



EP6 ATEX Electro-pneumatic Positioner

Description

The EP6 Electro-pneumatic positioner can control any valve that is actuated by a linear 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 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 7 bar.

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

PNS3000 and PNS4000 series

PN9000 series

TN2000 series



ATEX rating

Flameproof.
 Not intrinsically safe.

II 2G Ex db mb IIB T5 Gb



INMETRO (Brazil)

Ex db mb IIB T5 Gb



CCC (China)

Ex d mb IIB T5 Gb

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

Input signal range	4-20 mA
Impedance	Max 250 +/- 15 Ω
Air supply	1.4 to 7.0 bar (regulate 0.4 to 0.7 bar above actuator spring range)
Air quality	ISO 8573-1:2010 Class 3:3:3
Output pressure	0 to 100% supply pressure
Actuator stroke	20 mm to 150 mm or 55° to 90°
Action	Single acting/fail vent/Double acting
Operating temperature	-20 °C to +60 °C
Air flow	80 LPM @ 1.4 bar
Steady state air consumption	2.5 LPM @ 1.4 bar
Air connections	1/4" NPT female
Sensitivity	Single +/- 0.2% F.S. (Full Scale)
	Double +/- 0.5%
Hysteresis	+/- 1% F.S.
	Single +/- 1%F.S.
Linearity	Double +/- 2% F.S.
	+/- 0.5% F.S
Repeatability	+/- 0.5% F.S
Electrical connections	Cable gland M20 internal, terminals for conductors from 0.5 to 2.5 mm ² wire
Degree of protection	IP66
Characteristic	Linear
	Linear 3.0 kg (positioner only)
Shipping weight	Mounting Kits for Linear EY1 and EY2 - 1.2 kg, UY1,2,3 - 0.9 kg, UBC - 0.2 kg
	Rotary 4.4 kg (Positioner and mounting kit)

Positioner options

Basic model	Aluminium enclosure	<table border="1"> <tr><td>EP6</td></tr> <tr><td>S</td></tr> <tr><td>D</td></tr> <tr><td>L</td></tr> <tr><td>R</td></tr> <tr><td>A</td></tr> <tr><td>C</td></tr> <tr><td>M</td></tr> <tr><td>1</td></tr> <tr><td>A</td></tr> </table>	EP6	S	D	L	R	A	C	M	1	A
EP6												
S												
D												
L												
R												
A												
C												
M												
1												
A												
Acting type	Single acting											
	Double acting											
Mounting type	Linear - See page 4 for Mounting Kit selection											
	Rotary - Mounting Kit included											
Hazardous area protection	Flameproof Ex d (ATEX, IECEx, KCs)											
	Flameproof Ex d (CCC, NEPSI, ATEX, IECEx)											
	Flameproof Ex d (INMETRO)											
Electrical and Air connection	M20 -1/4" NPT											
Non standard features	Standard model											

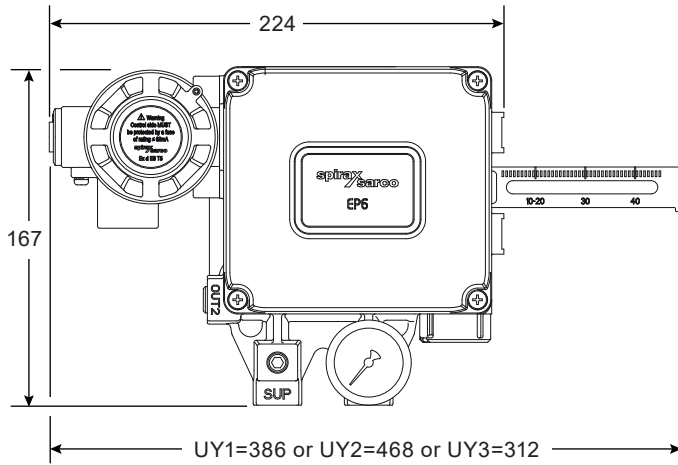
Ordering Code Example:



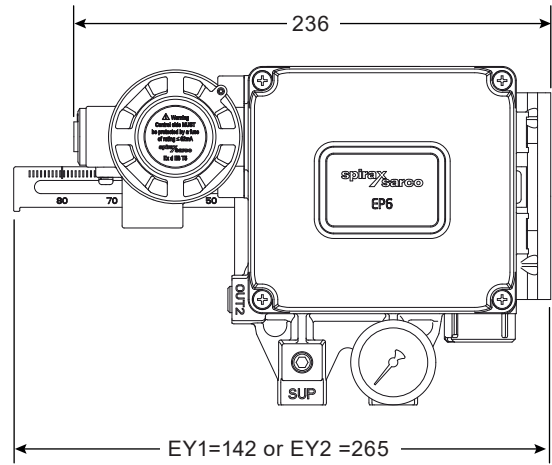
Safety information, installation and maintenance

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

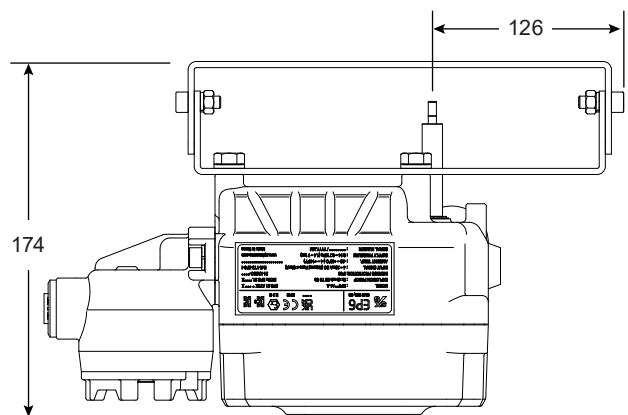
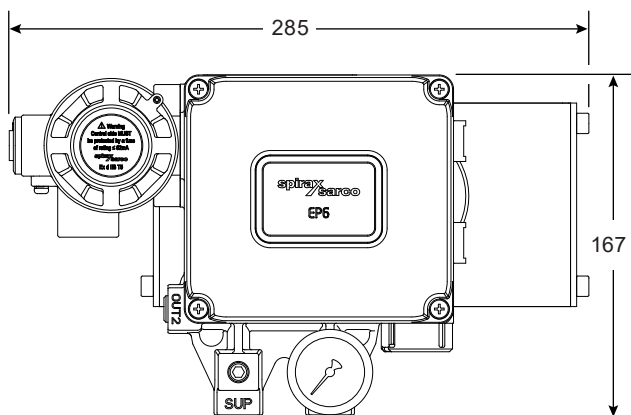
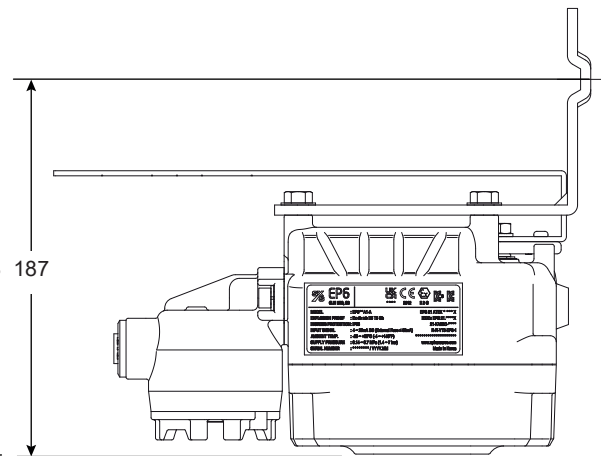
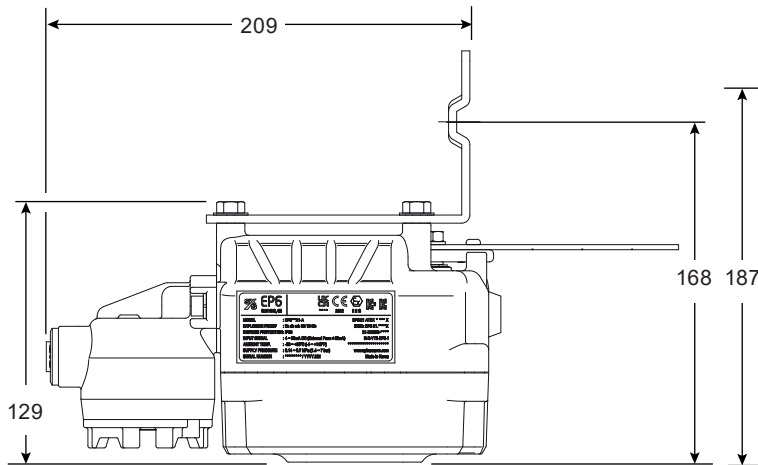
Dimensions (approximate) in mm



Linear left mounted



Linear centrally mounted



Rotary mounted

Mounting/linkage kit : Positioners 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	DN15 to DN50	EY1	
	PN9200		DN15 to DN100		
	PN9300		DN125 to DN300	EY2	
	PN9400		Spira-trol™ two port and QL three port	DN15 to DN100	EY1
	TN2030	DN125 to DN300		EY2	
	TN2150				
	TN2300				
	TN2400	LE, LEA and Steri-trol		DN15 to DN100	EY1
	TN2270				
	PN3000 Sprg Ext	KE, KEA, LE and LEA	DN15 to DN100	EY1 + UBC	
	PN4000 Sprg Ret				
	PN5000	Spira-trol™ two port and QL three port	DN15 to DN50	UY3	
	PN6000				DN15 to DN100
					DN125 to DN300
	DN15 to DN100		Not compatible		
	Spira-trol™ two port and QL three port		DN125 to DN300	UY1	
			LE, LEA and Steri-trol	DN15 to DN100	UY3
	KE, KEA, LE and LEA		DN15 to DN100	UY3 + UBC	
	'C' series		DN65 to DN100	UY1	
	'C' series		DN125 to DN200	UY2	
	Spira-trol™		DN125 to DN300		

Customer requirement example:

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

How to order

Example: 1 off Spirax Sarco EP6SLA1-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.