



APPROVED

Data Sheet UFS-110C

Rev 3.02 Page 1 of 2



## PREACTION-PAC GENERATION 3

### FEATURES

- **FM Approved**
- **NYC FD Certificate of Approval #6148**
- Includes preaction valve with optional control panel and supervisory pressure source
- Fully factory assembled, programmed, and tested
- No field assembly required
- Just connect water supply, drain, sprinkler piping, power, and electrical devices
- Lower left or right side water inlet and drain connections

### BENEFITS

- Saves assembly, programming, and installation time
- Installation drawings available
- Quicker commissioning – just place, connect, and it's ready
- Easy inspection and maintenance

### DESCRIPTION

The **FM Approved UNITED Fire Systems PREACTION-PAC™** is a fully assembled preaction fire suppression system, including preaction valve, trim, and optional control panel, providing one complete zone of preaction water sprinkler fire protection. All components are contained in two (2) red powder-coated steel enclosures assembled one above the other. The system pressure gauges are mounted on the front of the valve enclosure. The system detection and control panel is mounted behind a door on the electrical enclosure with a clear polycarbonate window allowing examination of the system visual indicators. 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.

### Precision Valve

The preaction valve assembled in the **PREACTION-PAC** uses a diaphragm to separate the system water supply from the system piping. The valve uses the supply water pressure in the diaphragm chamber to hold the diaphragm closed against the water supply pressure. When the water pressure in the diaphragm chamber is released, the valve actuates. The diaphragm style design of the pre-action valve allows for external resetting. Re-pressurizing the diaphragm chamber resets the valve.

### Piping

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

### Detection & Control Panel

Optional control panels allow for a simple, full-featured system with conventional detection, or a fully programmable and networkable addressable system. All necessary internal wiring connections are factory-assembled and tested.

- Attractive, rugged, powder-coated metal enclosures
- Separate, lockable valve and electrical enclosures
- Easy-to-see pressure gauges on enclosure front
- Manual actuation valve behind separate non-locking door
- Space for required spare sprinkler heads and wrench
- Easy-to-follow instructions on enclosure front
- 2 inch, 3 inch, and 4 inch valve options
- Addressable or conventional control panel options

- Finished appearance allows placement in or near protected space
- Rapid access to manual release handle without a key
- Reliable, dependable protection that functions as designed
- Expert in-house field and technical support



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**Data Sheet UFS-110C**  
Rev 3.02 Page 2 of 2



**Wiring**

Power for the control panel is factory-connected to come from the same 115 VAC 60 Hz single-phase source as the built-in compressor, or jumpers may be removed to permit two (2) separate power sources to be used. External wiring is brought to a terminal strip in the electrical enclosure. No access to the inside of the valve enclosure is necessary to complete the wiring installation. All necessary internal wiring for waterflow, tamper, and supervisory switches, plus solenoid activation, is factory-installed and tested.

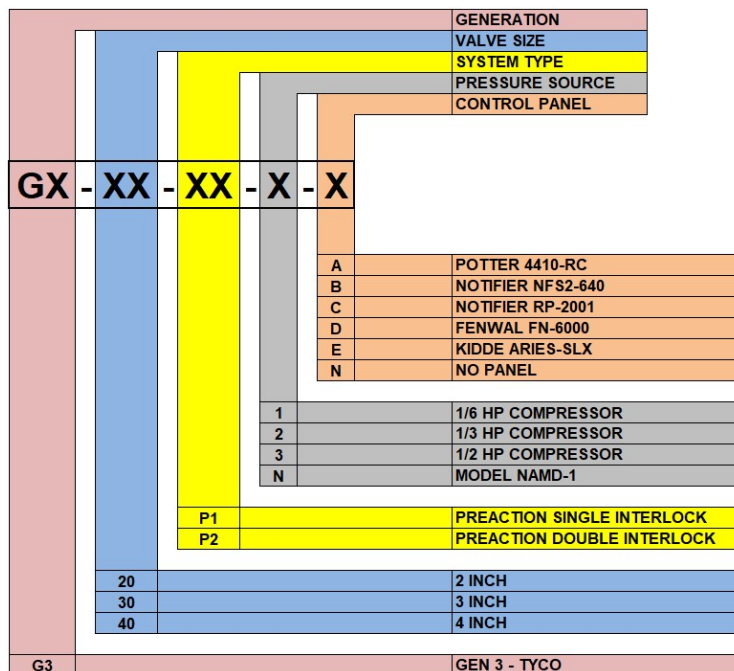
**Options (refer to Ordering Information)**

- Choice of preaction valve size (2 inch, 3 inch, or 4 inch)
- Choice of compressor size - Refer to **Table B**
- Choice of control panel (2 conventional and 3 addressable panels available)
- Installed **FM Approved** 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-110D**)

**Specifications**

- Maximum Service Pressure: 300 PSIG (2065 kPa gauge)
- Supervisory Pressure: 15 ± 2 PSIG (103 ± 13 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
- External Power Requirement: 115 VAC, 60 Hz, single-phase, (1) or (2) circuits. Maximum current draw 7.2 A

**Ordering Information**

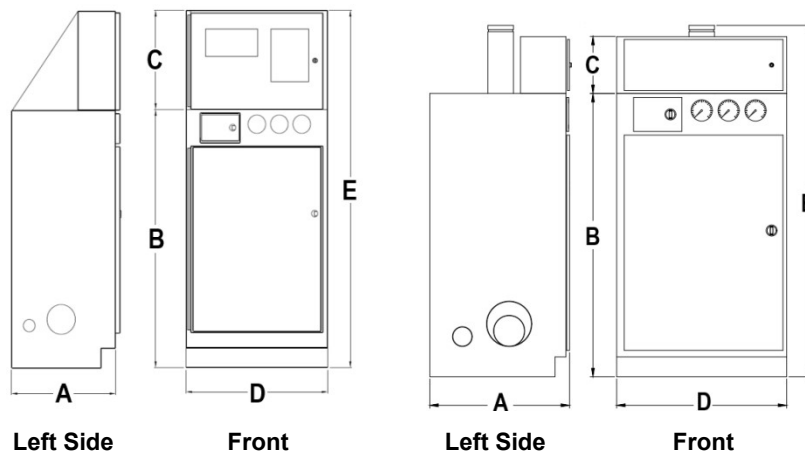


Dimension	With or Without Control Panel	Length
A - Depth	Both	24
B - Valve Enclosure	Both	52
C - Electrical Enclosure	With	20
	Without	10
D - Width	Both	30
E - Height	With	72
	Without	64

**NOTE: All dimensions are in inches.**

**Table A - Dimensions**

**Dimensions - Refer to Table A**  
With Control Panel      Without Control Panel



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**

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