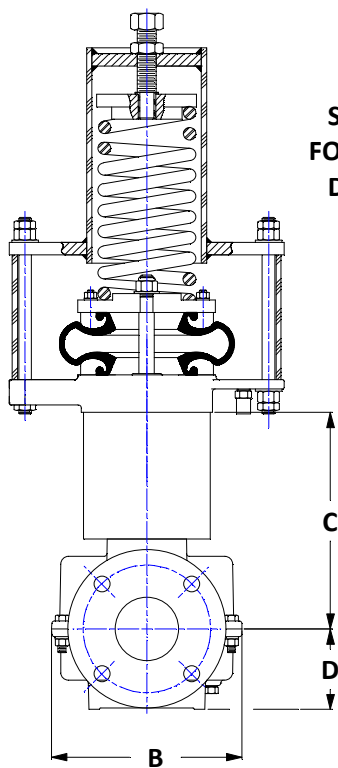


Pre-Pinched, Single Pinch, Enclosed Construction, Pneumatically Operated

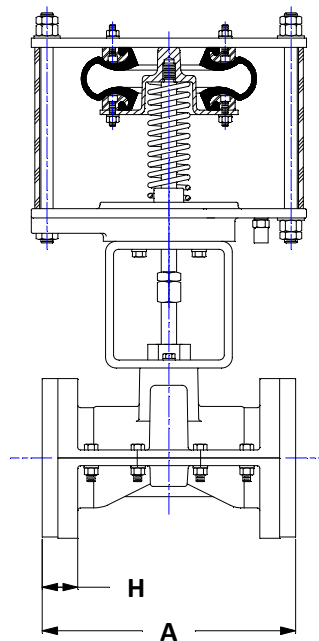
- Low pressure drop
- No packing
- Drop tight closure
- On/Off or throttling service
- Linear throttling characteristic
- Fail Open or Fail Closed pneumatic actuators
- Long lasting compression molded sleeve

Applications: Ideal for automatic control of abrasive, viscous, and corrosive fluids including wastewater, mine slurry, chemicals, cement, pulp, powder and pellets.

Operation: A pre-pinched pneumatically operated valve with the maintenance free Onyx Actuator. The actuator uses a spring for reliable fail-open (PFO) or fail-closed (PFC) operation in a range of sizes. It does not require lubricated air.



SEE PAGE 12
FOR ACTUATOR
DIMENSIONS



Specifications:

- Flanges: ANSI STD. 125/150 lbs
- Housing: Cast iron, ASTM A48, Class 35
- Stem: 303 stainless steel
- Yoke: Carbon steel
- Actuator: Cast iron/PVC

Options:

- Epoxy paint
- Sleeve elastomer
- 316 stainless steel stem
- ANSI STD 300 lbs. Flange
- Secondary containment package
- Auxiliary hand wheel
- Positioners
- Solenoid valves
- Limit switches

All dimensions are in inches.

SIZE	4	6	8	10	12	14	16	18	20	24
A	9.00	17.75	21.37	26.50	29.00	28.00	32.00	36.00	40.00	48.00
B	13.50	20.12	22.75	26.25	32.00	34.37	34.37	43.75	50.50	60.50
C	15.56	17.68	21.43	22.50	26.68	27.68	33.12	34.12	42.65	45.25
D	4.62	5.75	7.00	8.25	9.75	13.68	16.12	17.12	19.65	22.25
H	1.31	1.87	1.62	1.81	2.25	2.75	3.37	3.37	3.50	3.50
P Max	150 psi			100 psi						
Wt, lb	90	150	350	550	800	1,000	1,700	2,000	3,000	4,300

PNEUMATIC ACTUATORS

Pneumatic Fail Open and Fail Closed Actuators

- No Lubrication Required
- No piston Rings to Replace, Ever.
- No Wiper Rings
- Fail Safe Spring Return Operation
- Low Friction
- Zero Leakage
- Low Air Consumption
- On / Off or Modulating Service
- Rugged Cast Iron Base
- 303 Stainless Steel Stem
- PVC Cover Tube

These actuators provide outstanding performance in harsh environments. They are available in seven different sizes to match valve thrust and stroke requirements.

Construction: The heart of the Onyx actuator is a Firestone Air-Stroke® rubber suspension bag and spring. These air bags are typically used as suspension elements in trucks and buses, with a track record of years of dependable service under adverse conditions. Combining an air bag actuator with a spring provides simple, rugged, dependable actuation.

DURABLE FOR LONG LIFE

Airstroke actuators are a further application of Firestone's time proven Airide springs for truck and bus suspensions. Long life and durability proven in millions of miles of heavy-duty suspension use under adverse environmental conditions.

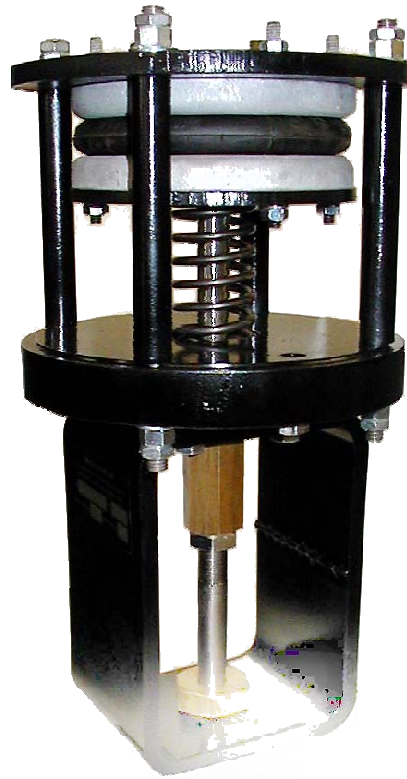
NO MAINTENANCE OR LUBRICATION REQUIRED

NO PISTON

Airstroke actuators have no piston or sliding seals. This allows for the design of Airstroke actuators into applications where dirt or grit would destroy the seals on conventional cylinders.

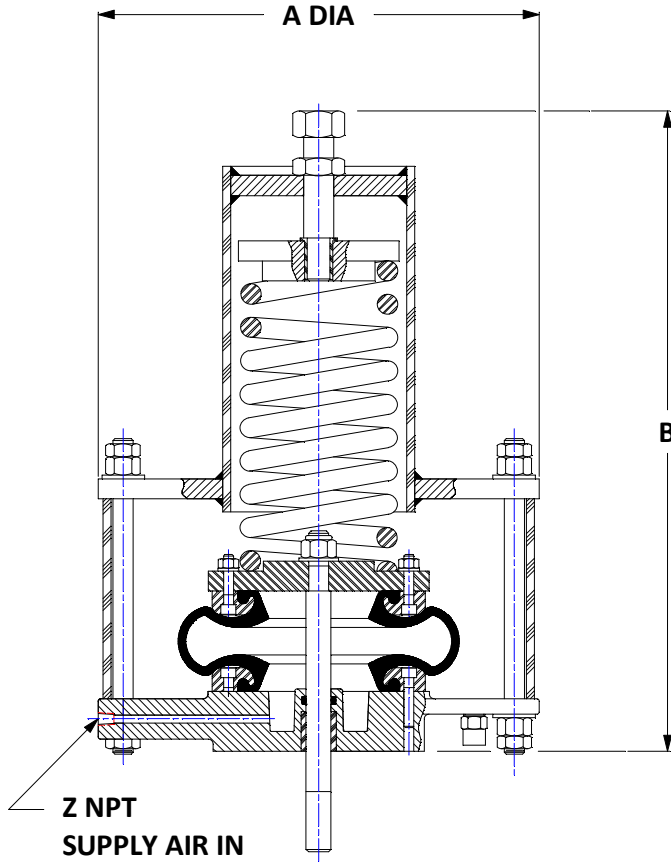
FRICTION FREE FOR IMMEDIATE RESPONSE

Since Airstroke actuators have no sliding seals, there is no breakaway friction as with conventional cylinders, making them ideally suited for operation with modulating positioners.

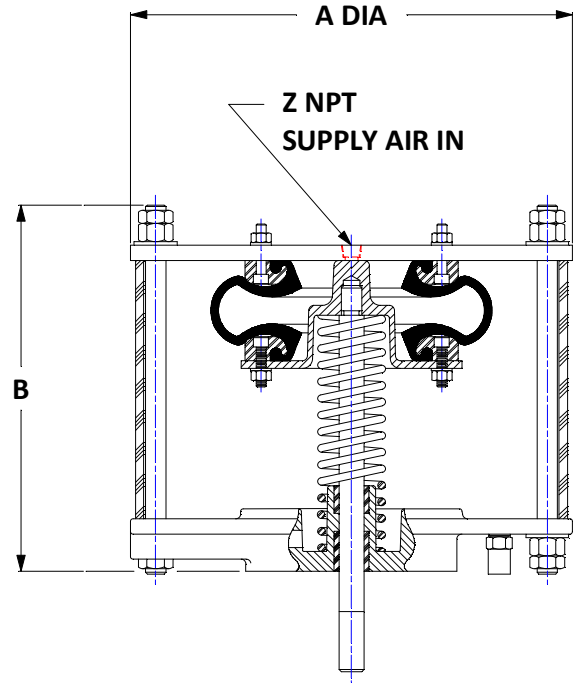


PFO & PFC ACTUATORS

ACTUATOR WEIGHTS AND DIMENSIONS
(All dimensions are in inches and weights are in lbs.)



PFC ACTUATOR



PFO ACTUATOR

SIZE	8	12	21	30	36	40	70	80	120	200
A DIA	7.50	11.00	11.18	13.56	14.74	19.06	16.37	19.75	23.68	31.75
B (PFC)	10.37	22.12	27.37	34.62	37.12	62.37	50.12	52.62	59.50	N/A
B (PFO)	7.15	9.12	11.00	13.00	16.25		18.50	18.50	24.50	34.93
Z NPT	1/4				3/8		1/2			
WEIGHT (PFC)	25	45	70	156	226	300	355	385	450	N/A
WEIGHT (PFO)	20	40	46	75	119	130	140	145	200	880