



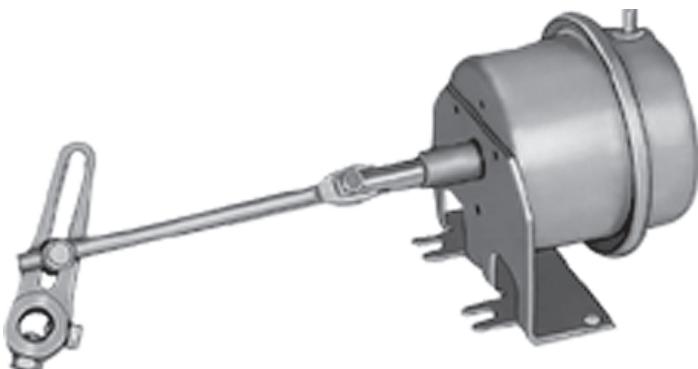
## MCP-8031 Series

### Damper Actuators with Linkage

#### Description

The KMC MCP-8031 Series Pneumatic Actuators are designed to control small dampers in HVAC air handling systems. The 8031 Series features a right angle bracket for mounting to the ductwork surface or damper frame.

The actuator may be rotated in its bracket so air connections can be made where needed. Actuators are supplied with crankarm linkage for use with 1/2" and 3/8" diameter damper shafts. The 8031's metal body design is also suited to ceiling plenum installations where non-metallic actuators are not allowed.



#### Features

- ◆ Metal housing is ideal for ceiling installations
- ◆ Adjustable bracket allows a wide range of air connections
- ◆ Mounts to ductwork or damper frame

#### Models

Use the list below to choose the MCP-8031 model which fits your application.

##### 1/2" Damper Shaft

MCP-8031-2111	3 to 12 psi spring range
MCP-8031-3111	5 to 10 psi spring range
MCP-8031-5111	8 to 13 psi spring range
MCP-8031-8111	4 to 8 psi spring range

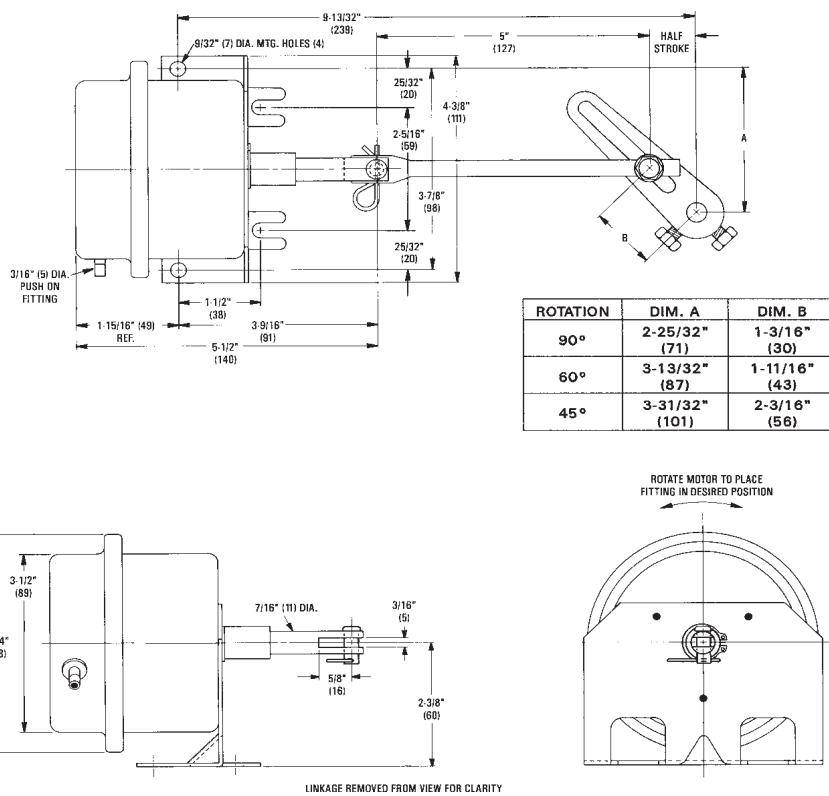
##### 3/8" Damper Shaft

MCP-8031-2112	3 to 12 psi spring range
MCP-8031-3112	5 to 10 psi spring range
MCP-8031-5112	8 to 13 psi spring range
MCP-8031-8112	4 to 8 psi spring range

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

## Details

All dimensions in inches (mm).



## Specifications

<b>Effective Area</b>	8 sq. inches (52 sq. cm)
<b>Stroke</b>	1-11/16" (43 mm)
<b>Supply Pressure</b>	0 to 20 psig (138 kPa) operating 30 psig (207 kPa) maximum <i>See note under Temperature Limits</i>
<b>Supply Connection</b>	3/16" (5 mm) OD metal fittings
<b>Material</b>	
Body	CRS w/zinc and dichromate
Diaphragm	Neoprene
Bearings	Bronze/Delrin (plastic)
Shaft	CRS with nickel plating
<b>Damper Rating @ 1000 fpm (5.08 m/s)</b>	
Gradual	8 sq. ft. (0.74 sq.m)
Two-position	10 sq. ft. (0.93 sq. m)

### Spring Ranges and Retracted/Extended Torque

(Based on 0 and 20 psi applied at 90°)

- 3 to 12 psi (21–83 kPa), 20/54 in. lbs. (2/6 N·m)
- 5 to 10 psi (34–69 kPa), 34/67 in. lbs. (4/8 N·m)
- 8 to 13 psi (55–90 kPa), 54/47 in. lbs. (6/5 N·m)
- 3 to 8 psi (21–55 kPa), 20/81 in. lbs. (2/9 N·m)

**Weight** 2.0 lbs. 5 oz. (1.1 kg)

### Temperature Limits

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

- |           |                                |
|-----------|--------------------------------|
| Operating | -20° to 180° F (-29° to 82° C) |
| Shipping  | -40° to 180° F (-40° to 82° C) |

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