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Fixed Extinguishing Systems | Deluge and Preaction Systems | **Preaction Sprinkler Systems**

Model DV-5A Single Interlock Preaction System

Product Description

Model No	Release Type	Valve Size		Rated Working Pressure		End Connection	Remarks
		in	(mm)	psi	(kPa)		
DV-5A	Wet Pilot	1 1/2, 2, 3, 4, 6, 8	(40, 50, 80, 100, 150, 165.1, 200)	300	(2065)	Grooved	a, g, j, k, m
DV-5A	Wet Pilot	1 1/2, 2	(40, 50)	300	(2065)	Threaded	a, b, g, j, k, m
DV-5A	Wet Pilot	3, 4, 6, 8	(80, 100, 150, 200)	300	(2065)	Flanged	a, g, j, k, m
DV-5A	Wet Pilot	3, 4, 6, 8	(80, 100, 150, 200)	300	(2065)	Grooved x Flanged	a, g, j, k, m
DV-5A	Dry Pilot	1 1/2, 2, 3, 4, 6, 8	(40, 50, 80, 100, 150, 165.1, 200)	250	(1720)	Grooved	a, f, g, h, j, k, m
DV-5A	Dry Pilot	1 1/2, 2	(40, 50)	250	(1720)	Threaded	a, b, f, g, h, j, k, m
DV-5A	Dry Pilot	3, 4, 6, 8	(80, 100, 150, 200)	250	(1720)	Flanged	a, f, g, h, j, k, m
DV-5A	Dry Pilot	3, 4, 6, 8	(80, 100, 150, 200)	250	(1720)	Grooved x Flanged	a, f, g, h, j, k, m
DV-5A	Electric	1 1/2, 2, 3, 4, 6, 8	(40, 50, 80, 100, 150, 165.1, 200)	See Remarks		Grooved	a, c, d, e, g, i, j, k, l, m
DV-5A	Electric	1 1/2, 2	(40, 50)	See Remarks		Threaded	a, b, c, d, e, g, i, j, k, l, m
DV-5A	Electric	3, 4, 6, 8	(80, 100, 150, 200)	See Remarks		Flanged	a, c, d, e, g, i, j, k, l, m
DV-5A	Electric	3, 4, 6, 8	(80, 100, 150, 200)	See Remarks		Grooved x Flanged	a, c, d, e, g, i, j, k, l, m

Remarks:

a. Approved when supplied with a main control valve body ASTM A536 ductile iron.

b. Approved when supplied with a main control valve body ASTM A351 CF8M stainless steel (size 1-1/2 inch NPS threaded end connections only).

c. The rated working pressure is limited to the rated pressure of the release trim solenoid valve.

d. Approved when equipped with a Skinner Model 73218BN4UNLVN0C111C2 two-way normally closed solenoid valve, 24 V dc, 10 W, ½ in. NPS, Cv Factor 4.0, Rated Working Pressure of 175 psi (1210 kPa).

e. Approved when equipped with a Skinner Model 73212BN4TNLVN0C322C2 two-way normally closed solenoid valve, 24 V dc, 22.6 W, ½ in. NPS, Cv Factor 2.8, Rated Working Pressure of 300 psi (2070 kPa).

f. Approved when supplied with a Model DP-1 dry pilot valve .

g. Approved when supplied with a Potter PS10-1 or PS10-2 waterflow pressure alarm switch.

h. Approved when supplied with a Potter PS40-1 or PS40-2 low pressure alarm switch.

i. Approved when equipped with a Skinner Model 73218BN4UNLVN0H111C2 two-way normally closed solenoid valve, 24 V dc, 10 W, ½ in. NPS, Cv Factor 4.0, Rated Working Pressure of 175 psi (1210 kPa).

j. Approved when factory assembled vertically inside the Model DV-5A Red-E Cabinet. The Red-E cabinet and assembled system components comprise an integrated fire protection system which is assembled and tested at the factory.

k. Approved when DV-5A valve and trim assembled horizontally or vertically.

l. Approved when equipped with a Ningbo Yongxing two-way normally closed solenoid valve 24 V dc, 12 W, ½ in. NPS, Rated Working Pressure of 230 psi (1600 kPa).
m. Optional Supervisory Switches: Tyco TPS10X1 or TPS10X2 waterflow pressure switch and Tyco TPS40X1 or TPS40X2 low pressure alarm switch.

Details

Category	Preaction Sprinkler Systems
Class of Work	1012 - Pre-Action Sprinkler Systems
Approval Standard	FM 1011, 1012, 1013 - Deluge and Preaction Systems
Certification Type	FM Approved
Listing Country	United States of America

Company

Tyco Fire & Building Products
1467 Elmwood Ave, Cranston ,
Rhode Island 02910
United States of America
http://tyco-fire.com

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Additional Info

Automatic Sprinkler Systems

Sprinkler Systems

Preaction Sprinkler Systems
Preaction sprinkler systems are equipped with automatic sprinklers and are used where it is important to prevent the accidental discharge of water. These systems may also be used where an alarm is desired in advance of sprinkler operation or where it is desired to minimize the water delivery delay inherent in a standard dry-pipe system. For this reason, the following factors shall be carefully assessed: detector spacing and sensitivity, sprinkler piping arrangement and ceiling construction.

Supervisory pressure is maintained in the sprinkler piping of a preaction sprinkler system. A trouble alarm sounds if the supervisory pressure is not maintained; however, such a condition will not cause the automatic water control valve to operate. Generally, a single check valve is installed downstream of the automatic water control valve to contain the supervisory pressure. Except for the addition of a single check valve and the use of automatic sprinklers, components of preaction sprinkler systems are identical or similar to those of deluge sprinkler systems.

The water supply is held back by a water control valve which is operated manually or automatically by the actuation of a fire detection system. The fire detection system is required to be one of the following types: hydraulic rate-of-rise, pneumatic rate-of-rise or electric. Compatible FM Approved Release Control Panels for use with electric release preaction sprinkler system(s) are listed under RELEASE CONTROL PANEL COMPATIBILITY.

Electrically operated preaction sprinkler systems are FM Approved on a component basis. Only the major, compatible components noted in the sprinkler system listing shall be used in designing an FM Approved system. FM Global installation acceptance may stipulate that only heat-actuated fire detection devices be used. Acceptance criteria by other jurisdictional authorities may vary.

Preaction sprinkler systems are FM Approved as complete systems. *Only the listed components for a specific manufacturer shall be used in an FM Approved system.*