

# spirax/sarco®

## PN600 Series Pneumatic Controllers

### DESCRIPTION

The PN600 Series Pneumatic Controller provides temperature or pressure control giving a 3 psi to 15 psi output signal with proportional action (plus manual reset) or proportional plus integral control. The range of pneumatic controllers can be used in conjunction with PN5000 and PN6000 Series Linear Actuators and PP4 Pneumatic Positioners.

### AVAILABLE TYPES

Temperature Model	Control Function
662-T5-M5	Proportional (+Manual Reset)
663-T5-M5	Proportional + Integral

**Scale Range for Temperature Models:**  
 0°-50°F 0°-100°F 50°-150°F 100°-200°F 150°-250°F 200°-300°F

T-5 = Nitrogen filled sensing bulb and capillary.  
 M-5 = Meters (16.5 ft) capillary tube. (Option of 10 meters [32 ft] - suffix "M10")  
 SY = Sensing bulb for sterile applications  
 T6 = Sensing bulb for air/gas applications

Pressure Model	Control Function
622	Proportional (+Manual Reset)
623	Proportional + Integral

**Scale Range for Pressure Models:**  
 0-25 psi 0-50 psi 25-100 psi 50-150 psi 100-200 psi  
 150-250 psi 100-300 psi

### TECHNICAL DATA

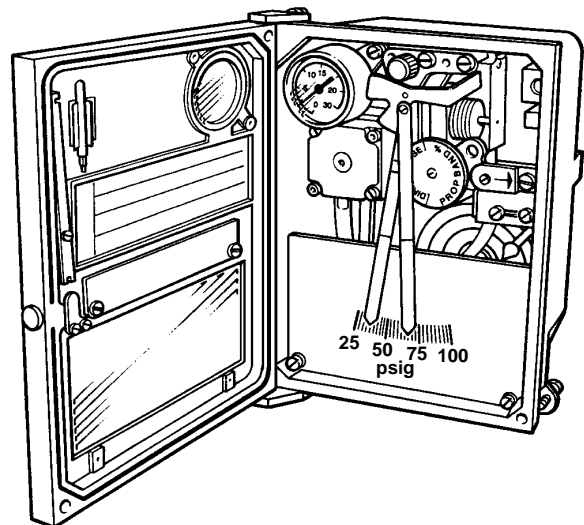
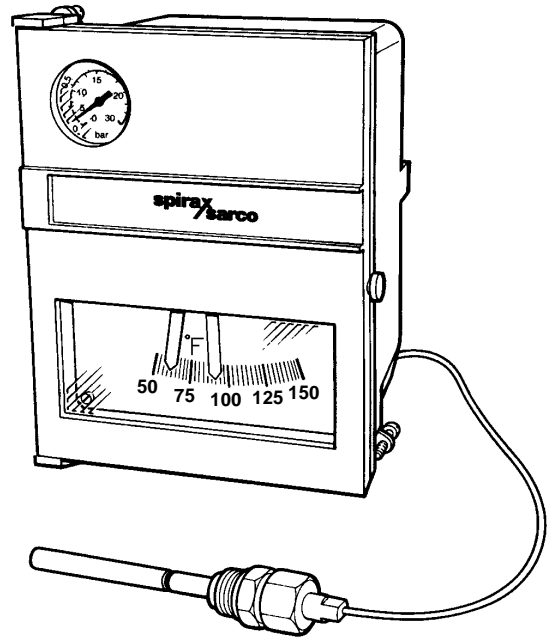
Controller	
Enclosure Rating	IP54 (Standard)
Scale length	4" (100mm)
Pointers	Measuring Value - black Set Point - red
Gauges	Output Signal Pressure (bar/psig)
Control Mode	Proportional (5-200% of scale range). Integral (0.1 to 20 repeats per minute).
Output Signal	3-15 psi (0.2 - 1 bar)
Control Action	Direct or Reverse Action - Field Reversible
Set Point Adjustment	Manual Adjustment
Accuracy	1% of Range Span
Sensitivity	0.2% of Range Span
Repeatability	0.5% of Range Span
Linearity	0.5% of Range Span
Air Supply	20 psig (1.4 bar)
Air Consumption	7 ft <sup>3</sup> /hr (0.2 Nm <sup>3</sup> /hr) Average
Air Connections	1/4" NPT
Ambient temperature limit	0-175° F (-15-65°C)
Mounting	Wall or Flush Panel Mounted
Weight	7.5 lbs (3.5 kg)

### Measuring Elements

Pressure	
Bourdon Tube	AISI 316L Stainless Steel
Connection	1/4" NPT
Maximum Pressure	+ 25% of scale range

### Temperature

Bulb and Capillary	AISI 316L Stainless Steel - Cylindrical Bulb for Liquids - Sanitary Bulb for Sterile Applications Spiral Bulb for Air/Gas
Bulb Connection	3/4" NPT
Capillary Length	5 Meters (16.5 ft) 10 Meters (32 ft) (in some ranges) (Other options available)
Max. Measured Temp.	+25% of scale range



### MATERIALS

Casing	Aluminium Alloy
Internals	Stainless and brass

### INSTALLATION AND COMMISSIONING

Installation should be carried out in accordance with the instructions supplied with each controller.

*Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.  
 In the interests of development and improvement of the product, we reserve the right to change the specification.*

TIS 1.613 US 08.99

# PN600 Series Pneumatic Controllers

## DIMENSIONS (NOMINAL) IN INCHES AND MILLIMETERS

Controller			
A	B	C	D
7.8	5.7	5.3	.67
202	144	136	17
Temperature Sensing Bulb			
E	F	G	
6.7	4.7	.5	
170	120	13	
Panel Mounting Cut Out			
J	H		
7.4	5.5		
188	138		

## MOUNTING ARRANGEMENTS

Controllers are panel mounted using the brackets provided with the units as standard

