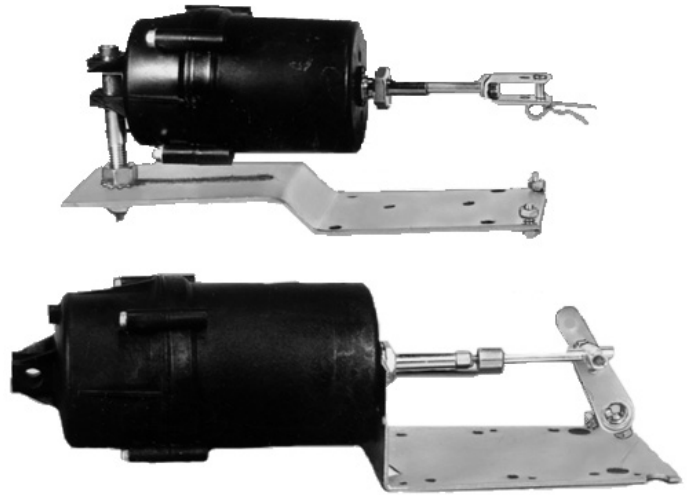


### **Description**

The KMC MCP-1231, and MCP-1241 Hesitation Stroke Pneumatic Damper Actuators are designed to position automatic air dampers in unit ventilators and air handling units.

The action of the MCP-1231 and 1241 is in response to an air pressure signal from a control device. An increase in pressure causes the actuator to stroke to a preset position, hesitate for a preset pressure range, then complete the full stroke. The stroke before and after hesitation is field adjustable.

Actuators may be combined with other control devices for performing various control cycles. Special mounting arrangements are available for adapting to various unit ventilators.



### **Features**

- ◆ Adjustable hesitation start and stop points
- ◆ Easy integration with other control devices
- ◆ Flexible mounting options

### **Models**

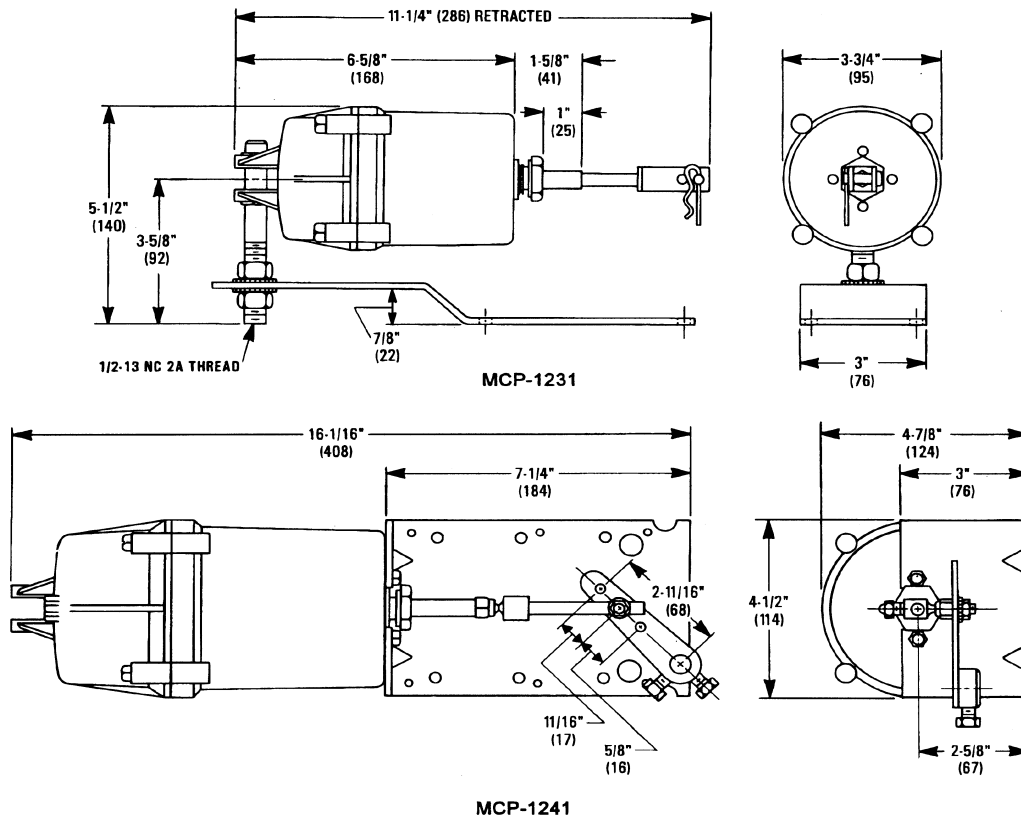
|               |                              |
|---------------|------------------------------|
| MCP-1231-0211 | 2" stroke; right angle mount |
| MCP-1241-0211 | 3" stroke; right angle mount |
| MCP-1231-0520 | 2" stroke; post mount        |
| MCP-1241-0520 | 3" stroke; post mount        |

### **Accessories/Replacement Parts**

|           |  |
|-----------|--|
| VTD--0803 | 1/4-20 x 5/16" actuator ball-joint         |
| VTD-0804  | 1/4-20 crankarm ball-joint                 |
| VTD-1100  | 1/4" clevis pin for post mounted actuators |
| VTD-1205  | Cotter pin for post mounted actuators      |
| VTD-1414  | 3-hole crankarm for 3/8" damper shaft      |
| VTD-1415  | 3-hole crankarm for 1/2" damper shaft      |
| VTD-1630  | 5/16" push rod for right angle actuators   |
| VTD-9423  | Replacement diaphragm; MCP-1231            |
| VTD-9424  | Replacement diaphragm; MCP-1241            |

## Details

All dimensions in inches (mm).



## Specifications

### Effective Area

|          |                        |
|----------|------------------------|
| MCP-1231 | 7 sq. in. (45 sq. cm)  |
| MCP-1241 | 11 sq. in. (71 sq. cm) |

### Stroke

|          |            |
|----------|------------|
| MCP-1231 | 2" (51 mm) |
| MCP-1241 | 3" (76 mm) |

### Supply Pressure

0 to 20 psig (138 kPa)  
 Operating at 30 psig (207 kPa) maximum  
 See note under *Temperature Limits*

### Supply Connection

3/16" (5 mm) fitting for 1/4" (6 mm) OD polyethylene tubing

### Material

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

### Weight

|          |                    |
|----------|--------------------|
| MCP-1231 | 3.25 lbs (1.47 kg) |
| MCP-1241 | 4.8 lbs. (2.18 kg) |

### Adjustments

|                   |   |
|-------------------|---|
| Hesitation Start  | 4 psig (28 kPa), stroke adjustable 20 to 70% prior to 4 psig. |
| Hesitation Finish | 8 psig (5 kPa), stroke adjustable 80 to 30% after 8 psig.     |

### 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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