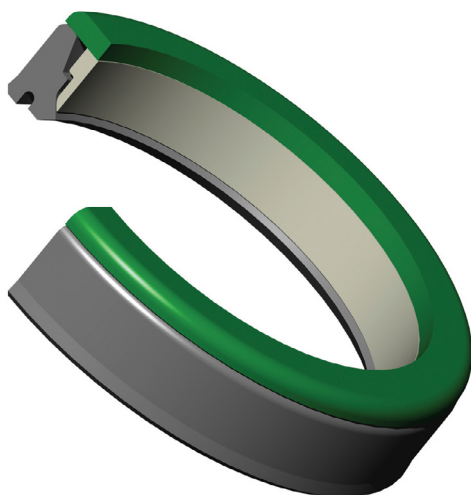


Enerlip® Rod



Enerlip® HP Rod

Versatile Seal for High & Low Pressures

Low Breakaway Friction, Pressure-Variable Seals

The Greene Tweed Enerlip® and Enerlip® HP are high-performance, low-leakage, pressure-variable seals developed to combine low-breakaway friction with ease of installation.

The unidirectional seal consists of a specially shaped elastomeric energizer with a mating PTFE-type heel bearing. At low pressure, the Enerlip® functions as a partially capped, single-acting elastomer lip seal. The elastomeric element's wide footprint provides excellent sealing capability. As pressure increases, the elastomeric element is forced up the ramp of the PTFE element, reducing the elastomeric footprint length to provide lower friction and wear. At high pressure, the Enerlip® acts as an activated PTFE seal, with optimum sealing action at pressures from 0 to 8,000 psi (0 to 550 bar).

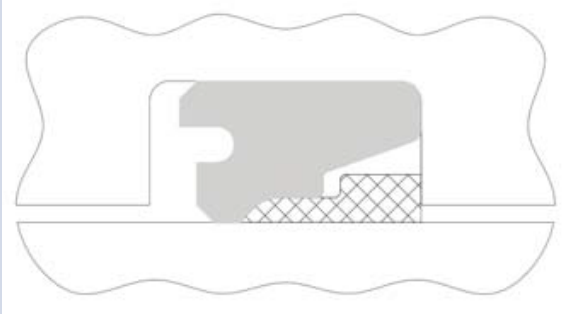
Features and Benefits

- » The elastomeric footprint is reduced as the elastomeric element is forced up the PTFE ramp, providing lower friction and wear
- » The wiping action of the elastomeric element provides effective leakage control compared to conventional cap seals
- » Functions as a pressure-actuated cap capable of withstanding high pressures
- » Functions as a partially capped, single-acting, elastomeric lip seal capable of withstanding low pressures
- » Provides for optimized sealing across the pressure range leading to resistance to wear and extrusion
- » Unidirectional design ensures no pressure entrapment when used in tandem seal arrangements

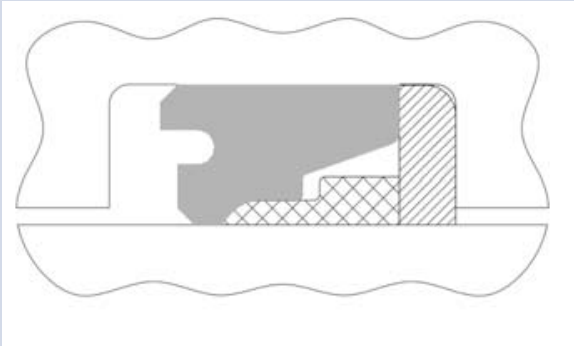
Applications

- » Tandem seal design applications found in utility and landing gear actuation systems
- » Primary and secondary flight control systems

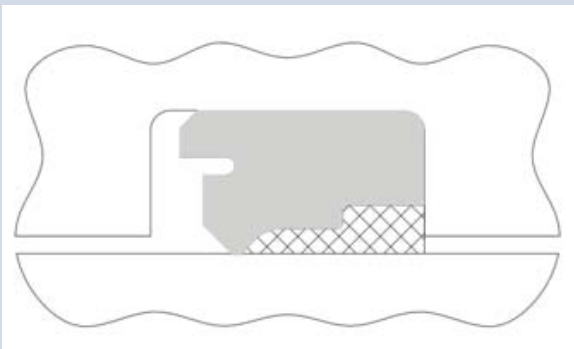
Enerlip® – Low Pressure Applied



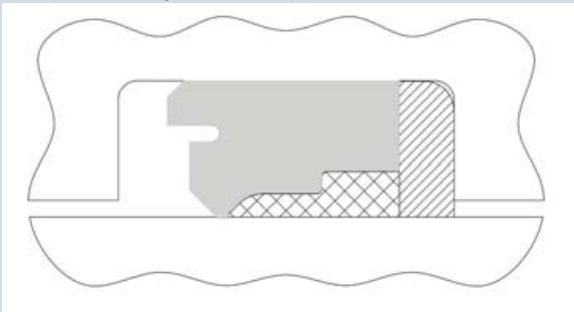
Enerlip® HP – Low Pressure Applied



Enerlip® – High Pressure Applied



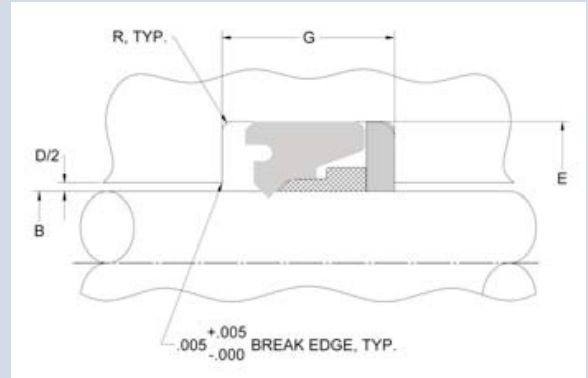
Enerlip® HP – High Pressure Applied



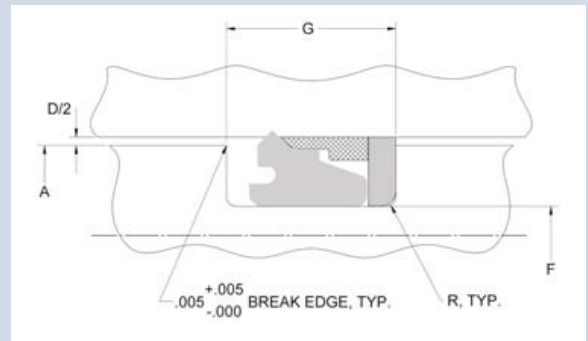
Enerlip® Configuration

Gland Dimensions

Rod



Piston



Enerlip® Design

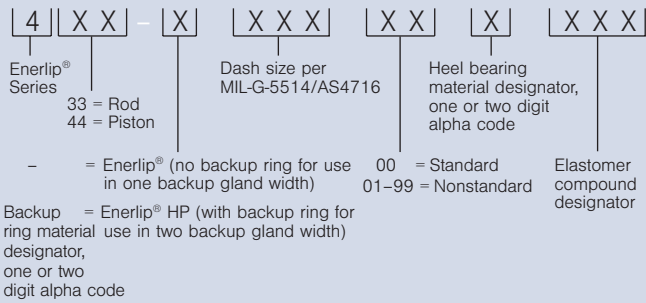
Working as either a primary seal or as a secondary seal to a primary PTFE-type seal, the Enerlip® seal provides low breakaway friction, reduced leakage, and ease of installation. The Enerlip® seal consists of a shaped elastomeric energizer with a mating PTFE-type heel bearing. The Enerlip® HP has an additional anti-extrusion ring.

Enerlip® Options

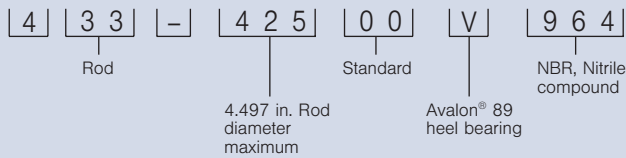
The Enerlip® is available for both rod and piston sealing: one backup gland width for Enerlip®, two backup gland widths for Enerlip® HP. It can be installed as the primary seal or as the secondary seal to a primary PTFE-type seal, such as the Greene Tweed's capped ACGTL™ ring or the Ener-Cap® HP in dual sealing (vented or unvented) systems.

Enerlip® Part Numbering System

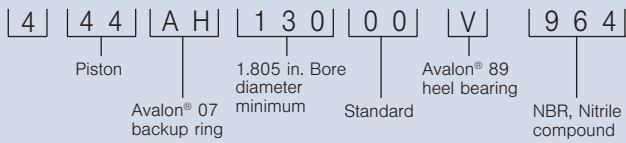
The part numbering system requires the use of the material designator tables found in the next column. For nonstandard designs, contact Greene Tweed engineering.



Part Numbering Example: Enerlip® for one backup gland width



Part Numbering Example: Enerlip® HP for two backup gland widths



Contact KLINGER for specific recommendations to suit higher performance requirements.

Material Designator Tables

Code	Elastomer Compound
160	NBR, Nitrile
161	NBR, Nitrile
410	FVMQ, Fluorosilicone
772	FKM, Fluorocarbon
952	EPM, Ethylene Propylene
954	EPDM, Ethylene Propylene
964	NBR, Nitrile

Code	Heel Bearing Material
Q	Avalon® 07
B	Avalon® 09
AA	Avalon® 44
AF	Avalon® 50
AG	Avalon® 57
AC	Avalon® 69
V	Avalon® 89

Code	Backup Material
AH	Avalon® 07
C	Avalon® 09
AB	Avalon® 44
AJ	Avalon® 57
AE	Avalon® 69
AP	Avalon® 89
A	NWR
AD	Arlon® 1330
AU	Arlon® 1555

Note: All backup rings are scarf cut. For solid backup rings contact KLINGER.

See Greene Tweed Surface Finish guidelines.

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.

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