Technical Requirements for Electronic Parts, Materials, and Processes Used in Space and Launch Vehicles

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2.2.2 Cautions

2.2.2.1 Manually Operated Switch. Manually operated switches that are not toggle or snap action can have the contacts damaged or seriously reduce their load handling capabilities when the switch is deliberately operated in slow motion.

2.2.2.2 Load Considerations. For inductive loads, low level loads, intermediate range loads, parallel contacts, series contacts, dry circuit switching, transformer switching, transient suppression, and dynamic contact resistance, the requirements of MIL-STD-1346 (as applicable) shall apply.

2.2.2.3 Environmental Conditions. The environmental conditions shall be considered when using the leaf type actuator. Uncontrolled forces due to shock, vibration, and acceleration can result in inadvertent plunger actuation.

3. DESIGN AND CONSTRUCTION

3.1 Requirements. Design and construction shall be in accordance with the requirements of the applicable specifications and the requirements of this standard.

3.2 Construction Controls. The following controls shall apply:

Each switch not being assembled or inspected shall be kept in a clean dust-free enclosure.

Subsequent to final cleaning and assembly, all open switches shall be worked on under a Class 100 environment per FED-STD-209.

Pre-closure wash (Millipore) and cleanliness verification (micro-particle analysis) shall be accomplished per Section 1000 in accordance with the manufacturer’s standard procedure. A copy of the manufacturer’s documented micro-particle cleaning and inspection procedures shall be available for review by the procuring activity upon request.

3.3 Recommended. Recommended designs and constructions are:

a. Switch shaft and housing of corrosion-resistant material
b. High contact pressures in cold environments
c. Hermetically sealed
d. Snap-action style contacts
e. Positive break
f. Panel seal

4. QUALITY ASSURANCE. The quality assurance requirements for snap action switches, thermal switches, and pressure switches are stated in subsequent sections of the standard. Quality assurance provisions for other switches shall be in accordance with the general requirements of Section 4 and the following:

4.1 In-process Controls. In-process controls shall be in accordance with the requirements of the applicable specifications, and the following:

4.1.1 Internal Visual Inspection

Inspect 100 percent at 10X minimum for:

a. Particles greater than 25.4 micrometers (0.001 inch) in maximum dimension shall be rejected.
b. Solder and weld joints
c. Proper alignment
d. Feedthroughs with contamination, debris, damage or misalignment shall be rejected.
e. Normal contacts
4.1.3 Additional Requirements. The following requirements shall apply:

a. Inspect seals and encapsulation 100 percent at 10X minimum for cracks
b. Leads and terminals are clean, straight, and free of prohibited materials
c. Each switch shall have its contact closure force setting checked by the manufacturer to comply with requirements of detailed specifications with full documentation provided.
d. Each switch shall have its critical internal dimensions checked for correctness and detail.

4.2 Screening (100 percent). Screening shall be in accordance with the requirements in the applicable specifications. Unless otherwise specified, the screening shall include 500 cycles minimum of run-in testing with contacts monitored for misses at 6 Volts dc, 100 milliamperes maximum.

4.3 Lot Conformance Tests. Lot conformance tests shall be in accordance with the Group B, or equivalent, tests in the applicable specifications.

4.4 Qualification Tests. Qualification testing shall be in accordance with the requirements of the applicable specifications.

4.5 Incoming Inspection DPA. Incoming inspection DPA shall be in accordance with MIL-STD-1580.

5. REGISTERED PMP

5.1 Reliability Suspect Parts

a. Nonhermetic units
b. Noncorrosion resistant materials
c. Slide devices

6. PROHIBITED PARTS LIST. Switches using prohibited materials in their construction (see Section 4, Paragraph 4.3.3).
1. SCOPE. This section sets forth detailed requirements for hermetically sealed snap-action switches.

2. APPLICATION. See Section 1200.

3. DESIGN AND CONSTRUCTION

3.1 Requirements. Design and construction shall be in accordance with the requirements of MIL-PRF-8805 and the requirements of this document.

3.2 Recommended. See Section 1200.

4. QUALITY ASSURANCE. Quality assurance provisions shall be in accordance with the general requirements of Section 4 and the following:

4.1 In-process Controls. In-process controls shall be in accordance with the requirements of MIL-PRF-8805. Internal visual inspection shall also be in accordance with the requirements of Paragraph 4.1 in Section 1200. In addition, devices shall be inspected at 10X minimum for the following defects. Devices exhibiting any of the following defects shall be rejected:

   a. Adhering conductive or nonconductive particles (metal burrs or case flashing)
   b. Incomplete (less than 360 degrees) swaging, or staking of assembly components
   c. Scratches or nicks in contact surface areas

4.2 Screening (100 percent). Screening (100 percent) shall be in accordance with the requirements listed in Table 1210-1.

4.3 Lot Conformance Tests. Lot conformance tests shall be in accordance with the Group B tests in MIL-PRF-8805.

4.4 Qualification Tests. Qualification testing shall be in accordance with the requirements of MIL-PRF-8805.

4.5 Incoming Inspection DPA. Incoming inspection DPA shall be in accordance with MIL-STD-1580. All metal surfaces shall be verified for the absence of prohibited materials (e.g., pure tin, zinc, or cadmium).

5. REGISTERED PMP

5.1 Reliability Suspect Parts. Switches using thermoplastic dielectric or packaging.

6. PROHIBITED PARTS LIST. Switches using prohibited materials in their construction (see Section 4, Paragraph 4.3.3)
### TABLE 1210-1. 100 PERCENT SCREENING REQUIREMENTS

<table>
<thead>
<tr>
<th>MIL-PRF-8805 Screens</th>
<th>Additions and Exceptions to the Methods, Requirements and Criteria of MIL-PRF-8805</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dielectric Withstanding-Voltage</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Contact Resistance</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Vibration (Random)** | a. MIL-STD-202, Method 214, Test Condition II, K (switch in critical system position and test to the requirements of the application)  
  b. 3 orthogonal planes, 1 minute each  
  c. Mounting fixture shall not add or remove energy from switch under test  
  d. Monitored for contact chatter, 10 microseconds maximum per MIL-STD-202, Method 310, Circuit B  
  e. No contact transfer (monitor equipment be capable of detecting closures greater than 1 microsecond)  
  f. If more than one critical system position exists, repeat steps a, b, c, d, and e, with the switch in each critical position. |
| **Thermal Shock** | During last cycle (5th), measure contact resistance at temperature extremes |
| **Particle Impact Noise Detection (PIND)** | a. MIL-STD-202, Method 217 Detection  
  b. The lot may be tested a maximum of 5 times. If less than 1% of the lot fails during any of the 5 runs, the lot may be accepted. All defective devices shall be removed after each run. Lots which do not meet the 1% PDA on the fifth run, or exceed 25% defectives cumulative, shall be rejected. |
| **Insulation Resistance** | |
| **Mechanical Run-in** | a. 500 cycles at 10 cycles per minute at +25°C  
  b. Monitor all make and break contacts at 6 VDC, 100 mA max |
| **Seal** | |
| **Dielectric Withstanding-Voltage** | |
| **Insulation Resistance** | |
| **Operating Characteristics** | |
| **Radiographic Inspection** | Per MSFC-STD-355; 2 views 90 deg. apart by X-ray, or 360 deg. view using "real-time" X-ray (preferred). |
| **Visual and Mechanical Examination (External)** | a. Marking and identification  
  b. Defects and damage; i.e., body finish, lead finish, misalignment, cracks |
| **Solderability** | |
1. SCOPE. This section sets forth detailed requirements for thermal switches.

2. APPLICATION

2.1 Derating. The derating requirements given in Section 1000 for relay contacts shall be used to derate switch contacts.

2.2 Electrical Considerations. Bimetallic disc thermal switches are used for thermal control and thermal protection. They have the advantage of being lightweight, sturdy (withstand high shocks of 750 g and vibration of 60 g rms random), and require no external power.

2.2.1 Anomalous Switch Behaviors. Some of the anomalous switch behaviors exhibited are fast cycling in both upper and lower set point. These anomalies are known as "creepage" or "dithering". Creepage. Creepage is defined as an opening or closing of the switch contacts not concurrent with the disc snap. This condition can lead to increased contact wear and shortened switch life as well as increased potential for welded contacts on higher load applications.

2.2.1.2 Dither. Dither is defined as the opening or closing of the switch contacts caused by internal $I^2R$ self heating. This condition exhibits itself in a series of openings and closings with some loss in thermal accuracy.

These failure anomalies usually are exhibited and screened out during acceptance testing and are therefore rarely seen in the field.

2.2.1.2.1 Creepage mitigation. Creepage can be mitigated by performing controlled temperature rate of change creepage test performed at 500 Vdc minimum, 5 ms maximum allowable arc duration, 1°C/minute rate of change is a good screen.

2.2.1.2.2 Dither mitigation. Dither can be mitigated by minimizing internal switch resistance through design and material choice and observing established derating criteria.

2.3 Electrical Requirements. To alleviate the possibility of dither, a 2.2°C minimum thermal deadband shall be required (temperature separation between the thermal switch "on" position and the switch "off" position).

3. DESIGN AND CONSTRUCTION

3.1 Requirements. Design and construction shall be in accordance with the requirements of MIL-PRF-24236 and the requirements of this standard.

3.2 Recommended

a. Snap-action.

b. Contact current rating, 5 amperes maximum

c. Deadband +2.2 ºC minimum

4. QUALITY ASSURANCE. Quality assurance provisions shall be in accordance with the general requirements of Section 4 and the following:

4.1 In-process Controls. In-process controls shall be in accordance with the requirements of MIL-PRF-24236 and the following:
4.1.1 Switch Assembly

a. Each switch shall have its contact closure and opening force setting checked and documented.

b. Each switch shall have its critical internal dimensions checked for correctness.

c. Each switch not being assembled or inspected shall be kept in a clean dust-free enclosure.

d. Subsequent to final cleaning and assembly, all open switches shall be maintained in a Class 100 environment per FED-STD-209.

e. All switches that utilize different materials for movable and stationary contacts shall have the terminal polarity identified as + or – and the life verified by tests with voltage applied in the polarity specified.

4.1.2 Precap Visual Inspection (100 percent). Inspect at 10X magnification minimum under laminar flow benches. The following conditions shall be rejectable:

a. Particle contamination greater than 25.4 micrometers (0.001 inch) in maximum dimension.

b. Plating defects such as flaking or blistering.

c. Loose oxide film on surface of bimetallic disc.

d. Organic compounds or films on contacts or header base.

e. Sharp peaks, cracks, chips, and flakes on actuator chips.

f. Radial cracks on the glass seal extending greater than one-half the distance from the center post to the outside edge.

4.1.3 Cleaning (Pre-Seal) and Small Particle Inspection (100 percent). Clean thermostatic switches, cans, and any other parts or subassemblies that constitute the final assembly. Parts and subassemblies shall be subjected to micro-particle cleaning and inspection prior to insertion into their enclosures. Devices containing particles greater than 25.4 micrometers (0.001 inch) in maximum dimension shall be rejected. Micro-particle cleaning and inspection shall be in accordance with the manufacturer’s standard procedures. A copy of the manufacturer’s documented micro-particle cleaning and inspection procedures shall be available for review by the procuring activity upon request.
4.1.4 **Screening (100 percent).** Screening shall be in accordance with the requirements listed in Table 1220-1.

### TABLE 1220-1. 100 PERCENT SCREENING REQUIREMENTS FOR THERMAL SWITCHES

<table>
<thead>
<tr>
<th>Test No. 1/</th>
<th>Test Description</th>
<th>Reference Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Post screen Internal Visual (Pre-seal) Inspection</td>
<td>4.1.5</td>
</tr>
<tr>
<td>2</td>
<td>Micro-particle Cleaning and Inspection</td>
<td>4.1.6</td>
</tr>
<tr>
<td>3</td>
<td>Run-in 2/</td>
<td>4.1.7</td>
</tr>
<tr>
<td>4</td>
<td>Vibration</td>
<td>4.1.8</td>
</tr>
<tr>
<td>5</td>
<td>Particle Impact Noise Detection (PIND)</td>
<td>4.1.9</td>
</tr>
<tr>
<td>6</td>
<td>Calibration</td>
<td>4.1.10</td>
</tr>
<tr>
<td>7</td>
<td>Creepage</td>
<td>4.1.11</td>
</tr>
<tr>
<td>8</td>
<td>Seal</td>
<td>4.1.12</td>
</tr>
<tr>
<td>9</td>
<td>Dielectric Withstanding Voltage (DWV)</td>
<td>4.1.13</td>
</tr>
<tr>
<td>10</td>
<td>Insulation Resistance</td>
<td>4.1.14</td>
</tr>
<tr>
<td>11</td>
<td>Contact Resistance</td>
<td>4.1.15</td>
</tr>
<tr>
<td>12</td>
<td>External Visual and Mechanical Examination</td>
<td>4.1.16</td>
</tr>
</tbody>
</table>

1/ Tests shall be performed in the order listed.

2/ Alternately, run-in may be performed after PIND.
4.1.5 Post Screen Visual Inspection. A 100% pre-seal visual inspection shall be performed. The internal visual inspection shall be performed using appropriate magnification (10X minimum). The purpose of this examination is to detect faulty workmanship and extraneous particles or materials that are not a required functional part of the mechanism. This examination shall be made on the header assembly, disc, and case, and shall be made from all views necessary to insure the absence of contamination from contacts and crevices. In addition, the following is required:

a. There shall be no evidence of case distortion, which could impair operation of the switch. Any damage or indentation of the weld rim or disc seating surfaces shall be a cause for rejection. There shall be no evidence of blistering, or flaking of the plating from either the base or terminal posts.

b. Transfer pins (striker pins) or insulators that have sharp peaks, cracks, or loose flaking shall be rejected.

c. There shall be adequate clearance around moving parts, and adequate spacing or proper insulation of isolated electrical parts.

4.1.6 Micro-particle Cleaning and Inspection. Switches, thermostatic, shall be subjected to micro-particle cleaning and inspection prior to insertion into their enclosures. Micro-particle cleaning and inspection shall be in accordance with the manufacturer’s standard procedure. A copy of the manufacturer’s documented micro-particle cleaning and inspection procedures shall be available for review by the procuring activity upon request.

4.1.7 Run-in (pre-Acceptance conditioning. Switches shall be operated for a minimum of 500 consecutive total cycles (one cycle constitutes one closure and one opening of the switch contacts). The switch shall be alternately heated and cooled to switch at the maximum actuating temperature and the minimum actuating temperature. The switch cycling rate shall not exceed three cycles per minute. The contacts shall switch a load of 6 ± 1 VDC @ 100 ± 25mA. This test shall be monitored to verify the proper switch function and contact resistance. There shall be no evidence of intermittent contact operation. The monitored contact resistance during each cycle shall not exceed 100 milliohms.

4.1.8 Vibration (Random). Testing shall be performed per Method 214, MIL-STD-202 with the following details and exceptions:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Spectrum</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Hz</td>
<td>0.01 g2/Hz</td>
</tr>
<tr>
<td>20 – 90 Hz</td>
<td>Increase, 9 dB/octave</td>
</tr>
<tr>
<td>90 – 350Hz</td>
<td>0.9 g2/Hz</td>
</tr>
<tr>
<td>350 – 2000Hz</td>
<td>Decrease, -6 dB/octave</td>
</tr>
<tr>
<td>Overall Grms</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Switches are to be functioning during testing: contacts shall be connected to a power supply at the manufacturer’s specified voltage and load current to monitor switching and contact chatter. There shall be no opening of closed contacts or closing of open contacts in excess of 10 microseconds. Afterwards, there shall be no evidence of mechanical damage.

Perform for 1 minute per axis per contact position in each of 3 mutually perpendicular axes, 6 minutes total per device.

4.1.9 Particle Impact Noise Detection (PIND) Switches, thermostatic shall be PIND tested in accordance with the manufacturer’s standard PIND test procedure. A copy of the manufacturer’s documented PIND test procedure shall be available for review by the procuring activity upon request. There shall be no evidence of particulate contamination. The following conditions apply:

a. The switch has to be in a thermal state that applies force to the loose member.
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b. The switch’s thermal rating can’t exceed the ambient environmental rating of the PIND equipment. (If the switch’s rating does exceed the thermal capability of the PIND equipment, it will have to rely on particle analysis of 4.1.6.)

4.1.10 Calibration. When switches are tested as specified in MIL-PRF-24236, quality conformance inspection calibration method for switches, the operating points for the opening and closing temperatures shall be within the tolerance specified.

4.1.11 Creepage. Switches shall be heated or cooled as specified with a temperature rate of change of less than 1º C per minute for three complete cycles. Voltage to be switched shall be 500 VDC minimum with sufficient load to limit the current to 1 milliampere maximum. The switch shall respond to specified temperature changes with immediate positive snap action. The arc duration shall not exceed 5 milliseconds.

4.1.12 Seal. The test method and requirements shall be in accordance with MIL-PRF-24236.

4.1.13 Dielectric Withstanding Voltage (DWV). The test method and requirements shall be in accordance with MIL-PRF-24236.

4.1.14 Insulation Resistance. The test methods and requirements shall be in accordance with MIL-PRF-24236.

4.1.15 Contact Resistance. The test methods and requirements shall be in accordance with MIL-PRF-24236. Unless otherwise specified in the detail specification, the contact resistance shall not exceed 25 milliohms.

4.1.16 External Visual and Mechanical Examination. The switches shall be examined to verify that the workmanship, configuration and dimensions are in accordance with paragraph 3.1.

4.2 Lot Conformance Tests. Lot conformance tests shall be in accordance with the Group B tests in MIL-PRF-24236 with the following exceptions:

Solderability per MIL-PRF-24236

MIL-PRF-24236, Group B tests not required on each lot are as follows:

Subgroup 1 – Moisture Resistance
Flame Response
Short Circuit
Overload Cycling
Subgroup 3 – No tests of this subgroup required
Subgroup 4 – Sensitivity Response
Temperature Anticipation
(All tests of Subgroup 2 shall be performed)

Endurance test per MIL-PRF-24236 shall be performed at 28 VDC, 5 amperes for 100,000 cycles using a resistive load.

4.2.1 Residual Gas Analysis (RGA) RGA shall be performed on 2 pcs per sealing lot (i.e. material vacuum-baked and final-sealed as a batch) to verify moisture content of 5,000 ppm (maximum).

4.2.1.1 Residual Gas Analysis Methodology.

The thermal switches shall be submitted for residual gas analysis (RGA) to a laboratory approved by the qualifying activity of the detailed specification. Thermal switches shall be preheated for fifteen minutes (minimum) at 100 degrees C immediately prior to being punctured for RGA. The method of sampling the backfill gas from the thermal switch (i.e., puncturing the thermal switch can) shall not cause damage to the internal parts of the thermal switch nor shall it introduce contaminants into the thermal switch. Immediately after removal from the test chamber, the puncture hole shall be covered with a noncontaminating adhesive tape to prevent the introduction of foreign particles. The composition of gases found shall be in agreement with the supplier’s baseline (approved) processes and gases for backfilling the thermal switches. The moisture (H₂O) content detected shall not exceed 1000 ppm.

4.3 Qualification Tests. Qualification testing shall be in accordance with the requirements of MIL-PRF-24236.
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4.4 Incoming Inspection DPA. Incoming inspection DPA shall be in accordance with MIL-STD-1580. All metal surfaces shall be verified for the absence of prohibited materials (e.g., pure tin, zinc, or cadmium).

5. REGISTERED PMP

5.1 Reliability Suspect Designs. See Paragraph 5.1 of Section 1200.

6. PROHIBITED PARTS LIST. Switches using prohibited materials in their construction (see Section 4, Paragraph 4.3.3 ).
1. SCOPE. This section sets forth detailed requirements for hermetically sealed pressure switches.

2. APPLICATION. See Section 1200.

3. DESIGN AND CONSTRUCTION

   3.1 Requirements. Design and construction shall be in accordance with the requirements of MIL-DTL-9395 and the requirements of this document. (See the requirements of Section 1200 and Section 300, as applicable.)

4. QUALITY ASSURANCE. Quality assurance provisions shall be in accordance with the general requirements of Section 4 and the following:

   4.1 In-process Controls. In-process controls shall be in accordance with the requirements of MIL-DTL-9395 and Paragraph 4.1 in Section 1200.

   4.2 Screening (100 percent). Screening (100 percent) shall be in accordance with the requirements listed in Table 1230-1.

   4.2.1 Lot Conformance Tests. Lot conformance tests shall be in accordance with the requirements in Table 1230-2.

   4.2.2 Qualification Tests. Qualification testing shall be in accordance with the requirements of MIL-DTL-9395.

   4.2.3 Incoming Inspection DPA. Incoming inspection DPA shall be in accordance with MIL-STD-1580. All metal surfaces shall be verified for the absence of prohibited materials (e.g., pure tin, zinc, or cadmium).

5. REGISTERED PMP

5.1 Reliability Suspect Parts

   a. Nonhermetic units

   b. Noncorrosion resistant materials or tin in units

   c. Slide devices

6. PROHIBITED PARTS LIST. Switches using prohibited materials in their construction (see Section 4, Paragraph 4.3.3).
## Table 1230-1. 100 Percent Screening Requirements for Pressure Switches

<table>
<thead>
<tr>
<th>MIL-DTL-9395 Screens</th>
<th>Additions and Exceptions to the Methods and Criteria of MIL-DTL-9395</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibration (Random)</td>
<td>a. MIL-STD-202, Method 214, Test Condition II, K (switch in critical system position and test to the requirements of the application)</td>
</tr>
<tr>
<td></td>
<td>b. 3 orthogonal planes, 1 minute each</td>
</tr>
<tr>
<td></td>
<td>c. Mounting fixture shall not add or remove energy from switch under test</td>
</tr>
<tr>
<td></td>
<td>d. Monitored for contact chatter, 10 microseconds maximum per MIL-STD-202, Method 310, Circuit B</td>
</tr>
<tr>
<td></td>
<td>e. No contact transfer (monitor equipment shall be capable of detecting closures greater than 1 microsecond)</td>
</tr>
<tr>
<td></td>
<td>f. If more than one critical system position exists, repeat steps a, b, c, d, and e, with the switch in each critical position.</td>
</tr>
<tr>
<td>Vibration (Sine)</td>
<td>MIL-STD-202, Method 204</td>
</tr>
<tr>
<td>High Temperature</td>
<td></td>
</tr>
<tr>
<td>Low Temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. The lot may be tested a maximum of 5 times. If less than 1% of the lot fails during any of the 5 runs, the lot may be accepted. All defective devices shall be removed after each run. Lots which do not meet the 1% PDA on the fifth run, or exceed 25% defectives cumulative, shall be rejected.</td>
</tr>
<tr>
<td>Mechanical Run-in</td>
<td>a. 500 cycles at 10 cycles per minute at +25°C</td>
</tr>
<tr>
<td></td>
<td>b. Monitor all make and break contacts at 6 VDC 100 mA max.</td>
</tr>
<tr>
<td></td>
<td>c. Miss test monitoring equipment to measure contact resistance required.</td>
</tr>
<tr>
<td>Proof Pressure Calibration</td>
<td></td>
</tr>
<tr>
<td>Coincidence of Operation</td>
<td>Multi-pole only</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td></td>
</tr>
<tr>
<td>Dielectric Withstanding-Voltage</td>
<td></td>
</tr>
<tr>
<td>Seal</td>
<td></td>
</tr>
<tr>
<td>Radiographic Inspection</td>
<td>Per MSFC-STD-355; 2 views 90 deg. apart by X-ray, or 360 deg. view using &quot;real-time&quot; X-ray (preferred).</td>
</tr>
<tr>
<td>Visual and Mechanical Examination (External)</td>
<td>a. Marking and identification</td>
</tr>
<tr>
<td></td>
<td>b. Defects and damage; i.e., body finish, lead finish, misalignment, cracks</td>
</tr>
</tbody>
</table>
### TABLE 1230-2. LOT CONFORMANCE TESTS FOR PRESSURE SWITCHES

<table>
<thead>
<tr>
<th>MIL-DTL-9395 Screens</th>
<th>Additions and Exceptions to the Methods and Criteria of MIL-DTL-9395</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group I</strong></td>
<td></td>
</tr>
<tr>
<td>Solderability</td>
<td>If applicable</td>
</tr>
<tr>
<td>Shock</td>
<td></td>
</tr>
<tr>
<td>Moisture Resistance</td>
<td></td>
</tr>
<tr>
<td>Overload Cycling</td>
<td></td>
</tr>
<tr>
<td>Seal</td>
<td></td>
</tr>
<tr>
<td><strong>Group II</strong></td>
<td>3 Samples</td>
</tr>
<tr>
<td>Mechanical Endurance</td>
<td></td>
</tr>
<tr>
<td>Electrical Endurance</td>
<td></td>
</tr>
<tr>
<td>Contact Resistance</td>
<td></td>
</tr>
<tr>
<td>Seal</td>
<td></td>
</tr>
<tr>
<td>Dielectric Withstanding Voltage</td>
<td></td>
</tr>
<tr>
<td><strong>Group III</strong></td>
<td>2 Samples</td>
</tr>
<tr>
<td>Burst Pressure</td>
<td>If applicable</td>
</tr>
<tr>
<td>Explosion</td>
<td></td>
</tr>
</tbody>
</table>