

# GENERAL CATALOG



TM

Desde sua fundação, em 1979, a Valtek Sulamericana conquistou a reputação do mais avançado provedor de válvulas de controle automáticas do continente. Esta reputação se estende também ao desenvolvimento, desenho e fabricação de válvulas de controle para aplicações especiais e severas, tais como: vapores superaquecidos, fluidos voláteis e corrosivos, fluidos lamacentos e erosivos, cavitação, altas pressões diferenciais e altos níveis de ruído.

Válvulas de controle com desenho e geometria únicos, dotados de um alto grau de intercambiabilidade de componentes, permite menores estoques de peças, custos e prazos de entrega.

A contínua e incessante evolução tecnológica, aliada à irreparável qualidade construtiva, tornam as válvulas de controle da Valtek Sulamericana dotadas de alto desempenho e durabilidade.



## GLOBE VALVE

### GxL<sup>®</sup> Model



Recommended for use in utilities and general services in continuous process industries, the GxL model globe valve has compact sizes and reduced weights, which makes for easy operation and installation. The project follows the same basic design as the renowned GLS control valve, while the rationalized range of options and the high production scale result in a robust and effective finished product, with an excellent cost-benefit ratio for applications in ANSI 150 and 300 pressure classes.

**Sizes:** 3/4 to 4 inches

**ANSI Ratings:** 150/300

**Body Style:** Globe

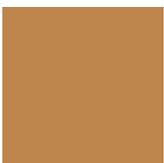
**Bonnet Type:** Standard

**Body/Bonnet Materials:** Body and bonnets made from castings such as: carbon steel, low-temperature carbon steel, chrome-moly steel, stainless steel, Alloy-20, bronze, Hastelloy-B2, Hastelloy-C, Inconel 600, Monel 400, nickel, titanium and other castable alloys upon request.

**Trim Materials:** 316 SS, 316L SS, 304 SS, 304L SS, 347 SS, 420 SS HT, 440C SS, 17-4PH, Duplex SS, Super-Duplex SS, Alloy-20, bronze, Hastelloy-B, Hastelloy-C, Monel 400, Monel K-500, Hastelloy-B, Hastelloy-C, nickel, titanium and others.

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
\* Field reversible  
\* Sizes: 15, 25 and 50  
\* Manual handwheel and limit stops available as option

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## GLOBE VALVE

### GLS® Model



Used in most continuous process industries, the GLS valve is recognized for its excellent sealing capacity, actuating thrust, positioning precision and simple maintenance. The design with self-centering seat, double upper guide system and cylinder and piston-type actuator assures GLS high performance and reliability, benefits that add to the various options of special trims and bodies.

**Sizes:** 1/2 to 48 inches (1/2 a 36")

**ANSI Ratings:** 150, 300 and 600

**Body Styles:** Globe, angle, three-way or steam-jacketed bodies

**Bonnet Types:** Standard, standard extension, special length

**Body/Bonnet Materials:** Cast bodies and bonnets matching body alloy: carbon steel, low temperature carbon steel, chrome-moly steels, stainless steels, Alloy 20, bronze, Hastelloy-B2, Hastelloy-C, Inconel 600, Monel 400, nickel, titanium and other castable alloys upon request.

**Trim Materials:** 316 SS, 316L SS, 304 SS, 304L SS, 347 SS, 420 SS HT, 440C SS, 17-4PH, Duplex SS, Super-Duplex SS, Alloy-20, bronze, Hastelloy-B, Hastelloy-C, Monel 400, Monel K-500, Hastelloy-B2, Hastelloy-C, nickel, titanium and others.

**Actuator:**

- \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure
- \* Field reversible
- \* Sizes: 25, 50, 100, 200, 300, 400 and 600
- \* Manual handwheel and limit stops available as option
- \* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## GLOBE VALVE

### GLH® Model



The GLH valve is the GLS valve version for high pressure applications, and it has incorporated the main technical characteristics of the GLS such as, high performance, easy maintenance and versatility have been adopted. In addition, its oversized components sturdiness, as for example, the plug stem and the use of special packings to prevent fugitive emissions (supplied as standard items), contribute to reliable operation of these valves in extremely critical industrial applications.

**Sizes:** 1 to 24 inches

**ANSI Ratings:** 900, 1500 and 2500

**Body Styles:** Globe, angle or special versions

**Bonnet Types:** Standard, standard extension

**Body/Bonnet Materials:** Cast bodies, and bonnets with the same body alloy: carbon steel, low temperature carbon steel, chrome-moly steels, stainless steels, Alloy 20, bronze, Hastelloy-B2, Hastelloy-C, Inconel 600, Monel 400, nickel, titanium and other castable alloys upon request.

**Trim Materials:** 316 SS, 316L SS, 304 SS, 304L SS, 347 SS, 420 SS HT, 440C SS, 17-4PH, Duplex SS, Super-Duplex SS, Alloy-20, bronze, Hastelloy-B, Hastelloy-C, Monel 400, Monel K-500, Hastelloy-B2, Hastelloy-C, nickel, titanium and others.

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
\* Field reversible  
\* Sizes: 25, 50, 100, 200, 300, 400 and 600  
\* Manual handwheel and limit stops available as option  
\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## GLOBE VALVE

### GLA® Model



The GLA valve has been designed in order to provide a greater flow rate capacity per size, when compared to a conventional globe-style valve. Due to its configuration with an almost straight passage area, this version creates less turbulence through the valve and downstream piping. Except for the body, plug and seat retainer, GLA valve components are interchangeable with those of GLS and GLH valves.

**Sizes:** 1 to 18 inches

**ANSI Ratings:** 150, 300 and 600 (1 to 18")  
900, 1500 and 2500 (1 to 12")

**Body Style:** "Y" pattern

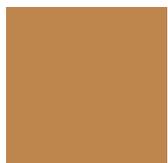
**Bonnet Types:** Standard, standard extension, special length extensions, metal bellows seal, cryogenic

**Body/Bonnet Materials:** Cast bodies, and bonnets with the same body alloy: carbon steel, low temperature carbon steel, chrome-moly steels, stainless steels, Alloy 20, bronze, Hastelloy-B2, Hastelloy-C, Inconel 600, Monel 400, nickel, titanium and other castable alloys upon request.

**Trim Materials:** 316 SS, 316L SS, 304 SS, 304L SS, 347 SS, 420 SS HT, 440C SS, 17-4PH, Duplex SS, Super-Duplex SS, Alloy-20, bronze, Hastelloy-B, Hastelloy-C, Monel 400, Monel K-500, Hastelloy-B2, Hastelloy-C, nickel, titanium and others

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
\* Field reversible  
\* Sizes: 25, 50, 100, 200, 300, 400 and 600  
\* Manual handwheel and limit stops available as option  
\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## GLOBE VALVE

### GLB® Model



Made of rolled bars or forged material, the GLB valve can be quickly machined in order to meet special lead-time requirements, either in cases of high pressure applications or in cases where special or exotic alloys are necessary. The GLB valve has several body configurations and has a high level of interchangeability with GLS and GLH valves, being available in pressure classes of up to ANSI 4500.

**Sizes:** 1/2 to 4 inches

**ANSI Ratings:** ANSI 150 to 4500

**Body Styles:** Globe in-line, globe off-set, angle, three-way

**Bonnet Types:** Standard, standard extension, special length extension, metal bellows seal, cryogenic

**Body/Bonnet Materials:** Cast bodies, and bonnets with the same body alloy: carbon steel, low temperature carbon steel, chrome-moly steels, stainless steels, Alloy 20, bronze, Hastelloy-B2, Hastelloy-C, Inconel 600, Monel 400, nickel, titanium and other castable alloys upon request.

**Trim Materials:** 316 SS, 316L SS, 304 SS, 304L SS, 347 SS, 420 SS HT, 440C SS, 17-4PH, Duplex SS, Super-Duplex SS, Alloy-20, bronze, Hastelloy-B, Hastelloy-C, Monel 400, Monel K-500, Hastelloy-B2, Hastelloy-C, nickel, titanium and others.

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
\* Field reversible  
\* Sizes: 25, 50, 100, 200, 300, 400 and 600  
\* Manual handwheel and limit stops available as option  
\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## GLOBE VALVE

### GLC® Model



The GLC valve is used in cryogenic applications up to -423°F (-253°C) inside the cold box and is specially recommended in cases where a simplified maintenance of the valve is required, and which can be performed from outside the cold box. In order to minimize heat transfer inside the cold box, the GLC valve has a light extended bonnet welded to the body, designed to keep a portion of vaporized fluid between the packing box and the liquid at cryogenic temperature.

**Sizes:** 1/2 to 10 inches

**ANSI Ratings:** 150, 300 and 600

**Body Styles:** globe, angle

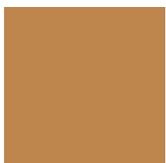
**Bonnet Type:** extended for cryogenic applications

**Body/Bonnet Materials:** Cast bodies, and bonnets with the same body alloy: stainless steels, bronze

**Trim Materials:** 316 SS, 316L SS, 304 SS, 304L SS, Monel 400, Monel K500, 17-4PH, 17-4PH Nitrided, 17-5PH

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
\* Field reversible  
\* Sizes: 25, 50, 100, 200, 300, 400 and 600  
\* Manual handwheel and limit stops available as option  
\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## GLOBE VALVE

### GLE® Model



Designed for use in the most severe applications, whether erosive, corrosive or in flashing condition duties, the GLE control valve is widely used in mining and metal refining industries, presenting innovative technical characteristics that make it a true reference in erosive applications, such as: angle body with smooth curve, which reduces turbulence when flow direction changes, large gallery in order to reduce flow velocity in the areas which are most attacked by fluid, absence of seat retainer, packing with scraper rings and wear-resistant trim, among others.

**Sizes:** 1 to 18 inches (ANSI 150)

1 to 12 inches (ANSI 300 and 600)

1 to 10 inches (ANSI 900 and 1500)

**Body Style:** Angle, with smooth curve and large gallery

**Bonnet Types:** Standard, standard extension

**Body/Bonnet Materials:** Cast bodies, and bonnets with the same body alloy: carbon steel, chrome-moly steels, stainless steels, Hastelloy-B2, Hastelloy-C, Inconel 600, titanium and other castable alloys upon request

**Trim Materials:** Solid Alloy #6, tungsten carbide, silicon carbide, ceramic partially stabilized with zirconia and others

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure

\* Field reversible

\* Sizes: 25, 50, 100, 200, 300, 400 and 600

\* Manual handwheel and limit stops available as option

\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.





## ECCENTRIC ROTARY PLUG VALVE

### EĀL<sup>®</sup> Model

The EĀL eccentric plug control valve is versatile, with excellent cost-benefit ratio and can be used in most applications involving low and medium pressures, particularly where a high flow rate capacity is required. The robust non-crossover shaft remains out of the flow path and creates an unobstructed passage area, factors that enable EĀL to perform duties in light and slightly erosive conditions. The plug, which moves away from the seat immediately upon the first degrees of rotation, assures a long-lasting sealing capacity.

**Sizes:** 1 to 8 inches (ANSI 150/300)

**Body Ends:** Flanged, flangeless (wafer-style assembly)

**Bonnet Type:** Standard

**Body/Bonnet Materials:** Cast bodies and bonnets matching body alloy: carbon steel (ASTM A216 Gr. WCB), stainless steel (ASTM A351 Gr. CF8M). Special versions to comply with NACE MR01.75 or other materials upon request

**Plug Materials:** 17-4PH (standard), 316L SS with Alloy #6 overlay

**Shaft/Stationary Post Material:** 17-4PH (standard)

**Seat Materials:** soft seat in 316 SS/PTFE or metal seat in 316 SS, 420 SS HT or 316L SS with Alloy #6 overlay

**Seat Retainer Materials:** 316 SS or 420 SS HT

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure

\* Field reversible

\* Sizes: 25, 50, 100 and 200

\* Manual handwheel and limit stops available as option

\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## ECCENTRIC ROTARY PLUG VALVE

### EP® Model

As it shares the basic project design with ExL valve, the EP line provides high performance in applications that require high flow rates, high rangeability and long-lasting sealing capacity. However, EP line offers an even wider range of options and can be supplied in pressure classes up to ANSI 600 and, as necessary, with the same face-to-face dimensions of globe valves. Such versatility assures the EP line a notable success in the chemical & petrochemical, pulp & paper, mining, and power plants applications among others.

**Sizes:** 1 to 12 inches (ANSI 150, 300 e 600)

**Body Ends:** flanged, flangeless (wafer-style assembly)

**Bonnet Type:** Standard

**Body/Bonnet Materials:** Body and bonnets made from castings such as: carbon steel (ASTM A216 Gr. WCB), stainless steel (ASTM A351 Gr. CF8M). Special versions to comply with NACE MR01.75 or other materials upon request

**Plug Materials:** 17-4PH (standard), 316L SS with Alloy #6 overlay

**Shaft/Stationary Post Material:** 17-4PH (standard)

**Seat Materials:** soft seat in 316 SS/PTFE or metal seat in 316 SS, 420 SS HT or 316L SS with Alloy #6 overlay

**Seat Retainer Materials:** 316 SS or 420 SS HT

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure

\* Field reversible

\* Sizes: 25, 50, 100 and 200

\* Manual handwheel and limit stops available as option

\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.

**VALTEK SULAMERICANA**



## SEGMENTED BALL VALVE

### Vxl® Model

Although it incorporates some technical characteristics of the VB valve such as, self-centering seat and splined drive shaft that prevent motion loss, the project of the Vxl segmented ball valve has been developed with day-by-day applications in mind, namely with ANSI ratings 150 and 300. Thus, the Vxl line benefits from a rationalized range of options, the high level of interchangeability with other Valtek Sulamericana rotary valves and a high production volume, which make it one of the most competitive segmented V-notch ball valves of the world market.

**Sizes:** 1 to 8 inches (ANSI 150/300)

**Body Ends:** Flanged, flangeless (wafer-style assembly)

**Bonnet Type:** Standard

**Body/Bonnet Materials:** Cast bodies, and bonnets matching body alloy: carbon steel, stainless steels, Alloy 20, Hastelloy-B2, Hastelloy-C, Monel 400, titanium and other castable alloys upon request

**Segmented Ball Materials:** Chrome plated 317 SS, other materials to match body material

**Shaft/Stationary Post Materials:** 17-4PH (standard), other materials to match body material

**Seat Materials:** soft seat in PTFE, metal seats in 316 SS or dual seat in 316 SS/PTFE

**Seat Retainer Materials:** Chrome-plated 316 SS, other materials to match body material

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
 \* Field reversible  
 \* Sizes: 25, 50, 100 and 200  
 \* Declutchable manual handwheel available as option  
 \* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## SEGMENTED BALL VALVE

### VB® Model

The modern design of model VB segmented ball valve, with its “V-notch”, assures excellent control accuracy, thanks to its smooth operation and high rangeability, which exceeds 300:1. The cutting action of the ball enables the VB valve to overcome challenges of operations with fibrous fluids or containing airborne particles, especially in the chemical & petrochemical, paper & pulp, petroleum and power plant industries. The rugged single-piece body, anti-blowout shaft and self-centering seats, which dispense with adjusting axial clearances, are other advanced features of the VB valve.

**Sizes:** 1 to 12 and 16 inches (ANSI 150, 300 and 600)

**Body Ends:** Integral flanges, separable flanges, flangeless (wafer-style assembly)

**Bonnet Types:** Standard, standard extension

**Body/Bonnet Materials:** Body and bonnets made from castings such as: carbon steel, stainless steels, Alloy 20, Hastelloy-B2, Hastelloy-C, Monel 400, titanium and other materials upon request

**Segmented Ball Materials:** Chrome plated 317 SS, other materials to match body material

**Shaft/Stationary Post Material:** 17-4PH (standard), other materials to match body material

**Seat Materials:** soft seat in PTFE, metal seats in 316 SS or dual seat in 316 SS/PTFE

**Seat Retainer Materials:** Chrome-plated 316 SS, other materials to match body material

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
 \* Field reversible  
 \* Sizes: 25, 50, 100 and 200  
 \* Declutchable manual handwheel available as option  
 \* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.

**VALTEK SULAMERICANA**



## BI-ECCENTRIC DISC VALVE

### Bxl® Model

Without dispensing with the state-of-the-art technology of the BED valve, from which it uses the smart solutions such as, concave disc with optimized geometry in order to assure high flow rate capacity, self-centering seat-ring with soft or metal sealing, and disc-stop on the body in order to avoid excess rotation, the Bxl line has been developed to meet industrial application needs at pressure classes ANSI 150 and 300 that can be served by a more standardized eccentric disc valve, with reduced cost and fast delivery, capable to achieve reference performance levels.

**Sizes:** 2 to 12 inches (ANSI 150/300)

**Body Styles:** Wafer or lug

**Bonnet Type:** Standard

**Body/Bonnet Materials:** Body and bonnets made from castings such as: carbon steel, stainless steels, Alloy 20, Hastelloy-B2, Hastelloy-C, Monel 400, titanium and other materials upon request

**Disc Materials:** Chrome-plated 316 SS; other materials to match body material

**Shaft/Stationary Post Materials:** 17-4PH (standard), other materials to match body material

**Seat & Pins Materials:** 17-4PH (standard); other materials to match body material

**Seat Materials:** soft seat in PTFE, PTFEG, PEEK; metal seat in 316 SS, dual seat in 316 SS/PTFE

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
 \* Field reversible  
 \* Sizes: 25, 50, 100 and 200  
 \* Declutchable manual handwheel available as option  
 \* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## BI-ECCENTRIC DISC VALVE

### BED® Model

The BED model bi-eccentric disc control valve is characterized by its flawless performance, which combines reliability and control accuracy. Such characteristics, along with rangeability of 100:1, make this valve model a particularly advantageous option in applications involving high flow rates and small or medium differential pressures. The double eccentricity causes the disc to move away from the seat immediately upon the first degrees of rotation, increasing seat controllability and lifespan. Light body, with compact face-to-face dimension makes for easy installation and maintenance tasks, while non-selective disc and shaft contribute to an extremely low operational cost.

**Sizes:** 2 to 36 inches (ANSI 150 to 2500)

**Body Styles:** Wafer, lug or special versions with flanges

**Bonnet Types:** Standard, standard extension, cryogenic extension

**Body/Bonnet Materials:** Body and bonnets made from castings such as: carbon steel, stainless steels, Alloy 20, Hastelloy-B2, Hastelloy-C, Monel 400, titanium and other materials upon request

**Disc Materials:** Chrome-plated 316 SS (standard), 316 SS/Alloy #6 or other materials to match body material

**Shaft & Pins Material:** 17-4PH (standard), Nitronic 50, Inconel, Nitronic 50/Alloy 6 and others to match body material

**Seat Materials:** soft seat in PTFE, PTFEG, PEEK or KEL-F; metal seat in 316 SS or 316 SS/Alloy 6; dual seat in 316 SS/PTFE

**Soft Seat Retainer Materials:** 316 SS or other materials to match body material

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
 \* Field reversible  
 \* Sizes: 25, 50, 100 and 200  
 \* Declutchable manual handwheel available as option  
 \* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



## FULL BORE BALL VALVE

### T $\bar{b}$ v<sup>®</sup> Model

The T $\bar{b}$ v model full bore ball valve has been designed to offer minimum resistance to fluid flow, providing high flow coefficients and a reference rangeability up to 300:1. Its construction with symmetrically split body makes maintenance tasks easy, while the ball/shaft assembly in a single piece, with an oversized shaft, provides a smooth and accurate hysteresis-free operation. Available seat options and bidirectional sealing make T $\bar{b}$ v the ideal choice for demanding applications with clean, fibrous or dirty fluids, particularly in the paper & pulp and oil & gas industries.

**Sizes:** 1 to 24 inches (ANSI 150, 300 and 600)  
1 to 36 inches (ANSI 150/300)

**Body Style:** Symmetrically split, with flanged connections  
Pendular or Trunnion assembly depending on valve size and pressure class  
Special fire-safe versions or compliant with NACE MR01.75 upon request

**Bonnet Types:** standard, standard extension

**VALTEK SULAMERICANA**

**Ball/Shaft Material:** 316 SS (standard)

**Passage Area:** Solid ball, straight full bore (optionally can be supplied with reduced port)

**Ball Coating Options:** Chrome-plated, Alloy #6 overlay, carbides nickel-boron

**Seat Materials:** Soft seat in PTFE (25% carbon filled), metal seat in 316L SS/Alloy #6, 316L SS/Alloy #12, 316L SS/carbides, 316L SS/nickel-boron

**Actuator:** \* Double-acting cylinder with positive fail-safe spring action in case of air supply lack failure  
\* Field reversible  
\* Sizes: 25, 50, 100 and 200  
\* Declutchable manual handwheel available as option  
\* Manual, electromechanical or electrohydraulic actuators upon request

**Positioners:** HPP1500 pneumatic or analog electropneumatic, HPP3000 and HPP3500 digital electropneumatic. Other models available upon request.



### Alpha® Trim

In applications with low and medium intensity cavitation, Alpha Trim is a cost-effective solution for minimizing the harmful effects of bubble collapse. Retainer, with staggered and diametrically opposite holes, directs the flushes to the center of body and keep the bubbles away from metallic surfaces. Available in sizes from 1 to 14" (ANSI 150/1500) and from 1 to 6" (ANSI 2500), the Alpha Trim can be assembled into globe, angle, Y-body and other types of valves.



### Beta® Trim

Valves equipped with Beta Trim reduce noise level up to 20 dBA in applications with gases. The attenuator is designed with a series of holes that reduce pressure gradually and control turbulence that propagates through downstream piping. Beta Trim is available in sizes from 1" to 42" (ANSI 150/600) and from 1" to 24" (ANSI 900/2500) and can be assembled into globe, angle, Y-body, expanded outlet and other types of valves.



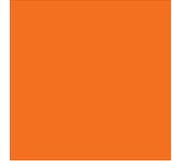
### Gamma® Trim

Gamma Trim eliminates damage caused by cavitation and minimize hydrodynamic noises, even on most severe liquid applications. Gamma cartridge has been designed to reduce total pressure drop through the valve in stages, preventing cavitation on all its points. Gamma Trim is available in sizes from 1" to 42" in classes ANSI 150 to 600 and from 1" to 24" in classes ANSI 900 to 2500 and can be assembled into globe, angle, Y-body and other types of control valves.



### Delta® Trim

Delta Trim effectively reduces noise levels generated by gases and liquids and eliminate cavitation effects. The cartridge, consisting of a disc stack with engineered grooves, causes a series of sudden fluid expansions and contractions, reducing pressure gradually. Delta Trim is available in sizes from 1" to 42" (ANSI 150/600) and from 1" to 24" (ANSI 900/2500) and can be assembled into globe, angle, Y-body, expanded outlet and other types of control valves.





## Beta<sup>®</sup> Attenuator Plate

Using the same principles of Beta Trim, the Beta attenuator plates are installed downstream the control valves in order to reduce total noise levels. Each plate can be supplied with up to four perforated stages, providing reductions of up to 15 dBA, depending on gas type and pressure drop ratio. Part of the pressure drop is absorbed through the stages with their multiple holes, resulting in lower flow velocity, less turbulence and less noise.

**Sizes:** 1.5 to 24 inches (ANSI 150/2500)

**Connections:** wafer-style, assembled between RF or RTJ flanges, lug and butt-weld.

## Omicron<sup>®</sup> Trim



In order to prevent damage caused by cavitation, the use of Omicron Trim must be considered when application involves high pressure drops and very low flow rates. The plug head has engineered grooves that extend throughout its length and intersect themselves several times. Fluid passing through channels experiences a continuous increasing of the passage area, and pressure reduction occurs gradually as the flow streams collide at the groove intersections. Due to its mechanical configuration, Omicron Trim is preferably used in angle valves.

**Characteristic:** Modified equal percentage

**Sizes:** 1 to 2 inches (ANSI 150/2500)

**Flow Coefficients (CV's):** 0.007 to 0.705

## Delta<sup>®</sup> Trim



Omega Trim has been designed for liquid applications under intense cavitation and low flow rate conditions. Based on the same principles of Gamma Trim, Omega Trim has a cartridge with channels and holes that is part of the plug head and is guided by the seat. The perforated cartridge, which in this case does not act as a seat retainer, can have up to 5 stages for gradual pressure reduction, and operating fluid must be clean and particulate-free. Omega Trim can be used in globe or angle valves.

**Characteristic:** Linear or Bi-Linear

**Sizes:** 0.5 to 2 inches (ANSI 150/2500)

**Flow Coefficients (CV's):** 0.50 to 2.52



## LINEAR ACTUATOR

### LA-XL® Model

LA-XL actuators feature high actuating thrust, control sensitivity and an exceptional pneumatic stiffness, which assures high positioning accuracy and flawless performance. The wide use of aluminum and the compact dimensions result in a lightweight and corrosion-resistant assembly.

**Type:** double acting cylinder and piston type, with returning spring in case of air supply failure. Air action is reversible in the field.

**Sizes:** 15, 25, 50, 100, 200, 300, 400, 500 and 600

**Action:** Air-to-open, air-to-close or fixed in last position

**Air supply:** up to 150 psi (10.3 Bar)

**Operating temperature:** -40 to 350°F (-40 to 175°C)

**Options:** Top-mounted push-only handwheel, side-mounted continuously connected handwheel, top-mounted continuously connected handwheel, limit stops, positioners, solenoids, limit switches and others



## ROTARY ACTUATOR

### RA-XL® Model

RA-XL rotary actuators combine high torque and pneumatic stiffness with an excellent control capacity, acknowledging the fact that the cylinder works with air in both chambers. As with LA-XL linear actuator, the use of aluminum and compact dimensions assures a robust and easy to handle assembly, with a proven lifespan exceeding 1 million cycles.

**Type:** double acting cylinder and piston type, with returning spring in case of air supply failure. Air action is reversible in the field.

**Sizes:** 25, 50, 100, 200, 300 and 400

**Action:** Air-to-open, air-to-close or fixed in last position

**Air supply:** up to 150 psi (10.3 Bar)

**Operating temperature:** -40 to 350°F (-40 to 175°C)

**Options:** declutchable handwheel, positioners, solenoids, limit switches and others



## ANALOG POSITIONER HPP2000® Series

The HPP2000 series represents the state-of-the-art in terms of analog positioners, presenting at the same time sturdiness and cutting-edge technology.

- Electropneumatic (I/P) or pneumatic (P/P) versions;
- Explosion-proof and intrinsically safe I/P module;
- Double or single acting;
- Control signal of 4-20 mAcc, 3-15 psi (0.2-1.0 Bar) or in 2 or 3 split-ranges;
- Assembly on linear or rotary actuators;
- Operating temperatures from -40 to 176°F (-40 to 80°C);
- Air supply pressure up to 150 psi (10.3 Bar)



## DIGITAL POSITIONER HPP3000® Series

The HPP3000 series microprocessed positioners are compatible with HART, DE and Fieldbus protocols, and 4-20 mAcc analog signal. In addition, they include programmable functions such as: auto-tuning, manual or automatic mode, diagnosis and split-range.

- Characteristics: Equal percentage, linear or customized curves;
- Remote installation version (optional);
- Double or single acting;
- Assembly on linear or rotary actuators;
- Operating temperatures from -40 to 176°F (-40 to 80°C);
- Air supply pressure up to 100 psi (6.9 Bar)



## DIGITAL POSITIONER HPP3500® Series

The modern HPP3500 series digital positioners are compatible with HART protocol and 4-20 mAcc analog signal. Intrinsically safe, these positioners have NEMA 4X (IEC IP66) enclosures developed to make assembly easy in NAMUR type rotary actuators.

- Characteristics: Equal percentage, linear or customized curves;
- Double or single acting;
- Assembly on linear or rotary actuators;
- Operating temperatures from -40 to 176°F (-40 to 80°C);
- Air supply pressure up to 100 psi (6.9 Bar)



## Manufacturing

Located in a large area and undergoing continuous upgrading, Valtek Sulamericana industrial plant is among the most modern of its category worldwide; this fact was helped by the climatization of the whole manufacturing area, which in addition to bringing benefits in the field of dimensional accuracy of manufactured items, increases machinery durability and assures a pleasant workplace that values the human element. The smart layout and organizational aspects highlight environment quality and match with the verticalized production model, ideal for manufacturing components and products with the desired quality level. That is also why the company has its own pattern and tooling departments and acquires raw materials and com-

ponents for their products from qualified suppliers or centers of excellence.

For planning, the use of advanced corporate software makes integrated business management easy, while the use of modern administration techniques and quality tools contributes to continuous improvement process. For manufacturing, the massive use of CNC machines, with direct data transmission (DNC), and the use of well-designed and built tooling assure high productivity and repeatability, for small parts or large components.

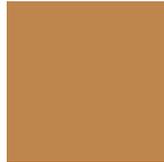
The Company's Engineering, which works with state-of-the-art 3D design software, and a large training area, are other reasons of pride.



## Quality

Driven by the “Quality Production” principle, Valtek Sulamericana’s philosophy is supported on three main points: efficient processes and production means, capable of generating components with high inherent quality, as well as assuring reduction of quality costs; continuous improvement of the intrinsic quality of its products, which is objectively noticeable, and an effective and autonomous Quality Control.

In addition to aspects directly related to product quality, Valtek Sulamericana also gives special attention to an active Quality Management System, certified by ISO-9000, which is capable of promoting continuous improvement of the industrial and administrative processes by using modern analytical tools, as well as building Quality Circles that encompass all productive chain stages.



## ValtekSulamericanaServiços

ValtekSulamericanaServiços is the division responsible for authorized technical assistance of Valtek Sulamericana products and is prepared to repair valves and deliver technical support services for plant startups and shutdowns, assuring customers total tranquility in respect to detection, analysis and solution for field problems.

By having its own structure and experienced technicians, ValtekSulamericanaServiços is capable of performing valve repairs, complete refurbishings and retrofittings with the expected agility.

In addition to plant warranty, the use of original parts, even on other brand valves, and the services and tests rigorously performed are the factors that extend valve economic lifespan and assure higher paybacks to users.

Quality Management System



---

**ISO 9001-2000**

Certificate No. 311001 QM

The information and specification contained in this bulletin are considered accurate. However, they are provided only for information purposes and should not be considered as certified. Valtek Sulamericana products are continuously improved and upgraded and the specification, dimensions and information contained herein are subject to change without notice. For further information or to confirm these presented here, contact your Valtek Sulamericana representative.

Monel is a registered trademark of Special Metals.

Hastelloy C and Hastelloy B are registered trademarks of Haynes International.

| Printed in Brazil

**[www.valteksulamericana.com.br](http://www.valteksulamericana.com.br)**

Cat. Valtek Sulamericana - Rev. 09/2009E - PN-9800012