

V-5500 Series Solid State Vacuum Switch



The V-5500 Series Solid State Vacuum Switches interface from vacuum to electrical control circuits.

The switch is adjustable from 1 to 28" Hg with a maximum 29.9" Hg vacuum supply. The Solid State Switch combines precision mechanical switch operating convenience with solid state reliability. It uses the Hall sensor. An integrated circuit, activated by a magnet located in the operating plunger, produces a digital output. There are no contacts. Supply voltage is 4.5-24 VDC. The Solid State Switch is a direct interface with solid state circuits. The digital logic-level output eliminates the need for conditioning circuitry to obtain a square wave output. A terminal housing can be provided for use with AMP 102241-1 terminals.

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, and port connection as shown below.)

V-5500 — 10 — PM — B85

Model Number	Adjustment Range	Mounting Style	Port Connection	Switch Selection
V-5500	5-1 to 5" Hg	FM-Flush Mount	B80-Barb for 1/16" I.D. Tubing	4.5-24 VDC
	10-2 to 10" Hg	PM-Panel Mount 1/8-27 NPS	B85-Barb for 1/8" I.D. Tubing	
		MM-Manifold Mount		
28-3 to 28" Hg	PT-Pipe Thread Mount 1/8-27 NPT	No Accessory Number required for a B-80 Barb		

FEATURES

- Low Cost
- Subminiature Size
- Low Differential
- Solid State Switch
- Fast Response

SPECIFICATIONS

ELECTRICAL

Switch Action: Solid State Hall Sensor
 Electrical Rating: 4.5-24 VDC
 Electrical Switch: UL Approved
 Electrical Connections: AMP 110224-1 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

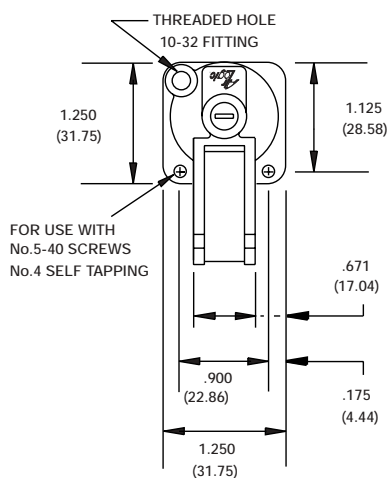
Flush Mount: mounting hole .125" diameter, use No. 4 self-tapping or 5-40 screw
 Panel Mount: 1/8-27 NPT to 1/8-27 NPS, 10-32 female internal threads
 Mounting hole size 7/16" diameter. Supplied with mounting nut
 Manifold Mount: Two mounting holes .125" diameter, use No. 4 self-tapping or 5-40 screw,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

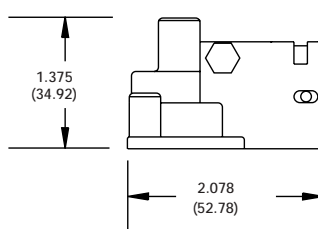
10-32 female threads.
 1/8-27 male tapered pipe threads with 10-32 female internal threads furnished with a B80 Barb, 10-32 Barbed Fitting for 1/16" I.D. tubing.

DIMENSIONS

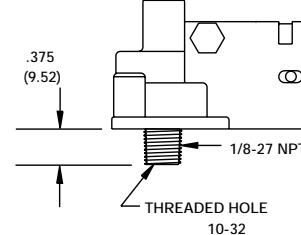
() = Metric Dimensions



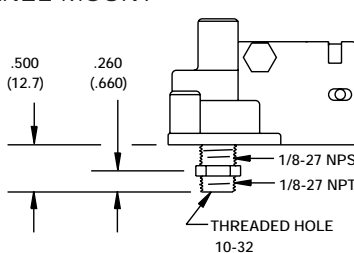
FLUSH MOUNT



1/8 NPT MOUNT



PANEL MOUNT



MANIFOLD MOUNT

