



## Series A6 Durable Pressure Switch

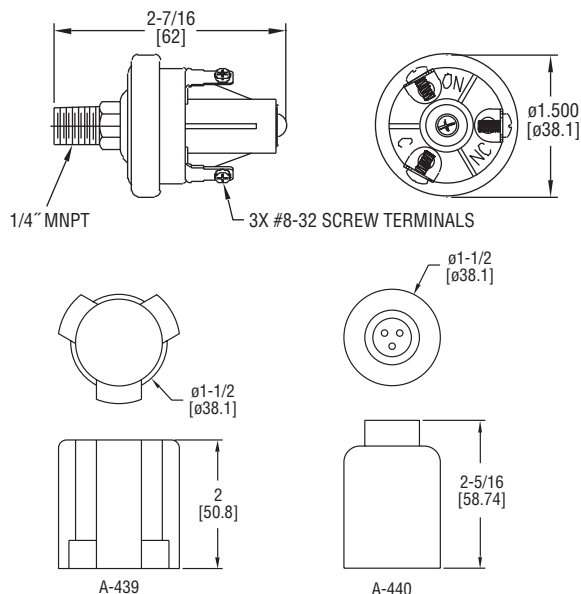
### Specifications - Installation and Operating Instructions



A-439



A-440



**Series A6 Durable Pressure Switches** have been specifically designed to stand up to extended duty applications. These switches are constructed with a polyimide film diaphragm and are compatible with a variety of fluids. For ease of installation, the switches come with a 1/4" male NPT process connection and can be mounted in any orientation. The Series A6 pressure switches are compact and have great setpoint integrity, and feature simple, easy set-point field adjustment.

#### INSTALLATION/MOUNTING

The switch can be mounted in any position. Do not twist the case when installing.

**Note:** National Pipe Thread (NPT) when mated may contain slight gaps between the major and minor diameter of the threads therefore plumbing tape or a compatible sealing agent must be used on the brass fittings to ensure proper sealing and avoid leaking.

| Model     | Set Point Range psi (bar) |                                | Base Material |
|-----------|---------------------------|--------------------------------|---------------|
|           | NC                        | NO                             |               |
| A6-151221 | 0.5 to 1 (0.03 to 0.07)   | 1.1 to 3.1 (0.08-0.21)         | Brass         |
| A6-251221 | 1.1 to 3 (0.08 to 0.21)   | 2.27 to 6.05 (0.16-0.42)       | Brass         |
| A6-351221 | 3.1 to 7 (0.21 to 0.48)   | 4.22 to 10.75 (0.29 to 0.74)   | Brass         |
| A6-451221 | 8 to 13 (0.55 to 0.90)    | 12.3 to 17.5 (0.85 to 1.21)    | Brass         |
| A6-551221 | 14 to 24 (0.97 to 1.66)   | 18.6 to 31.8 (1.28 to 2.19)    | Brass         |
| A6-651221 | 25 to 50 (1.73 to 3.45)   | 33.1 to 61 (2.28 to 4.21)      | Brass         |
| A6-751221 | 51 to 90 (3.52 to 6.21)   | 65.6 to 112.3 (4.53 to 7.75)   | Brass         |
| A6-851221 | 91 to 150 (6.28 to 10.35) | 114.7 to 198.3 (7.94 to 13.68) | Brass         |
| A6-153221 | 0.5 to 1 (0.03 to 0.07)   | 1.1 to 3.1 (0.08-0.21)         | 304 SS        |
| A6-253221 | 1.1 to 3 (0.08 to 0.21)   | 2.27 to 6.05 (0.16-0.42)       | 304 SS        |
| A6-353221 | 3.1 to 7 (0.21 to 0.48)   | 4.22 to 10.75 (0.29 to 0.74)   | 304 SS        |
| A6-453221 | 8 to 13 (0.55 to 0.90)    | 12.3 to 17.5 (0.85 to 1.21)    | 304 SS        |
| A6-553221 | 14 to 24 (0.97 to 1.66)   | 18.6 to 31.8 (1.28 to 2.19)    | 304 SS        |
| A6-653221 | 25 to 50 (1.73 to 3.45)   | 33.1 to 61 (2.28 to 4.21)      | 304 SS        |
| A6-753221 | 51 to 90 (3.52 to 6.21)   | 65.6 to 112.3 (4.53 to 7.75)   | 304 SS        |
| A6-853221 | 91 to 150 (6.28 to 10.35) | 114.7 to 198.3 (7.94 to 13.68) | 304 SS        |

| Model | Description                         |
|-------|-------------------------------------|
| A-439 | Weatherproof IP65 Cover             |
| A-440 | Weatherproof IP65 w/ Fly-wire holes |

#### SPECIFICATIONS

**Service:** Air, motor oils, transmission oils, jet fuels, and similar hydrocarbon media. (Not for water use).

**Wetted Materials:** Base: 304 SS; Diaphragm: Polyimide film.

**Temperature Limits:** -40 to 248°F (-40 to 120°C).

**Pressure Limits:** Operating Pressure: 150 psi (10.3 bar) for 0.5-24 psi set point ranges, 250 psi (17.2 bar) for 25-150 psi set-point ranges; Proof Pressure: 500 psi (34.5 bar); Burst Pressure: 750 psi (51.7 bar) for 0.5-24 psi set point ranges, 1250 psi (86.2 bar) for 25-150 psi set-point ranges.

**Enclosure Rating:** General purpose or with cover: IP65 - weatherproof.

**Repeatability:** ±10% of set-point.

**Set Point Tolerance:** ±15% of range.

**Switch Type:** 1 SPST NO, 1 SPST NC. NO and NC switch independent from each other.

**Electrical Ratings:** Resistive: 15 A @ 6 VDC, 8 A @ 12 VDC, 4 A @ 24 VDC; Inductive: 1 A @ 120 VAC, 0.5 A @ 240 VAC.

**Electrical Connections:** #8-32 screw terminals.

**Process Connection:** 1/4" NPT male.

**Mounting Orientation:** Switch can be installed in any position.

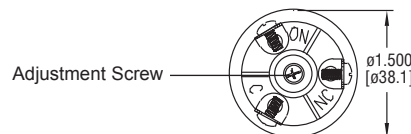
**Set-point Adjustment:** Screw.

**Agency Approval:** CE.

**Weight:** 0.13 lb (0.06 kg).

#### SETPOINT ADJUSTMENT

Setpoint is field adjustable within the range. In order to adjust setpoint remove black plastic cover to expose the setpoint adjustment screw as indicated in the figure below. Adjust top screw to change setpoint. Clockwise to increase setpoint and counterclockwise to decrease setpoint.



#### WIRING

All wiring must conform to the National Electrical Code and local regulations. Do not install the control to handle loads in excess of the electrical rating shown in the specifications. The terminals are labeled on the switch itself.



No lubrication or periodic servicing is required. Mount the control securely. Never exceed the electrical rating for the switch. Use the control only with compatible medias.

#### MAINTENANCE

Upon final installation of the Series A6 Durable Pressure Switch, no routine maintenance is required. A periodic check of the system calibration is recommended. The Series A6 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return good authorization number before shipping.