

Model 750

FLOAT TYPE LEVEL SWITCH – EXTERNAL CAGE ONE ALARM POINT

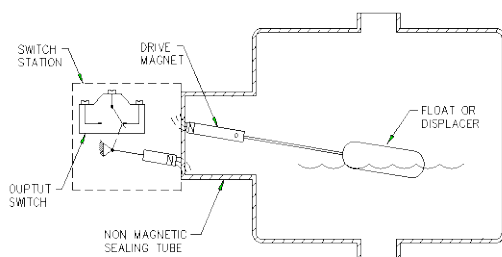
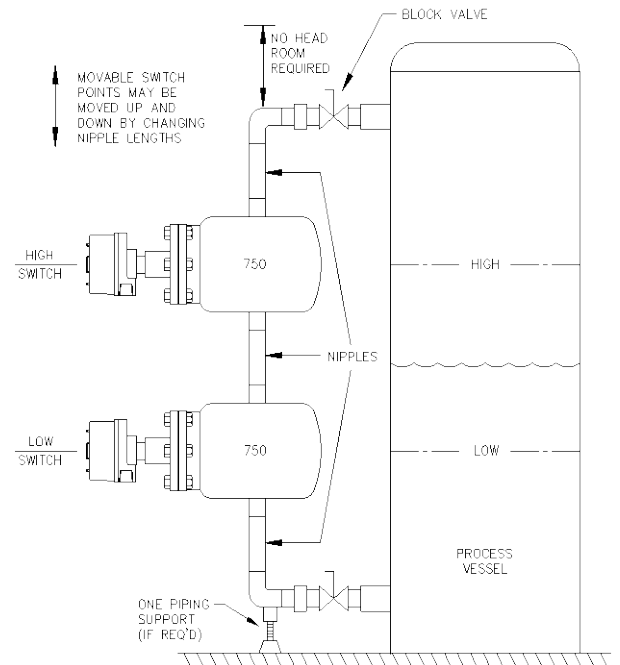
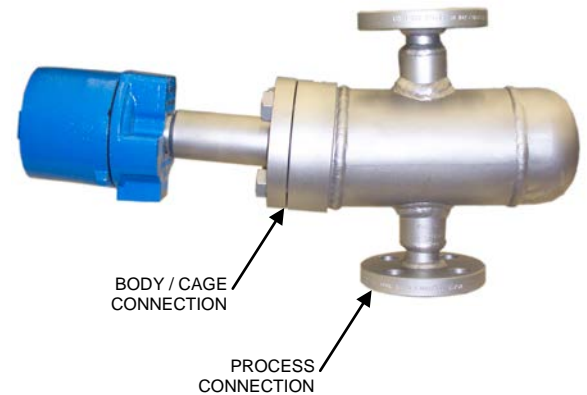
The Model 750 utilizes a balanced horizontal element design. This modern design has significant advantages over vertically rising float design, some are:

1. Straight through piping is efficient and lowers installation costs.
2. The switch point can be set to a new elevation without cutting on the process vessel. The vertical dimension requirement is small ($> 7"$ in some cases).
3. Its dual magnet positive switching action is reliable as well as insensitive to vibration and shock. There is no "in between" condition of the switching mechanism.
4. Is suitable for high temperature and pressure.
5. The sensing elements can be made solid for high pressures, better reliability, and corrosion resistance.

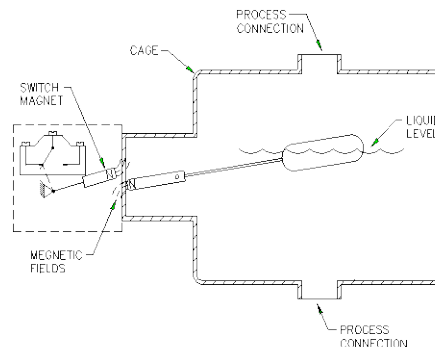
A float is held in a horizontal position by a counterweight pivot mechanism. As the liquid level rises, the sensing element is moved vertically up. This movement results in short stroke rotary motion which carries the drive magnet into the field of the switch station magnet. The switch magnet is pushed against the side of the sealing tube and the output switch is actuated.

When the liquid level falls, the sensing element moves down with it. The drive magnet is rotated back through the magnet fields; the switch magnet is repulsed, the switch returns to its original position, and the output switch deactuates.

The dual opposed magnet design provides snap action of the switch mechanism; immunity from vibration, and greatly improved reliability.



LOW LEVEL



HIGH LEVEL



DELTACONTROLS
CORPORATION

BASIC TYPE - **SENSING ELEMENT** - **BODY/CAGE CONNECTION** - **PROCESS CONNECTION** - **SWITCH AND HOUSING** - **OPTIONS**

MODEL
EXAMPLE: 750 - VS - W - 1"150RS - L1W - AA

BASIC TYPE

M/N	DESCRIPTION
750	1 ALARM

316 S.S. TRIM AND ATTRACTOR

OPTIONS

M/N	DESCRIPTION
AA	NONE
ZZ	SPECIAL - SPECIFY WHEN ORDERING

BODY/CAGE CONNECTION

M/N	DESCRIPTION
W	WELDED
F	FLANGED FOR CLEANOUT; ANSI DESIGN; OTHER STANDARDS AND RATINGS AVAILABLE, C/F NOTE: CLEANOUT FLANGE RATINGS ARE THE SAME AS FOR THE PROCESS CONNECTIONS, C/F FOR OTHERS

SENSING ELEMENT

* ELEMENT ASSEMBLY			ASSEMBLY WORKING				
M/N	MATERIAL		MIN SPG	PSIG @ °F			
	FLOAT	CAGE		100°F	450°F	750°F	1000°F
VS	316 SS	STEEL	0.80	375	235	200	85
VY	316 SS	316 SS	0.80	375	235	200	185
36S	316 SS	STEEL	0.65	3700	3600	3500	C/F
XS	316 SS	STEEL	0.50	965	630	935	80
XY	316 SS	316 SS	0.50	720	580	510	475
37S	316 SS	STEEL	0.45	8000	5250	4750	C/F
YS	316 SS	STEEL	0.40	1750	1100	1060	275
YY	316 SS	316 SS	0.40	1585	1100	1060	875
SS	316 SS	STEEL	0.30	615	400	345	305
SY	316SS	316SS	0.30	615	400	345	305
21S	316SS	STEEL	0.28	2260	1460	1240	1130
*INTERFACE SERVICE							
KIS	316 SS	STEEL	*0.15	400	260	245	200
KIY	316 SS	316 SS	*0.15	400	260	245	200
HIS	316 SS	STEEL	*0.10	950	590	570	150
HIY	316 SS	316 SS	*0.10	950	590	570	445

STEEL CAGE IS A-106B MATERIAL; LIMITED TO 800°F MAX CONTINUOUS SERVICE

* "KI" MINIMUM DIFFERENCE BETWEEN THE SPECIFIC GRAVITIES OF THE TWO LIQUIDS IS 0.15 SPG UNITS; MINIMUM SPG OF THE HEAVIER LIQUID: 0.40 SPG UNITS.

* "HI" MINIMUM DIFFERENCE BETWEEN THE SPECIFIC GRAVITIES OF THE TWO LIQUIDS IS 0.10 SPG UNITS MINIMUM SPG OF THE LOWER LIQUID IS 0.50

PROCESS CONNECTION

M/N*	PROCESS CONNECTIONS	CONN. WKG PSIG @ °F		
		100°F	400°F	750°F
1" SW	1" SOCKET WELD	5720	4940	3710
1" BW	1" BUTT WELD	5720	4940	3710
1" NPT	1" NPT	3000	2600	N.R.
1" 150R	1" 150# ANSI FLANGE	275	180	100.
1" 300R	1" 300# ANSI FLANGE	720	665	425
1" 600R	1" 600# ANSI FLANGE	1440	1330	850
1" 900R	1" 900# ANSI FLANGE	2160	2000	1275
1" 1500R	1" 1500# ANSI FLANGE	3600	3320	2125
ZZ	OTHER TYPES & SIZES	C/F	C/F	C/F

* PROCESS CONNECTIONS ARE THE SAME MATERIAL AS THE CAGE

NOTE: SPECIAL CONNECTIONS AND CONNECTION SPACING AVAILABLE; CONSULT FACTORY WITH REQUIREMENTS.

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	



CSA Ratings:
Housing types 'C' and 'T'
Cl I Div 1, Gr B,C,D; Cl 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



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