ELECTROMECHANICAL CYLINDERS

Heavy duty applications

Heavy duty electromechanical cylinders from Servomech are the right alternative to the use of hydraulic cylinders: **high linear speed even at high loads, precise control of positioning, speed and force, less energy consumption** and lower installation costs.

The right alternative to hydraulic cylinders

**ILA Series**

**ATL and BSA Series**

**HSA Series**

5 GOOD REASONS TO GO ELECTRIC

1. IMPROVE THE EFFICIENCY BY REDUCING ENERGY CONSUMPTION
2. BETTER CONTROL: POSITION - SPEED - FORCE
3. POSITIONING ACCURACY AND REPEATABILITY
4. GREAT SAFETY AND RELIABILITY
5. SAVE MONEY: EASIER INSTALLATION AND LESS MAINTENANCE
Servomech electromechanical cylinders for heavy duty applications

Servomech electromechanical cylinders are available with high precision ball screw and acme screw drive. High linear speed even at high loads, improved efficiency by reducing energy consumption, better control of position, speed and force, great positioning accuracy and repeatability are only some of the reasons that make them the right alternative to hydraulic cylinders. Also available on different assembly configurations for a total interchangeability with the existing hydraulic units.

SERVOMECH heavy duty electromechanical cylinders consist of 3 main series: ATL and BSA Series, ILA Series, HSA Series.

Servomech innovative solutions for high speed and long service life

**Ball screw nut**
with integrated sealing system and grease nipple
Axial recirculation of the balls for a greater load capacity

**Re-lubrication system**
Integrated anti-rotation device allows a fast and easy lubrication of the nut with “homing” position

**Tapered roller bearings**
back-to-back mounted for a stiff support of the ball screw

**Pushrod guide**
with axial sliding bush in anti-friction material for high-speed use

**Breather**
to compensate air flows and related pressure

www.servomech.com
**ATL and BSA Series**

**Right angle design linear actuators**

- Rear hinged attachments
- High precision worm gearbox, ZI involute profile

**ATL Series**, acme screw drive:
- 6 sizes, load capacity from 15 kN to 600 kN
- Acme screw from Ø 30 mm to Ø 120 mm

**BSA Series**, ball screw drive:
- 6 sizes, load capacity from 15 kN to 600 kN
- Ball screw from Ø 32 mm to Ø 120 mm

- Lubrication with synthetic grease
- (gearbox long life lubricated, screw drive regreasable)
- Standard stroke length up to 1,000 mm
- Proximity limit switches
- Incremental or absolute encoder for positioning control
- Prepared for IEC standard AC motors

**ILA Series**

**In-line modular design linear actuators**

- Housing mounting with pins
- In-line or right angle gearbox mounting

**ILA A Series**, acme screw drive:
- 6 sizes, load capacity from 5 kN to 200 kN
- Acme screw from Ø 22 mm to Ø 80 mm

**ILA B Series**, ball screw drive:
- 6 sizes, load capacity from 5 kN to 200 kN
- Ball screw from Ø 25 mm to Ø 80 mm

- Gearbox long life lubricated, screw drive regreasable
- Standard stroke length up to 1,500 mm
- Proximity limit switches
- Incremental or absolute encoder for positioning control
- Prepared for IEC standard AC motors and brushless servomotors

**HSA Series**

**High-speed linear actuators**

- Rear hinged attachments
- Gleason bevel gear
- Ball screw drive

- 6 sizes, load capacity from 5 kN to 150 kN
- Ball screw from Ø 25 mm to Ø 80 mm

- Lubrication with synthetic grease, gearbox long life lubricated, fast and easy re-lubrication of the nut with “homing” position.
- Linear speed up to 1,500 mm/s
- Standard stroke length up to 1,000 mm
- Proximity limit switches
- Incremental or absolute encoder for positioning control
- Prepared for IEC standard AC motors and brushless servomotors
Main features

Heavy duty electromechanical cylinders from Servomech consist of 3 main series: **ATL and BSA Series, ILA Series, HSA Series.**

SERVOMECH linear actuators have a wide application field. They are intended for industrial applications which require safe operation and/or linear motion control while moving, turning over or lifting a load. The **wide range of sizes, stroke lengths, motor types, linear speeds and available accessories** enables to adapt these products for new applications, replace even complex mechanical solutions and hydraulic cylinders, improving the result in terms of performance and with economical advantages.

<table>
<thead>
<tr>
<th>ATL and BSA Series</th>
<th>ILA Series</th>
<th>HSA Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear actuators with right angle design</td>
<td>Linear actuators with in-line modular design</td>
<td>Linear actuators for high-speed performance</td>
</tr>
<tr>
<td>Rear hinged attachments</td>
<td>Housing mounting with pins</td>
<td>Rear hinged attachments</td>
</tr>
<tr>
<td>Worm gear drive</td>
<td>Gearbox mounting in-line / right angle</td>
<td>Gleason bevel gear</td>
</tr>
<tr>
<td>6 standard sizes</td>
<td>6 standard sizes</td>
<td>6 standard sizes</td>
</tr>
<tr>
<td>Load capacity from 15 kN to 600 kN</td>
<td>Load capacity from 5 kN to 200 kN</td>
<td>Load capacity from 5 kN to 150 kN</td>
</tr>
<tr>
<td>Standard stroke length up to 1.000 mm</td>
<td>Standard stroke length up to 1.500 mm</td>
<td>Standard stroke length up to 1.000 mm</td>
</tr>
<tr>
<td>Linear speed up to 140 mm/s</td>
<td></td>
<td>Linear speed up to 1.500 mm/s</td>
</tr>
<tr>
<td><strong>ATL Series</strong> acme screw drive</td>
<td><strong>ILA A Series</strong> acme screw drive</td>
<td>Ball screw drive</td>
</tr>
<tr>
<td><strong>BSA Series</strong> ball screw drive</td>
<td><strong>ILA B Series</strong> ball screw drive</td>
<td></td>
</tr>
</tbody>
</table>

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** or visit our web site **www.servomech.com**