

Monitor Systems

A monitor system is a fast acting fire protection system used primarily to protect against rapid fire spread in high risk areas. Due to their specialized nature and compact size, monitor systems typically replace deluge systems in high risk areas or areas with limited space, though both systems can work together as well. Monitor systems may also be used for helicopter deck protection and in other large areas to increase fire protection of those areas.

A monitor system is also versatile enough to be adapted to extinguish pool fires by mixing foam into the water supply at a specific flow.

SYSTEM DESIGN

A monitor system controls the flow of water from a water supply to a monitor system using a valve unit and a control system where required. The valve system can be a simple on-off valve or a pressure regulating valve, as needed. The standard design has the necessary valves and instrumentation to allow for quick, easy-to-use operation, maintenance, and testing. Standard Firenor monitor systems are designed to be efficient, fast-acting firefighting equipment. The system can be customized to conform to any required safety integrity level and can be delivered full flow pre-tested. In addition to the Firenor standard design, the monitor system can be customized to meet specific project requirements. Customizations include

piping on open frame or inside cabinet for environmental protection purposes, and the choice of pneumatic, hydraulic, or electrical signals for the release mechanism.

VERIFICATION

Every system can be customized, upon request, for compliance with applicable rules, regulations and project specific requirements. Full documentation for any tailor-made products are available and include all necessary certifications, third party verifications such as DNV/GL, BV, ABS, etc., and full scale test reports, if required.



Monitor with Cabinet



MONITOR SYSTEMS

FEATURES

- Regulating or non regulating valve
- Flexible design
- Compatible with various hazardous area classifications and regulations (ATEX, UL, CSA etc.)
- Compatible with IEC 61508 for Safety Integrity Level 2 or 3
- Full-scale tests up to 35 000 LPM
- Working environment friendly design

MATERIAI

Every Firenor system is available in the following materials:

- Galvanized carbon steel Duplex
 - SS316
- Copper nickel • Super duplex
- 6Mo

Titanium

- GRF

FOAM SUPPLY

The foam supply for this system can be provided by a separate tank outside or inside the skid, or from a central foam system. The foam can be mixed with a variety of solutions listed below:

- Turbine foam proportioner
- Balanced pressure foam proportioner
- Foam inductors
- Constant flow orifice

MONITORS

The system can be delivered with any of the following types of monitors:

- Manual Monitors
- Self-Oscillating monitors
- Hydraulic or electric powered monitors

CONTROL SYSTEM

An optional SIL rated control system is available for any hydraulic or electric powered monitor system. The control system can be operated through both local and central control panels, allowing for quicker firefighting responses.

DOCUMENTATION

The engineering department produces documentation relevant to all phases of the project. Documentation normally includes the following:

- Quality plan
- Calculations
- ITP
- Certificates Reports

• MRB

• User manual

- Drawings
- Data sheets
- Indexes
- Procedures



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