

D-3062

LIT-1921010

Pneumatic Piston Damper Actuator

Description

The D-3062 Pneumatic Actuator is a multipurpose positioning device used to accurately position small dampers primarily on Variable Air Volume (VAV), terminal units and small ventilating dampers in response to output signals of a pneumatic controller or electro-pneumatic transducer.

The actuator is also recommended for use on other air flow control dampers, in interior locations, with a up to a maximum area of 4 square feet for proportional volume control and 6.25 square feet for two position actuation provided that the torque requirements are compatible with the specific application.

The D-3062 is UL component recognized for use on UL Classified 555/555S smoke and combination fire/smoke dampers, which have been tested and approved to a degradation temperature of 250°F (121°C).

Features

- high power to size ratio for locations in confined spaces
- all-aluminum housing which is lightweight and non-combustible
- telescoping linkage for fast and flexible installation
- front or rear mounting options for flexible mounting configurations
- optional mounting kits to cover any application and replacement of obsolete units

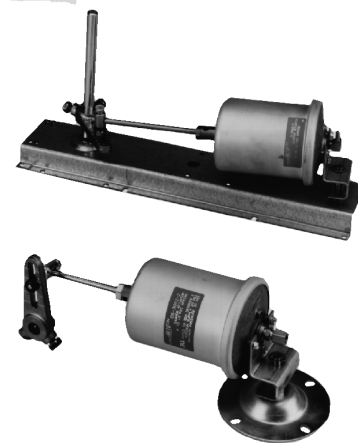
Applications

When used with proportional control, the damper size is limited to 4 square feet maximum.

As a 2-position control, damper size is limited to 6.25 square feet. As determined by testing using Johnson Controls D-1300 dampers, width and height are limited to 30 inches maximum.

Four nominal spring ranges are available: 3-7 psi (D-3062-1), 5-10 psi (D-3062-2), 8-13 psi (D-3062-3), and 11-15 psi (D-3062-4).

The control air pressure for normal HVAC operation is 0-20 psig. The minimum control pressure for safety damper ventilation mode is 20 psi with the maximum pressure of 30 psi. When used for both proportional and smoke applications, a separate air signal should be provided to override normal HVAC operations and enact safety damper functions.



D-3062 Pneumatic Piston Damper Actuators

Note: The D-3062 is not able to be configured for frame mounting in power fail open damper applications.

Repair Information

The D-3062 Damper Actuator has a sealed body, so field repairs cannot be made. If it fails to operate within its specifications, replace the unit. For a replacement damper actuator, contact the nearest Johnson Controls® representative.

Selection Charts

D3062 Pneumatic Piston Damper Actuators

Code Number	Nominal Spring Range, psig (kPa)
D-3062-1	3-7 (21-49)
D-3062-2	5-10 (35-70)
D-3062-3	8-13 (56-91)
D-3062-4	11-15 (77-105)
D-3062-41	8-13 (56-91) with Universal Mounting Kit

Mounting Kits¹ for D-3062 Damper Actuators

Code Number	Description	Weight, lb (Kg)
D-3062-100	Universal Mounting Kit for Type "W" (N.O. or N.C.) and Type "F" (N.C. only). The D-3062-100 mounting kit contains all parts required for the actuator to be mounted inside or outside the duct for use with D-1300 series dampers.	3.5 (1.59)
D-3062-101	Auxiliary Mounting Kit for multi-position swivel mounting.	0.8 (0.36)
D-3062-102	Small Damper Mounting Kit for limited space requirement mounting replaces #2 D-251.	0.8 (0.36)
D-3062-103	Unit Vent Mounting Kit as direct replacement of Johnson Controls D-3000, Robertshaw® M593 Series Actuators, Krueger MCP8030, or Barber-Colman MK693.	1.3 (0.59)
DMPR-KR001	RD-2000 - 9 to 16 inch round damper mounting kit	1.0 (0.45)

1. Mounting kits include bracket, linkage, and all necessary mounting hardware.

Accessories for D-3062 Damper Actuators

Code Number	Description	Weight, lb (Kg)
DMPR-KC050	Crank Arm: 7/16 inch adjustable to 2-3/4 inch radius	0.5 (0.23)
DMPR-KC051	Crank Arm: 3/8 inch adjustable to 2-3/4 inch radius	0.5 (0.23)
DMPR-KC053	Crank Arm: 1/2 inch adjustable to 2-3/4 inch radius	0.5 (0.23)
DMPR-KC300	Swivel Ball Joint	0.5 (0.23)
D-9999-152	Clevis Pin No. 6	0.5 (0.23)
D-9999-153	Twist Lock, Pin No. A	0.5 (0.23)
D-3062-104	Clevis - fork type	0.5 (0.23)
D-3062-106	Rod - 1/4-20 threaded one end	0.5 (0.23)
D-3062-107	Push-Pull Ball Joint and Nut, 5 per bag	1.0 (0.45)
D-3062-108	Rod - spade end	0.5 (0.23)
D-3062-600	Push-Pull Ball Joint	0.5 (0.23)
D-3073-604	Ball Joint - weather resistant	0.5 (0.23)

D-3062 Pneumatic Piston Damper Actuator (Continued)

Technical Specifications

D-3062 Pneumatic Actuators	
Stroke	2 inches (51 mm)
Control Air Pressure	0-20 psig for HVAC 20 psig (137 kPa) minimum for safety damper functions 30 psig (205 kPa) maximum
Air Connections	1/8 in. NPT straight barbed fitting for 5/32 or 1/4 in. O.D. polytubing (furnished). Compression fitting for 1/4 in. O.D. copper tubing (F-200-3, order separately).
Ambient Operating Conditions (HVAC)	-20 to 150°F (-29 to 66°C)
Effective Diaphragm Area	6.6 in. ² (43 cm ²)
Materials	Body - Aluminum, Diaphragm - Synthetic elastomer
Dimensions	3-3/16 in. diameter x 6-13/16 in. long
Shipping Weight, lb (Kg)	1.2 (0.54)
Agency Listing	UL Recognized component to 250°F (121°C) with compression fitting for copper tubing File no. R15581

Maximum Actuator Force at 20 psig (140 kPa)

Nominal Spring Range psig (kPa)	Stroke	Force lb (Newton)	Torque Output for 90° Rotation	D-3062-Suffix
3 to 7 (21 to 49)	Power	85.8 (382)	85.8 in·lb (9.69 N·m)	-1
	Return	19.8 (88)	19.8 in·lb (2.24 N·m)	
5 to 10 (35 to 70)	Power	66 (294)	66 in·lb (7.45 N·m)	-2
	Return	33 (147)	33 in·lb (3.73 N·m)	
8 to 13 (56 to 91)	Power	46.2 (206)	46.2 in·lb (5.22 N·m)	-3 -41
	Return	52.8 (235)	52.8 in·lb (5.96 N·m)	
11 to 15 (77 to 105)	Power	33 (147)	33 in·lb (3.73 N·m)	-4
	Return	72.6 (323)	72.6 in·lb (8.20 N·m)	

Note: Force calculated using 6.6 lb/psig available actuator force.