



Data Sheet UFS-110G

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SPRINKLER-PAC GENERATION 3 – DRY-PIPE VALVE

FEATURES

- Fully factory assembled and tested
- No field assembly required
- Just connect water supply, drain, and sprinkler piping
- Attractive and rugged metal enclosure
- Easy-to-see gauges on enclosure front
- Separate, lockable valve and electrical enclosures
- Space for required spare sprinkler heads and wrench
- UL / FM / NYC approved major components
- 2-1/2 and 3 inch valve options

BENEFITS

- Saves assembly and installation time
- Quicker commissioning – just place, connect, and it's ready
- Finished appearance allows placement in or near protected space
- Reliable, dependable protection that functions as designed
- Easy inspection and maintenance
- Expert in-house and field technical support

DESCRIPTION

The **UNITED Fire Systems SPRINKLER-PAC** is a fully assembled dry-pipe sprinkler valve fire suppression system, including dry-pipe valve and trim, providing one complete zone of dry-pipe water sprinkler fire protection. All components are contained in two (2) powder-coated steel enclosures assembled one above the other. The system pressure gauges are mounted on the front of the valve enclosure. The connections allowing monitoring of waterflow, tamper, and low / high air signaling switches are behind the electrical enclosure door. Lockable latches on both doors permit restricted access to connections and components. A manual release valve is located behind a non-locking door on the valve enclosure. Gasketing provides sealing of the enclosure doors. Knockouts permit easy attachment of external electrical raceways.

Dry-Pipe Valve

The dry-pipe valve assembled in the **SPRINKLER-PAC** is a differential offset single-clapper valve with a unique design. The valve body is lightweight ductile iron. The loss of supervisory pressure (air or nitrogen) through an operated automatic sprinkler head in response to heat from a fire permits the valve to open, allowing a flow of water into the sprinkler system piping. The reset procedure is simple, through the elimination of priming water.

Piping

Water inlet and drain connections are located on the lower left and right side of the valve enclosure. The outlet connection is on the top surface of the valve enclosure, behind the electrical enclosure. Grooved pipe is used for the inlet and outlet connections.

Wiring

Monitoring and supervisory circuits are connected from switches in the valve enclosure to a terminal strip in the electrical enclosure. No access to the inside of the valve enclosure is necessary to complete the wiring installation.



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Options

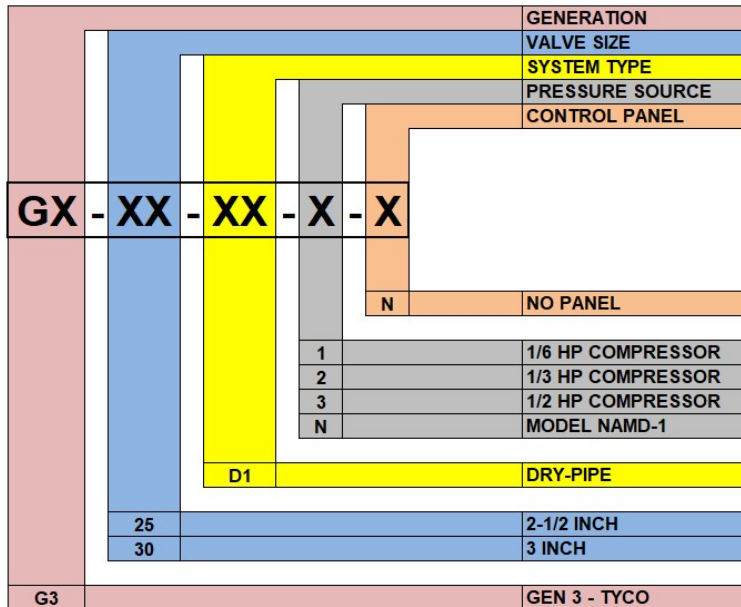
- Choice of dry-pipe valve size (2-1/2" and 3").
- Choice of compressor size - refer to **Table B**
- Installed Model NAMD-1 pressure maintenance device, making the assembly ready for external supervisory pressure source
- Integrated nitrogen-based corrosion-inhibiting system (refer to Data Sheet **UFS-110H**)

Specifications

- Maximum Service Pressure: 250 PSIG (1720 kPa gauge)
- System Supervisory Pressure Range: Dependent upon water pressure - refer to **Table C**.
- Minimum Supervisory Pressure: 10 PSIG (70 kPa gauge)
- Maximum Supervisory Pressure: 68 PSIG (470 kPa gauge)
- Electrical Enclosure: 14 gauge steel with continuous welded seams
- Valve Enclosure: 12 gauge steel with continuous welded seams
- Access Doors: Full hinge with oil-resistant gaskets

NOTE: Refer to **Table C**. Air compressors built-in to G3-XX-D1-1-X, G3-XX-D1-2-X, and G3-XX-D1-3-X assemblies by **UNITED Fire Systems** provide 13 to 18 PSIG supervisory pressure. Limit the water pressure to 60 PSIG when these assemblies are used. If water pressure will be higher, choose assembly G3-XX-D1-N-X, and provide an external air compressor.

Ordering Information



Dimensions - Refer to Table A

Dimension	Length
A - Depth	24
B - Valve Enclosure	52
C - Electrical Enclosure	10
D - Width	30
E - Height	64

NOTE: All dimensions are in inches

Table A - Dimensions

Compressor HP	Maximum Sprinkler Pipe Volume Gallons
1/6	220
1/3	430
1/2	670

Maximum sprinkler pipe volume is for initial-fill to 18 PSIG in 30 minutes to satisfy NFPA 13 - 2015 sections 7.2 and 7.3

Table B - Built-In Compressor Capacity

Maximum Water Supply Pressure PSIG	Required Supervisory Pressure Range PSIG
20	10
60	15 - 23
80	20 - 26
100	25 - 33
120	30 - 38
145	35 - 43
165	40 - 48
185	45 - 53
205	50 - 58
225	55 - 63
250	60 - 68

Table C - System Supervisory Pressure Requirements

