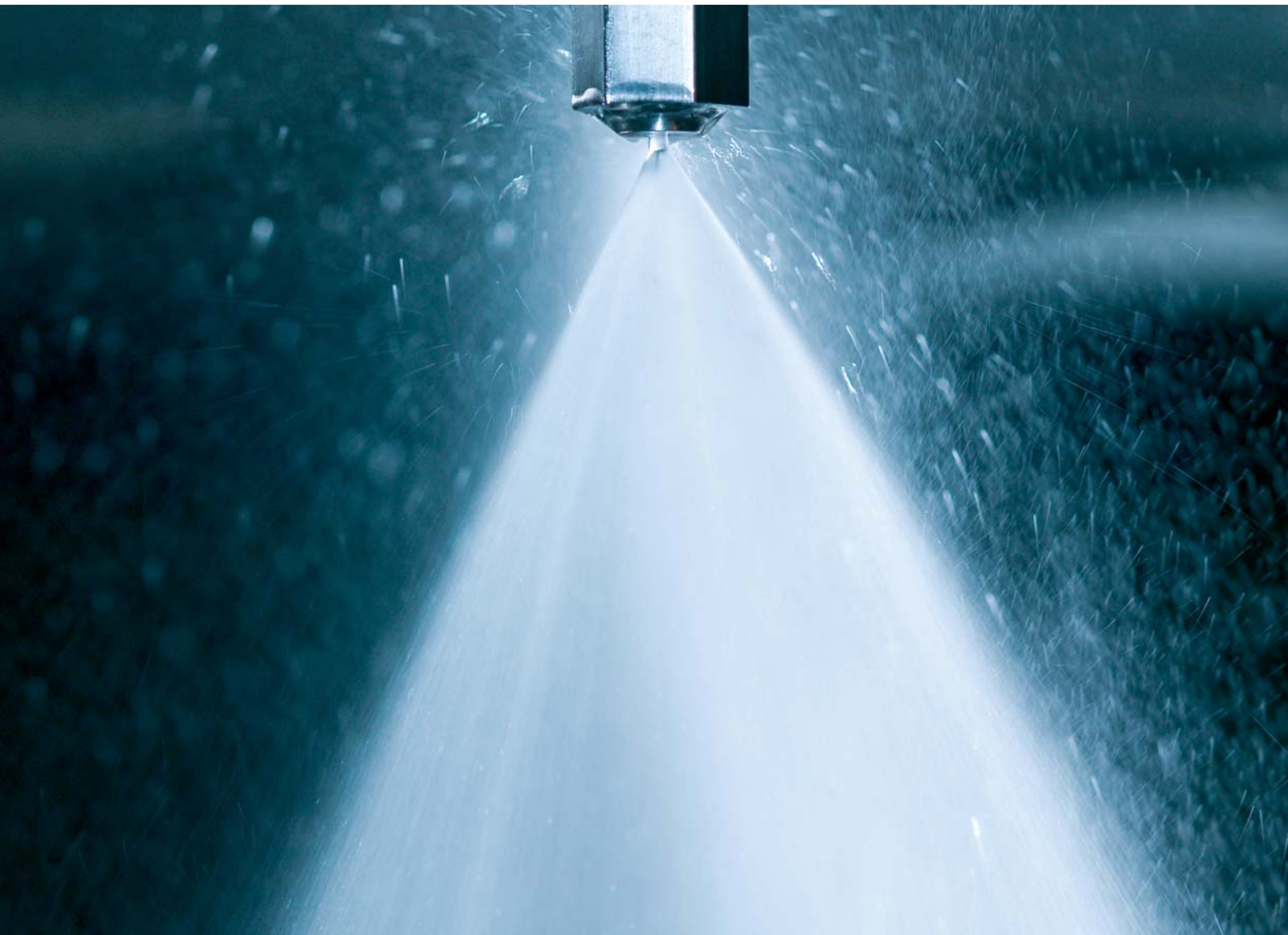


# **XFLOW<sup>®</sup>** **WATER MIST** solutions



# RELIABLE PROTECTION, INSTANT RESPONSE

The Unitor water mist system gives you the opportunity to integrate local and full protection in a single system. The solution can be applied for total flooding, local application fire fighting (LAFF) and accommodation areas.

The Unitor water mist system has a unique XFlow® water mist nozzle, which spreads fine water mist that extinguishes the fire fast, without any risk to the crew or equipment.

**THE UNITOR WATER MIST SYSTEM** provides reliable fire protection based on the newest technology. It gives you a number of advantages, such as:

- Compact design
- Standard components
- Customised layouts
- Low water consumption
- Low maintenance needs
- Low pressure

### Compact design

The Unitor water mist system uses water from the vessel's freshwater tank, with a backup connection for seawater. No dedicated storage space is required, increasing the overall productive space available on your vessel.

One pump and control system can be used for total flooding, local application and accommodation fire fighting in one single application.

### Low water consumption

The secret of the XFlow® technology is the combination of very fine water droplets and water mist using small water consumption. The droplets cool down the fire and extinguish it while the water mist encapsulates and suffocates the fire by keeping out the oxygen.

### Using standard components

The Unitor water mist system uses a water mist nozzle with low working pressure and low water flow. The pipe system components such as fittings and valves are standard components, keeping installation and maintenance costs low.

### System description

#### ENGINE ROOM

For engine room systems, the patented nozzles are mounted in a dry pipe system and released in sections through a total flooding system or for individual objects through local fire fighting systems. The system activation for a section is done manually from release stations in connection with the protected area or remotely from a release panel located at a fire control station, ECR or wheelhouse. For the local application fire fighting system, the release can be automatic and manual.

#### ACCOMMODATION AREAS

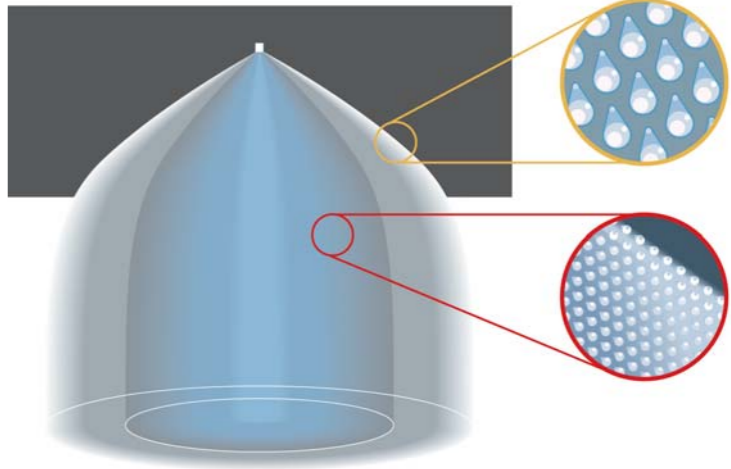
For accommodation areas, the patented nozzles are mounted in a wet pipe system and each water mist nozzle works automatically and independently. The nozzles activate when the fire reaches a certain temperature. The water mist is confined to the area or object affected by the fire, and the system can be activated without closing all vents and full evacuation of staff.

When a water mist nozzle is activated, water starts flowing through the pipes, causing the pressure to drop and the pumps to start. This triggers an optical and acoustic alarm on the bridge.

### Extinguishing fire using water mist

The Unitor water mist system creates a mist of fine water droplets. Droplets in variable sizes circulate in the airflow, suppressing the supply of oxygen and absorbing the heat energy. In that way it breaks the chain of combustion.

Water is an effective agent for fire fighting as it is readily available and environmentally friendly. When water is added as mist it is most efficient at reducing and dissipating heat and thereby controlling, suppressing and extinguishing a fire.



XFlow® technology



XFlow® low pressure nozzle

### APPROVALS

Unitor's fire fighting systems are approved by international marine authorities and classification societies. Wilhelmsen Technical Solutions is certified according to ISO 9001.

### Technical data

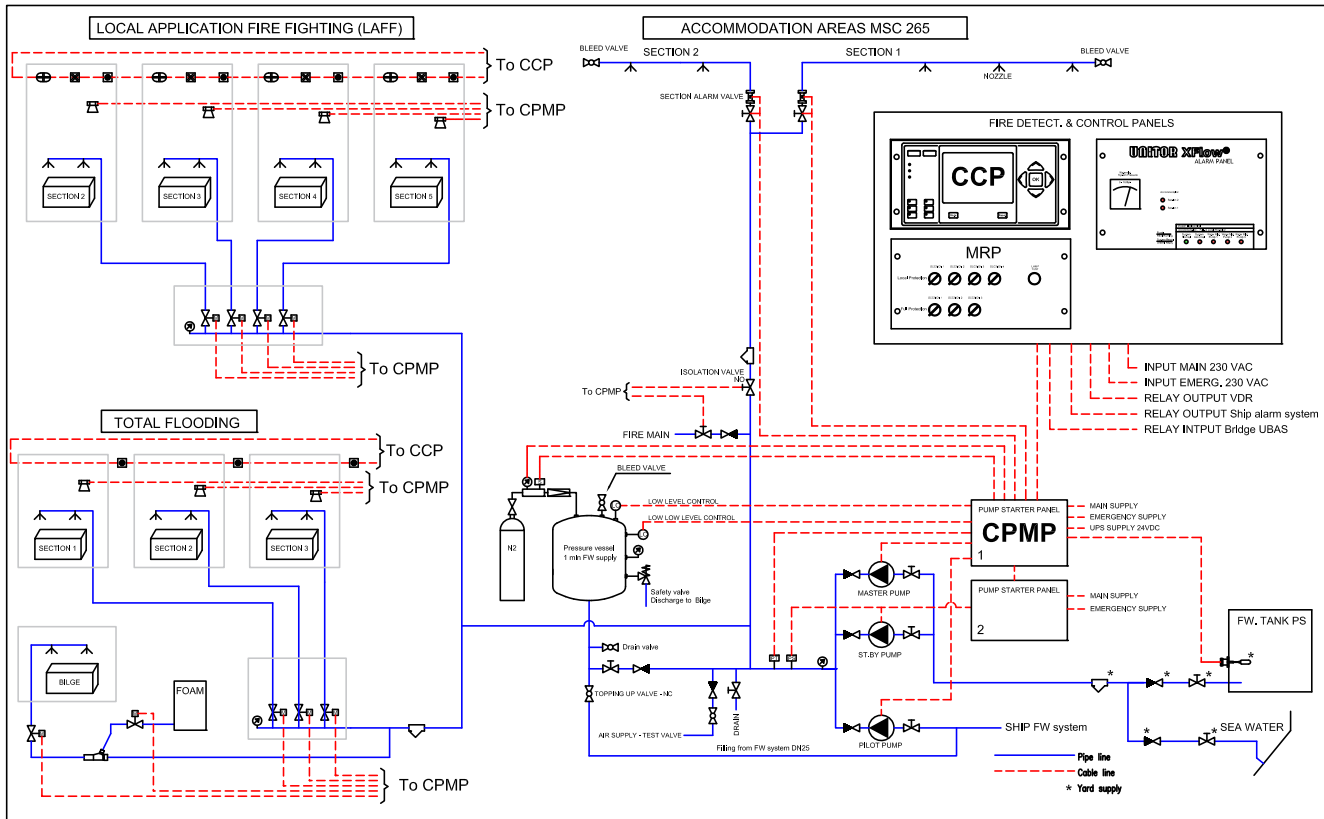
#### NOZZLE

	LAFF	Main flooding	Accommodation
<b>Types</b>	open	open	closed
<b>Material</b>	brass	brass	brass
<b>Water capacity</b>	1.2 to 1.4 l/min/m <sup>2</sup> @ 6.7 to 7.7 bar(g)	1.4 to 1.8 l/min/m <sup>2</sup> @ 9 bar(g)	1.5 to 2.0 l/min/m <sup>2</sup>
<b>Installation height</b>	up to 16.5 m	up to 6.6 m	NA

#### PUMP

	LAFF	Main flooding	Accommodation
<b>Type</b>	centrifugal multistage	centrifugal multistage	centrifugal multistage
<b>Material</b>	cast iron / stainless steel	cast iron / stainless steel	cast iron / stainless steel
<b>Voltage/frequency</b>	3x400/50 and 3x440//60 (or on request)	3x400/50 and 3x440//60 (or on request)	3x400/50 and 3x440//60 (or on request)
<b>Insulation and enclosure</b>	Class F, IP55	Class F, IP55	Class F, IP55

**Standard configuration**



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