class 3 (CL3)
- » Weight: Approx. 580 g
- » Lens material: Surface-hardened polycarbonate
  - » Material: Rubber
    - Threaded connection: Rd40 according to EN 148-1



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Full face mask BRK 820 SV

- » DIN EN 136, Class 3 (CL3)
- » Weight Approx. 690 g
- » Lens material: Safety glass
- » Material: Silicone
- » Threaded connection: Rd40 according to EN 148-1



### Full-face masks with positive pressure

Full face mask BRK 820 BN » DIN EN 136, Class 3 (CL3) » Weight: Approx. 670 g » Lens material: Surfacehardened polycarbonate » Unit plug-in connection: ESA acc. To DIN 58600

» Material: Rubber

Full-face mask BRK 820 A as a positive pressure version

- » DIN EN 136, Class 3 (CL3)
- » Weight: Approx. 610 g
- » Lens material: Surface-hardened Polycarbonate
- » Threaded connection: M45x3 acc. to din EN 148-3
- » Material: Rubber

Powerful phonic membrane
Infinitely adjustable strapping
Universal mask size

### Areas of application

In the chemical, petrochemical, automotive, pharmaceutical, food and agricultural industries, as well as in power stations and nuclear decommissioning, mining, fire and rescue services, civil protection and much more.

### BartelsRieger AirValve demand valve

#### Respiratory protection for the harshest conditions

The positive pressure and negative pressure versions of the **AirValve** are particularly resistant to dirt and operate reliably under the toughest conditions – with high concentrations of contaminants, heavy soiling and limited escape possibilities – wherever absolutely reliable respiratory protection is required.

The basic unit of the demand valve is a linking device between the breathing connection (e.g. full face mask **BRK 820**) and the compressed air supply hose (e.g. DZS 9/DZS 9R) coming from the breathing air source.

A distinction is made between constant-flow units with a control valve and constant air supply (see **BariLine**) and lung-actuated units. The air consumption of demand valves is lower than that of constant flow hose units.

A compressed air line breathing apparatus with a demand valve is particularly suitable for supplying breathing air from compressed air cylinders. A distinction is made between negative pressure and positive pressure demand valves. The latter create positive pressure in the breathing connection. The positive pressure prevents the penetration of hazardous substances from the ambient atmosphere into the respirator mask.

### Demand value AirValue N and P for negative and positive pressure

#### Streamlined technology ensures greater safety in use and maximum speed of servicing

**AirValve N** is available as a negative pressure version with Rd 40 round thread connection to EN 148-1 or as an positive pressure version **AirValve P** with M45x3 connection to EN 148-3.

- » Optional warning signal: An audible warning is given to the carrier in the event of a breathing air supply pressure failure.
- » Streamlined technology: By eliminating vulnerable small parts, the technology has been reduced to robust core components.
  - » Innovative shut-off function for positive pressure variant: Excess-pressure breathing apparatuses feature a shut-off function to prevent uncontrolled loss of air when the apparatus is not in use.
    - **The AirValve P** shut-off can be operated by a large area membrane. Additional seals are not needed.

#### **Quality commitment**

made of 100% stainless steel and fibreglass-reinforced polyamide

**G26-1** belongs to G26 group 1 (ArbMedVV), because weight <3 kg and <5 mbar respiratory resistance

**70%** less spare parts stock

**95%** less cleaning and maintenance

**100%** reliability through intuitive operation

65% fewer components



### Demand valve 4500 PL series

#### Compressed air line breathing apparatus with integrated warning device

1 as the as I have the

The demand valve **4500 PL** has proven itself over many years in the toughest applications. An essential feature of this demand valve is the fixed integrated warning device, which in combination with the pressure reducer **DM 1900**, a warning tone is emitted directly at the user's unit if the pressure drops below the minimum pressure – unmistakable and without additional air consumption.

#### **Optional MDW**

The tension reliever can be fitted with an optional medium pressure warning whistle (MDW) which, when supplied from an operational breathing air network, provides an audible warning to the wearer if the pressure falls below the required minimum supply pressure.

#### Body belt

Optional blue fabric with high strength metal lock.



### Negative and positive pressure version

| Connection | Туре              | Breathing connection   |
|------------|-------------------|--|
| D          | Negative pressure | Full face mask according to DIN EN 136<br>class 2 and 3 with a round thread<br>connection Rd40x1/7 according to DIN EN 148-1 |
| A          | Positive pressure | Full-face mask according to DIN EN 136<br>class 2 and 3 with a threaded connection<br>M45x3 according to DIN EN 148-3        |
| BN         | Positive pressure | Full-face mask according to DIN EN 136<br>class 2 and 3 with a unit plug-in connection<br>ESA according to DIN 58600         |

Fixed warning device integrated in the housing of the demand value

Falls into G26 group 1 (ArbMedVV), since weight <3 kg and <5 mbar breathing resistance</p>

Available in negative and positive pressure with all standard fittings

### BartelsRieger BariLine HH compressed air line breathing equipment

Comfortable and safe – BariLine HH combines respiratory protection and PPE in a single device. Certified according to DIN EN 14594 (Class 3B), corresponding to Protection Level 100.

The **BariLine**-product family from BartelsRieger includes compressed air line breathing equipment with control valve and constant air supply (constant-flow). **BariLine**-units supply sufficient air even at lower operating pressures.

#### Head protection

An industrial safety helmet has been integrated without modifying the design, in accordance with DIN EN 397.

#### **Respiratory protection**

Continuous flow is set using a control valve, which ensures that the breathing air supply is always gentle and draught free. The device always provides at least the minimum flow required for safety.

#### **Face protection**

The device meets the requirements for safety visors according to EN 166, it is scratchresistant and offers a wide field of vision.

#### **Chemical protection**

The chemical-resistant hood cover made of the newly developed substance **BariChem** dissipates electrostatic charges and is easily changeable. Extremely comfortable and resistant to numerous chemically and biologically hazardous substances.

**G26-1** BariLine PW belongs to G26 group 1 (ArbMedVV), as the weight is <3 kg and it has <5 mbar respiratory resistance

No G26 Precaution with BariLine HH is necessary, as no breathing resistance and weight is <3 kg

Bart-/Wearer of glasses respirator hood designed for use with facial hair or glasses

**Operational from >3 bar** Capable of use from >3 bar operating pressure

### **Dissipates electrostatic charges**

Lines, hood and control valve elements are made of materials that dissipate electrostatic charges, making them suitable for use in EX zones 1, 2 and 21, 22

Class 3B/4B available with compressed breathing air supply hose up to 50 m

# BariLine PW compressed air line breathing apparatus

Light and compact – BariLine PW in combination with a full-face mask is also suitable for use in narrow spaces. Certified according to DIN EN 14594 (Class 4B), corresponding to Protection Level 1,000.

#### Possible uses for BariLine PW

Protection against CMR substances, as well as highly poisonous and radioactive substances.

Protection against airborne biological agents of risk groups 2 and 3 and enzymes.

#### Pressure relief valve

Excess air is dissipated, thus reducing the exhalation resistance.

#### **Round threaded connection**

Round threaded connection Rd 40 according to EN 148-1 for connection to a full face mask according to EN 136.

#### Integrated diffuser

Reduces flow noise and inflow speed of the breathing air.



#### Control valve with body belt

Control valve with **BariLine** series certified according to DIN EN 14594, suitable for both compressed air line breathing apparatus.

#### **Operational from 3 bar**

Can also be operated at low operating pressure.

#### High-strength strain relief

Body belt and belt clip are designed for a maximum tensile force of up to 2500 N.

#### Simplest cleaning

Control valve and body belt can be cleaned in industrial washing machines. All components are made of rust-free materials. No additional lubrication of movable parts required.

#### Acoustic warning device

Warning signal sounds when the supply pressure is undershot as well as when the operating pressure is too high.





### More service for increased safety

#### Your all-round carefree package for cleaning and maintenance

Cleaning and maintenance of breathing apparatus are extremely complex tasks. It is not only about safety in use. Improper procedures also endanger the employees who are tasked with cleaning contaminated equipment. BartelsRieger therefore offers you complete cleaning and maintenance of your breathing apparatus as a professional service.

#### **Collection and delivery**

We organise the collection of your equipment and ensure that it is returned to its place of use as quickly as possible after cleaning. Either by our employees or one of our logistics partners.

#### **Professional cleaning**

Our trained specialists know what is important when cleaning a breathing apparatus. We clean quickly, thoroughly and reliably and in compliance with all safety and environmental protection requirements.

#### Testing and digital documentation

After cleaning, all units are subjected to a final test. You will receive the units back ready for use. We provide you with the corresponding certificates directly in digital or paper form.

#### Best service for your equipment

We clean compressed air line breathing apparatus, demand valves and all breathing connections from quarter to full face masks. Our range covers the products from different manufacturers. We are also authorised to clean and test all breathing connections in accordance with EN-136.

### Fast. Flexible. Safe.

#### Benefit from numerous advantages

#### More safety in use

Thanks to careful cleaning and uncompromising testing, you can be sure that your equipment will work reliably the next time you use it.

#### Protection of your service staff

Errors in handling contaminated equipment also endanger the employees in your service workshop. Our trained professionals do not take any risks.

#### Fast availability and high flexibility

We can arrange collection and delivery of equipment flexibly according to the customer's requirements. You always have your equipment when you need it.

#### **Better environmental protection**

As an Ecovadis certified company, we are committed to protecting the environment. We ensure that any hazardous substances produced during cleaning are disposed of properly.

#### Lower costs

Special staff clean and test your respiratory protection equipment using the latest technology. Process experience and optimisation make our offering highly competitive.







# The advantages of renting and leasing respiratory technology



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#### Lower costs and less administrative work

The provision of respiratory protection is a complex task. This does not end with the selection and purchase of the right equipment. A great deal of expertise is required to train personnel and to maintain and service the respiratory protection equipment. Furthermore, many companies invest in purchasing respiratory protection equipment that is rarely used, tying up resources that could be used elsewhere.

To overcome this challenge, BartelsRieger also offers respiratory protection for rent and lease. Our warehouse is located in North Rhine-Westphalia (Cologne-Ossendorf).

**More safety on site:** We advise and provide the best respiratory protection equipment for your needs. We also provide training for your employees.

**Employee safety** Respirators may be contaminated with hazardous substances after use. Cleaning must therefore be carried out according to numerous guidelines. Our trained professionals can take care of this for you.

**Lower costs:** In most cases, the purchase of respiratory protection equipment is associated with high costs. For many companies, renting or leasing respiratory protection is an economical solution, especially if the equipment is used infrequently.

**Less administrative work:** The procurement, storage, maintenance, cleaning and care of respiratory protection is also a huge administrative burden. Our rental and leasing concept reduces this to a minimum.



### BartelsRieger Service

#### Best support over the entire life cycle of our equipment

Together with BartelsRieger you benefit from comprehensive services for all product solutions. This includes maintenance, repair and replacement concepts as well as training and rental options.

#### Your advantages with the BartelsRieger service offer

- » Full safety through professional maintenance, cleaning and testing
- » Lower costs through extended product lifecycles
- » Minimised downtimes thanks to fast provision of spare parts
- » On-site service through our mobile service workshop
- » Error-free commissioning of devices and systems
- » Ideal preparation in user and equipment maintenance training courses
- » Guaranteed help and prompt response times within the framework of individual service contracts
- » Hire of respiratory protection equipment for more flexibility and plannability





## With Safety.

#### BartelsRieger Atemschutztechnik GmbH

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