LINEAR ACTUATORS



Joyce linear actuators are designed to lift and precisely position loads of up to 1500 pounds. They are built with cast aluminum housings, include motors (120 VAC or 12 VDC), and are best suited for use in environments that are protected from the elements. A spring brake ensures that the actuators hold position when power is off. The maximum speed, which varies with load, is about 50 inches per minute (LA155).

Joyce linear actuators are designed for either double clevis or trunnion mounting. Standard travel lengths include 3, 6, 12, 18, and 24 inches. The restraining torque for the translating tube is 190 inch-pounds.

Specifications for AC models LA155L & LA155P:

- 120 VAC
- Limit switch available (LA155L)
- Limit switch and potentiometer available (LA155P)
- Approximate weight, 25 lbs + 0.5 lbs per inch of travel

Specifications for 12 VDC models LA152L & LA152C:

- 12 VDC
- Limit switch available (LA152L)
- Overload clutch available (LA125C)
- Approximate weight, 19 lbs + 0.5 lbs per inch of travel

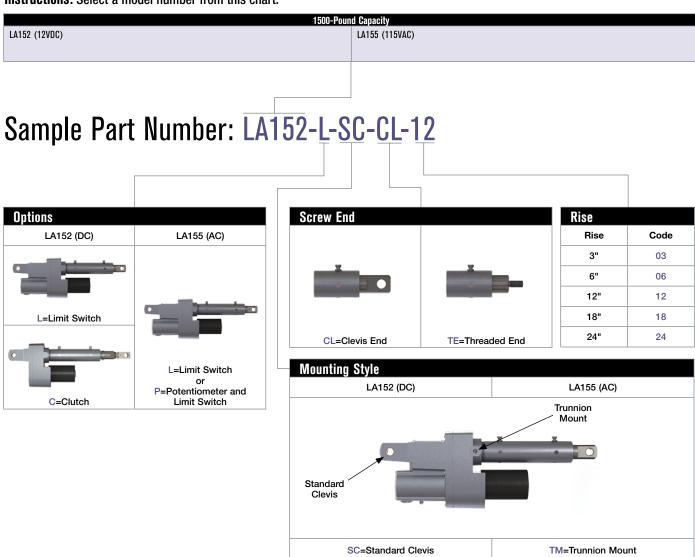
Joyce/Dayton offers Linear Actuators in several designs including:

- 120 VAC with limit switch
- 120 VAC with limit switch and potentiometer
- 12 VDC with limit switch
- 12 VDC with clutch

A guide for ordering is on page 144.

LINEAR ACTUATORS ORDERING INFORMATION

Instructions: Select a model number from this chart.



LINEAR ACTUATORS

1500 POUND DC WITH LIMIT SWITCH Optional Threaded End LA 152L 5/8"-18 UNF 2A Thread 7/8" Minimum Full Thread Optional Trunnion Mount 1/2"-20 UNF-2B Thread x 1" Deep (2) 1-5/32 14 1/8 ±1/8 Plus Travel 12 5/16 ±1/8 Plus Travel Travel 4 19/32 - 8 9/16 -5 5/8 1" Across Limit Switch Housing Flats Translating (Adjustable Switches) 1/4 Tube Ø1 1/2 Vent Ø2 1/4 Ø 3/4 Hole 1 3/4 Outer Tube (e) (1" Wide Across Flats) \Diamond 3 5/16 1 7/8 Ø 3/4 Hole Ø3 1/16 7 13/16 ±1/8 Manual Override Access Circuit Breaker 3 29/32 4 23/32 -1/2" NPT. 12 VDC Motor Aluminum Gear Housing 40 CR1 WIRING DIAGRAM 39 CR2 12 VDC LINE (12 VDC) Lifting Speed (in/min) Permanent 38 CR1 Magnet Motor (-) 3 CR2 37 COM. N.C. Extend 36 **△** N.O. SPDT 🛆 35 Retract Switch сом. **△** N.O. L.S. CR1 Coil 34 OCR2 Coil 500 750 1000 1250 1500 Load (lbs) 1600 30 1400 Current Draw (amperes) 25 1200 Duty Cycle (in/hr) 1000 20 800 600 15 400 200 10 750 750 500 1000 500 1000 1250 Load (lbs) Load (lbs) Duty Cycle ratings represent total travel per hour

Note: Drawings are artist's conception — not for certification; dimensions are subject to change without notice.

with equally timed intervals between cycles.

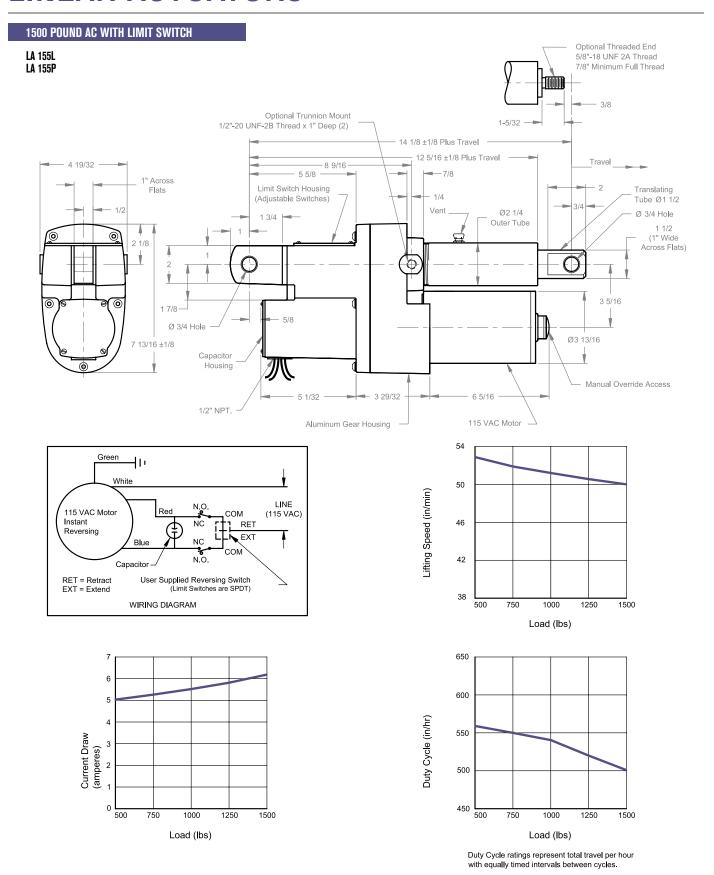
LINEAR ACTUATORS

1500 POUND DC WITH SLIP CLUTCH Optional Threaded End LA 152C 5/8"-18 UNF 2A 7/8" Min. Full Thrd. Optional Trunnion Mount 1/2"-20 UNF-2B Thread x 1" Deep (2) Travel 14 ±1/8 Plus Travel 9 1/2 ±1/8 Plus Travel - 4 19/32 -5 23/32 Slip Clutch 2 25/32 Assembly Translating Flats 1 3/4 Tube Ø1 1/2 Ø 3/4 Hole Vent Ø2 1/4 Outer Tube <u></u> 2 1/8 1 1/4 x 1" Wide 4 3 5/16 0 Ø 3/4 Hole Ø3 1/16 2 3/16 7 13/16 ±1/8 Manual Override Access 4 1/32 4 23/32 12 VDC Motor Aluminum Gear Housing 40 39 RET Black Lifting Speed (in/min) 38 12 VDC EXT Permanent LINE Magnet 37 RET (12 VDC) Motor 36 Jumper Wires EXT 35 RET = Retract User Supplied Reversing Switcth DPDT EXT = Extend WIRING DIAGRAM 500 750 1000 1250 1500 Load (lbs) 1600 30 1400 Current Draw (amperes) 25 1200 Duty Cycle (in/hr) 1000 20 800 600 15 400 10 500 750 1250 1500 750 1250 Load (lbs) Load (lbs) Duty Cycle ratings represent total travel per hour

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