

D-3153 Series Pneumatic Actuator

Description

The D-3153 Pneumatic Actuator is a multipurpose positioning device used primarily for operating ventilating dampers in response to the output signals of a pneumatic controller or electro-pneumatic transducer.

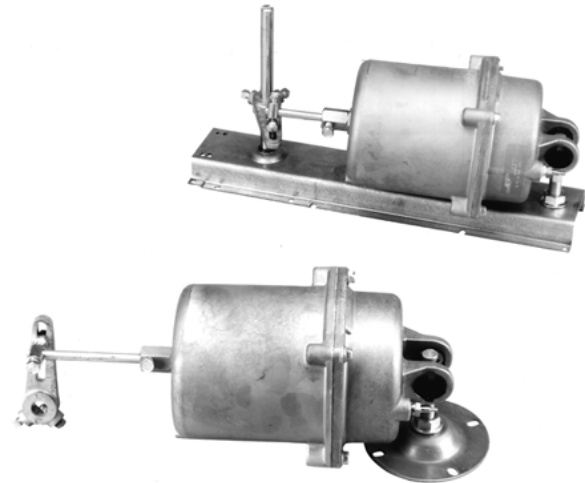
The D-3153 Pneumatic Actuator is used with dampers up to a maximum area of 16 ft² (1.5 m²) for proportional volume control, and 25 ft² (2.3 m²) for 2-position actuation (provided that the torque requirements are compatible with the specific application).

The D-3153 Pneumatic Actuator component is recognized by Underwriters Laboratories Inc. ® (UL) 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).

Refer to the *D-3153 Pneumatic Actuator Product Bulletin (LIT-2681054P)* for important product application information.

Features

- all-aluminum housing – creates a lightweight, non-combustible actuator
- telescoping linkage – provides fast, flexible installation
- long life and reliable design – places over a million actuators now in service
- 2-way swivel head – ensures full power delivery
- agency recognition – provides a UL recognized component for fire and smoke applications to 250°F (121°C)



D-3153 Pneumatic Actuator

Repair Information

Do not make field repairs. If the D-3153 Pneumatic Actuator fails to operate within its specifications, replace the unit. For a replacement D-3153 Actuator, contact the nearest Johnson Controls® representative.

Selection Charts

Ordering Information for D-3153 Series

Nominal Spring Range, psig (kPa)	With Universal Mounting Bracket	With Auxiliary Mounting Bracket	Body Only
8 to 13 (56 to 91)	D-3153-2	D-3153-5	D-3153-6003
8 to 13 (56 to 91) with D-9502	D-3153-1	D-3153-4	–
0 to 3 (0 to 21) and 9 to 13 (63 to 91) with 2-stage Pilot	–	D-3153-18	–
5 to 10 (35 to 70)	D-3153-3	D-3153-6	D-3153-6002
3 to 7 (21 to 49)	–	D-3153-7	D-3153-6001

Accessories (Order Separately)

Description	Shipping Weight, lb (kg)	Code Number
Rubber Boot Kit	0.2 (0.09)	D-3073-100
Ball Joint, weather resistant	0.3 (0.11)	D-3073-604
Blade Arm Kit	1.0 (0.45)	D-9999-100
Crank Arm, 1/2 in. adjustable to 2-3/4 in. radius	0.5 (0.23)	D-3153-101
Crank Arm, 3/8 in. adjustable to 2-3/4 in. radius	0.5 (0.23)	D-3153-108
Crank Arm, 7/16 in. adjustable to 2-3/4 in. radius	0.5 (0.23)	D-3153-109
Linkage Rod, 4 ft (122 cm)	2.0 (0.91)	D-3153-102
Linkage Rod, replacement	1.0 (0.45)	D-3153-103
Stop Screw Kit, 1/4 – 24 x 3 in.	0.5 (0.23)	D-3153-104
Proportional Pilot Positioner Kit ¹	2.0 (0.91)	D-9502-8
Ball Joint	0.5 (0.23)	D-9999-104
Pivot Post, 5 per kit	0.5 (0.23)	D-3153-110
E-rings for Pivot Post, 10 per kit	0.5 (0.23)	D-3153-111
Mounting Nuts for Pivot Post, 10 per kit	0.5 (0.23)	D-3153-112
Universal Mounting Bracket	3.5 (1.13)	D-3153-105
Auxiliary Mounting Bracket	1.0 (0.45)	D-3153-106
2-stage Positioner Kit ¹	2.0 (0.91)	D-9502-9

1. Positioner kit includes positioner, mounting plate, spring, and mounting hardware.

D-3153 Series Pneumatic Actuator (Continued)

Technical Specifications

D-3153 Pneumatic Actuators	
Stroke	3 in. (76 mm)
Control Air Pressure	0-20 psig (0-138 kPa) for Heating, Ventilating, and Air Conditioning (HVAC) 20 psig (138 kPa) minimum for safety damper functions 30 psig (207 kPa) maximum without pilot
Air Connections	1/8 in. NPT straight barbed fitting for 5/32 in. or 1/4 in. O.D. polytubing (furnished) compression fitting for 1/4 in. O.D. copper tubing (optional)
Ambient Operating Conditions	-20 to 150°F (-29 to 66°C)
Effective Diaphragm Area	15 in. ² (97 cm ²)
Materials	Body: Die-cast Aluminum; Diaphragm: Synthetic elastomer
Dimensions (H x W x D)	Refer to the <i>D-3153 Pneumatic Actuator Product Bulletin (LIT-2681054P)</i> Figure 2, Figure 3, and Figure 4.
Shipping Weight, lb (Kg)	D-3153-1 11.5 (5.2) D-3153-3 10.0 (4.5) D-3153-5 8.5 (3.9) D-3153-7 8.5 (3.9) D-3153-2 10.0 (4.5) D-3153-4 10.5 (4.8) D-3153-6 8.5 (3.9) D-3153-18 10.5 (4.8)
Compliance	UL recognized component to 250°F (121°C) with compression fitting for copper tubing, File No. R15581, D-3153-42 and D-3153-43 ULC Listed