

See "How to Order" guide - page 5.

See "Pressure Rating" notes page 4.



1. HEAD/CAP- Precision machined steel head and cap provide close concentricity and accurate alignment between piston, tube, piston rod and rod bearing.
2. CYLINDER BARREL- Damage resistant, heavy wall steel tubing, honed to an 8 to 16 micro finish for low frictional drag and maximum seal and piston bearing life.
3. ROD CARTRIDGE- Extra long, high strength bronze gland provides maximum bearing support and wear resistance. With certain exceptions, a removable retainer allows for gland removal without cylinder disassembly.
4. PISTON- One piece fine grained cast iron piston provides maximum strength and protection against shock loads. Anaerobic adhesive is used to permanently lock and seal the piston to the rod.
5. PISTON ROD- High strength damage resistant piston rod provides 100,000 PSI minimum yield material in 5/8" through 4 1/2" diameters. Larger diameters vary between 50,000 and 75,000 PSI minimum yield material. All rods are case hardened to 50-55 RC and hard chrome plated to provide maximum wear life. Stainless steel is also available.
6. TIE RODS- 100,000 to 125,000 PSI minimum yield steel, pre-stressed for fatigue resistance, and roll threaded for added strength.
7. CUSHIONS- Head cushion sleeve and rear cushion spear are machined to close tolerances to provide a gradual deceleration and reduced shock at end of stroke.
8. CUSHION NEEDLE ADJUSTMENT AND BALL CHECK- Flush mounted captive cushion adjustment allows for safe cushion adjustment under pressure. Special tip design and fine threads allow for precise adjustment over a broad range of operations. Cushion ball check allows for fast break-away under full power.
9. TUBE END SEALS- Extrusion resistant Teflon[®] material is compatible with virtually all fluids and can operate in temperatures to 500°F.
10. PORTS- SAE ports are standard and can be rotated to any 90 degree position in relation to each other and the mounting. NPTF ports are optional at no extra charge.
11. ROD SEAL- Twin lip urethane rod seal is pressure energized and wear-compensating for long, leak-free service. Viton[®] seals are optional.
12. PISTON SEALS- Pressure energized nitrile U-cups with back-up rings are standard. Step cut cast iron rings and Viton[®] seals are optional.
13. ROD WIPER- Nitrile double lip rod wiper acts as a secondary seal while keeping out dirt, dust and other contaminants. Optional Viton[®] wiper is available for fluid compatibility or temperatures to 400°F. Metallic scrapers and low friction wipers are also available.

Specifications and prices are subject to change without notice or incurring obligations.