

Features

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

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.

Pressure-Temperature*

Working Pressure: 150 PSI (69 Bar), Vacuum to 29inHg

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

Working Temperature: 0 to 180° F (-18 to 82° C)
Media temperatures up to 300° F (149° C)
with optional high temp. mounting bracket

Ball Valve Temperature Rating: 0 to 356° F (-18 to 180° C)

Actuator Temperature Rating: 0 to +180° F (-18 to 82° C)

*See P/T chart

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



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.

Description

Compact heavy duty quarter turn air actuators designed for long life and tested for a minimum 1 million operations. Investment cast 2-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 accessory confirmation switches, pilot valves and valve positioners

Optional Accessories

- DMS: Direct Mount Solenoid
- pilot to electrically operate the ball valve
- VPS: Valve Position Switches
- limit switches to confirm valve position
- PVP: Pneumatic Valve Positioner
- position the ball with 4-20mA or 0-10v
- HTB: High Temperature Bracket
- increases media working temperature

Specifications (English units)

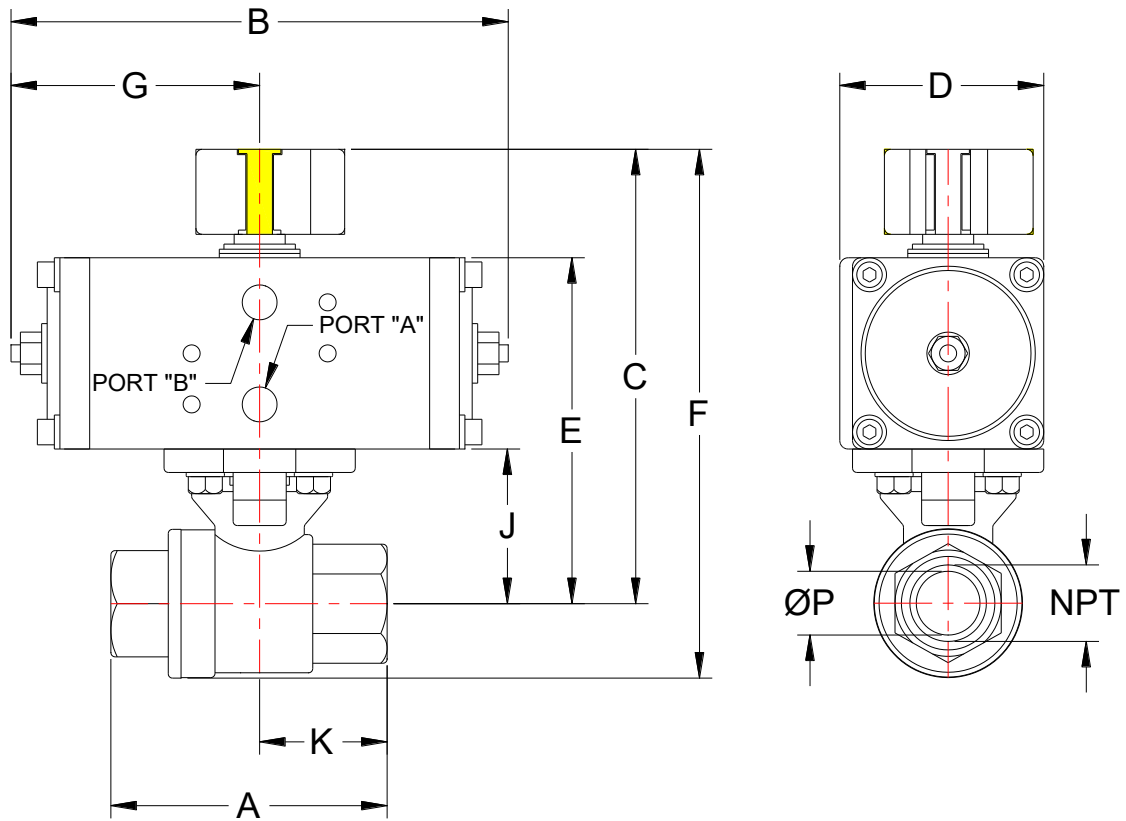
Stock Number	Pipe Size (NPT)	Orifice Size (inch)	Cv Flow Factor	Pressure Max. (PSI)*	Cycle Time /90° (seconds)	Pilot Air Port (NPT)
523402A	1/4	0.45	8	150	1	1/8
523403A	3/8	0.49	10	150	1	1/8
523404A	1/2	0.59	15	150	1	1/8

Cv is the GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

Specifications (Metric units)

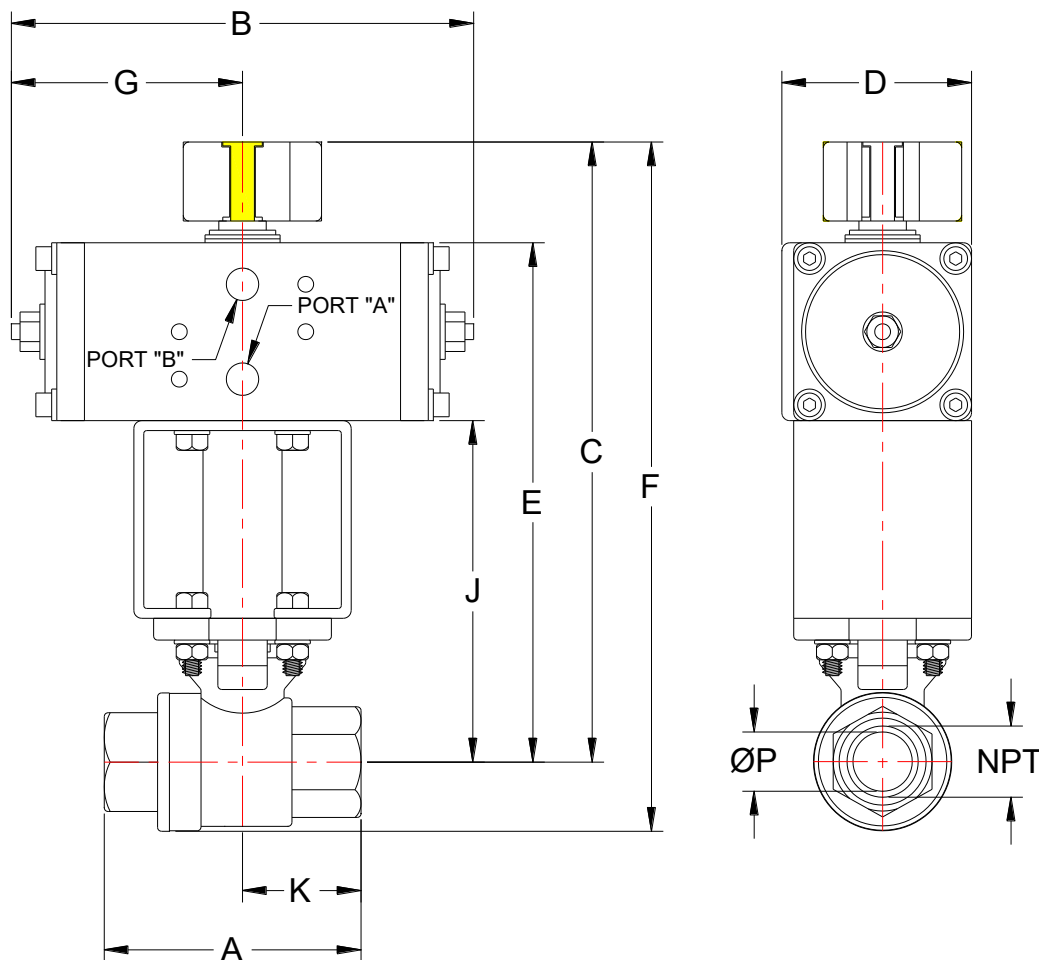
Stock Number	Pipe Size (NPT)	Orifice Size (mm)	Kv Flow Factor	Pressure Max.(Bar)*	Cycle Time/90° (seconds)	Pilot Air Port (NPT)
523502A	1/4	11.5	7	69	1	1/8
523503A	3/8	12.5	8.6	69	1	1/8
523504A	1/2	15	13	69	1	1/8

Dimensions: Double Acting



Pipe Size (NPT)		A	B	C	D	E	F	G	J	K	P	A & B Ports (NPT)	Weight
1/4	inch	2.57	4.61	4.02	1.89	3.23	4.69	2.30	1.46	1.22	0.45	1/8	2.05 lb
	mm	65.3	117	102	48	82	119	58.5	37	31	11.5	-	0.93 kg
3/8	inch	2.57	4.61	4.02	1.89	3.23	4.69	2.30	1.46	1.22	0.49	1/8	2.00 lb
	mm	65.3	117	102	48	82	119	58.5	37	31	12.5	-	0.91 kg
1/2	inch	2.57	4.61	4.02	1.89	3.23	4.69	2.30	1.46	1.22	0.59	1/8	1.95 lb
	mm	65.3	117	102	48	82	119	58.5	37	31	15	-	0.88 kg

Dimensions: Double Acting with High Temp. Mounting Bracket



Pipe Size (NPT)		A	B	C	D	E	F	G	J	K	P	A & B Ports (NPT)	Weight
1/4	inch	2.57	4.61	5.98	1.89	5.20	6.65	2.30	3.43	1.22	0.45	1/8	2.75 lb
	mm	65.3	117	152	48.0	132	169	58.5	87.0	31	11.5	-	1.25 kg
3/8	inch	2.57	4.61	5.98	1.89	5.20	6.65	2.30	3.43	1.22	0.49	1/8	2.70 lb
	mm	65.3	117	152	48.0	132	169	58.5	87.0	31	12.5	-	1.22 kg
1/2	inch	2.57	4.61	5.98	1.89	5.20	6.65	2.30	3.43	1.22	0.59	1/8	2.65 lb
	mm	65.3	117	152	48.0	132	169	58.5	87.0	31	15	-	1.20 kg