

DESCRIPTION

FIREGUARD water flow detectors are compatible with schedule 10 through 40 steel pipe, sizes 2 through 8 inch, and can be mounted in a vertical or horizontal position. Fireguard detectors consist of a rugged, NEMA 3-rated enclosure. Designed for both indoor and outdoor use, Fireguard detectors operate across a wide temperature range, from 32 to 155 °F. UL-listed models are equipped with tamper-resistant cover screws to prevent unauthorized entry. Inside, two sets of SPDT (Form C) synchronized switches are enclosed in a durable terminal block to assure reliable performance. The Fireguard detectors incorporate a mechanical retard feature, which minimizes the risk of false alarm due to pressure surges or air trapped in the sprinkler system. In addition, the mechanical retard's unique sealed design is immune to dust and other contaminants. The Fireguard detectors are designed to simplify installation. Two conduit openings permit easy attachment to the local alarm system. The retard mechanism and dual SPDT switches are field-replaceable.



FEATURES & BENIFITS:

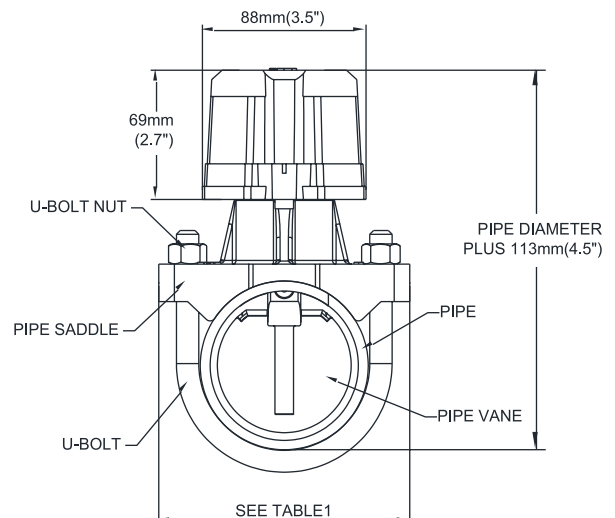
- Two inch mounting hole provided
- UL-Listed models are NEMA 3 rated
- Sealed reatard mechanism immune to dust and other contaminants
- Visual switch activation
- Field-replaceable retard mechanism and SPTD switches
- Rugged, dual SPDT switched enclosed in a durable terminal block
- Accommodates upto 12 AWG wire
- Designed for both indoor and outdoor use
- 100% synchronization activates both alarm pannel and local bell
- Tamper-resistant cover screw

Model	Nominal Pipe Size mm (in)	Pipe Schedule	Rated Working Pressure bar (psi)
VTWS50	50 (2)	10 thru 40	31 (450)
VTWS65	65 (2½)	10 thru 40	31 (450)
VTWS80	80 (3)	10 thru 40	31 (450)
VTWS100	100 (4)	10 thru 40	31 (450)
VTWS125	125 (5)	10 thru 40	31 (450)
VTWS150	150 (6)	10 thru 40	31 (450)
VTWS200	200 (8)	10 thru 40	15.5 (225)

Figure 1. Mounting Dimesion

SPECIFICATION

Contact Rating:	10A @ 125/ 250VACA ~ ; 3A @ 24VDC ===
Flow Rate:	15 to 37.8L/min (4 to 10 gpm)
Static Pressure Rating:	31bar (450 psi)
Dimensions Installed	see table
Operating Temperature Range:	32 to 155°F (0°C to 68°C)
Compatiable Pipe:	Steel pipe, schedule 10 through 40(see chart)
Shipping Weight:	1Kg



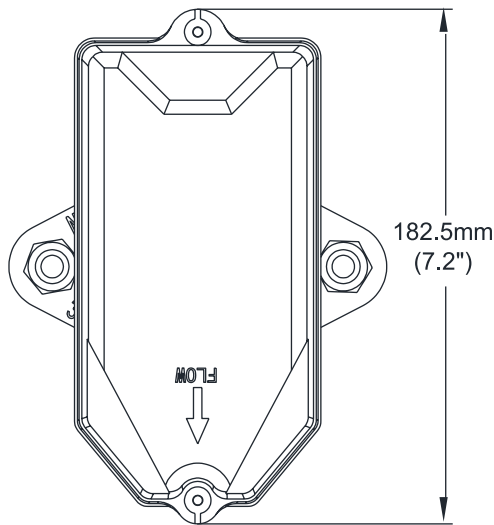


TABLE 1

DN	Dimension mm (in)	DN	Dimension mm (in)
50	116 (4.6)	125	195 (7.7)
65	116 (4.6)	150	225 (8.8)
80	135 (5.3)	200	270 (10.6)
100	170 (6.7)		

Figure 2. Mounting Hole Location

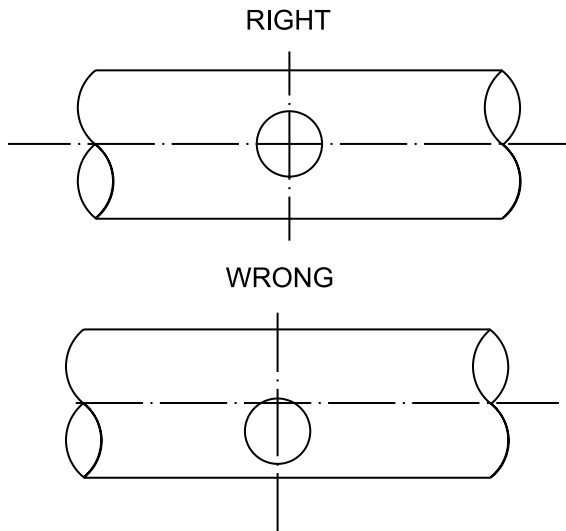


TABLE 2

DN	Hole size mm (in)	Torque (N.M)
50, 65	31.8mm+1.6mm (1 1/4 in+ 1/16 in)	41 - 47
80, 100, 125, 150, 200	50.8mm+1.6mm (2 in+ 1/16 in)	62 - 68

Figure 3. Assembly Diagram

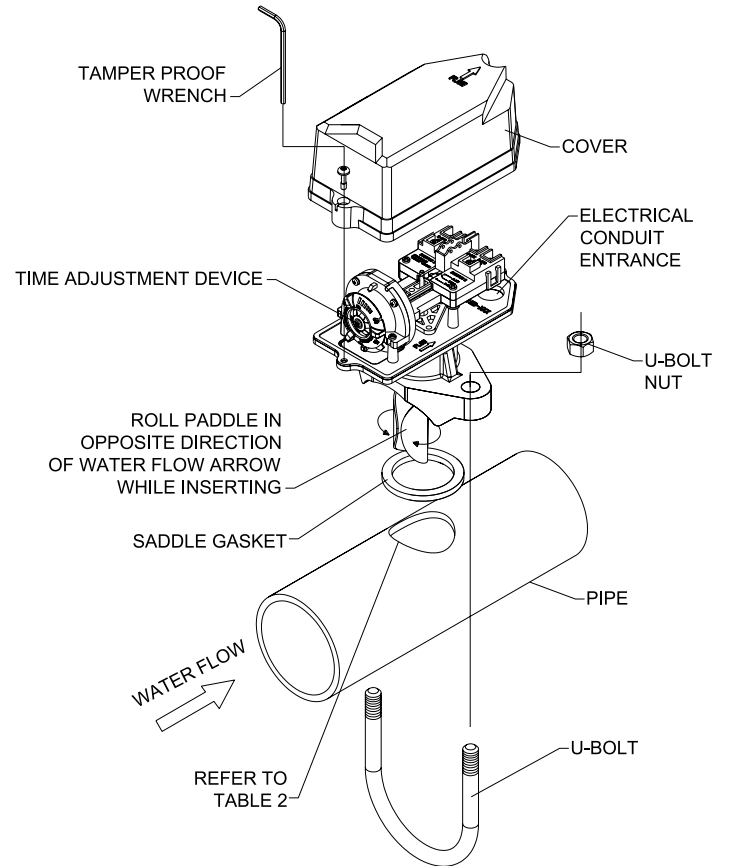


Figure 4. Knockout Plug Removal

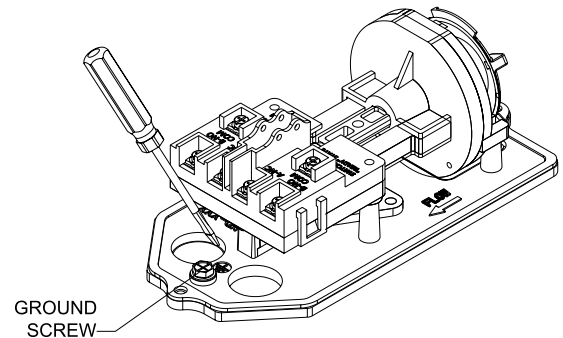
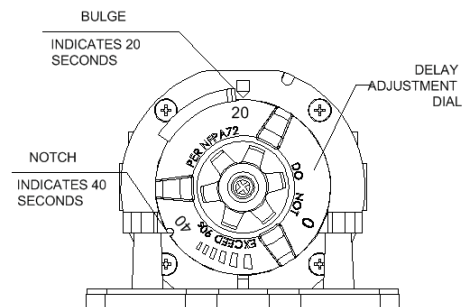


Figure 5. Delay Adjustment Dial



NOTE: RETARD TIME MAY EXCEED 90 SECONDS. ADJUST AND VERIFY THAT TIME DOES NOT EXCEED 90 SECONDS. NUMBER ON DIAL IS APPROXIMATE TIME DELAY IN SECONDS WITH AN ACCURACY OF +/-50%.

Figure 6. Directional Cover

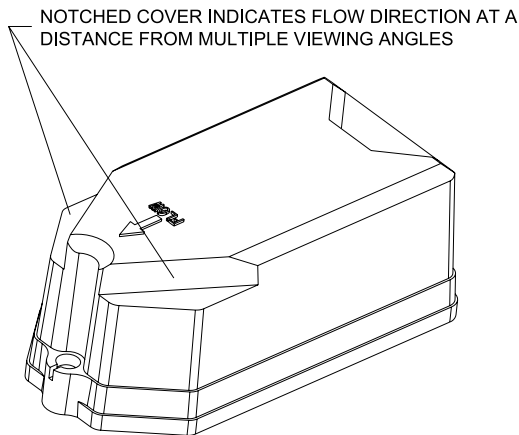
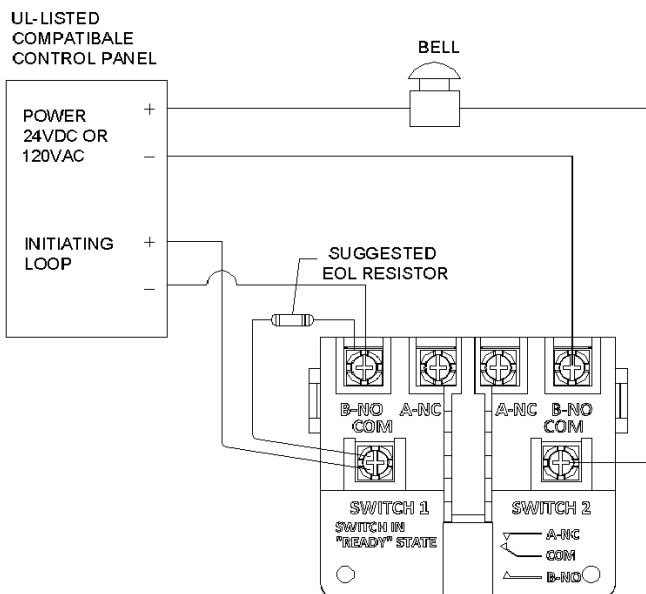


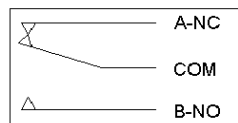
Figure 6. Directional Cover



NOTE: COMMON AND B-NO
CONNECTIONS WILL CLOSE
WHEN VANE IS DEFLECTED, I.E.,
WHEN WATER IS FLOWING. DUAL
SWITCHED PERMIT
APPLICATIONS TO BE COMBINED
ON A SINGLE DETECTOR.

CONTACT RATINGS	
250VAC	10 AMPS
24VDC	3 AMPS

SCHEMATIC OF
INDIVIDUAL SWITCH IN
"NO WATERFLOW"
CONDITION



BREAK WIRE AS SHOWN FOR
SUPERVISION OF CONNECTION.
DO NOT ALLOW STRIPPED WIRE
LEADS TO EXTEND BEYOND
SWITCH HOUSING. DO NOT LOOP
WIRES AROUND THE TERMINAL
AND SERVE AS TWO SEPERATE
CONNECTION.

