

Instruction Bulletin

Tank Float Switch Flange Mounted Class 9037, Type EG

INTRODUCTION AND SPECIFICATIONS



Use the tank float switch to control the liquid level automatically in a closed tank. The float switches can be set in the field to either open or close contacts on rising liquid. Floats and rod kits are available. See Tables 2-5.

Class 9037 Type EG float switches are double-pole devices mounted in NEMA 1 (general purpose) rated enclosures.

Table 1: Class 9037, Type EG Double-Pole Device Ratings

Electrical Ratings					
No. of Poles	Voltage	Horsepower			Control Circuit Rating
		Single Phase AC	Polyphase AC	DC	
2 Pole	115 Vac	2	3	0.5	A600
	230 Vac	3	5	0.5	
	460/575	—	1	—	
	32	—	—	0.25	
Temperature Ratings					
-40 to +185 °F (-40 to +86 °C)					
Pressure Rating					
50 psi					
Enclosure Rating					
NEMA 1					

INSTALLATION & WIRING

Mount the tank float switch directly to the tank by using the four 13/16 in. diameter mounting holes that are provided in the flange. Flange gaskets are not provided. The recommended size of the hole in the tank is 4-3/16 in.

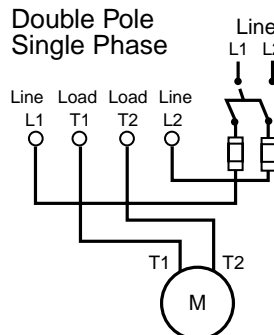
⚠ DANGER

HAZARDOUS VOLTAGE

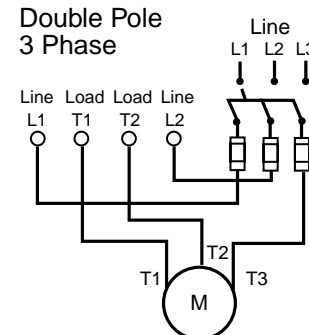
Disconnect all power before installing or servicing this equipment.

Failure to follow this instruction will result in death or serious injury.

**Double Pole
Single Phase**



**Double Pole
3 Phase**

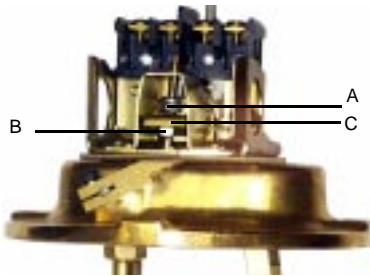


MOTOR PROTECTION

This device does not provide motor protection. However, it can be used as a pilot to operate a starter that provides motor protection. Contact your Square D sales office for information on a complete line of motor protective devices.

ADJUSTMENT

Switches are factory set to a specific float travel for a given length of rod. Float travel is adjustable in the field. The guard provided with the float switch prevents the operating lever from becoming tangled with the load and line wires.

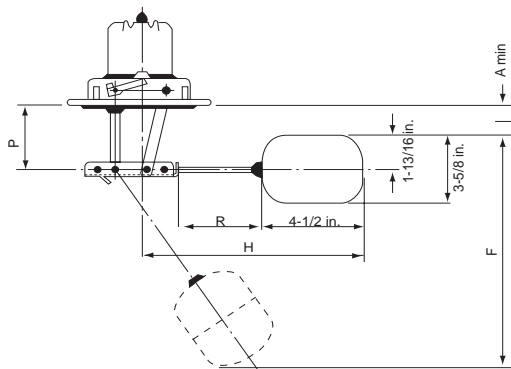


Remove the guard by loosening, not removing, the holding screws. Decrease float travel by turning the adjusting nut (A) downward and the adjusting nut (B) upward. Increase float travel by turning the adjusting nut (A) upward and the adjusting nut (B) downward.

NOTE: You must leave approximately 1/16 in. clearance between the adjusting nuts (A and B) and the operating lever (C). If you do not maintain this clearance, the mechanism will bind. Check the clearance when the contacts are closed.

ROD KITS

The float switch can be mounted in three positions as shown in Figures 1-3. Refer to Tables 2-5 for rod kits that are available for these positions.



P= (post clearance dimension) is 2-5/8 in. for short post models. On long post models (types EG-9 and EG-13) this distance is 4-11/16 in.

Figure 1: Float Position 1 - Vertical mounting, sump operation; contacts close as liquid level rises

Table 2: Rod Kits for Class 9037, Type EG-8 and EG-10 Float Position 1

Class 9049 Rod Kits	A [2]						F [2]		Water Level Change	
	R [2]	H [2]	EG-8 [1]		EG-10 [1]		Min	Max	Min	Max
			Min	Max	Min	Max				
ER-1	1-3/4	8-1/4	1	2	3-1/16	4-1/16	4-3/4	6	1-3/4	3
ER-2	2-1/2	9	1	2	3-1/16	4-1/16	4-3/4	6-1/4	1-3/4	3-1/4
ER-3	3-1/4	9-1/2	1	2	3-1/16	4-1/16	4-3/4	6-1/2	1-3/4	3-1/2
ER-5	5-1/4	11-3/4	1	2-1/2	3-1/16	4-9/16	4-3/4	6-3/4	1-3/4	3-3/4
ER-7	7-1/4	13-3/4	1	3	3-1/16	5-1/16	5	7-1/4	2	4-1/4
ER-12	12-1/4	18-3/4	1	4-1/4	3-1/16	6-5/16	5-3/4	9	2-3/4	6

[1] Dimensions are in inches.

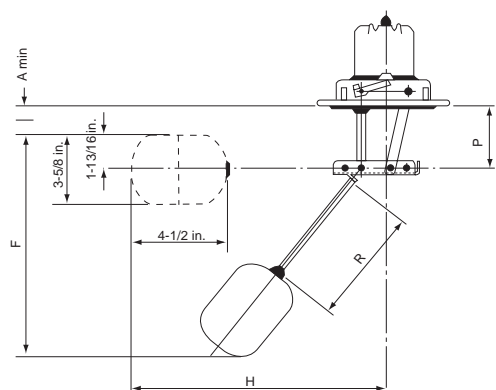
[2] Letters refer to Figure 1.

Table 3: Rod Kits for Class 9037, Type EG-9 and EG-13 Float Position 1

Class 9049 Rod Kits	A [2]						F [2]		Water Level Change	
	R [2]	H [2]	EG-9 [1]		EG-13 [1]		Min	Max	Min	Max
			Min	Max	Min	Max				
ER-1	1-3/4	7-1/2	1	4	3-1/16	6-1/16	6	9	3	6
ER-2	2-1/2	8-1/4	1	4-1/2	3-1/16	6-9/16	6-1/4	9-3/4	3-1/4	6-3/4
ER-3	3-1/4	9	1	5	3-1/16	7-1/16	6-1/4	10-1/4	3-1/4	7-1/4
ER-5	5-1/4	11	1	6	3-1/16	8-1/16	6-1/2	11-1/2	3-1/2	8-1/2
ER-7	7-1/4	12	1	7-1/2	3-1/16	9-9/16	6-1/2	13	3-1/2	10
ER-12	12-1/4	18	1	9-1/2	3-1/16	11-9/16	9	17-1/2	6	14-1/2

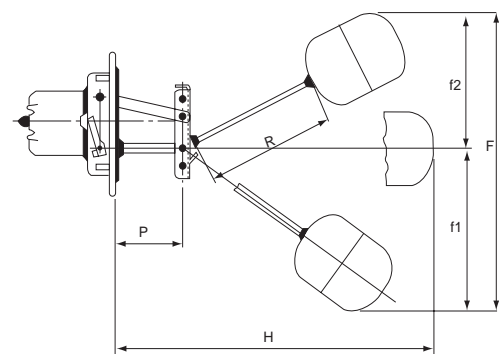
[1] Dimensions are in inches.

[2] Letters refer to Figure 1.



P = (post clearance dimension) is 2-5/8 in. for short post models. On long post models (types EG-9 and EG-13) this distance is 4-11/16 in.

Figure 2: Float Position 2 - Vertical mounting, standard operation; contacts close as liquid level falls.



P = (post clearance dimension) is 2-5/8 in. for short post models. On long post models (types EG-9 and EG-13) this distance is 4-11/16 in.

Figure 3: Float Position 3 - Horizontal mounting. Standard or sump operation depends on the position of the switch. To reverse operation, turn the control through 180° around the horizontal center line.

Table 4: Rod Kits for Class 9037, Type EG-9 and EG-13 Float Position 2

Class 9049 Rod Kits	A ^[2]										F ^[2]	Water Level Change
	EG-9 ^[1]				EG-13 ^[1]							
	R ^[2]	H ^[2]	Min	Max	Min	Max	Min	Max	Min	Max		
ER-1	1-3/4	7-1/2	1	3	3-1/16	5-1/16	5-1/4	7-1/4	2-3/4	4-1/4		
ER-2	2-1/2	8-1/4	1	3-1/2	3-1/16	5-9/16	5-3/4	8-1/4	2-3/4	5-1/4		
ER-3	3-1/4	9	1	4	3-1/16	6-1/16	6	9	3	6		
ER-5	5-1/4	11	1	5	3-1/16	7-1/16	6-3/4	10-3/4	3-3/4	7-3/4		
ER-7	7-1/4	13	1	6	3-1/16	8-1/16	7-3/4	12-3/4	4-3/4	9		
ER-12	12-1/4	18	1	8-1/2	3-1/16	10-9/16	10-1/4	17-3/4	7-1/4	12-1/4		

[1] Dimensions are in inches.

[2] Letters refer to Figure 2.

Table 5: Rod Kits for Class 9037, Type EG-9 and EG-13 Float Position 3

Class 9049 Rod Kits										
	H ^[2]			f1 or f2 ^[2]		F ^[2]		Water Level Change		
	R ^[2]	EG-9 ^[1]	EG-13 ^[1]	Min	Max	Min	Max	Min	Max	
ER-1	1-3/4	9	11	2-3/4	4-1/2	5-1/2	9	2-1/4	5-3/4	
ER-2	2-1/2	9-3/4	11-3/4	2-3/4	4-1/2	5-1/2	9	2-1/4	5-3/4	
ER-3	3-1/4	10-1/2	12-1/2	3	5	6	10	2-3/4	6-3/4	
ER-5	5-1/4	12-1/2	14-1/2	3-1/2	6	7	12	3-3/4	8-3/4	
ER-7	7-1/4	14-1/2	16-1/2	3-3/4	7	7-1/2	14	4-1/4	10-3/4	
ER-12	12-1/4	19-1/2	21-1/2	4-1/2	9-1/2	8-3/4	19	5-1/2	15-3/4	

[1] Dimensions are in inches.

[2] Letters refer to Figure 3.

REPLACEMENT PARTS

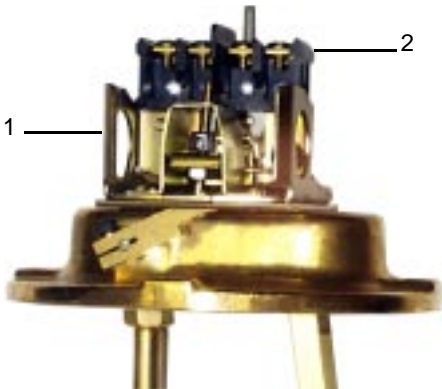


Figure 4: 9037 Type EG Replacement Parts

Table 6: Replacement Parts

Item Number	Description	Part Number	Quantity
1	Switch mechanism	2666-C5-G3	1
2	Set of movable and stationary contacts	9998 PC-242	1
Not shown	Replacement cover (specify complete class and type number)	S65079-701-50	1

ACCESSORIES

Table 7: Accessories

Description	Part Number	Quantity
Float 3-5/8 in. x 4-1/2 in. (304 stainless steel)	9049 EF-1	1
Float 3-5/8 in. x 4-1/2 in. (316 stainless steel) (Form Z5 only)	9049 EF-2	1
Float rod 1-3/4 in. stainless steel	9049 ER-1	1
Float rod 2-1/2 in. stainless steel	9049 ER-2	1
Float rod 3-1/4 in. stainless steel	9049 ER-3	1
Float rod 5-1/4 in. stainless steel	9049 ER-5	1
Float rod 7-1/4 in. stainless steel	9049 ER-7	1
Float rod 12-1/4 in. stainless steel	9049 ER-12	1