



## MIL 37-38 - Pneumatic Spring Diaphragm Actuators with optional hand wheels

Sizes: 11", 13", 15", 18" & 24"

Travel:  $\leq 4$ "

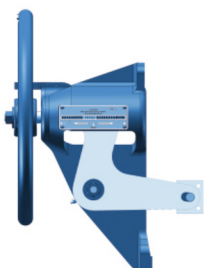
Supply Pressure: 20 to 65 psig



### Application

- Designed and used for smooth controls and stability
- Best suited where stroke is in between 0.125 inch and 4 inch
- Suitable for flow-to-open and flow-to-close type valves with moderate thrust requirements
- Designed for operating medium as plant air, sweet natural gas and any such non-corrosive fluids as per plant availability
- For use in control valves for critical applications like Boiler Feed water control, BFP Min. Recirculation, PRDS Spray control and on-off valves with less stroking time requirements

More information:  
[www.ksb-mil.com](http://www.ksb-mil.com)



6A Handwheel



7A Handwheel



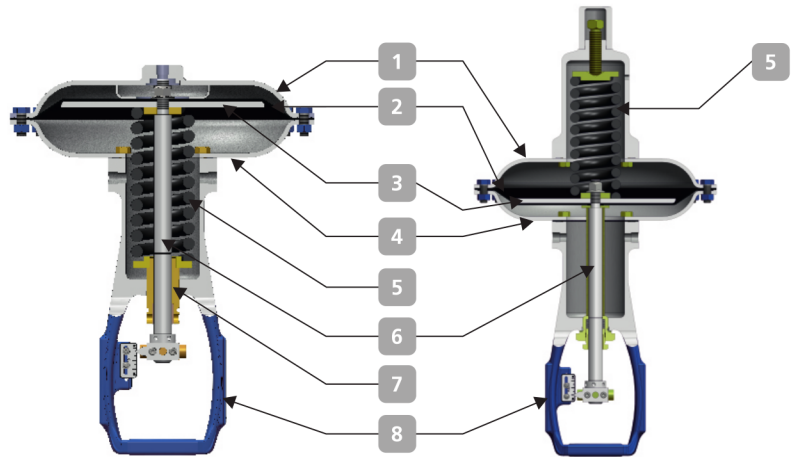
8A Handwheel

# MIL 37-38 - Pneumatic Spring Diaphragm Actuators with optional hand wheels



CONTROLS SUPPLY CHAIN  
VALVES ACTUATORS INSTRUMENTATIONS

- 1 Heavy one-piece yoke
- 2 Moulded elastomer diaphragm with fabric insert for long life and high sensitivity
- 3 Moulded Diaphragm and deep pressed steel Diaphragm cases minimise area change and produce linear relation between travel and air pressure
- 4 Optional top / side mounted handwheels for valve operation in emergency



Type 37 Actuator  
Direct: Air to Close

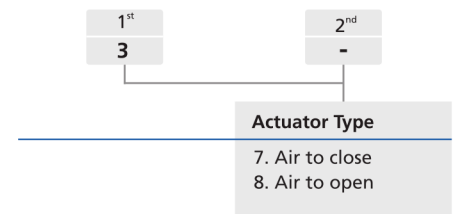
Type 38 Actuator  
Reverse: Air to Open

- 1 Diaphragm case (upper)
- 2 Diaphragm
- 3 Diaphragm plate
- 4 Diaphragm case (lower)
- 5 Actuator spring
- 6 Actuator stem
- 7 Spring adjuster
- 8 Yoke

## Standard Sizes / Spring / Supply

Size	Stroke (in)	Max Air Supply (psig)	Air to Close (37)		Air to Open (38)	
			Thrust (lbs)	Supply (psig)	Thrust (lbs)	Spring (psig)
11	0.5	60	1810	45	1300	16-30
	0.75	60	1740	45	1220	15-35
	1	60	1700	45	490	6-30
13	0.75	60	2500	45	2190	19-31
	1	60	2450	45	1840	16-31
	1.5	60	2360	45	1610	14-33
15	1.5	60	3400	45	1610	14-31
	2	60	3350	45	2110	12-35
	1.5	60	4830	45	7770	35-60
18 & 18L*	2	60	4650	45	6216	28-52
	2.5	60	4650	45	5550	25-55
	3	60	4650	45	3774	17-35
	3.5	60	4650	45	4000	18-46
	4	60	4650	45	2440	11-35
18H & 18HL*	1.5	60	5600	45	8160	30-48
	2	60	5580	45	7616	28-52
	2.5	60	5530	45	5550	25-55
	3	60	5425	45	4624	17-35
	3.5	60	5300	45	4000	18-46
24	4	60	5000	45	2440	11-35
	2.5	55	7580	45	11040	30-50
	3	55	6500	45	9200	25-50
	3.5	55	6500	45	8096	22-50
	4	55	5850	45	6624	18-50

## Model Decodification



\* 18L and 18HL actuators are applicable only for Air to close(37) type.

For ATC (37) actuators thrust values indicated is considering 3-15 psig spring range. For ATO (38) actuators thrust values indicated corresponds to the typical spring range listed above.

Thrust values will vary with other spring range / supply pressures which may be selected based on the valve design