

ABP3 Series

Back Pressure Regulator



Customer Value Proposition:

The ABP3 is a versatile design for precise control of inlet, upstream or back pressures.

The large convoluted diaphragm provides the user greater sensitivity of outlet pressures.

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



Contact Information:

Parker Hannifin Corporation
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:

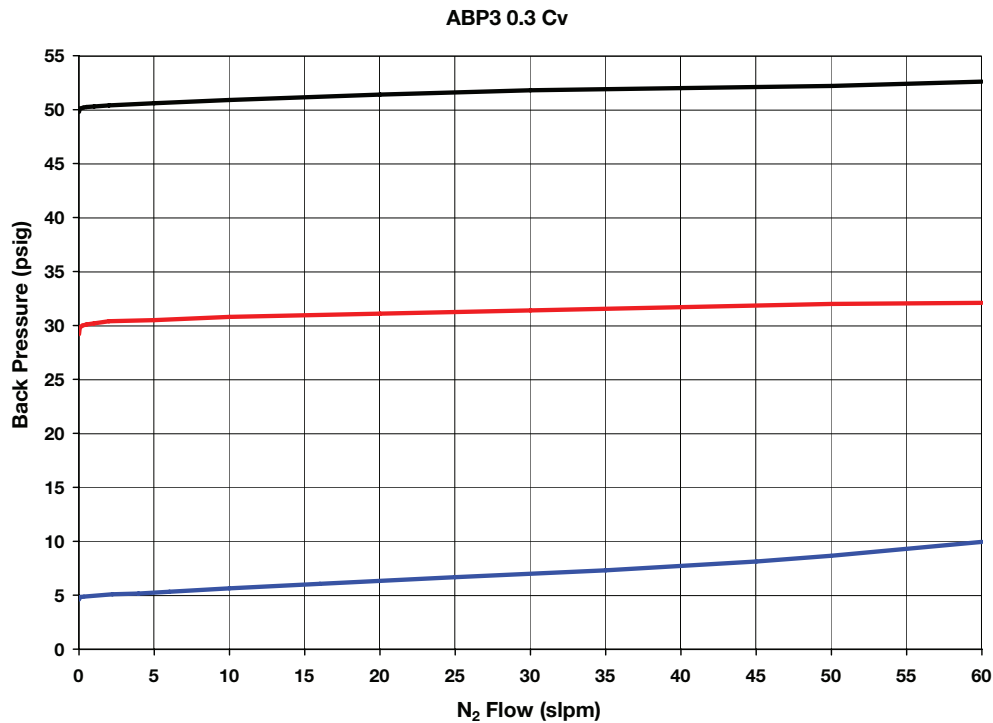
- Standard Hastelloy C-22® diaphragm for superior strength and corrosion resistance.
- Integral diaphragm stop provides an additional safety measure.
- Cleaned for O₂ service is standard.
- Convoluted diaphragm provides outlet pressure stability with changes in flow.
- Express Service Program is available and noted in *blue italic print*.



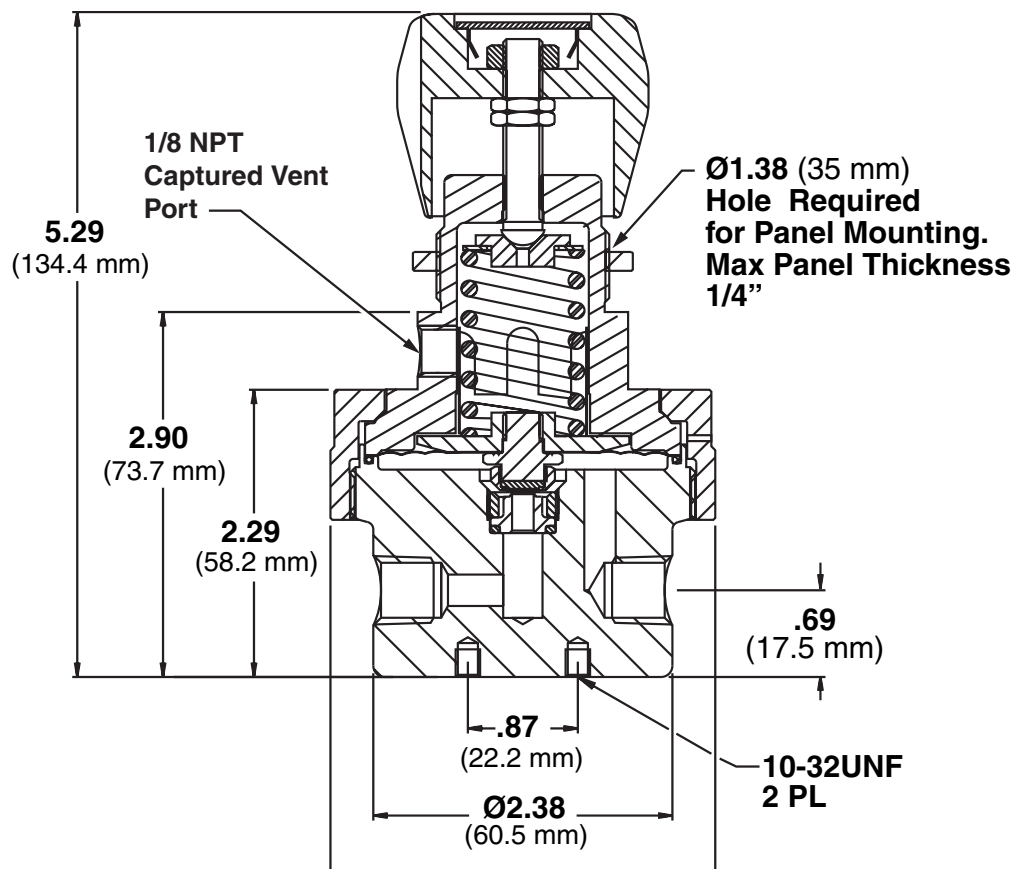
ENGINEERING YOUR SUCCESS.

ABP3

Flow Curves



Dimensional Drawing



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

ABP3

Ordering Information

Build an ABP3 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*.

Sample: **ABP3**

1

2

3

4

5

6

7

S T 3 3BP 01 4

Finished Order: **ABP3ST33BP014**

1

Body Material

S = 316L Stainless Steel

H = Hastelloy C-22®

2

Seat Material

T = PTFE

V = Fluorocarbon Elastomer (FKM)

K = Perfluoroelastomer (FFKM)

3

Pressure Range

Range	Gauge
1 = 1 - 5 psig	05 0 - 15 psig
2 = 1 - 30 psig	OL 0 - 60 psig
3 = 2 - 60 psig	01 0 - 100 psig

4

Porting

2BP = 2 Ports - No X required for gauges, Inlet & outlet ports only.

3BP = 3 Ports - One X for gauge port

3PP = 3 Ports - One X for gauge port

5

Inlet Gauge

05 = 0 - 15 psig

OL = 0 - 60 psig

01 = 0 - 100 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, required for higher temperatures)

06 = 0.06 Cv

1 = 0.1 Cv

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

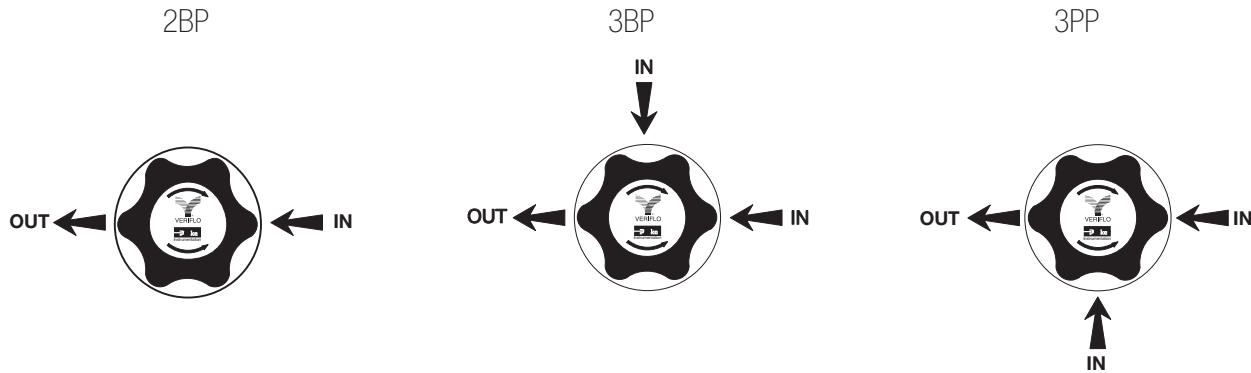
Vent Muffler Option:
Order Vent Muffler p/n: 46600581 as a separate line item.

Additional configurations available upon request

Hastelloy C-22® is a registered trademark of Haynes International, Inc.

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

Porting Configurations



ABP3

Specifications

Materials of Construction	
Wetted	
Body Options	316L Stainless Steel (std), Hastelloy C-22®
Diaphragm	Hastelloy C-22®
Diaphragm Assembly Options	316L Stainless Steel & PTFE (std) or Hastelloy C22® & PTFE
Seat O-ring	PTFE
Seat & Holder Options	316L Stainless Steel (std) Hastelloy C-22®
Seal Options	PTFE, FKM or FFKM
Screen Options	316L Stainless Steel (std) Hastelloy C-22®
Outboard O-ring Options	PTFE (with PTFE or FFKM seats) FKM (with FKM seat)
Non-wetted	
Cap	Nickel Plated Brass
Cap Nut	Nickel Plated Brass
Knob Options	ABS (std) Aluminum
Operating Conditions	
Control Pressure	1 - 5 psig (0.07 - 0.3 barg) 1 - 30 psig (0.07 - 2.06 barg) 2 - 60 psig (0.2 - 4.1 barg)
Max. Temperature of Flow Media	-15°F to 400°F (26°C to 204°C) <i>Note: Metal Knob required for high temperature applications</i>

Functional Performance	
Design	
Proof Pressure	90 psig (6 barg)
Burst Pressure	180 psig (12.4 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	13.8 cc
Approx. Weight	4.2 lbs (1.9 kgm)

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

OFFER OF SALE:

The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" elsewhere in this document or available at www.parker.com/veriflo



WARNING USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. THIS DOCUMENT IS FOR REFERENCE ONLY. PLEASE CONSULT FACTORY FOR LATEST PRODUCT DRAWINGS AND SPECIFICATIONS

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.



ENGINEERING YOUR SUCCESS.