

ControlLinks™ Fuel Air Control System

NOTE: THESE PRODUCTS ARE AVAILABLE ONLY THROUGH AUTHORIZED CONTROLINKS™ REPRESENTATIVES.

ML7999A Universal Parallel-Positioning Actuator



- Password protected with an eight-digit hexadecimal identification signal.
- Separate wiring compartment between line voltage power wiring and low voltage control.
- Couples directly to a 1/2 in. (13 mm) shaft with no additional parts required.
- Couples directly to 5/16 in. (8 mm) and 3/8 in. (9 mm) shafts using available self-centering shaft reduction accessories.
- Shaft coupler assembly available for shafts larger than 1/2 in.
- Bracket Accessory Kit available for mounting to Honeywell V51 Butterfly Gas Valves.
- NEMA 2
- IP54 with weatherproof kit (see Accessories)

Provides 100 lb-in. torque, pulse-width-modulating (PWM) control of combustion air dampers, butterfly gas valves, oil modulation valves, and flue gas recirculation systems. The actuator includes a precision feedback potentiometer and integral power supply. The ML7999A Actuator is part of the ControlLinks™ Fuel Air Control System, and must be used with the R7999 Fuel Air Controller.

Electrical Ratings:

Power Input: 100 to 240 Vac (+10/-15%), 50/60 Hz; Maximum Power Consumption: 15 VA.

Temperature Rating (Ambient): -40 F to +140 F; -40 C to +60 C.

Temperature Rating (Storage): -40 F to +150 F; -40 C to +65 C.

Humidity Range at 95 F (35 C): 5 to 95% RH, noncondensing.

Vibration: 0.0 to 0.5g continuous (V2 level).

Control Signal (at 5 mA current): Drive Clockwise: Minimum 4.25

Vdc differential between DR1-DR2; Drive Counterclockwise:

Maximum

-4.25 Vdc differential between DR1-DR2.

NOTE: Actuator does not respond until the 8-digit ID signal from the R7999 is passed via DR1-DR2.

Actuator Stroke: 95° nominal ± 3°, mechanically limited.

Output Hub Position Accuracy: ± 0.1°.

Torque Ratings at Rated Voltages: Lift and Hold Minimum: 100 lb-in.

(11.3 Nm); Breakaway Minimum: 100 lb-in. (11.3 Nm); Stall

Minimum: 100 lb-in. (11.3 Nm); Stall Maximum: 150 lb-in. (17 Nm).

Actuator Design Life (at 100 lb-in.): Full-Stroke Cycles: 100,000

minimum; repositions: 2,000,000 minimum.

Feedback Potentiometer: Total Resistance: 5000 ohms ± 10%.

Actuator Timing (90° Travel): Standard: 24 to 30 seconds; Derated Cold-Start Timing (from -40 F to -20 F (-40 C to -29 C), 150 seconds maximum.

Noise Rating: 55 dBA maximum at 1m during normal operation.

Mounting: Mounts directly on 1/2 in. (13 mm) round or square shaft.

With proper accessories, mounts to 5/16 in. and 3/8 in. (8 mm,

10 mm) round or square shafts; 9/16 in., 5/8 in., and 3/4 in.

(14 mm, 16 mm, and 19 mm) round shafts.

Position Indicator: Visible with cover on device.

Approvals: Underwriters Laboratories Inc. (UL); meets UL873;

Canadian Standards Association (CSA); European Community

(CE):

Accessories:

201391 Shaft Adapter for 3/8 in. round or square shaft;

32002935-001 ML7999 Weatherproof Kit

32003167-001 Shaft Adapter for 5/16 in. round or square shaft

32003168-001 Shaft Adapter for 3/4 in. diameter round shaft

32003168-002 Shaft Adapter for 5/8 in. diameter round shaft

32003168-003 Shaft Adapter for 9/16 in. diameter round shaft

32003396-001 V51 Mounting Bracket for 1-1/2 in. and 2 in. valves

32003396-002 V51 Mounting Bracket for 2-1/2 in., 3 in. and 4 in. valves.

Product Number	Description
ML7999A1003	Universal Parallel-Positioning Actuator. Medium torque electronic actuator with a precision feedback potentiometer and integral power supply capable of direct line voltage connection.