Reliable performance, improved uptime and lower total cost of ownership

The FlowTop GS control valve (types V746 and V748) helps plant owners and operators improve the reliability and uptime of production processes while minimizing operating and maintenance costs. Designed for general service applications, the FlowTop GS valve is a competitively priced, fully integrated valve-actuator-instrumentation package for continuous process flow loop control throughout the plant.

The FlowTop GS valve is engineered to deliver high flow rates and optimum control at minimum total cost. It does this by pursuing the simple design philosophy of building an instrumented control valve package that provides the breadth and depth of engineered control within the trusted name of Valtek.

The FlowTop GS integrated control valve package consists of the FlowTop globe body assembly, Logix™ digital positioner (with automatic calibration) and FlowAct™ pneumatic diaphragm actuator. Its clamped seat ring allows faster, simplified trim changes without lapping requirements and minimizes unforeseen downtime instances by assuring reliable, tight shutoff.

The integrated design makes the FlowTop GS valve an economical solution to buy, install, operate and maintain. Proven quality and best-in-class performance are accompanied with:

- Competitively priced, fully integrated valve-actuator-instrumentation solution
- High flow rates with excellent rangeability and repeatability
- Quick installation and simple setup without the need for instrument or process engineering skills
- Clamped seat ring design for quick repair or replacement of trims without the need for lapping
- Anti-noise and anti-cavitation, severe service trim options for minimizing noise and cavitation damage
- ISO 15848-1 Class B CC1 and ISO 15848-1 Class C fugitive emissions packing available
- Broad application versatility with trim and material options, including NACE MR0175, that cover all general service requirements
- Direct-mounted digital positioner without tubing (air-to-open)

Key components

- FlowTop globe body assembly valve
- Logix digital positioner (with automatic calibration)
- FlowAct pneumatic diaphragm actuator
Valtek® FlowTop™ GS
General Service Control Valve

Features and benefits

- **Minimized total cost of ownership** from a smaller, lighter, fully integrated package solution that is offered at competitive prices and is economical to buy, install, operate and maintain.

- **Wide application range** owing to contoured plug design with high adaptability, equal percentage, and linear and quick-open flow characteristics. In addition, it can be matched to a variety of trim types, providing excellent rangeability, repeatability and resolution.

- **Reduced downtime and simplified maintenance** from tight-shutoff, clamped seat rings that come standard and allow easy removal or replacement of trim without special tools or lapping. Additionally, it eliminates galling problems associated with threaded seat rings.

- **Longer service life** from anti-noise and anti-cavitation trims that mitigate noise and cavitation-related damage. Engineered guiding solutions minimize vibration and wear by stabilizing the plug and stem during valve travel.

- **Reduced environmental impact and improved safety** ensured by compliance with ISO 15848-1 Class B CC1 and ISO 15848-1 Class C fugitive emissions packing options.

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
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<tbody>
<tr>
<td>Style</td>
<td>Globe, integral flange, ASME B16.34</td>
</tr>
<tr>
<td>Sizes</td>
<td>½ to 6 in</td>
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<tr>
<td>Pressure classes</td>
<td>ASME 150 and 300</td>
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<tr>
<td>End connection</td>
<td>Flanged, RF</td>
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<tr>
<td>Body materials</td>
<td>A216WCC, A351CF8M, A351CF3M</td>
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<tr>
<td>Face to face</td>
<td>ISA 75.08.01</td>
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<tr>
<td>Bonnet</td>
<td>standard, extended, bellows seal</td>
</tr>
<tr>
<td>Packing</td>
<td>PTFE and graphite, live loaded, ISO 15848-1 or vacuum</td>
</tr>
<tr>
<td>Trim material</td>
<td>Stainless steel 410, 316, 316L</td>
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<tr>
<td>Trim types</td>
<td>standard, pressure balanced</td>
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<tr>
<td>Plug and seat facing</td>
<td>seat or full contour Alloy 6, hardened</td>
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<tr>
<td>Characteristic</td>
<td>= %, linear, quick open</td>
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<tr>
<td>Low noise and anti-cavitation</td>
<td>MegaStream™ one-stage</td>
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<tr>
<td>Leakage rates</td>
<td>Class IV, V and VI with optional soft seat</td>
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<tr>
<td>Actuator</td>
<td>Pneumatic diaphragm spring actuator</td>
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<td>Standard positioner</td>
<td>Logix 420, direct-mounted without tubing</td>
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Housing
- Rib design — results in lighter weight
- Mounting location
  - Direct-mounted positioner — no tubing

Packing
- Option: live loaded ISO 15848-1
- Packing follower
  - Fits ASME and DIN wrench
- Easy and versatile

Bonnet
- Available in standard, extended and bellows seal designs
- Contour
  - Precisely machined
  - Excellent flow rate

Flow capacity
- High Cv gallery

Seat leakage
- Standard
  - Class IV shut-off
- Contour
  - Profile ring designed for zero leakage between seat and body
- Characteristic
  - Excellent flow rate

Mounting location
- Direct-mounted positioner — no tubing

Valtek® FlowTop™ GS
General Service Control Valve

Flowserve Corporation
5215 North O’Connor Blvd.
Suite 2300
Irving, Texas 75039-5421 USA
Telephone: +1 937 890 5839