Experts in fire protection

MINIMAX

Rotating Pop-Up Foam Extinguishing Nozzles for Helidecks

TECHNOLOGIES

ROTATING POP-UP NOZZLE

360° Safety on Helidecks

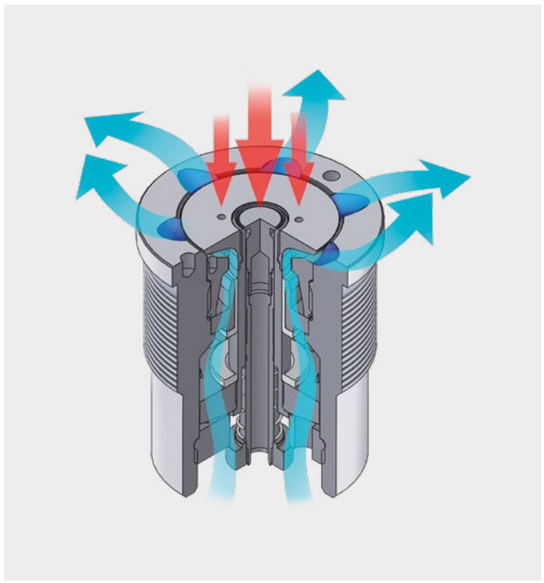
At sea, safety requirements for ships and offshore facilities such as oil platforms are of the utmost importance. This also applies to fire protection measures. After all, in the event of fire, rapid escape is usually impossible and the prompt arrival of help from outside cannot be expected. In light of the various types of fire risks, which exist on board ships, specific solutions are necessary for the space or object to be protected in order to ensure optimal fire protection on board. A helicopter accident, resulting in fuel spillage with wreckage and/or fire and smoke, may render some of the equipment unusable or preclude the use of some passenger escape routes.

The new rotating foam extinguishing nozzles have been designed and developed to meet exacting fire protection requirements for landing decks. The industry`s trend towards ships with smaller crews and unmanned platforms makes this equipment essential for maintaining the safety of these critical areas.

The nozzles are fully recessed in the deck and do not represent a visual obstruction or a potential tripping hazard.

In the event of activation, water pressure pop up the nozzle and will cover the deck area and any large pieces of equipment with a carpet of foam. The special rotational action of the three internal spray jets propelled the extinguishing liquid up to a height of 4.5 meters and increasing the overall coverage area and reduced the required nozzle quantity.

A huge benefit of the nozzles MXD PUN is solving a typical problem on each helicopter place. In case of a blocked baffle plate e. g. through the Helicopter, the extinguishing function is preserved because the water – foam mix can pass through openings to the surface.

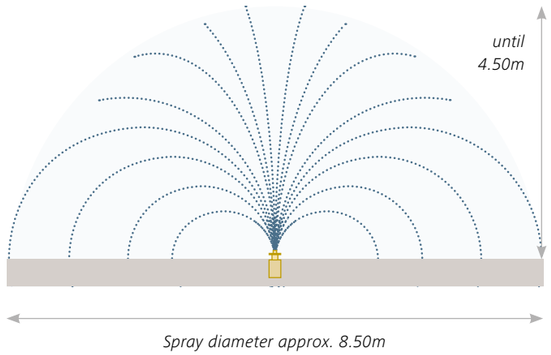


Nozzle function in case of blocked rotor

Open position pop-up foam extinguishing nozzle

How the system works
The system is released manually. The pop-up nozzles are propelled upward by the water pressure and opened. A foam proportioner mixes the water with the corresponding volume of foaming agent, which is stored in a foaming agent tank.

An optional electrical trigger is available. The extinguishing function is preserved.



Spray diameter approx. 8.50m

For each design solution a nozzle is available:

Water density	Foam type	Nozzle solution
3.75 l/m²	Level C	MXD PUN K100 NEW
6 l/m²	Level B	MXD PUN K183

Table: Requirements according to CAP 437

Benefits

- Pop-up design for flush installation on helicopter deck
- Foam is sprayed instantaneously onto the landing surface and any objects placed on it
- Nozzle completely recessed and flush with the deck when not in use
- Reducing water demand through nozzle rotational drive
- Large protection coverage through lifted nozzles
- Pop-up design protect the nozzle in standby mode
- Liquid distribution also in case of blocked rotor
- Quick and cost-effective installation from the top of the deck
- Foam spraying density regarding to CAP 437 (6 l/m²/min and 3.75 l/m²/min)
- Technical details
  - spray coverage: up to 8.5m diameter
  - spray height: up to 4.5m
  - recommended operating pressure 4bar (58psi) only
- Fire main supply feasible
- Approved by many major marine classifications (e.g. DNV, LR, CAA, MED)

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Minimax Fire Solutions
International GmbH
Im Weddern 25
23858 Reinfeld
Germany
Phone: +49 4533 7884-0
marine@minimax.de

Editor:
Minimax GmbH
Industriestrasse 10/12
23840 Bad Oldesloe
Germany
Phone: +49 4531 803-0
www.minimax.com

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