### 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.



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

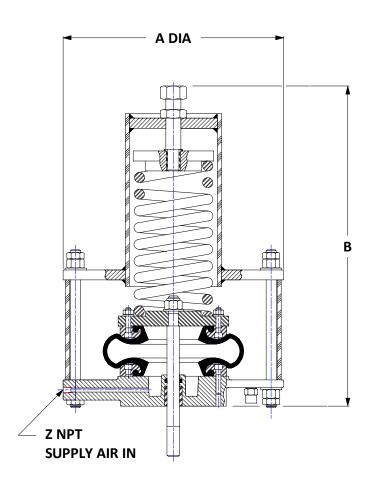
Since Airstroke actuators have no sliding seals, there is no breakaway friction as with conventional cylinders, making them ideally suited for operation with modulating positioners.

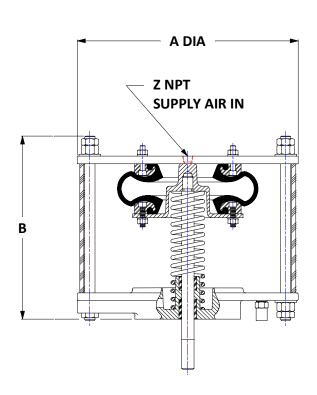




# **PFO & PFC ACTUATORS**

## 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