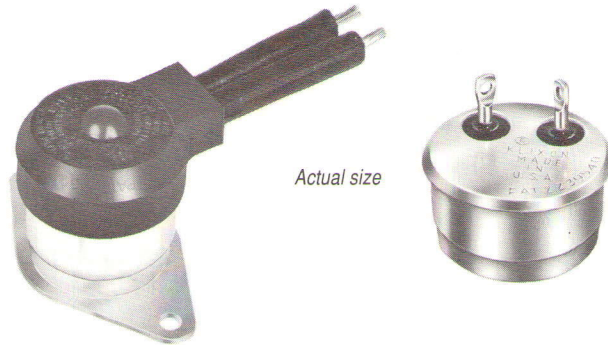


# 4391 Series Hermetically Sealed

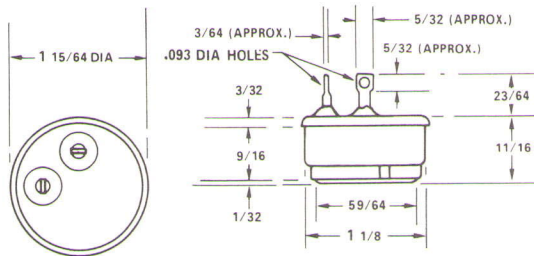
- Snap-action switching
- Normally open or normally closed
- Automatic or manual reset
- SPST or SPDT
- Overmold optional



## Dimensional Drawings of Basic Design

Other variations are available - dimensions in inches

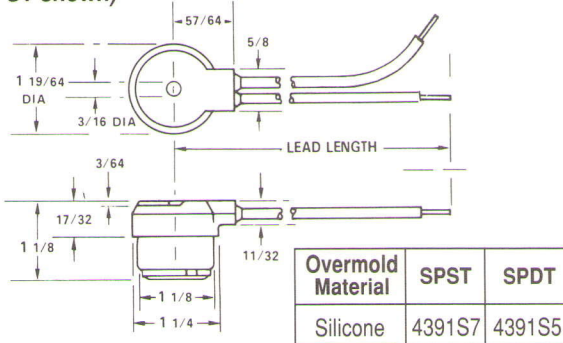
### 4391-8 Style SPST automatic reset without overmold



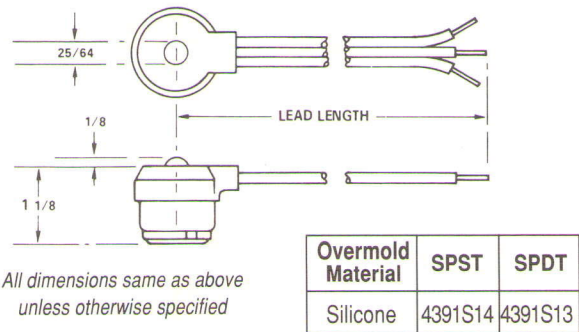
### 4391-6 Style SPDT automatic reset without overmold



### Automatic reset with overmold (SPST shown)

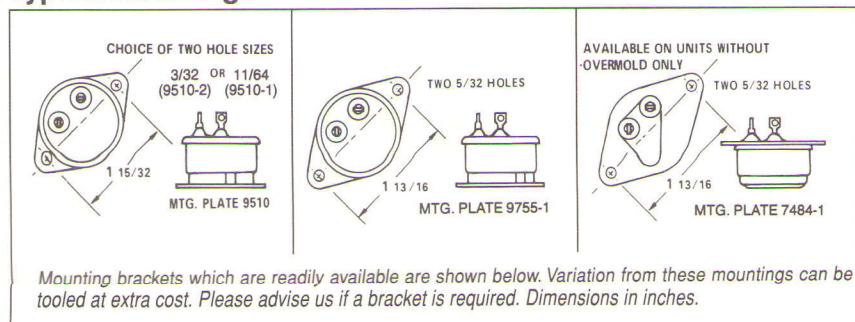


### Manual reset with overmold (SPDT shown)



All dimensions same as above unless otherwise specified

## Typical Mountings



## Performance Characteristics

### Switch Action

SPST or SPDT (snap-action)

### Contact Ratings

(Resistive, Automatic Reset)

30 VAC/DC	125 VAC	250 VAC	Life Cycles
Amperes			
10	4	2	100,000
11	6	3	50,000
12	8	4	25,000
13	10	5	10,000
14	12	6	5,000

Based on standard differential

### Dielectric Strength

1250 VAC, rms, 60 Cycles for 1 min.  
(1500 VAC rms available on special request)

### Vibration Resistance

Standard construction  
5-500 Hz, 3G's  
High vibration construction  
5-500 Hz, 5G's

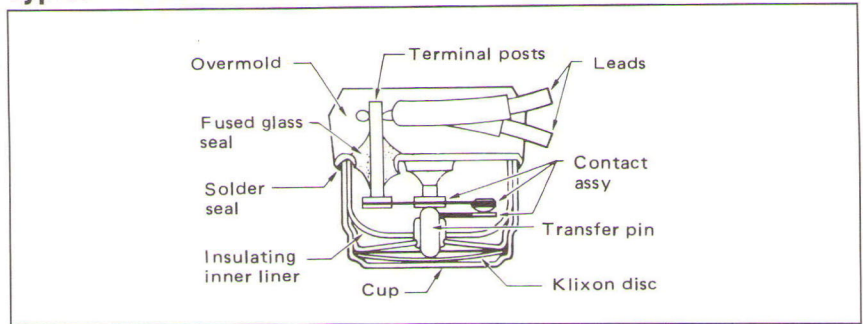
### Hermeticity

1 X 10<sup>-5</sup> atm cc/sec. max.

### Weight

Without overmold..... 21 grams  
With overmold ..... 56 grams

## Typical Cross Section View



**Temperature** (Use table below for common operating temperatures).

### Ambient Temperature:

Non-overmold -65°F to +450°F

Silicone overmold -60°F to +400°F

### Operating temperature

Temperature at which normally closed contacts open or normally open contacts close.

### Tolerance

Allowable range above and below setpoint and reset temperatures.

### Differential

Subtract the differential from the operating temperature to determine the temperature at which the contacts will return to the normal position (reset temperature).

## SPST Standard Vibration Resistance

Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
0	-17.8	15	8.3	5	2.8
10	-12.2	15	8.3	5	2.8
20	-6.7	15	8.3	5	2.8
30	-1.1	15	8.3	5	2.8
40	4.4	15	8.3	5	2.8
50	10.0	15	8.3	5	2.8
60	15.6	15	8.3	5	2.8
70	21.1	15	8.3	5	2.8
80	26.7	15	8.3	5	2.8
90	32.2	15	8.3	5	2.8
100	37.8	15	8.3	5	2.8

Consult factory if desired operating temperature does not appear in the table.

Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
110	43.8	15	8.3	5	2.8
120	48.9	15	8.3	5	2.8
130	54.4	15	8.3	5	2.8
140	60.0	15	8.3	5	2.8
150	65.6	15	8.3	5	2.8
160	71.1	15	8.3	5	2.8
170	76.7	15	8.3	5	2.8
180	82.2	15	8.3	5	2.8
190	87.8	15	8.3	5	2.8
200	93.3	15	8.3	5	2.8
210	98.9	25	13.9	7	3.9

Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
220	104.4	25	13.9	7	3.9
240	115.6	25	13.9	7	3.9
260	126.7	25	13.9	7	3.9
280	137.8	25	13.9	7	3.9
300	148.9	25	13.9	7	3.9
325	162.8	45	25.0	12	6.7
350	176.7	45	25.0	12	6.7
* 375	190.6	60	33.3	15	8.3
* 400	204.4	60	33.3	15	8.3
* 425	218.3	60	33.3	15	8.3
* 450	232.2	60	33.3	15	8.3

\* = Available in automatic reset only.

## SPDT & High Vibration Resistance

Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
0	-17.8	25	13.9	8	4.4
10	-12.2	25	13.9	8	4.4
20	-6.7	25	13.9	8	4.4
30	-1.1	25	13.9	8	4.4
40	4.4	25	13.9	8	4.4
50	10.0	25	13.9	8	4.4
60	15.6	25	13.9	8	4.4
70	21.1	25	13.9	8	4.4
80	26.7	25	13.9	8	4.4
90	32.2	25	13.9	8	4.4
100	37.8	25	13.9	8	4.4

Consult factory if desired operating temperature does not appear in the table.

Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
110	43.8	25	13.9	8	4.4
120	48.9	25	13.9	8	4.4
130	54.4	25	13.9	8	4.4
140	60.0	25	13.9	8	4.4
150	65.6	25	13.9	8	4.4
160	71.1	25	13.9	8	4.4
170	76.7	25	13.9	8	4.4
180	82.2	25	13.9	8	4.4
190	87.8	25	13.9	8	4.4
200	93.3	25	13.9	8	4.4
210	98.9	30	16.7	10	5.6

Operating Temperature		Differential		Tolerance	
°F	°C	°F	°C	±°F	±°C
220	104.4	30	16.7	10	5.6
240	115.6	30	16.7	10	5.6
260	126.7	30	16.7	10	5.6
280	137.8	30	16.7	10	5.6
300	148.9	30	16.7	10	5.6
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