



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

TI-P320-47  
CH Issue 3

## PN600 Series Pneumatic Controllers

### Description

The PN600 series pneumatic controllers provide temperature or pressure control providing a 0.2 bar to 1 bar output signal with proportional (plus manual reset) or proportional plus integral control action. An optional stainless steel pocket type W30S is available for use with temperature sensors.

The range of pneumatic controllers can be used in conjunction with PN5000 and PN6000 series linear actuators and PP4 pneumatic positioners.

### Available types

#### Temperature control

Model	Control function	Scale range
662-T5-M5*	Proportional (+ Manual reset)	0 - 100°C
662-T5-M5	Proportional (+ Manual reset)	50 - 150°C
662-T5-M5*	Proportional (+ Manual reset)	25 - 125°C
662-T5SY-M5	Proportional (+ Manual reset)	25 - 125°C
663-T5-M5*	Proportional + Integral	0 - 100°C
663-T5-M5	Proportional + Integral	50 - 150°C
663-T5-M5*	Proportional + Integral	25 - 125°C
663-T5SY-M5	Proportional + Integral	25 - 125°C

T5 = Nitrogen filled sensing bulb and capillary

SY = Sensing bulb for sterile applications

M5 = 5 metres capillary tube (\*Option of 10 metres - Suffix 'M10')

#### Pressure Control

622	Proportional (+ Manual reset)	0 - 7 bar
622	Proportional (+ Manual reset)	0 - 20 bar
623	Proportional + Integral	0 - 7 bar
623	Proportional + Integral	0 - 20 bar

#### Other options available include:-

Pneumatic receiver for 0.2 to 1 bar (or 3 to 15 psi g) input signal.  
Electromechanical receiver for 4-20 mA, 0-10 Vdc, RTD Pt100 or thermocouple input signal.

#### Other scale ranges available:-

Pressure (bar) Scale span options up to 0 to 500 bar  
Temperature (°C) Scale span options for:-  
50, 75, 100, 150, 200, 300 and 400°C

### Measuring elements

#### Pressure

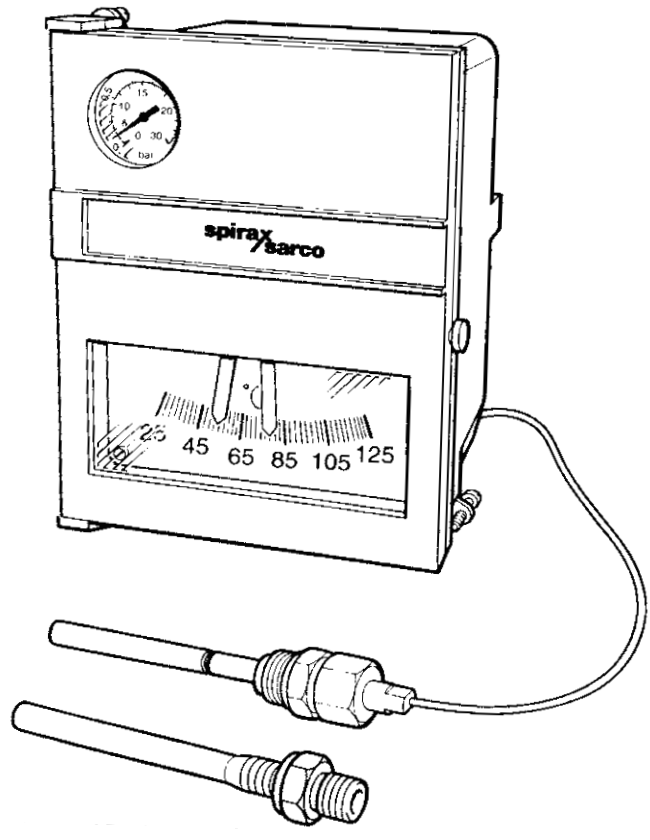
Bourdon tube	AISI 316L stainless steel
Connection	¼" BSP
Maximum pressure	+25% of scale range

#### Temperature

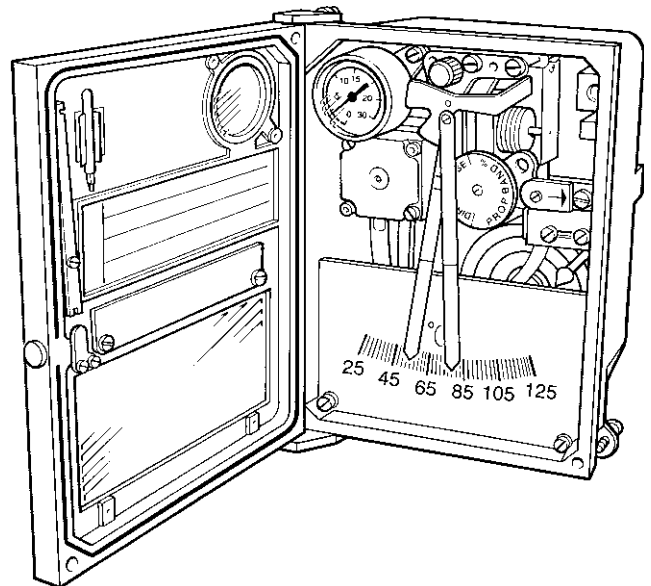
Bulb and capillary	AISI 316L stainless steel - Cylindrical bulb for liquids - Sanitary bulb for sterile applications (Option available with spiral bulb for air/gas)
Bulb connection	¾" BSP
Capillary length	5 metres 10 metres (in some ranges) (Other options available)
Max. measured temperature	+25% of scale range

#### Pocket - Type W30S (optional)

Material	AISI 316L	Stainless steel
Connection	½" BSP	
Maximum pressure	PN40	



Optional pocket type W30S



Local regulations may restrict the use of this product to below the conditions quoted.

In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

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## Technical data

### Controller

Enclosure rating	IP54 (Standard) IP55 (Optional)
Scale length	100mm
Pointers	Measured value - black Set point - red
Gauges	Output signal pressure (bar/psi g)
Control mode	Proportional (5-200% of scale range) Integral (0.1 to 20 repeats per minute)
Output signal	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	1.4 bar
Air consumption	0.2 Nm <sup>3</sup> /h (average)
Air connections	1/4" BSP
Ambient temperature limits	-15°C to 65°C
Mounting	Wall or flush panel mounted
Weight	3.5 kg

### Dimensions (mm)

#### Controller

A	B	C	D
202	144	136	17

#### Temperature sensing bulb

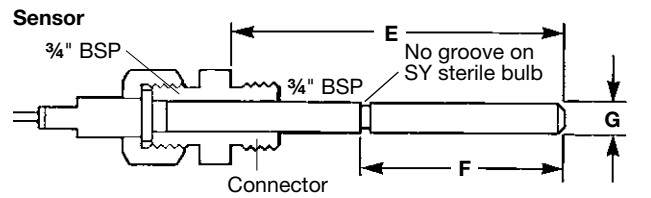
E	F	G
200	120	13

#### Panel mounting cut-out

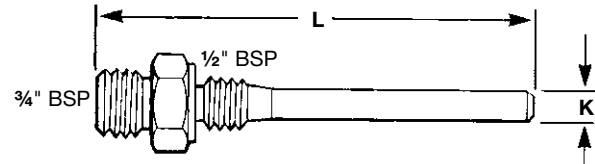
H	J
138	188

#### Pocket

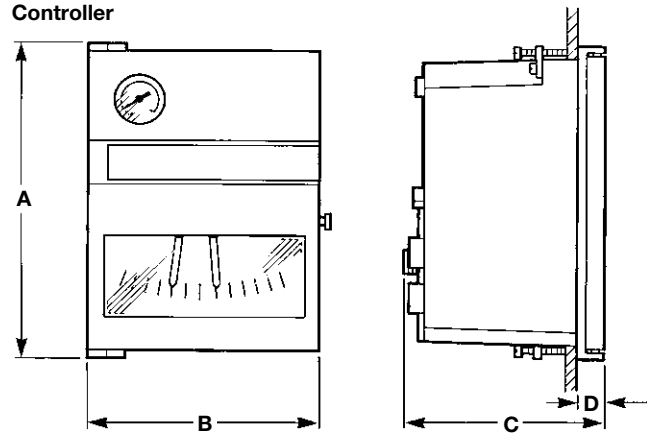
K	L
16	210



#### Pocket (optional replacing standard connector)



#### Controller



#### Panel cut-out

