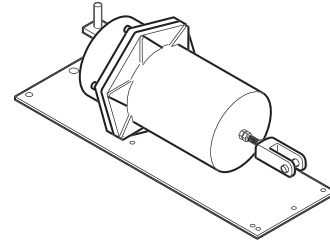


Damper Actuators, Proportional

For proportional pneumatic actuator with 20 sq. in. (129 cm²) 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 ^a				Nominal Torque ^b Proportional Control ^a		
			Return Stroke	Power Stroke					
			Based on 1.5 psi Pressure to Actuator	15 psi Supply Dual Press. System	15 psi Supply Single Press. System ^c	20 psi Supply Single or Dual Press. System ^c	15 psi Supply Dual Press. System	15 psi Supply Single Press. System ^c	20 psi Supply Single or Dual Press. System ^c
			psig	psig	lb	lb	lb	lb	lb-in.
	MK-7101	3 to 8	3 ±5	30	110	140	240	67.5	67.5
MK-7121	8 to 13	8 ±0.5	130	10	40	140	22.5		
MK4-7121 ^d								90	293

^a Force and torques based on factory set stroke and starting pressure.

^b 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.

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

^d 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).

MK-7100 Series, MK4-7121

Specifications

Construction

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

Accessories

Model No.	Description
AK-42309-500	Positive positioner and linkage.
AM-301	90 degree mounting bracket for floor mounting.
AM-530 ^a	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. ^b
AM-543	Actuator shaft extension.
TOOL-95-1	Pneumatic calibration tool kit.
PND-245-103	3 to 8 green spring.
PND-245-108	8 to 13 blue spring.
PND-202	Diaphragm.

^a Required to connect damper actuator to damper.

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