

# PNEUMATICS & FITTINGS

## KMC PNEUMATIC ACTUATORS MCP SERIES



**KMC**  
CONTROLS



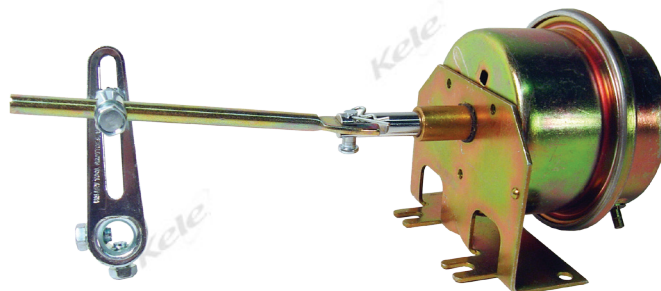
**NEW!**

### DESCRIPTION

KMC MCP-8031 Pneumatic Actuators are designed to control small dampers in HVAC air handling systems or air terminal units. They feature a right-angle bracket for mounting to the side of VAV terminals, ductwork, or damper frame. The metal body is also suited to ceiling plenum installations where nonmetallic actuators are not allowed. The actuator may be rotated in its bracket (supplied on most models) so air connections can be made where needed. Actuators are supplied with a clevis and optional clevis/cotter pins or crank arm linkage.

### FEATURES

- The metal body is ideal for ceiling installations
- Mounting bracket supplied on all models except -2099 and -3003
- Crank arm linkage or direct connection between damper and actuator shaft available



MCP-8031-2111

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### SPECIFICATIONS

<b>Effective Area</b>	8 sq. inches (52 sq. cm)
<b>Stroke</b>	1-11/16" (43 mm)
<b>Supply Connection</b>	3/16" (5 mm) OD metal fittings
<b>Supply Pressure</b>	0 to 20 psi (138 kPa) operating, 30 psi (207 kPa) maximum

**NOTE:** If application requires operation near maximum temperature AND maximum pressure, install a tubing restraint at the actuator connection.

#### Temperature Limits:

<b>Operating</b>	-20° to 180°F (-29° to 82°C)
<b>Shipping</b>	-40° to 180°F (-40° to 82°C)
<b>Material</b>	
<b>Body</b>	CRS with zinc and dichromate
<b>Diaphragm</b>	Neoprene
<b>Bearings</b>	Bronze or Delrin (plastic)
<b>Shaft</b>	CRS with nickel plating

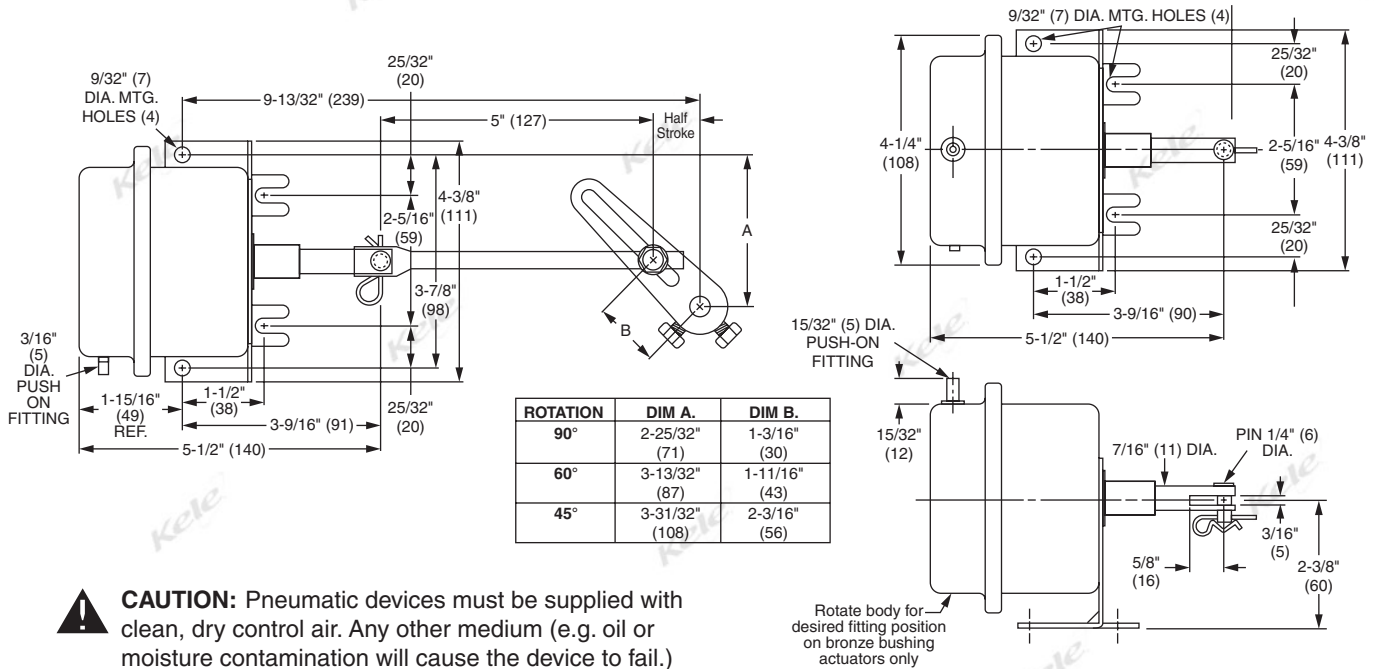
<b>Weight</b>	2.0 lb. (0.9 kg)
<b>Damper Rating @ 1000 fpm (5.08 m/s)</b>	
<b>Gradual</b>	8 sq. ft. (0.74 sq. m)
<b>Two-position</b>	10 sq. ft. (0.93 sq. m)
<b>Spring Ranges and Retracted/Extended Torque (Based on 0 and 20 psi applied)</b>	
	3–8 psi (21–55 kPa), 20/81 in-lb. (2/9 N•m) @ 90°
	4–8 psi (28–55 kPa), 27/81 in-lb. (3/9 N•m) @ 90°
	3–12 psi (21–83 kPa), 20/54 in-lb. (2/6 N•m) @ 90°
	5–10 psi (34–69 kPa), 34/67 in-lb. (4/8 N•m) @ 90°
	8–13 psi (55–90 kPa), 54/47 in-lb. (6/5 N•m) @ 90°
<b>Tolerance</b>	+0.5/-1.0 psi at start point and ±1.0 psi at finish point



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### DIMENSIONS



DAMPER TYPE	Up to 1000 FPM	1000 to 2500 FPM	2500 to 3000 FPM
Opposed blade without seals	3 in-lb / sq.ft.	4.5 in-lb / sq.ft.	6 in-lb / sq.ft.
Parallel blade without seals	4 in-lb / sq.ft.	6.0 in-lb / sq.ft.	8 in-lb / sq.ft.
Opposed blade with seals	5 in-lb / sq.ft.	7.5 in-lb / sq.ft.	10 in-lb / sq.ft.
Parallel blade with seals	7 in-lb / sq.ft.	10.5 in-lb / sq.ft.	14 in-lb / sq.ft.

### ORDERING INFORMATION

MODEL	DESCRIPTION	MODEL	DESCRIPTION
MCP-80312100	Actuator: Metal, 1-11/16", 3-12 PSI, no linkage	MCP-80313112	Actuator: Metal, 1-11/16", 5-10 PSI, 3/8" crank arm
MCP-80312101	Actuator: Metal, 1-11/16", 3-12 PSI, clevis	MCP-80315100	Actuator: Metal, 1-11/16", 8-13 PSI, no linkage
MCP-80312102	Actuator: Metal, 1-11/16", 3-12 PSI, Delrin® bushing, bracket only	MCP-80315101	Actuator: Metal, 1-11/16", 8-13 PSI, clevis
MCP-80312111	Actuator: Metal, 1-11/16", 3-12 PSI, 1/2" crank arm	MCP-80315102	Actuator: Metal, 1-11/16", 8-13 PSI, Delrin® bushing, bracket only
MCP-80312112	Actuator: Metal, 1-11/16", 3-12 PSI, 3/8" crank arm	MCP-80315111	Actuator: Metal, 1-11/16", 8-13 PSI, 1/2" crank arm
MCP-80313003	Actuator: Metal, 1-11/16", 5-10 PSI, Delrin® bushing, clevis only	MCP-80315112	Actuator: Metal, 1-11/16", 8-13 PSI, 3/8" crank arm
MCP-80313100	Actuator: Metal, 1-11/16", 5-10 PSI, no linkage	MCP-80318100	Actuator: Metal, 1-11/16", 4-8 PSI, no linkage
MCP-80313101	Actuator: Metal, 1-11/16", 5-10 PSI, clevis	MCP-80318101	Actuator: Metal, 1-11/16", 4-8 PSI, clevis
MCP-80313102	Actuator: Metal, 1-11/16", 5-10 PSI, Delrin® bushing, bracket only	MCP-80318102	Actuator: Metal, 1-11/16", 4-8 PSI, Delrin® bushing, bracket only
MCP-80313111	Actuator: Metal, 1-11/16", 5-10 PSI, 1/2" crank arm	MCP-80318111	Actuator: Metal, 1-11/16", 4-8 PSI, 1/2" crank arm
		MCP-80318112	Actuator: Metal, 1-11/16", 4-8 PSI, 3/8" crank arm

### ACCESSORIES

MODEL	DESCRIPTION	MODEL	DESCRIPTION
HPO-0004	Retainer, bracket	VTD-1611	Push rod
HPO-0005	Clevis pin	VTD-1403	Short crank arm, 3/8" shafts
HPO-0006	Cotter pin	VTD-1404	Short crank arm, 1/2" shafts