

688 Level Switch for Pressure Vessels up to 2000 psig

Application

The Model 688 is a single point on/off level switch, which completes an electrical circuit to a pump, valve, alarm or other device. This unit senses virtually any liquid and does not need adjustment when the vessel contents are changed. It will ignore foam, surge or splash to indicate true liquid level, with repeatability to 0.050 in. standard.

Features

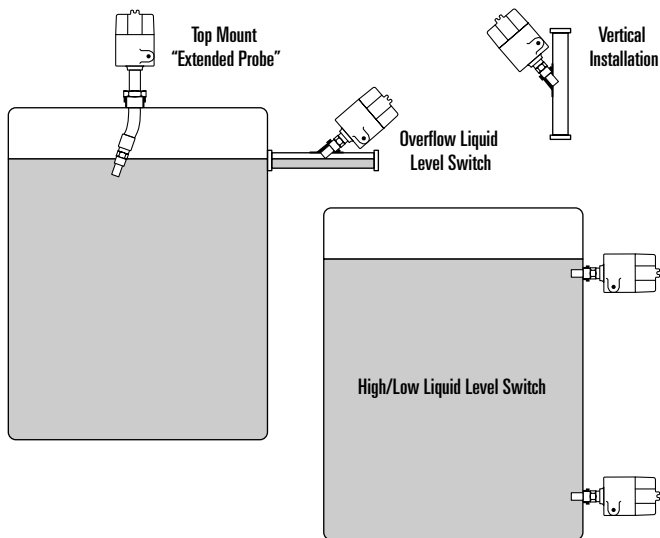
- **Fail-Safe:** Unit is field adjusted to high or low level fail-safe conditions.
- **Auto Test Self-Checking:** The unique self-checking feedback loop constantly "proves" that the switch is working properly and offers superior reliability in critical applications.
- **Long Life:** The all stainless steel, heavy-duty sensor resists damage from product abrasion or corrosion. No packing glands are used.
- **Explosion Proof:** CSA Approved for Class I Group C & D, Class II Group E, F and G hazardous locations
- **Versatile Power Supply:** The standard units are designed to accept 115 VAC, 230 VAC or low voltage AC or DC input power.

Operation

When liquid touches the sensor it starts a chain of activity throughout the sensors internal components, which in turn sends a signal to the circuit board inside the housing. A red LED is illuminated however if there is a sensor failure or other component failure, the relay will immediately transfer to the alarm condition.

Installation

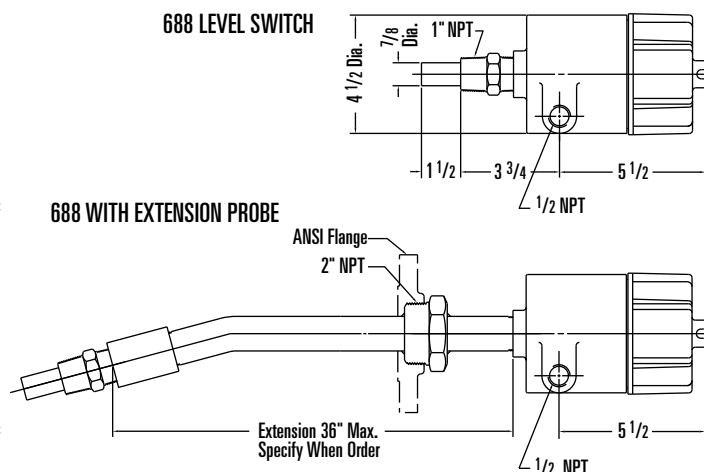
The 688 mounts in many positions.



Specifications

Electrical Housing	CSA Approved Class I, Groups C & D; Class II Groups E, F and G
Housing Operating Temperature	Ambient -40°F to +160°F
Operating Pressure	Up to 2000 psig
Sensor Operating Temperature	-40°F to +220°F
Electrical	
Input Voltage	Nominal: 115 VAC, 230 VAC, 24 VDC
Absolute Limits	90-135 VAC, 180-270 VAC, +-4 VDC
Frequency	AC Power: 50-60 Hz
Time Delay	Independent, non-integrating on make and brake.
Delay Time Range	50 milliseconds min., long delay, 30 sec. max.
Output	Relay DPDT Form C Contacts
Ratings	5A @ 120 VAC Non-Inductive, 5A @ 24 VDC Non-Inductive.

Dimensional Data



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Determining the Model Number

Example given: Standard Model 688-SN Level Switch for Pressure Vessels up to 2000 psig Type 347 S.S. Sensor.

MODEL 688-S N,X

*For variations, change code to match requirements.

- S • Standard 347 S.S.
- E • Extended Probe - 36" Max. with 2" Vessel Connection

Sensor Material

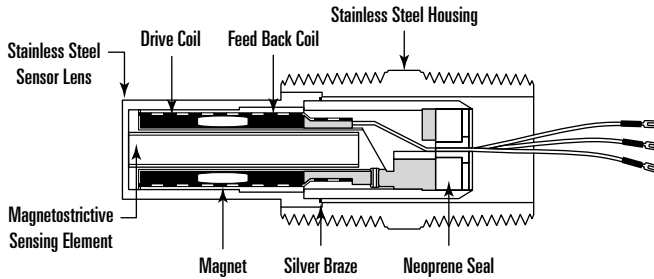
Options & Additions

- e • Epoxy Coated Housing
- s • Stainless Steel Tag
- x • Specify Additional Options

Sensor Coating

- N • None Required
- P • Teflon® (TIP ONLY)

Sensor Detail



Parts List

Item	Description	Qty.	Part No.
1	SENSOR, 347 STAINLESS STEEL	1	005510-P
	SENSOR, 347 S.S. TEFLON® COATED	1	005511-P
2	HOUSING, ALUMINUM	1	000168-M
3	COVER, ALUMINUM	1	000203-M
4	O-RING, BUNA-N	1	007376-P
5	CIRCUIT BOARD	1	005505-P
6	BRACKET, ALUMINUM	1	002605-M
7	SCREW, STAINLESS STEEL	4	001501-P
8	SCREW, STAINLESS STEEL	2	001504-P
9	LOCK WASHER, STAINLESS STEEL	2	001804-P
10*	DECAL	1	005901-P
11*	TAG	1	005903-P

*NOT SHOWN

