





### **Phase LC Actuator**

Phase Linear Compact Actuator (LCA) designed to meet industrial demands for efficient, high integrity, diaphragm valve actuation with the benefits of a lightweight compact and cost-effective construction.

The Phase LCA actuator range is designed for use with Weir type diaphragm valves in sizes from 8mm to 50mm.

They are suitable for use on all rubber and PTFE grades of diaphragm and gives reliable 100% leak tight shutoff.

Phase LCA is designed to simply swap out a manual bonnet assembly to convert existing manual valves to automated or can be ordered as part of a whole new valve assembly. Installation can be carried out in-line or within a workshop.

#### **Features and Benefits**

- · Compatible with both Saunders and Phase Diaphragm valves.
- Three operation modes; Double Acting, Spring Open, Spring Closed.
- Various spring pack options to suit individual line pressure requirements.
- Operating air supply rated to maximum 8 BarG 116psi.
  Normal operating pressure 6BarG 87psi.
- Available in sizes DN8 DN50.
- Temperature range of -10° C to +80° C.
- Tight shutoff to 10BarG line pressure (100% Δp rubber diaphragm).
- Durable materials of construction; Acetal enclosure with Stainless steel 316 componentry (316 enclosure option available).
- Compact design to minimise air consumption.
- Piston type pneumatic actuator for reliable 100% shutoff.
- Namur mount for direct solenoid connection to minimise assembly envelope.
- 1/8" BSPP ports for direct piping as standard (NPT option available on request).
- Interchangeable compressors to swap between button, screw or bayonet diaphragms without actuator strip down.
- Top mounting pad to secure ancillary attachments such as Phase LC Switchbox.
- Clear valve position indication.
- Autoclave 150° C max. using stainless steel option.

## **Modes of Operation**

#### **Spring Close**

This type of actuator requires a constant supply pressure to keep the valve in the open position. Loss of air supply, or designed withdrawal will cause the valve to shut off and remain so against maximum permissible line pressure.

## **Spring Open**

This type of actuator requires a constant supply pressure to keep the valve in the closed position. Loss of air supply, or designed withdrawal will cause the valve to open and remain so.

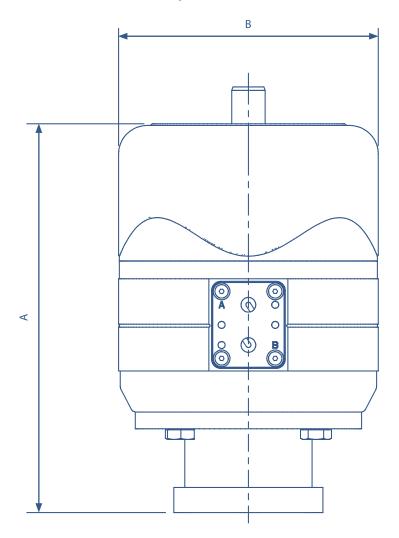
#### **Double Acting**

This type of actuator requires two air supply lines, one to open the valve, the other to close it. Loss of air supply, or designed withdrawal will cause the valve to drift open against line pressure.





# **Phase LC Actuator Specification:**



Materials of Construction						
Component	Material					
Actuator Body and Cover	Acetal Resin, Black					
Spindle	316 Stainless Steel					
Seals	Nitrile					
Spring	Chrome Alloy					
Namur Mount	316 Stainless Steel with Nitrile Gasket					
Spool	316 Stainless Steel					

Envelope Dimensions (mm)								
DN Valve Size	А	В						
8	120	60						
10	135	74						
15	135	74						
20	152	107						
25	152	107						
40	232	156						
50	232	156						

## **Actuator Coding**

z	Α	25	BN	LCA	sc	S	С	Α	N	В	R
Phase Product	Туре	Size	Bonnet	Bonnet type	Fail Action	Spool Material	Spool to Body Fixing	Head Material	Seal Material	Air Port	Diaphragm Fixing
		8mm		LC Actuator	SC = Spring Close	S = 316 St/St	C = Clear Holes	A = Acetal	N = Nitrile (Standard) -10°C to +80°C	B = BSPP	T=Threaded
		15mm			SO = Spring Open		M = Metric Thread	S = St/St	V = Viton -5°C to +80°C	N = NPT	B = Bayonet
		20mm			DA = Double Acting		I = Imperial Thread				P = Button Push Fit
		25mm									
		40mm									
		50mm									



