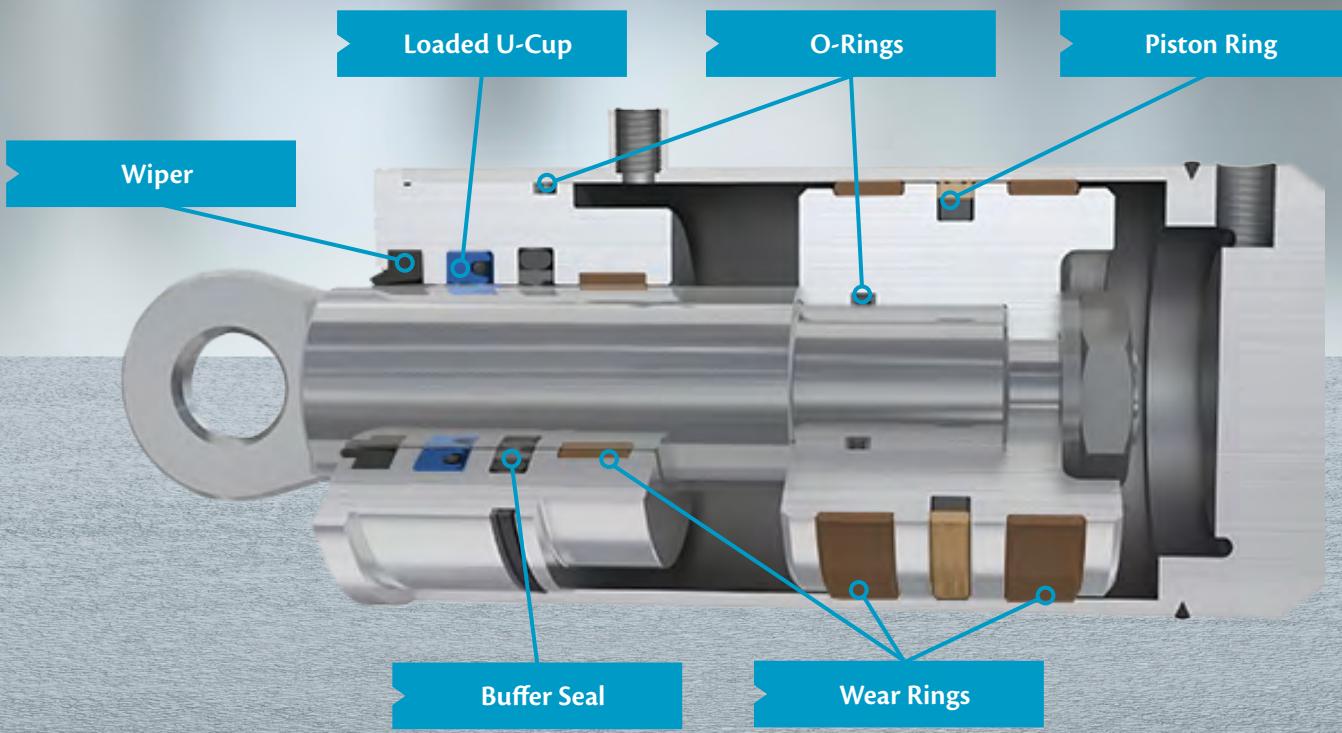




Hi-Tech Seals



Seals for Hydraulic and Pneumatic Cylinders

Hydraulic and pneumatic cylinders use sealing components installed on the piston and rod glands. These seals are critical to the cylinder sealing system, preventing fluid leakage, blocking external contaminants, and ensuring reliable, efficient operation. We stock an extensive selection of rod and piston seals for both single-acting and double-acting systems. They are available in numerous materials and lip configurations to suit different pressures, temperatures, media, and application requirements.



O-Rings

O-Rings grooves allow the O-Ring to be squeezed diametrically out-of-round even before the pressure is applied. The distortion of the O-Rings is a resilient elastic compound that fills the leakage path, thus creating a seal.

Wipers

Wipers are primarily designed to stop contaminants from entering a cylinder on the rod. If contaminants were to enter a cylinder, it could damage internal seals or components. They can also act as a secondary rod seal.



Loaded U-Cups

Loaded U-Cups are used for dynamic reciprocating applications. They are an excellent seal in low-pressure rod or piston applications. As the system pressure increases, the loading lip force also increases, automatically compensating for the higher pressure while maintaining a positive seal.



Wear Rings

Wear rings are precision-engineered to help keep the piston and rod centred and prevent metal-to-metal contact between components. This allows for even wear and pressure distribution on the seals.



Piston Rings

Piston rings provide excellent low friction and a strong chemical resistance. By changing the piston seals material, the temperature range, frictional characteristics, extrusion resistance, and wearability can be altered.



Buffer Seals

Buffer seals are commonly used in combination with another rod or piston seal, typically a U-cup style seal. Buffer seals in rod applications are designed to absorb pressure fluctuations when working under high-load conditions, this increases the lifespan of a rod seal.

Piston Seals:

- Spring Energized Seals
- Head Seals
- Capped T-Seals
- Homogenous U-Cups
- Unloaded U-Cups
- Loaded U-Cups
- Piston Rings
- Piston Cups
- Vee Packing
- T-Seals
- PIP Rings
- Modular Bearings
- Fluid Seals
- Crown Seals
- Wear Rings
- O-Rings
- Back-up Rings



Rod Seals:

- Loaded U-Cups
- Unloaded U-Cups
- Homogenous U-Cups
- Spring Energized Seals
- DZ Seals
- Vee Packing
- T-Seals
- PIP Rings
- Modular Bearings
- Buffer Seals
- Crown Seals
- O-Rings
- Wear Rings
- Back-up Rings
- Head Seals



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