SÜDMO CONSTANT PRESSURE VALVE

PRODUCT LEAFLET

GENERAL PRODUCT INFORMATION

Maintaining a reliable, repeatable back pressure on process lines with varying flow rates and viscosities is a challenge in today’s processing facilities. Traditional back pressure valves are costly and hard to maintain. They use laminated diaphragms, which are prone to cyclic fatigue, pressure shocks and chemical attack from aggressive media and cleaning chemicals. These diaphragms are expensive to replace, both in materials costs and plant downtime.

Solution

Pentair Südmo designed a balanced, 100 percent stainless steel valve that eliminates the issues related to diaphragm fatigue, while providing excellent control of back pressure with varying flow and viscosity characteristics. Pentair Südmo’s lip seal arrangement provides easy maintenance compared to valves that use diaphragms.

What sets our Constant Pressure Valve apart from the competition is that it is available in more sizes – from 1 to 4 inches – and has a stainless steel regulating cone instead of a diaphragm. The simple design is a variation on our proven single seat valve range. It can be retrofitted into any existing system, regardless of manufacturer. With no automation required, the self-regulating air supply unit is set at installation and the need for adjustment is eliminated.

BENEFITS

- One-piece balanced solid stainless steel plug
- Standard FDA elastomers for dairy applications
- Dual air supply for actuation during CIP to ensure 100% cleaning
- No automation feedback loops required to ensure accurate constant back pressure
- “Set and forget” self-regulating air supply unit
- Low cost seal kit eliminates expensive diaphragm

APPLICATIONS

- Separators in liquid milk and cheese facilities
- Milk standardization systems
- Utility header returns
- Filling operations

FLOW & FILTRATION SOLUTIONS | CONSTANT PRESSURE VALVE
## STANDARD SPECIFICATIONS

<table>
<thead>
<tr>
<th>Materials</th>
<th>Options</th>
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<tbody>
<tr>
<td>- Product contact: 316L (1.4404)</td>
<td>• Improved mechanical polish/electropolish</td>
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<td>- Non-product contact: 304 (1.4301)</td>
<td>• Sterilization chamber</td>
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<tr>
<td>- Optional: Hastelloy, AL6XN</td>
<td>• Control unit (Air regulator with gauge)</td>
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<td>Seals</td>
<td>• 3.1B material certification</td>
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<td>- Standard: EPDM</td>
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<td>- Optional: HNBR, FPM (Fluoro-Rubber), FFPM (Perfluorinated Fluoro-Rubber)</td>
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### Operating Pressure
- Control air pressure: 10-60 psi
- Product pressure: 20-90 psi

### Connections
- Standard: Sanitary O.D. tube butt weld
- Optional: Sanitary O.D. tube clamp
  - Welding ends for metric tubes
  - Welding ends for ISO tubes
  - DIN nut

### Finish
- $\leq 32$ Ra product contact
- $\leq 63$ Ra non-product contact