

P31P & P32P Proportional Regulators

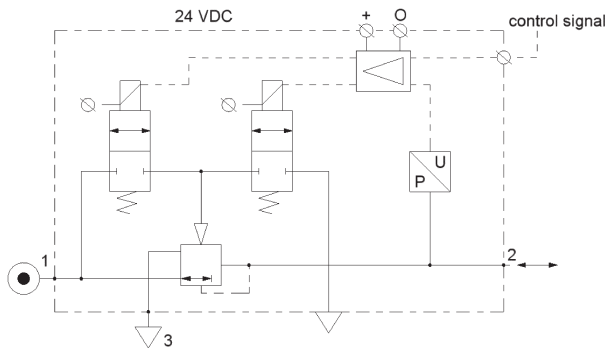
- Very fast response times
- Accurate output pressure
- Parameter settings
- Selectable I/O parameters
- Quick, full flow exhaust
- LED display indicates output pressure
- No air consumption in steady state
- Multiple mounting options
- Protection to IP65



P31P Series
Bottom exhaust



P32P Series
Bottom exhaust



Port Size	Description	Part Number
1/4"	145 psig (0-10 bar), NC 0-10V	P31PA92AD2VD1A
1/2"	145 psig (0-10 bar), NC 0-10V	P32PA94AD2VD1A

Operating information

Flow capacity*:	P31P	40 scfm (19 dm³/s, ANR)
	P32P	120 scfm (57 dm³/s, ANR)
Temperature range:		32°F to 122°F (0°C to 50°C)
Supply pressure (max):		
2 bar unit		36.3 psig (2.5 bar)
10 bar unit		152 psig (10.5 bar)
Operating pressure (min):		P2 pressure + 7.3 psig (0.5 bar)
Working medium:		Compressed air or inert gasses, filtered to 40µ
Pressure range:		
		0 to 30 psig (0 to 2 bar)
		0 to 145 psig (0 to 10 bar)
Weight:	P31P	0.64 lb (0.291 kg)
	P32P	1.42 lb (0.645 kg)

* Inlet pressure 91.3 psig (6.3 bar), inlet pressure and 4.9 psig (0.34 bar) pressure drop.

Ordering Information:

P31PA

9

2

A

D

2

V

D

1

A

Body Size

Global Modular Mini (1/4")P31PA

Global Modular Compact (1/2")P32PA

Thread Type

BSPP1

BSPT2

NPT9

Port Size

Global Modular Mini (1/4")2

Global Modular Compact (1/2")4

Version

Bottom Ported Exhaust (NC)A

Bottom Ported Forced Exhaust (NO)[†]E

Pressure Range

Z0 - 29 psig (0 - 2 Bar)

D0 - 145 psig (0 - 10 Bar)

Power Supply

224 Volts

Control Signal

V0-10V[‡]

‡ Factory setting is 0-10 V control signal. 4-20 mA control signal available via parameter 4 on keypad.

Input Connector

1M12 (4-pin)

Output Signal

DDigital, PNP

PNNP or 0-10V

NNPN or 0-10V

M4-20mA Fixed

D) Digital PNP output only, no analog output selectable

P) Digital PNP and analogue 0-10V outputs selectable, by means of parameter 6. (Factory default 0-10V)

N) Digital NPN and analog 0-10 V outputs selectable by means of parameter 6. Factory default 0-10V)

M) Analog 4-20mA output only.

Note: On all analog outputs the F.S. value can be adjusted by means of parameter 8.

† When the supply voltage is lost the unit will automatically exhaust the regulated pressure to 0 bar (atmospheric pressure)

Most popular.



For inventory, lead times, and kit

Proportional Regulators

Technical Information

Accuracy

+/- 1.0% of F.S.*

* Full scale (F.S.) - For 2 bar (29 psig) versions this will be 2 bar (29 psig), for the 10 bar (145 psig) version full scale will be 10 bar (145 psig).

Air consumption

No consumption in stable regulated situation.

Display

The regulator is provided with a digital display, indicating the output pressure, either in bar or psig.

The factory setting is as indicated on the label, can be changed through to software at all times (parameter 14)

Supply voltage

24 VDC +/- 10%

Power consumption

Max. 1.1W with unloaded signal outputs

Control signals

The electronic pressure regulator can be externally controlled through an analogue control signal of either 0-10V or 4-20mA. (parameter 4).

Output signals

As soon as the output pressure is within the signal band a signal is given of 24VDC, PNP Ri = 1 kOhm
Outside the signal band this connection is 0V.

Connections

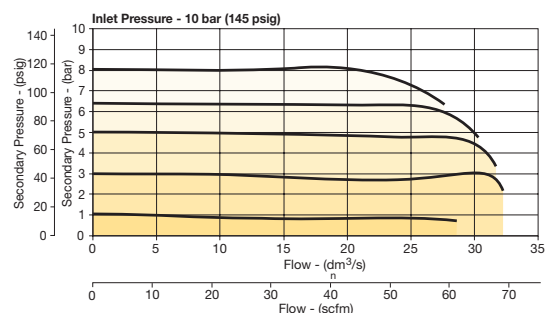
(In case of output signal (Option D)
Central M12 connector 4-pole
The electrical connections are as follows:

Pin No.	Function	Color
1	24 V	Supply
2	0 to 10 V	Control Signal Ri = 100k Ω
	4 to 20mA	Control Signal Ri = 500 Ω
3	0 V (GND)	Supply & Set Point Ground
4	24 V	Alarm Output Signal

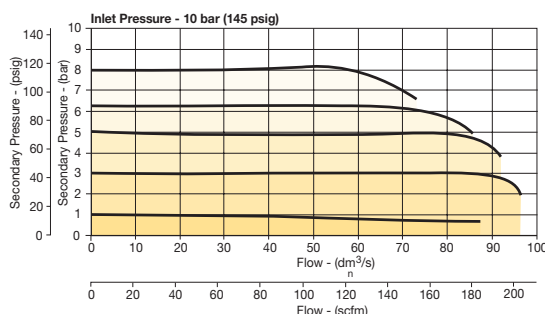
Global Air Preparation

Flow Charts

P31P Regulator 1/4" Ports



P32P Regulator 1/2" Ports



Degree of protection: IP65

EU conformity

CE: standard

EMC: according to directive 89/336/EEC

This pressure regulator is in accordance with:

EN 61000-6-1:2001

EN 61000-6-3:2001

EN 61000-6-2:2001

EN 61000-6-4:2001

Mounting position

Preferably vertical, with the cable gland on top.

Materials: P31P & P32P

Magnet core	Steel
Solenoid valve poppet	FPM
Solenoid valve housing	Techno polymer
Regulator body (P31P & P32P versions)	Aluminum
Regulator top housing	Nylon
Valve head	Brass & NBR
Remaining seals	NBR

B

Global Air
Preparation

Introduction

Filters

Coalescers

Regulators

Filter/
Regulators

Lubricators

Combinations

Accessories
and Kits



For inventory, lead times, and kit

B33

Parker Hannifin Corporation
Pneumatic Division