



**MAGSEAL**

Maximizing Critical System Reliability



# Special Situations Require Special Seals

# The MagSeal Advantage

## Features & Benefits

### Features

#### Magnetic versus Mechanical Force

Low, consistent force on seal face reduces friction, heat, and wear resulting in longer seal life.

Offers superior performance over spring seals in high vibration and high speed applications.

Face load 50-75% less than spring seal.

#### Designed for high shaft speed applications

Operates at high shaft speeds (Up to 17,000 ft./min).

#### Elastomer mounted components

Dampens system vibration and thus eliminates seal face chatter and resulting wear.

#### Precision machined seal faces—2 Helium light bands

Reduces seal face run in time and ensures optimal performance from initial setup.

#### Short axial length

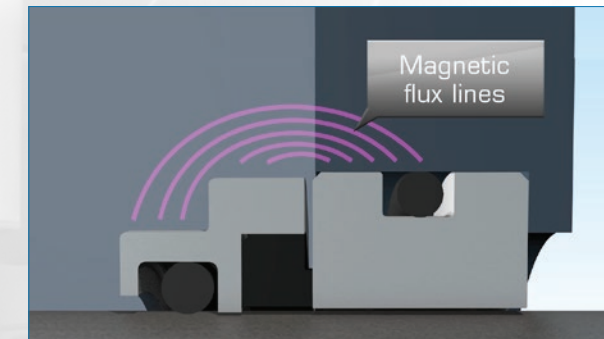
Suitable for lip seal replacement due to short axial envelope, and allows for ease of seal upgrades without the need for major system redesign.

### Benefits

For over 60 years MagSeal has been the trusted supplier of specialty magnetic seals for critical systems.



MagSeal exploded view



MagSeal closed magnetic circuit

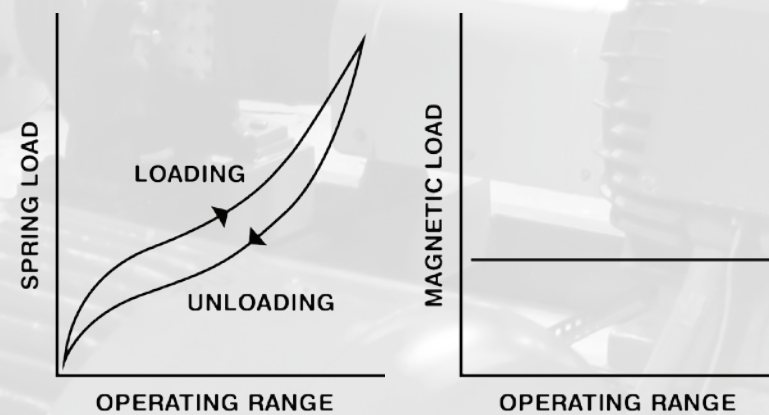
Respected for their design, quality and reliability, MagSeals have been the seal of choice for standard sealing applications and in special situations where conventional mechanical seals fall short. Able to operate in difficult situations, MagSeals are engineered to outperform in high speed, high vibration, and high altitude conditions and are excellent replacements for both lip and spring seals.



Model 62 MagSeal applied as a lip seal replacement

Our mechanical seal experts and engineering team consider that every application for mechanical seals can be different.

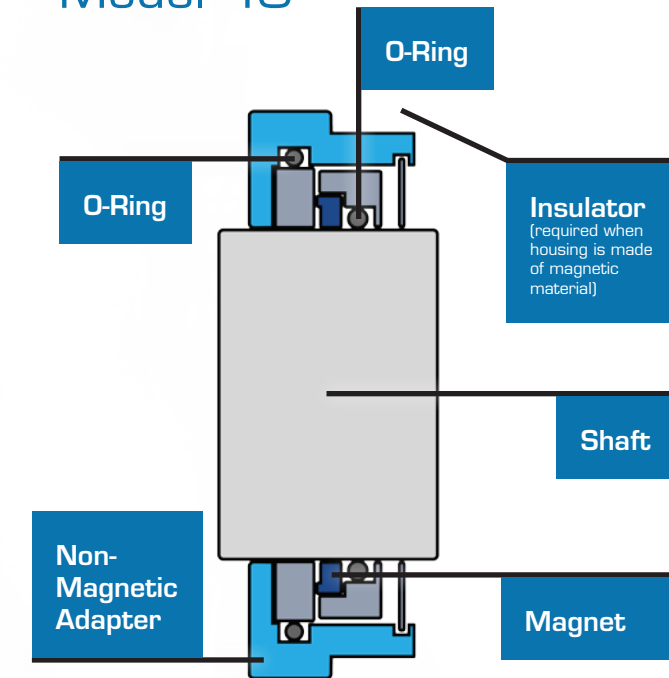
As such, most designs are customized to meet operating parameters, with careful consideration given to operating media, material requirements, loads, speeds, differential pressure, axial and radial constraints, runout, wobble, weight, as well as dynamic and static effects. If required, designs can also be made to be repairable and installation error proof.



**SPRING LOAD**  
Variable across the operating range and with hysteresis

**MAGNETIC LOAD**  
1/3 of spring load range calibrated by air gap and magnetizing process, and with no hysteresis

## Model 40



For use in most applications. Sealing pressures less than 50 PSI depending on size and operating conditions. Model 40 MagSeals can be manufactured for shafts up to 5 inches in diameter. Consult factory for information.

See [www.magseal.com/model40](http://www.magseal.com/model40) for complete specifications.

## Related Models for Special Situations

**Model 30:** For shaft sizes larger than 5.00 inches

**Model 15:** Applied in applications where pressure reversals occur. Seals are hydraulically balanced to handle reverse pressure conditions.

**Model 62:** For applications restricted to a shorter axial length, typically when replacing a lip seal.

See [www.magseal.com/models](http://www.magseal.com/models) for more details.

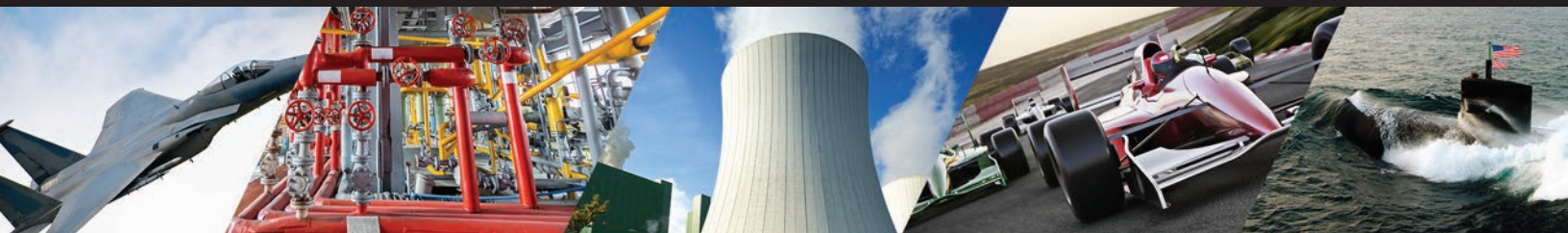
**Note:** MagSeals for bearing protection applications may not always be ordered by size alone and often require engineering review. Even in standard configurations, materials must be matched to the fluids involved. Please contact our Engineering Department at the earliest practical time during your project, and we will design a seal with materials and features suited to your operating conditions.

# Example Applications in a Real-World Situation

MAGSEAL is recognized globally as a trusted supplier of innovative sealing solutions for challenging applications where bearing protection is required in industrial rotating machinery.



## Other Industries We Serve



**MAGSEAL**  
Maximizing Critical System Reliability

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[www.magseal.com](http://www.magseal.com)