

P-7100 Pneumatic Electric Switch

The P-7100 Pneumatic Electric Switch is designed for use where a pneumatic controller is used to actuate an electric device. The P-7100 can be used for electric heat applications, to provide variations of the G-7185 Step Controller, or it can be used for any other application where an electric device is actuated by a pneumatic signal.

Operation

As the control pressure applied to the diaphragm increases, the switch plunger is depressed. When the pressure reaches the set point, the 20 amp SPDT switch controls transfer. When the pressure decreases approximately 2 PSI (14 kPa) below the set point value, the switch contacts return to their original position. The set point is fully adjustable from 3 to 18 PSIG (21 to 126 kPa) and can be changed by turning the dial to the desired setting.

Installation

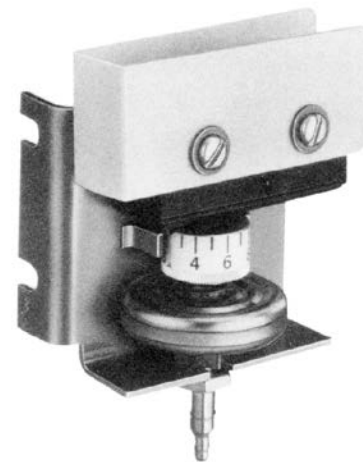
The P-7100 can be mounted in any position inside an approved electrical enclosure (as required). Two mounting slots are provided in the bracket for attachment; refer to Fig. 2 for space requirements and additional mounting details.

Calibration

The P-7100 is factory calibrated at 10 PSIG (70 kPa). If the unit needs to be recalibrated, proceed as follows:

1. Make sure that the nut holding the diaphragm assembly to the bracket is tight, then apply 10 PSIG (70 kPa) to the diaphragm.

2. Rotate the dial assembly until the switch contacts transfer (C to N.O. closes). Monitor the switch using an ohmmeter.
3. Loosen the holding nut, rotate the entire diaphragm and dial assembly until the "10" on the dial is aligned with the indicator, and retighten the holding nut.
4. Recheck for proper operation at the desired setting.



**Fig. 1: P-7100
Pneumatic Electric Switch**

Repair Information

Field repairs must not be made. For a replacement P-7100, contact the nearest Johnson Controls branch office.

Specifications

Product	P-7100-1 Pneumatic Electric Switch	
Pneumatic Range	3 to 20 PSIG (21 to 140 kPa)	
Differential	2 PSI (14 kPa)	
Set Point	Adjustable from 3 to 18 PSIG (21 to 126 kPa)	
Switch Action	SPDT (Single Pole Double Throw)	
Electrical Ratings	20 Amps, 480 VAC (Noninductive); 1 hp, 125 VAC; 2 hp, 250 VAC; Pilot Duty 750 VA, 125 or 250 VAC	
Connections	Pressure	Barbed Fitting for 5/32 or 1/4 in. O.D. Poly tubing
	Electric	#8 Screw Terminals
Ambient Temp Limits	-25 to 140°F (-32 to 60°C)	
Ambient Humidity Limits	10 to 90% RH Non-Condensing, 85°F (29°C) Maximum Dew Point	
Ambient Humidity Effect	± .025 PSI/1% RH	
Mounting	Enclosure Mounted Using Integral Bracket	
Accuracy	± 1 PSI (7 kPa) of Dial Marking at Calibration Conditions	
Agency Listings	UL Component Recognized and CSA Approved	
Shipping Weight	1.5 lb (.68 kg)	

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

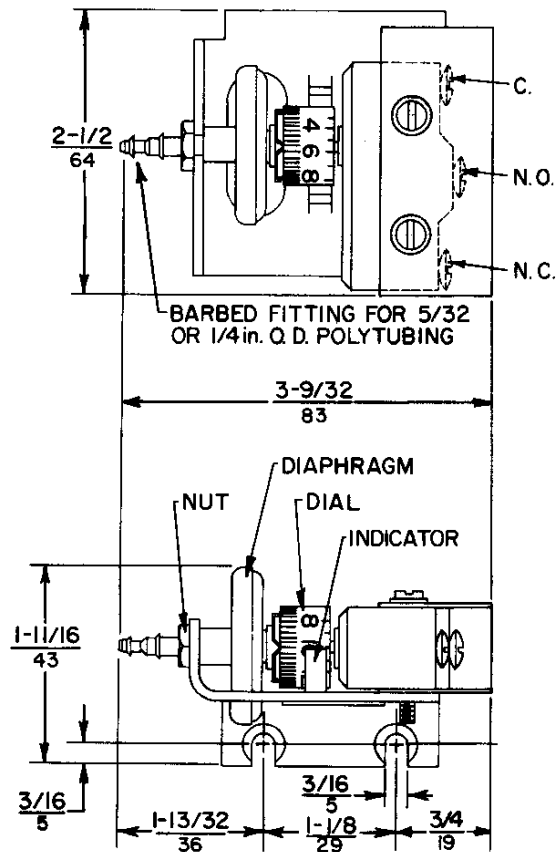


Fig. 2: P-7100 Dimensions $\frac{\text{in.}}{\text{mm}}$

European Single Point of Contact:
 JOHNSON CONTROLS
 WESTENDHOF 3
 45143 ESSEN
 GERMANY

NA/SA Single Point of Contact:
 JOHNSON CONTROLS
 507 E MICHIGAN ST
 MILWAUKEE WI 53202
 USA

APAC Single Point of Contact:
 JOHNSON CONTROLS
 C/O CONTROLS PRODUCT
 MANAGEMENT
 NO. 22 BLOCK D NEW DISTRICT
 WUXI JIANGSU PROVINCE 214142
 CHINA



Controls Group
 507 E. Michigan Street
 P.O. Box 423
 Milwaukee, WI 53202

Printed in U.S.A.