

# KLIXON® | 6PS & 7PS Series

## Hermetic Stainless Steel Pressure Switch

### FEATURES

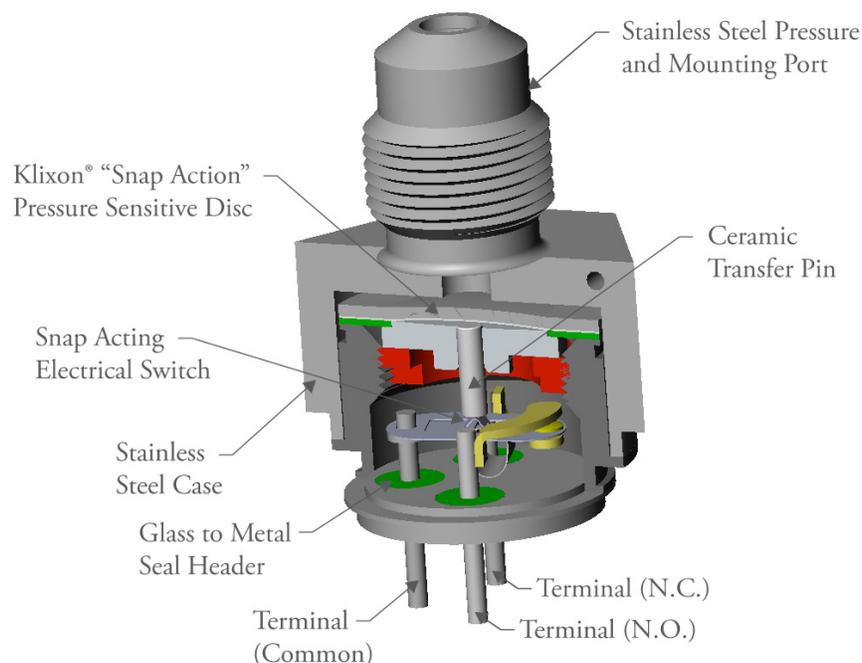
- Hermetically sealed per MIL-E-5400 paragraph 6.3.10
- Covers actuation range of 45 to 700 PSIA
- Maximum corrosion resistance under hostile conditions
  - 300 series stainless steel construction for all environment exposed parts
  - Stainless steel and brass construction for media exposed parts
- High vibration resistance
- 8000 psi minimum burst pressure
- SPDT switch configuration
- Available in a wide range of standard and custom configurations

### INTRODUCTION

The Klixon® 6PS and 7PS series precision pressure switches are snap-acting, all-welded devices with hermetically sealed switch contacts. Our pressure switches were developed for applications in aerospace and electronics where high reliability and/or resistance to severe environments is required. To ensure maximum corrosion resistance under hostile conditions, all parts exposed to the pressure media and the environment are made of brass or 300 series stainless steel — no rubber parts are used.

Small and lightweight, 6PS and 7PS Series switches can be mounted by their pressure ports alone, allowing maximum flexibility of design. Full contact force is maintained even during high shock and vibration—regardless of applied pressure—because the positive, snap-action disc works in tandem with snap-action switch contacts.

There are over 1,000 existing 6PS switch package designs. The 6PS is ideal for highly customized package and performance needs. The 7PS is ideal for higher volume standard solution needs.

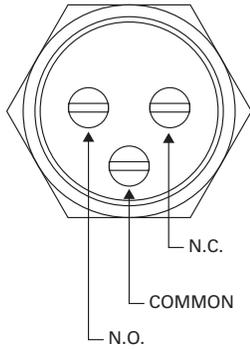


SPECIFICATIONS	
<b>Temperature Rating</b>	-65°F to 275°F (-53.8°C to +135°C)
<b>Vibration Resistance</b>	25 G, 20–2000 cps (no contact chatter in excess of 10 microseconds)
<b>Burst Pressure</b>	8,000 PSI minimum
<b>Proof Pressure</b>	8 times actuating pressure
<b>Life @ Rated Current</b>	50,000 cycles
<b>Current Capacity</b>	Resistive : 5amp @ 28 VDC Inductive : 2amp @ 28 VDC Lamp : 1amp @ 28 VDC
<b>Dielectric Strength</b>	Terminal to terminal : 1000 vrms Terminal to case : 1000 vrms
<b>Weight</b>	Without Leads : 30 grams maximum With Connector : 60 grams maximum
<b>Metal Parts Exposed to Pressure &amp; Environment</b>	300 series stainless steel CA-360-2 (1/2 hard leaded brass)
<b>Potting Material</b>	Epoxy resin

PRESSURE SPECIFICATIONS	
<b>Range of Actuation Pressure Settings</b>	at STP from 45 PSIA to 700 PSIA
<b>Range of Deactuation Pressure Settings</b>	Standard : 60% to 85% of actuation pressure Special : 85% to 90% of actuation pressure
<b>Range of Tolerances on Actuation &amp; Deactuation Pressure</b>	Standard : up to $\pm 6\%$ of actuation pressure ( $\pm 10$ PSI minimum) Special : up to $\pm 4\%$ of actuation pressure ( $\pm 5$ PSI minimum)  <i>Choice of deactuation pressure setting and tolerances affects price</i>

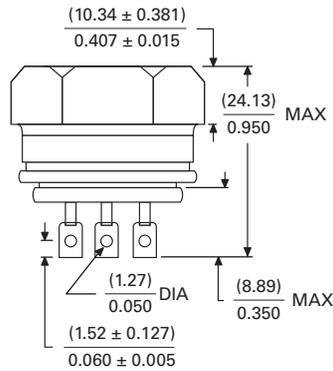
Actuation Pressure (PSIA)			Deactuation Pressure (PSIA)			
Pressure	Standard Tolerance	Special Tolerance	Standard 60% to 85%	Special 85% to 90%	Standard Tolerance	Special Tolerance
45 to 134	$\pm 10$	$\pm 5$	28 to 112	40 to 117	$\pm 10$	$\pm 5$
135 to 164	$\pm 10$	$\pm 7$	83 to 137	117 to 144	$\pm 10$	$\pm 7$
165 to 249	$\pm 15$	$\pm 10$	101 to 208	142 to 216	$\pm 15$	$\pm 10$
250 to 369	$\pm 20$	$\pm 15$	153 to 310	217 to 324	$\pm 20$	$\pm 15$
370 to 429	$\pm 25$	$\pm 20$	225 to 361	319 to 378	$\pm 25$	$\pm 20$
430 to 489	$\pm 30$	$\pm 20$	261 to 412	370 to 432	$\pm 30$	$\pm 20$
490 to 549	$\pm 35$	$\pm 25$	297 to 463	421 to 486	$\pm 35$	$\pm 25$
550 to 599	$\pm 40$	$\pm 25$	333 to 510	472 to 540	$\pm 40$	$\pm 25$
600 to 700	Consult Factory					

## 6PS SERIES - DESIGN TYPE

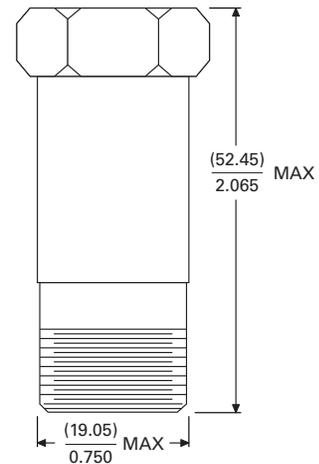


Lockwire holes are  $.047 \pm .006$  [1.19 ± .15] diameter. Located  $.050 \pm .008$  [1.27 ± .20] from port face of hex

### FLATTENED & PIERCED TERMINALS



### MS33678-10SL-3P (SPDT) IS33678-10SL-4P (SPST NC/NO)



		SPDT	SPDT	SPDT	SPDT	SPST	SPST
1/8" OD Tubing MS 33656 -E2		<b>6PS100</b> without lock-wire holes	<b>6PS150</b> with lock-wire holes	<b>6PS102</b> without lock-wire holes	<b>6PS152</b> with lock-wire holes	<b>6PS103</b> without lock-wire holes	<b>6PS153</b> with lock-wire holes
3/16" OD Tubing MS 33656 -E3		<b>6PS200</b> without lock-wire holes	<b>6PS250</b> with lock-wire holes	<b>6PS202</b> without lock-wire holes	<b>6PS252</b> with lock-wire holes	<b>6PS203</b> without lock-wire holes	<b>6PS253</b> with lock-wire holes
1/4" OD Tubing MS 33656 -E4		<b>6PS300</b> without lock-wire holes	<b>6PS350</b> with lock-wire holes	<b>6PS302</b> without lock-wire holes	<b>6PS352</b> with lock-wire holes	<b>6PS303</b> without lock-wire holes	<b>6PS353</b> with lock-wire holes
5/16" OD Tubing MS 33656 -E5		<b>6PS400</b> without lock-wire holes	<b>6PS450</b> with lock-wire holes	<b>6PS402</b> without lock-wire holes	<b>6PS452</b> with lock-wire holes	<b>6PS403</b> without lock-wire holes	<b>6PS453</b> with lock-wire holes
3/8" OD Tubing MS 33656 -E6		<b>6PS500</b> without lock-wire holes	<b>6PS550</b> with lock-wire holes	<b>6PS502</b> without lock-wire holes	<b>6PS552</b> with lock-wire holes	<b>6PS503</b> without lock-wire holes	<b>6PS553</b> with lock-wire holes
1/8" Pipe Fitting MS 33677		<b>6PS600</b> without lock-wire holes	<b>6PS650</b> with lock-wire holes	<b>6PS602</b> without lock-wire holes	<b>6PS652</b> with lock-wire holes	<b>6PS603</b> without lock-wire holes	<b>6PS653</b> with lock-wire holes
1/4" Pipe Fitting MS 33677		<b>6PS700</b> without lock-wire holes	<b>6PS750</b> with lock-wire holes	<b>6PS702</b> without lock-wire holes	<b>6PS752</b> with lock-wire holes	<b>6PS703</b> without lock-wire holes	<b>6PS753</b> with lock-wire holes





**7PS SERIES - DESIGN TYPE**

Pressure Port		Terminals	FLATTENED & PIERCED TERMINALS	POTTED LEADS	PT1H-8-3P CONNECTOR
1/8" OD Tubing MS 33656 -E2 (1" HEX)			7PS100	7PS101	7PS102
3/16" OD Tubing MS 33656 -E3 (1" HEX)			7PS200	7PS201	7PS202
1/4" OD Tubing MS 33656 -E4 (1" HEX)			7PS300	7PS301	7PS302
5/16" OD Tubing MS 33656 -E5 (1" HEX)			7PS400	7PS401	7PS402
3/8" OD Tubing MS 33656 -E6 (1" HEX)			7PS500	7PS501	7PS502
1/8" Pipe Fitting MS 33677 (1" HEX)			7PS600	7PS601	7PS602
1/4" Pipe Fitting MS 33677 (1" HEX)			7PS700	7PS701	7PS702
1" O.D. x 0.040" Flange Mount			7PS800	7PS801	7PS802

