

GROOVED WET ALARM CHECK VALVE

Type:ZSFZ8X9

Doc No:DS-901-ZSFZ8X9-01-E-X

1.0 PRODUCT OVERVIEW

The alarm check valve works as a check valve by preventing the reverse flow of water from the system piping to the water supply. The valve is trimmed with a water bypass line, which has an in-line swing check valve. The bypass line allows pressure surges to enter the system and to be trapped above the alarm check valve's clapper without the clapper lifting and causing false alarms.

When significant flow of water occurs, such as from an open sprinkler, the alarm valve's clapper lifts and allows water to enter the system. Simultaneously, water enters an intermediate chamber, which allows the water to activate an alarm either through a water motor alarm or through a water pressure alarm. These alarms continue to sound until the flow of water is stopped.



Dimensions:

3"(DN80)-8"(DN200)

Design Standard:

UL 193, ULC-ORD-C193, FM1041, GB 5135.2

Connection Standard:

ISO 6182, AWWA C606

Working Pressure:

PN16/PN10, 300PSI, 250PSI, 200PSI

Application:

The wet alarm valve is an important component of the wet sprinkler system. The

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operating temperature range is 0°C-80°C.

Pipe Material:

Welded and seamlessly rolled steel pipe:

ASME B36.10、ASTM A53-A53M、ISO 4200、GB/T 21835-2008

Grooved Coupling: ISO6182、GB 5135.11、AWWA C606

Surface Treatment:

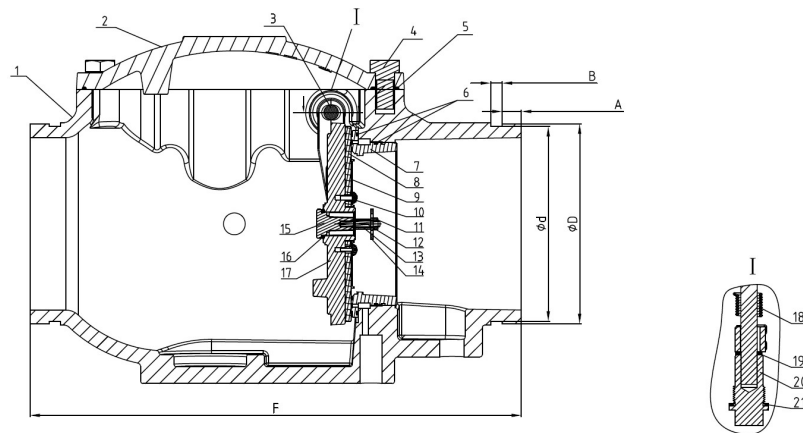
- ☐RAL3000 painting
- ☐RAL3000 Epoxy power painting
- ☐HS-1701B
- ☐Others would be available upon clients' detailed request

2.0 APPROVALS



3.0 SPECIFICATIONS

Product Sketch:



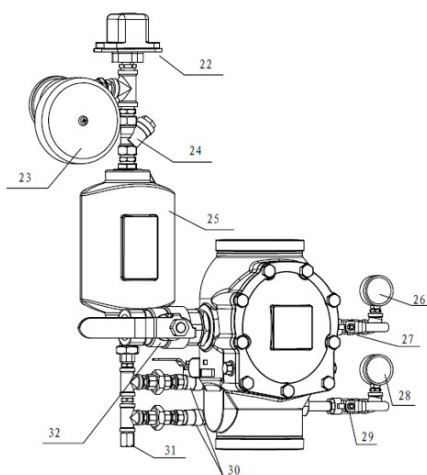
Part No.	Part	Standard Specification	Options
1	Valve Body	ASTM A536 65-45-12	
2	Bonnet	ASTM A536 65-45-12	
3	Pin	AISI 304	

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4	Hex Bolt	Carbon Steel Zinc Plated	
5	Gasket	EPDM	
6	O-Ring	NBR	
7	Seat	C89833	
8	Gasket	EPDM	
9	Plate	AISI 304	
10	Hex Nut	AISI304	
11	Hex Nut	AISI304	
12	Adjustment Screw	AISI304	
13	Core Tube	AISI304	
14	Core Board	AISI304	
15	Disc Core	C89833	
16	O-Ring	NBR	
17	Disc	C89833	
18	Spring	AISI304	
19	Plug Gasket	PTFE	
20	Plug	AISI304	
21	Plug Gasket	PTFE	

External Accessories



External Accessories			
Part No	Part	Part No	Part
22	Pressure Switch	28	Pressure Switch
23	Alarm	29	Ball Valve
24	Strainer	30	Ball Valve

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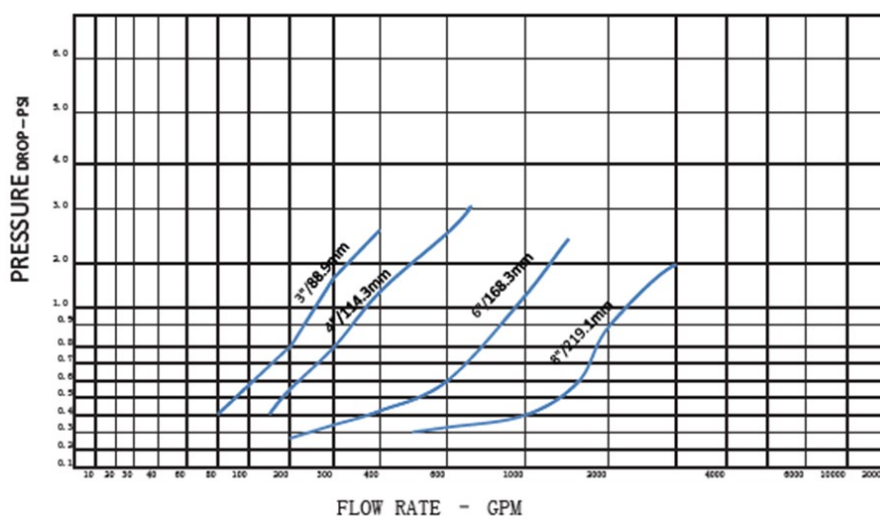
25	Decelerator	31	Throttle valve
26	Pressure Switch	32	Ball Valve
27	Ball Valve		

4.0 DIMENSIONS AND PERFORMANCE

4.1 Dimensions

Size		Dimensions					
in	DN	OD	A	B	Φ d	Φ D	F
3"	80	88.9	15.88	7.93	84.94	88.9	320.3
4"	100	114.3	15.88	9.53	110.08	114.3	382
6"	150	159.0	15.88	9.53	154.5	159.0	406.4
		165.1	15.88	9.53	160.9	165.1	406.4
		168.3	15.88	9.53	163.96	168.3	406.4
8"	200	219.1	19.05	11.1	214.4	219.1	446

4.2 Flow rates



4.3.1. Shell Body Test

Disc assembly, 2 times rated working pressure

Decelerator, 2 times rated working pressure

4.3.2. Leakage Test

Wet disc valve system side and connecting pipe fittings, 2 times rated working pressure

times the rated working pressure when the disc assembly in the open position

4.3.3. Alarm function

When the inlet pressure is 0.14MPa and the system side discharge flow is 15 L/min, neither the pressure switch nor the hydraulic alarm can issue an alarm

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signal.

The inlet pressure is 0.14MPa, 0.70 MPa, 1.20 MPa, 1.60 MPa, the corresponding side discharge flow of the system side is 60 L/min, 80 L/min, 170 L/min, 170 L/min, pressure switch and hydraulic alarm The bells must issue an alarm signal.

Delay adjustment time: The alarm device starts to issue a continuous alarm within 5s-90s after the system side releases water.

5.0REFERENCE MATERIALS

Approved certification for Grooved Wet Alarm Check Valve

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