

SAPPHIRE® PLUS 70-Bar Clean Agent Fire Suppression Systems

Significant Performance Enhancements

Already a time-proven clean agent technology with 25 and 42-bar nominal container pressures, the “PLUS” in the ANSUL® SAPPHIRE PLUS system represents 70-Bar capabilities.

Product Overview



The 70-Bar advantage

- Higher Fill Densities
- Reduced Footprint, Installation Cost and Service Time
- Wider Temperature Range: -18 to 65°C (0 to 149°F)
- Selector Valves and Extended Pipe Runs
- Optimised Pipe Sizes
- Easy Halocarbon Retrofit
- Electric Actuator with Integrated Placement Switch

The ANSUL® SAPPHIRE system has a proven track record for protecting people, the environment and high value assets.

Higher Pressure Equals Greater Flexibility

The SAPPHIRE PLUS system stores 3M™ Novec™ 1230 fire protection fluid at 70 bar (1015 psi) which helps reduce the storage footprint, installation and service time by offering higher fill densities up to 1.4 kg/L (87.4 lb/ft³). The increased pressure also permits the containers to be located much further from the protected space and increases the ability to introduce selector valves to protect multiple hazards from a single container bank. Additionally, pipe sizes can be reduced increasing the economy and design flexibility.

The SAPPHIRE system has a proven track record for protecting people, the environment and high value assets. Each system is custom engineered to quickly suppress fires while eliminating agent cleanup and minimising the downtime that can be associated with other agent types.

Sustainable Technology for Occupied Spaces

3M Novec 1230 Fire Protection Fluid provides a wide safety margin because it is used at concentrations of only 4.5 to 5.9% by volume which is well below the maximum 10% concentration for safe exposure. The agent has zero ozone depletion potential (ODP); and with an atmospheric lifetime between three and five days and a global warming potential of 1.0, it is the most environment friendly of the chemical clean agents. In fact, SAPPHIRE system installations carry a 20-year environmental warranty covering both the agent and the system hardware.

Fast Acting Suppression Reduces Downtime

SAPPHIRE systems work fast, delivering the agent within 6 to 10 seconds, suppressing fires before they have the chance to spread. Most importantly, when a fire is suppressed quickly, the result is less damage, lower refurbishment costs and reduced downtime.

Choose a revolutionary fire suppression system



State-of-the-Art Detection and Control

Automatic detection is provided for single or multiple hazards using an AUTOPULSE conventional or addressable releasing control panel with highly sensitive smoke, heat and flame detectors. When a fire is detected, the system will sound alarms, close doors, shut down equipment and release the SAPPHIRE fire suppression system. Pull stations are also provided for manual system actuation.



Extensive system features

- Total Flooding of Hazard Areas
- Clean Agent Protects Valuable Assets
- Environment and People Friendly Agent
- Fast Acting on Class A, B and C Fires
- UL/ULC and LPCB Listed
- FM Approved
- DOT/TPED Containers

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Applications for the SAPPHIRE PLUS Clean Agent Fire Suppression System

- Air Traffic Control
- Data Centers
- Electrical Switching Rooms
- Heritage Sites
- Machinery Spaces
- Medical Facilities
- Oil and Gas Facilities



The Ultimate Fire Suppression Solution

The ANSUL® brand promises a full range of quality fire protection solutions – from automatic detection and suppression systems to a complete line of wheeled and hand portable fire extinguishers and more. Plus, our extensive network of Authorised ANSUL® Distributors provides factory-trained professionals to serve our customers virtually anywhere in the world.

A Passion for Protection

Dedicated customer support. Extensive product portfolio. Engineering excellence. Trusted, proven brands. Johnson Controls offers all of these attributes, plus a passion for protection. It's what drives us to create solutions to help safeguard what matters most – your valued people, property and business.

For additional information, please visit www.ansul.com or follow us @ansulfire on Twitter.