

## MP909D Pneumatic Damper Operator

### SPECIFICATION DATA



### FEATURES

- Rugged ribbed aluminum body
- Low-friction shaft bearing
- Close tolerance on operating range and stroke
- Protected barb connector
- Versatile mounting and connecting hardware options
- Positive leakproof seal

### GENERAL

The MP909D Pneumatic Damper Operator provides proportional control of variable volume terminal units, mixing boxes, and small dampers. Choices of shaft end connections provide versatile mounting and hardware connection options.



## DESCRIPTION

The MP909D Pneumatic Damper Operator provides proportional control of variable volume terminal units, mixing boxes, and small dampers.

## SPECIFICATIONS

**Models:**

- MP909D with male shaft
- MP909D with clevis shaft

**Ambient Temperature Range:**

50 to 140F (10 to 60C)

**Maximum Safe Air Pressure:**

30 psi (207 kPa)

**Normal Operating Pressure Range:**

0 to 18 psi (9 to 124 kPa)

**Safe Operating Humidity:**

5 to 95 percent rh

**Stroke:**

2.3 in. (58 mm) or 3.0 in. (76 mm)

**Net Force Exerted:**

Pressure Range in psi (kPa)	Force in lb (N) at 0 psi (0 kPa)	Force in lb (N) at 20 psi (140 kPa)
3 to 6 (21 to 42)	9 (40)	42 (187)
3 to 8 (21 to 55)	9 (40)	36 (160)
5 to 10 (34 to 69)	15 (67)	30 (133)
8 to 13 (55 to 90)	24 (107)	21 (93)

**Diaphragm Effective Area:**

3 square inches (1944 mm<sup>2</sup>)

**Air Connection:**

5/32 in. (4 mm) push-on barb or 1/4 in. (6 mm) push-on barb

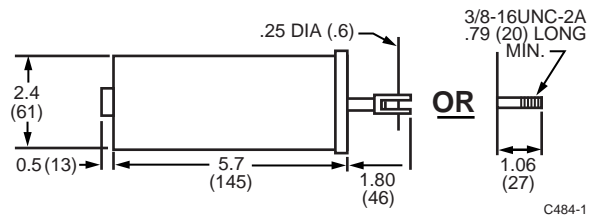
**Shaft End Connection:**

3/8 -16 UNC-2A thread or clevis end connector

**Weight:**

8.8 oz (244 g)

**Dimensions:**



**MP909D approximate dimensions in inches (millimeters).**

**Damper Load Rating:**

Load ratings for Honeywell's Moduflow dampers are figured by multiplying the B dimension of each damper by the number of sections required. The A dimension, not to exceed 48 inches (1219 mm) per section, is parallel to the blade length. The B dimension is perpendicular to the blade length

**Example:**

A D640 Damper in a duct with an overall A dimension of 24 inches (609 mm) and a B dimension of 8 inches (203 mm) requires one D640 section. Table 1 shows a B dimension of 8 inches requires one MP909D Operator for modulating service or one for two-position service.

Table 1. Maximum Damper Rating Per MP909D Operator in Inches (mm) for B Dimension.

Damper Model	MP909D Spring Range in psi (kPa)	Modulating Service		Two-Position Service
		Main Air Pressure 13 psi (90 kPa) for B Dimension in Inches (mm)	Main Air Pressure 18 psi (124 kPa) for B Dimension in Inches (mm)	Main Air Pressure 18 psi (124 kPa) for B Dimension in Inches (mm)
D640, D641	3-8 (21-55)	8 (203)	8 (203)	8 (203)
	5-10 (34-69)	8 (203) 10 (254) <sup>1</sup>	8 (203) 10 (254) <sup>1</sup>	12 (305) 18 (457)
	8-13 (55-90)	—	8 (203)	12 (305)
D642, D643, D644, D645	3-8 (21-55)	—	—	—
	5-10 (34-69)	8 (203) <sup>1</sup>	8 (203) <sup>1</sup>	10 (354) 12 (305) <sup>1</sup>
	8-13 (55-90)	—	—	10 (254) <sup>1</sup>

<sup>1</sup>3-inch Stroke Model only.

**Accessories:**

Angled Bracket 14003640-001 for external mounting to duct or terminal unit

Screw 14002807-002 for mounting bracket

Motor Shaft Ball Joint 315781-00605

Crank Arm Ball Joint 315321-00062

Crank Arm 26025B for 3/8 in. (9 mm) shaft

5/16-inch diameter Push Rods of various lengths

Clevis Pin 304955-062 or 14004622-001

Cotter Pin 14004615-001 or -002

**Approvals:**

UL Recognized Component Category EMKU2

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