

Model 765

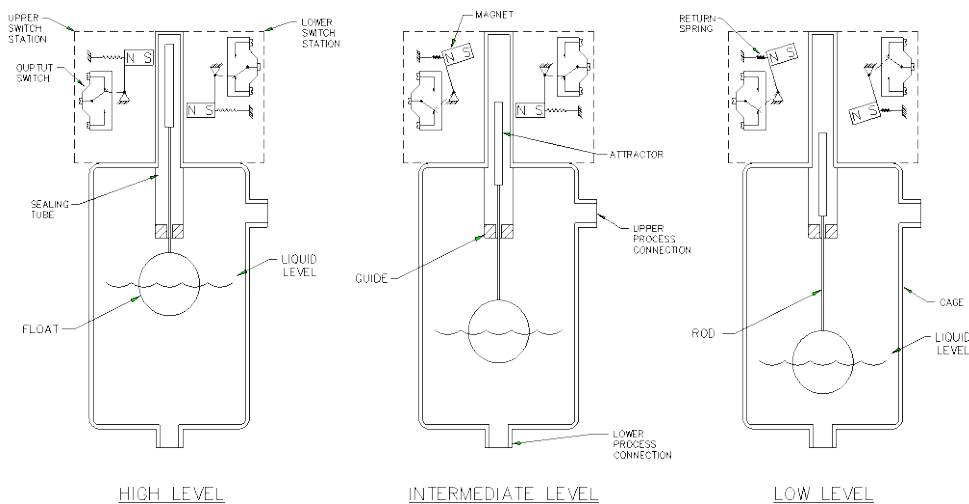
FLOAT TYPE LEVEL SWITCH – EXTERNAL CAGE MODEL 765A - TWO ALARM POINTS MODEL 765D – ONE ALARM POINT WITH DIFFERENTIAL

The Model 765A is very similar to the Model 760. The major difference is that the float moves farther and a second switch station is added. This design allows both monitoring and shutdown operation of critical liquid levels with a single control. It can provide a "High" alarm, plus a "High-High" shutdown action with one control unit.

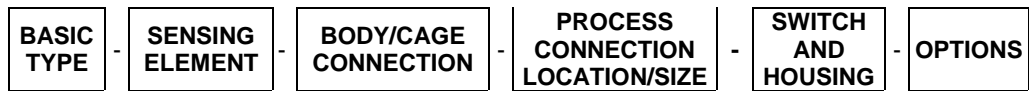
The Model 765A float inside the cage floats on the surface of the liquid and rides up and down with it. An attractor is attached to the float and also moves with the station magnet. When the level rises, the attractor is moved up into the field of the switch station magnet. The magnet is free to move and is pulled in against the side of the nonmagnetic sealing tube. The output switch is actuated by the movement of the magnet. If the level continues to rise, the attractor is pushed into the field of the upper switch station magnet and that output switch is actuated.

Similarly, when the liquid level falls, the attractor is sequentially pulled out of the field of each magnet. The magnet moves back to its original position and the output switch is deactivated. Note that extra power (greater SPG) is required for operating the second switch station.

The Model 765D body, mechanism, and float are the same as the one used for the Model 765A. The difference is that it only has a single switching station. The station activates when the sensing float rises to the upper stop and lifts the guide rod attractor into the field of the station magnet. The station stays activated until the float moves down against the lower stop. The guide rod-attractor is then pulled down out of the magnetic field and the switch station deactivates. It remains in that condition until the float again rises up against the upper stop and activates the switch.



DELTA CONTROLS
CORPORATION



MODEL
 EXAMPLE: 765 - GS - W - SB/1"600R - L1W - AA

BASIC TYPE

M/N	DESCRIPTION
765A	2 ALARMS
765D	1 ADJ. DIFF

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		
M/N	MATERIAL		MIN SPG		PSIG @ °F		
	FLOAT	CAGE	A	D	100°F	450°F	750°F
GS	316 S.S.	STEEL	0.85	0.75	850	565	485
GB	316 S.S.	304 S.S.	0.85	0.75	850	565	485
DS	316 S.S.	STEEL	0.85	0.75	525	350	300
DB	316 S.S.	304 S.S.	0.85	0.75	525	350	300
HS	316 S.S.	STEEL	0.70	0.65	1170	780	665
HB	316 S.S.	304 S.S.	0.70	0.65	1170	780	665
LS	316 S.S.	STEEL	0.70	0.65	470	305	260
LB	316 S.S.	304 S.S.	0.70	0.65	470	305	260
SS	316 S.S.	STEEL	0.60	0.55	650	430	370
SB	316 S.S.	304 S.S.	0.60	0.55	650	430	370
MS	316 S.S.	STEEL	0.50	0.46	485	325	275
MB	316 S.S.	304 S.S.	0.50	0.46	485	325	275
NS	316 S.S.	STEEL	0.45	0.41	730	475	400
NB	316 S.S.	304 S.S.	0.45	0.41	730	475	400
PS	316 S.S.	STEEL	0.35	0.32	375	250	215
PB	316 S.S.	304 S.S.	0.35	0.32	375	250	215
INTERFACE SERVICE							
IS	316 S.S.	STEEL	•	•	730	475	400
IB	316 S.S.	304 S.S.	•	•	730	475	400

STEEL CAGE IS A-106B CARBON STEEL
 FOR 316 S.S. CAGE INSTEAD OF 304 S.S.; CHANGE "B" TO "Y"; &
 OTHER PRESSURE & TEMP RATINGS AVAILABLE; C/F

- MINIMUM DIFFERENCE BETWEEN THE SPECIFIC GRAVITIES OF THE UPPER AND LOWER LIQUIDS: 0.10 SPG UNITS.
- OTHER MATERIALS AVAILABLE: CONSULT FACTORY
- # SPECIAL BODY & CAGE MATERIALS, & SIZES FOR EXTREME TEMPERATURE AND PRESSURE RATINGS ARE AVAILABLE:

OPTIONS

OPTIONS M/N *	HOUSING EXTENSION LENGTH (INCHES)	MAX PROCESS TEMP (°F) – SWITCHES					
		CONDENSING SERVICE (STEAM, DOWTHERM)			NONCONDENSING (GAS, HYDROCARBONS)		
		D	S,L	H,T	D	S,L	H,T
AA	NONE	400	500	750	500	600	850
T1	6"	500	575	950	600	700	1100
T2	12"	600	650	1250	800	925	1500
SA	316 S.S. SHEATHED ATTRACTOR						
HH	120VAC ELECTRICAL HOUSING HEATER TO PREVENT CONDENSATION & ICING; INSULATE HOUSING FOR LOW AMBIENT CONDITION						
DM	DUAL MAGNET FOR HIGH VIBRATION						

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

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

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



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