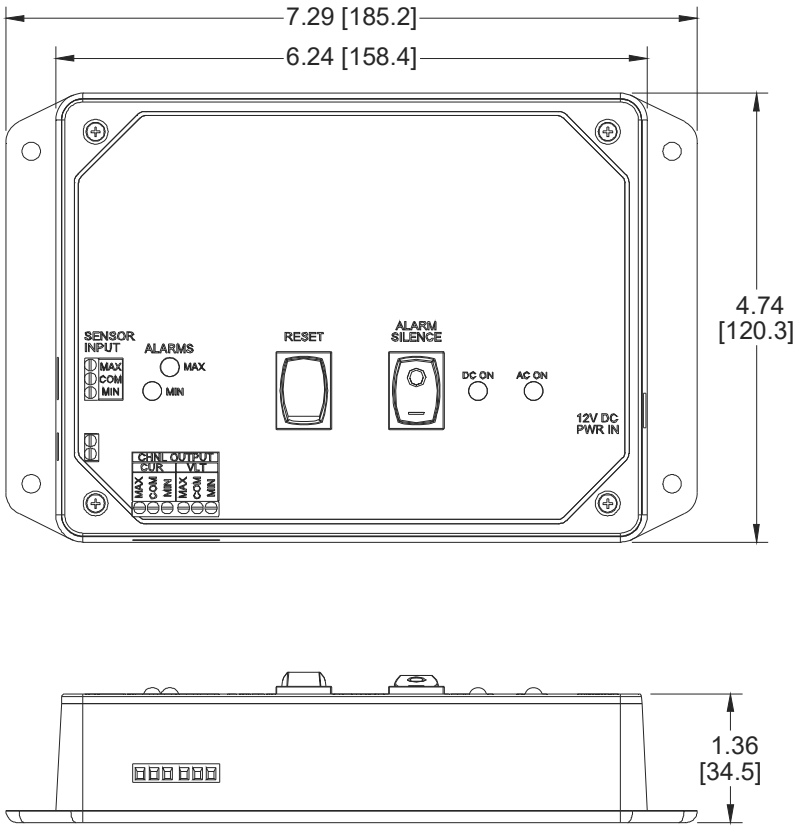
ZURN F7000 SERIES FLOW SENSOR INSTALLATION

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



The Zurn Flow Sensor is designed to notify the building maintenance staff whenever there is flow in the overflow drainage system, typically an indication of either a primary drainage system blockage or the inability of the primary system to adequately handle the water load on the roof. The multiple sensor positions of the in-pipe pickups provides alerts for both low and high flow conditions. Any registered flow level remains present until manually cleared, ensuring that the drainage system is not only monitored around the clock, but that no one needs to be present to witness the event. The information provided by Zurn Flow Sensor System alerts the owner to the maintenance needs of the drainage system, possibly avoiding a catastrophic structural failure. The flow sensor pick-up is supplied in a 6 inch long section of PVC or Cast Iron pipe to be installed by either no-hub gaskets, or gluing the PVC section into a horizontal run of the overflow drainage line. The sensor pickup should not be installed closer than 4 pipe diameters to an upstream elbow. The signal is sent out to the pickup and back to the control unit via a low voltage 12V signal (18 Ga. and in some cases due to interference wire should be shielded, wiring not included). Outputs are current or voltage outputs that will provide for connection to building management systems or to control valve actuators. Power is supplied to the unit from a 120 volt to 12 volt plug in transformer included with the sensor.

The Zurn Flow Sensor can also be utilized in rainwater harvesting systems to sense the water in the system and control a valve to flush the debris in first ten minutes of rain and then fill the storage tank.

Zurn Industries, LLC | **Specification Drainage Operation**
1801 Pittsburgh Avenue, Erie, PA U.S.A. 16502 · Ph. 855-663-9876, Fax 814-454-7929

In Canada | **Zurn Industries Limited**
7900 Goreway Drive, Unit 10, Brampton, Ontario L6T 5W6, 877-892-5216

www.zurn.com

Rev. -
Date: 10/01/2020
C.N. No. 143064
Form No. RD138

ZURN F7000 SERIES FLOW SENSOR INSTALLATION

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice

Installation Instructions:

1) Sensor Inputs:	Custom Zurn Input Water Level Sensor	
A) Common	Connection required for Min. or Max. Inputs	connection 18 ga., in some cases shielded, w ire by others
B) Minimum	Connection as needed for application	
C) Maximum	Connection as needed for application	
2) Zurn 7000 Outputs:	**Condition**	**Output**
A) Current Loop Output ("CUR")	Level detection OFF (neither low "MIN" nor high "MAX level condition detected).	3 ma. (+/- .3ma)
B) Current Loop Output ("CUR")	Level detection ON (either low "MIN" or high "MAX" level condition detected).	20 ma. (+/- 2ma)
C) Current loop fault condition detected.	Open Circuit in Loop	0ma.
D) Voltage Level Output ("VLT")	Level detection OFF (neither low "MIN" nor high "MAX" level condition detected).	0 V (referenced to common ground)
E) Voltage Level Output ("VLT")	Level detection ON (neither low "MIN" or high "MAX" level condition detected).	10 V (+/- 1 V)
3) Alarms:		
A) Low Level "MIN"	Visual	YEL LED turns ON
B) High Level "MAX"	Visual	RED LED turns ON
C) High Level "MAX"	Audiable	2.5KHz (nom) audible alert turns ON
4) Controls - Front Panel:		
A) Reset (Alarm) Sw itch	Resets alarms to OFF state (if alarm conditions no longer exist.)	
B) Alarm Silence Sw itch	Silences the audible alarm w hen the high level alarm conditions exists.	
5) Control - Internal:		
A) Optional "3-Hour Timer Reset" board.	Automatically resets High Alarms after approximately 3 hours (+/- 10%).	
6) Control - External:		
A) External Reset-terminal block receptacle provided	Install an external sw itch or dry contact relay closure for an external means of resetting the alrams.	
7) Internal Battery:		
A) Optional 12 Volt Battery Back-up	Optional 12 Volt 0.8 Amp hrs. Spill Proof Construction Approved for transport by air D.O.T., I.A.T.A., F.A.A. and C.A.B. Certified Operating Temp Range -4°F(-20°C) to 122° (50°C) recommended life three to five years U.L. recognized under file # MH20845 Provides continued functionality if AC pow er is out (up to approx. 24 hrs for single-channel alarm set.	An internal charger circuit automatically keeps this battery charged.
8) Power Indicators - Front Panel:		
A) AC ON	When lit, indicates that the AC pow er source "Use pow er supply supplied, or equivalent 12 VDC, 500ma supply) is supplying pow er to the unit.	
B) DC ON	This LED w ill be lit w hen the AC pow er source is supplying pow er to the unit, or w hen the AC pow er source is not supplying pow er to the unit (AC line pow er dow n or off) and the internal battery is supplying pow er to the unit. If this LED is NOT lit w hen the AC pow er source is disconnected, then the internal; battery is either not connected or is discharged.	
9) Power Input:		
A) 12 volt DC	120 V ac 60 Hz Linear pow er supply w ith 12V dc 500mA output UL listed	

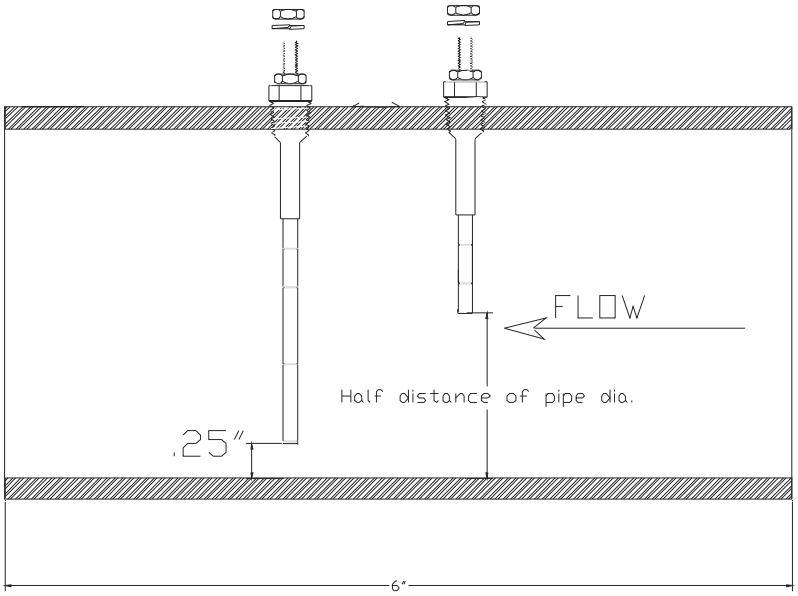
Zurn Industries, LLC | **Specification Drainage Operation**
1801 Pittsburgh Avenue, Erie, PA U.S.A. 16502 · Ph. 855-663-9876, Fax 814-454-7929

In Canada | **Zurn Industries Limited**
7900 Goreway Drive, Unit 10, Brampton, Ontario L6T 5W6, 877-892-5216

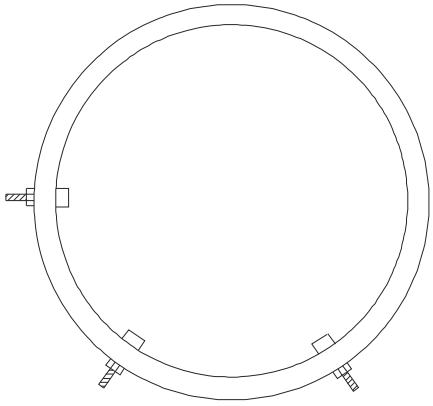
www.zurn.com

Rev. -
Date: 10/01/2020
C.N. No. 143064
Form No. RD138

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Cast Iron Pipe Pick-up



PVC Pipe Pick-up

See Zurn F7000 Specification Sheet for correct ordering

Important Information

1. If the overflow system is connecting to the primary on the horizontal the pickup must be in an elevated pipe section to prevent a false signal from water backing up the overflow pipe from the primary pipe

2. This product is not approved for use in hazardous locations or use with flammable liquids.

3. This product is designed to be used with a properly designed drainage system where the overflow system flows water in only rare occasions due to blockage or excessive rainfall. Use in a system that flows overflow water on a frequent basis due to improper design or installation may cause pickup corrosion and reduce the service life of the pickup terminals.

4. Removal of the pickup terminals will void warranty.

5. This product is designed to monitor one overflow drain per sensor channel, installation of the pickup sensor in a pipe with multiple upstream drains will not provide correct overflow notification.

6. In some cases the wire from the pick-ups to the control box may need to be shielded due to high voltage or RF signals in close proximity to the pickup wires

Disclaimer

The use of the Zurn Flow Sensor to notify the building owner of an overflow systems operation does not eliminate the need for maintenance. Maintenance may is still be required to maintain the proper operation of a roof drainage system.