Pressure Switches

Miniature

Features:

- Patented shock and vibration resistance
- Miniature size, lightweight, low cost
- Quick response time
- Dependable long life (20+ million cycles)
- Gold contact points (dual)
- Rugged military standards (MIL-SPEC)

Description:

The rugged yet ultra-sensitive PSF100A pressure switch incorporates a patented dual diaphragm/dual contact design offering protection against false actuation due to shock and vibration.

Specifications:

**Mechanical**

- Standard Tolerance: ±20% (tighter tolerances available)
- Switch Type: SPST normally open, double-make / double-break
- Switching Medium: Air, compatible fluids on "High" side
- Mechanical Life: More than 20 million cycles

Dimensions: Inches (Millimetres)
Pressure Switches

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Proof Pressure: 8 psi: for units where set point is 3 inches H₂O or less
15 psi: for units where set point is greater than 3 inches H₂O
8 psi: for units with Teflon® diaphragm

Shock and vibration: At zero pressure, will not make at 50 G’s shock, will not make at 10 G’s, 50 to 2,000 Hz vibration

Operating Temperature: +40°F to +150°F (standard), -46°F to +205°F (contact us)

Physical

Case Material: Polycarbonate (other materials available)
Porting Options: Two 200 inches diameter barbed ports (low / high) for use with 1/8 inches to 3/16 inches ID tubing
Diaphragm Material: Polyurethane (Teflon® optional)
Contact Points: Gold (dual)
Electrical Connections: Terminals - 0.187 inches × 0.02 inches tab-type, for use with quick disconnects
Mounting: Eyeleted for #2 screws; mounting clip or bracket available
Weight: Less than 10 g

Electrical

Current Rating: 40 mA resistive for life in excess of 20 million cycles
Operating Voltage: 30 V ac / dc or less with resistive load; 120 V ac neon lamp load

Note: For high load capabilities contact design flex for our SRF solid state relay

Specification Table

<table>
<thead>
<tr>
<th>Description</th>
<th>Inches H₂O</th>
<th>mbar</th>
<th>psi</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure switch, 0.004 - 0.018 psi</td>
<td>0.1 to 0.5</td>
<td>0.25 to 1.25</td>
<td>0.004 to 0.018</td>
<td>PSF100A-0.5</td>
</tr>
<tr>
<td>Pressure switch, 0.054 psi</td>
<td>1.5</td>
<td>3.73</td>
<td>0.054</td>
<td>PSF100A-1.5</td>
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<tr>
<td>Pressure switch, 0.108 psi</td>
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<td>7.46</td>
<td>0.108</td>
<td>PSF100A-3.0</td>
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<tr>
<td>Pressure switch, 0.217 psi</td>
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<td>14.92</td>
<td>0.217</td>
<td>PSF100A-6.0</td>
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<tr>
<td>Pressure switch, 0.361 psi</td>
<td>10</td>
<td>24.86</td>
<td>0.361</td>
<td>PSF100A-10.0</td>
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<tr>
<td>Pressure switch, 0.541 psi</td>
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<td>37.3</td>
<td>0.541</td>
<td>PSF100A-15.0</td>
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<tr>
<td>Pressure switch, 1.804 psi</td>
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<td>124.32</td>
<td>1.804</td>
<td>PSF100A-50.0</td>
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</tbody>
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