

Pneumatic Linear Positioning Valves Model YMV

- Simple installation and automatic commission (self-adjustment of zero and span)
- Accurate ($\pm 1\%$ FS) and reliable design
- Very low static air consumption
- Three input keys, two line LCD display and pressure gauges
- Optional HART, Profibus PA or Foundation (FF) Fieldbus



Application

Linear positioning valves can be configured to accurately control the stroke and position of linear actuators in industrial process.

The sturdy, reliable design makes the YMV suitable for the use in the following control applications:

- Power Station Burners
- Kiln Burners
- Pneumatic Conveying
- HVAC control
- Mine Shaft ventilation

Operating Principle

The electro pneumatic positioner and a pneumatic valve form a control system. The current position of the actuator is recorded by a servo potentiometer and the actual value x is fed back. The positioner works as a predictive, anticipatory five-point controller whose output variable $\pm \Delta y$ is used to control the integrated servo valves based on the pulse length modulation method. These input signals change pressure in the actuator chamber(s) and displace the actuator until the control deviation becomes zero.

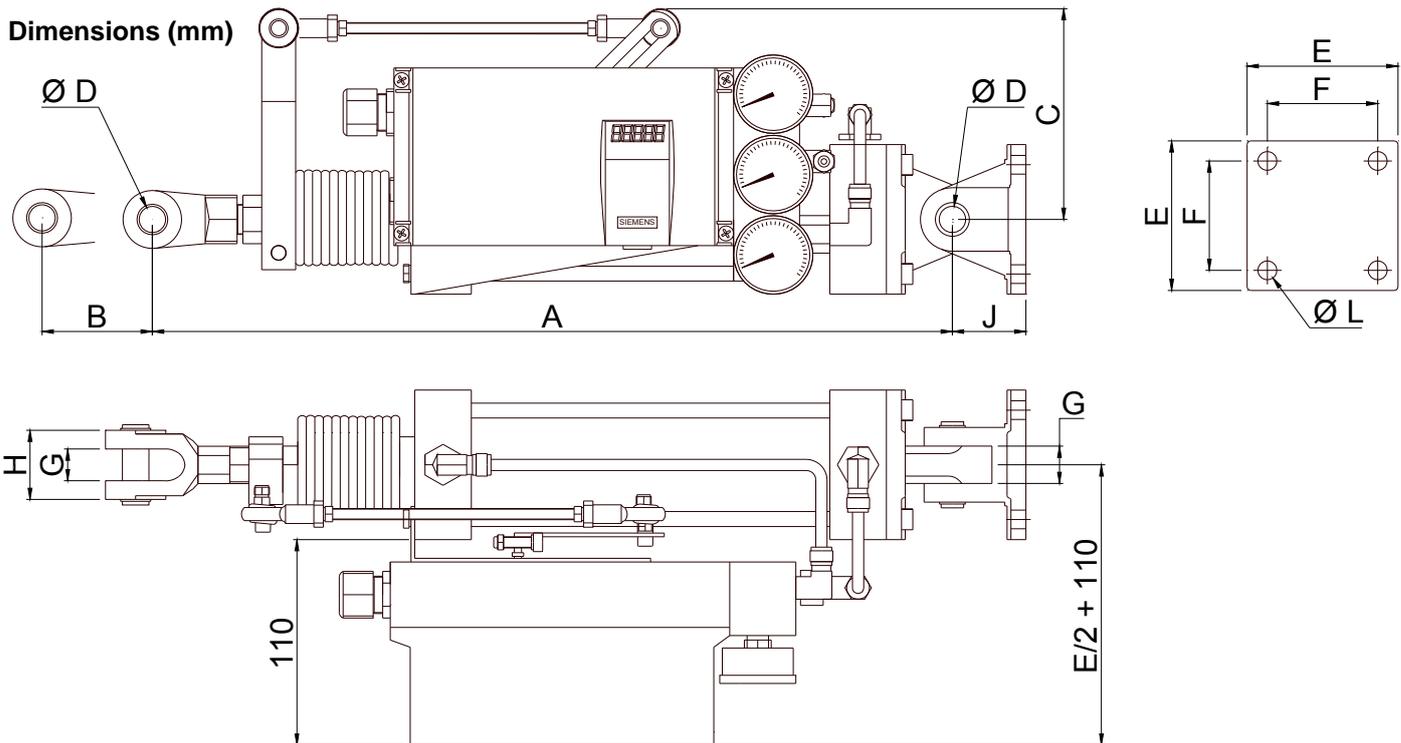
Features

- Plastic, Metal or stainless steel control housing
- Two line display with 5 digit 7 segment top line and 2 digit 7 plus 5 digit 14 segment bottom line
- Pneumatic valve manifold with piezoelectric valve control
- Local operation via keypad
- Extensive valve and positioner diagnosis functions

Options

- 4-20mA position feedback
- Fieldbus (Profibus PA, HART and Foundation)
- Alarm module with 2 digital outputs for limit travel (max./min.), 1 digital deviation or general alarm output and 1 digital input for "safety" position

Dimensions (mm)



Model	A	B	C	D	E	F	G	H	J	L	Wt. Kg
YMV63	383	125	105	14	80	59	20	40	37	9	6.8
YMV80	526	200	105	20	98	74	28	56	52	14	8.9
YMV100	552	200	105	20	118	90	28	56	52	14	15.5
YMV125	555	200	105	25	140	110	32	64	63	16	24.0
YMV160	613	200	105	32	174	142	40	80	75	18	39.7
YMV200	748	250	105	40	220	175	50	100	90	22	72.5
YMV250	933	350	125	50	274	216	63	126	110	26	134.8
YMV320	1096	400	160	50	340	282	63	126	110	26	178.1

Technical Specifications	
Actuator Type	Single or Double Acting
Working Pressure	0.3-0.7 MPa (40-100psi)
Electrical Power	230VAC or 24VDC (24Watt)
Accuracy (of Full Scale)	Combined Error <1% (Sensitivity 0.1%, Hysteresis 0.5%, Linearity ±1.0%)
Response time	0.1 Seconds
Repeatability	± 0.5% of Full Scale
Input Signal	4-20mA, Fieldbus or NO contacts
Output Signal	4-20mA, or Fieldbus (Optional Alarm module with 3 DO and 1 DI)
Dead Area	0.3%
Static Air Consumption	<3.6×10 ⁻² m ³ /h
Working Temperature	-30° C to 80° C (Ambient for actuator -30° C to 120° C)
Pneumatic connection	Female thread ¼-18 NPT
Electrical Connections	Screw terminals 2.5 (AWG28-12) via Cable Gland M20x1.5 or 1/2-14 NPT

All valves should be installed in accordance with the installation and operating manual. Due to our policy of continuous improvement, dimensions and specifications may change without notice. All specifications and dimension should be certified for installation purposes.

