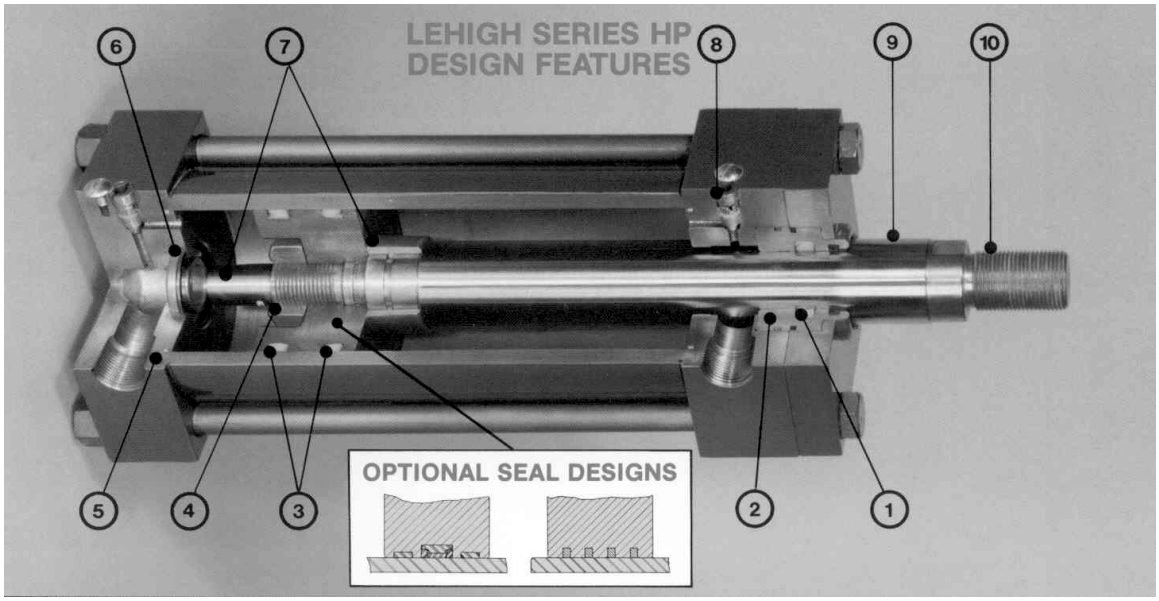
Lehigh High Pressure Hydraulic Cylinders…
Nominal Pressure 3000 PSI* (5000 PSI Non-Shock)
…Manufacturing Engineering At It's Best

To meet today's wide range of advanced technology for pressure and force in available space, Lehigh manufactures a complete line of hydraulic cylinders- both medium duty** and high pressure cylinders- *all* given the same dedicated attention to quality.

Skillful engineering encourages a delicate balance between design, materials, and precision workmanship. In designing the Series HP High Pressure Hydraulic Cylinder, Lehigh developed a product for which there is no equal in responsive performance.

Other custom engineered Lehigh state-of-the-art fluid power products include end-of-stroke and mid-position indicators with magnetic or electronic sensors.



1. The cast/compression molded, abrasion resistant polyurethane rod seal is positioned in the bearing to minimize seal loading, thus extending seal life.
2. Longer SAE-660 Naval Bronze wetted rod bearing for extended active service life. Separately bolted front flange contains the rod bearing, seal and rod wiper. Bearing assembly can be readily removed without disassembling the cylinder on most mounts.
3. Abrasion resistant, cast/compression molded polyurethane piston seals are standard. Step-cut cast iron piston rings or single energized Teflon seals are also available.
4. The piston is secured to the rod with both internal piston threads and an additional lock nut to prevent loosening and to increase strength.
5. Cast/compression molded polyurethane 0-ring tube end seals in conjunction with piloted tube outside diameter effectively prevents expansion under pressure and resists seal extrusion.
6. Rod end cushion utilizes a ball check (not shown) for fast breakaway and cap end cushion ring lifts off its seat providing fast return.
7. Proportionally tapered cushions at each end of the stroke help achieve smoother deceleration. Both cushions incorporate radial floating action to prevent wear, thus enhancing cushion response.
8. Cushion adjustment needle valve can be locked at the desired setting to prevent drift. Safety lock screws prevent accidental blowout when adjusting under pressure.
9. Ground, polished, and chrome-plated rods are resistant to abrasion providing longer seal life. Case hardened thru 3-1/2" diameter rod to resist accidental damage.
10. Rolled thread rod stud for greater strength of male rod ends, 5/8" thru 1-3/8" diameter rods.
11. Standard seals for the operating temperature range of 0 to 165 degrees F. Other seal compounds are available for special fluids, and higher or lower temperatures.

*For operating pressures exceeding 3000 psi, consult Lehigh for an engineering evaluation. **See catalog 8201