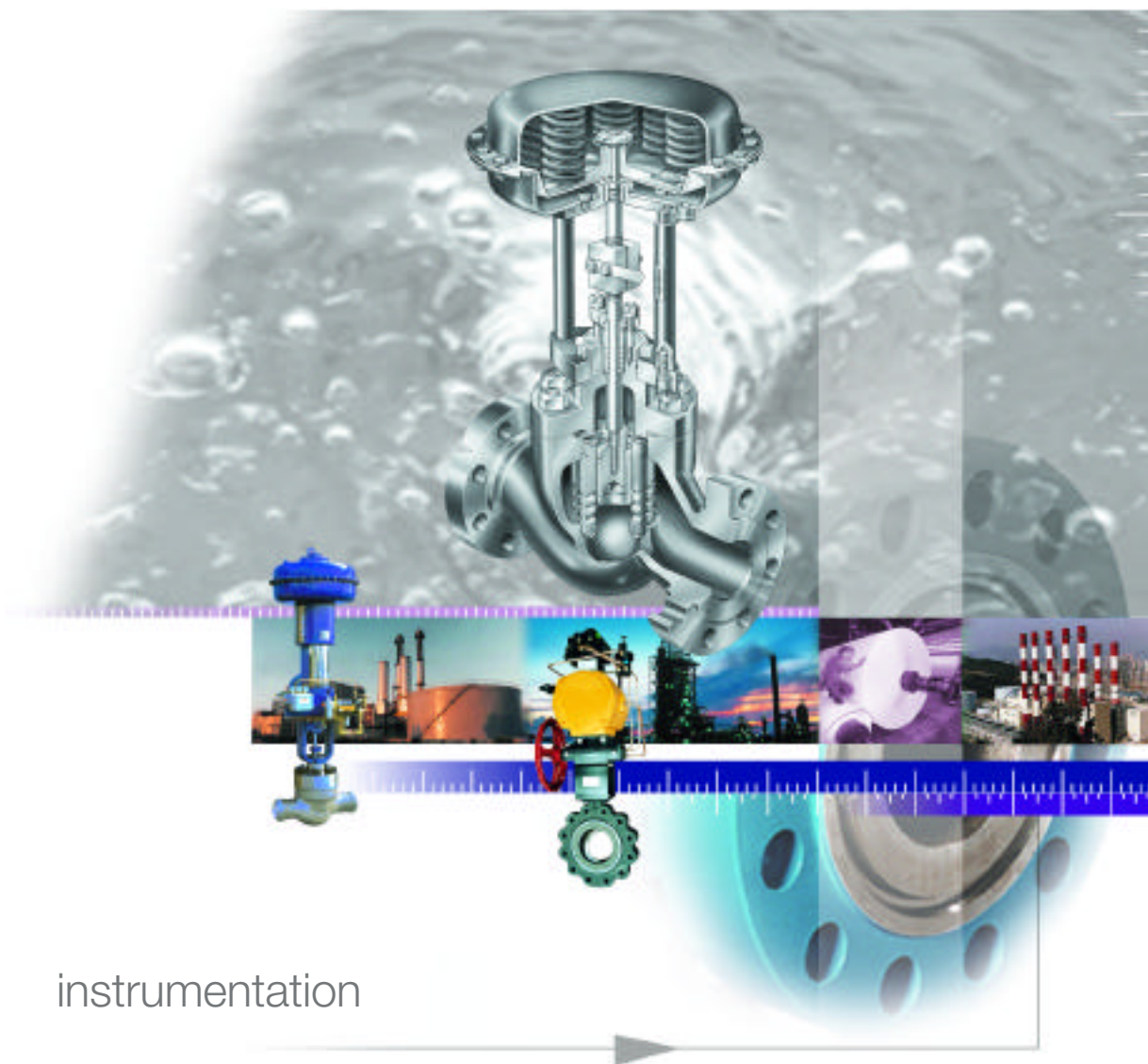


Control Valves

Control Valves • DSCV • Desuperheaters • Accessories



Field^{IT} Analyze^{IT} Control^{IT} Measure^{IT} Operate^{IT} **Industrial^{IT}**



World Valve Range



World Class Valves- Worldwide Availability



ABB control valves specialize in control valves, power valves, direct steam conditioning valves, desuperheating equipment and valve actuators for the entire range of process applications. These products can be found in all corners of the world, frequently operating on production plants in the most challenging environments.

ABB is the world's largest instrumentation and control company with control valve plants operating in Japan, Italy, United Kingdom, USA and India. Control valves global sales and applications are supported by local ABB Sales and Service companies and carefully selected sales agents throughout the world.

Maintaining the highest standards of quality throughout design, production and customer service in the cornerstone of ABB's philosophy. The main plants are accredited to ISO9001 and ISO14001. Ongoing investment in production capabilities keep the company at the forefront of modern manufacturing methods.

All products are rigorously tested to ensure reliability on even the most demanding application. Performance testing installations check products for flow, pressure, noise and the dynamic response under ambient and cryogenic temperatures.

Key market sectors served by ABB control valve products include:

Chemical, Oil & Gas	<i>Subsea installations</i>	Power Stations	<i>Conventional</i>
	<i>FPSO</i>		<i>Nuclear</i>
	<i>Platforms</i>		<i>Thermal</i>
	<i>Production Pipelines</i>		<i>Cogeneration</i>
	<i>Refineries</i>		<i>Geothermal</i>
	<i>Processing Plants</i>	Industrial	<i>Steel Production</i>
	<i>Pharmaceutical</i>		<i>Paper Production</i>

AB1000 Standard Duty

Single Seated Globe Valve

Sizes 1" to 8" (25mm to 200mm), Ratings ANSI 150 to 600

Designed to ensure that it will continue to represent a cost effective solution to a variety of process control applications, the AB1000 range is offered with a core of options which allow rapid delivery, high interchangeability of trims and lower costs.

Performance:

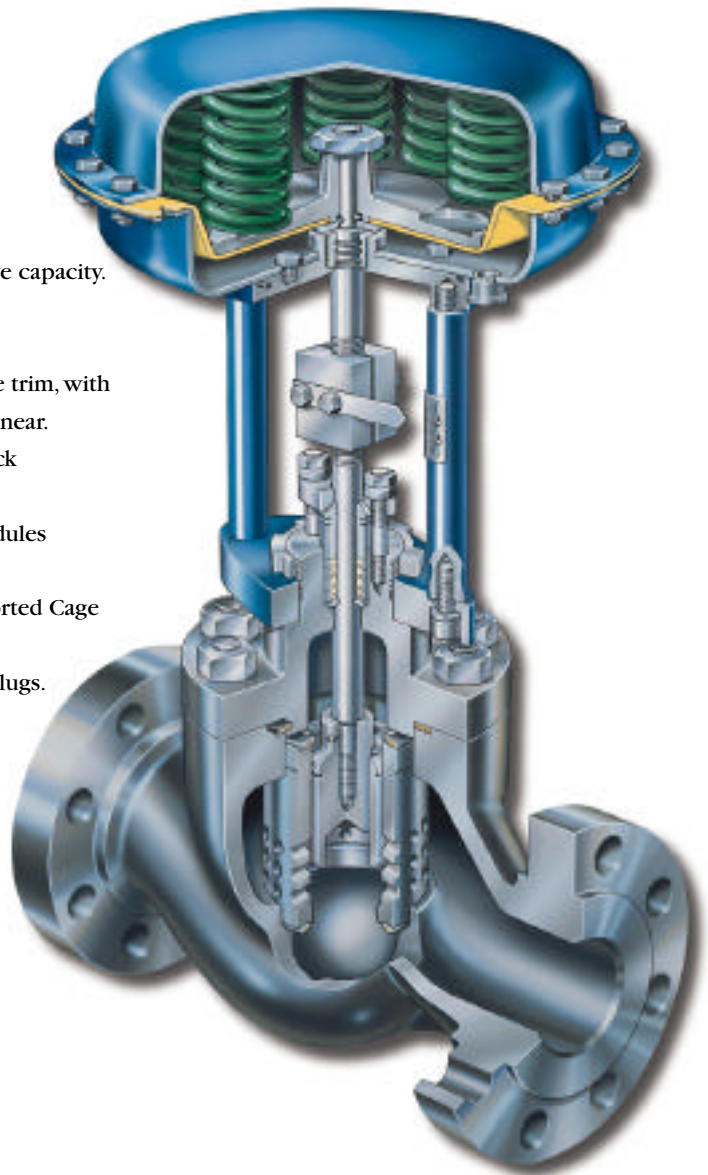
- ❑ High flow capacity.
- ❑ Tight shut-off to Class V available.
- ❑ Excellent flow control rangeability.
- ❑ Low weight.
- ❑ Streamline flow passages to improve capacity.

Design Flexibility:

- ❑ Inherent Modified Equal Percentage trim, with options for Equal Percentage and Linear.
- ❑ Clamped guide and seat allows quick change for modification/service.
- ❑ High interchangeability of trim modules and soft components.
- ❑ Available trim types: Contoured, Ported Cage and Low Noise Anti-cavitation (HF).
- ❑ Optional balanced or unbalanced plugs.

Design Integrity:

- ❑ Optimized using computer aided analysis.
- ❑ Designed to ASME B16.34.
- ❑ High integrity precision cast components.



In addition to the core WorldValve Range, many other special products are available. These high technology valves can be designed to meet your specific application.

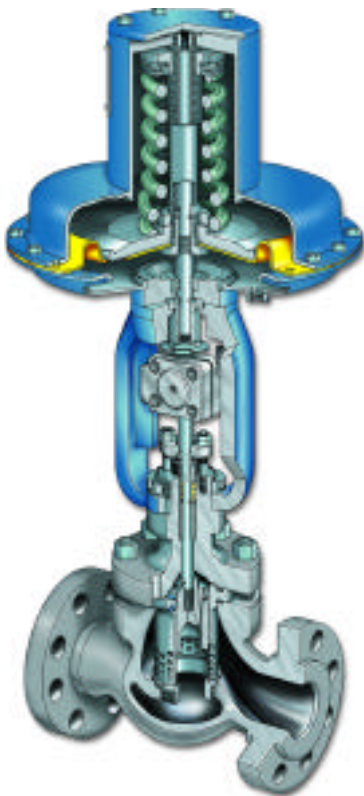
World Valve Range

AB2000 High Duty

Single Seated Globe Valve

Sizes 1" to 24" (25mm to 600mm), Ratings ANSI 150 to 600

The AB2000 range valves combines high integrity features with a high capacity, economical design philosophy. The AB2000 is ideally suited to meet the various critical service process control requirements that are demanded from a wide range of related industries. The modular construction design is available with a range of end connections and styles, and a variety of trim designs.



Performance:

- ❑ High Cv to body size ratio.
- ❑ Streamlined flow passages optimize capacity.
- ❑ Low noise and anti-cavitation trim designs for high pressure applications.
- ❑ Excellent flow control rangeability.

Design Flexibility:

- ❑ Modular construction design available with a range of different end connections and styles.
- ❑ Inherently characterised trim offered in Equal Percentage and Linear.
- ❑ Optional balanced or unbalanced plug designs.
- ❑ Multiple trim sizes available.
- ❑ Full range of body and trim material options.
- ❑ Full range of bonnet and packing designs to suit various temperatures and fluids.

Design Integrity:

- ❑ High integrity body/bonnet bolting system design to ASME VIII.
- ❑ Clamped cage guiding and screwed in seat design.

AB2500 High Duty

Single Seated Angle Valve

Sizes 1" to 24" (25mm to 600mm), Ratings ANSI 150 to 600

The AB2500 angle valve has been centered on a modular concept, using similar trim and construction details to the AB2000 globe valve. The AB2500 is compatible with many pipework configurations, and offers a cost effective solution to the 'final control element' used in modern plants.



AB3000 High Duty Power

Single Seated Globe Valve

Sizes 1" to 12" (25mm to 300mm), Ratings ANSI 900 to 2500

The AB3000 has been designed to operate at the high levels of energy associated with large, modern power plants. The valve design features a clamped guide and seat for quick change trim and ease of maintenance. Wide variety of trims engineered for specific applications.

Performance:

- ❑ High integrity design.
- ❑ Streamline flow passages to optimise capacity.
- ❑ Excellent flow control rangeability.

Design Flexibility:

- ❑ Modular construction design available with a range of different end connections and styles.
- ❑ Large variety of trim designs including low noise/anti-cavitation.
- ❑ Supplementary noise control options.
- ❑ Inherently characterized trim offered in Equal Percentage, Modified Equal Percentage and Linear.
- ❑ Optional balanced or unbalanced plug designs.
- ❑ Range of bonnet and packing designs to suit various temperatures and fluids.

Design Integrity:

- ❑ Design to ASME/ANSI B16.34.
- ❑ Clamped cage guiding - ideal for severe service applications.

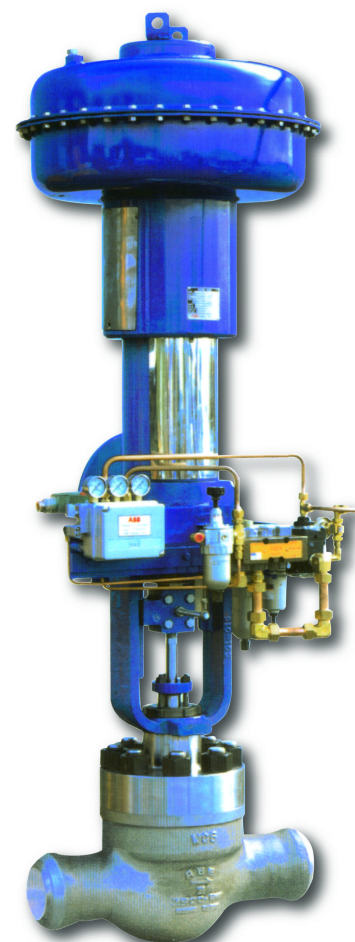


ABB control valves also supply a comprehensive range of power valves for the Nuclear industry. We have been the main supplier of valves to Japan's nuclear power plants for many years, and supplied over 75% of Japan's PWR reactor program Nuclear control valves. These Nuclear control valves can be manufactured for your specific technical requirements.

AB3500 High Duty Power Angle Valve

Sizes 1" to 12" (25mm to 300mm), Ratings ANSI 900 to 2500

The AB3500 is the angle version of the AB3000 High Duty Power globe valve. Applications for such angle valves tend to be particularly demanding and ABB's range offers a number of solutions to meet these needs. Pressure retaining bodies and bonnets can be from cast or forged alloys and are available to meet the highest temperatures currently in use in the power industry today.

AB4000

Rotary Valve Range



The AB4000 series describes the range of rotary control valves that are available from ABB Control Valves. This extensive range covers standard and high duty butterfly valves, characterized manual and automated ball valves which together with our globe range suit the majority of control valve applications.



AB4061/62 'Rotrol'

Rotary Valve

Sizes 6" to 36" (150mm to 900mm), Ratings ANSI 150 to 300

The AB4061/62 'Rotrol' valve has been developed to outperform conventional high performance butterfly valves throughout the process and power industries. The construction of this valve together with the options available will allow it to be used in a number of applications.

Performance:

- ❑ Reduced noise emissions.
- ❑ Control through 90° rotation.
- ❑ Excellent flow control rangeability.

Design Flexibility:

- ❑ Swing-through and tight shut-off seated trim designs.
- ❑ Wafer body and flanged connections available.
- ❑ Optional integral diffusers available on flanged versions.
- ❑ Full range of body and vane material options, with availability of hard facings.

Design Integrity:

- ❑ High integrity cast flanges.



AB5000

Mechanical Desuperheater

Steam Pipe Sizes 1" to 30" (25mm to 750mm), Ratings ANSI 150 to 2500

The AB5000 provides a cost-effective and efficient method of reducing superheated steam or other vapors to temperatures approaching saturation. The AB5000 can be supplied as a Variable Area (AB5100 "Varitrol") or a Fixed Area (AB5200 "Simtrol", AB5250 "Multijet") Unit, and as Steam Assisted (AB5300) or Variable Orifice (AB5400) types.

Performance:

- ❑ High efficiency atomisation.
- ❑ Temperature control to within 6°C (11°F) of saturation.
- ❑ High rangeability variable area spray unit.
- ❑ Accurate and repeatable control of fluid temperature.
- ❑ High spraywater pressure capability.
- ❑ Tight shut-off variable area spray unit.

Design Flexibility:

- ❑ Wide variety of design options.
- ❑ Wide range of available nozzle sizes.
- ❑ Erosion resistant materials of construction.
- ❑ Minimum number of components.
- ❑ Ease of installation.
- ❑ Large range of material options.
- ❑ High integrity stem sealing arrangement.
- ❑ Low maintenance features.
- ❑ Fully rationalized.
- ❑ Wide range of actuating mechanisms.
- ❑ Probe and Spray ring designs available.

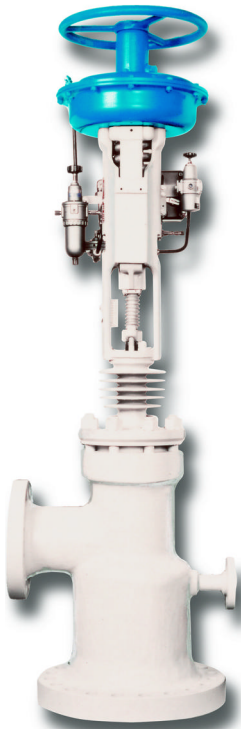


World Valve Range

AB6000

Pressure Reducing & Desuperheating PRD

Steam Pipe Sizes 2" to 36" (50mm to 900mm), Ratings ANSI 150 to 4500



The AB6000 range of combined pressure and temperature reducing desuperheating valves provides the facility within a single unit to condition superheated steam to desired pressure and temperature levels in either steam conditioning or Turbine Bypass applications. The units can also be supplied in either in-line or angle body configuration, fixed or variable area spray unit.

Performance:

- ❑ High efficiency atomisation, as small as 40 microns.
- ❑ Temperature control to within 6°C (11°F) of saturation.
- ❑ High rangeability variable area spray unit.
- ❑ Accurate and repeatable control of fluid temperature.
- ❑ Suitable for use with low spraywater differential pressure.

Design Flexibility:

- ❑ Wide variety of design options.
AB6100 DSCV GI Angle type: small/medium applications.
AB6200 DSCV GII Angle type: large scale applications.
AB6300 DSCV GIII Globe type: medium scale.
AB6400 DSCV GIV Separate control valve and attemperator.
AB6500 DSCV GV angle type: fabricated body.
- ❑ Wide rangeability on spraywater demand.
- ❑ Erosion resistant materials of construction.
- ❑ Minimum number of components.
- ❑ Ease of installation.
- ❑ Large range of material options.
- ❑ High integrity stem sealing.
- ❑ Low maintenance features.
- ❑ Wide range of actuating mechanisms available.



Smart Positioner

A new generation of control valve positioners with features such as autocalibration, position re-transmission, built-in limit switches and two way communication using HART® protocol. Profibus and Fieldbus options will be included as the standards become available.

- ❑ Communication by RS232 as standard, HART® protocol as an option.
- ❑ 10g vibration resistance.
- ❑ Operation on contaminated air supply.



Pneumatic Positioner

A variety of pneumatic positioners are available offering quality, robustness, compact dimensions and high performance. These positioners have extremely stable control characteristics even when used on small actuators.

- ❑ Field reversible, interchangeable cams.
- ❑ Fast response speed.
- ❑ Resilient to hostile environments.
- ❑ Exceptional shock and vibration performance.



Electro Pneumatic Positioner

A range of electro/pneumatic positioners is available which share the same features of the pneumatic positioners, but with the ability to run on 0-20, 4-20mA or split range signal.

- ❑ Economical and robust.
- ❑ High operational reliability.
- ❑ 4:1 split range.



Series 'A' Filter Regulators

Three sizes of Filter Regulator for use with the ABB range of positioners and instruments.

- ❑ Port size up to 1" NPT.
- ❑ Flow Rate up to 8000 litres per minute.
- ❑ Maximum bowl capacity 130cc.

In addition to those described above, ABBcontrol valves also supply a complete range of instruments including I/P Converters, Airlocks, Volume Boosters and Airsets.



**For additional information, visit us
on the Internet at www.abb.com**



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