



## P36C, P41C & P41D POSITIONERS

### Critical Performance

P36C/P41C and P41D positioners are designed for critical control applications. Valves with double-acting actuators and P36C/P41C/P41D positioners outperform all criteria of the dynamic valve performance specifications. Valves equipped with DR rotary diaphragm actuators and P41D positioners provide exceptional accuracy and speed of response.

### Span and Zero Adjustment

Calibration knobs for zero and span adjustments are color coded and marked  $\pm$  for ease of use. They're also conveniently located for easy calibration.

### Split Range Output/Field Reversible

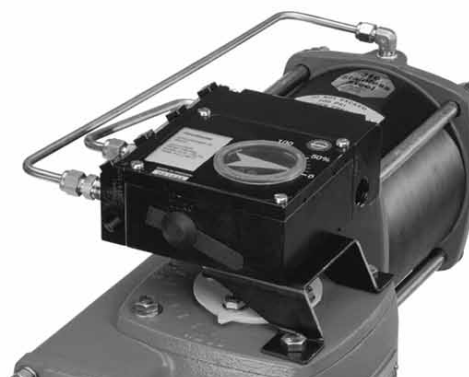
The standard cam is stainless steel. P36C/P41C positioners have one lobe for 90° full scale operation and one lobe for 90° split range or 180° full scale operation. The P41D positioner uses a three lobe cam (0-100%, 0-50% and 50-100%). Fifteen other cam options are available on request. Positioner operation can be reversed in the field by flipping the cam and reversing the ports on double-acting cylinders, and simply flipping the cam on spring-return actuators.

### High Performance, Long Life

The spool valve assembly design is key to the positioner's accuracy and control. The gold-plated spool and stainless steel seats provide a smooth, corrosion-resistant trouble-free operation.

### Sealed Housing

Both the P36C/P41C units are sealed and vented through a tapped exhaust port. The housing can easily be modified at any time for liquid drainage. Housing is die cast aluminum coated with black epoxy paint. The P41D housing is black anodized aluminum and meets NEMA 4, 4X.



### Approvals

The electronic P41C unit carries the following ratings (on application):

- Cenelec – NEMA 7, 9 explosion-proof EEXd11C T4-T6
- FM – NEMA 7, 9 explosion-proof Div. 1, Class 1 Groups B-D
- CSA – explosion-proof Div. 1, Class 1, 2, 3 Groups B-G

### I/P Conversion

Pneumatic P36C positioners can be converted in the field to electronic P41C versions with the compact I/P converter module. The converter and cover are easily coupled to the positioner in minutes. The built-in 5 micron filter is easily accessible and can be changed externally.

### Accurate, Precise Valve Control

The high gain spool valve assembly on P36C/P41C units, coupled with the built-in speed/dampening controls, provides precise, accurate control and stability. Valve position readout is clearly shown with a bright, visible indicator.

# Positioner Specifications

Order Code	P36C	P41C	P41D
Air Supply (psi)*	21-150 psi (150-1035 kPa)	21-150 psi (150-1035 kPa)	29-105 psi (200-730 kPa)
Linearity	< 0.50% of full scale	< 1% of full scale	< 1% of full scale
Hysteresis	< 0.50% of full scale	< .75% of full scale	< 0.4% of full scale
Repeatability	< 0.5% of full scale	< 0.5% of full scale	< 0.5% of full scale
Accuracy	0.25% of full scale	0.25% of full scale	0.2% of full scale
Air Consumption	0.71 SCFM @ 87 psi (20 nl/min @ 600 kPa)	0.78 SCFM @ 87 psi (22 nl/min @ 600 kPa)	0.71 SCFM @ 87 psi (20 nl/min @ 600 kPa)
Air Delivery	18.8 SCFM @ 87 psi (540 nl/min @ 600 kPa)	18.8 SCFM @ 87 psi (540 nl/min @ 600 kPa)	13.8 SCFM @ 87 psi (395 nl/min @ 600 kPa)
Input Impedance	-	260 ohms	240 ohms
Temperature Range	-5° to 185°F (-20° to 85°C)	-5° to 185°F (-20° to 85°C)	14° to 150°F (-10° to 65°C)
Weight	2.4 lbs (1.1 kg)	3.4 lbs (1.5 kg)	6.6 lbs. (3.0 kg)

\* Check maximum pressure of actuator; regulator may be required.

## Ordering

P36C, P41C and P41D positioners can be used with double-acting or spring-return cylinder or diaphragm actuators. P41D positioners are specifically designed for critical control applications. To order, simply add the order code from the table to the valve and actuator code.

## Positioners

PMV Positioners	Order Code
<b>P36C, 4-Way Pneumatic, Direct or Reverse Acting Positioner</b> Can be used as a 3-Way by plugging one port. Specify 3-15, 3-9 or 9-15 as second line information. Specify as second line information if increasing signal should open or close valve.	P36C
<b>P41C, 4-Way Electronic, Direct or Reverse Acting Positioner</b> Can be used as a 3-Way by plugging one port. Specify 4-20, 4-12 or 12-20 mA signal as second line information. Specify as second line information if increasing signal should open or close valve. Explosion-proof Cenelec (metric connection) FM & CSA (NPT connection)	P41C  P41C-EX4 P41C-EX7
<b>P41D, 4-Way Electronic, Direct or Reverse Acting Positioner</b> Can be used as a 3-Way by plugging one port. Specify 4-20, 4-12 or 12-20 mA signal as second line information. Specify as second line information if increasing signal should open or close valve.	P41D

Three lobe cam is standard:  
 Linear characterized full span, 0-50% and 50% split range lobes.

## Gauges

Positioner	Usage	Order Code
<b>Pneumatic Positioners</b> 3 Gauges mounted: Supply 0-100 psi Output 0-100 psi Signal 0-30 psi	P36C	G
<b>Electronic Positioners</b> 2 Gauges mounted: Supply 0-100 psi Signal 0-100 psi	P41C, P41D	G

## Air Filters for Positioners

It is required that one of these air filters be in the air supply line of every P36C, P41C and P41D electronic positioner as a primary dirt filter.

Filter	Order Code
Air Filter	AFR2

**Ordering Example:**  
**PEC,6,F1,CI,NBR,CR\*GS-6-PC6,P41C-AFR2-G**

## Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:  
 Web Site: [www.dezurik.com](http://www.dezurik.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)



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