



## EP6 Electro-pneumatic Positioner



### Description

The EP6 Electro-pneumatic positioner can control any valve that is actuated by a linear or rotary pneumatic actuator that conforms with NAMUR. It guarantees an exact proportionality between the stroke of the valve and the value of the electrical input signal (mA) into the positioner.

The EP6 has a cast aluminium housing that is also treated for outdoor installation. The unit can be mounted onto pneumatic actuators either rotary 55-90° or linear 20 to 150 mm.

The positioner can be supplied without a mounting kit or with a kit for rotary or linear actuators, the type must be specified when ordering.

As standard the EP6 is equipped with a pressure gauge to indicate the air pressure command sent to the pneumatic actuator.

The positioner is supplied for a control signal in mA and for an air supply pressure up to 100 psi g.

The EP6 positioner can also be used to reverse the action of the control signal.

### Air supply

The EP6 positioner must be provided with a high quality air supply to ISO 8573-1:2010 Class 3:3:3

### Applications

The EP6 can be used with any actuator that conforms to NAMUR, this includes all of the following Spirax Sarco pneumatic actuators:

**BVA300 rotary**

**PN1600 series**

**PNS3000 and PNS4000 series**

**PN9000 series**

**TN2000 series**

### Materials

Part	Material	Finish
Case and cover	Die cast aluminium	Anti-corrosive paint to RAL9016
Mounting bracket	Steel	EP protected
Feedback pin	Stainless steel	
Feedback lever	Stainless steel	
Feedback pin locator	Stainless steel	
Screws	Stainless steel	

## Technical data

<b>Input signal range</b>	4-20 mA (split range minimum amplitude 8 mA)
<b>Impedance</b>	Max 250 +/- 15 $\Omega$
<b>Air supply</b>	20 to 100 psig (regulate 5 to 10 psi above actuator spring range)
<b>Air quality</b>	ISO 8573-1:2010 Class 3:3:3
<b>Output pressure</b>	0 to 100% supply pressure
<b>Actuator stroke</b>	20 mm to 150 mm or 55 ° to 90 °
<b>Action</b>	Single acting/fail vent/Double acting
<b>Operating temperature</b>	-4 °F to +158 °F
<b>Air flow</b>	2.83 SCFM @ 20 psig
<b>Steady state air consumption</b>	0.08 SCFM @ 20 psig
<b>Air connections</b>	¼" NPT female
<b>Sensitivity</b>	Single : +/- 0.2% F.S. (Full Scale)
	Double : +/- 0.5% F.S.
<b>Hysteresis</b>	+/- 1% F.S.
<b>Linearity</b>	Single +/- 1% F.S.
	Double +/- 2% F.S.
<b>Repeatability</b>	+/- 0.5% F.S.
<b>Electrical connections</b>	Cable gland M20 internal, terminals for conductors from 0.5 to 2.5 mm <sup>2</sup> wire
<b>Degree of protection</b>	IP66
<b>Characteristic</b>	Linear
	Linear 6.2 lbs (positioner only)
<b>Shipping weight</b>	Mounting Kits for Linear EY1 and EY2 - 2.6 lbs, UY1,2,3 - 2.0 lbs, UBC - 0.4 lbs
	Rotary 9 lbs (Positioner and mounting kit)

## Positioner options

<b>Basic model</b>	Aluminium enclosure	<b>EP6</b>
<b>Acting type</b>	Single acting	<b>S</b>
	Double acting	<b>D</b>
<b>Mounting type</b>	Linear - See page 4 for Mounting Kit selection	<b>L</b>
	Rotary - Mounting Kit included	<b>R</b>
<b>Hazardous area protection</b>	Safe area	<b>S</b>
<b>Electrical and Air connection</b>	M20 -¼" NPT	<b>1</b>
<b>Non standard features</b>	Standard model	<b>A</b>

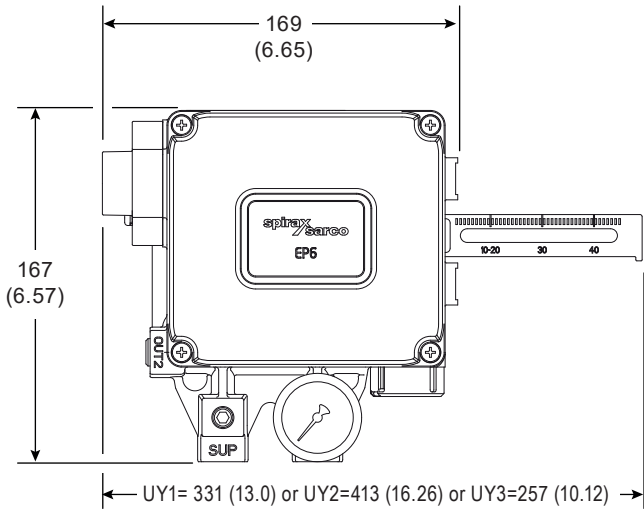
Ordering Code Example:



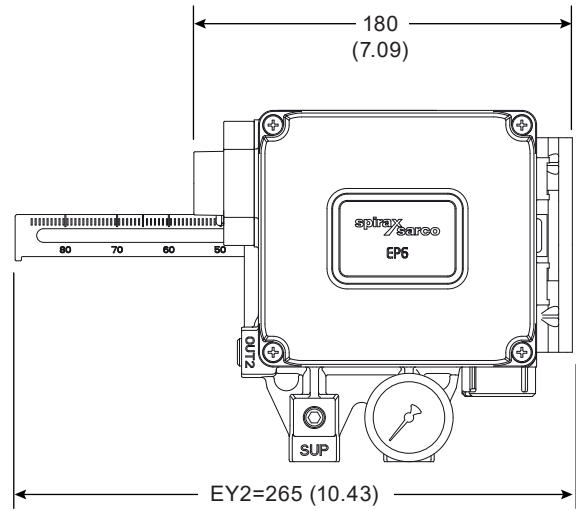
## Safety information, installation and maintenance

Full details are contained in the EP6 Electro-pneumatic positioner Installation and Maintenance Instructions.

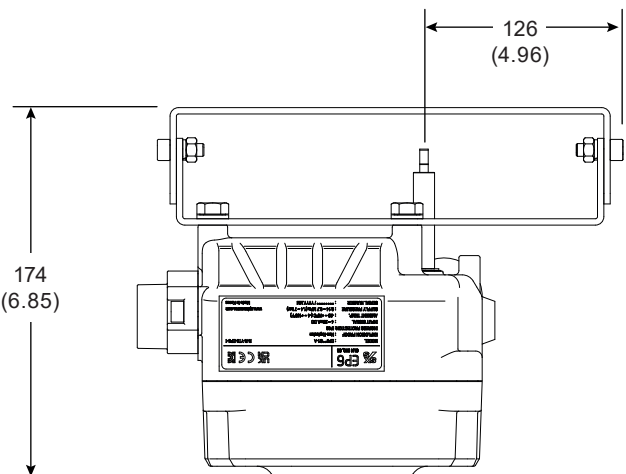
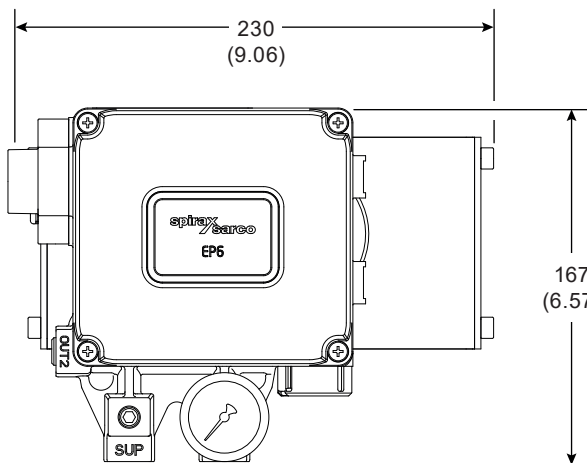
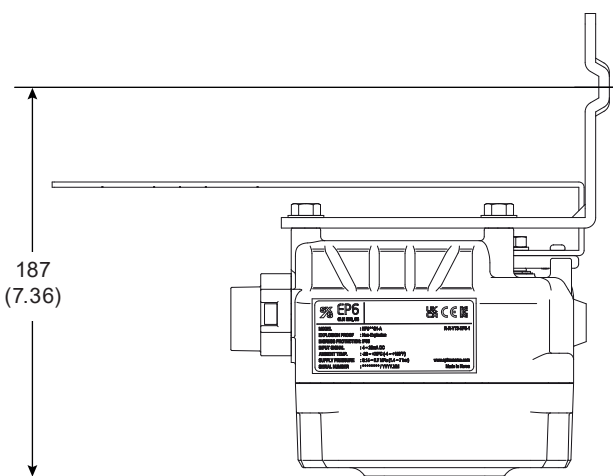
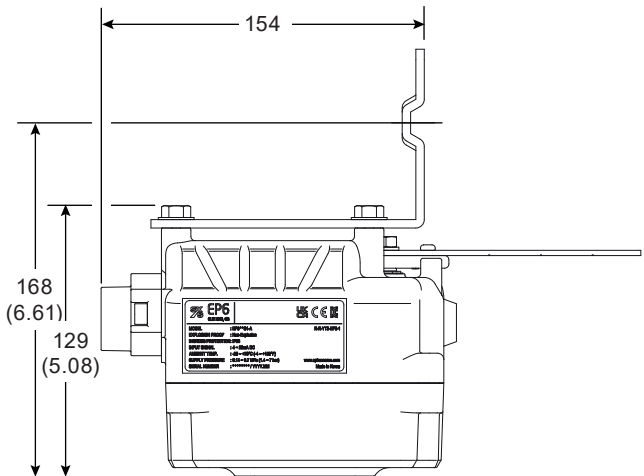
**Dimensions (approximate) in mm (inches)**



**Linear left mounted**



**Linear centrally mounted**



**Rotary mounted**

**Mounting/linkage kit** : Positioner mounting kits will be supplied for central mounting as standard.

Mounting Position	Actuator Model	Valve Models	Valve Sizes	Spirax kit Nomenclature
Central	PN9100	Spira-trol™ two port and QL three port	½" to 2"	EY1
	PN9200		½" to 4"	
	PN9300		6" to 12"	EY2
	PN9400	Spira-trol™ two port and QL three port	½" to 4"	EY1
	TN2030		6" to 12"	EY2
	TN2150			
	TN2300			
	TN2400			
	TN2270	LE, LEA and Steri-trol	½" to 4"	EY1
	PN3000 Sprg Ext		KE, KEA, LE and LEA	½" to 4"
	PN4000 Sprg Ret			
	PN5000	Spira-trol™ two port and QL three port	½" to 2"	UY3
	PN6000			
PN9100	6" to 12"			
PN9200	Spira-trol™ two port and QL three port		½" to 4"	Not Compatible
PN9300			6" to 12"	UY1
PN9400				
TN2030			½" to 4"	UY3
TN2150				
TN2300	LE, LEA and Steri-trol		½" to 4"	UY3
TN2400				
TN2270	KE, KEA, LE and LEA		½" to 4"	UY3 + UBC
PN3000 Sprg Ext				
PN4000 Sprg Ret	'C' series		2½" to 4"	UY1
PN5000		6" to 12"	UY2	
PN6000				
PN1600	Spira-trol™			

**Customer requirement example:**

1 off Electro-pneumatic positioner for use with single acting PN9300 actuator, having 30 mm stroke.

**How to order**

**Example:** 1 off Spirax Sarco EP6SLS1-A Electro-pneumatic Positioner + EY1 mounting kit.

**Caution:** The EP6 positioner must have a high quality air supply to ISO 8573-1:2010 Class 3:3:3.