

Dry Pipe Valves

In buildings where it is impractical to keep temperatures above freezing, automatic sprinkler systems can be equipped with an FM Approved dry pipe valve. The sprinkler piping contains air under pressure, instead of water. When a sprinkler operates, air escapes, the dry pipe valve trips, and water is admitted automatically to the system. Dry pipe systems should be installed in accordance with FM Global Loss Prevention Data Sheet 2-8N, Installation of Sprinkler Systems. Additionally, if their use is intended for refrigerated storage, FM Global Loss Prevention Data Sheet 8-29 should be referred to. System calculations regarding required system air capacity should be performed if only one air pressure maintenance device is contemplated for several sprinkler systems.

Dry pipe valves are designed so that a moderate amount of air pressure will hold back a much greater water pressure. In the *differential type*, the air pressure holds the water clapper closed either by means of a difference in areas on which the water and air pressures act, or by a combination of this principal with a lever action. In the *mechanical type*, a clapper on the water seat is held closed by a system of levers which are controlled by a relatively small air clapper.

A suitable alarm is connected to the dry pipe valve so that a warning is given when the valve operates. This may be a mechanical alarm that operates by a hydraulic motor, or a hydraulic pressure switch that closes an electric circuit to operate a bell, horn, or remote signaling system. Unless otherwise noted in the listing, these dry pipe valves have 175 psi (1205 kPa) rated working pressure.

Models LF-DAV100A, LF-DAV150A

Model LF-DAV100A Dry Pipe Valve System consists of the Model LF-DAV100A Dry Pipe Valve in 4 inch (100 mm) NPS. Model LF-DAV150A Dry Pipe Valve System consists of the Model LF-DAV150A Dry Pipe Valve in 6 inch (150 mm) NPS. A mechanical latch prevents the valve from resetting after tripping. The Models LF-DAV100A / LF-DAV150A Dry Pipe Valves have an external reset feature whereas an external knob is pushed in to reseal the clapper. The Models LF-DAV100A / LF-DAV150A Dry Pipe Valves have flanged inlet and outlet end connections. The Models LF-DAV100A / LF-DAV150A system is designed for systems with water supply pressures from 20 psi (138 kPa) to 175 psi (1205 kPa), and corresponding sprinkler system air pressures of 20 psi (138 kPa) to 38 psi (265 kPa). A loss of system air pressure, such as when a sprinkler activates, results in the translation of the piston seat which allows the priming chamber to vent which opens the Models LF-DAV100A / LF-DAV150A valve, sending water to the sprinklers and sounding alarms.

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New/Updated Product Listing:	No
Listing Country:	United Kingdom
Certification Type:	FM Approved