

VITON* SEALS

Cylinders may be equipped with seals of Viton (fluorocarbon rubber) to suit elevated temperature or fluid compatibility requirements when application conditions preclude use of standard materials. Viton is recommended for use with:

- Pneumatic service
- Petroleum oils and fluids
- Selected phosphate ester fluids
- Halogenated hydrocarbons
- Silicone fluids

Viton is suitable for use at temperatures from -20° F to +400° F (-29° C to +204° C). This material will withstand intermittent use to +550° F, but is subject to substantial seal life reduction with prolonged exposure to temperatures above +400° F.

When this option is desired, indicate if use is to suit temperature or fluid compatibility requirements.

Style 5 Rod End (with studded thread) should not be used at temperatures over +250° F. Other standard rod end styles are not subject to this limitation.

**Trade name of E.I. duPont deNemours & Company*

CARBOXYLATED NITRILE SEALS

Carboxylated Nitrile (CN) Seals are available for use in high speed/high cycle applications for air or hydraulic service. They are also suitable for use with water or water based fluids. CN Seals are recommended for:

- Pneumatic service
- High speed/high cycle applications
- Water/water based fluids to 210° F
- HWBF (high water base fluids)

STAINLESS STEEL PISTON ROD

Chrome plated piston rods of Series 17-4 stainless steel are available for use in cylinders which require corrosion resistance greater than that provided by standard construction. The strength of this material is slightly higher than standard rod stock, making it suitable for use in air or high pressure hydraulic applications.

Alternate grades of stainless steel, such as Series 304, are available. Rods of this material are suitable for use in most air and light duty hydraulic models, but may not have sufficient strength for high pressure service.

Consult Lynair, Inc. to obtain material recommendation or price information when an alternate grade of stainless steel is desired.

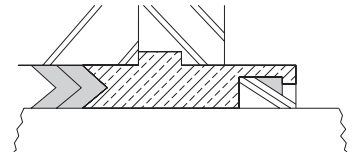
HARDENED PISTON ROD MATERIAL

Chrome plated piston rod material with a minimum case hardness of Rc-50 is available in all sizes. This option provides added resistance to damage resulting from foreign elements contacting the rod surface.

Hardened rod stock and standard rod stock have similar strength properties, however hardened material has increased brittleness which makes its use in applications subject to misalignment or high stress loading undesirable.

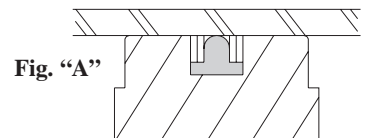
METALLIC ROD SCRAPER

Cylinders for use in areas containing abrasive particles or self adhering contaminants that could become embedded in the standard wiper should be ordered with a metallic scraper. Twin knife like edges will clean rod surface to prevent such harmful contaminants from entering sensitive inner bearing and seal areas. Hardened Piston Rod option is recommended when a metallic scraper is included.

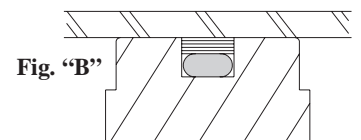


SEAL DESIGN MODIFICATIONS

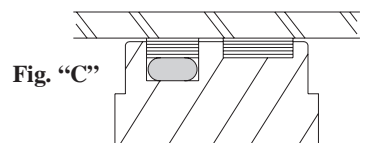
Rod and piston seals are available in a variety of design configurations. While standard Lynair cylinders include seals proven to be satisfactory for general purpose use, alternate styles designed to provide specific performance characteristics are available when application requirements make their use desirable. Seals that offer extended service life, greater sealing efficiency, lower friction, constructed of materials, or in sizes better suited to meet particular design requirements may be specified.



A glass fiber filled teflon sealing ring installed over an elastomer expander provides a long wearing, bi-directional, low bypass piston seal suitable for air or hydraulic service.



Wear rings of similar material are often used with this type of seal. Their use eliminates metal to metal contact between piston and bore surfaces which improves wear conditions and is especially effective when used in models having long stroke length.



Seal construction options are an extra cost feature available upon request in all cylinders. Consult Lynair, Inc. to obtain design recommendations and price adders when this optional feature is being considered.