

SECTION 2 - SYSTEM COMPONENTS**Principle of Operation**

The FM-200® valve is a high-flow-rate device specially designed for use in fire systems. Operation is by means of a pressure-differential piston. Container pressure is used within the valve to create a positive force on the piston, sealing the valve closed. Operation of the valve occurs when the upper chamber is vented faster than the 'make up device' in the shuttle can replace the pressure. Thereby allowing, the shuttle to be forced up, and free flow of FM-200® from the valve. Upper chamber pressure is released by the electrical, mechanical or pneumatic actuator.

The valve incorporates the following features:

- A pressure operated safety release device (burst disc).
- Main outlet, fitted with anti-recoil cap.
- A connection for a pneumatic, mechanical or electrical actuator, fitted with safety cap.
- A connection for an electrical solenoid.
- A connection for the pneumatic actuation port.

Burst Disc

A burst disc is factory fitted to every valve assembly. It is designed to rupture when the container becomes over pressurised when subjected to temperatures above the designed storage temperature of the container.

Figure 4 - Burst Disc

Burst Disc for 25 mm (1") Valve
Part No. 20915Burst Disc for 50 mm (2") Valve
Part No. 20915Burst Disc for 80 mm (3") Valve
Part No. 15330**Technical Information****25 mm (1") Valve & 50 mm (2") Valve**

Body:	Brass CZ 121
Rating:	53.4 bar (774.5 psi) @ 50 °C (122 °F)
Thread:	M18 x 1.00
Hole Orientation:	90° to Body
Torque:	35 Nm (25.8 lbs.ft)
Overall Size :	20mm (L) x 18mm (Dia) (0.79" (L) x 0.71" (Dia))
Weight:	0.028 kg (0.062 lbs)

80 mm (3") Valve

Body:	Brass UNS-C36000
Rating:	52 bar (760 psi) @ 50 °C (122 °F)
Thread:	0.9375-16UN-3A
Hole Orientation:	90° to Body
Torque:	68 Nm (50 lbs.ft)
Overall Size :	33.3mm (L) x 18mm (Dia) (1.3125" (L) x 0.71" (Dia))
Weight:	0.088 kg (0.195 lbs)