



Series  
DDB  
&  
DDD

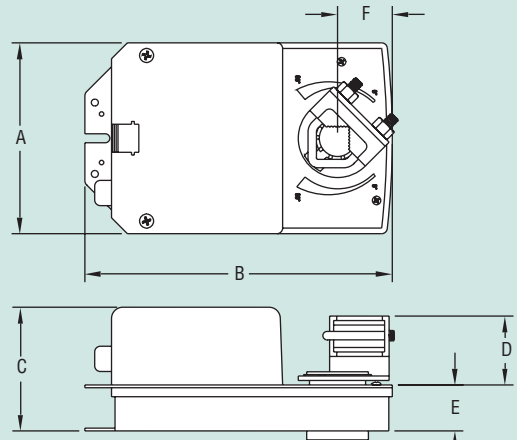
# Non-Spring Return Direct Coupled Actuators

Low Cost, Two-Position or Modulating



AIR QUALITY

Damper Actuators



Size	A	B	C	D	E	F
88 in-lb (10 Nm) & 132 in-lb (15 Nm)	4-17/64 [108.35]	6-55/64 [174.23]	2-49/64 [70.25]	1-35/64 [39.29]	1-1/32 [26.19]	1-15/64 [31.35]
177 in-lb (20 Nm) & 265 in-lb (30 Nm)	4-57/64 [124.22]	7-23/32 [196.06]	2-23/32 [69.06]			1-25/64 [35.32]

**DDB and DDD Series Direct Coupled Actuators** are non-spring return actuators that are perfect for positioning of dampers and valves in HVAC systems. DDB actuators are designed to accept floating control signals and come in a variety of power supplies. DDD Actuators are designed to accept 4 to 20 mA or 0 to 10 VDC modulating control signals and are 24 VAC powered. DDD units feature a 0 to 10 VDC feedback signal of damper position. Actuators produce 88 to 265 in-lb (10 to 30 Nm) of torque. Contact factory for optional internal auxiliary switches on DDB.

## FEATURES

- Direct mount
- Actuator travel indicator
- Overload protection
- Manual override
- Floating control signal on DDB
- Modulating 4 to 20 mA or 0 to 10 VDC control signal on DDD
- Position feedback signal on DDD
- 60,000 cycles nominal

Model	Size/ Torque	Supply Voltage	Input
DDB51	88 in-lb [10 Nm]	110 VAC	Floating
DDB53	88 in-lb [10 Nm]	24 VAC	Floating
DDB61	132 in-lb [15 Nm]	110 VAC	Floating
DDB63	132 in-lb [15 Nm]	24 VAC	Floating
DDB71	177 in-lb [20 Nm]	110 VAC	Floating
DDB73	177 in-lb [20 Nm]	24 VAC	Floating
DDB81	265 in-lb [30 Nm]	110 VAC	Floating
DDB83	265 in-lb [30 Nm]	24 VAC	Floating
DDD53	88 in-lb [10 Nm]	24 VAC	Modulating
DDD63	132 in-lb [15 Nm]	24 VAC	Modulating
DDD73	177 in-lb [20 Nm]	24 VAC	Modulating
DDD83	265 in-lb [30 Nm]	24 VAC	Modulating

## SPECIFICATIONS

**Power Requirements:** DDB: 110 VAC, 24 VAC,  $\pm 10\%$ , 50/60 Hz, single phase. Optional 230 VAC. DDD: 24 VAC,  $\pm 10\%$ , 50/60 Hz, single phase.

**Power Consumption:** DDB: 5.5 VA. DDD: 7.5 VA.

**Control Input:** DDB: Two-position or floating. DDD: 4-20 mA or 0-10 VDC.

**Overload Protection:** Magnetic clutch.

**Angle of Rotation:** 95° (mechanically adjustable).

**Accuracy:** DDD:  $\pm 5\%$ .

**Fits Shaft Diameter:** 0.4" - 0.75" (10-20 mm).

**Position Indication:** Visual indicator.

**Direction of Rotation:** CW/CCW.

**Running Time:** 88 in-lb: 66 sec., 132 in-lb: 90 sec., 177 in-lb: 110 sec.; 265 in-lb: 143 sec.

**Electrical Connection:** Terminal block, 18 AWG.

**Manual Override:** Push button.

**Temperature Limit:** -22 to 122°F (-30 to 50°C).

**Sound:** <45 dB.

**Life Expectancy:** 60000 full cycles.

**Housing:** NEMA 2 (IP42).

**Standard Accessories:** (2) imitative baffles, (2) baffle setscrews, (1) setting bracket.

**Weight:** DDB: 2.87 lb (1.3 kg) 88, 132 in-lb models; 3.68 lb (1.67 kg) 177, 265 in-lb models; DDD: 2.98 lb (1.35 kg) 88, 132 in-lb models; 3.79 lb (1.72 kg) 177, 265 in-lb models.

**Agency Approvals:** CE.