

# PNEUMATICS & FITTINGS



## PNEUMATIC GLOBE VALVE ACTUATORS MK-2690, MK-46XX, MK-6XXX SERIES



### DESCRIPTION

The Schneider Electric **MK Series** actuators provide proportional pneumatic control of Schneider Electric VB-7000 and VB-8000 Series globe valves.

### FEATURES

- **Rugged die cast aluminum construction**
- **MK-46xx, MK-6xxx have rolling diaphragms for long life**
- **Multiple spring ranges for various applications**

### COMMON SPECIFICATIONS

<b>Action</b>	Spring return valve stem up
<b>Connections</b>	1/8" NPT
<b>Positioner</b>	Order separately AK-42309-500
<b>Operating Temperature</b>	-20° to 220°F (-29° to 104°C)
<b>Operating Humidity</b>	5 to 95% RH non-condensing
<b>Maximum Pressure</b>	30 psig (207 kPa)
<b>Dimensions</b>	
<b>MK-2690</b>	3.6"H x 5.0"W x 2.3"D (9.0 x 12.7 x 5.7 cm)
<b>MK-46xx</b>	3.9"H x 4.8"DIA (9.9 x 12.1 cm)
<b>MK-6xxx</b>	7.8"H x 10.5"DIA (19.9 x 26.7 cm)
<b>Mounting</b>	Vertical upright
<b>Warranty</b>	1 year



MK2690



MK-46xx

### INDIVIDUAL SPECIFICATIONS

Model	Spring Range	Stroke	Diaphragm	Linkage
<b>MK-2690</b>	Springs provided in AV-7400 or AV-400 linkage (order separately)	1/2" (1.3 cm) nominal	6 sq. in. (39 sq. cm)	AV-400 or AV-7400, order separately
<b>MK-4601</b>	3-8 psi (21-55 kPa)	1/2" (1.3 cm) nominal	11 sq. in. (71 sq. cm)	AV-401 required, order separately
<b>MK-4611</b>	5-10 psi (34-69 kPa)	1/2" (1.3 cm) nominal	11 sq. in. (71 sq. cm)	AV-401 required, order separately
<b>MK-4621</b>	8-13 psi (55-90 kPa)	1/2" (1.3 cm) nominal	11 sq. in. (71 sq. cm)	AV-401 required, order separately
<b>MK-4641</b>	3-13 psi (21-90 kPa)	1/2" (1.3 cm) nominal	11 sq. in. (71 sq. cm)	AV-401 required, order separately
<b>MK-6601</b>	3-8 psi (21-55 kPa)	1/2" (1.3 cm) nominal	50 sq. in. (323 sq. cm)	AV-430 required, order separately
<b>MK-6611</b>	5-10 psi (34-69 kPa)	1/2" (1.3 cm) nominal	50 sq. in. (323 sq. cm)	AV-430 required, order separately
<b>MK-6621</b>	8-13 psi (55-90 kPa)	1/2" (1.3 cm) nominal	50 sq. in. (323 sq. cm)	AV-430 required, order separately
<b>MK-6801</b>	3-8 psi (21-55 kPa)	1" (2.5 cm) nominal	50 sq. in. (323 sq. cm)	AV-497 required, order separately
<b>MK-6811</b>	5-10 psi (34-69 kPa)	1" (2.5 cm) nominal	50 sq. in. (323 sq. cm)	AV-497 required, order separately
<b>MK-6821</b>	8-13 psi (55-90 kPa)	1" (2.5 cm) nominal	50 sq. in. (323 sq. cm)	AV-497 required, order separately
<b>MK-6911</b>	5-10 psi (34-69 kPa)	1-3/4" (4.4 cm) nominal	50 sq. in. (323 sq. cm)	AV-497 required, order separately

### NOMINAL SPRING RANGES

Model Number	Nominal Spring Range <sup>a</sup> (Spring Color Code)	
	psig	kPa
<b>MK-2690</b>	3 to 7 (Yellow)	21 to 48
	5 to 10 (Black)	34 to 69
	8 to 13 (Blue)	55 to 90

<sup>a</sup>Nominal (no load) condition, spring range based on 1/2" (13mm) maximum stroke, provided by AV-7400 or AV-400 linkage



# PNEUMATICS & FITTINGS

## PNEUMATIC GLOBE VALVE ACTUATORS

**MK-2690, MK-46XX, MK-6XXX SERIES**

### NOMINAL SPRING RANGES (CONTINUED)

Model number	Nominal spring range <sup>a</sup> (Spring color code)	
	psig	kPa
<b>MK-4601</b>	3 to 8	21 to 55
<b>MK-4611</b>	5 to 10	34 to 69
<b>MK-4621</b>	8 to 13	55 to 90
<b>MK-4641</b>	3 to 13	21 to 90

<sup>a</sup>Nominal (no load) condition, spring range based on 1/2" (13mm) maximum stroke.

Model number	Nominal spring range <sup>a</sup> (Spring color code)		Nominal stroke in (cm)
	psig	kPa	
<b>MK-6601</b>	3 to 8	21 to 55	0.5 (1.37)
<b>MK-6611</b>	5 to 10	34 to 69	0.5 (1.37)
<b>MK-6621</b>	8 to 13	55 to 90	0.5 (1.37)
<b>MK-6801</b>	3 to 8	21 to 55	1.0 (2.54)
<b>MK-6811</b>	5 to 10	34 to 69	
<b>MK-6821</b>	8 to 13	55 to 90	
<b>MK-6911<sup>bc</sup></b>	5 to 10	34 to 69	1.5 (3.31)

<sup>a</sup>Nominal (no load) condition, spring range based on 0.5" (13mm) maximum stroke, 1" (25.4mm), or 1.5" (33.1mm) stroke for MK-6911.

<sup>b</sup>MK-6911 is only used on 6.0" VB-8xx3-0-5-16. The MK-6911 was used on discontinued 4" to 6" VB-9323-0-5-x.

<sup>c</sup>Recommended for field replacements only where 20 psi air supply pressure is not available and/or required close-off pressure is less than 125 psi.

### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>MK-2690</b>	Pneumatic valve actuator, 1/2" stroke, no springs (order AV-400 or AV-7400 linkage kit)
<b>MK-4601</b>	Pneumatic valve actuator, 1/2" stroke, 3-6 psi spring range, for 1/2" to 1-1/4" VB-7xxx globe valves
<b>MK-4611</b>	Pneumatic valve actuator, 1/2" stroke, 5-10 psi spring range, for 1/2" to 1-1/4" VB-7xxx globe valves
<b>MK-4621</b>	Pneumatic valve actuator, 1/2" stroke, 10-13 psi spring range, for 1/2" to 1-1/4" VB-7xxx globe valves
<b>MK-4641</b>	Pneumatic valve actuator, 1/2" stroke, 3-13 psi spring range, for 1/2" to 1-1/4" VB-7xxx globe valves
<b>MK-6601</b>	Pneumatic valve actuator, 1/2" stroke, 3-8 psi spring range, for 1-1/2" to 2" VB-7xxx globe valves
<b>MK-6611</b>	Pneumatic valve actuator, 1/2" stroke, 5-10 psi spring range, for 1-1/2" to 2" VB-7xxx globe valves
<b>MK-6621</b>	Pneumatic valve actuator, 1/2" stroke, 3-13 psi spring range, for 1-1/2" to 2" VB-7xxx globe valves
<b>MK-6801</b>	Pneumatic valve actuator, 1" stroke, 3-8 psi spring range, for 2-1/2" to 5" VB-8xxx globe valves
<b>MK-6811</b>	Pneumatic valve actuator, 1" stroke, 5-10 psi spring range, for 2-1/2" to 5" VB-8xxx globe valves
<b>MK-6821</b>	Pneumatic valve actuator, 1" stroke, 8-13 psi spring range, for 2-1/2" to 5" VB-8xxx globe valves
<b>MK-6911</b>	Pneumatic valve actuator, 1-3/4" stroke, 5-10 psi spring range, for 6" VB-8xxx globe valves

### ACCESSORIES

<b>AV-400</b>	Linkage kit for assembling MK-2690 pneumatic actuators to 1-1/2" & 2" globe valves
<b>AV-7400</b>	Linkage kit for assembling MK-2690 pneumatic actuator to 1/2" to 2" VB-7xxx globe valves
<b>AK-42309-500</b>	Positive positioner kit for MK-2690, MK-46xx, MK-6xxx actuators