

HEAD PROTECTION

PERSONAL PROTECTIVE EQUIPMENT



MAGMA FIRE FIGHTING HELMETS TYPE - B Article No.: 1895BD201

MAGMA offers firefighters the latest in fire helmet design and technology. Designed with input from firefighters from around the world, MAGMA affords the individual firefighter the flexibility to configure a helmet to his/her exact requirements. Magma Type B is three-quarter light-weight, shell configurations.





BETTER

UNDER FIRE.

## **HIGHLIGHTS**

- Modular platform concept
- Optional bi-colour design
- Largest protection zone
- Designed to prevent from view and hearing restrictions
- · Largest visor, full face protection
- Full inside insulation against hazards
- Multiple adjustments for perfect fit
- Universal light adaption
- Only 29 components for easy handling, maintenance and low lifetime costs
- · No fix life time limitation
- Certified to EN443:2008

## THE NEW MAGMA FIRE HELMET PLATFORM CONCEPT

- Sleek design accommodates a wide variety of accessories and electronic components.
- · Can be easily reconfigured for new applications
- Magma offers the lowest weight and the most superior comfort in its class.
- The three-dimensional visor covers the retracted front frame for a maximum upper and lateral field of view, while also covering the complete face up to the chin, leaving enough space for spectacles, protective goggles and even a respirator mask.

This Article Data Sheet (ADS) is designed and produced by FLOWTRONIX (FT) covered under the intellectual property law. Any reproduction in whole or in part is strictly prohibited without written approval. FT HP 1014-3.2

Doc. Control:

magma

Rev.

Date:

April 4, 2016



HEAD PROTECTION

PERSONAL PROTECTIVE EQUIPMENT





The layout of the platform, outer shell and visor encloses the inner compartment against all risks. No comparable helmet offers a similar protection against heat, flames, sparks and fluids.

The Magma head ring is made from just three components.

Clearly laid out and easy to operate.

The front and rear height of the head ring can be adjusted separately, just like the wearing height. These functions ensure sufficient space for a perfect fit of the protective goggles, the mask and for maximized head size coverage from 50-65 cm. MAGMA FIRE FIGHTING HELMETS TYPE - B Article No.: 1895BD201



Strap system with 4-point attachment, adjusts itself automatically.

Easy adjustment even with gloves on. The x-shaped design of the neck straps fits comfortably and obtains best results in pull off test.

The three-dimensional visor covers the retracted front frame for a maximum upper and lateral field of view, while also covering the complete face up to the chin, leaving enough space for spectacles, protective goggles and even a respirator mask.



The helmet is compatible with all conventional respirator masks

- whether with rubber straps or adjustable two-point mask connection.

Radio with bone or swan microphones are located where it should and can be mounted in no time and without using tools to the designated attachment points.

# LIGHTING

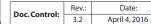
By intention Bullard decided not to go with a torch model orientated system due to the fast evolvement of the LED technology and the large variety of requirements. The newly developed torch adapter from Bullard can accommodate most types of torches.

The adapter is attached to the ergonomical position: below the eye line, for a low-refl ection illumination even in intensive smoke conditions and also for a low centre of gravity.

# **NECK PROTECTOR**

Neck protector made from Nomex or aluminized aramid fiber with inner layer., Dutch Ear-Neck-Protector 2-layer version or 4-layer version with watertight membrane





This Article Data Sheet (ADS) is designed and produced by FLOWTRONIX (FT) covered under the intellectual property law. Any reproduction in whole or in part is strictly prohibited without written approval. FT HP 1014-3.2



HEAD PROTECTION

PERSONAL PROTECTIVE EQUIPMENT



# **TECHNICAL SPECIFICATION**

#### Structure

- The helmet system provides a base platform that permits interchangeable outer shells of ½ and ¾ sizes (Helmet Type A and Type B) to meet structural, forestry, search, water, high angle, and medical fire and rescue applications.
- The platform provides adequate space to apply ranking symbols.
- Outer shell and front frame are available in seven different colors and reflective striping are available in three different colors to permit multiple color and rank combinations.
- The system is made from as few components as possible.
- The platform must isolate the entire inside of the helmet system. No heat, flames, sparks or liquids are allowed to enter the inside.
- The system provides access for use of stethoscope, cell phones and similar communication devices.
- The total weight shall be as low as possible.
- The system must be certified according to EN443 2008 including all optional tests.
- Helmet Type A must provide same impact protection like Helmet Type B.
- The visor (face protection) and the eye protector must be certified according to EN14458 2004 for firefighting applications.
- Any accessory must be tested and certified for and along with the system.
- Certificate of Compliance for Helmet Mask Combination is requested.

#### Assembly and maintenance

- The complete system and components shall permit quick and easy assembly and disassembly for maintenance, repair, cleaning, and change of applications.
- Complete disassembly or reassembly shall not exceed a few minutes.
- Any component of the system is available separately as a spare part.

#### Outer shell

- Made from Glassfiber Composite material, lowest possible weight, extreme resistance against heat, flames, impact and penetration.
- Minimum requirement: 300°C surface temperature for eight minutes with no delamination.
- Helmet Type A and Type B comes in one unique design.

#### Paint

• Three - layer three - K paint, water based. Glossy finish with UV protection.

## Platform

• Inner liner made from HD Polyurethane with optional Polyurethane coating on the inside. Plastic inserts for visor attachment molded into the PUR liner. Front and rear frame around the inner liner to take visor, eye protector and the entire harness.

#### Visor

- 3-D injection molded, min. 2mm thick with a maximum angle of view to both sides and to the top. The visor shall extend a minimum length of 20cm when deployed and fully retract inside the outer shell in the stowed position. The visor extends and retracts without impeding the use of prescriptive eyewear and protective goggles. The visor extends and retracts over most SCBA masks.
- Visor hardware permits easy replacement.
- The visor is operational with gloved hands.

Date:

April 4, 2016

• The visor is provided with an anti-scratch coating. An optional gold coated visor is also available.

# MAGMA FIRE FIGHTING HELMETS TYPE - B Article No.: 1895BD201

## Harness

- The harness provides maximum comfort, function and air ventilation.
- Minimized contact surface on the wearer's head.
- All attachments designed as quick releases.
- All fabrics / thread are made from Aramid, all pads with non -flammable foam, and all plastic parts are made from non-flammable Nylon.

#### Headband/ratchet system

- Helmet has an adjustable sizing system to accommodate 50-65cm. Sizing adjustment is accomplished by a ratchet headband system while donned. Adjustment is possible with a gloved hand while donned.
- The helmet shell and head ring system design does not impede proper seal of SCBA mask or goggle when properly sized and in the donned position.
- The front part of the head ring as well as the back part including the ratchet system is adjustable vertically and horizontally and independently from each other. The complete headband/ratchet assembly provides quick release attachment and vertical and horizontal adjustment for comfort and balance options.
- Crown strap suspension with quick attachment to the rear frame permits the option of integrated attachment for bone microphones, left and/or right.

## **Chin Strap**

- Front straps with optional comfort padding are separately adjustable for the right and left sides.
- Quick release buckle to the side of the chest. Adjustable rear strap, self positioning with a 2-point attachment to the rear helmet. The rear straps provide an x-shaped 2-dimensional surface-to-surface contact in the wearer's neck.

## Ear-Neck-Protector (ENP)

- The system provides both standard ENP's made from 2-layer Aramid fabric and Dutch ENP's.
- Dutch ENP made from four layers, outer layer Nomex, moisture barrier, permeable membrane and inner liner.

## Accessories

- The system provides at least the following optional accessories:
- Mask Adaption
- Torch Light
- Radio with bone microphone
- Goggles (Polycarbonate lens Certified EN166)
- Eye protection (EN14458)



# PPE Customization Program



Logo, Name or Reflective Tape Placement

Doc. Control:

Rev.:

3.2

This Article Data Sheet (ADS) is designed and produced by FLOWTRONIX (FT) covered under the intellectual

property law. Any reproduction in whole or in part is strictly prohibited without written approval. FT HP 1014-3.2