

# ABP1 Series

## Back Pressure Regulator



Parker Hannifin Corporation's Veriflo Division presents the ABP1 Series back pressure regulator.

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.



### 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.
- ▶ Meets NACE Standard MR0175.

### materials of construction

#### Wetted

Body ..... 316L Stainless Steel, Monel®  
or Hastelloy C-22®  
Seat ..... Teflon®, Viton® or Kalrez®  
Seals ..... Teflon®  
Diaphragm ..... Hastelloy C-22®

#### Nonwetted

Cap ..... 303 Stainless Steel  
Cap nut ..... 316L Stainless Steel  
Knob ..... ABS Plastic (Black)

### operating conditions

Control pressure ..... 0-25 psig (0-1.7 barg)  
0-50 psig (0-3.5 barg), 0-100 psig (0-7.0 barg)  
0-250 psig (0-17.2 barg), 0-500 psig (0-35.0 barg)

Max temperature of flow media:  
..... -40°F to 400°F (-40°C to 204°C)

### functional performance

Design proof pressure ..... 0-25: 37.5 psig  
0-50: 75 psig, 0-100: 150 psig, 0-250: 375 psig,  
0-500: 750 psig  
Design burst pressure ..... 0-25: 75 psig  
0-50: 150 psig, 0-100: 300 psig,  
0-250: 750 psig, 0-500: 1500 psig  
Flow capacity .....  $C_v$  0.3  
(Optional 0.1  $C_v$  and 0.06  $C_v$ )  
(SEMI Flow Coefficient Test# F-32-0998)

Maximum Inboard Design  
Leak Rate .....  $< 2 \times 10^{-6}$  scc/sec HE

### internal volume

5.9cc

### standard connections

1/8" or 1/4" female pipe threads (NPTF)

### approximate weight

2.2 lbs (1.0 kgm)

Catalog: 4510  
LitPN: 25000172  
Rev: 0 4/03



