



## | 25PS, 42PS, 44PS, 45PS AND 46PS SERIES PRESSURE SWITCHES

### Introduction

Sensata's 25PS pressure switch family of products has been designed for direct control of electric motors and other demanding load applications requiring precise pressure settings. Sensata's Klixon® snap acting disc is the heart of this hermetically sealed product offering. Extended electrical capacities and life cycles, in both environmentally sealed and unsealed configurations, encourage usage in the most rigorous electrical protection applications.

Sensata Technologies has been a leading global supplier of pressure sensors and switches for over 50 years.



### Features and Benefits

- Hermetically Sealed Sensor
- Snap Acting/Automatic Reset
- Custom Engineered Solutions
- Factory Calibrated Setpoints
- SPST or SPDT both normally open or closed contacts
- Electrically rated to 600V (44/45PS)
- High cycle life capability (42/44PS)
- Environmental sealing is available
- High current capability

### Applications

- Air Conditioning (R410a, R22, R134a, R470c, CO 2, (R333a), Ammonia (R717)
- Fan Cycling
- High capacity compressors
- Refrigeration Industrial Systems
- Extreme load applications
- Single Pole, Double Throw (SPDT) for alarm signaling



### TECHNICAL SPECIFICATIONS

<b>Operating Pressure</b>	500 psig (34 bar)
<b>Proof Pressure*</b>	600 psig (41 bar)
<b>Burst Pressure</b>	5000 psig (345 bar)
<b>Life at Rated Current</b>	1,000,000 cycles 0-300 psig/milliamp load 100,000 cycles 0-500 psig full amperage
<b>Electrical Ratings</b>	5 mA @ 9 Vdc to 2A @ 28 Vdc 5.8 FLA/34.8 LRA @ 120 Vac 2.9 FLA/15.0 LRA @ 240/277 Vac
<b>Dielectric Strength</b>	750 Vrms Open Contacts 1500 Vrms Terminals to Fittings (ground)
<b>Lead Wire Material</b>	#16 & #18 AWG 600 V 105°C 1/32" PVC Quick Connects .250" x 0.032" straight male spa Others upon request; call Sensata

<b>Ambient Temperature</b>	-40°F to 257°F (-40°C to 125°C) (4% setpoint shift @ 100°C)
<b>Fluid Temperature</b>	-65°F to 275°F (-53.9°C to 135°C)

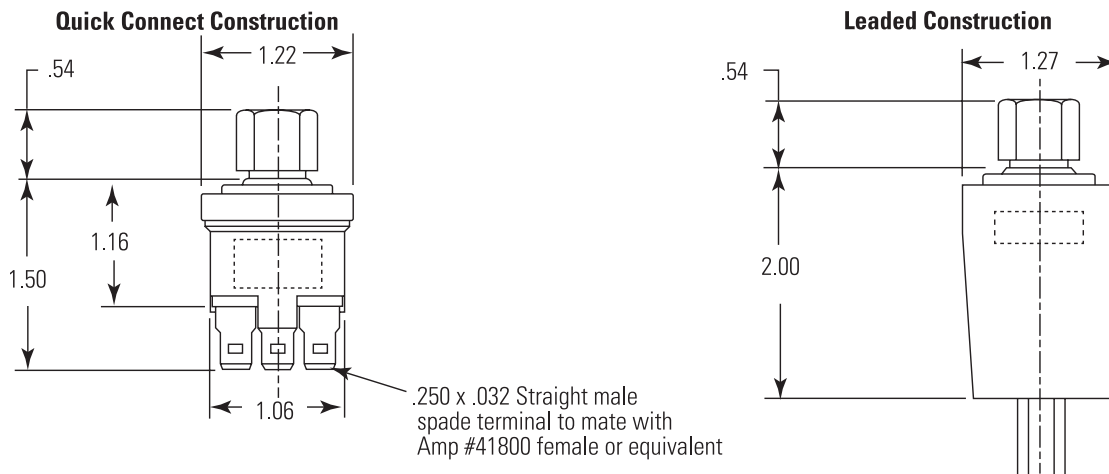
## Electrical Ratings

Device	Switch Type**	28 Vdc	120 Vac				240 Vac				480 Vac		600 Vac	
		Amps Inductive	Amps Res	FLA	LRA	VA Pilot Duty	Amps Res	FLA	LRA	VA Pilot Duty	FLA	LRA	FLA	LRA
25/42PS -SPST	NO	15	13	13	65	125	10	10	45	125	-	-	-	-
	NC	15	25††	13	60	125	25††	10	45	125	-	-	-	-
25/42PS -SPDT	NO	15	10	5.8	34.8	278	5	2.9	17.4	278	-	-	-	-
	NC	15	25††	13	60	125	25††	10	45	125	-	-	-	-
44/45PS -SPST	NO	15	13	13	65	125	10	10	45	125	4	24	3.2	19.2
	NC	15	25††	13	60	125	25††	10	45	125	4	24	3.2	19.2
44/45PS -SPDT	NO	15	10	5.8	34.8	278	5	2.9	17.4	278	-	-	-	-
	NC	15	25††	13	60	125	25††	10	45	125	-	-	-	-

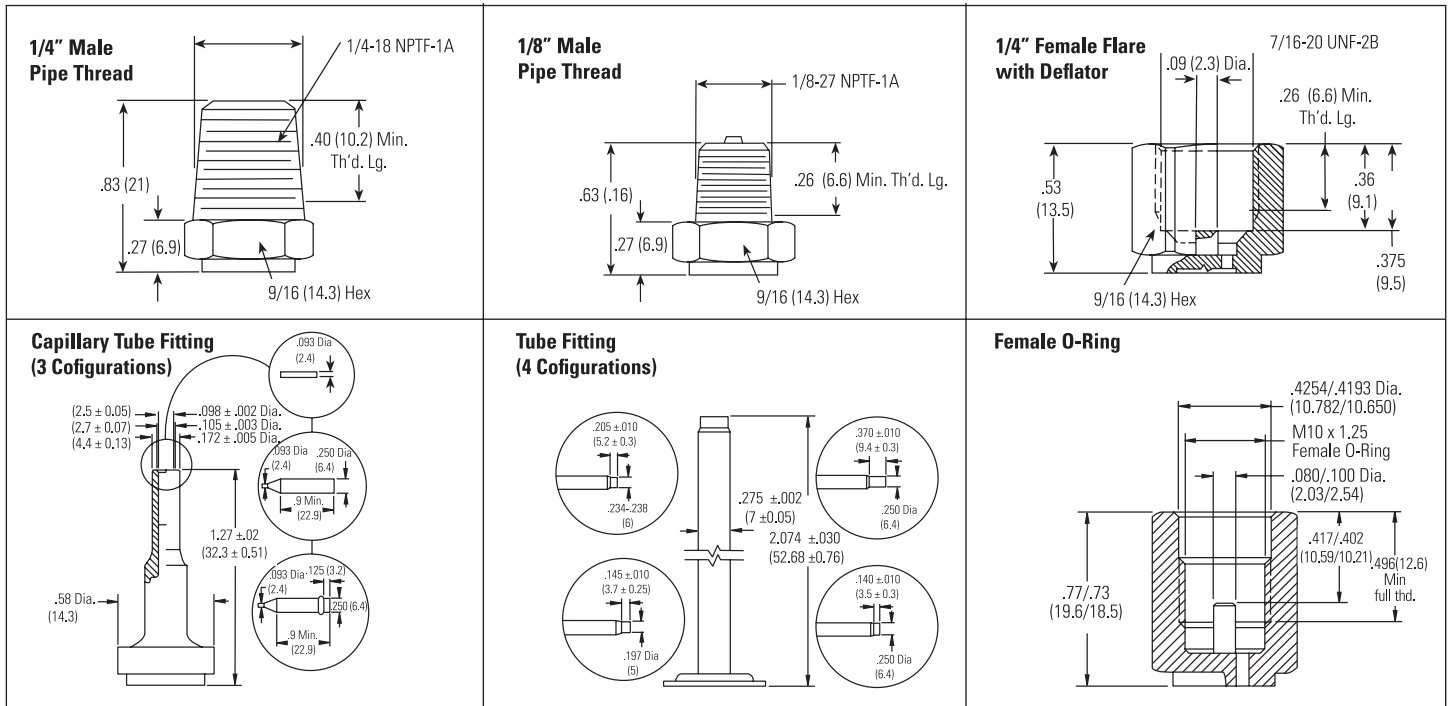
## DIMENSIONS

All dimensions in inches

### Typical Dimensional Drawings - 25PS, 42PS, 44PS, 45PS



Typical Standard Fittings - (Other port fittings are available. Contact Sensata.)



**WARNINGS**



**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury**

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