



The global leader in customized valve automation

Linear Hydraulic Spring Return Extend Actuators

Features

1 - Cylinder – High strength steel cylinder is honed to a 16RMS finish.

2 - Piston – Precision machined steel piston incorporates an anti-friction wear ring and bidirectional quad seal for long trouble-free service.

3 - Piston Rod Bearing – Heavy duty, extra-long piston rod bearing is externally removable for ease of service.

4 - Cylinder Heads (Upper and Lower) – Precision machined steel cylinder heads provide a true parallel surface for alignment of the cylinder and piston rod bearing.

5 - Spring and Spring Cartridge – Springs are pre-compressed and welded into a sealed spring cartridge at the factory for safe, maintenance-free service. Spring rates can be designed for maximum stiffness.

6 - Piston Rod – The piston rod is made from 100,000 psi minimum yield high quality strength alloy steel, ground to an 8RMS finish and hard chrome plated. Stainless Steel is available on request.

7 - Travel Stops – Externally adjustable travel stops are sized to withstand the full output thrust of the actuator and do not intrude into the pressurized power cylinder.

8 - Coupling Block – Unique piston rod to valve stem coupling block allows easy installation and removal of the actuator. (For control valve and globe valve applications, ATI utilizes a [split coupling block](#).)

9 - Adaption Bracket – One piece open adapter allows for access to travel stops, limit switch adjustment, valve packing adjustment, and actuator removal.



Benefits

- Adjustable travel stops incorporated with our coupling blocks, rather than with thru-bolt, through cylinder heads, which make path for leaking
- All steel construction for higher safety margins (no aluminum, fiberglass or other cost-cutting but weak material components)
- Design and material finish reduce friction
- Upper and lower cylinder heads maintain linearity
- Piston Rod Bearing is designed to move inside the lower cylinder head, maintaining its linearity but not twisting



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Linear Hydraulic Double Acting Actuators

Features

1 - Cylinder Heads (Upper and Lower) – Precision machined steel cylinder heads provide a true parallel surface for alignment of the cylinder and piston rod bearing.

2 - Cylinder – High strength steel cylinder is honed to a 16RMS finish.

3 - Piston – Precision machined steel piston incorporates an anti-friction wear ring and bidirectional quad seal for long trouble-free service.

4 - Piston Rod Bearing – Heavy duty, extra-long piston rod bearing is externally removable for ease of service.

5 - Adaption Bracket – One piece open adapter allows for access to travel stops, limit switch adjustment, valve packing adjustment, and actuator removal.

6 - Piston Rod – The piston rod is made from 100,000 psi minimum yield high quality strength alloy steel, ground to an 8RMS finish and hard chrome plated. Stainless Steel is available on request.

7 - Travel Stops – Externally adjustable travel stops are sized to withstand the full output thrust of the actuator and do not intrude into the pressurized power cylinder.

8 - Coupling Block – Unique piston rod to valve stem coupling block allows easy installation and removal of the actuator. (For control valve and globe valve applications, ATI utilizes a **9 - split coupling block**.)



Benefits

- Adjustable travel stops incorporated with our coupling blocks, rather than with thru-bolt, through cylinder heads, which make path for leaking
- All steel construction for higher safety margins (no aluminum, fiberglass or other cost-cutting but weak material components)
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