

ML7421A,B Electric Linear Valve Actuator

SPECIFICATION DATA



FEATURES

- Quick and easy installation.
- No separate linkage required.
- 3/4 in. (20 mm) stroke on ML7421A; 1-1/2 in. (38 mm) stroke on ML7421B.
- No adjustments required.
- Accurate valve positioning.
- Low power consumption.
- High close-off ratings.
- Force-limiting end switches.
- Manual operator.
- Synchronous motor.
- Corrosion-resistant design.
- Maintenance free.
- Conduit connector knockout.

APPLICATION

The ML7421A,B Electric Linear Valve Actuators are modulating control motors for use with low-voltage controls that provide an analog output of 0 to 10 Vdc or 2 to 10 Vdc. These actuators operate standard Honeywell valves in heating, ventilating, and air conditioning (HVAC) applications.



SPECIFICATIONS

Models:

| Model No. | Description | Signal Input | Stroke in in. (mm) | Run Time in sec at 60 Hz |
|-------------|--------------------------------|-----------------------------|--------------------|--------------------------|
| ML7421A1008 | Electric Linear Valve Actuator | 2 to 10 Vdc or 0 to 135 ohm | 3/4 (20) | 95 |
| ML7421A1024 | | 0 to 10 Vdc | | |
| ML7421B1007 | | 2 to 10 Vdc or 0 to 135 ohm | 1-1/2 (38) | 175 |
| ML7421B1015 | | 0 to 10 Vdc | | |

Dimensions:

See Fig. 1.

Weight:

5.1 lb (2.3 kg).

Electrical Ratings:

Power Input: 24 Vac (+10%, -15%), 60 Hz.

Power Consumption: 12 VA maximum at 24 Vac.

Stem Force:

405 lbf (1800N).

Ambient Temperature Range:

14°F to 122°F (-10°C to +50°C).

Storage Temperature Range:

-40°F to +158°F (-40°C to +70°C).

Humidity:

5 to 95 percent relative humidity, noncondensing.

Protection Standard:

IP54.

Insulation:

Class III (24 Vac).

Approvals:

UL94-5V Flame Retardant.

Meets CE standards.

Cable entry:

Two knockout holes for 1/2 in. and 3/4 in. conduit standard on actuator case.

Actuator Material:

Cover: ABS plastic.

Yoke and Base: Diecast aluminum.

Accessories:

NOTE: The following dual auxiliary potentiometers can be added but provide only a single auxiliary potentiometer function.

43191679-003 Dual 220 Ohm Auxiliary Potentiometer for ML7421A.

43191679-004 Dual 220 Ohm Auxiliary Potentiometer for ML7421B.

43191680-002 Dual Auxiliary Switch for ML7421A,B (for 24 Vac use only).

Table 1. Closeoff Ratings in psi for ML7421A,B Electric Linear Valve Actuators.

| Valve | Type | 1/2 in. | 3/4 in. | 1 in. | 1-1/4 in. | 1-1/2 in. | 2 in. | 2-1/2 in. | 3 in. | 4 in. ^a | 5 in. ^a | 6 in. ^a |
|--------|--------|---------|---------|-------|-----------|-----------|-------|-----------|-------|--------------------|--------------------|--------------------|
| V5011A | Flange | N/A | N/A | N/A | N/A | N/A | N/A | 77 | 53 | 29 | 18 | 12 |
| V5011B | Flange | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 29 | 18 | 12 |
| V5011F | Screw | 150 | 150 | 150 | 150 | 150 | 150 | 100 | 61 | N/A | N/A | N/A |
| V5011G | Screw | 150 | 150 | 150 | 150 | 150 | 150 | 100 | 61 | N/A | N/A | N/A |
| V5013B | Flange | N/A | N/A | N/A | N/A | N/A | N/A | 77 | 53 | 29 | 18 | 12 |
| V5013C | Flange | N/A | N/A | N/A | N/A | N/A | N/A | 77 | 53 | 29 | 18 | 12 |
| V5013F | Screw | 150 | 150 | 150 | 150 | 150 | 150 | N/A | N/A | N/A | N/A | N/A |

^aOnly for use with ML7421B Actuator.

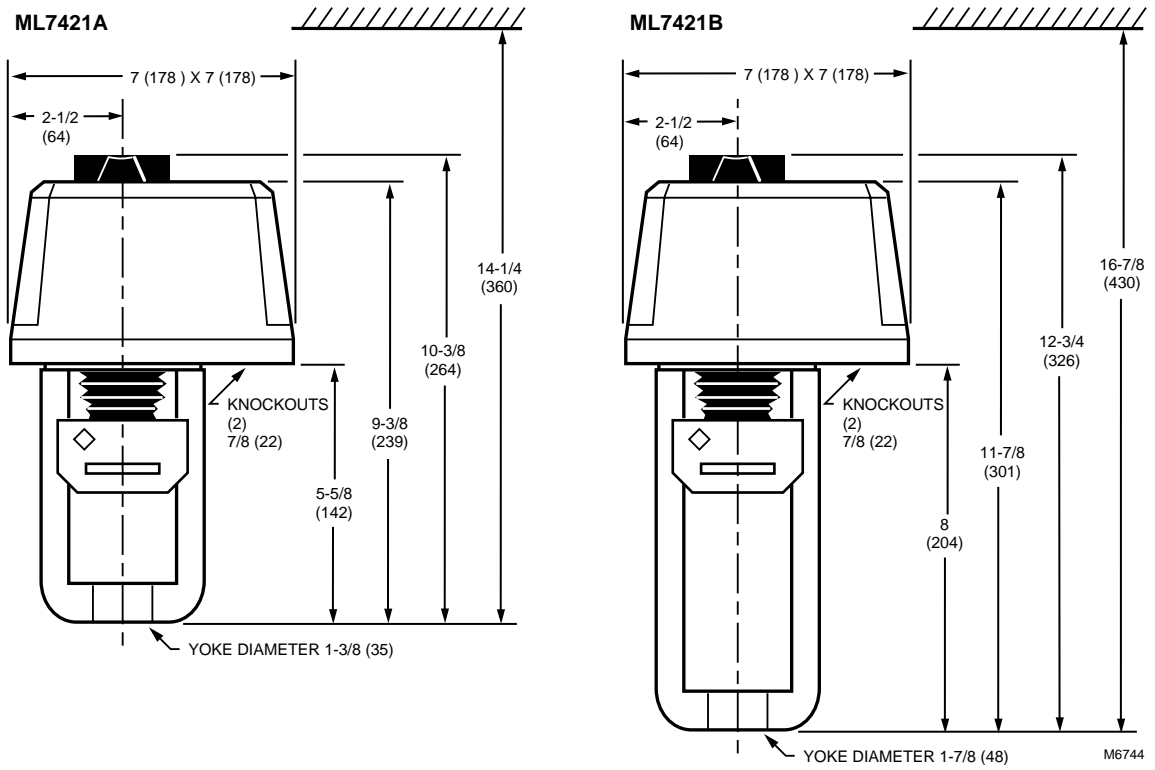


Fig. 1. Approximate dimensions of ML7421A,B Electric Linear Valve Actuator in in. (mm).

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