V-5100 Series
Subminiature Vacuum Switch

The V-5100 Series Vacuum Switches interface from vacuum to electrical control circuits. Ideal for low differential vacuum applications. The switch is adjustable from 1 to 28" Hg with 29.9" Hg maximum. The switches have three electrical terminals: Normally Open, Normally Closed and Common. 15 AMP switches are standard. 0.1 to 25 AMP switches are available.

Four mounting styles are available: The standard flush mount; the panel mount has a unique thread that goes from 1/8-27 tapered pipe thread to 1/8-27 straight pipe thread for mounting; the manifold mount is designed to mount directly on pneumatic circuit boards or manifold subplates - a Buna N o-ring is supplied; and 1/8 NPT mount which has 1/8-27 tapered pipe threads. The switches are furnished with a B80 Barb, 10-32 Barbed Fitting for 1/16" I.D. tubing.

ORDERING INFORMATION (Order by model number, adjustment range, mounting style, port connection and switch selection as shown below.)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Adjustment Range</th>
<th>Mounting Style</th>
<th>Port Connection</th>
<th>Switch Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-5100</td>
<td>5-1 to 5&quot; Hg</td>
<td>PM-Flush Mount</td>
<td>B80-Barb for 1/16&quot; I.D. Tubing</td>
<td>.1B - .1 AMP</td>
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<tr>
<td></td>
<td>10-2 to 10&quot; Hg</td>
<td>PM-Panel Mount 1/8-27 NPT</td>
<td>B85-Barb for 1/8&quot; I.D. Tubing</td>
<td>3A - .3 AMP</td>
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<td></td>
<td>18-3 to 28&quot; Hg</td>
<td>MM-Manifold Mount</td>
<td>No Accessory Number required for a B-80 Barb</td>
<td>5A - .5 AMP</td>
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<td></td>
<td></td>
<td>PT-Pipe Thread</td>
<td>B85-Barb for 1/8&quot; I.D. Tubing</td>
<td>10A - 10 AMP</td>
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<td></td>
<td></td>
<td>Mount 1/8-27 NPT</td>
<td>No Accessory Number required for a 15 AMP</td>
<td>15A - 15 AMP</td>
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<td>25A - 25 AMP</td>
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</tbody>
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FEATURES
- Low Cost
- Subminiature Size
- Low Differential
- Snap-Action Switch
- Fast Response

SPECIFICATIONS
ELECTRICAL
- Switch Action: Single pole, double throw
- Electrical Rating: 15 AMP is standard; no accessory number required
- 0.1 to 25 AMP switches are available
- Electrical Switch: UL Approved
- Electrical Connections: .1B" quick-connect terminal

MECHANICAL
- Operating Speed: Activate or release in 25 milliseconds
- Signal Pressure: 29.9" Hg maximum
- Adjustment Range: 1 to 28" Hg
- Temperature Limits: 40° to 120°F (4° to 49°C.)

MATERIALS
- Housing: Polysulfone
- Diaphragm: Polyurethane
- Spring: Stainless Steel or Music Wire

MOUNTING
- Flush Mount: mounting hole .125" diameter, use No. 4 self-tapping or 5-40 screw
- Panel Mount: 1/8-27 NPT to 1/8-27 NPS, 10-32 female internal threads
- Mounting hole size 7/16" diameter. Supplied with mounting nut
- Manifold Mount: Two mounting holes .125" diameter, use No. 4 self-tapping or 5-40 screw, supplied with Buna N o-ring
- 1/8 NPT Mount: 1/8-27 male tapered pipe threads with 10-32 female internal threads

PORT CONNECTIONS
- 10-32 female threads.
- 1/8-27 male tapered pipe threads with 10-32 female internal threads furnished with a B80 Barb, 10-32 Barbed Fitting for 1/16" I.D. tubing.

DIMENSIONS
( ) = Metric Dimensions

Please Read Warranty on Page 11
Check Chemical Compatibility of Polysulfone.