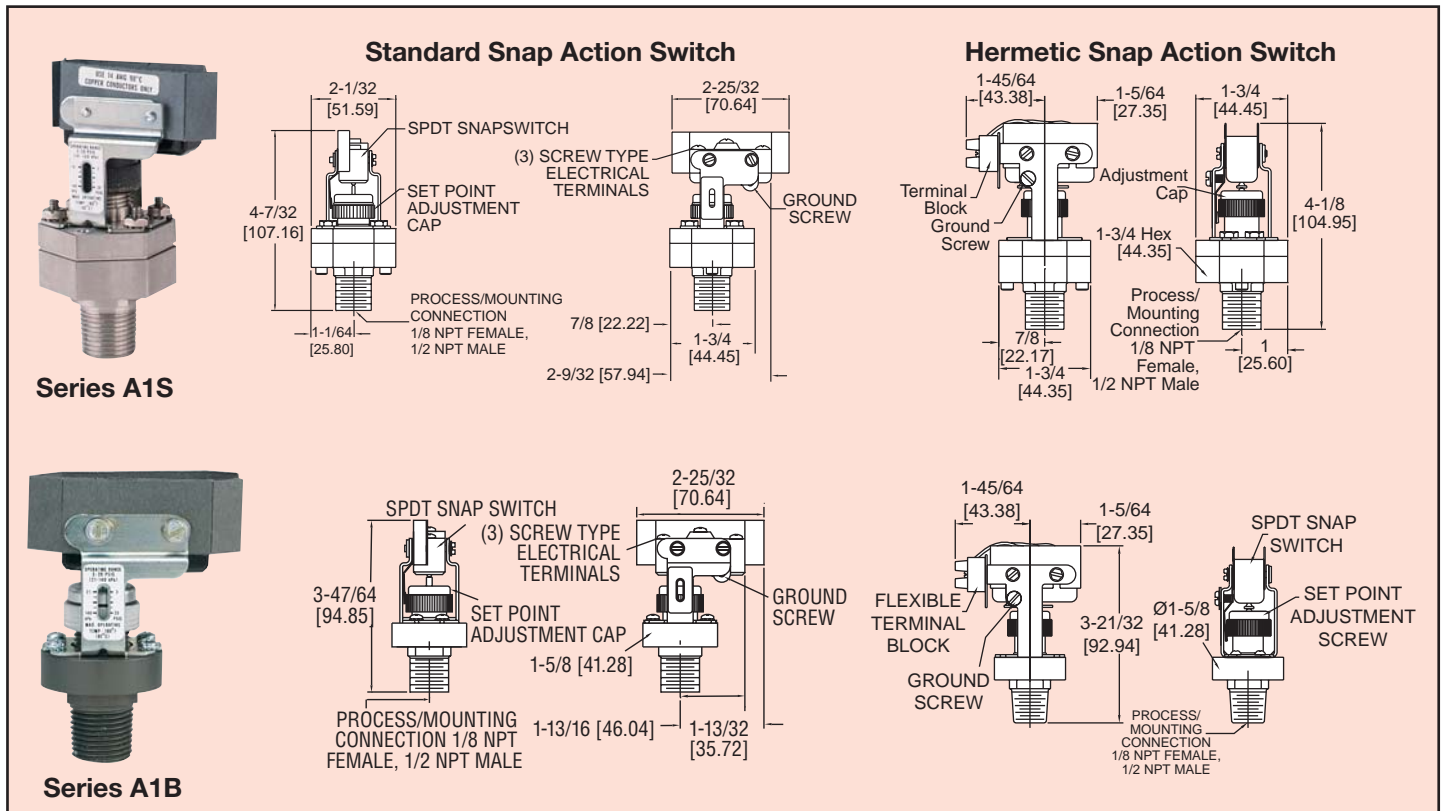




Series
A1S
&
A1B

Low Cost OEM Pressure Switch

316 SS or Buna-N Diaphragm, Optional Weatherproof Enclosure,
Ranges from 3-20 to 50-500 psig



Low Cost and Precision Made. The A1 Pressure Control provides the flexibility required for industrial applications. The A1 pressure switch is ideal for panel mounting wherever a high quality economical open case control is required. Optional weatherproof housing meets NEMA 4X standards. Superior 15A contact allows direct control of a motor or pump without the use of external relays - a true time and money savings. Unique features include broad temperature limits for increased application possibilities and convenient indicating scale for quick and easy field adjustment. The rugged A1S construction incorporates the features most often requested by customers; a 316 SS diaphragm pressure element for exceptional compatibility and long service life. The A1B construction offers a lower cost Buna-N diaphragm for those applications not requiring 316 SS. Pressure chambers available are: aluminum with Teflon[®] impregnated hard coating perfect for oil based hydraulic fluids and noncorrosive air and gases, brass for water and water based fluids, and 316 SS for harsher applications. Optional hermetically sealed snap switches are available for harsh environments.

OP enclosure and mounting configuration offers a unit that can be directly mounted through the panel wall keeping the process outside of the panel. Unit has a flush bottom and includes a gasket and mounting nut to insure a tight weatherproof seal against the panel.

Features

- 316 SS or Buna-N diaphragm
- Aluminum, Brass, or 316 SS pressure chamber
- High current SPDT snap switch
- Weatherproof enclosure available in Polycarbonate or 316 SS
- Hermetically sealed snap switch option

SPECIFICATIONS

Wetted Materials:

- Pressure Chamber:** Aluminum with Teflon[®] impregnated anodized coating, brass, or 316 SS.
- Diaphragm:** 316 SS on A1S, Buna-N on A1B.
- O-ring:** Viton[®] on A1S, Buna-N on A1B.

Temperature Limit: -40 to 180°F (-40 to 82°C).

Pressure Limits: 750 psig (51 bar).

Enclosure Rating: O, and OP enclosure none. PC, PN, SC, and SN enclosures meet NEMA 4X standards.

Switch Type: Type 1: SPDT snap switch. Type 1HS: SPDT hermetically sealed snap switch.

Electrical Rating: Switch Type 1: 15A @ 120/240/480 VAC, 1/8 HP @ 125 VAC, 1/4 HP @ 250 VAC. Switch Type 1HS: 5A @ 120/240 VAC.

Electrical Connection: Screw terminals on Type 1 switch, terminal block on Type 1HS switch.

Process Connection: 1/8" female NPT and 1/2" male NPT. OP style has 1/8" female NPT and 1/2" male straight thread.

Mounting Orientation: Within 20° of vertical.

Set Point Adjustment: Knurled screw cap with indicating scale.

Weight: A1S: 9 oz (.25 kg), A1B: 6 oz (.17 kg).

Deadband: Fixed, see deadband chart.



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Example	A1	S	PC	SS	1	2	A1S-PC-SS-1-2 Pressure Control; 316 SS diaphragm and Viton® O-ring; weatherproof enclosure, NEMA-4X, polycarbonate with conduit entry; 316 SS pressure chamber; fixed deadband, automatic reset; SPDT snap acting switch; adjustable range 15-150 psig.
Construction	A1						Series Designator
Diaphragm Material		S B					316 SS diaphragm and Viton® O-ring Buna-N diaphragm and Buna-N O-ring
Enclosure & Mounting			O OP PC SC				Open case Open case - panel mount, has 1/2" straight thread and flush bottom, includes gasket and mounting nut (only available on A1B with brass chamber) Weatherproof enclosure, NEMA 4X, polycarbonate with conduit entry Weatherproof enclosure, NEMA 4X, 316 SS with conduit entry
Pressure Chamber Material				AL BR SS			Aluminum with Teflon® impregnated anodized coating Brass 316 SS
Circuit (Switch) Type					1 1HS		SPDT snap action switch, rated 15A @ 120/240/480 VAC, 1/8 HP @ 125 VAC, 1/4 HP @ 250 VAC SPDT Hermetically sealed snap switch rated 5A @ 120/240 VAC
Adjustable Pressure Range						1 2 3 4	3-20 psig (.21-1.4 bar) 15-150 psig (1.0-10.3 bar) 25-250 psig (1.7-17.2 bar) 50-500 psig (3.4-34.5 bar)

Optional Enclosures & Mounting:

Weatherproof



Open Case-Panel Mount



Series A1S - Type O enclosure and Type 1 switch

AL chamber models base price
BR chamber models base price
SS chamber models base price

Series A1B - Type O enclosure and Type 1 switch

AL chamber models base price
BR chamber models base price
SS chamber models base price

Enclosures:

PC

SC

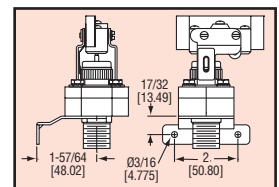
Switches:

1HS

Accessories:

A-613 Mounting Bracket

Optional accessory is formed from 14 ga. steel, zinc plated for corrosion resistance. Provides rugged permanent mounting and speeds installation. Two 1/4" 6-32 mounting screws are included to attach switch to bracket.



Series A1S and A1B Deadband Chart - psig (bar)

Model	Range	Deadband at Minimum Range	Deadband at Maximum Range
A1S or A1B with Type 1 Switch	3-20 (.21-1.4)	1 (.07)	3 (.21)
	15-150 (1.0-10.3)	5 (.34)	15 (1.0)
	25-250 (1.7-17.2)	8 (.55)	25 (1.7)
	50-500 (3.4-34.5)	15 (1.0)	50 (3.5)
A1S with Type 1HS Switch	3-20 (.21-1.4)	1.5 (.10)	4 (.28)
	15-150 (1.0-10.3)	10.5 (.72)	40 (2.8)
	25-250 (1.7-17.2)	9 (.62)	50 (3.5)
	50-500 (3.4-34.5)	14.5 (.99)	42 (2.9)
A1B with Type 1HS Switch	3-20 (.21-1.4)	2 (.14)	6 (.41)
	15-150 (1.0-10.3)	6 (.41)	25 (1.7)
	25-250 (1.7-17.2)	17 (1.17)	50 (3.5)
	50-500 (3.4-34.5)	12.5 (.86)	44 (3.0)

STOCKED MODELS in bold

Model Number	Range psig (bar)
A1S-O-AL-1-1	3-20 (.21-1.4)
A1S-O-AL-1-2	15-150 (1.0-10.3)
A1S-O-AL-1-3	25-250 (1.7-17.2)
A1S-O-AL-1-4	50-500 (3.4-34.5)
A1S-O-AL-1HS-2	15-150 (1.0-10.3)
A1S-O-BR-1-1	3-20 (.21-1.4)
A1S-O-SS-1-1	3-20 (.21-1.4)
A1S-O-SS-1-2	15-150 (1.0-10.3)
A1S-PC-SS-1-1	3-20 (.21-1.4)
A1S-PC-SS-1-2	15-150 (1.0-10.3)
A1B-O-AL-1-1	3-20 (.21-1.4)
A1B-O-AL-1-2	15-150 (1.0-10.3)
A1B-OP-BR-1-2	15-150 (1.0-10.3)
A1B-O-AL-1HS-1	3-20 (.21-1.4)
A1B-PC-AL-1-1	3-20 (.21-1.4)
A1B-SC-BR-1-2	15-150 (1.0-10.3)