TI-P320-47 CTLS Issue 5



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

Control function	Scale range
Proportional (+ Manual reset)	0 - 100 °C
Proportional (+ Manual reset)	50 - 150 °C
Proportional (+ Manual reset)	25 - 125 °C
Proportional (+ Manual reset)	25 - 125 °C
Proportional + Integral	0 - 100 °C
Proportional + Integral	50 - 150 °C
Proportional + Integral	25 - 125 °C
Proportional + Integral	25 - 125 °C
	Proportional (+ Manual reset) Proportional (+ Manual reset) Proportional (+ Manual reset) Proportional (+ Manual reset) Proportional + Integral Proportional + Integral Proportional + Integral

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:-

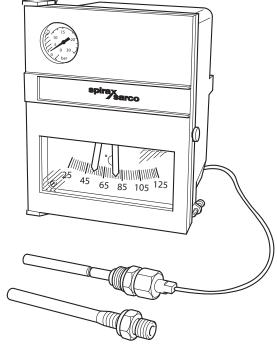
Pneumatic receiver for 0.2 to 1 bar (or 3 to 15 psi g) input signal. Electromechanical receiver for 4-20 mA, 0-10 Vdc, RTD Pt100 or thermocouple input signal.

Other scale ranges available:-

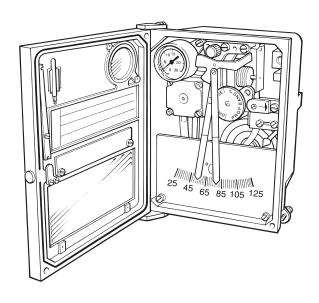
Pressure (bar) Scale span options up to 0 to 500 bar

Temperature (°C) Scale span options for:-

50, 75, 100, 150, 200, 300 and 400 °C



Optional pocket type W30S



Measuring elements

Pressure

Bourdon tube	AISI 316L stainless steel
Connection	1⁄4" BSP
Maximum pressure	+25% of scale range

Te	m	n	Δ	ra	tı	ır	۵
16	111	μ	C	ı a	u	a i	C

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

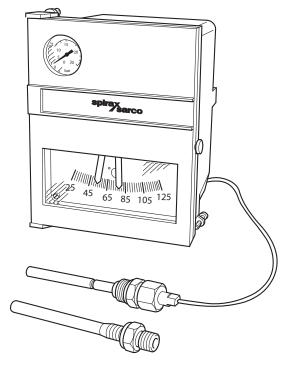
Pocket - Type W30S (optional)

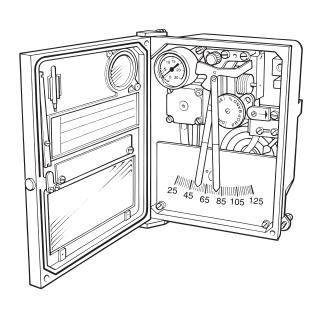
Material	AISI 316L	Stainless steel
Connection	½" BSP	
Maximum pressure	PN40	

Technical data

Controller

Enclosure rating	IP54 (Standard) IP55 (Optional)	
Scale length	100 mm	
Pointers	Measured value Set point	- black - red
Gauges	Output signal press	ure (bar/psi g)
Control mode	Proportional (5-200 Integral (0.1 to 20 re	0 ,
Output signal	0.2 - 1 bar	
Control action	Direct or reverse ac Field reversable	tion -
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 Nm³/h (average)	
Air connections	1⁄4" NPT	
Ambient temperature limits	-15 °C to 65 °C	
Mounting	Wall or flush panel	mounted
Weight	3.5 kg	



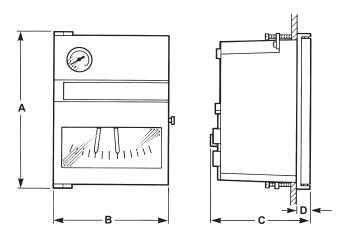


Optional pocket type W30S

Dimensions (mm)

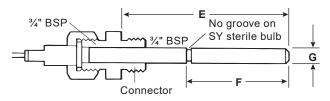
Controller

Α	В	С	D
202	144	136	17



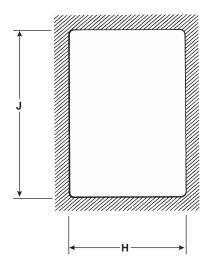
Temperature sensing bulb

E	F	G	
200	120	13	



Panel mounting cut-out

н	J	
16	188	



Pocket

K	L	
16	210	

