

Model 767

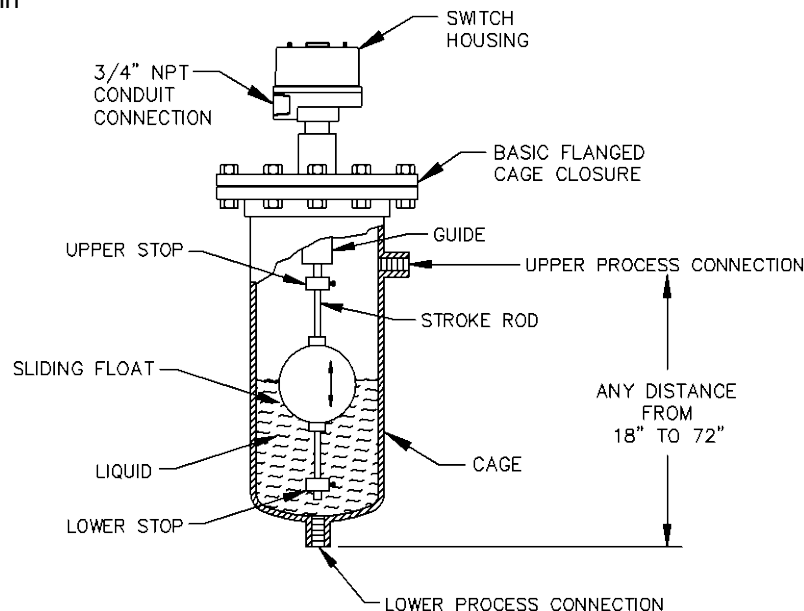
FLOAT TYPE LEVEL SWITCH – EXTERNAL CAGE VERY WIDE SPACING BETWEEN SWITCHPOINTS MODEL 767A - TWO ALARM POINTS MODEL 767D – ONE ALARM POINT WITH DIFFERENTIAL

The Model 767 is similar to the inserted float Model 711. The sliding float technique allows full tank height alarm within a single caged switch unit. The Model 767 provides extra wide spacing between the liquid level positions at which switch action occurs. The wide spacing is accomplished by allowing the float to slide on the float rod. No switch action occurs as long as the liquid level is varying between stops. The float is carried against a stop when it rises or falls far enough. The float pushes against the stop and causes switch action to occur.

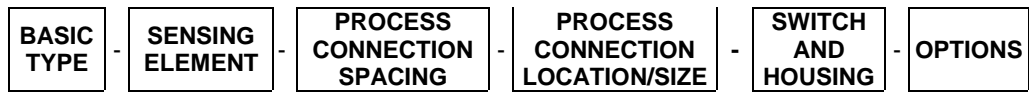
A counter-spring offsets the weight of the attractor, rod, and inner works. The attractor is held in the middle of its travel as long as the liquid supporting the float between stops. The weight of the float pulls the attractor down on low level and its buoyancy lifts it up on high level. Each of these movements produces a switch action.

The Model 767A provides two switch points at widely spaced alarm point locations.

The Model 767D uses the same mechanism as the Model 767A; the difference is that it utilizes a differential device and only one switch station. It provides pumping control between the high and low switching points. The switch magnet is attracted and the switch station actuates when the upper stop is lifted by a float. The station stays actuated until the level drops enough for the float to push the lower stop down. The attractor is pulled away from the switch magnet; the switch deactivates, and stays that way until the upper stop is lifted again.



DELTA CONTROLS
CORPORATION



MODEL
 EXAMPLE: 767A - GS - 18" - SB/1"600R - L1W - AA

BASIC TYPE

M/N	DESCRIPTION
767A	2 ALARMS
767D	1 ADJ DIFF

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

PROCESS CONNECTION LOCATION/SIZE

PROCESS CONNECTION LOCATION

SS	SIDE- SIDE
SB	SIDE-BOTTOM
SSD	SIDE-SIDE PLUS 3/4" BOTTOM DRAIN

PROCESS CONNECTION SIZE

# PROCESS CONNECTION SIZE & TYPE	
M/N	DESCRIPTION.
• 1" SW	1" SOCKET WELD.
• 1" NPT	1" NPT
1" 150R	1" 150# RAISED FACE ANSI FLANGE
1" 300R	1" 300# RAISED FACE ANSI FLANGE.
1" 600R	1" 600# RAISED FACE ANSI FLANGE
2" 150R	2" 150# RAISED FACE ANSI FLANGE
2" 300R	2" 300# RAISED FACE ANSI FLANGE
2" 600R	2" 500# RAISED FACE ANSI FLANGE
ZZ	OTHER TYPES AND SIZES

* PROCESS CONNECTION MATERIAL IS SAME AS CAGE
 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

SENSING ELEMENT

* ELEMENT ASSEMBLY				ASSEMBLY WORKING PSIG @ °F		
M/N	MATERIAL		MIN SPG	100 °F	250 °F	450 °F
	FLOAT	CAGE				
11S	316 S.S.	STEEL	0.60	185	145	120
11B	316 S.S.	304 S.S.	0.60	185	145	120
12S	316 S.S.	STEEL	0.65	450	350	290
12B	316 S.S.	304 S.S.	0.65	450	350	290
13S	316 S.S.	STEEL	0.35	375	295	245
13B	316 S.S.	304 S.S.	0.35	375	295	245

STEEL CAGE IS A-106B MATERIAL
 FOR 316 S.S CAGE, CHANGE "B" TO "Y"
 FLANGED CLEANOUT RATING: SAME AS CAGE
 MINIMUM SPG: INCREASED BY 6% ABOVE 300°F
 HIGHER TEMPERATURES: AVAILABLE, C/F

SWITCH AND HOUSING

M/N FIRST CHARACTER	SWITCH TYPE - SERVICE AND LOAD RATINGS	Switch Temp Rating
S	GENERAL USE, COMPACT, 4 AMP @ 28VDC, 5 AMP @ 125VAC, 250VAC	-65 to 250°F (-54 to 121°C)
T	HIGH TEMPERATURE; 5 AMP @ 125VAC,250VAC; 0.5A@125VDC; 0.25A@250VDC	-65 to 400°F (-54 to 204°C)
H	SEALED SWITCHES, 15 AMPS @ 125/250VAC, 0.5 AMPS @ 125 VDC, 0.25A @ 250VDC, 1/8HP 125VAC, 1/4HP 250VAC	-67 to 185°F (-55 to 85°C)
L	A.C. MOTOR LOADS; 15 AMP @ 125,250,480VAC, 0.25 HP @ 250VAC, 1/8HP@125VAC; 1/4HP@250VAC; 0.5A@125VDC; 0.25A@250VDC	-67 to 185°F (-55 to 85°C)
D	HIGH D.C. LOADS; 10 AMP @ 125VAC/DC; 0.25 HP @ 125VAC/DC; 3A(resistive)@250VDC; 1/2HP@125VDC POLARIZED (i.e., with negative side connected to common.)	-67 to 180°F (-55 to 82°C)
M/N SECOND CHARACTER	NUMBER OF CONTACTS	
1	1 SPDT CONTACT	
2	2 SPDT CONTACTS	
4	4 SPDT CONTACTS (TYPE S ONLY)	
M/N THIRD CHARACTER	HOUSING RATING	
W	Type 4X, IP65	
X	TYPE 4X, IP65 (EPOXY COATED)	
C	ALUMINUM – FOR HAZARDOUS LOCATIONS; SEE CSA RATINGS	
T	300 STAINLESS STEEL – FOR HAZARDOUS LOCATIONS; SEE CSA RATINGS	

OPTIONS

M/N	DESCRIPTION
AA	NONE
IN	INCONEL SPRING, 500°F; INCREASE MIN. SPG BY 4% IF TEMP. OVER 300°F
SA	316 S.S. SHEATHED ATTRACTOR
HH	120VAC ELECTRICAL HOUSING HEATER TO PREVENT CONDENSATION & ICING

PROCESS CONNECTION SPACING

SWITCH POINT ACTIONS:	
MAXIMUM ELEVATION:	2" BELOW TOP PROCESS CONNECTION
MINIMUM ELEVATION:	SB TYPE: 8" ABOVE THE BOTTOM CONNECTION FACE.
	SS TYPE: 10" ABOVE THE BOTTOM CONNECTION CENTERLINE
	SSD TYPES: 2" ABOVE THE BOTTOM CONNECTION CENTERLINE



CSA Ratings:
 Housing types 'C' and 'T'
 CI I Div 1, Gr B,C,D; CI II, Div 1 Gr E,F,G; CL III Div 1
 Class I Zone 1, Ex/AEx d IIB+H₂
 Maximum contact ratings 480Vac, 15A, T5 with max ambient 80°C. T6 without heater with max ambient 60°C



DELTA CONTROLS CORPORATION

Engineered Sensors – For Difficult Services

585 Fortson Street
 Shreveport, La. 71107 - USA
 Ph: +1(318) 424-8471
 Fax: +1(318) 425-2421
 E-mail: sales@deltacnt.com
 Web: www.claustrtemp.com