



## MCP-5160 Series 6" Pneumatic Damper Actuators

### Description

The KMC MCP-5160 Series 6" Pneumatic Damper Actuators are designed to position large automatic air control dampers. The MCP-5160 Series feature a universal mounting bracket for connecting to dampers, butterfly valves and variable fan inlet vanes.

The MCP-5160 has an 8 to 13 psi main spring for ample return power. The linkage is designed for angular adjustment from 60° to 120° of the damper rotation at full stroke. The units may be used for modulating or two-position applications with or without an adjustable start-point positive positioner.



### Features

- ◆ Allows modulating or two position applications
- ◆ Universal mounting bracket
- ◆ Ample return power from 8 to 13 psi main spring

### Accessories/Replacement Parts

CMC-1002	Metal Positive Positioner
VTD-1500	Positioner feedback arm
VTD-2256	5 psi span spring for CMC-1002
VTD-2266	10 psi span spring for CMC-1002
VTD-5002	Replacement linkage kit
VTD-9426	Replacement actuator diaphragm

### Models

Use the chart below to choose the MCP-5160 model which fits your application.

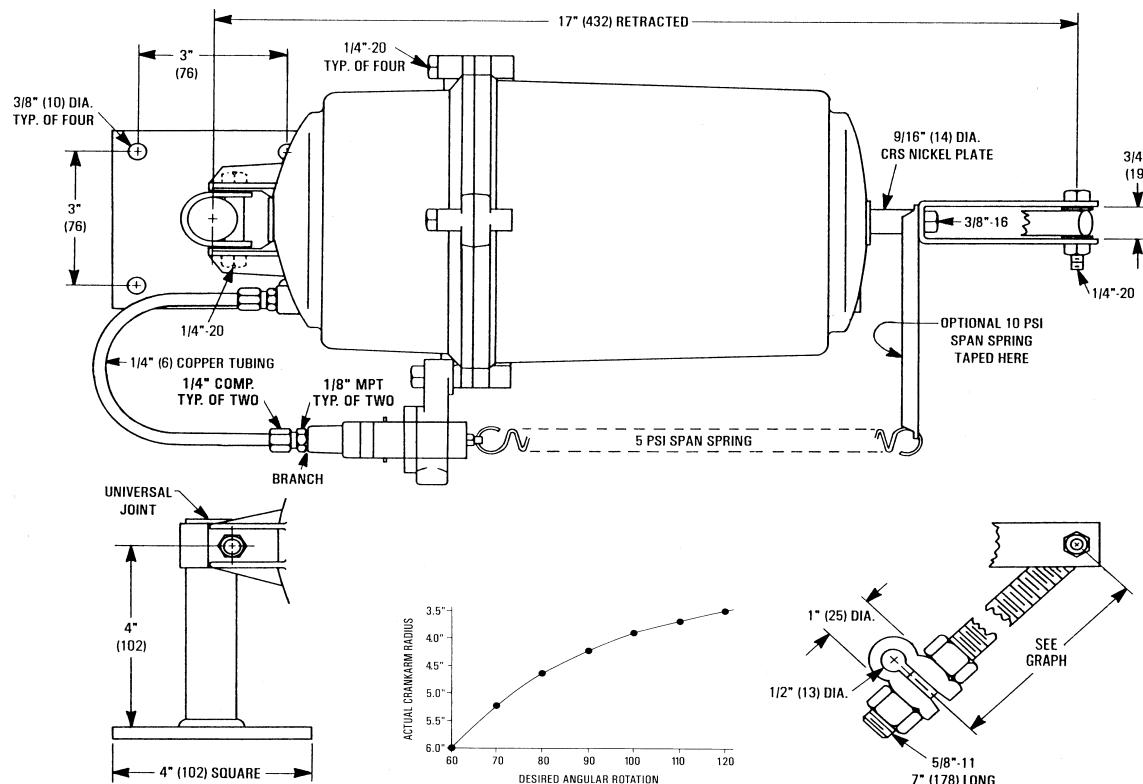
Mounting Bracket	Bracket Hardware Only	Crankarm Linkage	Clevis Linkage Only	Metal Positioner
MCP-5160-5020			●	
MCP-5160-5101	●			
MCP-5160-5102		●		●
MCP-5160-5103		●		
MCP-5160-5111	●		●	
MCP-5160-5114	●			●
MCP-5160-9020		●		
MCP-5160-9101	●			
MCP-5160-9102		●		●
MCP-5160-9103		●		
MCP-5160-9111	●		●	
MCP-5160-9114	●			●

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

Specifications and design subject to change without notice.

## Details

All dimensions in inches (mm).



## Specifications

<b>Effective Area</b>	24.8 sq. inches (160 sq. cm)
<b>Stroke</b>	6" (152 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>Spring Ranges</b>	8 to 13 psi (55–90 kPa)
<b>Retracted/Extended Torque</b> <i>(Based on 0 &amp; 20 psi applied @ 90°)</i>	576/504 in. lbs. (65/57 N•m)

**Supply Connection** 1/8" (3 mm) FPT, supplied with brass compression fitting for 1/4" (6 mm) OD tubing

### Material

Body	Die-cast aluminum
Diaphragm	Neoprene
Piston	Glass-filled nylon
Shaft	CRS with nickel plating

### Damper Rating @ 1000 fpm

Gradual	75 sq. ft (7 sq. m)
Two position	90 sq. ft. (8.36 sq. m)

**Weight** 12.75 lbs. (6 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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