

PT988 Pneumatic Liquid Level Switch

Application

WellMark's PT988 Pneumatic Level Switch is designed for horizontal mounting in a tank or vessel through threaded or flanged pipe connections (will work in an API 2" full coupling) and is excellent for applications where space is a factor. It can be externally caged for vessel isolation and can be used as a high or low level alarm, as well as a liquid level control. In addition, it can be switched from direct to indirect action simply by inverting the unit 180°.

The PT988 features a 3-way snap-acting pilot (0 to full output using 20-30 psi supply pressure) or order it with an optional throttling pilot (3 to 15 psi output with a 20 psi supply pressure).

Features

- Snap or Throttle
- Small, Compact
- Direct or Indirect Action
- Economical

Specifications

Max. Working Pressure	1500 psi
Supply Pressure	20 psi Min. – 30 psi Max.
Operating Temperature	-40°F to 275°F
Process Connections	2" MNPT Standard
Pilot Connections	1/4" FNPT
Pilot Mode	Snap Acting Throttling

Materials

Body	Plated Steel Std. (S.S. available)
Float	Stainless Steel (Collapse pressure: 2500 psi)
Wetted Parts	Stainless Steel
Pilot	Stainless Steel

Operation

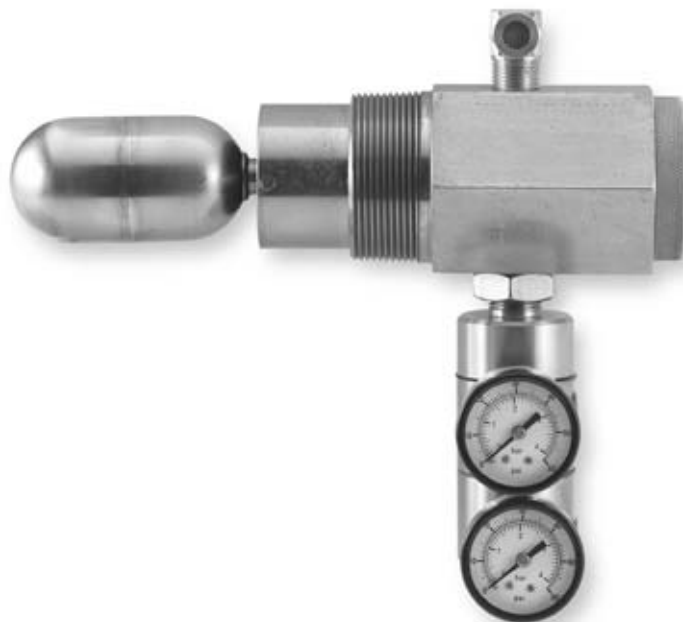
As liquid within the vessel varies, linear movement of the float is converted to rotary movement of the actuator assembly. In the snap acting mode, as the actuator pad moves closer to the nozzle, supply pressure is diverted to signal pressure, tripping the shuttle pilot to either full output pressure, energizing end-device, or to zero output pressure, de-energizing end-device. In the throttling mode, as the actuator pad moves closer to the nozzle, supply pressure is diverted to output pressure, resulting in modulating pressure to the end-device.

Direct Acting

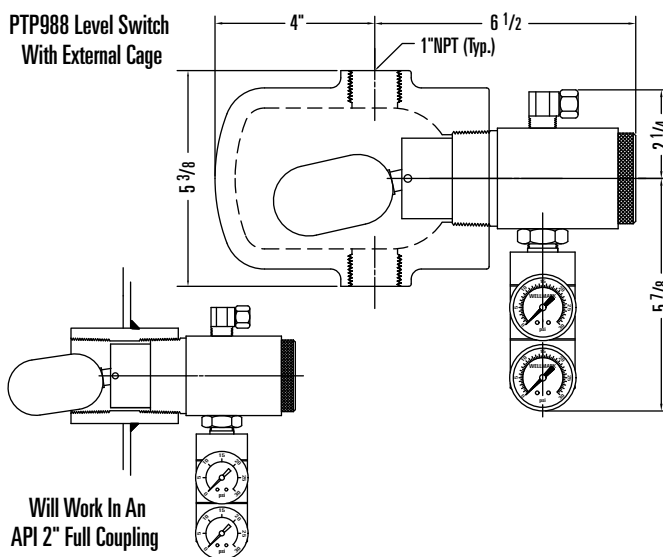
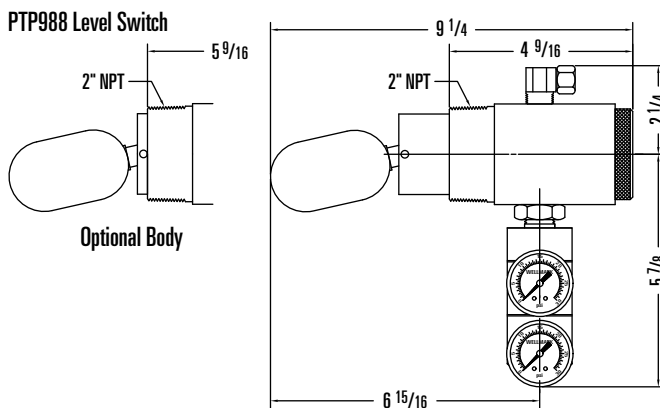
A rise in fluid level resulting in an increase of pilot output. This is accomplished when the pilot is in the downward position

Indirect Acting

A rise in fluid level resulting in a decrease of pilot output. This is accomplished when the pilot is in the upward position.



Dimensional Data

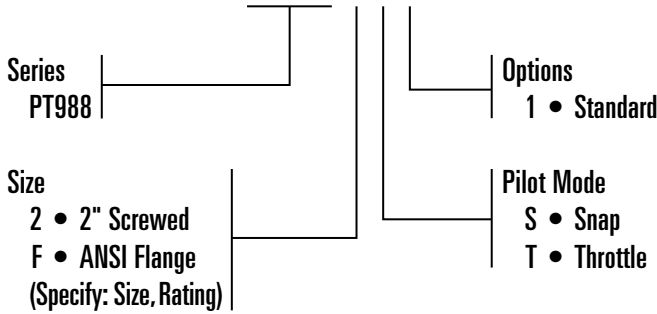


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Determining the Model Number

Example given: Standard Model PT988-2S-1, 2" Screwed, Snap-Acting Level Switch.

MODEL PT988-2 S-1

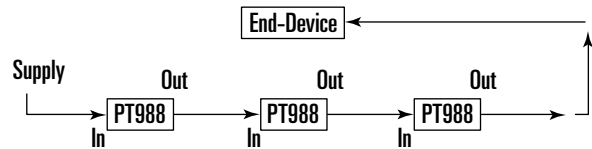
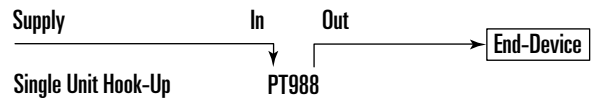


Parts List

Item	Description	Qty.	Part No.
1	BODY, CARBON STEEL	1	30216
2	PORT, STAINLESS STEEL	1	30215
3	RETAINER, STAINLESS STEEL	1	20433
4	FLOAT ARM, STAINLESS STEEL	1	20432
5	PIN, STAINLESS STEEL	1	20434
6	SPACER, STAINLESS STEEL	2	20431
7*	POLYPAK, FLUOROMYTE	1	10482
8	WIRE, SNAP, S.S. (SNAP PILOT ONLY)	1	20439
8	WIRE, THROTTLE, S.S. (THROTTLE PILOT ONLY)	1	20783
9*	O-RING, VITON®	1	004102-P
10	PORT, STAINLESS STEEL	1	20558
11	SET SCREW, STAINLESS STEEL	1	10485
12	NYLOCK NUT, STAINLESS STEEL	1	10500
13	WASHER, PLASTIC	2	10602
14	WASHER, PLASTIC	2	10603
15	VENT ASSEMBLY, BRASS	1	20136
16	PILOT BODY, S.S. (THROTTLE PILOT ONLY)	1	20562
17	INSERT, NYLON	1	10601
18	CAP, STAINLESS STEEL	1	20436
19*	O-RING, BUNA-N	1	05000-0173
20	FLOAT, STAINLESS STEEL	1	10575
21	NAME PLATE	1	10642
22	ORIFICE PLATE, S.S. (THROTTLE PILOT ONLY)	1	20035
23	PILOT NOSE, S.S. (SNAP PILOT ONLY)	1	30276
24	PILOT SEAT, S.S. (SNAP PILOT ONLY)	1	30277
25	PILOT CAP, S.S. (SNAP PILOT ONLY)	1	30278
26	PILOT SPOOL, DELRIN® (SNAP PILOT ONLY)	1	20000
27*	PILOT SEAT, URETHANE (SNAP PILOT ONLY)	1	10024
28*	PILOT SEAT, URETHANE (SNAP PILOT ONLY)	1	10025
29*	PILOT GASKET, CORPRENE (SNAP PILOT ONLY)	1	10003
30*	DIAPHRAGM, BUNA-N (SNAP PILOT ONLY)	1	10004
31	SCREW, S.S. (SNAP PILOT ONLY)	4	10522
32*	SEAT, VITON®	1	20606
33	SCREW, STAINLESS STEEL	1	10604
34*	SCREW, S.S. (SNAP PILOT ONLY)	2	10001
35	CAP TUBE, S.S. (SNAP PILOT ONLY)	1	20519
36	CAM, STAINLESS STEEL	1	20559
37	ACTUATOR, STAINLESS STEEL	1	20549
38	FLAPPER, STAINLESS STEEL	1	10530
39	PRESSURE GAUGE	2	10063
40	JAM NUT, STAINLESS STEEL	1	10273
41	SPRING, S.S. (SNAP PILOT ONLY)	1	10005

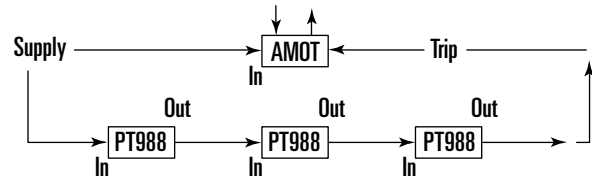
*Recommended Spare Part

Various Pneumatic Hook-Ups



Multiple Unit Hook-Up with Output

If any of above should alarm, the "Supply" would be blocked and the output would



Should the alarm device be something with a restricted orifice (such as an AMOT 2400), the "Supply" to the alarm and the "Supply" to the PT988 should be the same. CAUTION: The "Trip" port of the "AMOT" CANNOT be utilized as the "Supply" to the "IN" port of the PT988. On alarm, the PT988 blocks the "IN" port and opens "OUT" to "EXHAUST."

