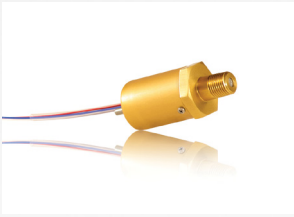
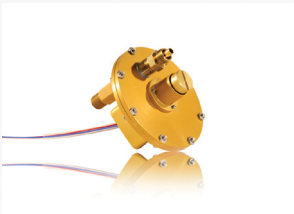


# Lightweight & Reliable Pressure, Vacuum & Differential Pressure Switches



## 490 SERIES COMPACT LIGHTWEIGHT PRESSURE SWITCH

Field adjustable pressure ranges up to 3000 PSI  
Dual spring design for accuracy and stability  
Piston design to allow high proof pressures  
Suitable for altitude ranges from -1000 to 50,000 ft



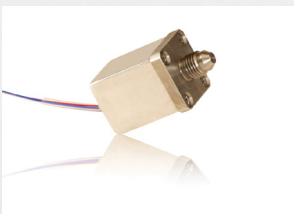
## 654 SERIES ULTRA LOW PRESSURE, VACUUM & DIFFERENTIAL PRESSURE SWITCH

Low ranges down to 0.03 PSI  
Lightweight aluminum construction  
Design suitable for both wet and dry media  
Fully enclosed design for harsh environments  
SPDT and DPDT electrical switch options available



## 658 SERIES DUAL DIFFERENTIAL PRESSURE SWITCH

Factory set, tamper proof  
Lightweight aluminum construction  
Dual spring design for accuracy and stability  
Fully enclosed design for harsh environments  
One piece fully supported diaphragm to achieve both low setpoint and high proof pressure



## 670 SERIES PRESSURE & VACUUM SWITCH

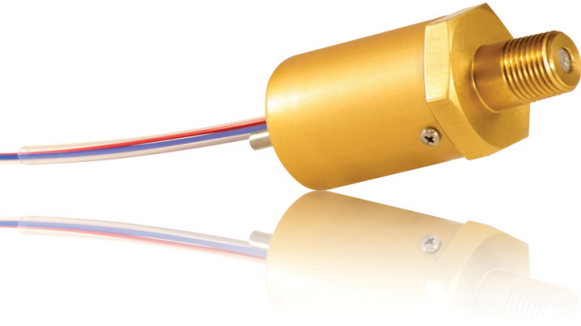
Factory set, tamper proof  
Dual spring design for accuracy and stability  
Lightweight aluminum or stainless steel construction  
One piece fully supported diaphragm to achieve both low setpoint and high proof pressure  
Model for FAA 15 minute flame testing available upon request



## 680 SERIES PRESSURE & VACUUM SWITCH WITH INTEGRATED ELECTRICAL CONNECTOR

Lightweight aluminum or stainless steel construction  
Fully integrated electrical connector  
Double pole, double throw switching option  
Excellent operating temperature range from -65 to +400F  
Wide selection of pressure ports and configurations for easy installation  
Model for FAA 15 minute flame testing available upon request



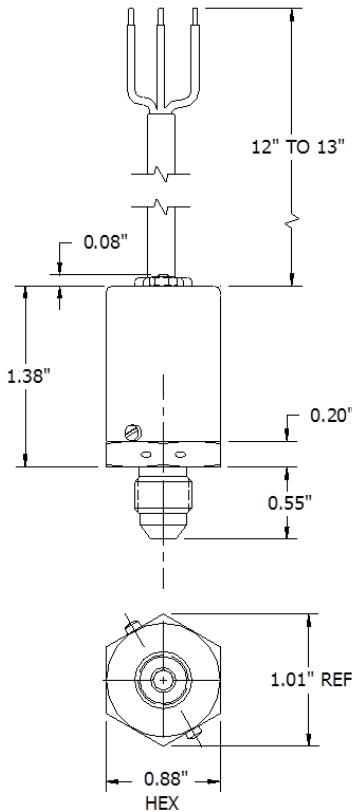


Made in USA

## FEATURES / BENEFITS

- Lightweight, aluminum body, pressure switch
- Dual-spring design for accuracy and stability
- Field adjustable
- Suitable for altitude ranges from -1000 ft to 50'000 ft
- Piston design to allow high proof pressure

## SPECIFICATIONS



### MECHANICAL

|                    |                                   |
|--------------------|-----------------------------------|
| Standard Tolerance | +/- 10%                           |
| Switch Type        | SPDT (single pole / double throw) |
| Switching Medium   | Air or compatible fluids          |
| Mechanical Life    | 100,000 cycles                    |
| Setpoint Ranges    | 400 to 3000 PSI (27.58–207 bar)   |
| Proof Pressure     | 4500 PSI (310 bar)                |
| Hysteresis         | 10% to 40% of set point           |
| Operating Temp.    | -65 to 180 DEG F (-54–82°C)       |

### ELECTRICAL

#### Current Rating

Resistive 5 AMP

#### Operating Voltage

30VDC



### PHYSICAL

|                        |  |
|------------------------|--|
| Case Material          | Aluminum, Gold Anodized                            |
| Seal                   | Varies by option - See part number system below    |
| Piston                 | Stainless Steel                                    |
| Pressure Port          | Many standard ports - See part number system below |
| Electrical Connections | Wire leads or Mate n lok 1-480701                  |
| Weight                 | Less than 2 ounces                                 |

| Series | Type         | Housing                               | Seal   | Electrical Output | Electrical Connection  | Pressure Port  | Set-Point (PSI)                   |
|--------|--------------|---------------------------------------|--|-------------------|--|--|-----------------------------------|
| 490    | P - Pressure | AL - Aluminum<br>ST - Stainless Steel | 1 - Buna n<br>2 - Ethylene Propylene<br>4 - Neoprene<br>5 - Silicone | SP - SPDT         | 2 - 12" leads<br>3 - Amp Mate-N-Lok 1-480700<br>4 - Amp Mate-N-Lok 1-480701<br>5 - MS3102-10SI-3P<br>7 - MS33678-10SI-3P | A - 1/8" MNPT<br>B - 1/4" MNPT<br>C - An816-4d<br>D - And10050-4<br>E - Imperial 1/4" plastic<br>F - MS33656E-6<br>G - MS33649-4<br>H - MS33656E-2<br>I - MS33656E-4<br>J - MS33656E-5<br>K - MS33656E-3 | 400 - 3000 PSI<br>(27.58–207 bar) |

**Determine Your Product Number:**

**490 - P - xx - x - SP - x - x - xxxx**

**Highlighted Options Standard**

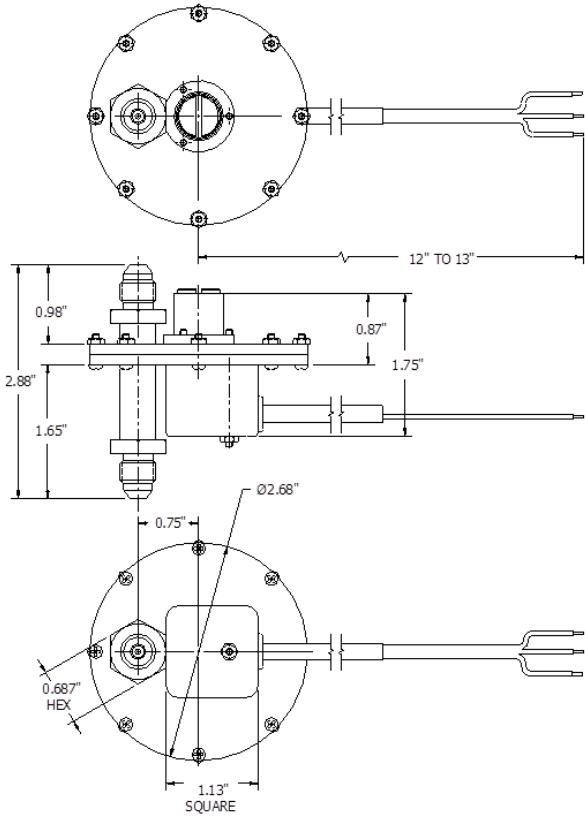
# 490 SERIES



**FEATURES / BENEFITS**

- Lightweight, aluminum construction
- Low pressure ranges
- Fully enclosed design for harsh environments
- Wet / Wet ability
- SPDT and DPDT electrical switch options available

Made in USA



**SPECIFICATIONS**

| MECHANICAL             |  | ELECTRICAL               |
|------------------------|--|--------------------------|
| Standard Tolerance     | +/- 10%  | <b>Current Rating</b>    |
| Switch Type            | SPDT (single pole / double throw) or DPDT (double pole / double throw) | Resistive 5 AMP          |
| Switching Medium       | Air or compatible fluids   | <b>Operating Voltage</b> |
| Mechanical Life        | 100,000 cycles   | 30VDC                    |
| Set-Point Ranges       | 0.03 to 6 PSI (2.07–414 mbar)  |                          |
| Proof Pressure         | 75 PSI (5.2 bar)   |                          |
| Hysteresis             | 10% to 50% of set point  |                          |
| Operating Temp.        | -65 TO 350 DEG F (-54–177°C)   |                          |
| PHYSICAL               |  |                          |
| Case Material          | Aluminum, Gold anodized  |                          |
| Seal                   | Varies by option - See part number system below                        |                          |
| Diaphragm              | Mylar  |                          |
| Pressure Port          | Varies by option - See part number system below                        |                          |
| Electrical Connections | Wire leads or Mate n lok 1-480701                                      |                          |
| Weight                 | Less than 6 ounces   |                          |

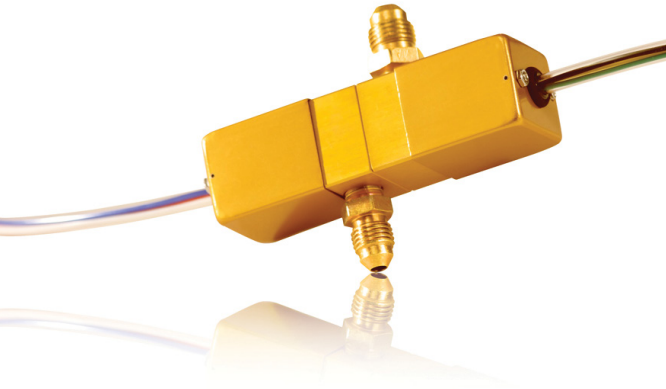
| Series | Type   | Housing       | Seal   | Electrical Output      | Electrical Connection   | Pressure Port  | Set-Point (PSI)               |
|--------|--|---------------|--|------------------------|---|--|-------------------------------|
| 654    | P - Pressure<br>V - Vacuum<br>D - Differential | AL - Aluminum | 1 - Buna n<br>2 - Ethylene Propylene<br>3 - Mylar<br>4 - Neoprene<br>5 - Silicone<br>6 - Stainless Steel | SP - SPDT<br>DP - DPDT | 1 - Amp 6-p<br>2 - 12" leads<br>3 - Amp Mate-N-Lok 1-480700<br>4 - Amp Mate-N-Lok 1-480701<br>5 - MS3102-10SI-3P<br>6 - MS3112E10-6P<br>7 - MS33678-10SI-3P | A - 1/8" MNPT<br>B - 1/4" MNPT<br>C - An816-4d<br>D - And10050-4<br>E - Imperial 1/4" plastic<br>F - MS33656E-6<br>G - MS33649-4<br>H - MS33656E-2<br>I - MS33656E-4<br>J - MS33656E-5<br>K - MS33656E-3 | 0.03-6 PSI<br>(2.07–414 mbar) |

**Determine Your Product Number:**

**654 - x - AL - x - xx - x - x - xxxx**

**Highlighted Options Standard**

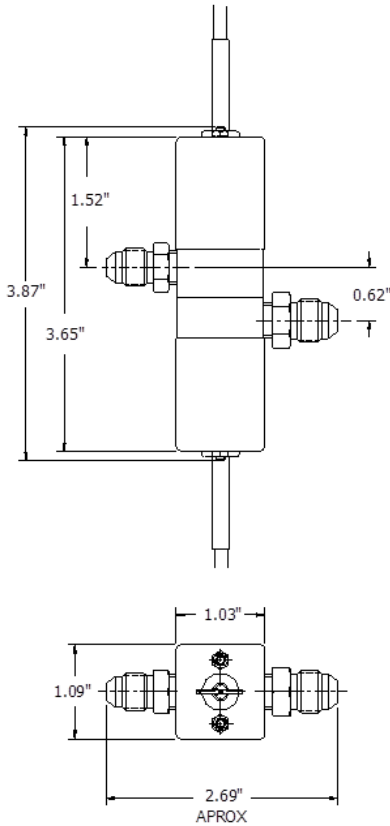
**654 SERIES**



Made in USA

**FEATURES / BENEFITS**

- Lightweight, aluminum construction
- Dual-spring design for accuracy and stability
- One piece fully supported diaphragm to achieve both low setpoints and high proof pressures
- Factory set, tamper proof
- Fully enclosed design for harsh environments



**SPECIFICATIONS**

| MECHANICAL             |   | ELECTRICAL               |
|------------------------|---|--------------------------|
| Standard Tolerance     | +/- 10%   | <b>Current Rating</b>    |
| Switch Type            | SPDT (single pole / double throw)               | Resistive 5 AMP          |
| Switching Medium       | Air or compatible fluids                        | <b>Operating Voltage</b> |
| Mechanical Life        | 100,000 cycles                                  | 30VDC                    |
| Set-Point Ranges       | 40 to 200 PSI (2.76–13.8 bar)                   |                          |
| Proof Pressure         | 1000 PSI (70 bar)                               |                          |
| Hysteresis             | 5% to 30% of set point                          |                          |
| Operating Temp.        | -65 TO 300 DEG F (-54–149°C)                    |                          |
| PHYSICAL               |   |                          |
| Case Material          | Aluminum, Gold anodized                         |                          |
| Seal                   | Buna n  |                          |
| Diaphragm              | Silicone  |                          |
| Pressure Port          | Varies by option - See part number system below |                          |
| Electrical Connections | Varies by option - See part number system below |                          |
| Weight                 | Less than 6 ounces                              |                          |

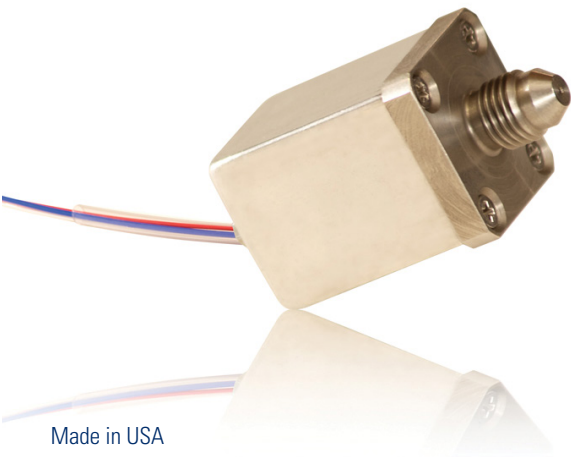
| Series | Type             | Housing       | Seal   | Electrical Output | Electrical Connection   | Pressure Port  | Set-Point (PSI)               |
|--------|------------------|---------------|--|-------------------|---|--|-------------------------------|
| 658    | D - Differential | AL - Aluminum | 1 - Buna n<br>2 - Ethylene Propylene<br>4 - Neoprene<br>5 - Silicone | SP - SPDT         | 1 - Amp 6-p<br>2 - 12" leads<br>3 - Amp Mate-N-Lok 1-480700<br>4 - Amp Mate-N-Lok 1-480701<br>5 - MS3102-10SI-3P<br>6 - MS3112E10-6P<br>7 - MS33678-10SI-3P | A - 1/8" MNPT<br>B - 1/4" MNPT<br>C - An816-4d<br>D - And10050-4<br>E - Imperial 1/4" plastic<br>F - MS33656E-6<br>G - MS33649-4<br>H - MS33656E-2<br>I - MS33656E-4<br>J - MS33656E-5<br>K - MS33656E-3 | 40-200 PSI<br>(2.76–13.8 bar) |

**Determine Your Product Number:**

**658 - D - AL - x - SP - x - x - xxxx**

**Highlighted Options Standard**

**658 SERIES**



Made in USA

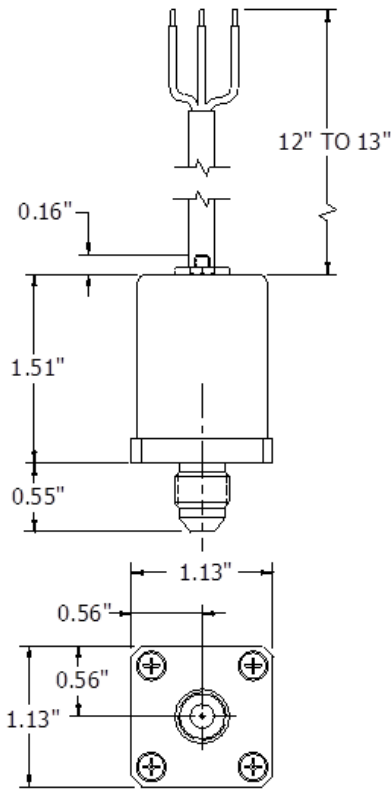
**FEATURES / BENEFITS**

- Lightweight, aluminum body, pressure/vacuum switch
- Dual-spring design for accuracy and stability
- One piece fully supported diaphragm to achieve both low setpoints and high proof pressures
- Factory set, tamper proof
- Model for FAA 15 minute flame testing available upon request

**SPECIFICATIONS**

| MECHANICAL         |                                   |
|--------------------|-----------------------------------|
| Standard Tolerance | +/- 10%                           |
| Switch Type        | SPDT (single pole / double throw) |
| Switching Medium   | Air or compatible fluids          |
| Mechanical Life    | 100,000 cycles                    |
| Setpoint Ranges    | 1.5 to 400 PSI (0.1–27.6 bar)     |
| Proof Pressure     | 1000 PSI (69 bar)                 |
| Hysteresis         | 10% to 40% of set point           |
| Operating Temp.    | -65 to 400 DEG F (-54–204°C)      |

| ELECTRICAL               |
|--------------------------|
| <b>Current Rating</b>    |
| Resistive 5 AMP          |
| <b>Operating Voltage</b> |
| 30VDC                    |



| PHYSICAL               |   |
|------------------------|---|
| Case Material          | Aluminum, Gold anodized   |
| Seal                   | Varies by option - See part number system below                     |
| Diaphragm              | Stainless Steel   |
| Pressure Port          | Many standard ports - See part number system below                  |
| Electrical Connections | Many standard electrical connections - See part number system below |
| Weight                 | Less than 2.5 ounces  |

| Series | Type                       | Housing                               | Seal   | Electrical Output | Electrical Connection   | Pressure Port  | Setpoint (PSI)                |
|--------|----------------------------|---------------------------------------|--|-------------------|---|--|-------------------------------|
| 670    | P - Pressure<br>V - Vacuum | AL - Aluminum<br>ST - Stainless Steel | 1 - Buna n<br>2 - Ethylene Propylene<br>3 - Mylar<br>4 - Neoprene<br>5 - Silicone<br>6 - Stainless Steel | SP - SPDT         | 2 - 12" leads<br>3 - Amp Mate-N-Lok 1-480700<br>4 - Amp Mate-N-Lok 1-480701 | A - 1/8" MNPT<br>B - 1/4" MNPT<br>C - An816-4d<br>D - And10050-4<br>E - Imperial 1/4" plastic<br>F - MS33656E-6<br>G - MS33649-4<br>H - MS33656E-2<br>I - MS33656E-4<br>J - MS33656E-5<br>K - MS33656E-3 | 1.5-400 PSI<br>(0.1–27.6 bar) |

**Determine Your Product Number:**  
**670 - x - xx - x - SP - x - x - xxxx**  
 Highlighted Options Standard

**670 SERIES**

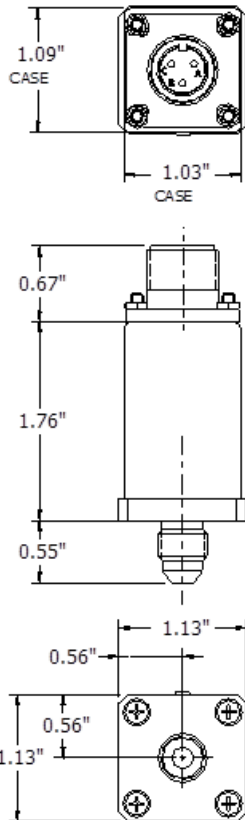



Made in USA

**FEATURES / BENEFITS**

- Lightweight, aluminum body, pressure/vacuum switch
- Dual-spring design for accuracy and stability
- One piece fully supported diaphragm to achieve both low setpoints and high proof pressures
- Factory set, tamper proof
- Integrated connector
- Model for FAA 15 minute flame testing available upon request

**SPECIFICATIONS**



| MECHANICAL             |  | ELECTRICAL  |
|------------------------|--|---|
| Standard Tolerance     | +/- 10%  | <b>Current Rating</b>   |
| Switch Type            | SPDT (single pole / double throw) or DPDT (double pole / double throw) | Resistive 5 AMP   |
| Switching Medium       | Air or compatible fluids   | <b>Operating Voltage</b>  |
| Mechanical Life        | 100,000 cycles   | 30VDC   |
| Set-Point Ranges       | 1.5 to 400 PSI (0.1–27.6 bar)  |  |
| Proof Pressure         | 1000 PSI (69 bar)  |   |
| Hysteresis             | 10% to 40% of set point  |   |
| Operating Temp.        | -65 to 400 DEG F (-54–204°C)   |   |
|                        |  |   |
| PHYSICAL               |  |   |
| Case Material          | Aluminum, Gold Anodized  |   |
| Seal                   | Varies by option - See part number system below                        |   |
| Diaphragm              | Stainless Steel  |   |
| Pressure Port          | Many standard ports - See part number system below                     |   |
| Electrical Connections | Many standard electrical connections - See part number system below    |   |
| Weight                 | Less than 6 ounces   |   |

| Series | Type         | Housing              | Seal   | Electrical Output | Electrical Connection                   | Pressure Port   | Setpoint (PSI)                |
|--------|--------------|----------------------|--|-------------------|---|---|-------------------------------|
| 680    | P - Pressure | AL - Aluminum        | 1 - Buna n   | SP - SPDT         | 5 - MS3102-10SI-3P                      | A - 1/8" MNPT   | 1.5-400 PSI<br>(0.1–27.6 bar) |
|        | V - Vacuum   | ST - Stainless Steel | 2 - Ethylene Propylene<br>3 - Mylar<br>4 - Neoprene<br>5 - Silicone<br>6 - Stainless Steel | DP - DPDT         | 6 - MS3112E10-6P<br>7 - MS33678-10SI-3P | B - 1/4" MNPT<br>C - An816-4d<br>D - And10050-4<br>E - Imperial 1/4" plastic<br>F - MS33656E-6<br>G - MS33649-4<br>H - MS33656E-2<br>I - MS33656E-4<br>J - MS33656E-5<br>K - MS33656E-3 |                               |

**Determine Your Product Number:**

**680 - x - xx - x - xx - x - x - xxxx**

**Highlighted Options Standard**

**680 SERIES**