



samson

AND
EVERYTHING
FLOWS

PRODUCT PORTFOLIO

SAMSON Product Highlights
for the Process Industry

GLOBE VALVES

SAMSON globe valves provide measured control of your fluid processes, such as non-corrosive, corrosive and erosive media, steam, hygienic and aseptic media.



STANDARD TYPE 3241

Rugged design for all control applications with optional bellows seal, insulating section and suitable for use in cryogenic applications.

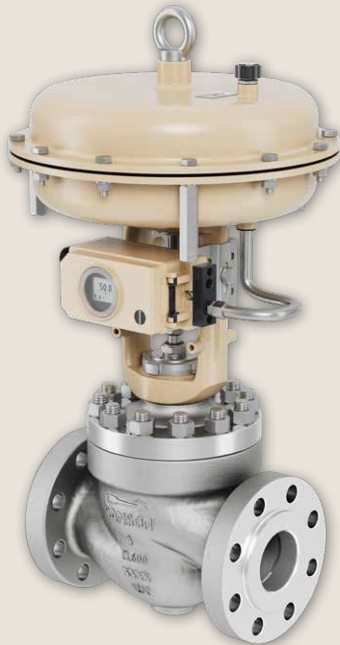
Pressures up to: PN 40/Class 300
Sizes up to: DN 300/NPS 12



GENERAL SERVICE TYPE 3321

The perfect economic solution for less demanding applications: the Type 3321 is optionally available with Type 3371 and Type 3372 Actuators.

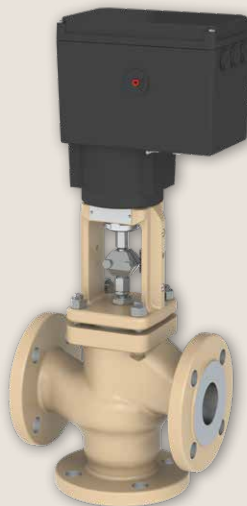
Pressures up to: PN 40/Class 300
Sizes up to: DN 100/NPS 4



HIGH PRESSURE TYPE 251GR

Designed for more demanding applications with field-interchangeable seat retention designs combined with multi-plug options, this new modular design meets the highest standards.

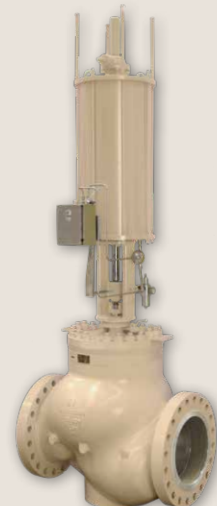
Pressures up to: PN 160/Class 900
Sizes up to: DN 200/NPS 8



THREE WAY TYPE 3244

Based on the Type 3241 standard globe valve, the Type 3244 Three-way Valve provides both mixing and diverting service and has many of the options offered for Type 3241, including bellows seal and cryogenic extension bonnet.

Pressures up to: PN 40/Class 300
Sizes up to: DN 150/NPS 6



SEVERE SERVICE TYPE 3595

For the toughest applications with globe or angle style bodies, the plug is cage guided across the entire travel range with minimal clearance to reduce vibrations. Optional trims for liquids and gases to minimize noise and wear.

Pressures up to: Class 2500
Sizes up to: NPS 32

SPECIAL GLOBE VALVES

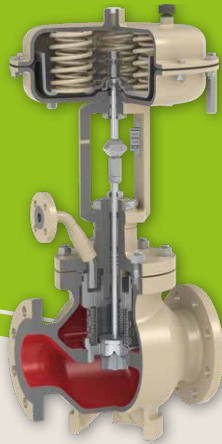
SAMSON has built on the success of its standard valve range to develop application-specific products tailor made for optimized control applications in various industries.



MICRO FLOW TYPE 3510

Designed for very low flow rates with optional bellows seal and insulating section. Suitable for throttling service and available in special materials and high-pressure versions.

Pressures up to: PN 400/Class 2500
Sizes up to: DN 25/NPS 1



STEAM CONDITIONING TYPE 3281

Designed to reduce the pressure and temperature of steam to controlled set points by injecting water downstream of the valve.

Pressures up to: PN 160/Class 900
Sizes up to: DN 300/NPS 12



HYGIENIC TYPE 3347

Self-draining angle design for hygienic applications, wetted sealing materials comply with EN 1935/FDA regulations. Metal or soft sealing plug. Bar stock and cast bodies are available.

Pressures up to: 40 bar/580 psi
Sizes up to: DN 150/NPS 6



ASEPTIC TYPE 3349

Control valve for aseptic applications in the food and pharmaceutical industries with USP VI diaphragm. Compliant with 3-A regulations and certified by EHEDG.

Pressures up to: 25 bar/360 psi
Sizes up to: DN 6 to 100/
NPS ¼ to 4



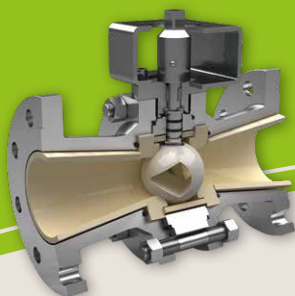
TOP-ENTRY CRYOGENIC SAMSON FROSTY® · TYPE 3598

Designed for cold-box applications with minimal loss of energy by using a circulation inhibitor and cryogenic extension bonnet. In-line serviceability for low cost of operation in all cryogenic applications down to -273 °C.

Pressures up to: PN 100/Class 900
Sizes up to: DN 150/NPS 6

ROTARY VALVES

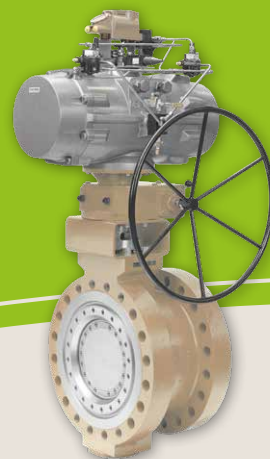
SAMSON manufactures a variety of rotary valves that provide high flow capacities in a compact body to meet specific application needs.



CERAMIC LINED TYPE KST

Ceramic-lined ball valve suitable for corrosive media with abrasive solid content. The high-quality ceramic internal parts provide excellent wear resistance. Using the V-ball, the valve is suitable for on/off and throttling service.

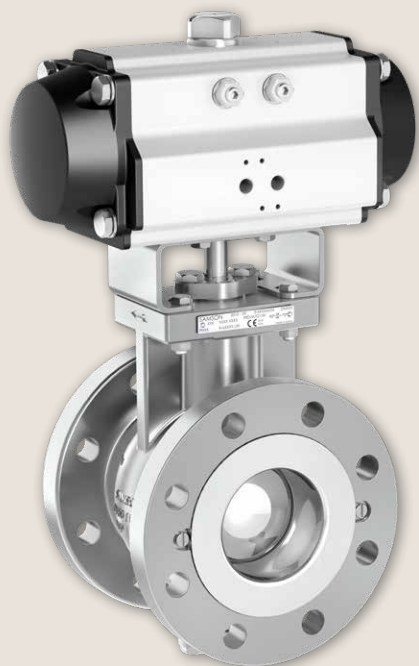
Pressures up to: PN 40/Class 300
Sizes up to: DN 300/NPS 12



TRIPLE OFFSET BUTTERFLY TYPE LTR 43

The triple-offset design ensures seat contact only when fully closed. This minimizes wear while providing a high flow capacity when fully open. The low operating torque reduces the actuator size, resulting in a compact control solution. Cryogenic and high-temperature versions available, also suitable for on/off service.

Pressures up to: PN 420/Class 2500
Sizes up to: DN 2300/NPS 92



SEGMENTED BALL TYPE 3310

By combining high rangeability with precise control, the Type 3310 offers high flow rates in a compact design with both linear and equal percentage trims. It also has EN 1935/FDA seals and optional ISO 15848-approved packings.

Pressures up to: PN 40/Class 300
Sizes up to: DN 300/NPS 12



AXIAL FLOW TYPE 3599

Precise control and high flow capacities combined with a high rangeability in a compact design with balanced plug and stem guiding for smooth operation and a variety of cage designs to handle critical applications.

Pressures up to: PN 40/Class 2500
Sizes up to: DN 1200/NPS 48



ROTARY PLUG

Double-eccentric rotary plug valves are perfectly suited for applications where high volume flow vs size ratio or a high rangeability are decisive factors. Extremely low sensitivity to dirt and particles in severe service applications.

Pressures up to: PN 420/Class 2500
Sizes up to: DN 600/NPS 24

ON/OFF VALVES

SAMSON produces a wide range of on/off valves for applications to complement the throttling valve range.



GLOBE TYPE 3351

Functionality of a globe valve, but for on/off service requiring Class VI shut-off. Complete with self-adjusting stem packing and actuator. EN 1935/ FDA seals available on request.

Pressures up to: PN 40/Class 300
Sizes up to: DN 100/NPS 4



BALL TYPE 26d

Full bore design available in both DIN and ANSI face-to-face dimensions. Corrosion-resistant version with live-loaded stem packing available.

Pressures up to: PN 40/Class 300
Sizes up to: DN 150/NPS 6



BUTTERFLY TYPE 14b

Double-eccentric design for general service applications with low- and high-temperature versions available. Lugged design with anti-blowout stem for safety.

Pressures up to: PN 40/Class 300
Sizes up to: DN 800/NPS 32



DIAPHRAGM TYPE KMA 905

Cavity-free diaphragm valve with rising handwheel and optical safety indicator, sealed bonnet with internal travel stop and locking device. CDSA sealing concept eliminates product entrapment to improve cleanliness and drainability.

Pressures up to: 10 bar/150 psi
Sizes up to: DN 50/NPS 2



SEVERE SERVICE RINGO

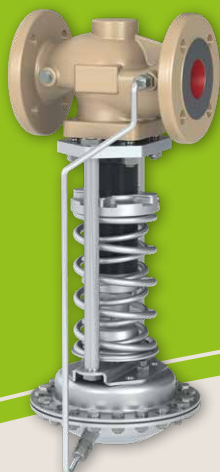
Wide range of pressure and design standards with fully welded, top-entry and trunnion-mounted design. API 6A compatible with a range of seat options to meet application-specific requirements.

Pressures up to: Class 2500
Sizes up to: NPS 56

SELF-OPERATED REGULATORS

SAMSON self-operated regulators for liquids, gases and vapors use the process medium to function. No auxiliary energy is required.

SAMSON offers self-operated regulators for pressure, temperature, differential pressure and flow as well as combined regulators.



PRESSURE TYPE 41-23

The valve closes when the downstream pressure increases. Wide set point range with easy adjustment and low-noise plug as standard. Optional control line directly from valve cavity. Also available as excess pressure valve (opens when the upstream pressure increases).

Pressure up to: PN 40/Class 300
Sizes up to: DN 100/NPS 4

TEMPERATURE TYPE 4/2231

Low maintenance requiring no auxiliary energy with a wide set point range and easy adjustment. Suitable for liquids, gases and vapors, especially for heat transfer media, such as water, oil and steam.

Pressures up to: PN 40/Class 300
Sizes up to: DN 150/NPS 6



FLOW TYPE 42-36 E

Designed to control the flow rate in the pipeline with an adjustable set point at the restriction. Can be installed in either the flow or return pipe, giving high control authority. Screw connection as an option.

Pressures up to: PN 40/Class 300
Sizes up to: DN 250/NPS 10



DIFFERENTIAL PRESSURE TYPE 42-24

Low-noise, medium-controlled proportional regulator requiring little maintenance. Suitable for circuit water, water/glycol mixtures, steam, air, other liquids, non-flammable gases and vapors. Wide set point range.

Pressures up to: PN 40/Class 300
Sizes up to: DN 250/NPS 10



PRESSURE TYPE 2371

Designed especially for pressure reducing applications in the food, beverage and pharmaceutical industries. EC 1935/2004/FDA/USP VI compliant materials. Self-draining design with no dead cavities. Also available as excess pressure valves.

Pressures up to: 10 bar/150 psi
Sizes up to: DN 50/NPS 2

PTFE/PFA-LINED VALVES

SAMSON specializes in tailoring lined valves to meet the strictest requirements and offers solutions across the entire valve size range: lined ball and globe valves in small and medium sizes as well as lined butterfly valves in medium and large sizes.



GLOBE TYPE 1a/b

Fully lined for corrosive applications with exchangeable PTFE seat and plug. Stem sealing with PTFE bellows and monitoring port to detect primary stem leakage.

Pressures up to: PN 16/Class 150

Sizes up to: DN 200/NPS 8



MICRO FLOW TYPE 6a

Globe valve for very low flow rates, fully lined for corrosive applications with PTFE bellows seals as standard, special material trims available.

Pressures up to: PN 10

Sizes up to: DN 15
(female thread)



BUTTERFLY TYPE 10a

Optimal solution for aggressive and corrosive media with all wetted parts being PTFE coated. Double-eccentric design to reduce seat wear. Disk can be removed with the shaft for maintenance purposes.

Pressures up to: PN 16/Class 150

Sizes up to: DN 800/NPS 32



DIAPHRAGM TYPE KMA 495

Thanks to a PFA lining for smooth internal surfaces, particles cannot adhere easily. Ideal solution for corrosive gases, liquids, fine chemicals and seawater applications.

Pressures up to: 10 bar/150 psi

Sizes up to: DN 50/NPS 2



BALL TYPE 20a

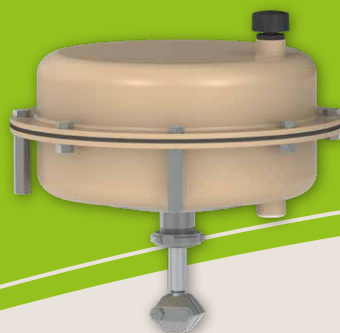
For on/off applications in extremely corrosive media. Two-piece design for easy maintenance with exchangeable PTFE seat rings. Compact design.

Pressures up to: PN 16/Class 150

Sizes up to: DN 200/NPS 8

ACTUATORS

SAMSON offers pneumatic, electric, electropneumatic and hydraulic actuators for linear and rotary high- and low-pressure valves in all sizes for all applications, including specialty applications, such as cryogenic, food and beverage, severe service.



PNEUMATIC LINEAR TYPES 3277, 3271

Rolling diaphragm design with integral attachment of valve accessories. Suitable up to 250 mm linear travel with handwheel and travel stop options.



ELECTRIC LINEAR TYPE 3374

Designed for use in HVAC applications, district heating and cooling networks as well as processing plants. Can be configured to perform specific control tasks. Versions with communication interface are suitable for connection to the SAM DISTRICT ENERGY web portal or a process control system.



PNEUMATIC HYGIENIC TYPE 3379

Piston design, linear fail-safe actuator directly integrated with hygienic and aseptic valve bonnets. 3A certified. Suitable for caustic wash-down, optionally with integrated Type 3724 Positioner (4 to 20 mA).



PNEUMATIC DIAPHRAGM ROTARY · R

With a linear travel of 200 mm, this pneumatic diaphragm actuator provides a highly accurate angle of rotation combined with virtually no friction to achieve an incredible hysteresis-free control performance. Available with a maximum torque of 1000 Nm and supply pressure up to 6 bar.



PNEUMATIC ROTARY TYPE 31a

Rack-and-pinion design with limit stops as standard and encapsulated springs for safe and easy maintenance.

VDI/VDE 3845 and VDI/VDE 3847 accessories attachment, available in a large range of sizes to economically match torque requirements.

POSITIONERS

With many years of control engineering experience, SAMSON manufactures pneumatic, electropneumatic and smart positioners for all linear and rotary actuator applications, complying with international standards and communication protocols.



STANDARD TROVIS 3730

Smart with non-contact travel sensing, optional limit contacts and feedback transmission. Auto-calibration and auto-tune with LCD and connection to the free TROVIS-VIEW software. Available with HART® communication protocol. Stainless steel and hazardous area versions available.

GENERAL PURPOSE TYPE 3725

Electropneumatic, compact design suitable for linear and rotary actuators. Three touch-sensitive keys and LCD provide intuitive operation with auto-calibration function. Protected non-contact sensor for precise control, UV-resistant housing and attachment options. Hazardous area version available.

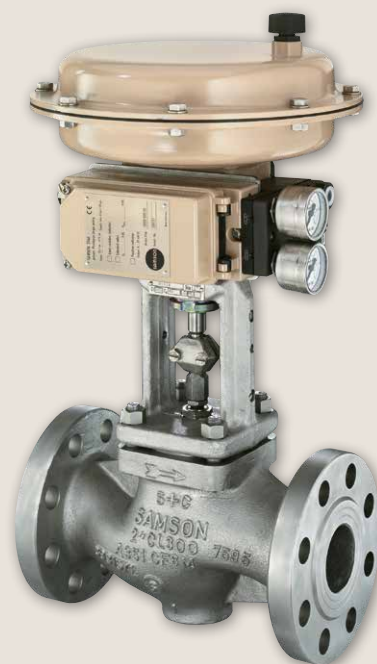


HIGH CAPACITY TROVIS 3793

Smart positioner with high air capacity for larger linear or rotary actuators requiring no additional accessories. Auto-calibration and auto-tune with LCD and connection to the free TROVIS-VIEW software. Suitable for single- and double-acting actuators with hazardous area version.

EXPLOSION PROOF TYPE 3731

Ex d electropneumatic, compact design suitable for linear and rotary actuators. Auto-calibration and auto-tune with LCD and connection to the free TROVIS-VIEW software. Available with HART® and FOUNDATION™ fieldbus communication protocols.



PNEUMATIC TYPE 3766

Pneumatic positioner suitable for single-acting, pneumatic linear or rotary actuators. Suitable for hazardous environments or where no electric input signals are available.

VALVE ACCESSORIES

SAMSON manufactures a wide range of valve accessories for use on SAMSON and third-party control valves.



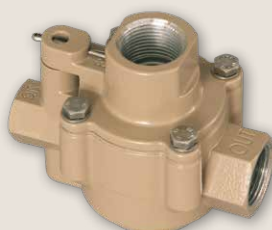
SOLENOID VALVE TYPE 3967

Suitable for linear or rotary actuators with a wide range of switching functions. Explosion-proof Type 3966 available.



SUPPLY PRESSURE REGULATOR TYPE 4708

Provides constant air supply independent of the upstream pressure with optional set point ranges. Suitable for direct or panel mounting.



QUICK EXHAUST VALVE TYPE 3711

Allows for quick venting/operation of actuators, available in both aluminum and stainless steel housings with integrated restriction to adjust the venting speed.



SIGNAL CONVERTER TYPE 6111

Converts a DC input signal into a pneumatic output signal. Suitable as intermediate element between electric control devices and pneumatic control valves.



LOCK-UP VALVE TYPE 3709

Used to shut off the signal pressure when the air supply falls below an adjusted limit or fails completely. Causes the actuator to fail in place.



VOLUME BOOSTER TYPE 3755

Designed to increase the positioning speed of actuators for installation between the positioner and actuator.



SIGNAL CONVERTER TYPE 6116

Based on the Type 6111, this i/p converter proportionally converts the electric input signal into a pneumatic output signal but within a certified explosion-proof housing.

DIGITAL SOLUTIONS

SAMSON is taking on the challenges of digitalization. We are working to become the first choice for smart valves and flexible production processes. SAM stands for SAMSON ASSET MANAGEMENT.



ELECTRONIC NAMEPLATE: DATAMATRIX CODE

The DataMatrix code on SAMSON control valves provides a unique valve identifier that links to the valve build specified on the SAMSON website.



FOCUS-1

The FOCUS-1 Process Node by FOCUS-ON is the first fully integrated multi-parameter flow control and measurement device in the process industry. Thanks to innovative integration of the ultrasonic transducers into its control valve body, it can accurately measure the volumetric flow of liquids.



SAM GUARD®

The SAM GUARD® predictive analytics solution for the process industry quickly and accurately identifies equipment failures and suspicious operating modes days to weeks before an actual failure occurs. It provides an average of five early, accurate and actionable alerts a day.



SAM VALVE MANAGEMENT

SAM VALVE MANAGEMENT is a web-based solution for the smart monitoring and management of control valves installed in process plants. It provides a complete overview of all connected control valves fitted with smart SAMSON positioners.



HART
COMMUNICATION PROTOCOL

FOUNDATION

PROFI
NET

PROFI
BUS

ethernet-**apl**
advanced physical layer

DIGITAL POSITIONERS

Smart instruments, including communication-enabled positioners in combination with SAM VALVE MANAGEMENT allow for efficient asset management and predictive maintenance of the entire control valve.



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PRODUCT PORTFOLIO

SAMSON Product Highlights for the Process Industry

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