## LA-1 Linear Actuator

## Features

- 9/16" bore
- 0.375 " dia. case hardened \& ground shafts
- 4 linear ball bearings and seals
- Cylinders can be rebuilt
- Chrome plated cylinder rods
- Adjustable stopscrews for end of stroke adjustment
- Sensing switches can be used with stopscrews
- Compressed air from 60-100 psi
- 10-32 air connection

- Tapped \& dowel pin holes in anodized body for ease of mounting
- End blocks anodized and include tapped \& dowel pin holes


| Type | Stroke | A | B | Weight |
| :---: | :---: | :---: | :---: | :---: |
| LA-1-1 | $1^{\prime \prime}$ | 4.62 | 6.50 | 1.2 |
| LA-1-2 | $2^{\prime \prime}$ | 5.62 | 8.50 | 1.3 |
| LA-1-3 | $3^{\prime \prime}$ | 6.62 | 10.50 | 1.4 |
| LA-1-4 | $4^{\prime \prime}$ | 7.62 | 12.50 | 1.5 |

## Ordering

The LA-1 comes in four standard stroke lengths: \# = 1, 2, 3, \& 4. Custom stroke lengths are available upon request.

## LA-1- \#- CR for Clean Room option

## Applications

B-1P Gripper mounted on the end of an LA-1 which is mounted vertically to the end of an LA-2. This application is depicted in our CMU(Combined Motion Units) LL21.


## Technical Data

$=14 \mathrm{lbs}$
$=+/-0.0005^{\prime \prime}$
$=>100$ million travel

Force @ 80 psi
Repeat accuracy
Life expectancy nches

Force diagrams below depict the load (F\#) and the resultant deflection (y\#) caused by that force (or torque T ).


$$
\mathrm{y}_{\mathrm{T}}=\stackrel{\mathrm{O}}{\sim} \mathrm{y}_{\mathrm{T}}^{-\mathrm{y}^{2}} \quad \begin{aligned}
& \mathrm{T}=\mathrm{F} 1 * 0.88 \\
& \mathrm{y}_{\mathrm{T}}=\mathrm{y}_{1} * .5
\end{aligned}
$$

$$
\mathrm{F} 1=\mathrm{F} 2
$$

F1 Load vs. Travel at set Deflections for the LA-1

$$
\mathrm{y}_{1}=\mathrm{y}_{2}
$$



Life (millions of inches traveled) vs. Travel \& Load

stainless steel hardware, non-lube sleeve-type bushings, and nickel-plated stopscrews and shock absorbers.


