VERY HIGH PRESSURE LEVEL SWITCH
HIGH RELIABILITY – MECHANICAL SIMPLICITY

MODEL 762

FEATURES

- Mechanical Simplicity Produces Maximum Reliability
- Designed In Accordance With ANSI B31 Or Other
- Radiography And Dye Penetrant Testing
- Hydro Pressure Test At 150% Of Design Pressure
- 100% Operational Testing
- Low SPG Operation; To 20,000 PSIG Basic
- Interface Detection At Very High Pressures
- Insensitive To High Frequency Vibration
- No Seals To Leak, Magnetically Coupled
- Material Certificates, Mill Test Reports, And Test Documents Provided To User

OPERATION

The Model 762 Level Switch provides output switching at one elevation of a varying liquid level. The unit has its primary element mounted outside the process vessel. The external cage design is utilized to minimize process turbulence effects and so that the level alarm may be valved off from the process vessel. It can then be depressurized for testing and maintenance without disturbing the operation of the process. The output of the unit consists of a switching action at a preset liquid level elevation.

The liquid level rises and the displacer lifts the attractor in front of the switch station magnet. This external magnet pulls in and the output switch is actuated. Decreasing liquid level moves the displacer assembly downwards. The output switch deactuates when the attractor is pulled out of the switch station's magnetic field.

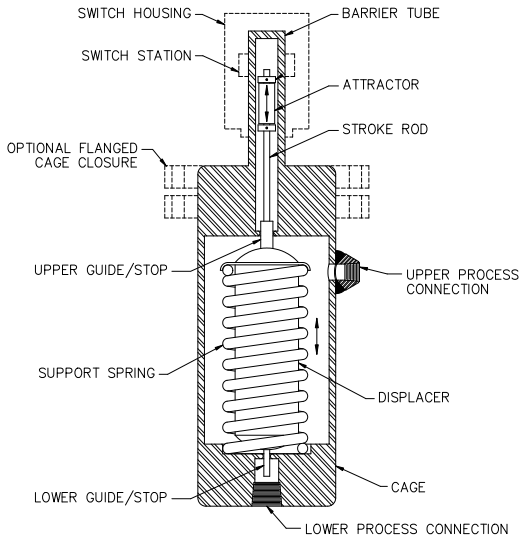
SWITCH STATION AND DISPLACER

The switch station is on the outside of the barrier tube and is isolated from the process liquid. It is equipped with a magnet whose lines of force pass through the non-magnetic barrier tube. The magnet is pulled in against the outside of the tube and actuates the microswitch(s) when the attractor is lifted into the magnetic field inside the tube.

This unit utilizes thick wall displacers for sensing elements. The support spring offsets most of the displacer weight so that liquid buoyancy requirements are minimized. It is designed for very high pressure services, even those with low specific gravities.

Model 762-36-2"GL

SCHEMATIC CUTAWAY



(Side/Side Type Available)

Delta Controls
CORPORATION

LIQUID LEVEL AND INTERFACE ALARM FOR VERY HIGH PRESSURES

MODEL NUMBERING SYSTEM

BASIC TYPE	SENSING ELEMENT	BODY/CAGE CONNECTION	PROCESS CONN SPACING	SIZE & TYPE PROCESS CONN	SWITCH & HOUSING	OPTIONS
MODEL EXAMPLE 762	17Y	W	AA	SB/1"FPTY	L1W	AA

BASIC TYPE	
M/N	DESCRIPTION
762	1 ALARM

NOTE: 316 S.S. SPRING TO 300°F MAX, INCONEL SPRING TO 500°F MAX.
BASIC: 316 S.S. TRIM, 416 ATTRACTOR

SENSING ELEMENT						
	SENSING ELEMENT				WKG PSIG AT °F	
M/N	MATERIAL		MIN SPG			
	ELEMENT	CAGE	215°	450°	215	450
17S	316 S.S.	STEEL	0.60	0.65	1325	1015
17Y	316 S.S.	316S.S.	0.60	0.65	1260	1015
19S	316 S.S.	STEEL	0.40	0.45	1010	810
19Y	316 S.S.	304 S.S.	0.40	0.45	1010	810
33S	316 S.S.	STEEL	0.40	0.50	3000	3000
34S	316 S.S.	304 S.S.	0.40	0.50	4500	4500
35S	316 S.S.	STEEL	0.40	0.50	6000	6000
36S	316 S.S.	STEEL	0.40	0.50	7500	7500
37S	316 S.S.	STEEL	0.40	0.50	10,000	10,000
38S	316 S.S.	STEEL	0.40	0.50	20,000	20,000

NOTE: UNITS FOR HIGHER PRESSURE AND TEMPERATURE ARE AVAILABLE
STEEL MATERIAL: A106 AND A105

BODY/CAGE CONNECTION					
M/N *	BODY MATERIAL	BY FLOAT TYPE 17	19	33	38
W	STEEL OR 304 S.S.				
F	STEEL			C/F	
F	316 S.S.			C/F	

* "W" = WELDED SOLID
"F" = FLANGED CLEANOUT.

SIZE & TYPE PROCESS CONN				
# PROCESS CONNECTION SIZE & TYPE –				
M/N & ANSI SIZE	A105 CARBON STEEL		– 304 STAINLESS STEEL	
	SB	SSD	SB	SSD
1"STUB*				
▲ 1"FPT*				
1"/600R*				
1"/1500R*				
1"/2500R*				
SPECIFY PC				

* PROCESS CONNECTION MATERIAL SAME AS CAGE MATERIAL
# STYLE OF PROCESS CONNECTION: "SB" = SIDE/BOTTOM; "SS" = SIDE/SIDE "SSD" – SIDE/SIDE PLUS ¾" SIZE BOTTOM DRAIN; SPECIFY NPT OR SW.
SPECIAL CONNECTION SPACING AVAILABLE; C/F
▲ 3000 PSIG, WOG FITTING RATING; 1" SCH 80 OR 160 WELDING STUB CONNECTIONS AVAILABLE: C/F WITH DETAILS
NOTE: INSTALLED DRAIN VALVE AVAILABLE: C/F WITH SPECIFICATIONS
– FOR 316S.S., ADD 15% TO 304 S.S. PRICE

SWITCH & HOUSING		
▲SWITCH STATION DESCRIPTIONS		
W/P-N4	E/P-7CD,9	INTENDED SERVICE **
S1W S2W S4W	* S1C * S2C S4C	GENERAL USAGE
T1W T2W	T1C T2C	HIGH TEMPERATURE
L1W L2W	L1C L2C	A.C. MOTOR LOADS
D1W D2W	D1C D2C	HIGH D.C. LOADS

▲FOR NEMA 4X (EPOXY): ADD $. AND CHANGE "W" TO "X"
FOR NEMA 7, GROUP B: ADD $ AND CHANGE "C" TO "B"
* FOR ALL 300 S.S. NEMA 7B HOUSING: ADD $ AND CHANGE "C" TO "T"
**SEE DATA SHEET FOR SWITCH LOAD AND SERVICE RATINGS

M/N	DESCRIPTION
AA	NONE
SA	316 S.S. SHEATHED ATTRACTOR
DM	DUAL MAGNET FOR HIGH VIBRATION
IN	INCONEL
HH	120VAC ELECTRICAL HOUSING HEATER TO PREVENT CONDENSATION & ICING

SPECIFICATIONS

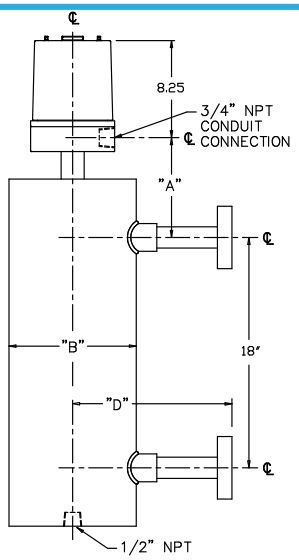
- **Temperature: -20 to +215˚F (-18 to +102˚C); -20 to + 450˚F (-18 to 230˚C) optional**
- **Basic Materials: A106 steel and 316 stainless steel**
- **Design Pressure: In accordance with ANSI B31, ASME Section VIII; or other recognized standards**
- **Support Spring: 316 S.S. to 215ºF Inconel 750 to 450ºF**
- **Trim and Displacer: 316 S.S.**
- **Attractor: 316 or 416 S.S.**
- **Cage Style: Seal welded or flanged**
- **Process Connections: Socket weld, butt weld, flanged, Grayloc clamp hubs, or custom as required.**

OPTIONAL

Custom modifications to suit a particular application; including materials, dimensions, etc.

M/N	DIMENSIONS (HIGH TEMP)	
	"A"	"B"
17*	7.7	6.6
19*	7.7	8.6
33	10.7	8.6
34	10.7	8.6
35	10.7	9.0
36	10.7	9.0
37	12.0	11.0
38	C/F	C/F

* DIMENSIONS ARE FOR SIDE/BOTTOM TYPE PROCESS CONN.



DESIGNED AND BUILT IN THE USA

Engineered Reliability

585 Fortson Street
Shreveport, La. 71107 - USA
P: +1(318) 424-8471
F: +1(318) 425-2421
sales@deltacnt.com
www.deltacnt.com