

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, 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 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:

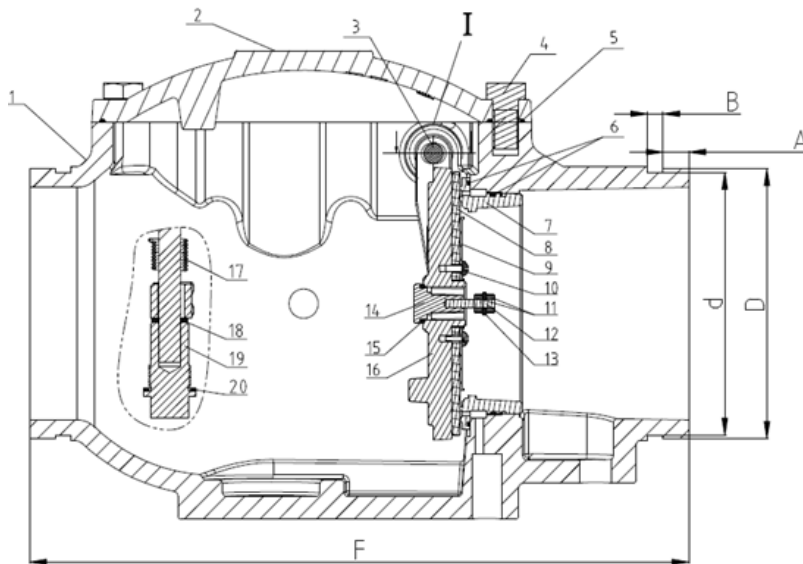
- RAL3000 painting
- RAL3000 Epoxy power painting
- HS-1701B
- Others would be available upon clients' detailed request

2.0 APPROVALS



3.0 SPECIFICATIONS

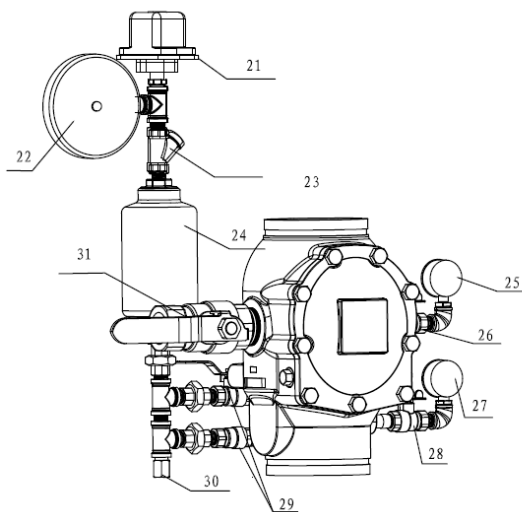
Product Sketch:



Part No.	Part	Standard Specification	Options
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1	Valve Body	ASTM A536 65-45-12	
2	Bonnet	ASTM A536 65-45-12	
3	Pin	AISI 304	
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	Slotted Screw	AISI304	
11	Hex Nut	AISI304	
12	Adjustment Screw	AISI304	
13	Card Board	C89833	
14	Compensator	C89833	
15	O-Ring	NBR	
16	Disc	C898337	
17	Spring	AISI304	
18	Plug Gasket	PTFE	
19	Plug	AISI304	
20	Plug Gasket	PTFE	

External Accessories



External Accessories

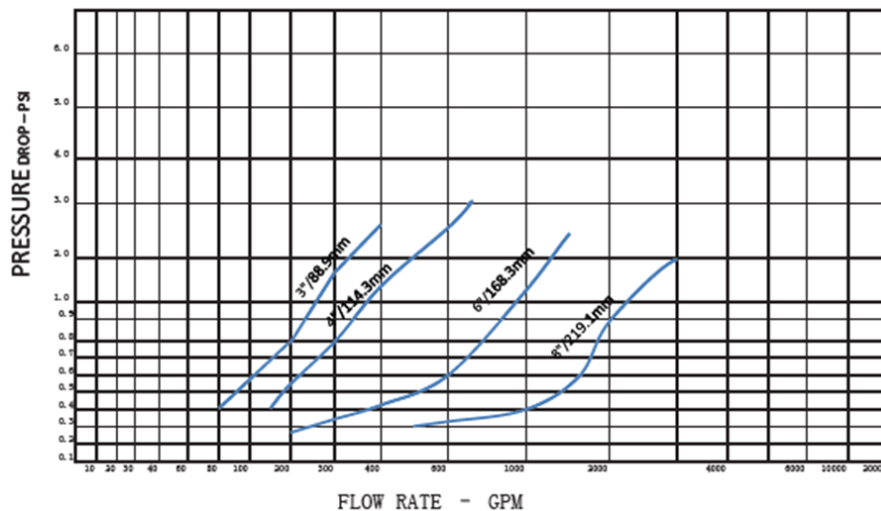
Part No	Part	Part No	Part
21	Pressure Switch	27	Pressure Switch
22	Alarm	28	Ball Valve
23	Strainer	29	Ball Valve
24	Decelerator	30	Throttle valve
25	Pressure Switch	31	Ball Valve
26	Ball Valve		

4.0 DIMENSIONS AND PERFORMANCE

4.1 Dimensions

Size		Dimensions					
in	DN	OD	A	B	Ø d	Ø 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
5"	125	139.7	15.88	9.53	135.48	139.7	390
		141.3	15.88	9.53	137.03	141.3	390
6"	150	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 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.

5.0 REFERENCE MATERIALS

Approved certification for Grooved Wet Alarm Check Valve