



## Cylinders for MSA Air Masks

[ Lighter than ever ]



# MSA Lightens Your Load

Search and rescue...fire suppression...unexpected hazards. Firefighting is tough business. And sometimes it can seem like the weight of the world is on your back. But that doesn't mean your SCBA air cylinder has to weigh you down too.

MSA uses Carbon-Wrapped Cylinders as the standard on all Air Masks. The cylinders are so light you hardly know they're there.

In short, Carbon-Wrapped Cylinders are the lightest SCBA air cylinders ever developed by MSA. And that means a lighter load on you. With less weight to carry, firefighter fatigue and stress are reduced, giving you more energy to be at your best when it counts. Carbon-Wrapped Cylinders deliver exceptional weight savings because they feature a unique outerwrap made of lightweight, high-performance carbon fibers. The carbon fibers, which have a high

strength-to-weight ratio, reduce cylinder weight by two to six pounds when compared to previously used fiberglass-wrapped cylinders and as much as 10 pounds when compared to aluminum cylinders.

## A Leader in Innovation

In 1976, MSA introduced the Composite I Cylinder — the first fully-wound composite cylinder. A combination of aluminum and fiberglass, the Comp I cut cylinder weight virtually in half at that time. Since then, more than 300,000 MSA fully-wound composite cylinders have been placed into service with an untarnished record of performance.

Designed exclusively for MSA Air Masks, Carbon-Wrapped Cylinders incorporate the same proven technology found in earlier MSA fully-wound composites. And they're available in both high - and low-pressure models.

With the high-pressure Air Masks, you can choose from three 4500 psig Carbon-Wrapped Cylinders. The H-30 Cylinder provides a 30-minute-rated air supply and maximum maneuverability, which may be required for confined space rescues. For longer duration air supplies, you can choose either H-45, H-45LP (Low-Profile) or H-60 Cylinder, which provide a 45 - or 60 - minute air supply, respectively. Low-pressure Air Masks are suitable for use with the L-30 Cylinder, a 2216 psig cylinder rated for 30 minutes. Or, use the L-30 +, a 30-minute-rated cylinder pressurized to 3000 psig.



# Cylinder Weight

Cylinder Type	NIOSH Service Life Rating	Pressure	Weight (Empty)
L-30*	30-minute	2216 psig	7 lb. - 9 oz.
L-30+*	30-minute	3000 psig	10 lb. - 2 oz.
Fiberglass Hoop-Wound	30-minute	2216 psig	13 lb. - 0 oz.
Aluminum	30-minute	2216 psig	18 lb. - 0 oz.
H-30*	30-minute	4500 psig	7 lb. - 3 oz.
H-45*	45-minute	4500 psig	10 lb. - 9 oz.
H-45 Low Profile*	45-minute	4500 psig	10 lb. - 6 oz.
H-60*	60-minute	4500 psig	12 lb. - 11 oz.

\*These cylinders are capable of custom options.



*Sleek and light, Carbon-Wrapped Cylinders are available in six models to accommodate a wide range of applications.*

## Precision-Formed

Like all MSA fully-wound composite cylinders, Carbon-Wrapped Cylinders are made with a seamless aluminum liner that is precision-formed by a six-step process with quality control inspections all along the way. After forming the neck of the liner by a computer-controlled spinning process, the cylinder is wound thousands of times with high-strength carbon fibers impregnated with epoxy resin. The process is then completed with a final overwrap of fiberglass fibers for enhanced abrasion resistance. As a final touch, MSA added a “glow-in-the-dark” luminescent band for improved visibility at night.

Carbon-Wrapped Cylinders also retain MSA’s proven cylinder valve design. Like all MSA cylinders, the valve features a handwheel mounted at a right angle to the valve stem. This design allows fast activation of the SCBA air supply, even when wearing bulky gloves. For higher quality and reliability, MSA manufactures its own cylinder valve.

## Custom Cylinder Options

### Cylinder Logos

If your department would like to make cylinder identification easier, MSA can place your custom logo under the clear coat of any carbon-wrapped cylinder. The logo is easy to see and read.

MSA has three standard templates that you can use to customize the text, or you can provide a customized logo, such as a county seal (see attached). The logo will be placed on either a white background or a luminescent band between the labels and cylinder valve. The logo will be repeated, evenly spaced around the cylinder.



### Cylinder Smart Chip

To assist you with logistics and maintenance records, MSA offers the optional Smart Chip Technology. This enables you to electronically keep track of your cylinder’s manufacture date and last hydrostatic test date. Also, you can identify to which station the cylinder belongs to by simply scanning the embedded chip with a reader. This software makes your record keeping very simple and paperless.

- P/N 10054412 Smart Chip Reader
- P/N 10054413 Smart Chip Software

Custom cylinder ordering is easy and efficient, if you go to <http://www.msafire.com/cylinders>.

## The Choice Is Yours

Besides Carbon-Wrapped Cylinders, MSA offers two other air cylinders to meet your own needs and budget:



### Fiberglass Hoop-Wound

**Composite Cylinder:** Available in a 30-minute, low-pressure model, MSA's hoop-wound cylinder features fiberglass wrapping and provides a cost-saving advantage over fully-wound composites. In general, hoop-wound cylinders are three to five pounds heavier than fully-wound fiberglass or carbon-wrapped cylinders.



**3AL Cylinder:** Less expensive than MSA's hoop-wound cylinder, this 30-minute low-pressure cylinder features all-aluminum construction. Because of its weight (approximately 18 pounds), it is designed primarily for customers who don't use an SCBA frequently. The 3AL Cylinder also offers an indefinite service life.

## Ordering Information

Part No.	Description
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### Carbon-Wrapped Composite Cylinders

807586	L-30, 30-minute, low-pressure
816115	L-30+, 30-minute, low-pressure
807587	H-30, 30-minute, high-pressure
807570	H-45, 45-minute, high-pressure
807588	H-60, 60-minute, high-pressure
10035644	H-45, low profile, 45-minute

### Fiberglass Hoop-Wound Composite Cylinder

469619	30-minute, low-pressure
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### Aluminum Cylinder

809872	3AL, 30-minute, low-pressure
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To learn more about the complete line of MSA air cylinders, including Stealth Carbon-Wrapped Cylinders, see your MSA-Authorized Fire Service Distributor and ask which cylinder is right for you. Or call us toll-free at 1-800-MSA-2222.

**Note:** This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



ID 0108-11-MC / Apr 2004  
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