



T-Tap Waterflow Detectors

System Sensor T-Tap Waterflow Detectors are designed for primary signaling in residential systems and branch line signaling in larger systems.



Features

- Sealed retard mechanism (Model WFDT)
- Visual switch activation (Model WFDT)
- Twelve different flexible plastic paddles
- Vertical or horizontal mount
- Durable, tamper-resistant enclosure
- Dual SPDT switches in durable terminal block
- Sizes marked on flexible plastic paddles
- 100 percent synchronization activates both alarm panel and local bell
- Accommodates up to 12 AWG wire

Both the WFDT retard model and the WFDTNR non-retard model fit any tee that has a 1" NPT branch, including: 1", 1¼", 1½" and 2" NPT threaded ferrous and brass tees; 1", 1¼", 1½" and 2" copper sweat tees; Tyco, Spears®, Victaulic® and NIBO brand 1" CPVC tees; and 1½" polybutylene tees.

Design. The design of the WFDT and WFDTNR makes them easy to install and simple to maintain. Either can be mounted in the vertical or horizontal position. Two conduit openings permit easy attachment to the local alarm system. The retard mechanism (Model WFDT only) and switch assemblies are field-replaceable.

Features. Twelve different flexible plastic paddles fit 1", 1¼", 1½" and 2" tees. Sizes are marked clearly on the paddles for ease of installation. Plastic paddles slip over the actuating lever and are securely fastened with one screw. The handy depth gauge ensures the proper installation depth and clearance of the detector to the tee.

Construction. The WFDT and WFDTNR include a durable, tamper-resistant enclosure and rugged switch assembly. The robust covers completely enclose the electrical components to keep out dust and dirt. Improved self-guiding security screws and removal tools make the detectors resistant to tampering and simplify field maintenance. Dual SPDT switches are enclosed in a durable terminal block for added strength.

Agency Listings



5739



CS169



7770-1653:114



167-93-E



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T-Tap Waterflow Detector Specifications

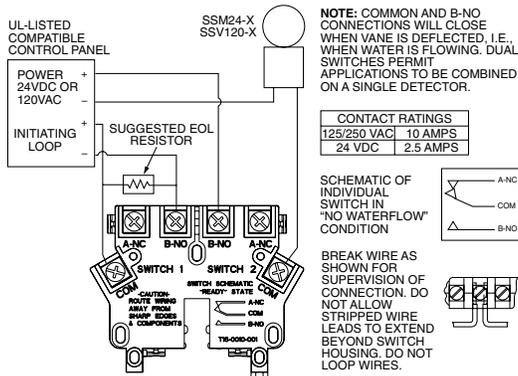
Architectural/Engineering Specifications

Model shall be a WFDT or WFDTNR as manufactured by System Sensor. T-tap waterflow detectors shall be installed on a tee that has a 1" NPT branch including: 1", 1¼", 1½" or 2" threaded ferrous or brass tee; 1-2" copper sweat tees; Tyco, Spears,® Victaulic,® and NIBCO brand 1" CPVC tees; or 1½" polybutylene tee as designated on the drawings and/or as specified herein. Detectors shall mount on any clear pipe span of the appropriate size, either a vertical or horizontal run at least 6" from any fittings or valves that may change water direction, flow rate, or pipe diameter or no closer than 24" from a valve or drain. Detectors shall have a sensitivity in the range of 4 to 10 gallons per minute and a static pressure rating of 250 psi. The retard t-tap detector shall be a sealed mechanical pneumatic unit with visual indication of actuation. The actuation mechanism shall include a polyethylene vane inserted through the tee fitting and connected by a mechanical linkage to the delay mechanism. The non-retard t-tap detector shall respond with no time delay to waterflow in the specified direction and range. Outputs shall consist of dual SPDT switches (Form C contacts). Two conduit entrances (one of which is a knockout type) for standard fittings of commonly used electrical conduit shall be provided on the detectors. A grounding provision is provided. All detectors shall be listed by Underwriters Laboratories for indoor or outdoor use.

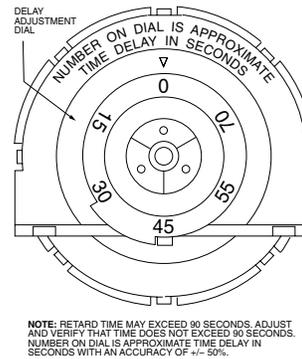
Physical/Operating Specifications

Static Pressure Rating	250 PSI	Operating Temperature Range	32°F to 120°F (0°C to 49°C)
Maximum Surge	18 FPS	Enclosure Rating	UL indoor/outdoor rated
Triggering Threshold Bandwidth (Flow Rate)	4-10 GPM	Cover Tamper Switch	UL models: optional P/N 546-7000 ULC/Canadian models: factory installed
Overall Dimensions, Installed	WFDT: 4.5" H x 3.75" W x 6.7" L (11.4cm H x 9.5cm W x 17cm L) WFDTNR: 3.75" H x 3.25" W x 4.25" L (9.5cm H x 8.2cm W x 10.8cm L)	Service Use	Automatic Sprinkler: NFPA 13 One or Two Family Dwelling: NFPA 13D Residential Occupancies up to 4 Stories: NFPA 13R National Fire Alarm Code: NFPA 72
Contact Ratings	Two sets of SPDT (Form C) 10.0 A @ 125/250 VAC 2.5 A @ 24 VDC	Shipping Weight	WFDT: 2.6 lbs. (1.2 kg.) WFDTNR: 1.5 lbs. (0.7 kg.)
Compatible Tee Fittings	Threaded ferrous and brass tees, copper sweat tees, CPVC tees, and polybutylene tees	Warranty	3 years
Conduit Entrances	Two openings for ½" conduit.	U.S. Patent Numbers	5,213,205

Electrical Connections for WFDT



Delay Adjustment Dial



Ordering Information

UL Model	ULC Model	Description
WFDT	WFDTA	Waterflow Detector, Fits 1", 1¼", 1½", 2" ferrous and brass threaded tees; 1", 1¼", 1½", 2" copper sweat tees; 1" CPVC tees; and 1½" polybutylene tees
WFDTNR	—	Waterflow Detector, non-retard, fits same tees as Model WFDT
Accessories	Description	
A77-01-02	Replacement terminal block for WFDT	
A77-01-08	Replacement terminal block for WFDTNR	
A3008-00	Replacement retard mechanism	
PRK9	Replacement paddle kit – 12 paddles for WFDT and WFDTNR (see WFDT for sizes)	
546-7000	Cover tamper switch kit for WFDT	
S07-66-02	Replacement tamper screws for covers of WFDT, WFDTNR	
WFDW	Replacement tamper-proof wrench for cover of WFDT, WFDTNR	
WFDN4	NEMA-4 gasket kit	
C58-164-01	Replacement metal cover	
C58-195-01	Replacement plastic cover (WFDTNR)	

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3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495

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