

Compact Air Actuated Ball Valves

3-Piece Stainless Steel, Full Port 1/4" to 1/2 NPT series **5231**

Features

- Full Port direct mount ISO5211 valve
- 316 stainless steel body, ball and stem
- Swing- out center section
- RTFE (reinforced Teflon) ball seats
- Triple RTFE/Viton live loaded stem seals, adjustable
- Valve Anti-static device
- Silicone free valve
- Valves tested per API598
- Compact double acting actuators
- Actuator designed for minimum 1 million cycles
- Quarter turn rack and pinion design
- Highly visible valve position indicator
- Actuator factory lubricated for normal lifetime

Applications

On-off control of water, air, oil and other media compatible with the materials of construction. Cycle times approx. 1 second per 90° rotation. Suitable for steam service up to 50 PSI with optional high temperature mounting bracket. Valves can be mounted in any orientation. Suitable for vacuum service to 29"Hg.

Operation

Double acting actuators use air pressure to open and air pressure to close the ball valve (4-way pilot). Spring return actuators use air pressure to open and springs to close the valve (3-way pilot). Actuator will work with filtered dry or lubricated compressed air. Air supply pilot pressure should be between 80 and 120 PSI. An easy to read visual valve position indicator is located on top of actuator.

Construction

Valve Body	316 stainless steel ASTM A351 CF8M			
Ball/Stem	316 stainless steel			
Ball Seats	RTFE (reinforced Teflon)			
Stem Seals	RTFE, Viton			
Anti-static Device	Ball to Stem			
Actuator Seals	NBR (Buna-N)			
Actuator Body	Anodized aluminium, epoxy-polyester coated end covers			
Position Indicator	Glass filled Polyamide			
Fasteners	Stainless Steel			

Doc: 5231.10/21



Description

Compact heavy duty quarter turn air actuators designed for long life and tested for a minimum 1 million operations. Investment cast 3-piece full port stainless steel body/ball for unrestricted flow and minimum pressure loss. Adjustable live loaded stem seal packing helps compensate for wear, pressure or temperature fluctuations, extending the cycle life of the valve. Blow-out proof stem. Standard Namur mounting pads for optional solenoid pilot valves.

Approvals– Actuators

- CE Declaration of conformity
- SO5211/ DIN3337 valve mounting

• ATEX-94-9-CEE standard for explosive environment II 2GD c Tmax = 95°C

Standards- Valves

• API598

Optional Accessories

DMS: Direct Mount Solenoid - pilot to electrically operate the ball valve SVC: Solenoid Valve Cable - provide electrical power via pre-wired cable



series 5231

Specifications (English units)



Working Pressure: 150 PSI (10 Bar), Vacuum to 29inHg

Air Pilot Pressure Required: 80-120 PSI (5.5-8.3 Bar)

Ball Valve Temperature Rating: -4 to 356° F (-20 to 180° C)

Actuator Temperature Rating: -4 to $+180^{\circ}$ F (-20 to 82° C)



Specifications (English units)

Stock Number	Pipe Size (NPT)	Orifice Size (inch)	Cv Flow Factor	Pressure Max. (PSI)*	Cycle Time /90° (seconds)	Pilot Air Port (NPT)
523102A	1/4	0.5	8.0	150	1	1/8
523103A	3/8	0.5	10.0	150	1	1/8
523104A	1/2	0.6	15.0	150	1	1/8

 $C\nu$ is the GPM of water at 60° F that will pass through the value with 1 PSI pressure drop

Specifications (Metric units)

Stock Number	Pipe Size (NPT)	Orifice Size (mm)	Kv Flow Factor	Pressure Max.(Bar)*	Cycle Time/90° (seconds)	Pilot Air Port (NPT)
523102A	1/4	11.5	7.0	10	1	1/8
523103A	3/8	12.5	8.6	10	1	1/8
523104A	1/2	15.0	13.0	10	1	1/8



series **5231**

Dimensions: Double Acting



Valworx.

series **5231**

Dimensions: Double Acting with Solenoid Valve





*1/2" valve depicted

Stock Number	Pipe Size (NPT)		Μ	N
523102A	114	inch	6.3	3.3
	1/4	mm	159.0	85.0
523103A	3/8	inch	6.3	3.3
		mm	159.0	85.0
523104A	1/2	inch	6.3	3.3
		mm	159.0	85.0