

K-511-V

WATER FLOW ALARM SWITCH

Vane Type



PRODUCT DESCRIPTION

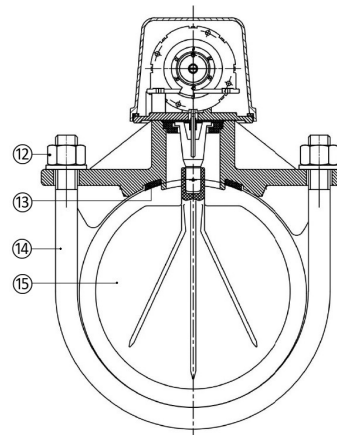
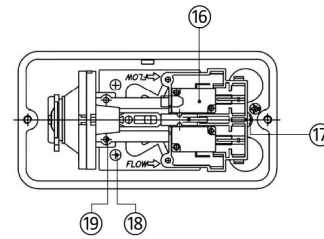
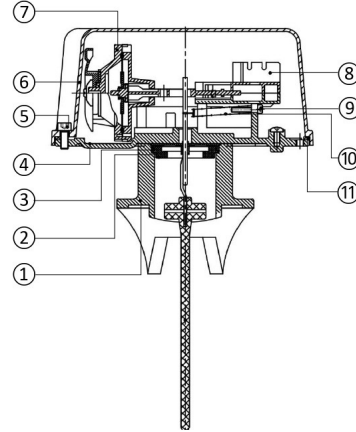
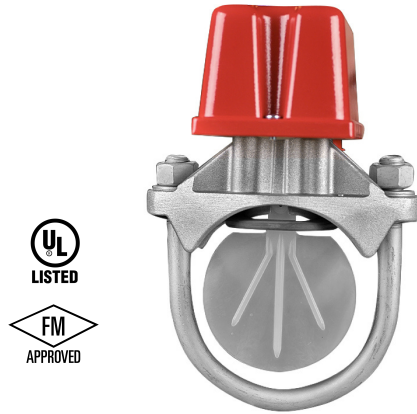
General	Used to monitor water flow in Fire Sprinkler Systems
Sizes	2" to 8" [DN50 to DN200]
Features	Two SPDT switches are enclosed in a durable terminal block Mechanical retard feature to minimize the risk of false alarm Tamper resistant screws to prevent unauthorized entry
Service Use	NFPA; 13, 13D, 13R, 72
Approvals	UL Listed and FM Approved

TECHNICAL SPECIFICATIONS

Service Pressure	450 psi [31 Bar]
Flow Sensitivity Range	4-10 GPM [15-37 LPM]
Maximum Surge	18 FPS [5.5 m/s]
Contact Ratings	8A@250VAC, 3A@24VDC, 2.5A@30VDC
Temperature Range	0°C - 68°C [32°F - 154.4°F]

MATERIAL SPECIFICATIONS

No.	Part Name	Material
1	Saddle	Aluminum Alloy B85 A04130
2	Gasket	Plastic POM
3	Holder	Stainless Steel A276 Grade 304 & Rubber EPDM
4	Plate	Aluminum Alloy B85 A04130
5	Screw	Stainless Steel F593 Grade 304
6	Cover	Aluminum Alloy B85 A04130
7	Retard Chamber	Assembly
8	Terminal Box	Nylon
9	Screw	Stainless Steel F593 Grade 304
10	Spring	Stainless Steel A276 Grade 304
11	Gasket	Rubber D2000 EPDM
12	Nut	Stainless Steel F594 Grade 304
13	Saddle Gasket	Rubber D2000 EPDM
14	U-Bolt	Carbon Steel
15	Vane	Plastic PE
16	Micro Switch	Assembly
17	Screw	Stainless Steel F593 Grade 304
18	Bolt	Stainless Steel F593 Grade 304
19	Screw	Stainless Steel F593 Grade 304



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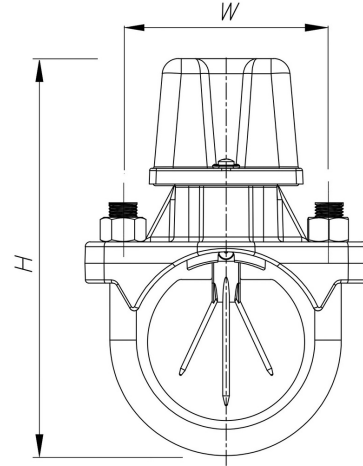
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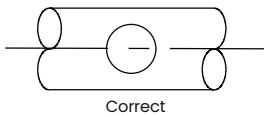
DIMENSIONS

Flow Switch Size	W		H	
	in.	mm	in.	mm
2"	3.31	84	7.48	190
2½"	3.62	92	7.87	200
3"	4.09	104	8.66	220
4"	5.24	133	9.65	245
6"	7.36	187	11.8	300
8"	9.41	239	13.78	350

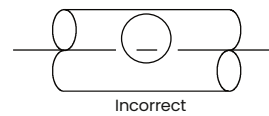


INSTALLATION REQUIREMENTS

Nominal Pipe Size	Nominal Pipe O.D.	Pipe Wall Thickness				Hole Size		U-Bolt Nuts Torque			
		Schedule 10		Schedule 40		in.	mm	ft-lb	n-m		
in.	mm	in.	mm	in.	mm	in.	mm				
2"	50	60.3	2.735	0.109	2.77	0.154	3.91	1.25 +0.125 -0.062	33.0 ±2.0		
2½"	65	73.0	2.875	0.120	3.05	0.203	5.16			20	27
3"	80	88.9	3.500	0.120	3.05	0.216	5.49				
4"	100	114.3	4.500	0.120	3.05	0.237	6.02	2.0 ±0.125	50.8 ±2.0		
6"	150	168.3	6.625	0.134	3.40	0.280	7.11				
8"	200	219.1	8.625	0.148	3.76	0.322	8.18				



Hole must be drilled perpendicular to the pipe and vertically centered.



RETARD ADJUSTMENT

- The delay can be adjusted by rotating the retard adjustment knob from 0 to the max setting 60 seconds.
- The time delay should be set at the minimum required to prevent false alarms.
- To adjust the setting, turn the adjustment knob clockwise to increase the delay, and counterclockwise to decrease the delay.

TYPICAL ELECTRICAL CONNECTIONS

- The waterflow switches are equipped with two SPDT Switches, one can be used to operate a central station, while the other contact is used to operate audible or visual annunciator.

An uninsulated section of a single conductor should not be looped around the terminal and serve as two separate connections

