ABP1 Series

Back Pressure Regulator

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Customer Value Proposition:

The ABP1 is a versatile design for the control of inlet, upstream or back pressure in an instrument or analyzer system.

The materials of construction of this regulator make it suitable for applications where corrosive media and/or environments are present.

Contact Information:

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Veriflo Division
250 Canal Blvd
Richmond, California 94804

phone 510 235 9590
fax 510 232 7396
veriflo.sales@parker.com

www.parker.com/veriflo

Product Features:

- Standard Hastelloy C-22® diaphragm for superior strength and corrosion resistance.
- Cleaned for O_2 service is standard.
- Convoluted diaphragm provides outlet pressure stability with changes in flow.
- Integral diaphragm stop provides an additional safety measure.
- Express Service Program is available and noted in *blue italic print.*

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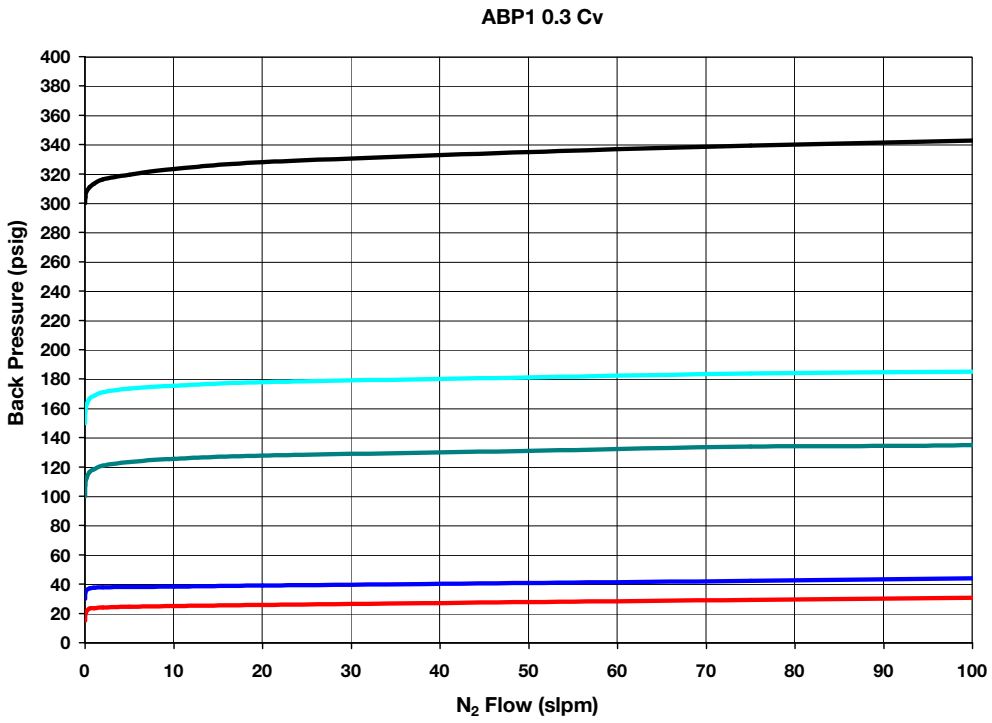
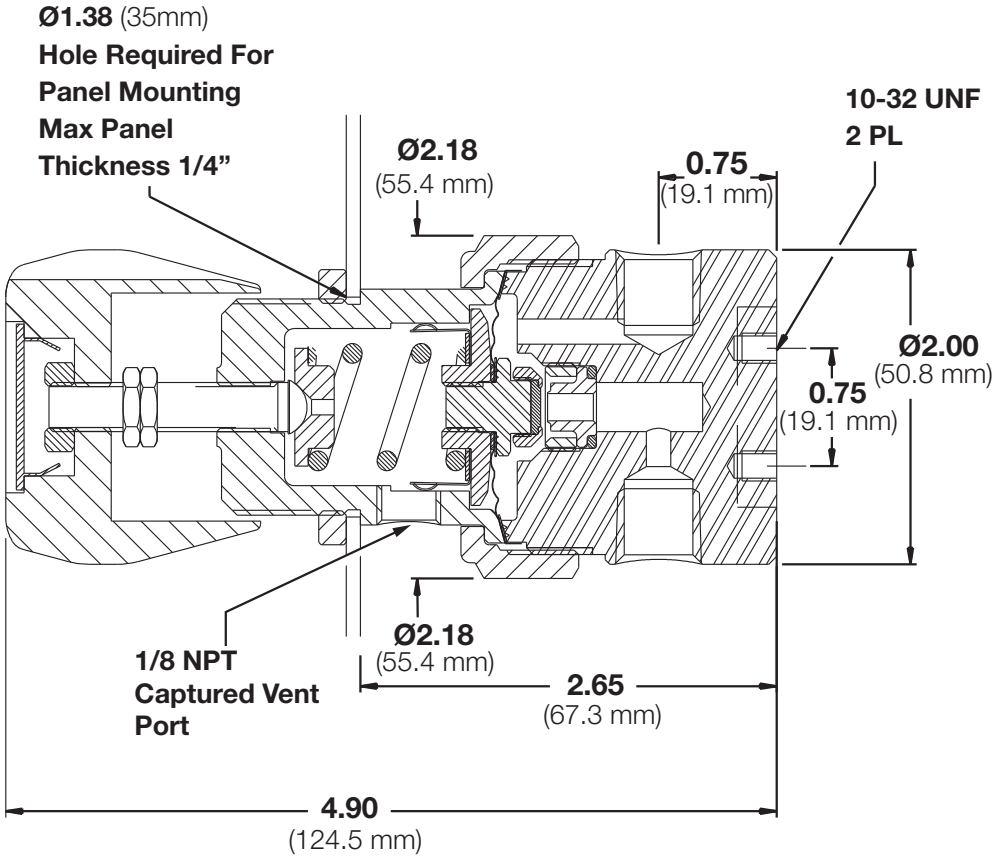
ABP1

Flow Curves



Dimensional Drawing



Safety Guide and Installation and Operating Instructions available at
www.parker.com/veriflo

ABP1

Ordering Information

Build an ABP1 Regulator by replacing the numbered symbols with an option from the corresponding tables below.

Note: Options in *blue/Italic* type are available for the *Express Service Program.*

	1	2	3	4	5	6	7
Sample: **ABP1**	**S**	**T**	**3**	**3BP**	**2**	**4**	

Finished Order: **ABP1ST33BP24**

1 Body Material

S = 316L Stainless Steel
H = Hastelloy C-22®
M = Monel®

2 Seat Material

T = PTFE
V = Fluorocarbon Elastomer (FKM)
K = Perfluoroelastomer (FFKM)

3 Pressure Range

Range	Gauge
1 = 1 - 25 psig	*03 0 - 30 psig*
2 = 2 - 50 psig	*OL 0 - 60 psig*
3 = 3 - 100 psig	*2 0 - 200 psig*
4 = 10 - 250 psig	*4 0 - 400 psig*
5 = 20 - 500 psig	*6 0 - 600 psig*

4 Porting

2BP = 2 Ports - No X required for gauges, Inlet & outlet ports only,
3BP = 3 Ports - One X for gauge port
3PB = 3 Ports - *One X for gauge port (outlet though bottom)*
3PP = 3 Ports - *One X for gauge ports*

5 Inlet Gauge

03 = 0 - 30 psig
OL = 0 - 60 psig
2 = 0 - 200 psig
4 = 0 - 400 psig
6 = 0 - 600 psig
X = No Gauge
(Additional ranges available upon request)

6 Port Style

2 = 1/8" NPT Female
4 = 1/4" NPT Female
(All Gauge ports are 1/4" NPT Female)

7 Optional Features

This section can have multiple options

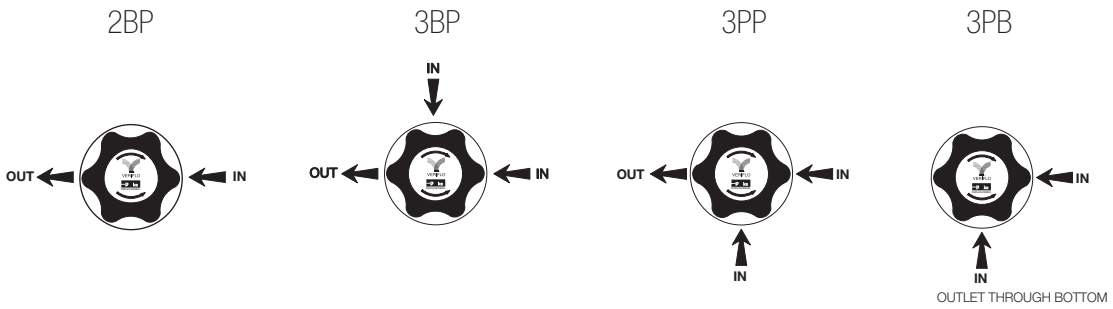
DO= Dome Loaded *(Not available with M option)*
M = Metal Knob *(Black) (Not available with DO options)*
06 = 0.06 Cv
1 = 0.1 Cv

Note: Panel Mount Option:
Order Panel Nut Ring p/n: 41900363 as a separate line item.
Vent Muffler Option:
Order Vent Muffler p/n: 46600581 as a separate line item.

Additional configurations available upon request

Note: Veriflo reserves the right to plug NPT ports. If a true ported body is required, please contact Customer Service.

Porting Configurations



ABP1

Specifications

Materials of Construction	
Wetted	
Body Options	316L Stainless Steel (std) Monel® or Hastelloy C-22®
Diaphragm	Hastelloy C-22®
Diaphragm Assembly Options	316L Stainless Steel, PTFE (std) Hastelloy C-22, PTFE
Seal Options	PTFE, FKM or FFKM
Seat O-ring	PTFE
Seat & Holder Options	316L Stainless Steel (std) Hastelloy C-22®
Outboard Gasket	PTFE
Screen Options	316L Stainless Steel (std) Hastelloy C-22®
Non-wetted	
Cap	303 Stainless Steel
Cap Nut	316L Stainless Steel
Knob Options	ABS (std) Aluminum

For additional information on materials of construction, functional performance and operating conditions, see Regulator Technical Bulletin.

Functional Performance	
Design	
Proof Pressure	750 psig (52 barg)
Burst Pressure	1,500 psig (103 barg)
Flow Capacity	
C_V	0.3 C_V (std), 0.1 C_V or 0.06 C_V
Leak Rate	
Internal:	Bubble Tight
External:	Bubble Tight
Internal Volume	5.9 cc
Approx. Weight	2.3 lbs (1.0 kgm)
Operating Conditions	
Control Pressure	1 - 25 psig (2 barg) 2 - 50 psig (3.5 barg) 3 - 100 psig (7 barg) 10 - 250 psig (17 barg) 20 - 500 psig (35 barg)
Max. Temperature of Flow Media	-15°F to 400°F (26°C to 204°C) *Note: Metal Knob required for high temperature applications*

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