

# spirax sarco®

## PN2000 Series Spring Retract Pneumatic Actuators (for 'C' Series)

### Description

A range of single spring linear actuators having 5 diaphragm sizes for matching the requirements of different valves at various differential pressures. Each actuator is fitted with a combined mechanical stroke indicator and anti-rotation guard. The actuators are designed for easy conversion from spring retract to spring extend, and vice versa, without the need for special tools.

These actuators are designed to be used with 'C' series 2-port control valves.

### Available types

Spring retract spindle actuators:

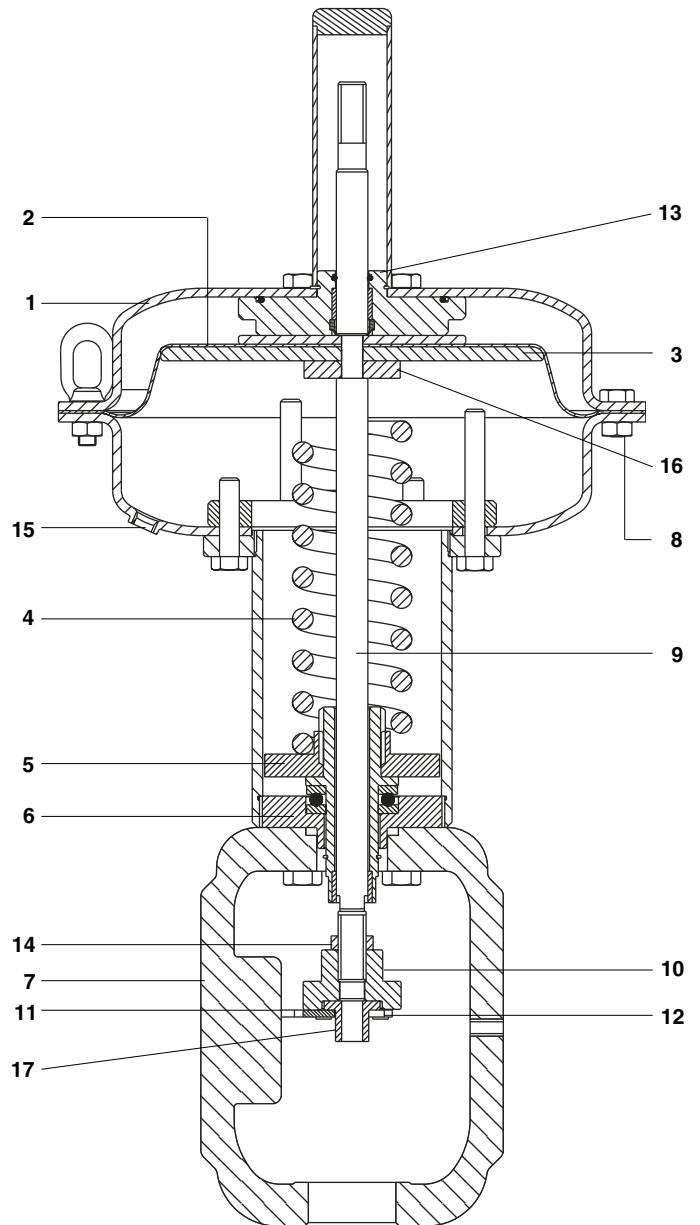
**PN2300, PN2400, PN2500, PN2600 and PN2700 series.**

### Technical data

Temperature range	-4°F to 230°F	(-20°C to +110°C)
Maximum operating pressure	44 psi	(3 bar)
Air supply connection	PN2300 to PN2600	1/4" NPT
	PN2700	1/2" NPT

### Materials

No. Part	Material
1 Diaphragm housing	Carbon steel
2 Diaphragm	Reinforced nitrile rubber
3 Diaphragm plate	Stainless steel
4 Spring	Spring steel
5 Spindle guide	Bronze
6 DU bearing	Hardened steel
7 Yoke	Cast steel
8 Housing securing nuts and bolts	Zinc plated steel
9 Spindle	Stainless steel
10 Connector	Zinc plated steel
11 Travel indicator	Stainless steel
12 Lock plate	Zinc plated steel
13 'O' ring	Nitrile rubber
14 Lock-nut	Zinc plated steel
15 Cap with vent hole	Nickel plated brass
16 Spring location washer	Zinc plated steel
17 Valve spindle adapter	Stainless steel



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**Dimensions/weights** (approximately) in inches (mm) and pounds (kg)

Actuator	Actuator diaphragm			Actuator yoke			Actuator spring holder		Weight
	A	B	C	Type A	Type B	Type C	Type 1	Type 2	
PN2300	11-1/4" (285)	4-5/16" (109)	6-7/8" (175)	9" (231)	9-3/4" (247)	11-3/4" (299)	6-9/16" (167)	8" (204)	51 (23)
PN2400	13-1/4" (336)	5-9/16" (142)	6-7/8" (175)	9" (231)	9-3/4" (247)	11-3/4" (299)	6-9/16" (167)	8" (204)	73 (33)
PN2500	16" (405)	7-1/16" (180)	6-7/8" (175)	9" (231)	9-3/4" (247)	11-3/4" (299)	6-9/16" (167)	8" (204)	121 (55)
PN2600	18-5/16" (465)	7-1/16" (180)	7-7/8" (200)	9" (231)	9-3/4" (247)	11-3/4" (299)	6-9/16" (167)	8" (204)	154 (70)
PN2700	Contact Sales at Spirax Sarco for further information.								

## Installation

Actuators should be mounted on the valve with the stem in a vertical position. Installation and Maintenance Instructions are supplied with the product.

## Spare parts

Information regarding available spare parts is shown in separate literature.

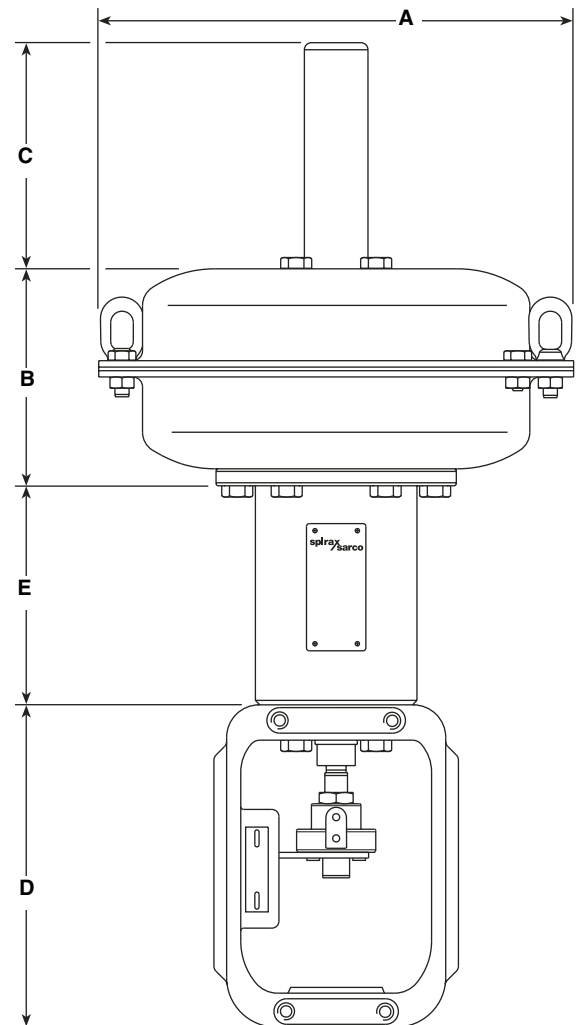
## PN2000 series actuator selection table

Actuators can be selected using the differential pressure charts shown in the relevant Technical Information sheet in conjunction with the following part codes:

<b>Actuation</b>	PN = Pneumatic	<input type="text" value="PN"/>
<b>Actuator action</b>	2 = Spring to retract	<input type="text" value="2"/>
<b>Diaphragm size</b>	3 4 5 6 7	<input type="text" value="5"/>
<b>Actuator travel</b>	2 = 3/4" (20 mm) 3 = 1-3/16" (30 mm) 4 = 1-1/2" (38 mm) 5 = 2" (50 mm) 7 = 3" (75 mm)	<input type="text" value="2"/>
<b>Spring range</b>	0 = 3 to 15 psi (0.2 to 1.0 bar)	<input type="text" value="0"/>
<b>Yoke type</b>	A = Type A for valve sizes: 1" to 2" (DN25 - 50) B = Type B for valve sizes: 2-1/2" to 4" (DN65 - 100) C = Type C for valve sizes: 5" to 8" (DN125 to 200)	<input type="text" value="A"/>
<b>Spring-holder size</b>	1 = Type 1 2 = Type 2	<input type="text" value="2"/>

<input type="text" value="PN"/>	<input type="text" value="2"/>	<input type="text" value="5"/>	<input type="text" value="2"/>	<input type="text" value="0"/>	<input type="text" value="A"/>	<input type="text" value="2"/>
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## How to order

**Example:** 1 off Spirax Sarco PN2520A2 actuator, set to 3-15 psi.