

## Cairns® XF1 Fire Helmet



WHEN YOU GO IN, WE GO IN WITH YOU.



### THE RIGHT TIME FOR SOMETHING NEW

We know the MSA Cairns XF1 Fire Helmet looks entirely different than the helmet you're wearing now. And that's the point. At MSA Cairns, we're always striving to innovate helmet technology—which is why we're always talking to firefighters about their gear. From these conversations, we knew it was the right time to bring a European-style fire helmet to North America.

The design of the National Fire Protection Association (NFPA) 1971- and 1951-compliant Cairns XF1 Fire Helmet capitalizes on the expertise of firefighters who wear jet-style fire helmets, while blending in the needs of the North American firefighter.



## MEETING FIREFIGHTER NEEDS: BENEFITS OF THE CAIRNS XF1 FIRE HELMET



#### **REDUCED SNAGS**

The Cairns XF1 Fire Helmet has been engineered as much for comfort and fit as safety. The most obvious feature is what it lacks—the XF1 Helmet is brimless. While untraditional, the lack of a brim makes it easier to crawl into tight spaces and retain your helmet.



#### **INTEGRATED ACCESSORIES**

The Cairns XF1 Fire Helmet offers several optional accessories, like a secondary (ocular) visor, lighting, and communications.

All are integrated seamlessly into the design, retaining its sleek profile.<sup>1</sup>



#### **EASY TO CLEAN**

The Cairns XF1 Fire Helmet's modular design allows it to be quickly disassembled for thorough inspection, care and maintenance. Plus, the helmet's soft goods are removable, washable and replaceable—all without the use of tools.



#### **LIGHTING THE WAY**

This compact light accessory is housed inside the helmet, reducing exposure to heat, flames, and impact. The strategic placement of LED lights on either side of the helmet improves visibility in dark conditions without detracting from others' vision.



#### **PERSONALIZED FIT**

Several easy-to-find adjustments can be made enabling the fire helmet fit to be customized to the individual. When it's all said and done, the XF1 Helmet doesn't just fit firefighters—it fits most of them comfortably.<sup>2</sup>



#### **CUSTOMIZED LOOK**

The Cairns XF1 Fire Helmet is available in four colors, black, white, yellow, and red, and two finishes, matte and glossy, for firefighters to choose a look that fits their style.

Front plates, in a variety of colors, black pre-printed and custom printed options, are available.

<sup>&</sup>lt;sup>1</sup> Accessories are not certified to NFPA; however, their addition to the helmet does not affect NFPA compliance.

<sup>&</sup>lt;sup>2</sup> This information based on Beta trial of 250 participants with various facepieces, including competitor SCBA.



## CAIRNS XF1 FIRE HELMET FIREFIGHTER-DRIVEN FEATURES



#### **RELIABLE DESIGN, EXCELLENT PROTECTION**

#### Designed to withstand the rigors of structural fire fighting:

- Lightweight shell molded from high heat–resistant thermoplastic provides protection against typical fire scene hazards.
- Full-coverage impact cap combined with the fitted suspension system allows for equal distribution of forces.
- Shell, face shield, and earlaps, provide coverage from impacts, projections, heat, and flames.
- Brimless style prevents shifting and bumping.
- Increased head mobility allows for expanded field of view, especially upward.



#### **EASY CARE TO SAVE TIME & MONEY**

Designed to be quickly disassembled for care and maintenance as required by NFPA 1851:

- The modular design allows for thorough inspection, cleaning, and replacement of parts.
- Soft goods are removable, washable, and replaceable with minimal effort and no tools.<sup>3</sup> Wash cycle testing conducted at MSA labs showed that the soft goods, including the chinstraps, withstood 52 wash cycles.<sup>4</sup>
- Both helmet sizes use many of the same components to minimize spare parts management and costs.





#### **COMFORT THROUGH INNOVATION**

Designed for a comfortable fit and easy adjustability:

- Robust, yellow components designate helmet interaction points for the user.
- Front headband angle adjusts to establish proper fit when wearing a hood or SCBA facepiece.
- Three-position ratchet adjustment provides for individualized/ customizable fit.
- Pivoting, three-point chinstrap automatically aligns to the proper wearing angle with or without facepiece.

<sup>3</sup> MSA does not recommend washing suspension straps due to their key role in dissipating impact. Follow the Product Instructions for removing and replacing suspension straps.

<sup>&</sup>lt;sup>4</sup> When washed according to instructions provided.

## **MSA CAIRNS XF1 FIRE HELMET ACCESSORIES**

MSA offers a variety of integrated accessories designed to maximize available headroom while minimizing snag hazards.





#### **LIGHT MODULE**

### Unique, compact light located inside the helmet improves visibility in dark conditions without detracting from others' vision:

- Internal location reduces the light's exposure to heat, flames, and impact.
- Light module is ATEX (Zone 1, IP56)-rated.
- Light placement on each side of the helmet allows for expanded field of view.
- Yellow on/off switch is easy to see and rubberized for better grip with gloved hands.
- Uses AAA batteries for up to 10 hours of continuous operation.
- Flashing light indicates remaining battery level.
- Light module weighs just 3.5 oz. (99 g) with batteries—about 33% lighter than other helmet-mounted flashlights.
- Adding the light module does not affect compliance with NFPA-1971 or NFPA-1951.

#### INTERNAL COMMUNICATION HEADSET

## The internally-mounted headset snaps easily inside the helmet, providing incoming communication right to the ear, where it's needed most:

- The headset can be installed without tools and does not affect how the helmet fits on the firefighter's head.
- Users have the option of one or two integrated speakers.
- The flexible, noise-cancelling Electret boom microphone extends more than 3 in. (76 mm) in length and can be used with or without SCBA facepiece.
- When not in use, the microphone stows safely out of the way behind the wearer's head.
- Fire-retardant cable downlead offers NEXUS (7.1 mm jack, four pole) connecting plug.
- Headset adds minimal weight (3.5 oz. [99 g] for one speaker or 4.4 oz. [124 g] for two speakers).
- This accessory is ATEX (Zone 1, IP56)-rated
- The headset operates with various push-to-talk (PTT) modules, such as MSA HandyCom, enabling connection to a radio:
- Housing with large, easy-to-push button
- Downlead cable to the radio with connection plug
- Belt/strap attachment via durable integrated clip
- No batteries needed; powered by the radio through the PTT.
- Adding the communication headset does not affect compliance with NFPA-1971 and NFPA-1951.

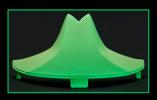
#### **INTEGRATED OCULAR VISOR**

### The optional ocular visor provides additional eye protection that is easy to deploy:

- Patented pivot adjustment system allows the visor to articulate to and away from the face, helping to provide gap-free protection even when the user is wearing corrective lenses.
- Visor is easy and quick to remove to clean or replace with no tools. Great secondary eye protection when a full-face protection is not needed.
- Protective anti-scratch coating helps ensure extended lifetime.
- Unique wide field of view in all directions.
- Compliant to ANSI/ISEA Z87.1:2015 as an impact protector—similar to safety eyewear typically worn by firefighters for nonstructural fire responses such as motor vehicle accidents.
- Adding the ocular visor does not affect compliance with NFPA-1971 or NFPA-1951.

#### **FRONT PLATES\***

- 11 pre-printed black plates, including those for ranks, EMS, and Chaplain.
- Plates available in 9 colors.
- Can be customized with metal badge, molding, or multi-color printing.
- Can be removed in a few seconds without special tools.



XF1 Luminous Front Plate (GA1150-32)



XF1 Front Plate, Lieut. w/1 trumpet (GA1150-N4)

<sup>\*</sup>Minimum order quantities apply to customized front plates. Pre-printed black plates and blank colored plates can be ordered as single pieces.





# MSA CAIRNS XF1 FIRE HELMET TECHNICAL DATA

SIZE	
MEDIUM	Head sizes from 61/2-73/4
LARGE	Head sizes from 718–818
WEIGHT	Base helmet (with full face shield), compliant to NFPA-1971 and NFPA 1951
MEDIUM	55-57 oz. (159 ± 30 g)
LARGE	60-62 oz. (170 ± 30 g)
COLORS	Black
	Yellow
	White
	Red
FINISHES	Matte
	Glossy
APPROVALS	NFPA 1971, Standard on Protective Ensembles for Structural and Proximity Fire Fighting (current edition)
	NFPA 1951, Standard on Protective Ensembles for Technical Rescue Incidents (current edition)
SHELL	High temperature thermoplastic (injection molded)
IMPACT LINER	Shock-absorbing polyurethane foam with aramide reinforcement
CHINSTRAP	Kevlar®/Nomex blend
SOFT GOODS & EAR COVERS	Nomex
FULL FACE SHIELD	High temperature thermoplastic with AF/AS coatings

## **MSA CAIRNS XF1 FIRE HELMET PART NUMBERS**

#### **HELMETS**

MATERIAL NO	SIZE		FINISH		COLOR			
MATERIAL NO.	MED	LARGE	MATTE	GLOSSY	BLACK	RED	WHITE	YELLOW
GYM1018500000-NE16								
GYM1018500000-RD16								
GYM1018500000-BU16								
GYM1018500000-JC16								
GYL1018500000-NE16								
GYL1018500000-RD16								
GYL1018500000-BU16								
GYL1018500000-JC16								
GYM1018500000-NA16								
GYM1018500000-RE16								
GYM1018500000-BA16								
GYM1018500000-JD16								
GYL1018500000-NA16								
GYL1018500000-RE16								
GYL1018500000-BA16								
GYL1018500000-JD16								





#### **FRONT PLATES**

MATERIAL NO.	DESCRIPTION			
GA1150-16	XF1 Front Plate, black			
GA1150-34	XF1 Front Plate, white	GA1150-16	GA1150-34	GA1150-45
GA1150-45	XF1 Front Plate, blue			
GA1150-2B	XF1 Front Plate, green			
GA1150-46	XF1 Front Plate, yellow	GA1150-2B	GA1150-46	GA1150-33
GA1150-33	XF1 Front Plate, orange			
GA1150-32	XF1 Front Plate, photolum			
GA1150-74	XF1 Front Plate, red	GA1150-32	GA1150-74	GA1150-4L
GA1150-4L	XF1 Front Plate, HV yellow	M	M	M
GA1150-N2	XF1 Front Plate, black, Chief, five trumpets		CAPTAN	LEUT.
GA1150-N3	XF1 Front Plate, black, Captain, two trumpets	GA1150-N2	GA1150-N3	GA1150-N4
GA1150-N4	XF1 Front Plate, black, Lieutenant, one trumpet	M	M	M
GA1150-N5	XF1 Front Plate, black, Fireman's scramble		(A)	
GA1150-N6	XF1 Front Plate, black, EMS star of life	GA1150-N5	GA1150-N6	GA1150-N7
GA1150-N7	XF1 Front Plate, black, Deputy Chief, three trumpets	M	M	M
GA1150-N8	XF1 Front Plate, black, Assistant Chief, four trumpets			(1)
GA1150-N9	XF1 Front Plate, black, Battalion Chief, two trumpets	GA1150-N8	GA1150-N9	GA1150-P1
GA1150-P1	XF1 Front Plate, Captain two axes		A 4	
GA1150-P2	XF1 Front Plate, black, Lieutenant, one axe			
GA1150-P3	XF1 Front Plate, black, Chaplain's cross	CANIFO DO	CANTO DA	
		GA1150-P2	GA1150-P3	

## MSA CAIRNS XF1 FIRE HELMET ACCESSORIES & PARTS

#### **ACCESSORIES**

#### **REPLACEMENT PARTS\***

MATERIAL NO.	DESCRIPTION	MATERIAL NO.	DESCRIPTION
GA1484	XF1 Lighting module	GA1162	XF1 Headband liner and ratchet cover kit
GA1087C	XF1 Ocular visor assembly	GA1160	XF1 Chinstrap assembly
GAY10212232116000X	XF1 Boom microphone headset	GA1153	XF1 Reflective trim kit, lime yellow
10163388	PTT for APX6000/7000	GA1159	XF1 Ear cover
10163389	PTT for XTS5000		



## MSA—The Safety Company

Established in 1914, MSA Safety Incorporated is the global leader in the development, manufacture, and supply of safety products that protect people and facility infrastructures. Many MSA products integrate a combination of electronics, mechanical systems, and advanced materials to protect users against hazardous or life-threatening situations. The company's comprehensive product line is used by workers around the world in a broad range of markets, including the oil, gas, and petrochemical industry, the fire service, the construction industry, mining, and the military. MSA's core products include self-contained breathing apparatus, fixed gas and flame detection systems, portable gas detection instruments, industrial head protection products, firefighter helmets and protective apparel, and fall protection devices. With 2020 revenues of \$1.35 billion, MSA employs approximately 5,200 people worldwide. The company is headquartered north of Pittsburgh in Cranberry Township, PA, and has manufacturing operations in the United States, Europe, Asia, and Latin America. With more than 40 international locations, MSA realizes approximately half of its revenue from outside North America. For more information visit MSA's web site at www.MSAsafety.com.

#### **Our Mission**

MSA's mission is to see to it that men and women may work in safety and that they, their families, and their communities may live in health throughout the world.

MSA: WE YOU GO IN, WE GO IN WITH YOU.

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit https://us.msasafety.com/Trademarks.

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