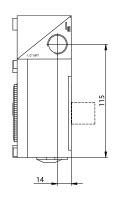
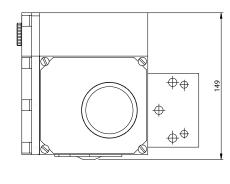
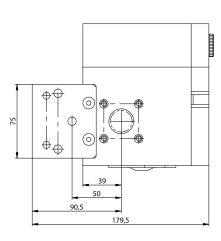


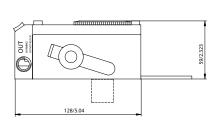
# Dimensions drawings (mm)

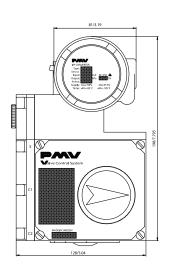


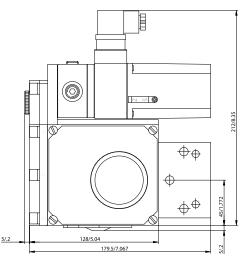




EP5







EP5

EP5 EX

**EP5-FS** 





p/n: FCD PMENBR0006-03









### Intrinsically safe:

ATEX EEX ia IIC, T4-T6 (x) II 1 G CSA, FM Class 1, Div 1, Group ABCD

ATEX EEX d IIB+H2, T4-T6 🐼 II 2 G CSA, FM Div 1, Class 1, 2 & 3 Group

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all gossible applications. The purchaser/user must therefore assume the utlimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation and Maintenance (I & M) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes onlyand should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. Because Flowserve is continually improving andupgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.

©2014 Flowserve Corporation, Irving, Texas, USA. Flowserve and PMV are registered trademarks of Flowserve Corporation.

### Palmstierna International AB

Korta Gatan 9 SE-171 54 Solna SWEDEN Tel: +46 (0) 8 555 106 00 Fax: +46 (0) 8 555 106 01 E-mail: infopmv@flowserve.com

### Germany

Flowserve Sperberweg 16 D-41468 Neuss **GERMANY** Tel: +49 (0) 2131 795 74 80 Fax: +49 (0) 2131 795 74 99 E-mail: pmvgermany@flowserve.com

**UK** Flowserve Abex Road Newbury, Berkshire, RG14 5EY Tel: +44 (0) 1635 46 999 Fax: +44 (0) 1635 36 034 E-mail: pmvukinfo@flowserve.com

**Italy** Flowserve Spa Via Prealni 30 20032 Cormano (Milano) Tel: +39 (0) 2 663 251 Fax: +39 (0) 2 615 18 63 E-mail: infoitaly@flowserve.com

### USA. Mexico

14219 Westfair West Drive Houston, TX 77041 Tel: +1 281 671 9209 Fax: +1 281 671 9268 E-mail: pmvusa@flowserve.com

### Canada

Cancoppas Limited 2595 Dunwin Drive, Unit 2 Mississuga, Ont L5L 3N9 CANADA Tel: +1 905 569 6246 Fax: +1 905 569 6244 E-mail: controls@cancoppas.com

### **Asia Pacific Headquarters**

Flowserve Pte Ltd. No. 12 Tuas Avenue 20 REPUBLIC OF SINGAPORE 638824 Tel: +65 (0) 687 98900 Fax: +65 (0) 686 24940 E-mail: fcdasiaprocess@flowserve.com

### South Africa

Flowserve Unit 1, 12 Director Road Spartan Ext. 2 1613 Kempton Park, Gauteng SOUTH AFRICA Tel: +27 (0) 11 397 3150 Fax: +27 (0) 11 397 5300

### The Netherlands

Fabromatic BV Rechtzaad 17 4703 RC Roosendaal THE NETHERLANDS Tel: +31 (0) 30 6771946 Fax: +27 (0) 30 6772471 E-mail: fcbinfo@flowserve.com

### China

Flowserve Hanwei Building No. 7 Guanghua Road Chao Yang District 100004 Beijing CHINA

Tel: +86 (10) 6561 1900 Fax: +86 (10) 6561 1899

www.pmv.nu



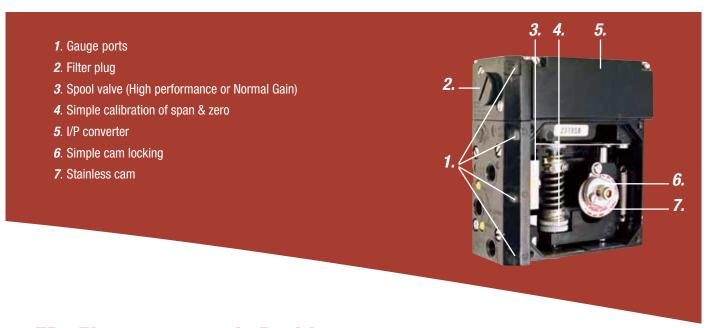


# EP5 Electropneumatic positioner

Product Information





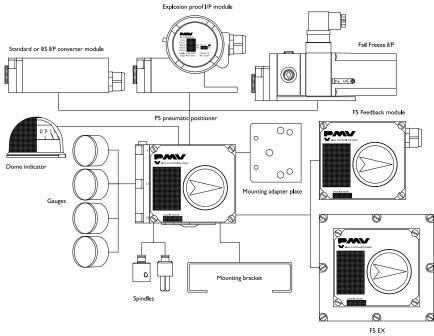


# EP5 Electropneumatic Positioner

## EP5

- Modular, sturdy, simple, reliable design.
- Tapped exhaust port.
- Easy to add on Feedback Unit F5.
- Simple calibration, external zero adjustment.
- High gain pilot valve.
- Built in gauge ports.
- Bright visible indicator, flat or Dome style.
- Stainless steel cam.







# Technical data

Deadband	≤ 0.15%
Input signal	4–20 mA
Linearity	≤ 1%*
Hysteresis	≤ 0.75%*
Repeatability	≤ 0.5%*
Air supply	Max. 1 MPa/150 Psi, Oil, water and dustfree
	Min. 0.14 MPa/21 Psi
Connector threads	1/4" NPT or G (BSP)
Gauge threads	1/8" NPT or G (BSP)
Counduit entry	1/2" NPT or M20 x 1,5
Terminals	2.5 mm² (AWG 14) Screw terminals

Gain factor at: 600 KPa/87 Psi
High Performance Version
Min: 1000 KPa/KPa
Min: 66%/% ISA S75.13-1989
Min: 30%/%
Min: 30%/%

### Max. air consumption at supply pressure:

0.2 MPa/29 Psi	6.1 nl/min (0.22 SCFM)	2.7 nl/min (0.1 SCFM)
0.4 MPa/58 Psi	13.6 nl/min (0.48 SCFM)	6.1 nl/min (0.21 SCFM)
0.6 MPa/87 Psi	22 nl/min (0.78 SCFM)	9.9 nl/min (0.35 SCFM)
0.8 MPa/116 Psi	30.5 nl/min (1.08 SCFM)	13.7 nl/min (0.48 SCFM)
1 MPa/145 Psi	39 nl/min (1.38 SCFM)	17.5 nl/min (0.62 SCFM)

### Min. air delivery at supply pressure:

0.2 MPa/29 Psi	200 nl/min (6.9 SCFM)	156 nl/min (5.5 SCFM)
0.4 MPa/58 Psi	370 nl/min (12.8 SCFM)	288 nl/min (10.1 SCFM)
0.6 MPa/87 Psi	540 nl/min (18.8 SCFM)	421 nl/min (14.8 SCFM)
0.8 MPa/116 Psi	710 nl/min (24.7 SCFM)	553 nl/min (19.4 SCFM)
1 MPa/145 Psi	880 nl/min (30.6 SCFM)	686 nl/min (24 SCFM)

Input impedance	170–260 Ohms at 20°C (71°F)
RFI influence	Not measureable
Capacitance	Negligible
Position sensivity	None
Supply pressure effect	0.5%/0.1 MPa (15 Psi)
Temperature range	-20°C to +85°C/(-4°F to +185°F)
Low temp option	-40°C to +85°C/(-40°F to +185°F)
Weight	1.5 kg/3.4 lbs
Housing	Die cast aluminum
Surface treatment	ED Epoxy paint, black
Fasteners	A2/A4 Stainless
Ingress protection	IP 66/NEMA 4

### **Approvals**

	Approvato			
	ATEX	Intrinsically safe	EEX ia IIC T4-T6 🐼 II 1 G	
		Flameproof**	EEX d IIB+H2 T4−T6 ⟨Ex⟩II 2 G	Non-electrical device P5 €x II 1 G
	FM	Intrinsically safe	Div.1, Class 1 Group ABCD	
		Explosion proof**	Div.1, Class 1 Group BCD	
	CSA	Intrinsically safe	Div.1, Class 1 Group ABCD	
		Explosion proof**	Div.1, Class 1,2,3 Group BCDEFG	

\* Percent of full scale

\*\* I/P in round housing





### Modular

- EP5 For all normal applications
- EP5-EX Explosion proof
- EP5-FS Fail freeze
- EP5-IS Intrinsically safe





## **EP5 Series Coding**

Model

EP5XX EP5 Double acting pneumatic EP5FS Fail freeze function

EP5IS Intrinsically safe, ATEX, FM, CSA

EP5EX Explosion proof ATEX

Spool valve

HP High performance LB Normal Gain

Connections

N NPT ¼" , El. ½" NPT G G ¼" air, M20 x 1,5 electric M NPT ¼" air, M20 x 1,5 electric

Surface treatment

U Epoxy coating M Tufram

Spindle 01, 23 etc

01 to 39. See dwg SPNDLS\_P5

Cam

K01, K08 etc K01 to K34

Front cover

PV9DA\* 90°, Direct, arrow indicator

Input signal

4-20 mA input

Temperature

N Nitrile seals -20°C to +85°C Q Silicon seals -40°C to +85°C

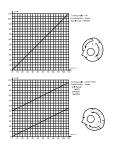
\*For 30, 45, 60 deg rotation, change PV9 to PV3, PV4 or PV6

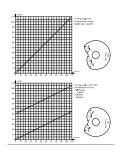
### Example

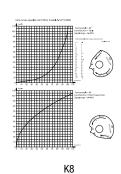
EP5XX-HPNU-23K01-PV9DA-4Z

## Cams









K1 K3