MAV
MOBILE BREATHING AIR SUPPLY
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Repair, maintenance or cleaning work require the frequent use of breathing apparatuses. Due to the structural circumstances or when working in remote areas, this work may frequently only be carried out using local or self-contained breathing apparatuses. However, restricted spaces frequently do not allow carrying a compressed air breathing apparatus or longer deployment times are necessary. For such purposes, compressed air line breathing apparatuses represent the best respiratory protection solution. The breathable air required is supplied to the facepiece via supply hoses whose lengths can be selected according to the circumstances of the working area. The breathable air is provided by compressed air cylinders, permanently installed compressed air line systems or compressors. Usually, these breathing air supplies are however, stationary or are not available at the deployment location. With our products of the mobile breathing air supply, you can reach every deployment location without any problem. In the area of the mobile breathing air supply, we offer you standard products and custom solutions manufactured individually according to your requirements. The standard products include cylinder trolleys in different sizes, backup systems as case solution and passenger vehicle trailers equipped with the required respiratory protection technology. If your requirements deviate from the standard solutions, we will develop your tailored solution together with you. We develop, produce, train and maintain.
II. VERSIONS

Mobile breathing air supply systems

Cylinder trolleys

- Consisting of a stable stainless steel chassis
- Safe transport of the compressed air cylinders
- Depending on the structure, up to two hose reels for compressed air supply hoses
- Due to the position of the cylinders, its weight is optimally transferred to the chassis and makes manoeuvring easier

Case

- Fully equipped pneumatics integrated in the case
- Highly stable, impact-resistant polymer
- Up to 2 x 6.8 litre / 300 bar compressed air cylinders
- Depending on the layout, with additional emergency air supply

Car trailer

- Combine a breathing air supply unit with a car trailer registered for public roads
- Structure made of aluminium and stainless steel
- Depending on the structure, up to two hose reels for compressed air supply hoses
III. COMBINATION OPTIONS

Combination of mobile breathing air supply with additional emergency air supply

Mobile breathing air supply systems

Selection criteria
What are the local circumstances?
Which deployment time are you expecting?
How many persons should be supplied?

Do you need an emergency air supply?

No

Compressed air line breathing apparatuses (DSG)

Yes

External emergency air supply

Compressed air line breathing apparatus with integrated emergency air supply

How should this be established?
IV. EVACUATION ALARM

Sole pneumatic hazard warning

The patented evacuation alarm from BartelsRieger allows the flagman to trigger an acoustic alarm signal on the respiratory protection equipment carrier in order to call them back out of the deployment area in event of unexpected danger.

How it works:

- The person (flagman) monitoring the respiratory protection controls the compressed air supply and in event of an emergency, activates the evacuation signal from the control panel. A lever must be flipped over for this purpose.
- Then an acoustic warning signal is triggered on the breathing apparatus.

The sole pneumatic technology guarantees a failure-safe operation without radio connection and power supply and also permits its use in Ex-protection zones. They guarantee a fault-free warning, e.g. when inspecting tanks where a radio connection is prone to failure or a mechanical “pulling” on a safety line / hose as an agreed warning signal could lead to misunderstandings.

With immediate effect, the mobile breathing air supply units (MAV) from BartelsRieger can be equipped with this option. If you already own an MAV system, this can be retrofitted on request.
V. CYLINDER TROLLEY

Long-term deployments with highest mobility

Cylinder trolley systems based on a stable stainless steel chassis. They serve the safe transport of the compressed air cylinders for breathable air. Moreover, these systems have a fixed installed cylinder pressure reducer and up to two hose reels for the compressed air supply hoses. Due to the position of the cylinders, their weight is optimally transferred to the chassis and makes manoeuvring easier. All cylinder trolleys are equipped with a residual pressure warning device.

Our product range comprises:

- MAC in the form of a trolley easy to handle, for three 6.8 litre breathing air cylinders
- FW 2603, for two 6.8 litre breathing air cylinders with one hose drum
- FW 2500, for two 50 litre breathing air cylinders with two hose drums

Compressed air supply hoses // Hose reel

Special features are the tensile strength of the connections, the bending strength, pressure, heat and flame resistance as well as the antistatic properties (Ex protection). Every hose is equipped with an automatic breathable air coupling and a respective plug nipple. The hoses are available in different individual lengths.

Hose reels allow a simple transport, light and quick winding and unwinding, also under pressure thanks to the rotary union, and contribute significantly to extending the service life of compressed air supply hoses.
MAC 3603
Mini breathable air container with three compressed air cylinders

Product features

- Roll container with extendible and fixing point for lifting devices
- Operation possible upright or horizontal
- Storage space for a compressed air line breathing apparatus, full face mask, demand valve and 30 metre compressed air supply hose
- Breathing air supply: Accommodation of three compressed air cylinders, each 6 to 6.8 litre / 300 bar // approx. 5,700 litre breathing air supply
- The constructive design allows simple care and space-saving storage
- Supply of two device users

Body
Stainless steel, LxWxH (mm): 510x670x860, weight with cylinders approx. 57 kg, lockable sliding handle, storage compartment for accessories

Equipment
Pressure reducer, filling and supply connection: 300 bar, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, Residual pressure warning device: approx. 55 ± 5 bar, compressed air cylinders are not included

Article no.: 940550
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 114 min
High respiration: 100 l/min = approx. 57 min
FW 2603
Cylinder trolley with hose drum

Product features

- Cylinder trolley with transport handle and hose drum
- Optimum weight distribution
- The hose drum is designed for 30 or 50 metre compressed air supply hose DZS 9
- Breathing air supply: Accommodation of two compressed air cylinders, each 6.8 litre / 300 bar // approx. 3,800 litre breathing air supply
- Supply of two device users

Cylinder trolley
Stainless steel, LxWxH (mm): 480x440x1000, weight with cylinders approx. 50 kg, hose drum with 30 metre hose

Equipment
Pressure reducer, filling and supply connection: 300 bar, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, Residual pressure warning device: approx. 35 ± 5 bar, compressed air cylinders are not included
FW 2500
Cylinder trolley with two hose drums

Article no.: 940538
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 560 min
High respiration: 100 l/min = approx. 280 min

Product features

- Cylinder trolley with 4 wheel safety chassis and two hose drums
- The hose drums are each designed for 50 metre compressed air supply hose DZS 9
- System electrostatic conductive
- Breathing air supply: Accommodation of two compressed air cylinders, each 50 litre / 300 bar // up to 28,000 litre breathing air supply
- Shut-off valve with venting function and additional reverse flow protection, which allows the second cylinder to be used when changing a cylinder
- Supply of four device users

Cylinder trolley
Stainless steel, LxWxH (mm): 1200x650x1750, weight with cylinders approx. 300 kg, 2 x hose drums, each with 50 metre hose, storage box, Total stop brake, without compressed air cylinders

Equipment
Pressure reducer, filling and supply connection: 300 bar, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, Residual pressure warning device: approx. 35 ± 5 bar
VI. BREATHING AIR CASE TAV

Compact and transportable

The mobile log-term compressed air line breathing apparatus TAV is suitable for use in vehicles such as overburden loaders, fork lifts or other special vehicles in which the use of conventional isolating devices worn on the persons body is not possible due to restricted space available.

The particular advantage is, next to the freedom of movement when driving the vehicle, in the relieved mode of operation of compressed air line breathing apparatuses from the low weight of the device and favourable respiratory physiological factors such as low respiratory temperature and light respiratory resistance.

The TAV comprises a dimensionally stable welded aluminium case with two compressed air cylinders for breathing air supply for approx. 76 minutes. The operation and control elements are protected embedded in the housing under the carry handle, the case does not have to be opened for commissioning or for filling the cylinder package. The residual pressure warning is carried out twofold acoustically: Contact signal on the TAV and intermittent direct at the user.

A medium pressure hose established the connection between the TAV and equipment user. This is equipped with an emergency air supply 4500 PL/D SNLV including automatic switching valve (AUV). If the breathing air supply should fail via the connecting hose, or be decoupled on purpose, the AUV switches to the emergency air supply that has a reserve for 15 minutes. In doing so, the flushing connection elements of the hose guarantee a safe coupling and decoupling in pollution-laden atmospheres.
TAV
Transportable Breathing Air Supply

Product features

- Roller case with transport handle and fixing eyelets
- Operation possible upright or horizontal
- Breathing air supply: Accommodation of two compressed air cylinders, each 6.8 litre / 300 bar // approx. 3,800 litre breathing air supply
- Simple care and space-saving storage
- Supply of one equipment user

Body
Aluminium, LxWxH (mm): 520x700x190, weight with cylinders approx. 27 kg, transport handle, without cylinders

Equipment
Pressure reducer, filling and supply connection: 300 bar, medium pressure outlets: 1x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, Residual pressure warning device: approx. 35 ± 5 bar

Article no.: 841022
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = ca. 76 min
High respiration: 100 l/min = approx. 38 min
VII. BACKUP SYSTEM

Compact as case solution

Breathing air backup systems are mounted in an impact-resistant case that guarantees the safe storage of the pneumatic and emergency air supply. They have been designed for deployments where it is not possible to setup a breathing air supply with cylinder batteries directly at the place of use due to the local framework conditions. Depending on the version, the structure permits the use of a filtration technology for the safe use with compressors.

All systems are equipped with a mounted pressure reducer and a residual pressure warning device. If the breathing air source is faulty, they switch to the emergency air supply.

Our product range includes products for the use of compressed air from ring network lines, cylinder batteries and from compressed air compressors.

Medium pressure supply // High pressure supply

With the medium pressure supply, the compressed air (5 to 8 bar) is supplied to the breathing air supply from the ring network line or medium pressure compressors and permits a distance of up to 100 metres between the compressed air source and the consumers. With the high pressure supply, the compressed air (300 bar) is transferred over a distance of up to 100 metres from compressed air cylinders or high-pressure compressors.

Medium pressure compressors // Breathing air conditioning

Compressors suck in the ambient air and thus potential air contamination, and concentrate this to a multiple. Lubricating oil and wear particles from the compressor also enter the compressed air. Compressed air filters for breathing air conditioning are used for this purpose. The 1st filtration stage comprises a coalescing filter that filters oil water - aerosols as well as dirt particles up to 0.01 µm. A subsequent 2nd stage comprises an activated carbon adsorption layer that binds the oil mist and odour substances and reduces them to a residual oil content of < 0.003 mg/m³.

Emergency air supply // Automatic switching valve

Under certain operating conditions, it may be necessary to provide an additional emergency air supply (NLV) that is connected to the compressed air line breathing apparatus via an automatic switching valve (AUV). If the air supply from the breathing air source is faulty, for example due to an interruption of the compressed air supply hose, the valve switches automatically to the additional air supply from a compressed air cylinder.
AIRSAFE ALW 1683-C
Medium pressure supply with filtration

Article no.: 940553
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 38 min
High respiration: 100 l/min = approx. 19 min

Product features

- Case made of impact-resistant, waterproof and acid-resistant polymer
- Bridging of up to 100 metres between the place of use and the medium pressure supply source
- Integrated breathing air conditioning with two separate stages: Coalescing filter // Activated carbon filter
- Emergency air supply: including two compressed air cylinders, each 6.8 litre/300 bar // approx. 1,900 litre breathing air supply
- For securing two equipment users

Case
Polymer, LxWxH (mm): 860x560x330, weight with cylinder approx. 35 kg, rollers, extendible handle

Equipment
Pressure reducer, automatic switching valve AUV, medium pressure supply, breathing air conditioning, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, emergency air supply (NLV) 1 x 6.8 litre / 300 bar, acoustic warning device with active NLV, residual pressure warning device of the NLV: approx. 35 ± 5 bar
AIRSAFE 2203
Medium pressure supply

Product features

- Waterproof transport box made of aluminium for industrial applications
- Bridging of up to 100 metres between the place of use and the medium pressure supply source
- Emergency air supply: Accommodation of two compressed air cylinders, each 2 litre / 300 bar // approx. 1,100 litre breathing air supply
- For securing two equipment users

Article no.: 200490
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 22 min
High respiration: 100 l/min = approx. 11 min

Case
Aluminium, LxWxH (mm): 600x400x385, weight approx. 19 kg

Equipment
Pressure reducer, automatic switching valve AUV, medium pressure supply, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, acoustic warning device with active NLV, residual pressure warning device of the NLV: approx. 35 ± 5 bar, compressed air cylinders are not included.
AIRSAFE 2683-C
Medium & high pressure supply

Article no.: 940548
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 76 min
High respiration: 100 l/min = approx. 38 min

Product features

- Case made of impact-resistant, waterproof and acid-resistant polymer
- Supply of medium and high pressure possible
- Bridging of up to 100 metres between the place of use and the supply source
- Emergency air supply: Accommodation of two compressed air cylinders, each 6.8 litre / 300 bar // approx. 3,800 litre breathing air supply
- For securing two equipment users
- Twofold high-pressure inlet enables the parallel switching of several systems or cylinder batteries

Case
Polymer, LxWxH (mm): 860x560x330 , weight with cylinders approx. 35 kg, rollers, extendible handle

Equipment
Pressure reducer, automatic switching valve AUV, 2 x filling and supply connection: 300 bar, medium pressure supply connection: 6 bar, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar, acoustic warning device with active NLV, Residual pressure warning device of the NLV: approx. 35 ± 5 bar, compressed air cylinders are not included
VIII. GAS PROTECTION TRAILER

Flexible as car trailer solution

The Airmax series combine a breathing air supply unit with a car trailer registered for public roads. The structure is carried out in aluminium and stainless steel and permits deployments under the hardest conditions. The breathing air supply is provided by up to four 50 litre compressed air cylinders with 300 bar filling pressure. The pressure-reducer installed behind the control panel reduces the high pressure to a working pressure of approx. 5 to 6 bar. The acoustic residual pressure warning device is also integrated in the panel and sounds at approx. 35 ±5 bar.

Chassis / Structure

BartelsRieger gas protection trailers are available based on two chassis types:

Type 1
Compact version with total height of 109 cm, space for up to four compressed air cylinders and storage space for accessories.

Type 2
With a total height of 144 cm and additional space for two hose reels and accessories.

Both chassis offer space for a complete, impact and shock-resistant pneumatic module, have a cover with pneumatic dampers and two park supports.
AIRMAX BASE
The compact trailer

Article no.: 200522
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 830 min
High respiration: 100 l/min = approx. 415 min

Product features

- Chassis type 1, stainless steel base frame
- Breathing air supply: Accommodation of three compressed air cylinders, each 50 litre / 300 bar // approx. 41,400 litre breathing air supply
- Supply of two device users
- Total weight < 750 kg
- Road approval

Chassis
Aluminium / stainless steel, LxWxH (cm): 314x168x109, overrun and parking brake, support wheel

Equipment
Pressure reducer, filling and supply connection: 300 bar, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar,
Residual pressure warning device: approx..35 ± 5 bar, compressed air cylinders are not included
AIRMAX PROFESSIONAL
The all-rounder

Product features

- Chassis type 2, stainless steel base frame
- Two stainless steel automatic hose reels including compressed air supply hose DZS 9R, 50 metre
- Two standardised aluminium boxes for personal protective equipment
- Aluminium storage box for height rescue
- Breathing air supply: Accommodation of maximum two compressed air cylinders, each 50 litre / 300 bar // approx. 28,000 litre breathing air supply
- Supply of four equipment users (two via a hose reel, two via medium pressure outlets on the panel
- Permissible total weight < 750 kg with road approval

Chassis
Aluminium, LxWxH (cm): 314x168x109, overrun and parking brake, support wheel

Equipment
Pressure reducer, filling and supply connection: 300 bar, medium pressure outlets: 2x AK2 coupling, medium pressure gauge: 0-16 bar, high-pressure gauge: 0-400 bar,
Residual pressure warning device: approx. 35 ± 5 bar, compressed air cylinders are not included

Article no.: 200781
Calculated air supply for one breathing apparatus user
Low respiration: 50 l/min = approx. 560 min
High respiration: 100 l/min = approx. 280 min
You need quick and uncomplicated individual products for respiratory protection? Standard products do not solve your problem? Then you’ve come to the right place! Our philosophy includes providing you with quick and flexible solutions for your problems with respiratory protection applications in order to offer you, your employees and your customers the right and safe respiratory protection. Together with you, we will create new special solutions for respiratory protection, to match your special requirements.

We offer comprehensive know-how from the product development to product and application advice, customer and employee training courses up to maintenance and repairs.

You can count on us at all times - for sure.
IX. ACCESSORIES

PRESSURE REDUCER

Series 500 and 1900

The cylinder pressure reducer reduces the cylinder pressure to the work pressure of the breathing apparatus connected to it and is thus a part of a compressed air line breathing apparatus in accordance with EN 14593-1 / EN 14594. If the cylinder pressure reaches 35 ±5 bar, the pressure-reducer automatically switches to the warning pressure. An intermittent warning signal sounds on the pressure reducer along with the direct responding warning device on the equipment user. The air supply in the cylinder can be read off on the high-pressure gauge at any time. Next to the correctly working pressure, the medium pressure gauge indicates the breathing activity of the equipment user by movement of the gauge pointer.

Series 500
Available with and without additional residual pressure warning device on the pressure reducer. If the cylinder pressure drops below 35 ±5 bar, the breathing apparatus user is alerted by the residual pressure warning.

- Supply performance: approx. 1,200 l/min
- Medium pressure: 4.5 - 6.2 bar
- Supply of four persons
- Warning: Medium pressure warning whistling
- Residual pressure warning: 35 ±5 bar

**Article no.: 940324** (without residual pressure warning device)
**Article no.: 940338** (with residual pressure warning device)

Series 1900 (PRODUCT NOVELTY 2018)
Available with high pressure warning whistling (HDW) or medium pressure warning whistling (MDW). If the residual pressure drops below 35 ±5 bar, the breathing apparatus user is alerted by the residual pressure warning (HDW or MDW). The HDW is especially designed for continuous flow devices where large amounts of air can be taken continuously.

- Supply performance: approx. 1900 l/min
- Medium pressure: 4.5 - 6.2 bar
- Supply of four persons
- Warning: MDW or HDW
- Residual pressure warning: 35 ±5 bar

**Article no.: 200693** (DM 1900 with HDW, 2x AK2)  **Article no.: 200697** (DM 1900 with MDW, 2x AK2)
**Article no.: 200696** (DM 1900 with HDW, 4x AK2)  **Article no.: 200698** (DM 1900 with MDW, 4x AK2)
AIRBOX SERIES
Breathing air and emergency air supply

Airbox - Breathing air supply for up to four persons
The Airbox has been designed for tough applications and serves for the accommodation and protection of the DMW 500 or DM 1900. These systems ensure that a safe connection with up to two high-pressure supply sources (e.g. cylinder batteries) is possible. The connection is selectively established by one or two flexible high-pressure hoses (2 metres) whose mechanical strength has been dimensioned for the tough applications to be expected.

- Pressure reducer
- Impact-resistant case
- 10.5 kg // LxWxH (mm):
  406x330x174

Airbox NLV - Emergency air supply with 552 litre reserve
The Airbox NLV offers a fully-fledged compact backup system for two equipment users in a robust plastic case. The control of the backup system monitors the supply pressure. If the pressure falls below 3.5 bar, the system switches to the emergency air supply without interruption. With active emergency air supply, an acoustic alarm is issued.

- RN pressure reducer
- Impact-resistant case
- 12 kg // LxWxH (mm):
  546x347x247

Airbox 2000 - Breathing air supply for up to 6 persons
The Airbox 2000 provides six medium pressure outlets and permits the setting of the working pressure (5-15 bar). A residual pressure warning device installed in the case sounds at 35 ± 5 bar. The Airbox 2000 is also equipped with an automatic backup switching system for supplying a medium pressure emergency air supply. If the working pressure falls below the predetermined value or if the high-pressure supply fails completely, the system switches and an audible warning device indicates emergency mode.

- Adjustable pressure-reducer
- Supply of an NLV is possible
- 12.5 kg // LxWxH (mm):
  520x430x220

Connections:
DMW 500: 2x AK2
DM 1900: 4x AK2
COMPRESSED AIR CYLINDER
Composite version

Compressed air composite cylinder 6.8 litre / 300 bar
Compressed air composite cylinder with 6.8 litre capacity and 300 bar filling pressure, equipped with an aluminium liner, a 300 bar cylinder valve (M18x1.5) and valve sealing plugs. The compressed air composite cylinder is supplied including initial commissioning. Air volumes: 1,900 litre. Service life: 15 // 30 years. Compressed air cylinders are also available as PET version with an unlimited service life.

Compressed air steel cylinder 50 litre / 300 bar
Compressed air steel cylinder with 50 litre capacity and 300 bar filling pressure, equipped with a 300 bar cylinder valve and valve sealing plug. The compressed air steel cylinder is supplied including initial commissioning according to the German ordinance on industrial health and safety. Approx. 14,000 litres breathable air are available at a filling pressure of 300 bar.

COMPRESSED AIR SUPPLY HOSES
DZS 9 and DZS 9R

We provide you with compressed air supply hoses of series DZS 9 for the chemical industry as well as the series DZS 9R for operation in the petro-chemical industry and refineries. Special features are the tensile strength of the connections, the bending strength, pressure, heat and flame resistance as well as the electric conductivity (Ex protection). If required, several hoses can be combined with each other to achieve a greater range of the hoses. Every hose is equipped with a safety breathable air coupling and a respective plug nipple.

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THE CONSULTANT TOOL.
Everything at a glance // Simple and convenient product comparison

With the new Consultant tool BartelsRieger permits an even quicker and targeted consultation. With only a few clicks, you find the product you are looking for using the Consultant tool.

With three clicks to the product desired!

- Quick and targeted consultation
- Trade-specific features
- Detailed product description
- Direct comparison of the product features

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Standard to special solutions // Respiratory protection technology from one source.

Our comprehensive service concept offers you a customer-orientated After Sales Service that matches your individual requirements. BartelsRieger offers comprehensive services in the fields maintenance, replacement and repair concepts, servicing, spare and accessory parts and a lot more for all product solutions.