

Pneumatic Cylinder Seals



PNEUMATIC PISTON SEALS

A simple asymmetric lip U seal. Can be used in a single acting piston, or mounted back to back on a double acting piston.

The asymmetric lips on the seal are different due to the nature of the application. The outer lip is dynamic, so is short but flexible. Inner lip is static, so longer and stronger to concentrate the load on the static area.

Advantages:

- Simple groove design
- Can be used in air lubricated or dry applications
- Low Friction
- Easy to install
- Excellent wear resistance
- Extended Service Life

Abbey Seals stock a wide variety of high performance materials such as Polyurethane, NBR, VITON®, EPDM and SILCONE.



PNEUMATIC CUSHION SEALS

Pneumatic cushion seals function is to act as a check valve, so a separate valve is not necessary. A lip seal has a chamfer on the inside which ensures an effective cushioning process. When the direction changes, the check valve ensures the pressure can be applied on the piston surface. The pneumatic cushion seals are designed specifically for cushioning in pneumatic cylinders made of polyurethane which as a very high abrasion resistance.



PNEUMATIC ROD SEALS

An Asymmetric lip U Seal. The inner Lip is the dynamic sealing element, so is flexible, and shorter than the external part of the seal. Designed to maintain lubricating film on the rod and minimize friction.

Advantages :

- Simple groove design
- Can be used in air lubricated or dry applications
- Low Friction
- Easy to install
- Excellent wear resistance
- Extended Service Life



PNEUMATIC ROD WIPERS

The Pneumatic Rod Wiper has to prevent dust, dirt and other particles entering into the system. This occurs with a special wiper lip which has an effective cleaning action, to stop scores, add protection and extend the life of the seal.

It also prevents air escaping from the cylinder giving a perfect seal.



COMPLETE PISTON SEALS

Complete compact piston with steel body and bonded to sealing lips with special pneumatic sealing edges. Ready to install, double acting, pressurized complete piston with integral guide. Easily assembled on the piston rod without additional sealing elements. The design with radial air relief passages on the front face facilitates reliable pressure distribution at the end of the stroke

Advantages:

- Long working life
- Ease of installation
- Excellent sealing properties over a wide pressure range