

GARNET INERT GAS FIRE SUPPRESSION SYSTEM

Designed for total flooding according to NFPA 2001 standards. Uses inert gasses like nitrogen, argon, and carbon dioxide to displace oxygen and suppress fires without harming equipment or leaving damaging residues. Ideal for Class A, B and C hazards.

GARNET541

Representative Agents : IG-541
Gas Composition : 52% Nitrogen + 40%Argon + 8% CO₂

GARNET100

Representative Agents : IG-100
Gas Composition : 100% Nitrogen

GARNET55

Representative Agents : IG-55
Gas Composition : 50% Nitrogen + 50%Argon

GARNET01

Representative Agents : IG-01
Gas Composition : 100%Argon



DISCHARGE NOZZLES are designed to discharge the clean agent from the cylinders upon activation. Nozzles are available in 180° and 360°. The system design determines the type of nozzle suitable for proper flow rate and distribution pattern.

VALVE ASSEMBLY operates by means of pressure differential piston. The valves incorporated with the features to enable it to be connected with manual and pneumatic actuator for actuation purpose. There are two types of valves; Discharge valve and Solenoid Discharge Valve.



MANUAL ACTUATOR is designed to be used and installed with solenoid valve for mechanical actuation. Safety pin is provided with every actuator to prevent accidental discharge. Manual actuator features retractable pin which resets when level back to original position.

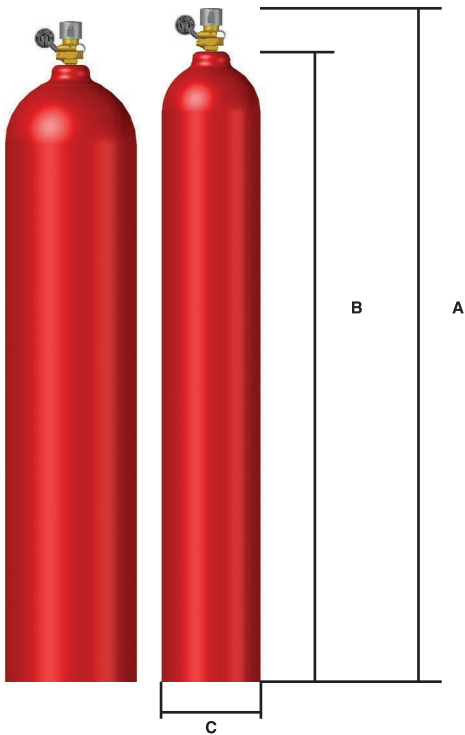


PNEUMATIC MANUAL ACTUATOR is designed to be used and installed with solenoid valve for mechanical or pneumatic actuation.



PNEUMATIC ACTUATOR features a pneumatically driven piston that is used to depress the valve core and open opening the valve for system discharge. It is typically installed and used on the discharge valve for slave cylinders.

CYLINDER ASSEMBLY

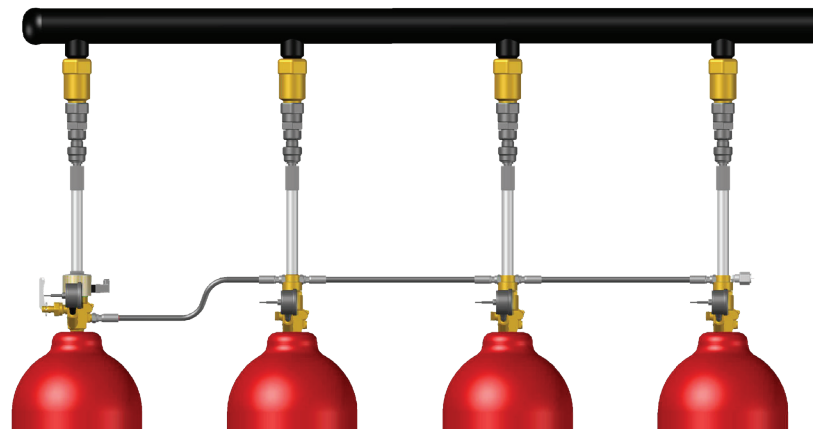


The cylinder assembly comprises of a cylinder factory fitted with a valve, filled with clean agent and pressurised to 200 bar / 300 bar at 15°C (2900psi/4351psi at 59°F). Cylinder are available in 80L/40L. All GARNET inert gas cylinders are manufactured in accordance with ISO-9809 and TPED tested.

Size (L)	Working Pressure	Test Pressure	Height (mm), A	Height (mm), B	Cylinder Diameter (mm), C	Nominal Tare Weight (kg)
80	200 Bar	300 Bar	1840 - 1855	1775	267	92
140			1800 - 1820	1735	356	146
80	300 Bar	450Bar	1870 - 1885	1805	267	110
140			1920 - 1940	1855	356	226

◀ Cylinder Assembly

One master cylinder and others slave cylinders are designated for multiple cylinders installed for intended to discharge simultaneously. In case there is a fire occurs, the master cylinder can be activated either electrically or manually. Whereas, the slave cylinders are activated pneumatically from the discharge action of master cylinder.



Typical Installation Diagram ▶

FEATURES

- ▶ Effective against Class A, B, and C fires
- ▶ Colourless, odourless, and non-contaminating gaseous fire protection
- ▶ Protect critical assets and processes without causing damage
- ▶ Little to no post-discharge clean-up
- ▶ Safe to use in occupied areas
- ▶ Adhere to Montreal Protocol guideline

APPLICATIONS

- ▶ Data centres
- ▶ Power generation
- ▶ Oil & Gas facilities
- ▶ Production plants
- ▶ Marine
- ▶ Museum & archives

