

Process Control Instruments
Valve Automation

Electro-Pneumatic Positioners

Series AF700
Linear/Rotary



Description

The AccuFlo Series AF701/702 Electro-Pneumatic Positioners are used as final controlling element for operation of pneumatic Rotary/linear valve actuators in correspondence with an input signal of 4-20 mA DC or split ranges. The Positioners are based on a force balance design for control application that requires a high degree of reliability and repeatability at an economical cost. The Positioners can handle the supply pressure up to 100 psig for higher pressure industrial pneumatic and process control system requirements.

Integrated Characteristics

- Suitable for Rotary / Linear Actuators.
- Low Air Consumption
- No resonance at 5-200Hz.
- Prevents hunting by using Orifice for small size actuator.
- Simple Conversion to Direct Acting or Reverse Acting
- Precise Calibration with simple SPAN and Zero Adjustments.
- Suitable for Single/Double acting Actuators.
- Can control ½ split range with simple operation without replacing any parts
- Extremely Vibration Resistance Design.
- Easy Maintenance.
- Corrosion-Resistance Aluminium Die cast Body.
- Options available : Position Transmitter (4-20mA DC).
Two limit Switches. (2 NO + 2 NC)

Position Transmitter

Provided with AccuFlo 701 & 702 E/P Positioner against order. Zero and Span adjustment by Potentiometer. With RA & DA Selectable slide switch.



Specifications

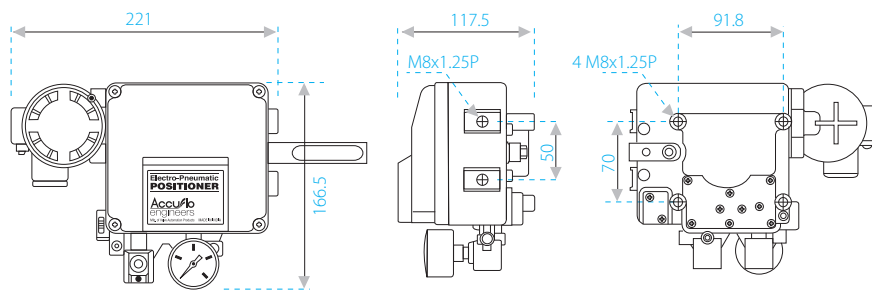
Rotary Single/Double acting

Item - Type	Single	Double
Input Signal	4 - 20mA DC	
Impedance	250 ± 15 Ω	
Supply Pressure	1.4~7kgf/cm ² (20~100 psi)	
Stroke	0~90°	
Air Connection	PT (NPT) ¼"	
Gauge Connection	PT (NPT) ⅛"	
Conduit	PF ½" (G½")	
Explosion Proof	Ex dm IIB (C) T6 Ex ia IIB T6	
Protection	IP66/IP65	
Ambient Temp.	-20°C ~ 70°C	
Linearity	± 1% F.S.	± 2% F.S.
Hysteresis	1% F.S.	
Sensitivity	± 0.2% F.S.	± 0.5% F.S.
Repeatability	± 0.5% F.S.	
Air Consumption	3LPM (Sup+1.4kgf / cm ² 20psi)	
Flow Capacity	80LPM (Sup+1.4kgf / cm ² 20psi)	
Material	Aluminum Die casting	
Weight	2.9kg (6.4 lb)	

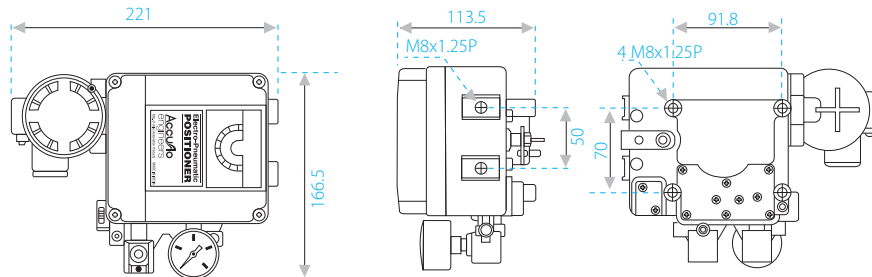
Linear

Item - Type	Single	Double
Input Signal	4 - 20mA DC	
Impedance	250 ± 15 Ω	
Supply Pressure	1.4~7kgf/cm ³ (20~100 psi)	
Stroke	10~150mm	
Air Connection	PT (NPT) ¼"	
Gauge Connection	PT (NPT) ⅛"	
Conduit	PF 1/2" (G1/2")	
Explosion Proof	Ex dm IIB (C) T6 Ex ia IIB T6	
Protection	IP66/IP65	
Ambient Temp.	-20°C ~ 70°C	
Linearity	± 1% F.S.	± 2% F.S.
Hysteresis	1% F.S.	
Sensitivity	± 0.2% F.S.	± 0.5% F.S.
Repeatability	± 0.5% F.S.	
Air Consumption	3LPM (Sup+1.4kgf / cm ² 20psi)	
Flow Capacity	80LPM (Sup+1.4kgf / cm ² 20psi)	
Material	Aluminum Diecasting	
Weight	2.7kg (6.1lb)	

Dimension Drawing (Linear)



Dimension Drawing (Rotary)



Ordering Information E/P Positioners (Linear/Rotary)

Series AF700

Model No. AF701 **L** Linear

Model No. AF702 **R** Rotary

Acting Type **S** Single **D** Double

Explosion Proof **M** ExdmIIBT5 **C** ExdmIICT5

I ExialIIBT6 or ExialICT6 (NEPSI)

N Non-Explosion

Orifice Type **1** Below 90 cm³ **2** 90 ~ 180 cm³
3 Over 180 cm³

Connection Type **P** PT **N** NPT

Ambient Temp. **S** -20°C ~ 70°C **H** -20°C ~ 120°C

I -40°C ~ 70°C

Option 1 **A** Arrow **D** Dom Indicator

Option 2 **0** None **1** +PTM Internal **2** +PTM External (Ex- Proof)

3 + L/S Internal **4** + L/S External Ex Proof

5 +PTM Internal, + L/S Internal

6 +PTM External (Ex- Proof), + L/S External Ex Proof

Shaft for R **N** Namur **D** Double D

Lever Type for L **4** Below 40 mm **7** 40 ~ 70mm

10 70 ~ 100mm **13** 100 ~ 130mm