

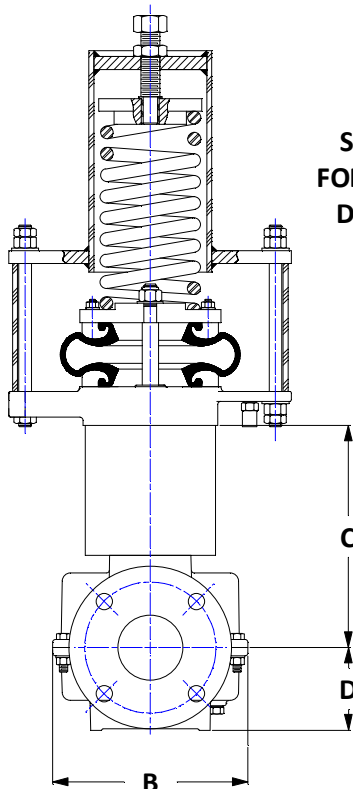
# Series CAR

## Full Round, Single Pinch, Enclosed Construction, Pneumatically Operated

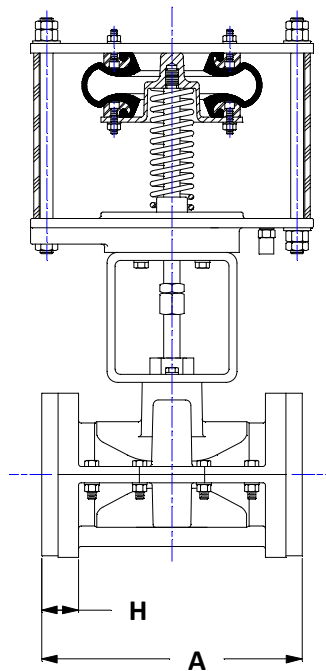
- Clog resistant full round opening.
- Low pressure drop
- No packing
- Drop tight closure
- On/Off or throttling service
- Fail Open or Fail Closed pneumatic actuators
- Long lasting compression molded sleeve

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

**Operation:** A full round 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	1/2	3/4	1	1-1/2	2	2-1/2	3	4
A	4.25	5.50	5.50	6.50	7.00	7.50	12.00	13.87
B	3.75	3.87	4.75	5.25	6.25	9.25	9.00	13.50
C	4.93	5.06	9.34	9.62	10.00	14.00	14.25	15.56
D	1.93	2.00	2.18	2.56	3.06	3.56	3.81	4.62
H	0.69	0.75	0.84	0.97	1.12	1.25	1.69	1.68
P Max	200 psi					175 psi		
Wt, lb	10	12	15	21	27	35	47	110

# PNEUMATIC ACTUATORS

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## 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.

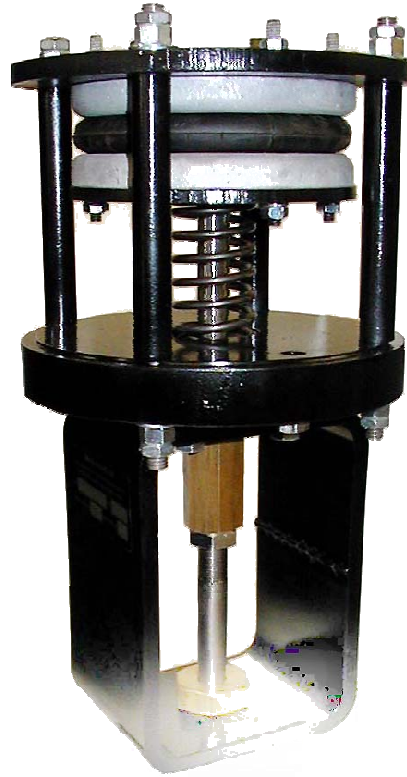
### NO MAINTENANCE OR LUBRICATION REQUIRED

### 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.

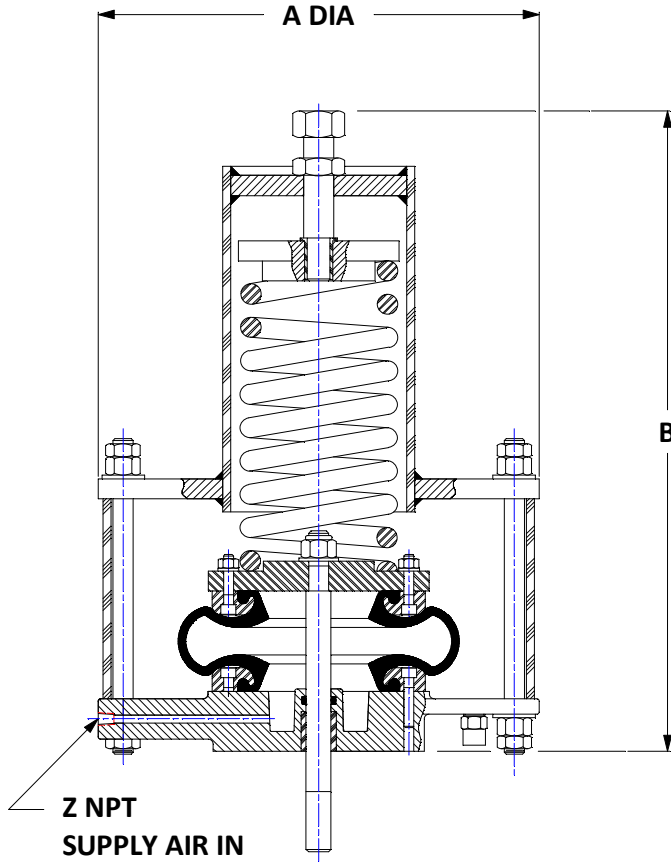
### FRICTION FREE FOR IMMEDIATE RESPONSE

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.

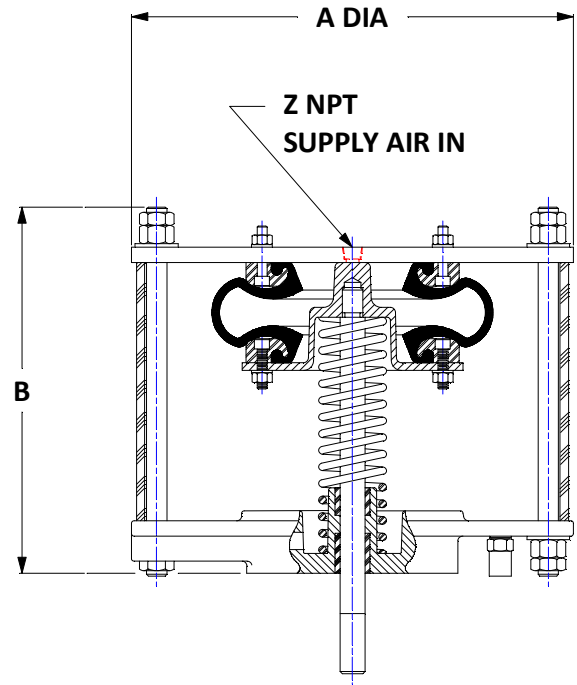


# PFO & PFC ACTUATORS

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