

POWERS™ Controls LC Pneumatic Damper Actuator

Product Description

The LC pneumatic damper actuator is a piston-type pneumatic actuator. It is designed to develop very high thrust with capacity to handle heavy loads.

Product Number

331-2882

Accessories

Table 1.

Part Number	Description
531-833	Spring Clamp (secures 1/4-inch OD poly tubing to barb-fitting at higher control pressures)

Prerequisites

1/2-inch NPT connecting pipe cut to "L" dimension

Required Tools

- Flat-blade screwdriver
- 8-inch, adjustable crescent wrench
- Electric drill
- Drill bits

Expected Installation Time

60 minutes

Installation

Fan Inlet Vanes (See Figure 1)

Use Table 2 to determine the location of the hole on the damper lever arm with respect to the pivot point for the various arcs of angular rotation.

Table 2. Lever Arm Length for Rotation.

Lever Operating Arc (A)	Lever Radius (R) Inches (mm)
15°	26-1/2 (673)
30°	13-1/2 (343)
45°	9 (229)
60°	7 (178)
75°	5-3/4 (146)
90°	5 (127)

To Determine Length (L) of Pipe Required:

1. Set the damper lever arm at the midpoint of its arc.
2. Measure the perpendicular distance H from the center of the hole in the damper lever arm to the mounting surface. Use the following formula to determine L:

$$L = H - 23\text{-}1/2 + TE$$

Where:

L, H, and TE are in inches (or millimeters).

The number 23-1/2 inches (597 mm) allows for the length of the actuator (when the shaft is at half stroke), the clevis, both adapters, and so on.

TE is the thread engagement of the pipe in the two adapters. Allow 1/2-inch (13 mm) of TE for each end of the pipe. The connecting pipe must be provided at the job site.

Siemens Industry, Inc. recommends using 1/2-inch (13 mm) connecting pipe on lengths up to 7 feet (2.1 m). From 7 to 15 feet (2.1 to 4.6 m), use one-inch (25 mm) pipe with reducer fittings. The maximum recommended length of pipe is 15 feet (4.6 m).

When the damper lever arm is at the midpoint of its arc, the minimum distance between the center of the mounting hole on the arm and the mounting surface must be 24-1/4 inches (61.6 cm).

Installation, Continued

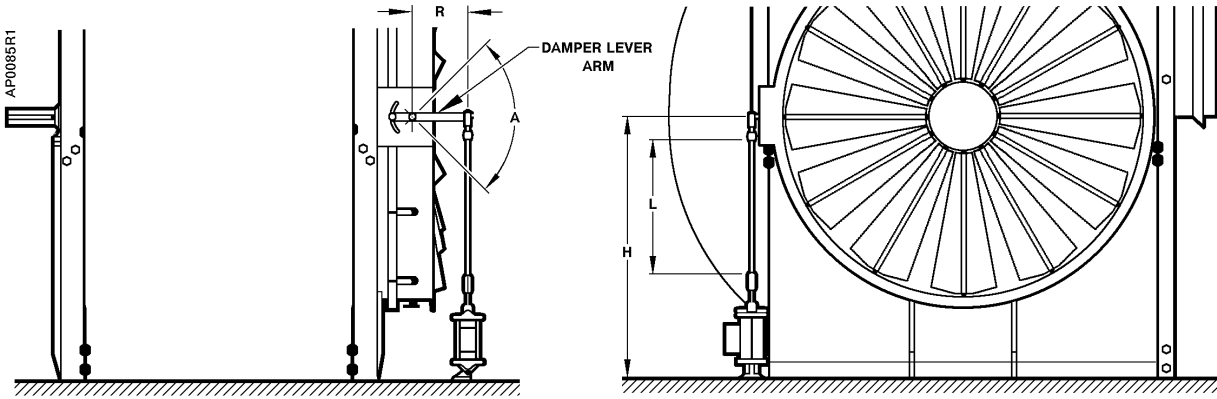


Figure 1. Fan Inlet Vanes Installation.

Dimensions

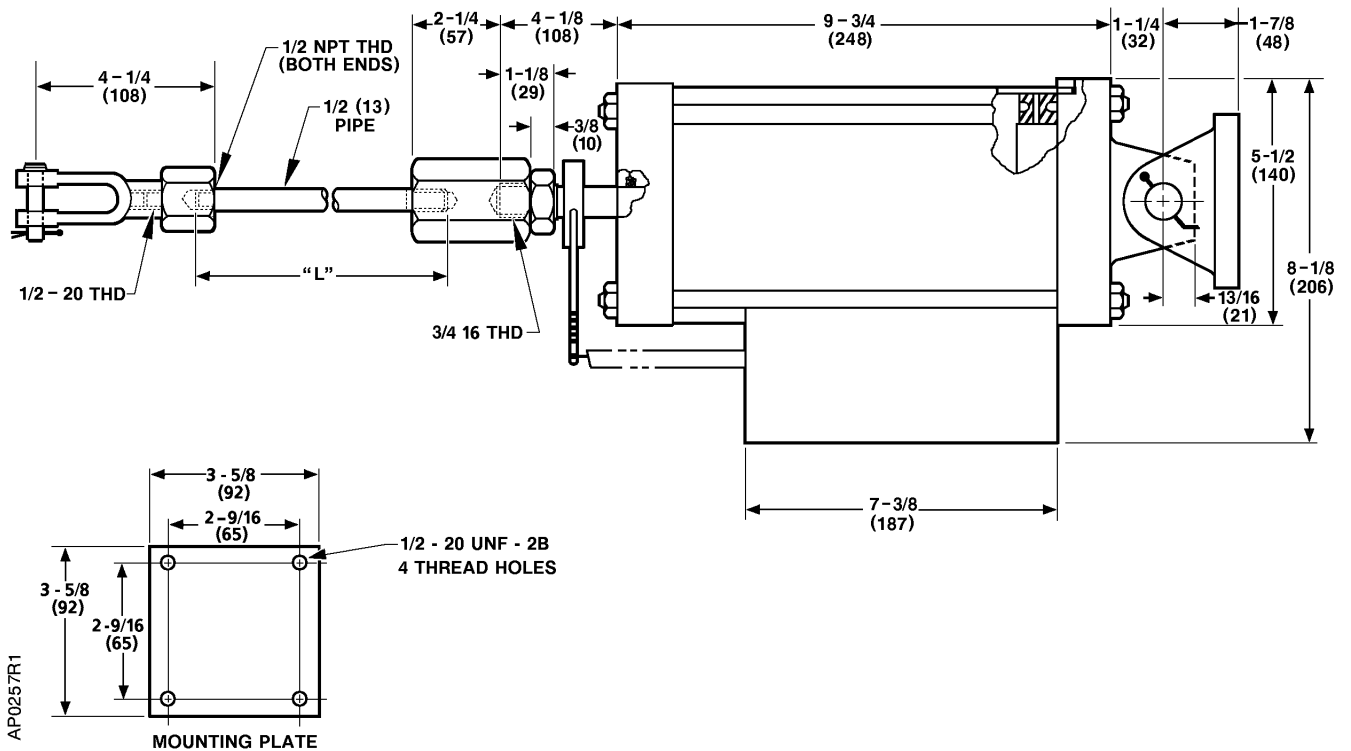


Figure 2. LC Actuator Dimensions in Inches (Millimeters).

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