

# CAPSU-PHOTOHELIC® PRESSURE SWITCH/GAGES

Lo-Limit and Hi-Limit Control, Aluminum or Brass Case Available

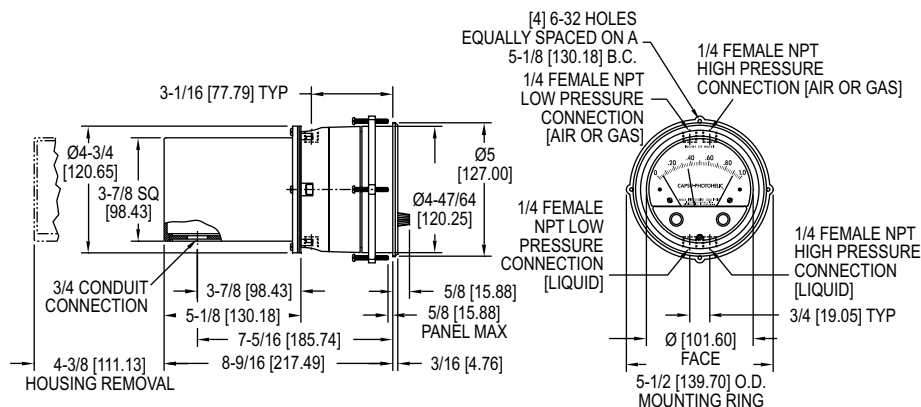
**Set points are instantly adjusted with front knobs.**



**Series 43000**  
**Capsu-Photohelic® switch/gage**



**Series 43000**  
**Capsu-Photohelic® switch/gage with brass body**



**Series 43000 Capsu-Photohelic® Pressure Switch/Gages** function as versatile, highly repeatable pressure switches combined with a precise pressure gage employing the time-proven Magnehelic® gage design. The Capsu-Photohelic® switch/gage employs an encapsulated sensing element for use with both liquids and gases at pressures to 500 psig (34 bar). Optional cast brass case is available for water or water based liquids. Two phototransistors actuated, DPDT relays are included for low/high limit control. Easy to adjust set point indicators are controlled by knobs located on the gage face. Individual set point deadband is one pointer width — less than 1% of full-scale. Set points can be interlocked to provide variable deadband — ideal for control of pumps.

## FEATURES/BENEFITS

- Gage capsule permits high-pressure usage with small differentials
- Zero and range adjustments outside of gage means no disassembly in normal service
- Time-proven, simple, frictionless movement that permits full-scale readings as low as 0.5 in w.c.
- Photo-electronic relays provide fast-acting switching with variable deadband control for chatter-free operation

## APPLICATIONS

- Pump control
- Pumping systems
- Wastewater
- Compatible liquid or gas applications

## SPECIFICATIONS

### GAGE SPECIFICATIONS

**Service:** Compatible gases and liquids. Brass case option required for water based liquids.

**Wetted Materials:** Consult factory.

**Accuracy:**  $\pm 3\%$  of FS at 70°F (21.1°C).  $\pm 4\%$  on 43215, 43220 and 43500.

**Pressure Limits:** -20 Hg to 500 psig (-0.677 to 34.5 bar).

**Temperature Limits:** 20 to 120°F (-6.67 to 48.9°C). Low temperature option available

**Process Connections:** 1/4" female NPT.

**Size:** 4" (101.6 mm) dial face, 5" (127 mm) OD x 9-3/16" (233.36 mm).

**Weight:** 5 lb. 8 oz (2.49 kg). Brass 11 lb. 2 oz (5.05 kg).

## SWITCH SPECIFICATIONS

**Switch Type:** Each set point has 2 form C relays (DPDT).

**Repeatability:**  $\pm 1\%$  of FS.

**Electrical Rating:** 10 A @ 120 VAC, 6 A @ 240 VAC, 60 Hz res. 10 A @ 28 VDC.

**Electrical Connections:** Screw terminals.

**Power Requirements:** 120 VAC, 50/60 Hz; 240 VAC and 24 VAC power optional.

**Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations

**Set Point Adjustment:** Adjustable knobs on face.

MODEL CHART			
Model	Range in w.c.	Model	Range in w.c.
<b>43000-0</b>	0-5	<b>43050</b>	0-50
<b>43001</b>	0-1.0	<b>43060</b>	0-60
<b>43002</b>	0-2.0	<b>43080</b>	0-80
<b>43003</b>	0-3.0	<b>43100</b>	0-100
<b>43004</b>	0-4.0	<b>43150</b>	0-150
<b>43005</b>	0-5.0	<b>43200</b>	0-200
<b>43006</b>	0-6.0	<b>43300</b>	0-300
<b>43008</b>	0-8.0	<b>43400</b>	0-400
<b>43010</b>	0-10	<b>43500</b>	0-500
<b>43015</b>	0-15	<b>43302</b>	1-0-1
<b>43020</b>	0-20	<b>43304</b>	2-0-2
<b>43025</b>	0-25	<b>43310</b>	5-0-5
<b>43030</b>	0-30	<b>43320</b>	10-0-10
<b>43040</b>	0-40	<b>43330</b>	15-0-15

OPTIONS	
To order	
<b>add suffix:</b>	<b>Description</b>
<b>-SRH</b>	Single relay activates on increase
<b>-SRL</b>	Single relay activates on decrease
<b>-24VAC</b>	24 VAC relay pack
<b>-240VAC</b>	240 VAC relay pack
<b>-RMR</b>	Remote mounted relay
<b>-TAMP</b>	Tamper proof knobs
<b>-WP</b>	Weatherproof (NEMA 4)
<b>-EXPL</b>	Explosion-proof (NEMA 7 C, D, 9 E, F, G; NEC Class I, Div. 1 and 2, Groups C, D, Class II, Div. 1 and 2, Groups E, F, G, Class III
<b>-NIST</b>	NIST traceable calibration certificate
<b>Example:</b> 43001-NIST	
<b>B</b>	Brass body; For water based liquids order optional brass case
<b>Example:</b> 43001B	
<b>Note:</b> Contact Customer Service for detailed dimension drawings.	

ACCESSORIES	
Model	Description
A-298	Flat aluminum bracket for flush mounting

