



# ELECTROMECHANICAL CYLINDERS

*Industrial light duty applications*



**CLA and CLB Series**

**ATL and BSA Series**



- 1. IMPROVE EFFICIENCY**  
LESS ENERGY CONSUMPTION
- 2. SELF-LOCKING**  
HOLD THE POSITION UNDER LOAD
- 3. REPEATABILITY**  
POSITIONING CONTROL
- 4. MAINTENANCE FREE**
- 5. EASY INSTALLATION AND USE**



**LMR Series**

Linearmech electromechanical linear actuators are easy-to-use and reliable products.

Great and convenient *alternative to the use of pneumatic cylinders* recommended in case of medium to low speed application, intermittent duty cycle operation and self-locking requirement when load is applied, both pull or push load.

*The light duty electromechanical alternative to fluid driven technology*

# Linearmech electromechanical cylinders

## Easy-to-use and reliable products



Linearmech electromechanical actuators are available with **acme screw drive**, recommended for intermittent operation and self-locking condition; also available with **ball screw drive**, recommended in case of medium-high operating cycle.

Linearmech cylinders are successfully applied in **industrial applications and automation**, food industry, medical industry, construction equipment and agricultural machinery, marine applications, vehicle automation for disabled and every time is required a **reliable, technological and good quality product** to perform a linear movement.

Available with AC or DC motors. Wide range of mounting accessories and positioning control (limit switches, encoder, potentiometer). Linearmech linear actuators are easy-to-use products with compact dimensions, robust and maintenance-free construction.

**Linearmech** electromechanical cylinders consist of 3 main series: **LMR Series, ATL and BSA Series, CLA and CLB Series**.

### Limit Switches Option

#### Integrated

Electric limit switches, cam-operated, available on LMR Series actuators.

The set-up of switches position is very easy and intuitive.

The cam design hold the position detection in every condition.

Built-in limit switches, placed inside the profile dimensions.

Available on request FC2X option (switches internally wired between power supply and electric motor, to switch-off the motor supply directly without relays).



#### Protected in limit switches box (IP65)

Electric limit switches, cam-operated, protected under a sealed cover (IP65), available on **CLA and CLB Series** actuators.

Available on request FC2X option (switches internally wired between power supply and electric motor, to switch-off the motor supply directly without relays, DC and AC 1-phase motor only).



#### External

Magnetic reeds fixed with support clamps to actuator's protective tube. Available on **ATL and BSA Series** actuators.

Used to determine any intermediate position in the working stroke.

The set-up of switches position is very easy and intuitive.



## LMR Series

### Compact design linear actuators

Electromechanical actuators with right angle design motor  
Acme screw drive  
Input drive with worm gear

#### 3 standard sizes available

Load capacity push-pull up to **6.000 N**  
Linear speed up to 52 mm/s

Electric motors available: DC motors (12V, 24V, 36V).  
Electric limit switches, integrated and easy to set-up.  
Incremental encoder for position control.



## ATL and BSA Series

### Robust and reliable linear actuators

Electromechanical actuators with right angle design motor  
Aluminum alloy housing with high resistance  
Input drive with worm gear

**ATL Series:** acme screw drive

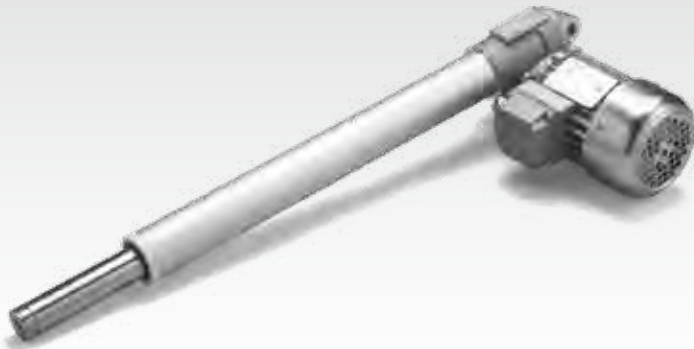
**BSA Series:** ball screw drive

#### 5 standard sizes available

Load capacity push-pull up to **11.000 N**  
Linear speed up to 150 mm/s

Electric motors available: DC motors,  
AC motors (1-phase or 3-phase).

Magnetic and electromechanical external limit switches  
available.



## CLA and CLB Series

### Linear actuators with limit switches and potentiometer

Electromechanical actuators with right angle design motor  
Aluminum alloy housing with high resistance  
Input drive with worm gear

**CLA Series:** acme screw drive

**CLB Series:** ball screw drive

#### 5 standard sizes available

Load capacity push-pull up to **10.000 N**  
Linear speed up to 100 mm/s

Electric motors available: DC motors,  
AC motors (1-phase or 3-phase).  
Cam-operated limit switches and rotary potentiometer  
protected under a sealed cover (IP65).



electromechanical actuators

## Main features

Linearmech electromechanical cylinders consist of 3 main series: **LMR Series, ATL and BSA Series, CLA and CLB Series.**

Each family is designed and developed to represent a series of sizes with an adequate reciprocal gauge, to allow an easier selection of the most suitable size in terms of performances and costs for each application.

| LMR Series  | ATL and BSA Series   | CLA and CLB Series  |
|---|--|---|
| Motors available:<br>DC 12V, 24V, 36V<br>Integrated electric limit switches | Motors available:<br>DC12V, DC24V, AC 1-phase, AC 3-phase<br>External limit switches (magnetic/electric) | Motors available:<br>DC12V, DC24V, AC 1-phase, AC 3-phase<br>Electric limit switches and potentiometer (IP65) |
| 3 standard sizes<br>Load capacity up to 6.000 N                             | 5 standard sizes<br>Load capacity up to 11.000 N   | 5 standard sizes<br>Load capacity up to 10.000 N  |
| Standard stroke length up to 500 mm<br>Linear speed up to 52 mm/s           | Standard stroke length up to 500 mm<br>Linear speed up to 150 mm/s                                       | Standard stroke length up to 1.000 mm<br>Linear speed up to 100 mm/s  |
| Acme screw drive  | <b>ATL Series</b> acme screw drive<br><b>BSA Series</b> ball screw drive                                 | <b>CLA Series</b> acme screw drive<br><b>CLB Series</b> ball screw drive                                      |

## Quality, Technology and Innovation. Our commitment.



Servomech produce **a wide range of electromechanical linear actuators and screw jacks**, ball screw and nuts, electromechanical servo actuators, completely manufactured inside the Servomech factory in Bologna - ITALY.

**High technology and accuracy in manufacturing**, inspections and controls during the entire production process for a constant quality over the time.

Technical support in product selection; on request, **custom-based product** execution to meet your specific application requirements.

**Ball screw and nuts** made by Servomech. Available on request:

- Ball screws with ISO IT3 or IT5 accuracy grade, according to application requirements
- Ball nuts zero backlash or preloaded

For more information, please contact our sales/technical support at [sales@servomech.com](mailto:sales@servomech.com) or visit our web site [www.servomech.com](http://www.servomech.com)



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