

## Fluid Compatibility Table

---

### LIP, CASE AND SPRING MATERIALS

#### LIP MATERIALS

Nitrile Buna-N 70 durometer compound is the standard material for our seals and is recommended for a majority of common applications. Nitrile lip seals work well within the temperature range of -65°F to 250°F and provide compatibility with water and most common mineral oil and greases.

Polyacrylate compounds are recommended for higher temperature applications, ranging from -30°F to 300°F. They also work well with mineral oils, EP additives and greases. However, they offer poor sealing in dry running conditions and cost more than Nitrile.

Silicone compounds offer the widest range of normal operating temperatures ranging from -90°F to 340°F. However, they do not perform well in dry running conditions, and should not be used with EP compounds and oxidized oils.

Viton® compounds are premium lip materials offering the widest temperature range and chemical resistance. Viton® will handle temperatures from -40°F to over 400°F (-40°C to over 240°C).

Viton® will resist most special lubricants and chemicals that can destroy Nitrile, Polyacrylates and Silicones. Viton® is extremely resistant to abrasion and provides superior wear performance. Viton® works in dry running applications, but only for intermittent periods. Graphite is available as an additive to any compound. Normally graphite is added at a 3% factor to aid in lubricity.

### CASE AND SPRING MATERIALS

The cases and springs for our seal products are produced from carbon steel. In applications where corrosion resistance is important, either case or spring or both can be produced from stainless steel. In addition, rubber coated seals can provide the best resistance to corrosive environments in the most economical design. HYPALON® coating is an O.D. sealant which is available on any metal case design by customer request.

### LIP, CASE AND SPRING TABLES

The following tables identify the most common lip and case designs. Additional, more complex designs are available for special applications; however, the lip and case designs below represent those which will fill the needs of most seal requirements.

### LIP DESIGN

The following designations indicate the configuration of the sealing members:

- V = Single Lip
- K = Double Lip
- S = Single Lip, Spring Loaded
- OB = Oil Bath (Prefix)
- WS = Wiper w/Bronze Scraper
- U = Triple Lip
- D = Double Lip, Double Spring Loaded
- WP = Wiper Lip Design
- O = External Seal Type

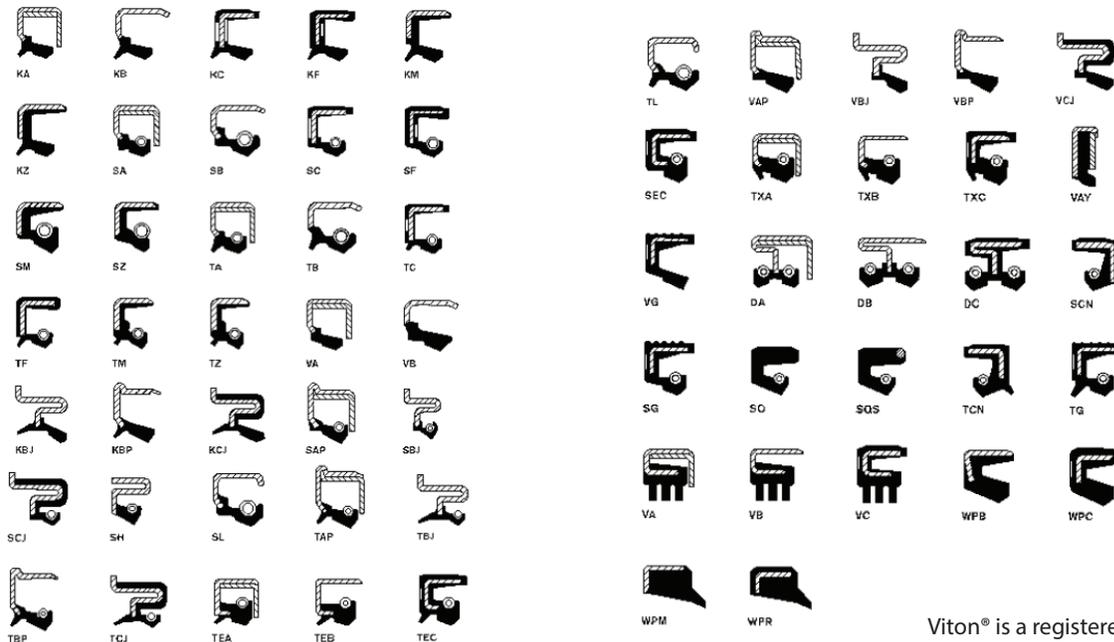
## CASE AND SPRING DESIGN

The following designations indicate the case type or any special features of the basic case designs. The designations for lip designs, attachment configuration and case style are then put together to indicate the specific seal type desired.

- A = Double Case
  - B = Lip Attached to End of Case Only
  - C = Fully Rubberized Casing
  - E = Metal Reinforced Sealing Lip
  - F = Special Fully Encased Design
  - G = Ridged Rubber Coated O.D.
  - H = Reverse Case Style
  - J = Special Flanged Indented Case
  - M = Fully Rubberized Inner Case
  - N = Short Flex High Pressure Design
  - P = Flanged Case
  - Q = All Rubber Split Seal Design
  - SP = Other Special Feature
  - X = Special Fitting Condition Design
  - Y = Indented Back Case
  - Z = Rubber Covered Chamber
- NOTE: Basic single case design has no designation

## OIL SEAL LIP DESIGN CHART

The following Lip Seal designs are the most common, if your application calls for a design not listed below, please contact Monroe Seals.



Viton® is a registered trademark of DuPont® Dow Elastomers L.L.C