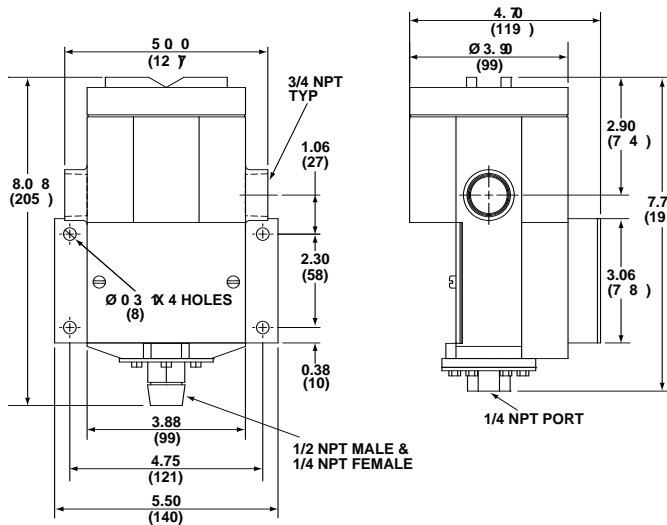


# Installation and Maintenance Instructions for ASHCROFT® P-Series Snap Action Switches for Pressure Control



## psi Ranges

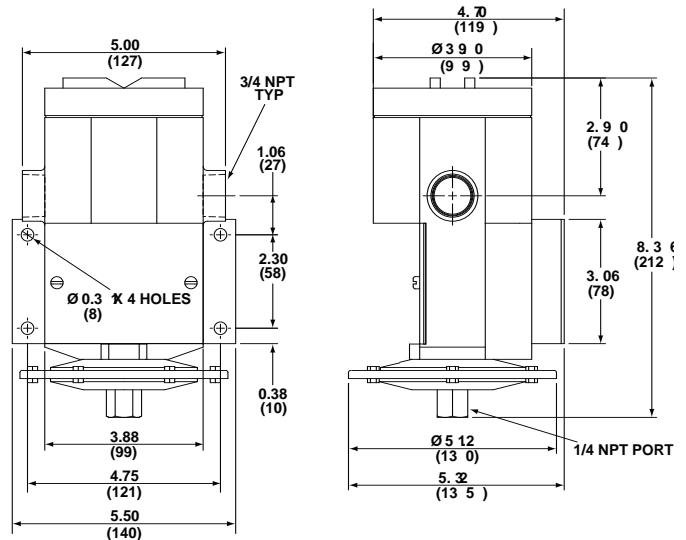


N4 – 5.0 lb. (2.3)  
N7 – 5.6 lb. (2.5)

### STANDARD RANGES

15, 30, 60, 100, 200, 400, 600 psi  
1000, 2000, 3000 psi  
30"Hg vac.-0 psi  
30"Hg vac.-15 psi

## H<sub>2</sub>O Ranges



N4 – 5.7 lb. (2.6)  
N7 – 6.3 lb. (2.9)

### STANDARD RANGES

30, 60, 100, 150 H<sub>2</sub>O

## INTRODUCTION

The Ashcroft pressure control is a precision device which features a snap action switch. Fixed deadband is available with single or dual SPDT independently adjustable switches with various electrical ratings. Adjustable deadband is available with a SPDT switch with various electrical ratings. Several wetted material constructions for compatibility with pressure media may be obtained.

The "P" Series Ashcroft snap action pressure switch is available in both standard NEMA~ and explosion-proof NEMA 7 & 9 configurations. The enclosure is an epoxy coated aluminum casting.

## INSTALLATION

This control is a precision instrument and should never be left with internal components exposed. During installation insure that covers are in place and conduit openings are sealed.

## MOUNTING

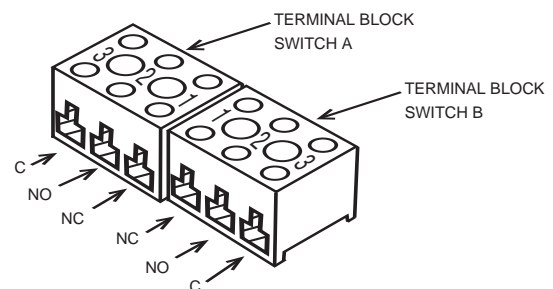
Four holes in the bracket supplied are used in surface mounting of the control. Location of these holes is shown on the general dimension drawings. An optional pipe mounting bracket is also available. Mount on a vibration free surface or pipe. When tighten-

ing control to pressure line, always use the wrench flats or hex on the pressure connection. Never tighten by twisting the case.

## ELECTRICAL CONNECTION

Remove top cover, cover unscrews (CCW).

On all units except one with terminal blocks-wire directly to the switch according to circuit requirements. Units with terminal blocks-wire directly to terminal blocks as required. Terminals are marked common, norm open and norm closed.



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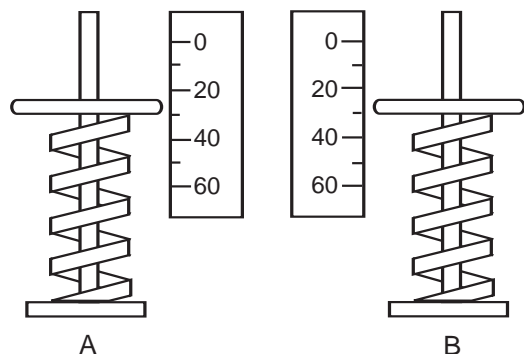


## CONDUIT CONNECTIONS

Two 3/4 NPT holes are provided, one fitted with a plug, the other with a cap. It is recommended that Teflon tape or other sealant be used on conduit bushing or plug threads to ensure integrity of the enclosure. NEMA 7 & 9 enclosures require proper conduit seals and breathers as per the National Electrical Code.

## SETPPOINT ADJUSTMENTS

**Series PP-S Single Switch** – Remove front cover, held in place by two screws. For setpoint adjustment to within + 1% of nominal range, use a suitable reference such as an Ashcroft Duragauge or test gauge. Monitor switch with a suitable pilot light or meter. Pressurize the system to the required setpoint and turn the adjusting wheel until the switch changes mode. When the setpoint has been achieved, raise and lower the pressure to insure that the setpoint is correct.



**Series PP-D Dual Switch** – Remove front cover, held in place by two screws. There are two range adjusting wheels. The adjusting wheel on the left (labeled A) controls the left switch, the adjusting wheel on the right (labeled B) controls the right switch. The switches are set independently.

**NOTE:** The units are calibrated at the factory such that for proper operation switch B setpoint must be set higher than switch A setpoint.

For setpoint adjustment to within  $\pm 1\%$  of nominal range mount the switch on a calibration stand, and use a suitable reference such as an Ashcroft Duragauge or test gauge. Monitor switch with a suitable pilot light or meter.

Pressurize the system to the required setpoint and turn the adjusting wheel until the switch changes mode. When the setpoint has been achieved, raise and lower the pressure to insure that the setpoint is correct. This must be done for both setpoint A and setpoint B.

**Series PP-A Adjustable Deadband Switch** – Remove front cover, held in place by two screws. The adjusting wheel labeled A controls the resetpoint of the switch. The adjusting wheel labeled B controls the setpoint of the switch.

**Note:** The units are calibrated at the factory such that for proper operation setpoint B is always higher than resetpoint A.

For accurate setpoint adjustment, mount the switch on a calibration stand, and use a suitable reference such as an Ashcroft Duragauge or Test Gauge. Monitor switch with a suitable pilot light or meter. Pressurize the system to the required setpoint. Move adjusting wheel on spring B until switch changes mode. Then lower pressure to the resetpoint, move adjusting wheel on spring A until the switch changes mode. Raise and lower pressure to insure that setpoint is correct. Repeat as necessary.

**Note:** Since vacuum models are already above setpoint at atmosphere, the Normally Open (NO) circuit will be closed as received.