



Spring Energized PTFE-Seals



Metal-O-rings and C-rings

Special seals for valves

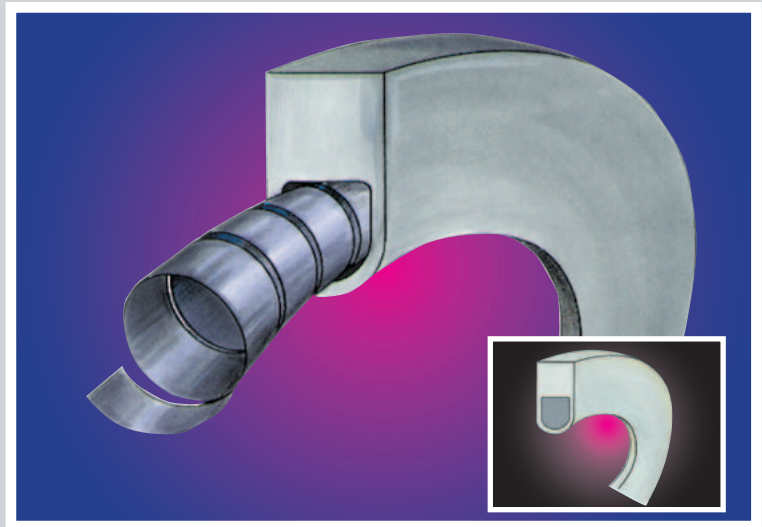


High Performance Seal Technologie



Main field of GFD-Seals:

- Ball valves
- Control valves
- Regulating valves
- Butterfly valves
- Sampling valves
- Gate valves
- Seat valves



Valves, which must operate with very low temperatures such as $-196\text{ }^{\circ}\text{C}$ or in the desert, which must be resistant against aggressive medias, hot gases and pressures of several hundred bars, require special solutions – seals from GFD.

This applies in particular if the operation conditions of the valves and the seals do not permit aging.

GFD supplies seals for the most different valves like ball valves, butterfly valves, control and regulating valves, gate valves etc.

Is it high temperatures $+315\text{ }^{\circ}\text{C}$ ($+800\text{ }^{\circ}\text{C}$ with Metal-seals), low temperatures or aggressive media: We have the correct answer for your problems.

Whether the application at the arbor respectively at the control shaft or at the spherical sealing surface of the ball at the butterfly or at the gate – we have a solution!

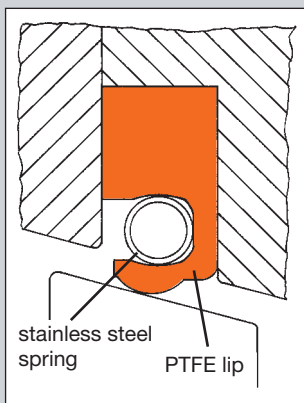
Advantages of GFD-seals:

Applicable in the housing or in the disc of butterfly valves.

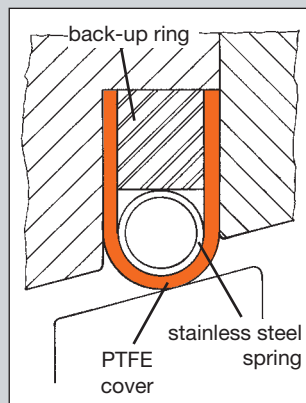
In different variants and special designs from 2 mm up to 3000 mm diameter available.

- Universal chemical-resistant
- Durable elasticity because of an integrated stainless steel spring
- Sterilisable for foodstuff or pharmaceutical applications
- Capsulated or totally sealed stainless steel spring
- Highest wear resistance and lowest friction forces
- Suitable for high and low temperatures
(-196 °C to +316 °C) (+800 °C Metal-Seals)

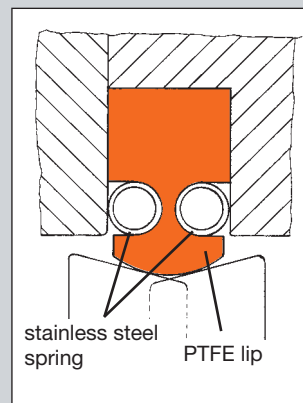
Applications in valves for example ball valves and butterfly valves



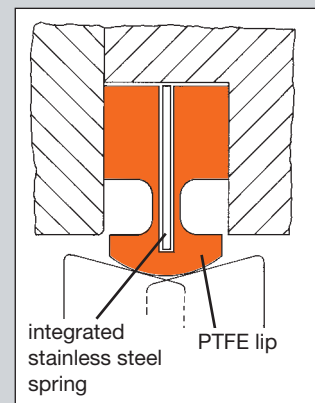
Disc seal made of PTFE with stainless steel spring



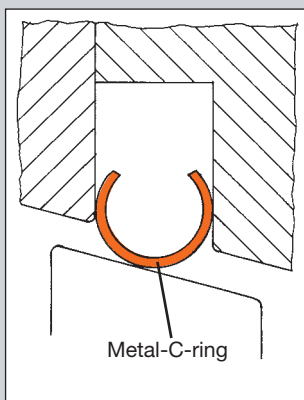
PTFE disc seal with capsulated stainless steel spring



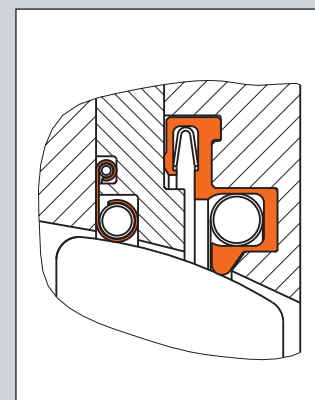
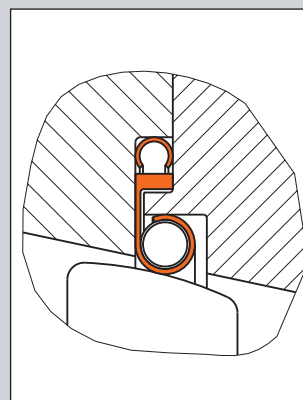
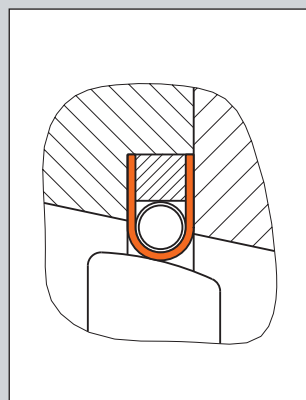
Two-sided working PTFE disc seal with 2 stainless steel springs



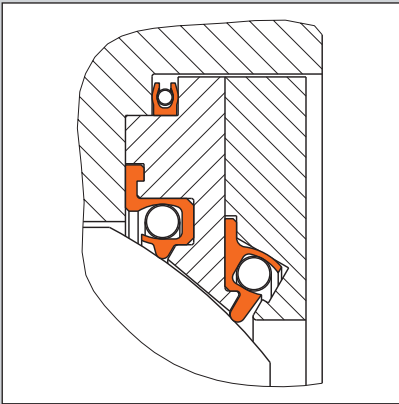
Two-sided working PTFE-seal with stainless steel spring washer



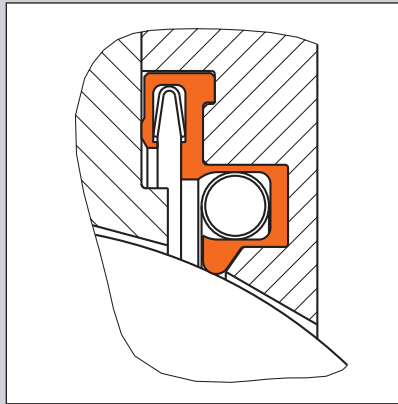
Metallic disc seal with Metal-C-ring



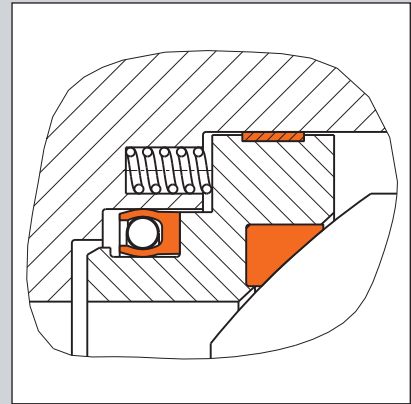
Applications in valves for example ball valves and butterfly valves



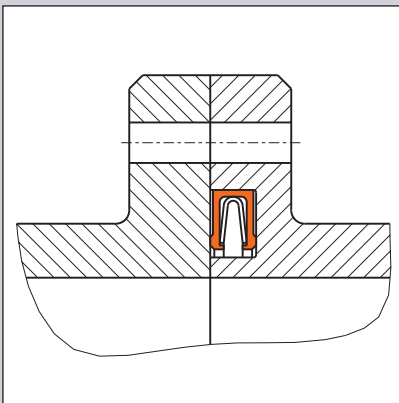
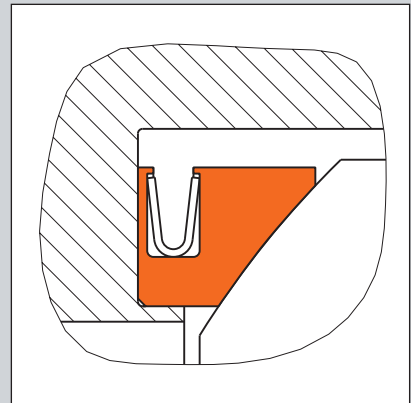
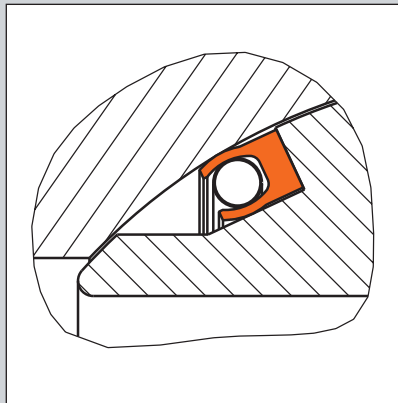
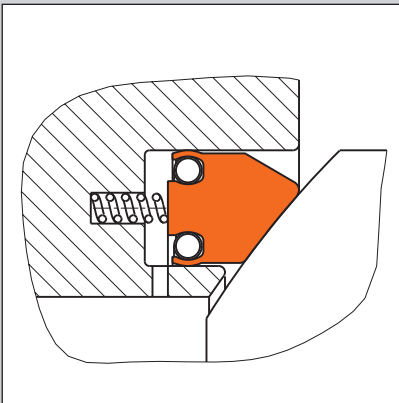
Disc seal, two-way pressure
from -200 °C up to +300 °C,
resistant against aggressive chemicals



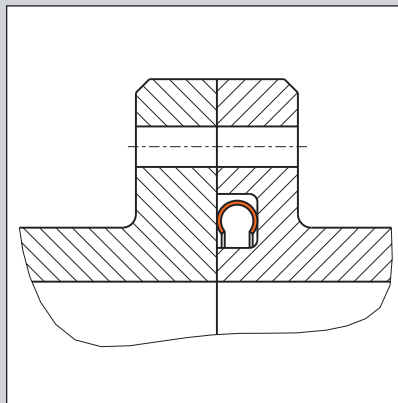
Disc seal, one-way pressure
from -200 °C up to +300 °C,
resistant against aggressive chemicals



Ball valve seal
typical arrangement

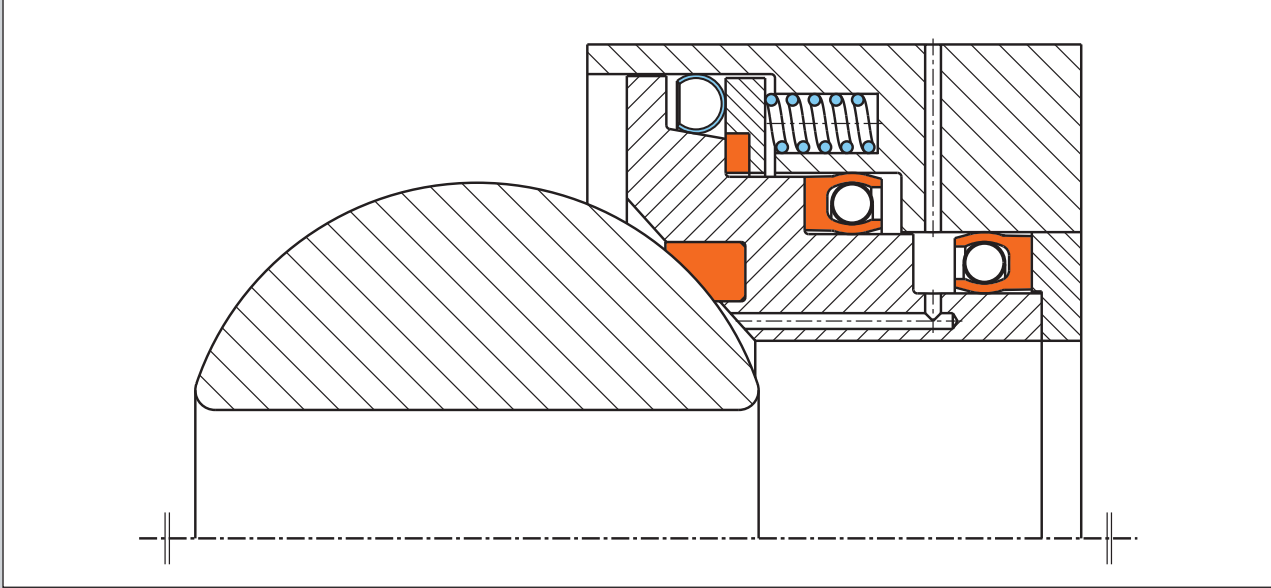


Pipeline connection
static seal in valves

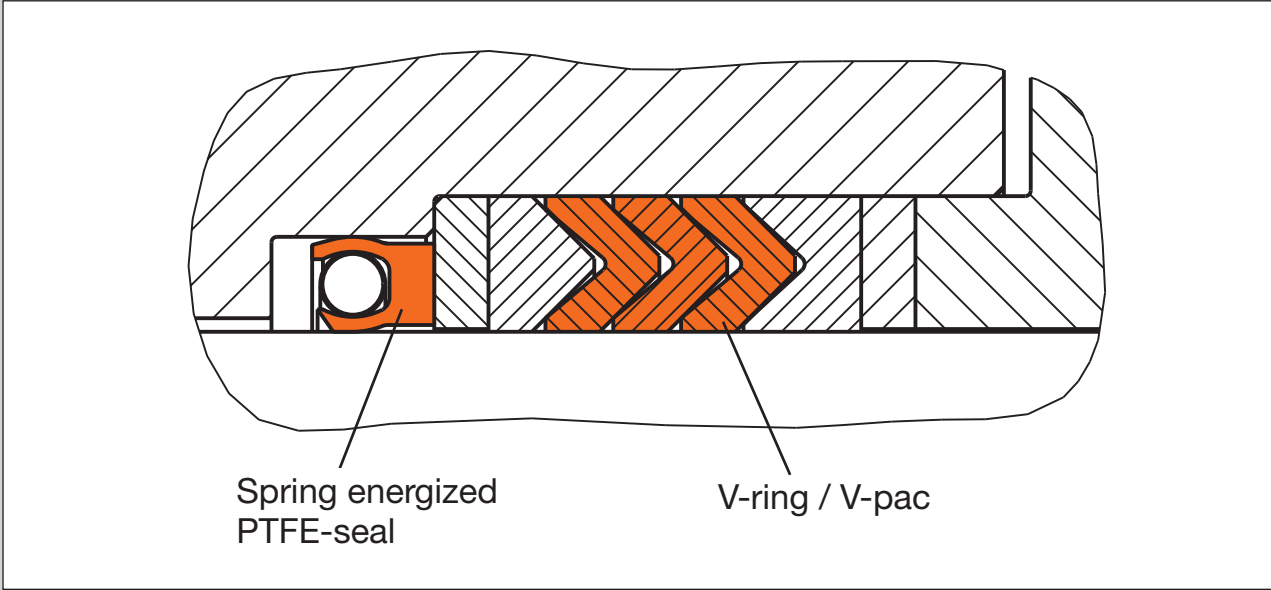


Representations are principle
representations and show only
a small cross section of our
possibilities.

Application in ball valve (fire - safe)



Application in control and regulating valves for example rod seals:



Product Lines

Spring Energized PTFE-Seals

or made of other high performance plastics with a stainless steel spring for lasting elasticity.

Metallic O-Rings and Metallic C-Rings

use as static seals for gases and fluids under extreme conditions, temperatures from -269 °C to +980 °C and UHV-vacuum to 6800 bar pressure.

PTFE-Seals

universal chemical resistance, sterilisable, suitable for food and drug.

PTFE-Parts

according to drawings and specifications of clients.

Metallic-Etched Parts

parts from 0.01 to 1 mm thickness, from 2 x 2 mm up to 500 x 2000 mm.

Rotary Lip Seals of PTFE

for high shaft velocity, poor lubricated conditions, long life time, almost universal chemical resistance.

Metallic Seals and Laser Parts

for small series, individual parts and experiments, without any tooling costs.

Seals made of Fluor-Elastomers and Perfluor-Elastomers

(Teflon, Kalrez and Viton)* are registered trademark of Du Pont.



GFD

Seals

Seal Systems

Seal Elements

**GFD – Gesellschaft für
Dichtungstechnik mbH**

Hofwiesenstraße 7
D-74336 Brackenheim
Telefon +49 (0) 71 35 95 11-0
Telefax +49 (0) 71 35 95 11-11

www.seals.de
info@seals.de

