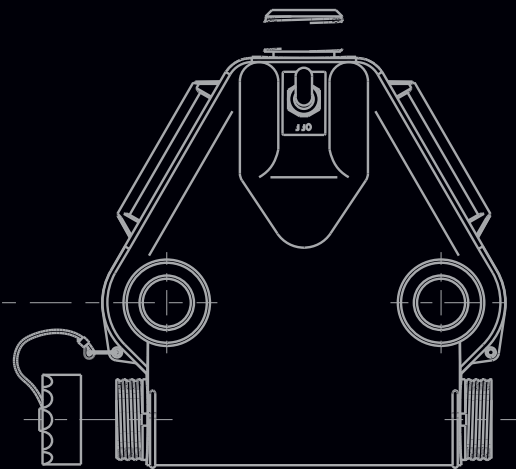
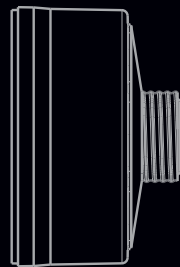
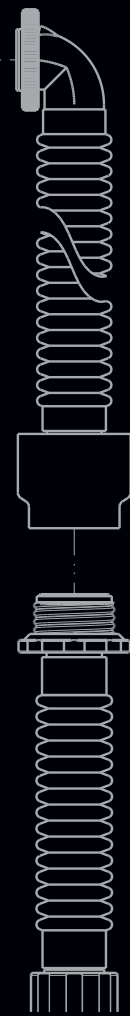
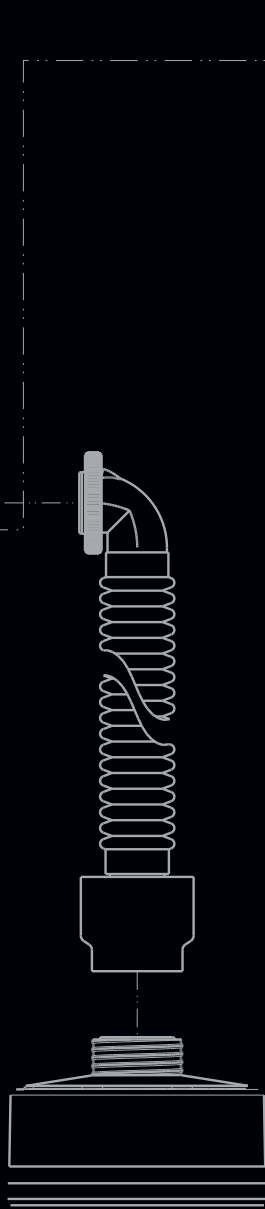
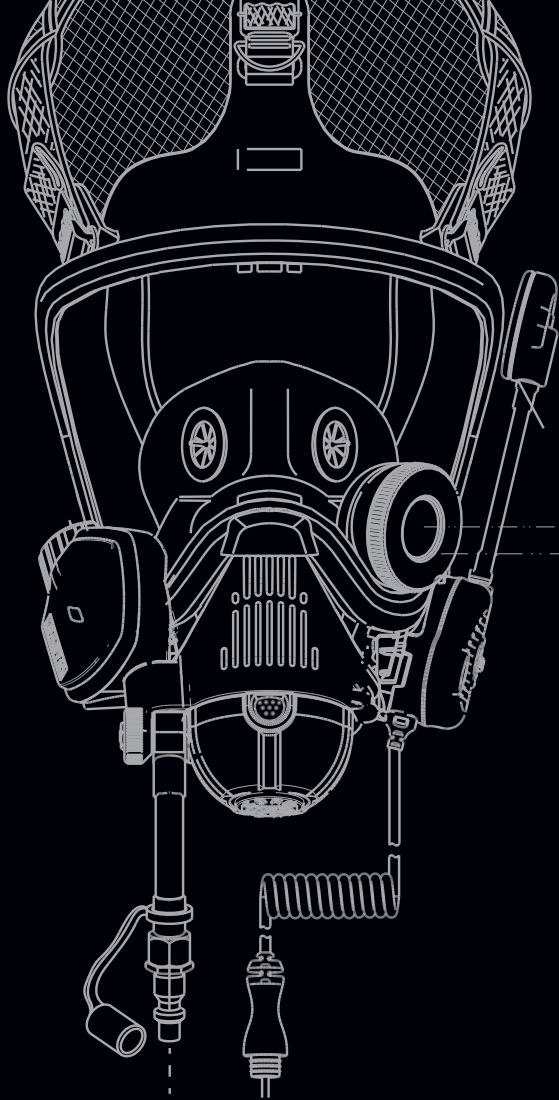


FIREYER

MSA  
**FIREHAWK® M7**  
**RESPONDER** AIR MASK



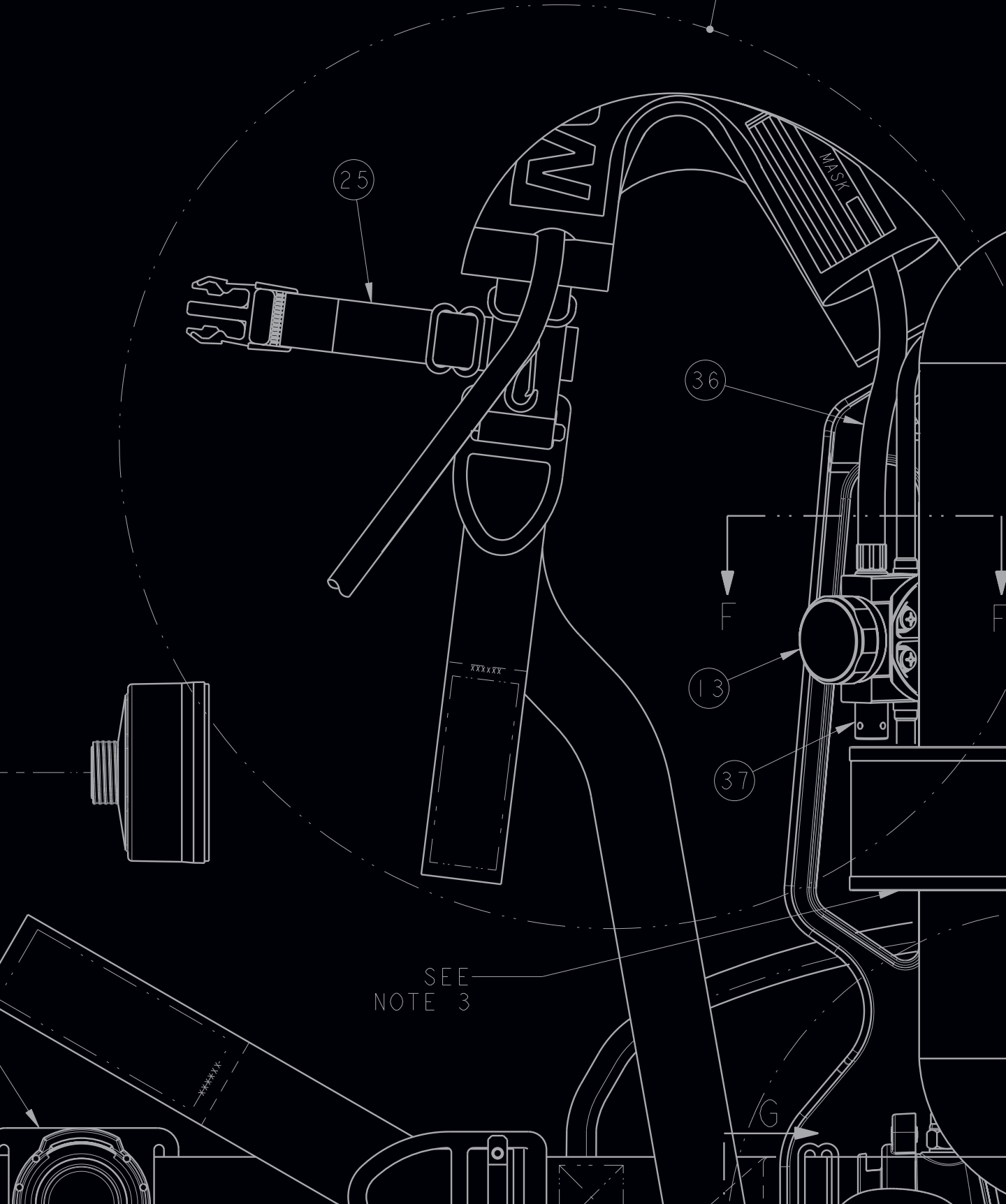
# ***FireHAWK<sup>®</sup> M7***

## ***RESPONDER***

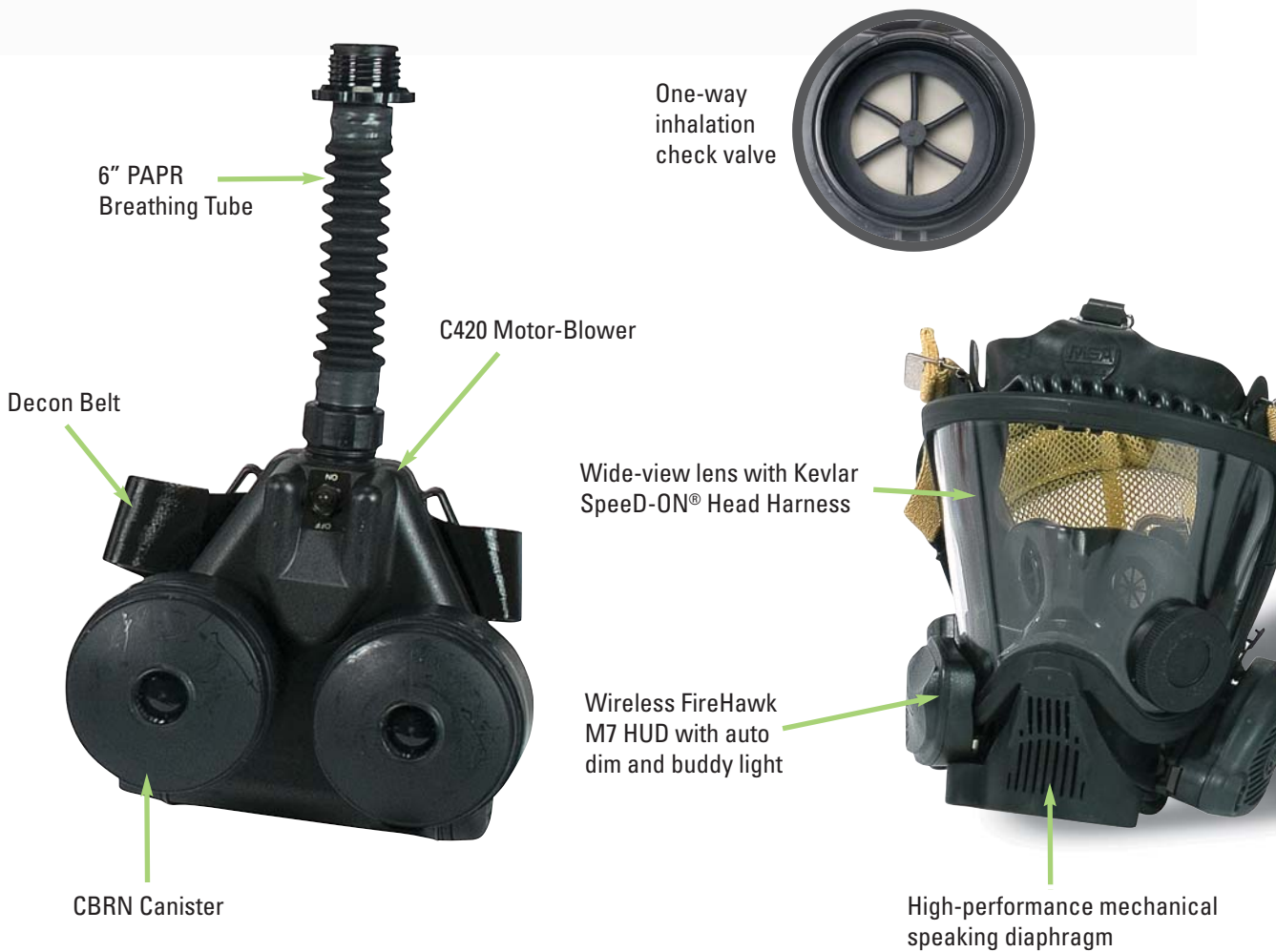
***Air Mask***



SEE FIGURE 2  
ON SHEET 4



# WHAT'S IN THIS AIR MASK





FireHawk M7 Control Module with accelerometer motion sensor, digital and mechanical pressure display time remaining, and thermal alarm

High-visibility reflective panels

FireHawk M7 Carrier and Harness Assembly with side handles and carabiner attachment

PR14™ First-Stage Regulator with only 14 internal parts

Parachute-style buckles

CBRN Canister

Double-pull Kevlar waist belt

Firehawk® MMR Regulator

18" or 22" APR Breathing Tube

APR Strap





Luminescent cylinder band



Optional chest strap

Stainless steel cylinder band with secure cam-lock system

Lumbar pad

PASS Alarm Dual Sound Emitters

Quick-Fill® URC with Audi-Larm™ Audible Alarm

LED buddy lights











# The industry's most versatile respiratory protection consists of an NFPA-2007-edition CBRN air mask, a CBRN gas mask, and a CBRN PAPR!

MSA's new FireHawk M7 Responder Air Mask is uniquely versatile protection that can quickly be transformed into a CBRN air-purifying respirator (APR) or a CBRN powered air-purifying respirator (PAPR). You can change respirator modes as your job changes direction from first response and rescue to scene management and remediation activities.

Firefighters typically are the first to respond to any incident whether it is a residential fire, an accident, or any unknown threat. MSA's FireHawk M7 Responder Air Mask provides the maximum level of protection for CBRN environments. However, that amount of protection is not always needed, especially outside the immediate fire scene. Once the hazard has been assessed, air-purifying respirators (APR) may make the most sense for low concentrations of certain contaminants.

The M7 Responder facepiece is NIOSH approved for the SCBA, PAPR and APR configurations, in accordance with the MSA users instructions. This practical emergency respiratory protection system meets/exceeds the latest requirements of NFPA and NIOSH standards (see ATO ordering information for details). It's the first and only of its kind, and an emergency responder's dream come true.

## The FireHawk M7 Responder Air Mask

Seven life-safety design components built on a modular air mask platform ensure you of the highest-quality SCBA currently available, giving you that lifesaving edge in the face of danger. This new air mask offers more options than any other product in the industry.

## 1. TAKING THE HEAT

MSA's new FireHawk M7 PASS Alarm gets **louder as heat increases!** This patent-pending emitter exceeds 95 decibels and performs solidly at the NFPA 500°F test!



## 2. VIRTUALLY "BULLET-PROOF" ELECTRONICS

The FireHawk M7 HUD, Power Module, and Control Module, encased in a proprietary **high-temperature impact-grade** polymer compound, receive the highest possible protection against impact and water ingress on the fireground.

## 3. STRAIGHT-TALK COMMUNICATIONS

Communications start with a **high-performance mechanical speech diaphragm**, a standalone solution which exceeds NFPA requirements. It is backed by an **electronic amplifier** with an internal facepiece microphone for ultimate clarity. The ClearCommand® Communication System provides clear communication during critical times.



## 4. FIREGROUND MANAGEMENT

The practical, complete, and user-friendly **MSA Accountability System**, based on a proven system, displays a full array of visual and audible information for up to 100 firefighters within a one-mile line-of-site. Downloading reports makes record keeping easy.



## 5. EXTENDED PROTECTION

Prepare for the unexpected. Choose from an integrated rappelling system, the MSA Rescue Belt, or **extended duration** air-purifying options with the CBRN APR or PAPR accessories. Never before have so many options been available on one SCBA.





WINDBERRY

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## 6. LIGHTWEIGHT, EASY TO USE COMPONENTS

We always strive to lighten the load of components, reduce parts count, simplify maintenance, maximize user comfort, and modularize the design. The FireHawk M7 Responder Air Mask has a lightweight polymer backplate with quick-release harness straps, an error-proof cam-lock cylinder attachment, fast change-out electronic components, a large swiveling lumbar pad, and regulators that will fit in the palm of your hand (*less than 30 parts for the MMR and 14 for the 1st stage*). Our time-tested Ultra Elite® Facepiece has unbeatable comfort, visibility, communications, cross-contamination protection, fit, and seal.

## 7. PLATFORM FOR THE FUTURE

Every FireHawk M7 Responder Air Mask electronics ensemble contains a 2.4GHz personal wireless network, which transmits and receives encrypted information over a short range on a firefighter's body. Software can be field-upgraded wirelessly, and a thoroughly-tested RFI shield protects against all fireground radio signals.

**Future technology** can provide additional information back to incident command through the MSA Accountability System. So you get the best technology today and into the future.

### FireHawk M7 Responder APR

The CBRN Gas Mask with Canister will help to provide you with protection when you enter or exit a hazardous area, or work within the area for a limited time. As you breathe, inhaled air is drawn through the canister which removes, neutralizes, and/or traps specific contaminants. Then, exhaled air leaves the facepiece through the facepiece exhalation valve.

To convert from SCBA to APR, the canister and breathing tube must be attached to the facepiece. When the SCBA cylinder valve is closed, facepiece valves convert to air-purifying mode through the APR canister. Although the air mask carrier and harness and cylinder may be removed from the user, the MMR regulator must always be connected to the inlet adapter to seal the facepiece inlet port.

MSA provides a tool to calculate your canister life for the contaminant levels measured in your environment. This canister service time calculator can be found at [MSAnet.com/calculator](http://MSAnet.com/calculator). See MSA's Response Respirator Selector for additional information.

### FireHawk M7 Responder PAPP

The CBRN Responder PAPP (Powered Air-Purifying Respirator) system is ideal when you need non-IDLH respiratory protection for an extended period of time (*up to 8 hours*). This PAPP provides an OSHA-assigned protection factor 20 times greater than APR, due to positive pressure in the mask.

Essentially, it combines an industry-leading motor-blower to the Ultra Elite M7 Responder Facepiece, and CBRN canisters for up to 8 hours of air-purifying respiratory protection. Its constant filtered air flow (*of at least 115 lpm*) improves comfort with a cooling effect, greatly reducing pulmonary stress, and preserving strength and mental acuity. The air flow also prevents fogging in the facepiece, reduces claustrophobia, and allows for extended use in hot and stressful environments.

The Responder C420 Motor-Blower is trustworthy, with over 50,000 fielded in various U.S. military programs, comes complete with the motor-blower, belt, air flow indicator, canisters and breathing tube. Choose one of two batteries that can be hot-swapped during warm environment use.

To convert from SCBA to PAPP, the PAPP and breathing tube must be attached to the facepiece. When the SCBA cylinder valve is closed, facepiece valves convert to air-purifying mode through the PAPP, at which time the user turns on the PAPP motor. Although the air mask carrier, harness and cylinder may be removed from the user, the MMR regulator must always be connected to the inlet adapter to serve as a seal for the facepiece inlet port.





# SPECIFICATIONS

- Air mask weight with empty H-30 cylinder (including batteries) is 22 lbs-5 oz
- Battery life of electronics > 1 year with frequent use (standard alkaline cells)
- RFI shielding up to 50v/m radio signal load across an 80 MHz to 2.5 GHz range
- PASS heat alarm performance > 95 dB @ 500°F
- Water immersion protection – FireHawk M7 electronics at 5 ft. depth for 1 hour
- Air delivery – manufactured to the NFPA standard 320 lpm rate; design qualified at twice NFPA rate (640 lpm) cyclic breathing
- Data-logging – most recent 25-hours-of-use information
- Electronic ID tagging (RFID) standard with MSA Accountability System
- Optional equipment: Rescue with Belt Rappelling System (50 ft. & 75 ft.), MSA Accountability System, Extend-Aire™ and Quick-Fill Emergency Breathing Systems, swiveling lumbar pad and chest strap
- Standard equipment includes: facepiece cross-contamination check-valve, thermal alarm, time-remaining display, wireless programming and network, front & rear buddy lights, auto-dim HUD, large drag-carrying handles, stainless steel cylinder band with cam-lock system
- Maximum flow rate 130-140 lpm
- Lithium-sulfur dioxide mission battery LiSO2 BA 5800/U: operates 8 hours
- Nickel metal hydride rechargeable battery: operates 4 hours
- Ambient temperature -32 to 49°C / -26 to 120°F
- EMI MIL-STD-461C, Part 4, RE02
- Environmental water and dust protection - IP68 (inlet and outlet ports closed)
- Decontamination – performance not affected adversely
- Expected working life of blower (MTTF) > 1,000 hrs (per EA-DTL-1827)

## ORDERING INFORMATION

### FireHAWK M7 Responder Air Mask

Ordering Selection Matrix and Price List (NFPA 1981 and 1982 - 2007 edition compliant, NIOSH 42 CFR Part 84 CBRN certified)\*

Air Mask Pressure	Carrier/Harness Assembly	Lumbar Pad/Rescue Belt	Cylinder	Emergency Breathing Support	Facepiece and MMR Regulator	Nosecup	Head Harness	Electronic Communications	APR/PAPR Kits	Integrated PASS/Telemetry	Case	
L 2216	A Single Pull without chest strap B Single Pull with chest strap C Double Pull without chest strap D Double Pull with chest strap	0 None 1 Swiveling Lumbar Pad A Rescue Belt - Standard, 50" B Rescue Belt - Mid-Size, 50" C Rescue Belt - Long, 50" D Rescue Belt - Standard, 75" E Rescue Belt - Mid-Size, 75" F Rescue Belt - Long, 75"	0 None	0 None	0 None	B Hycar Small	0 None	0 None	A None	A None	A PASS with thermal alarm activated	0 None
			3 30' Carbon with air	1 Quick-Fill	C Hycar Medium	1 Medium	B Clear Command Ready with bracket	B APR 18" tube	B PASS without thermal alarm activated	1 Hard Case		
			6 30' Carbon less air	2 ExtendAire	D Hycar Large	2 Large	C Clear Command Amp	C APR 22" tube	C PASS, telemetry and thermal alarm	2 Soft Case		
			0 None	3 Quick-Fill and ExtendAire		4 Speed-ON with neck strap	D Clear Command Amp/RI	D APR 18" tube with PAPR kit				
			1 30+ Carbon with air	M is not compatible with Quick-Fill				E APR 22" tube with PAPR kit				
			2 30+ Carbon less air									
	M 3000	Options A & B can only be chosen if a rescue belt is selected.	If choosing a rescue belt, the carrier/harness assembly must be a single pull (options A or B).	0 None								
				1 30' Carbon with air								
				2 45' Carbon with air								
				3 45' Carbon low-profile with air								
				4 60' Carbon with air								
				5 30' Carbon less air								
H 4500			6 45' Carbon less air									
			7 45' Carbon low-profile less air									
			8 60' Carbon less air									

Special note regarding approvals - Approvals are only available (and were obtained) for each component (SCBA, APR and PAPR) as an independent CBRN respirator. Although the APR, PAPR and SCBA have been evaluated for seamless convertibility in a contaminated environment, as well as to the NFPA heat and flame test criteria by independent labs, there is currently no standard for which to seek this type of system approval and they have not been evaluated by the NFPA or NIOSH. Users are required to convert among modes in an uncontaminated environment. Please see user's instructions for specific approval information and limitations.

A-M7R

Part Number

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## ORDERING INFORMATION – REPLACEMENT PARTS

<i>Ultra Elite M7 Responder Facepieces</i>			
Facepiece with ClearCommand Bracket		Facepiece without ClearCommand Bracket	
Small	10093927	Small	10093924
Medium	10093926	Medium	10093923
Large	10093928	Large	10093925

<i>ClearCommand Communications System for Ultra Elite Facepieces</i>	
Amplifier Kit, complete with microphone	10024074
Replacement amplifier unit	10023056
Amplifier Radio Interface Kit, complete with microphone	10051290
Replacement Amplifier Radio Interface unit	10051289
Bracket only	10023055

<i>Emergency Breathing Accessories</i>	
Quick-Fill 3-foot emergency transfill hose in Kevlar pouch	485366
ExtendAire hose and pouch	812973
ExtendAire air-line hose kit	812958

<i>Spare / Replacement M7 HUD</i>	
M7 Responder HUD	M7 Responder HUD with bracket
10093911	10093912

### **Carbon-Wrapped Cylinders**

A unique outerwrap made of lightweight, high-performance carbon fibers, which reduces cylinder weight by 2 to 6 pounds (*compared to fiberglass-wrapped cylinders*) and as much as 10 pounds (*compared to aluminum cylinders*). Choose from six sizes to accommodate a wide range of applications.

Cylinder Type (Cylinder & Valve)	NIOSH Service Rating Life	Pressure (psig)	Weight* (empty)	Part No.
L-30	30'	2216 psig	8 lbs. – 0 oz.	807586
L30+	30'	3000 psig	9 lbs. – 8 oz.	816115
H-30	30'	4500 psig	7 lbs. – 4 oz.	807587
H-45	45'	4500 psig	9 lbs. – 7 oz.	807570
H-45 Low-Profile	45'	4500 psig	9 lbs. – 10 oz.	10035644
H-60	60'	4500 psig	11 lbs. – 12 oz.	807588

*\*All weights shown are approximate.*





## ORDERING INFORMATION

### Accountability System

Combines the latest computer software with a high-performance radio module and field-proven technology.

Accountability Base Station Kit <i>(includes software, antenna kit, USB cable and 8-24 volt power cable)</i>	10072240
M7 Control Module Reader / M7 ID tag writer	10083876
M7 ID tags	10083875
Antenna kit	10075756
USB cable	10063880
8-24 volt, power cable	10049410
Wall mount power cable <i>(not included in 10072240 kit)</i>	10047342



### Rescue Belt

Rescue Belt, 50 foot Kevlar line, standard belt (56")	10052766
Rescue Belt, 50 foot Kevlar line, mid-size belt (66")	10071003
Rescue Belt, 50 foot Kevlar line, long belt (76")	10052767
Rescue Belt, 75 foot Kevlar line, standard belt (56")	10052768
Rescue Belt, 75 foot Kevlar line, mid-size belt (66")	10071004
Rescue Belt, 75 foot Kevlar line, long belt (76")	10052769

### APR only

CBRN Canister	10046570
APR Breathing Tube - 18"	10094016
APR Breathing Tube - 22"	10094023

### PAPR only

CBRN Canister	10046570
C420 PAPR Kits <i>(less facepiece and cartridge)**</i>	10094024

\*\* Includes C420 PAPR, Belt, Air-flow indicator and breathing tube.

### Accessories for C420 PAPR

NiMH Rechargeable Battery Kit <i>(2 NiMH batteries, charger and cap)</i>	B-20040-001
LiSO2 Battery	M-20020
6" Breathing Hose Assembly	10094021
NiMH Rechargeable Battery Pack	S-20036
NiMH Rapid Battery Charger	B-20090-001
NiMH Rechargeable Battery Cap Assembly	B-30060-001
Web Belt Assembly	S-30019
PAPR Carrying Case	B-10079-001

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**MSA Mexico**

Phone 52-55 21 22 5770

Fax 52-55 5359 4330

**MSA International**

Phone 412-967-3354

FAX 412-967-3451

**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.

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