



**NEW PRESSURE REDUCER!**

# BD mini

## [ Short Duration Compressed Air Breathing Apparatus ]

The compressed air breathing apparatus BD mini, which now features a redesigned, maintenance-friendly pressure reducer, is especially suited for short duration work in confined spaces.

Its compact size and versatile design permit the use of various carrying modes. Thus the apparatus is ideal for sites that can only be reached through narrow entry openings or for work in confined spaces.

Of course, the BD mini can also be carried on the back like a “large” compressed air breathing apparatus and can also be used for brief explorations or inspection tours.

With a coupling for compressed airline breathing apparatus [available as accessory], the BD mini can be connected to a stationary air source.

This permits the operator to remain at the worksite for longer durations. The BD mini supplies air for the approach, as well as for the return.





#### **Hip carrying mode**

*With hip belt and shoulder strap; compressed air cylinder suspended between legs [for entry].*



#### **Back carrying mode**

*With hip belt only; compressed air cylinder carried diagonally across the back.*



#### **Shoulder carrying mode**

*With shoulder strap; compressed air cylinder suspended laterally.*

## **[ Design ]**

Depending on the lung governed demand valve used, the BD mini can be operated as a normal pressure or a positive pressure apparatus.

The base of the BD mini is the carrying plate. The apparatus has an easily adjustable harness. The hip belt and shoulder strap can be attached through the slots provided in the carrying plate, without requiring the use of any special tools. This user-friendly method allows the carrying mode to be adapted to individual requirements.

The apparatus is supplied from the factory with the hip belt and shoulder strap already adjusted for the back carrying mode. The carrying plate is also provided with several slots of varying dimensions, permitting the trouble-free mounting of the pressure reducer. In this way, the pressure reducer can always be placed in the optimum position, regardless of the carrying mode selected by the operator.

## **[ Function ]**

The pressure reducer is designed to be connected to 200 or 300 bar compressed air cylinders.

The warning signal at the pressure reducer is high pressure controlled and medium pressure dosed. Thus a loud, constant signal sounds during the total alarm. The great advantage of this is that the warning device functions injector-less: i.e. the input of ambient air is not required to discharge the warning signal.

Also on the pressure reducer is the pressure gauge line with a large luminescent and pivotable pressure gauge, as well as the medium pressure line to connect the lung governed demand valve.

The compressed air cylinder is fastened onto the carrying plate with a cylinder retaining strap. The strap's universal length permits the use of cylinders of various sizes. A large, handy tightener, fitted with a locking device permits the swift and easy exchange of cylinders.

## **[ Features and Benefits ]**

- small and lightweight
- with 2 l/300 bar composite cylinder, weight less than 5 kg
- various carrying modes
- especially suited for use in confined spaces
- innovative state-of-the-art 1st stage pressure reducer with new, modern design
- for use with normal or positive pressure

## **[ Accessories ]**

A special Y-piece with nonreturn valve permits the use of the BD mini combined with a compressed airline breathing apparatus. The Y-piece attaches to the medium pressure coupling. The compressed air cylinder must be closed during this time.

The optional Automatic Switch Valve connects a compressed airline to a BD mini. This ensures a continuous supply of air in case the external air source [e.g. factory airline] fails. The ASV switches automatically to the air source with higher pressure. The compressed air cylinder stays open.



**Water-tight and self-luminescent pressure gauge:**  
easy to read in any position

**Cylinder holder:**  
easily adjusted to various cylinder sizes

**Carrying plate:**  
handy to carry, comfortable to wear

**Harness:**  
easy to clean

**New pressure reducer:**  
high performance, reduced weight, low maintenance

**Injector-less warning whistle:**  
no danger of parts freezing over



## [ Demand Valves ]

### AutoMaXX series

#### AutoMaXX-AE:

Positive pressure demand valve with thread connection M 45 x 3 to EN 148-3.

#### AutoMaXX-AS:

Positive pressure lung governed demand valve with MSA plug connector.

#### AutoMaXX-AS-B:

Features a By Pass valve for constant air flow.

#### AutoMaXX-N:

Normal pressure lung governed demand valve with standard round thread according to EN 148-1.

All versions available with rubber line [extension: G]



AutoMaXX-AE

### LA 96 & 88 series

#### LA 96-AE:

Small, light-weight positive pressure demand valve: the first breath automatically switches the positive pressure.

For doffing, loss of air is prevented by simply switching it back into readiness [normal pressure]. It connects to the face mask by a threaded handwheel with the EN 148-3 thread M 45 x 3.

#### LA 96-AS:

The LA 96-AS is identical to the LA 96-AE in construction and function. The connection to the face mask is a quick connect coupling, just push and breathe.

#### LA 96-N:

The smallest and lightest demand valve for normal pressure. Servo-assisted, it delivers the breathing air almost resistance-free. With handwheeled thread connection to EN 148-1 [round thread].

#### LA 88-AE/AS/N:

The same features the LA 96 series but medium pressure line of rubber material to stand harsh conditions.



LA 96-AS



Y-piece attached to the medium pressure coupling of BD mini

## [ Technical Data ]

Operating pressure	300 bar
Initiating pressure of warning signal	105 ± 5 bar
Weight [Basic apparatus]	approx. 2.1 kg
<b>Materials</b>	
Carrying plate	Polycarbonate, self-extinguishing
Harness	Aramid/Nomex, self-extinguishing
Pressure reducer	Brass, nickel plated, chrome plated
Fittings	Stainless steel, Thermoplast, self-extinguishing

## [ Accessories ]

D4066857	Y-Piece
D4066700	Automatic Switch Valve
<b>Compressed Air Cylinders – Steel</b>	
D5103963	2l/200 bar, full
D5103983	2l/200 bar, empty
D5103964	2l/300 bar, full
D5103984	2l/300 bar, empty
<b>Compressed Air Cylinders – Composite</b>	
D5103969	2l/300 bar, full
D5103974	2l/300 bar, empty
10050853	3l/300 bar, full, with airflow restrictor
10058821	3l/300 bar, empty, with airflow restrictor

## [ Ordering Information ]

Basic Unit	Demand Valves	Facepieces
<b>D4075713 BD mini</b> 	<b>NORMAL-</b> D4074808 <b>LA 83</b> 10023686 <b>AutoMaXX-N</b> D4075960 <b>LA 88-N</b> 10036274 <b>AutoMaXX-N-G</b> D4075852 <b>LA 96-N</b>	D2055000 <b>3S</b> [EN 148-1] D2055718 <b>3S Silicone</b> [EN 148-1] D2056700 <b>Ultra Elite</b> [EN 148-1] D2056718 <b>Ultra Elite Silicone</b> [EN 148-1]
	<b>POSITIVE-PRESSURE</b> D4075906 <b>LA 88-AS</b> 10023688 <b>AutoMaXX-AS</b> D4075850 <b>LA 96-AS</b> 10036272 <b>AutoMaXX-AS-G</b> 10038296 <b>AutoMaXX-AS-B</b> 10038410 <b>AutoMaXX-AS-B-G</b>	<b>For the demand valve LA 88-AS and LA 96-AS</b> D2055751 <b>3S-PS</b> D2055764 <b>3S-PS Silicone</b> D2056751 <b>Ultra Elite-PS</b> D2056764 <b>Ultra Elite-PS Silicone</b> <b>For the demand valve AutoMaXX-AS</b> 10031422 <b>3S-PS-MaXX</b> 10031388 <b>3S-PS-MaXX Silicone</b> 10031385 <b>Ultra Elite-PS-MaXX</b> 10031384 <b>Ultra Elite-PS-MaXX Silicone</b>
	D4075909 <b>LA 88-AE</b> 10023687 <b>AutoMaXX-AE</b> D4075851 <b>LA 96-AE</b> 10036271 <b>AutoMaXX-AE-G</b>	D2055741 <b>3S-PF</b> [EN 148-3] D2055763 <b>3S-PF Silicone</b> [EN 148-3] D2055741 <b>Ultra Elite-PF</b> [EN 148-3] D2056763 <b>Ultra Elite-PF Silicone</b> [EN 148-3]

AE/PF = Connector M 45 x 3 · AS/PS = MSA Quick Connector for LA 88- and LA 96-AS · B = By pass valve · G = Rubber line · MaXX = Plug connector for AutoMaXX-AS  
 N = Normal pressure. Other full face mask versions are available on request.

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