

### Description

The KMC MCP-1160 Series 6" Pneumatic Damper Actuators are designed to position automatic air dampers in pneumatically controlled systems. The MCP-1160 Series features a universal mounting bracket for use with dampers, butterfly valves and variable fan inlet vanes.

The MCP-1160 has an 8 to 13 psi main spring for ample return power. The linkage is adjustable 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.



MCP-1160-1111 Shown

### Features

- ◆ Modulating or two position applications
- ◆ Universal mounting bracket and adjustable linkage
- ◆ Ample return power from 8 to 13 psi main spring

### Accessories/Replacement Parts

- CMC-1001 Non-metallic positive positioner
- CMC-1002 Metal positive positioner
- VTD-1500 Positioner feedback arm
- VTD-2252 5 psi span spring for CMC-1001
- VTD-2256 5 psi span spring for CMC-1002
- VTD-2262 10 psi span spring for CMC-1001
- VTD-2266 10 psi span spring for CMC-1002
- VTD-2272 3 psi span spring for CMC-1001
- VTD-2282 7 psi span spring for CMC-1001
- VTD-9426 Replacement actuator diaphragm

### Models

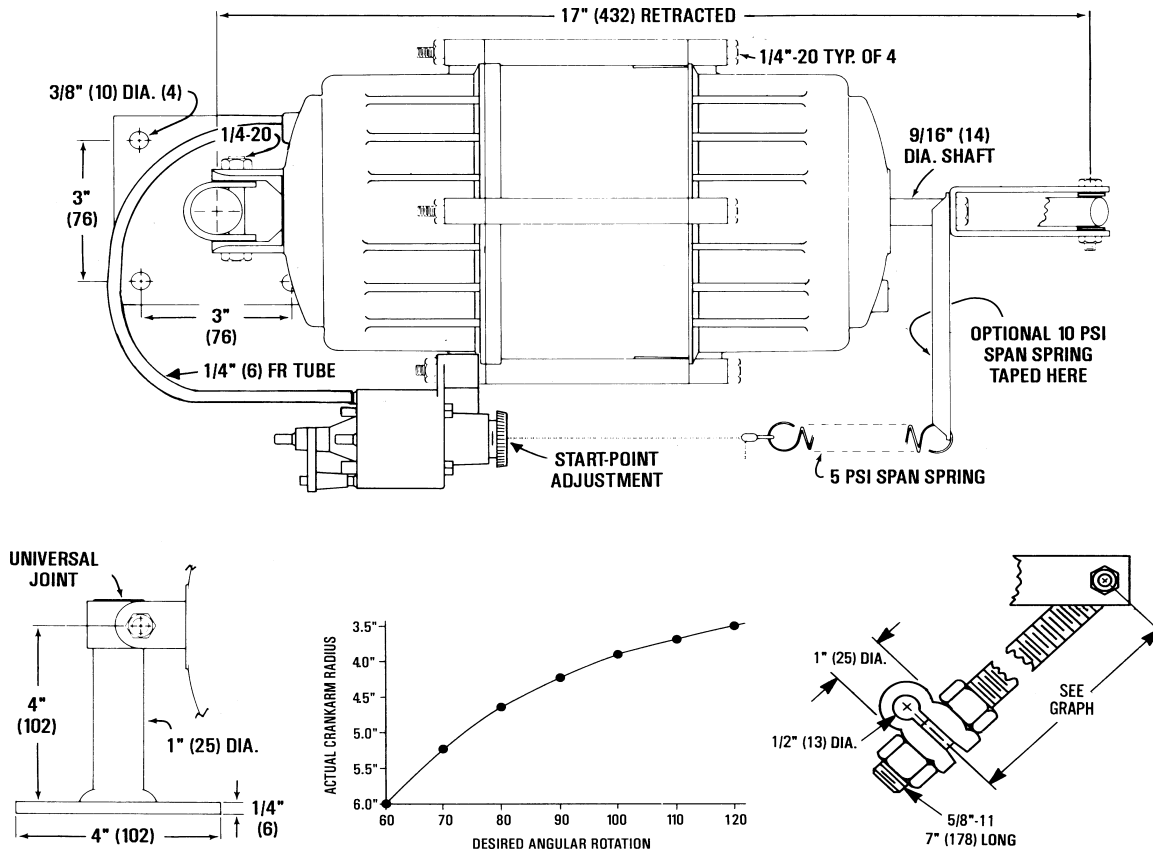
Use the chart below to choose the MCP-1160 model which fits your application.

	Bracket Mounting Bracket	Crankarm Hardware Only	Clevis Linkage Only	Plastic Linkage Only	Metal Positioner
MCP-1160-1020					
MCP-1160-1101	●				
MCP-1160-1102					●
MCP-1160-1103			●		●
MCP-1160-1104			●		●
MCP-1160-1111	●				●
MCP-1160-1114	●				●
MCP-1160-5020			●		
MCP-1160-5101	●				
MCP-1160-5102					●
MCP-1160-5103			●		
MCP-1160-5104			●		●
MCP-1160-5111	●				●
MCP-1160-5114	●				●
MCP-1160-9111	●				●
MCP-1160-9114	●				●

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

## 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>	8–13 psi (55–90 kPa)
<b>Retracted/Extended Torque</b>	<i>(Based on 0 &amp; 20 psi applied)</i> 576/504 in. lbs. (65/57 N•m) @ 90°
<b>Supply Connection</b>	3/16" (5 mm) fitting for 1/4" (6 mm) O.D. polyethylene tubing

### Material

Body	Black glass-filled nylon
Diaphragm	Neoprene
Piston	Glass-filled nylon
Shaft	CRS with nickel plating
Bearings	Glass-filled nylon

### Damper Rating @ 1000 fpm

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

**Weight** 9.75 lbs. (4.4 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)

### KMC Controls, Inc.

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