



**Linear-Mech**<sup>®</sup>

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