



reddot award 2001 product design

AirMaXX & AutoMaXX

[The New Compressed Air Breathing Apparatus System]



FEI

One for All

Flexible Compressed Air Breathing Apparatus System

The new premium compressed air breathing apparatus system from MSA is designed for optimal ergonomics. Developed in close cooperation with international fire service specialists and respiratory protection experts, the compressed air breathing apparatus AirMaXX and the lung governed demand valve AutoMaXX set milestones for fire fighting around the world.



AirMaXX Gives You the Choice:

- Normal pressure or positive pressure
- 200 bar or 300 bar
- 1 or 2 cylinders of steel or light composite material

Do you Have Special Needs?

- Do you want the warning signal close to the ear?
- Do you need the additional safety of the ICU, the Integrated Control Unit, instead of a pressure gauge?
- Do you expect the speed of the Quick-Fill connection?
- Do you want a Second Connection for rescue applications?

The Various Configuration Options of the AirMaXX Permit Individual Apparatus Solutions.









AirMaXX-S Retreat signal near the ear [For noisy applications]



AirMaXX-Z The universal Second Connection for rescue applications [Safety for two]



AirMaXX-Q The Quick-Fill connection permits charging the cylinders with the apparatus donned [Filling of air in 45 sec]



With the AirMaXX You are on the Safe Side!

Not only now, but also in the future. Because the AirMaXX is designed for simple retrofitting of electronic modules, e.g. telemetry.

MSA AirMaXX, safety today and in the future!



The AirMaXX has received the RedDot Award 2001 for its outstanding product design.

The RedDot Award is a world-wide recognized and prestigious prize of the product design industry.

It is awarded annually by the Design Center Nordrhein-Westfalen. In 2001, the jury had to choose between a total of 1.523 entries from 24 countries. Honored with the



reddot award 2001 product design

AirMaXX – the Basic Apparatus

[Ergonomics & Comfort for Safety]



AirMaXX basic apparatus [Comfort is standard]



AirMaXX carrying plate The triple length adjustment assures comfortable wearing [Utmost flexibility]



AirMaXX harness Hip belt and shoulder pads assure pleasant wearing and optimal fit [Simply comfortable]

One for all: The MSA AirMaXX has a carrying plate with triple length adjustment. Adjustable quickly and safely with large clips to the user's height also during work; the apparatus fits everyone.

Optimal Ergonomics Ease the Heavy Work

The harness, developed using data from the latest anthropometric studies, fits without pinching and all adjustments are made quickly, also with gloves!

The ergonomic S-swing of the shoulder straps allows freedom of movement for the arms. The swivelling hip belt follows extreme movements with elasticity. The swivel range is limited and the padded stop adds to the feeling of safety. The AirMaXX fits snugly and securely, even if you are turned upside down!

Changing the cylinders is no problem: patented slide studs make changing simple and easy. On closing the cylinder strap buckle, the slide studs are pressed down and the cylinder is secured absolutely safe in position. With the handy bracket the length of the strap is quickly extended. Thus, cylinders of different size are quickly exchanged!



AirMaXX cylinder retainer Exceptionally simple and quick cylinder change [Simply quick]



AutoMaXX – the Demand Valve

[The Heart of the SCBA System]

AutoMaXX – the Safe One

The large operating buttons are positioned where you expect them. The housing is designed that it cannot get caught and that blows are deflected. The protective cap assures highest operating safety: even in case of damage, the AutoMaXX continues to function.

AutoMaXX - the Comfortable One

Maximum freedom of movement since the connections to facepiece and medium pressure line swivel. The silicone line remains flexible also at lowest temperatures. The semiglobe shaped housing is handy and the coloured operating buttons can be pushed easily also with gloves. The lung governed demand valve is easily activated with the first breath and operates very quietly. A lung governed demand valve of the luxury class!

AutoMaXX – Maintenance Friendly

The valve assembly does not need repeat lubrication. The protective cap is removed quickly, permitting check of the diaphragm. A delight for every service technician!

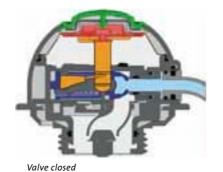
The AutoMaXX is available in the following versions:

- N: Normal pressure with standard round thread
- AE: Positive pressure with M 45 x 3
- AS: Positive pressure with MSA plug connector
- AS-C: combines AE and AS

AutoMaXX – a Successful Design



AutoMaXX with positive pressure - valve open





AutoMaXX-N Normal pressure lung governed demand valve according to EN 148-1 [Cutting – edge tradition]



AutoMaXX-AS Positive pressure lung governed demand valve with MSA plug connector [Fully automatic air supply]



AutoMaXX-AS-C: Combines the standard M 45 x 3 thread with the handy plug connector [Crossing generations]



The Facepieces for the AirMaXX

[Well Connected]



Ultra Elite-PF with AutoMaXX-AS [Highest Comfort]



Ultra Elite-PF with EZ-Don Nomex harness. Also for the 35 full face mask series. [Perfect fit]

Ultra Elite

Ultra Elite – the innovative full face mask from MSA, developed according to the requirements of the user, with futureoriented design, exemplary ergonomics and state-of-the-art technology. Every detail fits the user's requirements optimally.

- Silicone or rubber
- Two sizes
- Almost natural, undistorted field of vision
- Exemplary wearing comfort
- Excellent speech transmission
- Polycarbonate lens, coated with silicon on both sides with high resistance
- TPE (thermoplastic elastomer) nose cup with small dead space

There is a comprehensive range of accessories for the Ultra Elite full face mask series – a perfect complement for the professional application.

Please refer to our leaflet ID 05-418.1 ITL.



3S

3S-proven by millions – world-wide! The MSA AUER 3S full face mask for normal or positive pressure.

- Silicone or rubber
- Two sizes
- Stand-alone or mask-helmet combination
- 5-point head harness or Nomex EZ-Don harness
- Perfect facepiece-to-face fit
- Easy to maintain

As well for the 3S fill face mask series there is a wide range of accessories Please refer to our leaflet ID 05-405.2 ITL.



35 with AutoMaXX-AS-C [Tradition & future combined]

All Masks According to EN 136

Class 3, according to type

- With standard thread according to EN 148-1
- With thread M 45 x 3 according to EN 148-3
- With MSA plug connector for LA 88/96 or AutoMaXX-AS

Mask-Helmet Combinations

For work with helmet-mask combinations we offer mask versions adapted for use with helmets.

Special adapters allow attaching the mask to the helmet quickly and securely, without need to take off the helmet. Similarly, the mask can be comfortably detached from the helmet if there is no longer a need for respiratory protection during work.



3S-HG [with Gallet helmet]



ICU – The Integrated Control Unit

...for the Additional Information



The ICU Displays

- Remaining service time
- Pressure
- Temperature

And gives Alarm

- At low cylinder pressure
- If the apparatus user does not move

Use modern electronics to make your work safer!

The ICU calculates based on your current air consumption, how long your air supply will last, also, if required, in case of a longer retreat time.

There is an audible warning when the pressure drops below 150, 100 and 60 bar. The integrated motion sensor gives alarm if there is no movement for 20 seconds.

In an emergency you can also give alarm manually.

With a large button you can switch from the individual readings of cylinder pressure, remaining service time and temperature. Symbols clearly indicate which reading is being shown. Of course the display can be illuminated.

The ICU records all data up to 30 work applications. All data can be read and processed with a software (accessory) via the infrared interface. All alarm levels can be freely set with the software.

As soon as the cylinder valve is opened, the ICU is activated. With the key version ICU-S, the key is deposited at the operations centre for identification.

In order that you can quickly read the remaining cylinder pressure, we have retained the mechanical pressure gauge.

The ICU: proven optics plus additional safety!

Please refer to our detailed leaflet ID 01-155.2 ITL.

ICU



Ordering Information

[Your Choice!]

AirMaXX Options

	· · · · · · · · · · · · · · · · · · ·
10027590	AirMaXX basic apparatus
10027591	AirMaXX-S with signal line (S)
10027592	AirMaXX-Z with second connection (Z)
10027593	AirMaXX-S-Z with signal line (S) and second connection (Z)
10027594	AirMaXX-Q with quick-fill connection (Q)
10027595	AirMaXX-S-Q with signal line (S) and quick-fill connection (Q)
10027596	AirMaXX-Z-Q with second connection (Z) and quick-fill connection (Q)
10027598	AirMaXX-S-Z-Q with signal line (S), second connection (Z) and quick-fill connection (Q)

AirMaXX Options with ICU

10027599	AirMaXX basic apparatus with ICU
10027600	AirMaXX-S with ICU
10027601	AirMaXX-Z with ICU
10027602	AirMaXX-S-Z with ICU
10027603	AirMaXX-Q with ICU
10027604	AirMaXX-S-Q with ICU
10027605	AirMaXX-Z-Q with ICU
10027606	AirMaXX-S-Z-Q with ICU

AirMaXX Options with ICU-S

10027607	AirMaXX basic apparatus with ICU-S (version with key)
10027608	AirMaXX-S with ICU-S
10027609	AirMaXX-Z with ICU-S
10027610	AirMaXX-S-Z with ICU-S
10027611	AirMaXX-Q with ICU-S
10027612	AirMaXX-S-Q with ICU-S
10027613	AirMaXX-Z-Q with ICU-S
10027614	AirMaXX-S-Z-Q with ICU-S

AutoMa)	(X
10023686	AutoMaXX-N (normal pressure lung governed demand valve with standard thread)
10023687	AutoMaXX-AE (positive pressure lung governed demand valve with M 45 x 3 thread)
10023688	AutoMaXX-AS (positive pressure lung governed demand valve with MSA plug connector)
10023689	AutoMaXX-AS-C (positive pressure lung governed demand valve with M 45 x 3 thread and MSA plug connector)
10032072	Adapter AS (for AutoMaXX-AS to masks with M 45 x 3 thread)
Full Face	Masks for AutoMaXX-AS
10031385	Ultra Elite PS-MaXX

10031383	Ultra Elite PS-MaXX small
10031384	Ultra Elite PS-MaXX silicone
10031382	Ultra Elite PS-MaXX-EZ
10031381	Ultra Elite PS-MaXX-EZ small
10031422	3S-PS-MaXX
10031388	3S-PS-MaXX silicone
10031420	3S-EZ-PS-MaXX
10031424	3S-H-PS-MaXX (for combination with Schuberth helmet F200)
10031423	3S-H-PS-MaXX small (for combinations with Schuberth helmet F200)
10031425	3S-HE-PS-MaXX (for combination with Heros helmet)
For full fac	a macks for AE AS C and N plaase refer to

For full face masks for AE, AS-C and N please refer to leaflets ID 05-405.2 ITL and ID 05-418.1 ITL.



The Compressed Air Cylinders...

[Working under High Pressure]



Composite	
5103-976 5103-947 10029767	
5103-979 5103-962 10015962	6.8 liter/300 bar empty charged with airflow restrictor, charged weight approx. 6.6 kg, Ø approx. 156 mm, length* approx. 518 mm
5103-980 5103-973	6.8 Liter/300 bar with lockable valve empty charged, weight approx. 6.6 kg, Ø approx. 156 mm, length* approx. 518 mm

Steel	

JUCCI	
5103-985 5103-965	4 liter/200 bar empty charged, weight approx. 5.4 kg Ø approx. 115 mm, length* approx. 506 mm (not for use with Quick-Fill [Q]
5103-986 5103-967 10015960	6 liter/300 bar empty charged with airflow restrictor, charged weight approx. 10.9–11.7 kg, Ø approx. 140 mm, length* approx. 530 mm
5103-987 5103-968 10031812 10024010	6 Liter/300 bar super light empty charged with airflow restrictor, charged with lockable valve, charged weight approx. 9.1 kg, Ø approx. 140 mm, length* approx. 520 mm
	*without valve

All-Composite

	6.8 Liter/300 bar
10019155	empty
10019154	charged, weight approx. 6.2 kg
	Ø approx. 156 mm, length* approx.
	556 mm
	6.8 Liter/300 bar
	with lockable valve
10019156	empty
10019157	charged, weight approx. 6.2 kg,
	Ø approx. 156 mm, length* approx.
	556 mm
	*without valve

...and more!

Accessories		
4075-818	T-piece 156/300 T-piece for two 300 bar composite cylinders (Ø approx. 156 mm)	
4085-817	T-piece 115/200 T-piece for two 4 I/200 bar composite cylinders (Ø approx. 115 mm) (not for use with Quick-Fill [Q])	
4075-971	Filling Connector Q Filling connector for Quick-Fill with pressu- re gauge and non-return valve, is screwed into valve of supply cylinder and permits quick charging of AirMaXX-Q apparatus	
4075-929	Filling line Q Filling line, 1 m, with 2 Quick-Fill couplings to connect the AirMaXX with the supply connector. In handy carrying pouch.	
4075-720	Rescue set in pouch	
4075-723	Rescue set in carrier both rescue sets for all AirMaXX with Second Connection (Z) contain a 3S-EZ mask and the lung governed demand valve LA 96-NR with a 150 cm medium pressure line. For rescuing persons in distress.	
4075-963	Chest strap (additional protection against slipping of the shoulder straps)	
4075-877	Protective cover for composite cylinders, black	
4075-878	Protective cover for composite cylinders, yellow	



Rescue Set in Action



Quick-Fill system



MSA in Europe

Northern Europe

Regional Head Office

Netherlands MSA Nederland B.V. Kernweg 20 NL-1627 LH Hoorn P. O. Box 39 NL-1620 AA Hoorn Phone +31 [229] 25 03 03 Telefax +31 [229] 21 13 40 E-Mail info@msaned.nl

Belgium

MSA Belgium N.V. Sterrenstraat 58/1 B-2500 Lier Phone +32 [3] 491 91 50 Telefax +32 [3] 491 91 51 E-Mail msabelgium@msa.be

Great Britain

MSA [Britain] Limited East Shawhead Coatbridge ML5 4TD Scotland Phone +44 [12 36] 42 49 66 Telefax +44 [12 36] 44 08 81 E-Mail info@msabritain.co.uk

Sweden

MSA NORDIC Kopparbergsgatan 29 SE-214 44 Malmö Phone +46 [40] 699 07 70 Telefax +46 [40] 699 07 77 E-Mail info@msanordic.se

Central Europe

European Head Office

Germany MSA Europe Thiemannstrasse 1 D-12059 Berlin Phone +49 [30] 68 86-555 Telefax +49 [30] 68 86-15 17 E-Mail contact@msa-europe.com

Regional Head Office

Germany MSA AUER GmbH Thiemannstrasse 1 D-12059 Berlin Phone +49 [30] 68 86-555 Telefax +49 [30] 68 86-15 17 E-Mail info@auer.de

Austria

MSA AUER Austria Vertriebs GmbH Absberger Str. 9 A-3462 Absdorf Phone +43 [22 78] 31 11 Telefax +43 [22 78] 31 11-2 E-Mail msa-austria@auer.de

Switzerland

MSA Schweiz August-Riniker-Str. 106 CH-5245 Habsburg Phone +41 [56] 441 66 78 Telefax +41 [56] 441 43 78 E-Mail msa-schweiz@auer.de

www.msa-europe.com

Southern Europe

Regional Head Office Italy MSA Italiana S.p.A. Via Po 13/17 I-20089 Rozzano [MI]

Phone +39 [02] 89 217-1 Telefax +39 [02] 8 25 92 28 E-Mail info@msaitaliana.it

France

MSA France 11/13, rue de la Guivernone Z.I. du Vert-Galant F-95310 Saint-Ouen-L'Aumône B. P. 617 F-95004 Cergy-Pontoise Cedex Phone +33 [1] 34 32 34 32 Telefax +33 [1] 30 37 63 05 E-Mail info@msa-france.fr

Spain

MSA Española, S.A.U. Narcís Monturiol, 7 Pol. Ind. del Sudoeste E-08960 Sant-Just Desvern (Barcelona) Phone +34 [93] 372 51 62 Telefax +34 [93] 372 66 57 E-Mail info@msa.es

Eastern Europe

Regional Head Office

Germany MSA AUER GmbH Thiemannstrasse 1 D-12059 Berlin Phone +49 [30] 68 86-25 99 Telefax +49 [30] 68 86-1577 E-Mail mee@auer.de

Hungary MSA AUER Hungaria Biztonságtechnika Kft.

Francia út. 10 H-1143 Budapest Phone +36 [1] 251 34 88 Telefax +36 [1] 251 46 51 E-Mail - info@msa-auer.hu

Poland

MSA AUER Polska Sp. zo.o. ul. Wschodnia 5A PL-05-090 Raszyn Phone +48 [22] 711 50 00 Telefax +48 [22] 711 50 19 E-Mail biuro@msa-auer.com.pl

Russia

MSA AUER Moscow ul. Sadovo-Sucharevskaja 6/37 301 office RUS-103051 Moscow Phone +7 [095] 924 48 56 Telefax +7 [095] 924 48 56 E-Mail msa-moscow@auer.de

MSA Europe

Thiemannstrasse 1 D-12059 Berlin Phone +49[30]6886-555 Fax +49[30]6886-1517 http://www.msa-europe.com E-mail contact@msa-europe.com **MSA [Britain] Limited** East Shawhead Coatbridge ML5 4TD, U.K. Phone +44[0]1236 424966 Fax +44 [0]1236 440881

E-mail info@msabritain.co.uk Subject to change without notice ID 01-110.1 ITL/2./N/10.02/HH

