

# ABP3 Series

## Back Pressure Regulator

High Sensitivity • Stainless Steel



### Value Proposition:

Designed with versatility in mind, the ABP3 Series regulator offers precise control of inlet, upstream, or back pressure. Its large, convoluted diaphragm ensures greater sensitivity of outlet pressures. Standard Hastelloy® diaphragm construction makes it ideal for harsh applications where corrosive media / environments are present.

### Product Features:

- Standard Hastelloy® C-22 diaphragm for superior strength and corrosion resistance
- Convoluted diaphragm provides outlet pressure stability with changes in flow
- Integral diaphragm stop provides an additional safety measure

### Specifications:

Functional Performance	
<b>Design</b>	
Burst Pressure	180 psig (12.4 barg)
Proof Pressure	90 psig (6 barg)
<b>Flow Capacity</b>	
C <sub>v</sub> Options	C <sub>v</sub> 0.3 (std), C <sub>v</sub> 0.1, C <sub>v</sub> 0.06
<b>Leak Rate</b>	
Internal	Bubble Tight
External	Bubble Tight
<b>Internal Volume</b>	13.8cc
<b>Approximate Weight</b>	4.2 lbs. (1.9 kg)

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)
Maximum Temperature of Flow Media	-15°F to 400°F (-26°C to 204°C) Note: Metal Knob required for high temperature applications

Material of Construction	
Wetted	
Body Options	316L Stainless Steel (std). (Consult factory for alloyed Material Options)
Diaphragm	Hastelloy® C-22
Diaphragm Assembly Options	316L Stainless Steel and PTFE (std) or Hastelloy® C-22 and PTFE
Seat O-Ring	PTFE
Seat & Holder Options	316L Stainless Steel (std) or Hastelloy® C-22
Seal Options	PTFE (std.), FKM or FFKM
Outboard O-Ring Options	PTFE (with PTFE or FFKM seats) FKM (with FKM seats)
Screen Options	316L Stainless Steel (std) or Hastelloy® C-22
Non-Wetted	
Cap	Nickel Plated Brass
Cap Nut	Nickel Plated Brass
Knob Options	ABS (std) or Aluminum

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

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

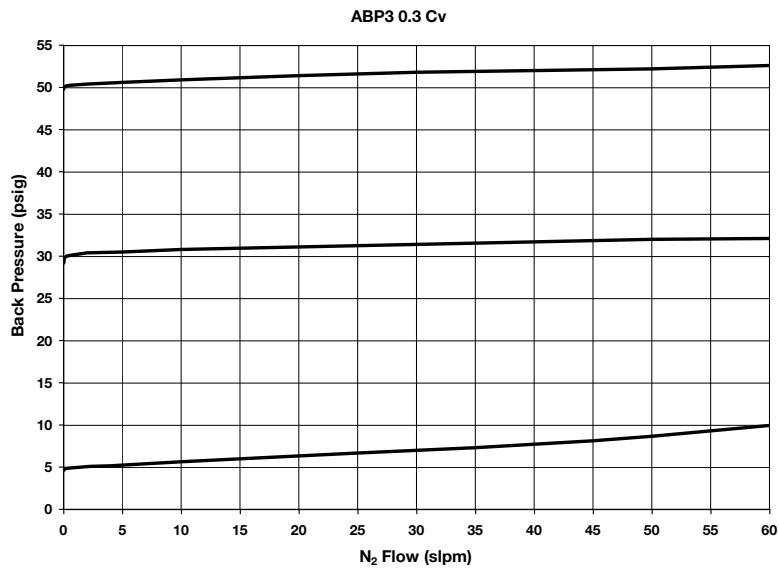


INSTRUMENTATION PRODUCTS DIVISION

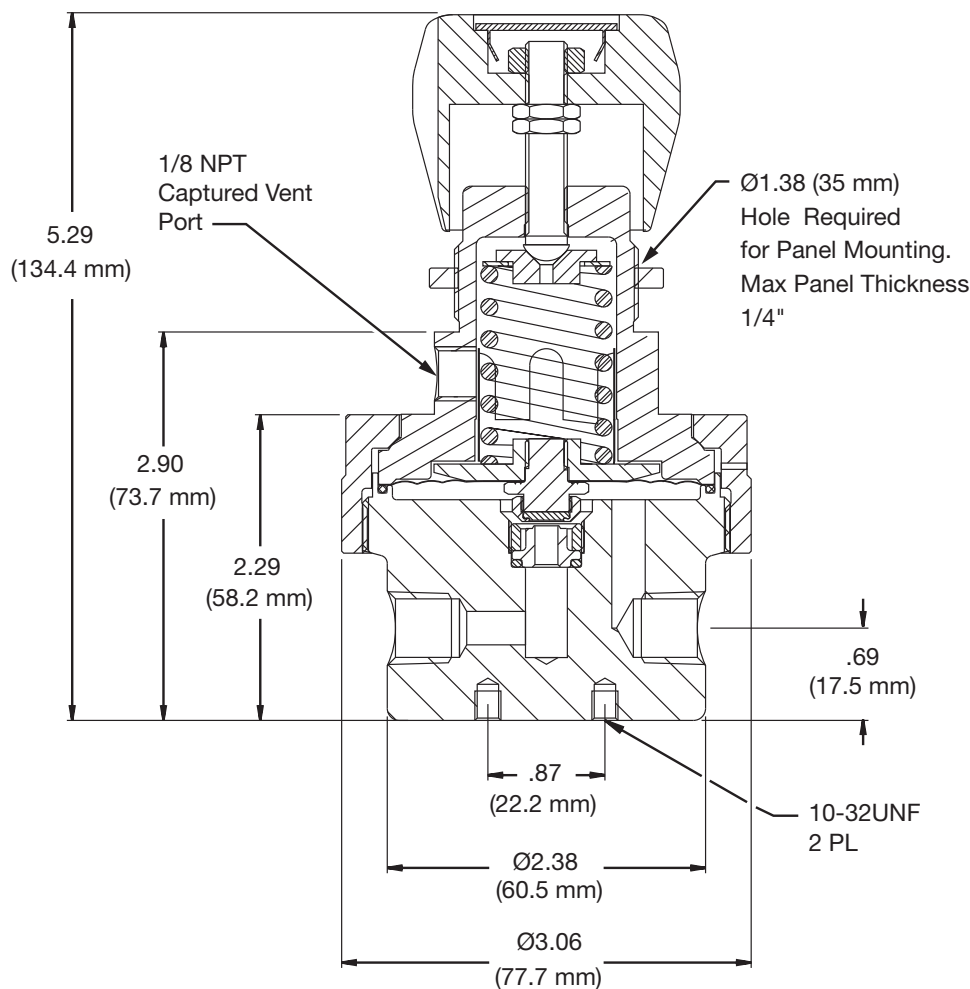
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## Flow Curve:



## Dimensional Drawing:



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## Ordering Information:

Building a Part Number: <i>Example: ABP3ST33BPX4</i>									
Example Part Number:	ABP3	S	T	3	3BP	X	4		
Ordering Parameters/Options:	Series	Body Material	Seal Material	Pressure Range	Porting	Inlet Gauge	Port Style	Optional Features	
Table Reference: (see below)	A	B	C	D	E	F	G	H	

**A - Series**

ABP3	ABP3 Series Regulator
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**B - Body Material**

S	316L Stainless Steel (Consult factory for Alloy Material options)
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**C - Seal Material**

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

**D - Pressure Range**

1	1-5 psig
2	1-30 psig
3	2-60 psig

**E - Porting**

2BP	2 Ports (No X required for gauges, inlet and outlet ports only)
3BP	3 Ports (One X for gauge port)
3PP	3 Ports (One X for gauge port)

**F - Inlet Gauge**

05	0-15 psig
OL	0-60 psig
01	0-100 psig
X	No gauge (Gauges may be provided by local Parker Distributor)

**G - Port Style**

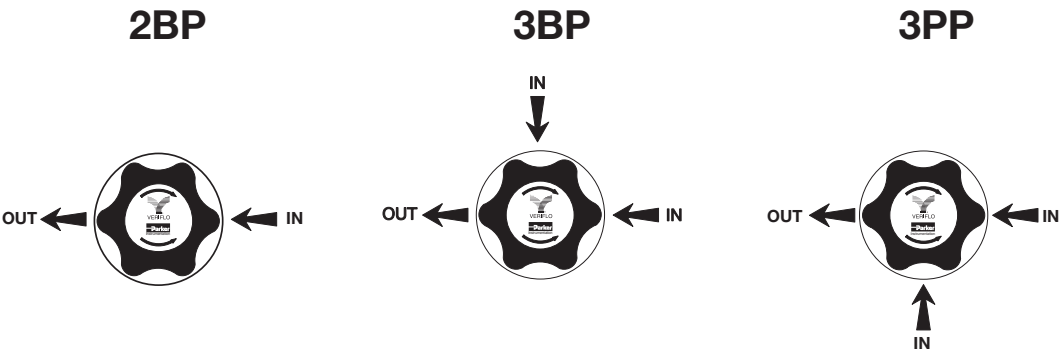
4	1/4" NPT Female (All Gauge ports are 1/4" NPT Female)
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**H - Optional Features**

M	Metal Knob (Black)
06	0.06 C <sub>v</sub>
1	0.1 C <sub>v</sub>
C3	Cleaned for Oxygen Service (Oxygen Cleaning Requirements in accordance with Parker Specification ES8003)

Note:  
**Panel Mount Option:**  
Order Panel Mount Nut Ring (PN: IR4-Panel-Nut-B-NP) as separate line item  
**Vent Muffler Option:**  
Vent Muffler (PN: Muffler-2F-Bronze) as separate line item.  
Vent Muffler is standard for the Self Relieving (S), Corrosion Resistant (C) option combination.  
**Parker Instrumentation Products Division reserves the right to plug NPT ports**

## Port Configuration:



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Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

### Offer of Sale

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).



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