

tyco

Fire Products

Features and Benefits

- Full Comprehensive Line of Alarm Valves
- Lightweight Ductile Iron Bodies
- UL & CUL Listed, as well as FM Approved
- Compatible with RC-1 Retarding Chamber
- Can be Installed in Vertical & Horizontal Position
- Flanged x Flanged, Flanged x Grooved & Grooved x Grooved Available

Model AV-1

Model AV-1 Alarm Check Valve,
300 psi (20,7 bar) 2-1/2, 4, 6, & 8 Inch
(TFP910)



General Description

The Model AV-1 Alarm Check Valves are divided seat ring, rubber faced clapper, waterflow alarm check valves that are intended for use in wet pipe (automatic sprinkler) fire protection systems. They may be installed vertically or horizontally, and they are designed to automatically actuate electric and/or hydraulic alarms when there is a steady flow of water into the system that is equivalent to the discharge rate of one or more sprinklers.

A separately ordered, Model RC-1 Retard Chamber (TFP920) is required for installations subject to variable pressures. It is used to help prevent false alarms associated with pressure variations in public water supplies.

The AV-1-300 Alarm Check Valve Trim includes pressure gauges to monitor system pressure conditions, a by-pass check valve, a main drain valve, and an alarm test valve. The bypass check valve reduces the possibility of false alarms by permitting slow as well as small transient increases in water supply pressure to be passed through to the system without opening the waterway clapper.

Technical Data

Approvals

UL and C-UL Listed, as well as FM Approved.

Working Water Pressure Range

20 to 300 psi (1,4 to 20,7 bar).

Physical Characteristics

The body is ductile iron, the handhole cover is ductile iron or cast iron, and the seat ring is bronze. The clapper for the 2-1/2 inch (DN65) valve size is stainless steel. The clapper for the larger valve sizes is either cast or ductile iron. All valve sizes utilize an EPDM clapper facing. Threaded port connections for the AV-1 Valves are available NPT threaded or threaded per ISO 7/1 as detailed in the Ordering Procedure section.

Nominal Valve Size	● End Connection Available		
	Inlet x Outlet		
	Groove x Groove	Flange x Groove	Flange x Flange
2-1/2 Inch (DN65)	● 22 lbs. (10,0 Kg)	● 28 lbs. (12,7 Kg)	N/A
4 Inch (DN100)	● 45 lbs. (20,4 Kg)	● 51 lbs. (23,1 Kg)	● 62 lbs. (28,1 Kg)
6 Inch (DN150)	● 68 lbs. (30,9 Kg)	● 78 lbs. (35,4 Kg)	● 93 lbs. (42,2 Kg)
8 Inch (DN200)	● 129 lbs. (58,6 Kg)	● 148 lbs. (67,1 Kg)	● 167 lbs. (75,8 Kg)

(Always refer to Technical Data Sheet [TFP910] for complete description of all Listing criteria, design parameters, installation instructions, care and maintenance guidelines, and our limited warranty).

MODEL AV-1

Ordering Procedure

Standard AV-1-300 Alarm Check Valve (American Standard Flange Drilling, American Threaded Ports, and American Groove Outside Diameter, as applicable):

Specify: (specify size inch) Model AV-1-300 Alarm Check Valve with (specify end connections), P/N (specify).

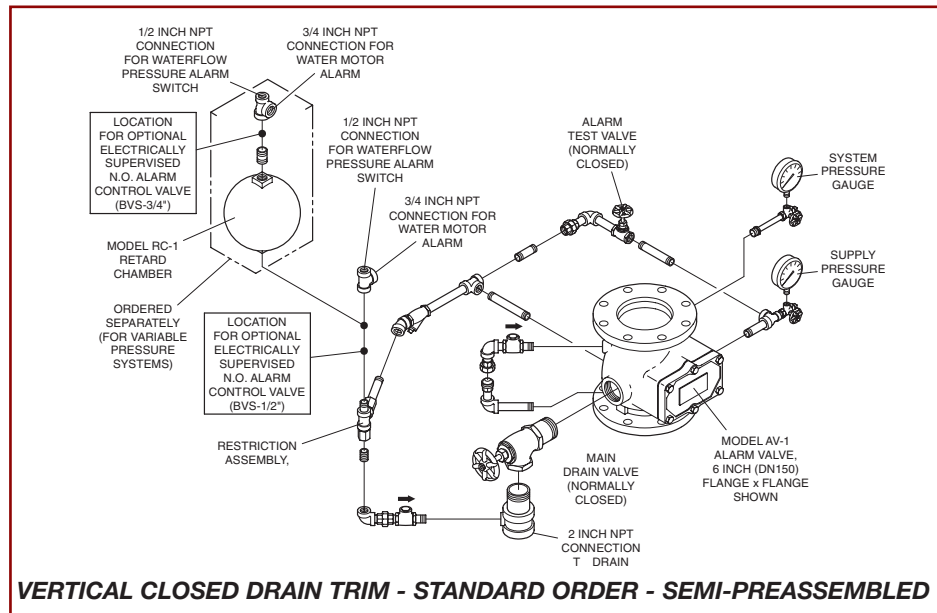
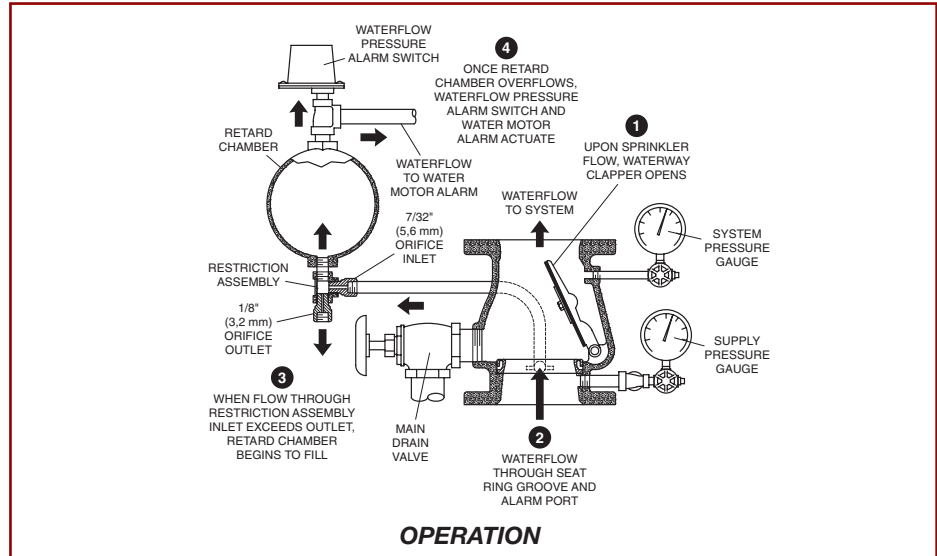
- 2-1/2 Inch G x G
2.88 inch (73,0 mm)
Groove O.D. x 2.88
inch (73,0 mm)
Groove O.D.P/N 52-203-1-110
- 2-1/2 Inch F x G
ANSI Flange x
2.88 inch (73,0 mm)
Groove O.D.P/N 52-203-1-210
- 4 Inch G x G
4.50 inch (114,3 mm)
Groove O.D. x 4.50
inch (114,3 mm)
Groove O.D.P/N 52-203-1-113
- 4 Inch F x G
ANSI Flange x
4.50 inch (114,3 mm)
Groove O.D.P/N 52-203-1-413
- 4 Inch F x F
ANSI FlangeP/N 52-203-1-013
- 6 Inch G x G
6.62 inch (168,3 mm)
Groove O.D. x 6.62
inch (168,3 mm)
Groove O.D.P/N 52-203-1-115
- 6 Inch F x G
ANSI Flange x
6.62 inch (168,3 mm)
Groove O.D.P/N 52-203-1-615
- 6 Inch F x F
ANSI FlangeP/N 52-203-1-015
- 8 Inch G x G
8.62 inch (219,1 mm)
Groove O.D x 8.62
inch (219,1 mm)
Groove O.D.P/N 52-203-1-916
- 8 Inch F x G
ANSI Flange x
8.62 inch (219,1 mm)
Groove O.D.P/N 52-203-1-816
- 8 Inch F x F
ANSI Flange x
ANSI FlangeP/N 52-203-1-016

Standard Order AV-1-300 ValveTrim:

Specify: Vertical, Closed Drain Galvanized Trim for (specify size)
Model AV-1-300 Alarm Check Valve, P/N (specify).

Vertical Closed Drain, Galvanized

- 2-1/2 inchP/N 52-204-2-050
4 or 6 inchP/N 52-204-2-951
8 inchP/N 52-204-2-952



Accessories

Order the following accessories, as applicable:

- Model RC-1 Retard Chamber (required for variable pressure water supply conditions)P/N 52-211-2-002
- Alarm Vent Trim (required when a water motor alarm is not installed)P/N 52-201-2-012
- Model PS10-2A Potter Electric Waterflow Pressure Alarm Switch (required for electric signal indicating waterflow)P/N 54-281-1-002
- Model WMA-1 Water Motor Alarm (required for a mechanical waterflow alarm)P/N 52-630-1-001

Tyco Fire Products

Technical Services

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