

LISTING SHEETS

☞Automatic Sprinkler Systems ☞Sprinkler Systems ☞Vacuum Systems ☞Dry Pipe

FireFlex/VACTEC Dry Pipe Vacuum System

The FireFlex/VACTEC Vacuum System is pre-assembled and pre-wired with all electrical and mechanical components contained in a single enclosure. Connections required for installation are a water supply inlet, water discharge outlet, main drain, electrical detection and alarm connections (if applicable) and AC power lines. The discharge outlet is connected to a vacuum sprinkler piping network.

The FireFlex/VACTEC Dry Pipe Vacuum System operates upon loss of vacuum when a sprinkler operates. Loss of vacuum is detected by the FireFlex Model FLX-PC vacuum pressure controller and a signal is sent to the release control panel to open the solenoid valve on the control valve trim. This results in the control valve opening and the system filling with water. No additional Fire Alarm detection is required or used.

When equipped with a fail-safe option, a VACTEC Model VORV-3 vacuum operated relief valve will operate mechanically upon loss of vacuum from a sprinkler operation in the event of electrical component failure. This operation results in the control valve opening and the system filling with water.

| <i>Valve Size, inch</i> | <i>Pressure Rating, psi (kPa)</i> | <i>System Supervisory Vacuum Pressure, psi (mbar)</i> | <i>Water Supply and Outlet Connections</i> | <i>Remarks</i> |
|-------------------------|-----------------------------------|---|---|----------------|
| 3, 4, 6, 8 | 175 psi (1210 kPa) | 2.175 (150) min 2.611 (180) max | Grooved-Grooved Flanged- Flanged Flanged- Grooved | a, b, c |

Remarks:

a. Installations must adhere to the design constraints detailed in the manufacturer’s Design Manual and FM Global Property Loss Prevention Data Sheets.

b. Vacuum systems must be installed in conjunction with compatible FM Approved Vacuum System Sprinklers.

c. Considered FM Approved with or without a fail-safe option

FireFlex/VACTEC Vacuum Non-interlock Preaction System

The FireFlex/VACTEC Vacuum System is pre-assembled and pre-wired with all electrical and mechanical components contained in a single enclosure. Connections required for installation are a water supply inlet, water discharge outlet, main drain, electrical detection and alarm connections (if applicable) and AC power lines. The discharge outlet is connected to a vacuum sprinkler piping network.

The FireFlex/VACTEC Vacuum Non-interlock Preaction System operates upon either a loss of vacuum when a sprinkler operates or when Fire Alarm detection is activated. Loss of vacuum is detected by the FireFlex Model FLX-PC vacuum pressure controller and a signal is sent to the release control panel to open the solenoid valve on the control valve trim. Alternatively, a Fire Alarm detector (not included with the vacuum system) activates and sends a signal to the release control panel to open the solenoid valve on the control valve trim. This results in the control valve opening and the system filling with water.

When equipped with a fail-safe option, a VACTEC Model VORV-3 vacuum operated relief valve will operate mechanically upon loss of vacuum from a sprinkler operation in the event of electrical component failure. This operation results in the control valve opening and the system filling with water.

| Valve Size, inch | Pressure Rating, psi (kPa) | System Supervisory Vacuum Pressure, psi (mbar) | Water Supply and Outlet Connections | Remarks |
|-------------------------|-----------------------------------|---|---|----------------|
| 3, 4, 6, 8 | 175 psi (1210 kPa) | 2.175 (150) min 2.611 (180) max | Grooved-Grooved Flanged- Flanged Flanged- Grooved | a, b, c |

Remarks:

- a. Installations must adhere to the design constraints detailed in the manufacturer's Design Manual and FM Global Property Loss Prevention Data Sheets.*
- b. Vacuum systems must be installed in conjunction with compatible FM Approved Vacuum System Sprinklers.*
- c. Considered FM Approved with or without a fail-safe option*

FireFlex/VACTEC Vacuum Single-interlock Preaction System

The FireFlex/VACTEC Vacuum System is pre-assembled and pre-wired with all electrical and mechanical components contained in a single enclosure. Connections required for installation are a water supply inlet, water discharge outlet, main drain, electrical detection and alarm connections (if applicable) and AC power lines. The discharge outlet is connected to a vacuum sprinkler piping network.

The FireFlex/VACTEC Vacuum Single-interlock Preaction System operates when Fire Alarm detection is activated and a signal is sent to the release control panel to open the solenoid valve on the control valve trim. This results in the control valve opening and the piping network filling with water. If a sprinkler operates without Fire Alarm detection activation, the loss of vacuum is detected by the FireFlex Model FLX-PC vacuum pressure controller and a low vacuum pressure alarm signal is activated and displayed on the release control panel but the system does not operate.

| Valve Size, inch | Pressure Rating, psi (kPa) | System Supervisory Vacuum Pressure, psi (mbar) | Water Supply and Outlet Connections | Remarks |
|-------------------------|-----------------------------------|---|---|----------------|
| 3, 4, 6, 8 | 175 psi (1210 kPa) | 2.175 (150) min 2.611 (180) max | Grooved-Grooved Flanged- Flanged Flanged- Grooved | a, b |

Remarks:

a. Installations must adhere to the design constraints detailed in the manufacturer's Design Manual and FM Global Property Loss Prevention Data Sheets.

b. Vacuum systems must be installed in conjunction with compatible FM Approved Vacuum System Sprinklers.

FireFlex/VACTEC Vacuum Double-interlock Preaction

The FireFlex/VACTEC Vacuum System is pre-assembled and pre-wired with all electrical and mechanical components contained in a single enclosure. Connections required for installation are a water supply inlet, water discharge outlet, main drain, electrical detection and alarm connections (if applicable) and AC power lines. The discharge outlet is connected to a vacuum sprinkler piping network.

The FireFlex/VACTEC Vacuum Double-interlock Preaction System operates when Fire Alarm detection is activated and a sprinkler operates resulting in a loss of vacuum pressure detected by the FireFlex Model FLX-PC vacuum pressure controller. When both conditions are satisfied, the release control panel opens the solenoid valve on the control valve trim. This results in the control valve opening and the piping network filling with water. The system does not operate when Fire Alarm detection is activated without a loss in vacuum pressure from a sprinkler operation; this results only in an alarm signal displayed on the release control panel. Conversely, if a sprinkler operates and there is a loss of vacuum pressure without Fire Alarm detection, a low vacuum pressure alarm signal is activated and displayed on the release control panel but the system does not operate.

| <i>Valve Size, inch</i> | <i>Pressure Rating, psi (kPa)</i> | <i>System Supervisory Vacuum Pressure, psi (mbar)</i> | <i>Water Supply and Outlet Connections</i> | <i>Remarks</i> |
|-------------------------|-----------------------------------|---|---|----------------|
| 3, 4, 6, 8 | 175 psi (1210 kPa) | 2.175 (150) min 2.611 (180) max | Grooved-Grooved Flanged- Flanged Flanged- Grooved | a, b |

Remarks:

a. Installations must adhere to the design constraints detailed in the manufacturer's Design Manual and FM Global Property Loss Prevention Data Sheets.

b. Vacuum systems must be installed in conjunction with compatible FM Approved Vacuum System Sprinklers.