

LINEAR ACTUATORS | LCA SERIES

Developed as next generation servo motor based on moving coil technology. Snap-Together design controls tight tolerance stack-up to assure high product quality at a competitive price.



- ✓ Cost effective
- ✓ Built-in lubrication for long operation life
- ✓ High cycle and acceleration
- ✓ IP protection optional

| Part Number | Voltage [DC] | Size: LxWxH [mm] | Stroke [mm] | Peak Force [N] | Continuous Force [N] | Force Constant [N/A] | Maximum Current [Amp] | Moving Mass [kg] | Weight [kg] |
|----------------|--------------|------------------|-------------|----------------|----------------------|----------------------|-----------------------|------------------|-------------|
| LCA6-010-55-3 | 24 | 135x60x6 | 10 | 3.5 | (*) | 2.9 | 1.2 | 0.037 | 0.21 |
| LCA8-010-55-2 | 24 | 95x50x8 | 10 | 4 | (*) | 3.2 | 1.7 | 0.025 | 0.16 |
| LCA8-025-15-3 | 24 | 110x50x8 | 25 | 2.6 | (*) | 2.2 | 1.3 | 0.027 | 0.18 |
| LCA8-050-15-3 | 24 | 135x50x8 | 50 | 2.6 | (*) | 2.2 | 1.3 | 0.03 | 0.22 |
| LCA13-025-55-2 | 24 | 155x75x13 | 25 | 7 | 2.8 | 2.5 | 3 | 0.08 | 0.4 |
| LCA13-035-15-6 | 24 | 180x75x13 | 35 | 14 | 5.6 | 9.4 | 1.5 | 0.12 | 0.52 |
| LCA13-050-15-6 | 24 | 210x75x13 | 50 | 14 | 5.6 | 9.4 | 1.5 | 0.125 | 0.6 |
| LCA16-010-55-2 | 24 | 110x60x16 | 10 | 6 | 2.5 | 4.3 | 1.5 | 0.045 | 0.435 |
| LCA16-010-75-2 | 48 | 110x60x16 | 10 | 13 | 5 | 6.5 | 1.5 | 0.045 | 0.435 |
| LCA16-025-55-2 | 24 | 155x75x16 | 25 | 7 | 2.8 | 2.5 | 3 | 0.08 | 0.47 |
| LCA16-035-15-6 | 24 | 180x75x16 | 35 | 14 | 5.6 | 9.4 | 1.5 | 0.12 | 0.62 |
| LCA16-050-15-6 | 24 | 210x75x16 | 50 | 14 | 5.6 | 9.4 | 1.5 | 0.125 | 0.73 |
| LCA20-025-55-2 | 24 | 155x75x20 | 25 | 9 | 3.6 | 3 | 3 | 0.08 | 0.71 |
| LCA20-025-75-2 | 48 | 155x75x20 | 25 | 25 | 10 | 7 | 3.6 | 0.08 | 0.71 |
| LCA25-010-55-1 | 24 | 70x55x25 | 10 | 8 | 3 | 6 | 1.5 | 0.04 | 0.27 |
| LCA25-010-55-2 | 24 | 130x60x25 | 10 | 16 | 6 | 5.5 | 3 | 0.085 | 0.45 |
| LCA25-010-75-1 | 48 | 70x55x25 | 10 | 12 | 5 | 8 | 1.5 | 0.04 | 0.27 |
| LCA25-010-75-2 | 48 | 130x60x25 | 10 | 22 | 9 | 8 | 3 | 0.085 | 0.45 |
| LCA25-025-15-6 | 24 | 130x60x25 | 25 | 15 | 6 | 13 | 1.6 | 0.076 | 0.55 |
| LCA25-025-35-6 | 48 | 130x60x25 | 25 | 20.5 | 8.2 | 14.5 | 1.6 | 0.076 | 0.55 |
| LCA25-025-55-2 | 24 | 130x60x25 | 25 | 7.4 | 2.9 | 2.5 | 3 | 0.076 | 0.55 |
| LCA25-025-75-2 | 48 | 130x60x25 | 25 | 9.2 | 3.6 | 3 | 3 | 0.076 | 0.55 |
| LCA25-050-15-6 | 24 | 155x60x25 | 50 | 15 | 6 | 13 | 1.6 | 0.082 | * |
| LCA25-050-35-6 | 48 | 155x60x25 | 50 | 20.5 | 8.2 | 14.5 | 1.6 | 0.082 | * |
| LCA25-100-15-6 | 24 | 205x60x25 | 100 | 15 | 6 | 13 | 1.6 | 0.1 | * |
| LCA25-100-35-6 | 48 | 205x60x25 | 100 | 20.5 | 8.2 | 14.5 | 1.6 | 0.1 | * |
| LCA25-150-15-6 | 24 | 258x60x25 | 150 | 15 | 6 | 13 | 1.6 | 0.12 | * |
| LCA25-150-35-6 | 48 | 258x60x25 | 150 | 20.5 | 8.2 | 14.5 | 1.6 | 0.12 | * |
| LCA25-200-15-6 | 24 | 310x60x25 | 200 | 15 | 6 | 13 | 1.6 | 0.14 | 1.3 |
| LCA25-200-35-6 | 48 | 310x60x25 | 200 | 20.5 | 8.2 | 14.5 | 1.6 | 0.14 | 1.3 |

LINEAR ACTUATORS | LCA SERIES CONT.

| Part Number | Voltage [DC] | Size: LxWxH [mm] | Stroke [mm] | Peak Force [N] | Continuous Force [N] | Force Constant [N/A] | Maximum Current [Amp] | Moving Mass [kg] | Weight [kg] |
|----------------|--------------|------------------|-------------|----------------|----------------------|----------------------|-----------------------|------------------|-------------|
| LCA32-012-75-3 | 48 | 100x57x31 | 12 | 76 | 30 | 13 | 6 | 0.076 | 0.75 |
| LCA50-010-75-2 | 48 | 125x50x100 | 10 | 130 | 50 | 46 | 2.8 | 0.43 | 2.6 |
| LCA50-025-75-1 | 48 | 125x100x50 | 25 | 50 | 20 | 40 | 1.5 | 0.335 | 2.16 |
| LCA50-050-35-6 | 48 | 250x115x50 | 50 | 90 | 36 | 67 | 1.7 | 0.665 | * |
| LCA50-050-75-1 | 48 | 125x100x50 | 50 | 45 | 18 | 30 | 1.6 | 0.335 | 2.58 |
| LCA50-050-75-2 | 48 | 215x100x50 | 50 | 85 | 34 | 30 | 3 | 0.465 | 4.34 |
| LCA50-100-35-6 | 48 | 300x115x50 | 100 | 90 | 36 | 67 | 1.7 | 0.66 | 5.7 |
| LCA50-150-35-6 | 48 | 350x115x50 | 150 | 90 | 36 | 67 | 1.7 | 0.825 | 8 |
| LCA50-250-35-6 | 48 | 450x115x50 | 250 | 90 | 36 | 67 | 1.7 | 1 | 14 |

NOTE: For any SMAC Moving Coil Actuators, the maximum recommended continuous duty current is 600mA supplied to the actuator over a 1 second period. For anything beyond this in terms of current draw or time please consult the factory. We manufacture actuators to suit our customers' requirements. Please call us if you do not find the right actuator in this list. Linear actuators are also available as linear slides (see page 20). (*)Consult factory



LCA6



LCA8



LCA13



LCA16/LCA20



LCA25



LCA32



LCA50



Options & Modifications (Consult factory for availability)

- Linear encoder resolutions ----- 5µm standard, 1µm and 0.1µm optional for most units. Consult factory for availability.
- Shaft ends ----- Male, Female, Blank and Custom (check availability of custom option).
- Return spring ----- Prevents the shaft from dropping during vertical operation when power is cut.
- Vacuum ----- Vacuum through the shaft or on the shaft for pick and place applications.
- Extended nosh bushing ----- For tighter shaft run-out and higher side load onto the shaft.
- Increase of force & acceleration ----- 48 volt coil and double coil options are available for some units with 24 volt single coil.
- Increase of force accuracy/lifetime ----- Low-friction linear guide/extra-long preload linear guide.
- Dust/Waterproof ----- IP65/67 protection is available with LCA50 series.

LINEAR ACTUATORS | LBL/LCB SERIES

The LBL and LCB are price competitive solutions for some higher force applications, previously dominated by pneumatic actuators.



- ✓ High force and acceleration
- ✓ Cost effective

| Part Number | Voltage [DC] | Size: LxWxH [mm] | Stroke [mm] | Peak Force [N] | Continuous Force [N] | Force Constant [N/A] | Maximum Current [Amp] | Moving Mass [kg] | Weight [kg] |
|----------------|--------------|------------------|-------------|----------------|----------------------|----------------------|-----------------------|------------------|-------------|
| LBL25-025-35-3 | 48 | 175x101.6x25 | 25 | 60 | 24 | 40 | 1.5 | 0.14 | 2 |
| LBL25-050-35-3 | 48 | 200x101.6x25 | 50 | 60 | 24 | 40 | 1.5 | 0.16 | 2.2 |
| LBL25-075-35-3 | 48 | 240x101.6x25 | 75 | 60 | 24 | 40 | 1.5 | 0.18 | 2.22 |
| LBL25-100-35-3 | 48 | 280x101.6x25 | 100 | 60 | 24 | 40 | 1.5 | 0.19 | 2.24 |
| LBL25-200-35-3 | 48 | 360x126.6x24.8 | 200 | 60 | 24 | 40 | 1.5 | 0.21 | 4.56 |
| LBL40-050-35-3 | 48 | 335x160x40 | 50 | 100 | 40 | 40 | 2.5 | 0.9 | 7.2 |
| LCB25-010-75-3 | 48 | 155x81.6x29.8 | 10 | 80 | 30 | 22 | 3.6 | 0.14 | 1.17 |
| LCB25-015-55-2 | 24 | 100x81.6x30 | 15 | 47 | 18 | 12.7 | 3.7 | 0.12 | 1.01 |
| LCB25-025-75-2 | 48 | 155x81.6x25 | 25 | 40 | 16 | 30 | 1.3 | 0.12 | 1 |

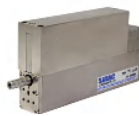
NOTE: For any SMAC Moving Coil Actuators, the maximum recommended continuous duty current is 600mA supplied to the actuator over a 1 second period. For anything beyond this in terms of current draw or time please consult the factory. We manufacture actuators to suit our customers' requirements. Please call us if you do not find the right actuator in this list.



LBL25



LBL40



LCB25

Options & Modifications (Consult factory for availability)

- Linear encoder resolutions ----- 5µm standard and 1µm optional.
- Shaft ends ----- Male, Female, Blank and Custom (check availability of custom option).
- Return spring ----- Prevents the shaft from dropping during vertical operation when power is cut.
- Vacuum ----- Vacuum through the shaft or on the shaft for pick and place applications.
- Extended nose bushing ----- For tighter shaft run-out and higher side load onto the shaft.
- Increase of force accuracy/lifetime ----- Low-friction linear guide/extra-long preload linear guide.

LINEAR ACTUATORS | LAL SERIES

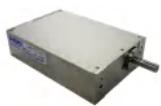
SMAC's original series of linear actuators with stroke up to 150mm and a peak force of up to 500N. As with all SMAC actuators, the LAL has independent control of position, speed, and force.



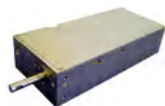
- ✓ Soft-Land™ capability and precise force control
- ✓ High cycle
- ✓ Data feedback

| Part Number | Voltage [DC] | Size: LxWxH [mm] | Stroke [mm] | Peak Force [N] | Continuous Force [N] | Force Constant [N/A] | Maximum Current [Amp] | Moving Mass [kg] | Weight [kg] |
|-----------------|--------------|------------------|-------------|----------------|----------------------|----------------------|-----------------------|------------------|-------------|
| LAL35-025-55-2 | 24 | 135x90x35 | 25 | 31.5 | 12.6 | 15.5 | 2.9 | 0.19 | 1.06 |
| LAL35-025-75-1 | 48 | 135x90x35 | 25 | 18 | 7 | 10 | 1.3 | 0.12 | 0.95 |
| LAL35-050-55-1 | 24 | 135x90x35 | 50 | 10 | 4 | 7 | 1.6 | 0.13 | 1.1 |
| LAL35-050-75-1 | 48 | 135x90x35 | 50 | 12.5 | 5 | 10 | 1.3 | 0.13 | 1.1 |
| LAL35-100-55-1 | 24 | 135x90x35 | 100 | 6 | 2.4 | 3.5 | 1.6 | 0.1 | 1.7 |
| LAL55-050-55-1 | 24 | 250x110x55 | 50 | 25 | 10 | 19 | 1.3 | 0.3 | 3 |
| LAL55-050-75-1 | 48 | 250x110x55 | 50 | 40 | 16 | 24.5 | 1.8 | 0.3 | 3 |
| LAL55-100-55-1 | 24 | 250x110x55 | 100 | 16 | 6.4 | 13 | 1.3 | 0.3 | 3.8 |
| LAL55-100-75-1 | 48 | 250x110x55 | 100 | 25 | 10 | 17 | 1.8 | 0.3 | 3.8 |
| LAL55-150-55-1 | 24 | 250x110x55 | 150 | 13 | 5 | 10 | 1.3 | 0.4 | 4.5 |
| LAL55-150-75-1 | 48 | 250x110x55 | 150 | 19.5 | 8 | 12.5 | 1.8 | 0.4 | 4.5 |
| LAL95-015-75-1 | 48 | 90x70x95 | 15 | 84 | 33 | 53 | 1.7 | 0.25 | 2.2 |
| LAL95-015-75-2 | 48 | 147x70x95 | 15 | 185 | 74 | 58 | 3.2 | 0.5 | 3 |
| LAL95-025-75-2 | 48 | 180x70x95 | 25 | 162 | 65 | 52 | 3.1 | 0.58 | 3.75 |
| LAL95-050-75-1 | 48 | 147x70x95 | 50 | 65 | 26 | 41 | 1.7 | 0.25 | 3 |
| LAL300-030-75-1 | 48 | 120x85x120 | 30 | 115 | 46 | 76 | 1.6 | 0.45 | 4.8 |
| LAL300-030-75-2 | 48 | 210x85x120 | 30 | 250 | 100 | 87.3 | 3 | 0.8 | 7.8 |
| LAL300-050-75-2 | 48 | 210x85x120 | 50 | 202 | 80 | 86 | 3 | 0.8 | 8.8 |
| LAL300-100-75-1 | 48 | 210x85x120 | 100 | 80 | 32 | 43 | 2 | 0.7 | 7.9 |
| LAL500-025-75-2 | 48 | 300x140x200 | 25 | 500 | 200 | 166 | 3 | 1.6 | 26.5 |
| LAL500-050-75-2 | 48 | 300x140x200 | 50 | 500 | 200 | 100 | 4 | 1.6 | 26.5 |

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LAL35



LAL55



LAL95



LAL300



LAL500

Options & Modifications (Consult factory for availability)

| | | |
|-------------------------------------|-------|---|
| Linear encoder resolutions | ----- | 5µm standard, 1µm and 0.1µm optional for most units. Consult factory for availability. |
| Shaft ends | ----- | Male, Female, Blank and Custom (check availability of custom option). |
| Return spring | ----- | Prevents the shaft from dropping during vertical operation when power is cut. |
| Vacuum | ----- | Vacuum through the shaft or on the shaft for pick and place applications. |
| Extended nose bushing | ----- | For tighter shaft run-out and higher side load onto the shaft. |
| Increase of force & acceleration | ----- | 48 volt coil and double coil options are available for some units with 24 volt single coil. |
| Increase of force accuracy/lifetime | ----- | Low-friction linear guide/extra-long preload linear guide. |
| Dust/Waterproof | ----- | IP65/67 protection is available with LAL95 series. |