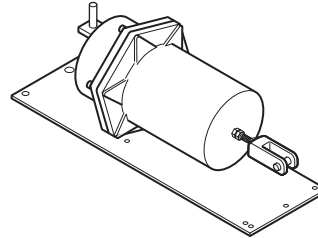


# MK-71xx Series, MK4-71xx

## Damper Actuators, Proportional

For proportional pneumatic actuator with 20 sq. in. (129 cm<sup>2</sup>) effective area used to control damper and air valves in heating, ventilating, and air conditioning systems.



**Features:**

- Rugged cast aluminum body.
- Completely enclosed spring.
- Long lasting rolling diaphragms.

### Model Chart

Model No.	Nominal Operating Range	Starting Pressure Adjustable	Maximum Force <sup>a</sup>				Nominal Torque <sup>b</sup> Proportional Control		
			Return Stroke	Power Stroke			15 psi Supply Dual Press. System	15 psi Supply Single Press. System <sup>c</sup>	20 psi Supply Single or Dual Press. System <sup>c</sup>
			Based on 1.5 psi Pressure to Actuator	15 psi Supply Dual Press. System	15 psi Supply Single Press. System <sup>c</sup>	20 psi Supply Single or Dual Press. System <sup>c</sup>			
psig	psig	lb	lb	lb	lb	lb-in.	lb-in.	lb-in.	
MK-7101	3 to 8	3 ±5	30	110	140	240	67.5	67.5	67.5
MK4-7101									
MK-7121	8 to 13	8 ±0.5	130	10	40	140	22.5	90	293
MK4-7121 <sup>d</sup>									

<sup>a</sup> Force and torques based on factory set stroke and starting pressure.

<sup>b</sup> Nominal torque for actuators without positioner is based on 1.5 psi (10 kPa) pressure change at the actuator. MK-7121 requires 15 psi (103 kPa) be available to actuator.

<sup>c</sup> Adjust pressure reducing valve so that listed pressures are available at the actuator. MK4-7121 requires 20 psi (138 kPa) be available to actuator.

<sup>d</sup> Factory installed positive positioner (AK-42309-500) start point adjustable 1 to 12 psi (7 to 83 kPa) with span adjustable 2 to 13 psi (14 to 90 kPa).

## Specifications

<b>Construction</b>	
<b>Housing</b>	Die cast aluminum.
<b>Diaphragm</b>	Replaceable beaded molded neoprene.
<b>Stroke</b>	Nominal 4-1/2 in. (114 mm), adjustable 4 to 5 in. (102 to 127 mm).
<b>Nominal Damper Area</b>	Actuator sizing should be done in accordance with damper manufacturer's specifications.
<b>Start point</b>	Adjustable, refer to Description Model Chart.
<b>Spring</b>	Retracts actuator crank arm on loss of air pressure.
<b>Maximum air pressure</b>	30 psig (207 kPa).
<b>Ambient temperature limits</b>	
<b>Shipping</b>	-40 to 160°F (-40 to 71°C).
<b>Operating</b>	-20 to 160°F (-29 to 71°C).
<b>Air connections</b>	1/8 in. FNPT.
<b>Mounting</b>	In any position.
<b>Dimensions</b>	17-5/8 H x 7-3/4 W x 7-5/8 D in. (448 x 197 x 194 mm).

## Accessories

Part Number	Description
AK-42309-500	Positive positioner and linkage.
AM-301	90 degree mounting bracket for floor mounting.
AM-530 <sup>a</sup>	Crank arm for 1/2 in. diameter damper shaft. Holes for 4-1/2 in. stroke.
AM-532	Bolt-on frame lug and damper blade clip kit.
AM-538	Actuator brace kit.
AM-542	Rod end connector for 5/16 in. (10 mm) rod. <sup>b</sup>
AM-543	Actuator shaft extension.
TOOL-095-1	Pneumatic calibration tool kit.
<b>Maintenance Parts</b>	
AM-533	Actuator shaft extension.
AM-534	Pivot stud.
AM-535	Clevis kit.
AM-541	Clevis kit.
AM-536	Mounting plate.
AM-538	Brace kit.
AM-542	Rod end connector.
PND-90	High temperature diaphragm.
PND-202	Diaphragm.
PND-245-103	Green, 3 to 8 psi spring.
PND-245-108	Blue, 8 to 13 psi spring.

<sup>a</sup> Required to connect damper actuator to damper.

<sup>b</sup> Maximum length of 5/16 in. (8 mm) rod which can be used with AM-542, 15 in. (381 mm).