



SERIES BP 1000–WELDED

BACK PRESSURE REGULATOR

Precision control – high reliability

- 0.5 psig to 300 psig (0.035 to 21 bar) operating pressure ranges
- Flow capacity Cv = 0.3
- SS 316L VAR secondary remelt construction
- Ni-Cr-Mo alloy internals, 'SH' option, for added corrosion resistance
- High leak integrity
- 15 µin. surface finish (10, 7 and 5 µin. optional)
- Fine adjustment control
- Cleaned, assembled and packaged for high purity semiconductor applications
- Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

Operating Parameters

Pressure ratings	BP 1001	0.5 to 10 psig (0.035 to 0.7 bar)
	BP 1002	1 to 30 psig (0.07 to 2 bar)
	BP 1010	5 to 100 psig (0.35 to 7 bar)
	BP 1020	15 to 200 psig (1.05 to 14 bar)
	BP 1030	15 to 300 psig (1.05 to 21 bar)
Proof pressure		150% of maximum operating
Burst pressure		300% of maximum operating

Other Parameters

Inlet/outlet connectors	1/4 or 3/8 inch face seal or tube weld
Flow coefficient (Cv)	0.3
Internal volume	0.49 in ³ (8 cm ³)
Operating temperature	-40° to +160°F (-40° to +71°C)
Surface finish	15 µin. (0.4 µm) Ra max standard;
	10 µin (0.25 µm); 7 µin (0.18 µm); and 5 µin (0.13 µm) optional
Inboard leakage	2 x 10 ⁻¹⁰ sccs
Outboard leakage	2 x 10 ⁻⁹ sccs He
Leakage across seat	Bubble tight
Installation	surface or panel (optional)

Materials

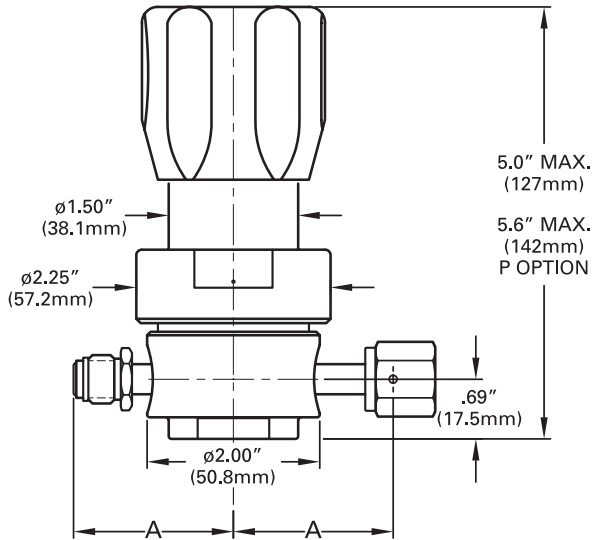
	Series BP 1000 S Noncorrosive	Series BP 1000 SH Corrosive
Type of Service		
Wetted Parts		
Body	SS 316L secondary remelt	SS 316L secondary remelt
Nozzle and diaphragm	SS 316L	Ni-Cr-Mo alloy / UNS N06022
Seat	Fluoroelastomer / FKM*	Fluoroelastomer / FKM*
Seals	PTFE	PTFE
Bonnet	SS 303	SS 303

All specifications subject to change without notice.

*Optional seats available, PTFE and Perfluoroelastomer / FFKM.

DEFINING NEW LEVELS OF ULTRACLEAN

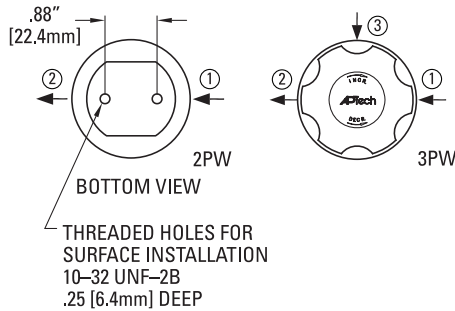
DIMENSIONAL INFORMATION



Connection	A	
	in	mm
FV4, MV4	1.85 ±.01	47.0
FV6, MV6	2.35 ±.01	59.7

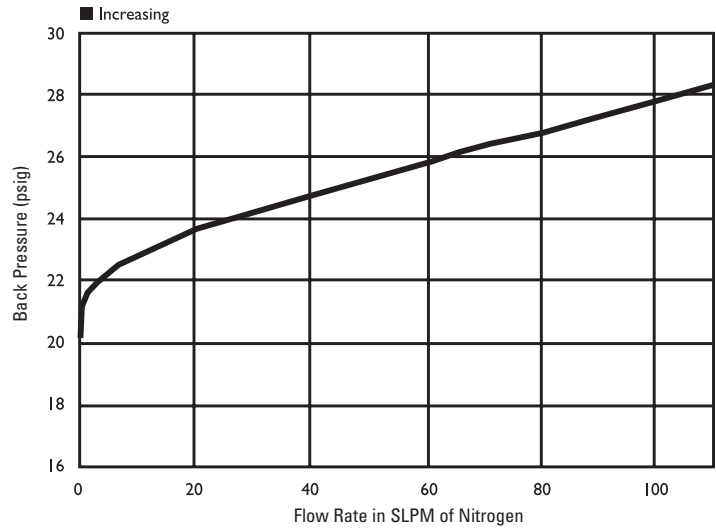
All dimensions in inches (mm). Metric dimensions are for reference only.

PORTING CONFIGURATIONS



CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation and maintenance are also required to assure safe, trouble free performance.

BP 1000 with FKM seat



ORDERING INFORMATION

Sample Order Number **BP 1001SM 2PW FV4 FV4**

BP 1001 | Series
 BP 1001 = 0.5-10 psig (.03 to .7 bar)
 BP 1002 = 1-30 psig (.07 to 2 bar)
 BP 1010 = 5-100 psig (.35 to 7 bar)
 BP 1020 = 15-200 psig (1.05 to 14 bar)
 BP 1030 = 15-300 psig (1.05 to 21 bar)

S | Material
 S = Stainless steel (SS)
 SH = SS/Ni-Cr-Mo alloy internals

M | Surface Finish Options
 M = 10 µin. Ra
 V = 7 µin. Ra
 X = 5 µin. Ra

2PW | Ports
 2PW = 2 ports butt weld
 3PW = 3 ports butt weld

FV4 FV4 | Connections Inlet / Outlet

FV4 = 1/4 inch face seal female
 MV4 = 1/4 inch face seal male
 FV6 = 3/8 inch face seal female
 MV6 = 3/8 inch face seal male

Tube weld stub available

Gauges* Source / Delivery

0 = No gauge
 V3 = 30-0-30 psig/bar
 L = 30-0-60 psig/bar
 1 = 30-0-100 psig/bar
 H = 30-0-160 psig/bar
 2 = 0-200 psig/bar
 4 = 0-400 psig/bar

* Standard gauge ports are 1/4 inch face seal male (1/4 inch female available).

Options

P = Panel installation**
 KZ = Perfluoroelastomer / FFKM seat
 TF = PTFE seat

** On panel mount option, bonnet port is not threaded. Panel hole 1.42" diameter.