

Product Information

Model ALC-101 Arc Length Control

- Sequence Control
- DC or AC Applications
- GTAW (TIG) or Plasma
- Large weight capacity
- Ten-turn voltage control
- Digital Meter

The ALC-101 Arc Length Control is designed for stand-alone welding applications where, in addition to control of the arc voltage, it is important to have preset, automatic control of the welding sequence.

The ALC-101 incorporates three features:

- **Arc Voltage Sensing** - The arc length control measures arc voltage and compares the resulting signal to the value entered by the operator. To maintain the set arc length, the control works with a field proven servo drive to move the torch up or down as required.
- **Touch Retract** - Electrical touch retract allows the starting arc gap to be set. After the knob on the control has been set to the desired position, and after the torch down switch has been pressed and held, the actuator will move the torch down until the electrode contacts the part to be welded. The contact is sensed by the control which then reverses the direction of actuator travel for a preset time thus setting the arc gap.
- **Sequence Control** - In addition to providing control of the arc voltage, the ALC-101 is capable of controlling the weld sequence using five timers designed to start and stop associated equipment. They control the starting and stopping of the travel, the wire feed and the welding power supply.



ALC-101E Control

The control is designed to provide automatic control of the arc voltage and includes a ten-turn potentiometer and large digital display to set and indicate the arc voltage. Controls are also provided to set the starting arc gap, volt sensing delay, sensitivity and stop retract distance. The sequence control includes:

- Travel start delay timer (0 to 10 secs.)
- Travel stop delay timer (0 to 10 secs.)
- Wire feed start delay timer (0 to 10 secs.)
- Wire feed stop delay timer (0 to 10 secs.)
- Arc stop delay timer (0 to 10 secs.)

The control can be used for DC or AC welding. When AC is being used, it is necessary to install the AC enhancement kit which provides superior performance.

Interface kits are required for sequence control and for use when pulsed or slope current conditions exist. Contact Jetline for details or available interface kits.

ALC-401-60C Actuator

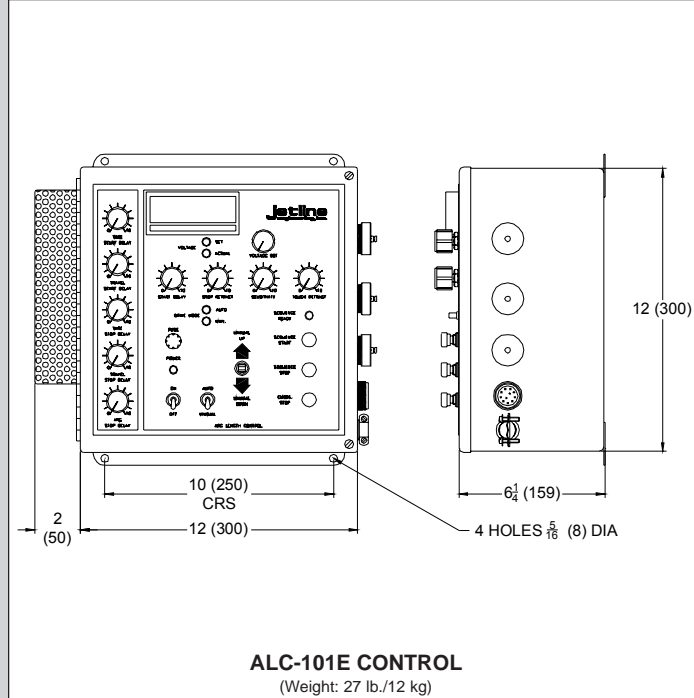
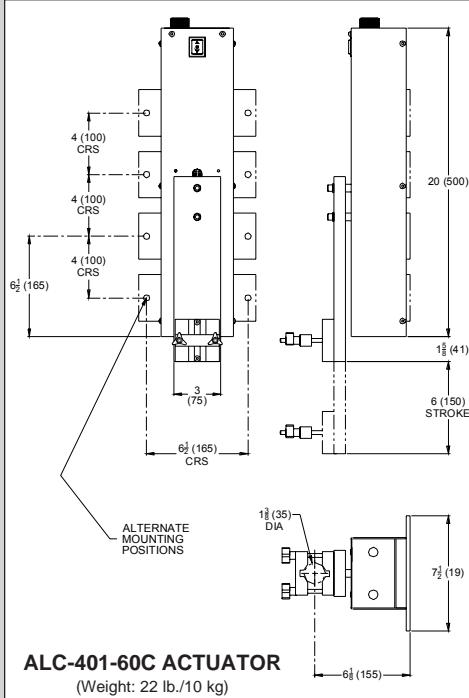
The ALC-401-60C actuator consists of a rugged servo driven motor slide. The slide is a ball screw design coupled with two hardened and ground shafts using recirculating ball bushings. The entire mechanism is enclosed in a steel housing and can handle up to 40 lbs (18 kg) at the centerline of the torch. A universal torch holder is provided at the end of the slide.

Alternative compact actuators are optionally available with either 1" (25 mm) or 4" (100 mm) stroke.



ALC-401-6 ACTUATOR

ALC-101 ARC LENGTH CONTROL



All dimensions are in inches (millimeters)

Specifications

Actuator:

Drive:	Recirculating Ball Screw
Mechanism:	Recirculating Ball Bushings
Stroke:	6" (150 mm) 12" (300 mm) optional 4" (100 mm) optional 1" (25 mm) optional
Torch Holder:	Universal Vee-Clamp
Torch Diameters:	3/4" to 1 1/2" (19 to 38 mm)
Weight Capacity:	40 lbs. (18 kg)
Max. Drive Speed:	30 ipm (750 mm/min)
Accuracy:	±1% of setting or 0.1V (whichever is the greater)
Prepositioning:	±0.005" (0.12 mm)
Touch Retract:	0 to 1/4" (0 to 6 mm)
Stop Retract:	0 to 3/4" (0 to 19 mm)

Control:

Display:	Digital
Volt Sensing:	5 to 50V DC or AC
Travel Start Delay:	0 to 10 seconds
Travel Stop Delay:	0 to 10 seconds
Wire Start Delay:	0 to 10 second
Wire Stop Delay:	0 to 10 seconds
Arc Stop Delay:	0 to 10 seconds
Sensitivity:	0 to 99% adjustable
Temperature:	32 to 130°F (0 to 55°C)
Cooling:	None, sealed cabinet
Input Cord:	8 ft. (2.4 m), 3 prong
Input:	120 or 240 VAC, 50/60 Hz Single phase, 200VA (Specify voltage when ordering)

See Jetline price list for complete ordering information

Distributed by:

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