



SIGMAMOTOR

Provides higher accuracy and safety in metering pump systems

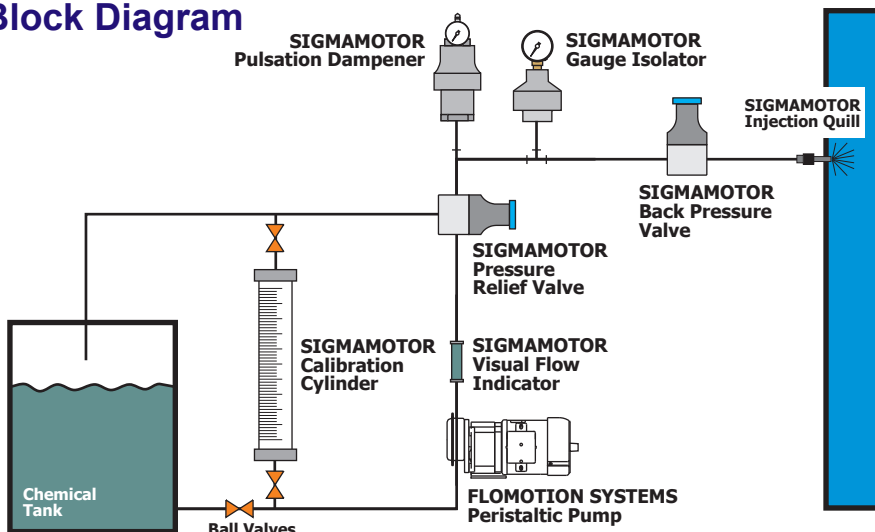
Back Pressure Valves

- CNC precision machined parts
- Fine pressure adjustment
- Cost effective and reliable
- Pressures from 5-150 psi (350 optional)
- Variety of materials available
- Anti-syphon protection
- Optional air release and pressure gauge port

SIGMAMOTOR Back Pressure Valves prevent siphoning and varying rates of dosage from fluctuating downstream pressure by enacting positive discharge pressure in your metering pump system. Inside the valve is a diaphragm held in place by a spring which is pressure set. When the pressure is exceeded the PTFE diaphragm is pushed up and material flows through the valve to the injection point. The valves are factory set but are easily adjusted in the field.



Typical System Block Diagram



CHEMICAL FEED ACCESSORIES

BACK PRESSURE VALVES - HOW TO ORDER

B: - - - -
 1 2 3 4 5

Example: B-N-250-P-V-L

PROCESS CONNECTION TYPE 1

| | 5-150PSI SPRING WITH PVC TOP | 50-350PSI SPRING WITH SS TOP* |
|---------------------|------------------------------|-------------------------------|
| NPT | N | MN |
| BSP | B | MB |
| SOCKET | S | MS |
| FLANGED | F | MF |
| UNION | U | MU |
| RIGHT ANGLE NPT | RN | RMN |
| RIGHT ANGLE BSP | RB | RMB |
| RIGHT ANGLE SOCKET | RS | RMS |
| RIGHT ANGLE FLANGED | RF | RMF |
| RIGHT ANGLE UNION | RU | RMU |

*Metal valves only

SIZE 2

Larger sizes upon request

| SELECT: | 250 | 375 | 499 | 500 | 750 | 100 | 150 | 200 |
|---------------------------|---------------------------|-----|------------|------------|------|------|-------|------|
| NPT Size (in) | 1/4 | 3/8 | 1/2 (mini) | 1/2 (std.) | 3/4 | 1 | 1-1/2 | 2 |
| A-Height (in) | Metal: 4.11 Plastic: 4.43 | | 5.93 | | 9.00 | | | |
| B-Diameter (in) | 2.34 | | | 3.45 | | 4.00 | 4.45 | |
| C-Process Centerline (in) | 1.07 | | | 1.18 | | 2.05 | | |
| Pulsating US GPH | 100 | 200 | 350 | 500 | 600 | 600 | 1350 | 2000 |
| Contininuous US GPM | 10 | 15 | 17.5 | 25 | 30 | 30 | 67 | 100 |

INLET CONNECTION MATERIAL 3

| | |
|----------------|----|
| PVC | P |
| POLYPROPYLENE | PP |
| CPVC | CP |
| PTFE | T |
| Kynar® PVDF | K |
| 316 SS | S |
| ALLOY 20 | A |
| HASTALLOY C276 | H |

DIAPHRAGM OPTIONS 4

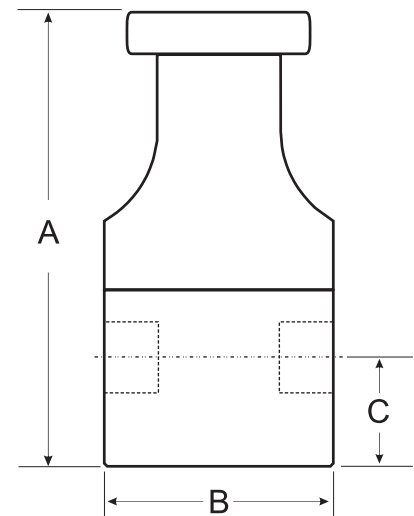
PTFE / EPDM Standard

| | |
|--------------|----|
| VITON | V |
| EPDM | E |
| PTFE / VITON | TV |

OPTIONS 5

5-150psi spring & PVC Top Standard

| | |
|------------------|-----|
| 0-50PSI SPRING | L |
| 50-350PSI SPRING | H |
| CPVC TOP | CP |
| SS TOP | S |
| PVC AIR RELEASE | ARV |
| NONE | X |



Maximum Temperature

Plastic: 140° F

Metal: 300° F

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