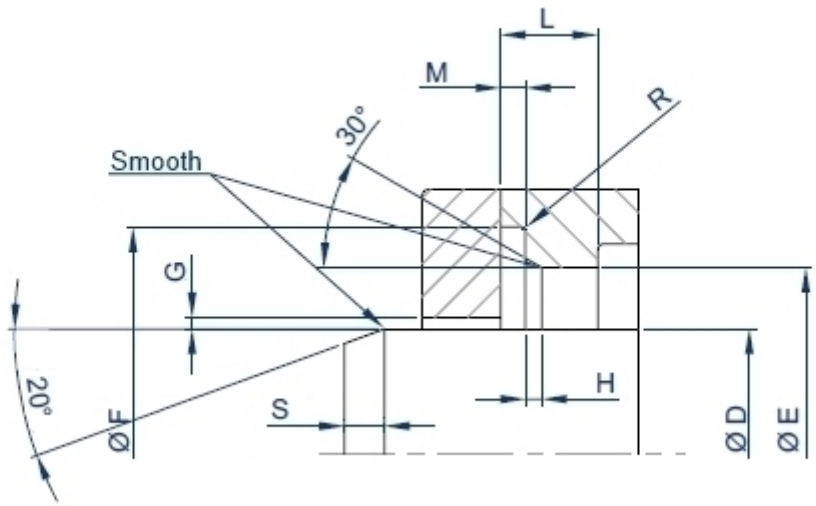
# Rotary shaft seals |Energized Rotary Enerseal V




Spring Energized Rotary Seals

**Spring Energized Rotary Seals**

Jacket in PTFE compound, PEEK, UHMW-PE, PU 54Sh.D.

Spring in Aisi 301, Elgiloy, Hastelloy and **NACE approved Inconel X750**.**An optional FDA approved Silicone filling is available**.

Homepage
Rotary Shaft Seals

## SEAT

| housing class | **D** dimensional range | **E** groove diameter | **F** flange groove diameter | **L** groove width | **M** flange groove width | **H** chamfer | **S** chamfer | **R** max | **G** max. radial gap |
|---|---|---|---|---|---|---|---|---|---|
| | **f7** | **H9** | **H12** | **H12** | **+0/-0.1** | | | | |
| REL | 5 - 240 | D + 5.0 | D + 9.0 | 3.6 | 0.85 | 0.8 | 2.5 | 0.3 | 0.05 |
| REH | 25 - 400 | D + 7.0 | D + 12.5 | 4.8 | 1.35 | 1.1 | 3.0 | 0.4 | 0.08 |
| REN | 45 - 650 | D+10.5 | D + 17.5 | 7.1 | 1.80 | 1.4 | 5.5 | 0.5 | 0.10 |
| REM | 80 - 1100 | D+14.0 | D + 22.0 | 9.5 | 2.80 | 1.6 | 8.5 | 0.5 | 0.12 |

**Coding example**

housing class REN
profile code 055
rod 50
materials: jacket Neuflon 020 spring Aisi 301

**Roto-Enerseal REN 055 050 N-020 301**

## FINISHES

| SURFACE FINISH ACCORDING WITH FLUID | | |
|---|---|---|
| **application** | **max Ra µm<br>dynamic surface** | **max Ra µm<br>static surface** |
| CRYOGENICS | 0,1 | 0,2 |
| FREON<br>HELIUM<br>HYDROGEN | 0,2 | 0,3 |
| AIR<br>NITROGEN<br>ARGON<br>METHANE<br>FUELS | 0.2 | 0.4 |
| WATER<br>OIL | 0.3 - 04 | 0.6 |
| **ROTARY SEALS** | | |
| **Shaft surface** | **Shaft hardness** | **Surface treating deep** |
| Ra 0.2 - 0.3 micron max.<br>Rz 1.0 - 2.5 micron max.<br>R max. < 4 micron | 55 HRC min. for pressure up to 5 bar<br>60 HRC min. for pressure > di 5 bar<br>60 HRC for speed > 4m/sec | 0.3 mm min. |

## AVAILABILITY

**To check the availability:**
-choose profile and compound from the drop-down menu
-input the desired housing class
-input the desired diameter
Once obtained the availability, a request for quotation can be sent.

## MATERIALS

**Click compound's code to download the .PDF data sheet. Login required.**

**PTFE COMPOUNDS**

| HD Slippers code | Composition | Approvals | ΔT °C | Description |
|---|---|---|---|---|
| N-009 | Ptfe-oxides | | -268 +260 | All pourpose on soft surfaces |
| N-032 | Ptfe-carbon | | -268 +260 | High wear resistance, pneumatic and hydraulic seals |
| N-197 | Ptfe-carbographite | **NORSOK** | -268 +260 | High wear resistance, hydraulic and pneumatic seals |
| N-043 | Ptfe-graphite | **FDA** | -268 +260 | High wear resistance, low friction coefficient. |
| N-103 | Ptfe-carbon fibre | **FDA** | -268 +260 | High wear resistance, low friction coefficient, hard surfaces. |
| N-033 | Ptfe-glass fibre-$MoS_2$ | | -268 +260 | Of general use, in lubricated applications, rotary seals |
| N-060 | Ptfe-glass fibre | **FDA** | -268 +260 | All pourpose on hard surfaces |
| N-067 | Ptfe-glass fibre | **FDA NORSOK** | -268 +260 | High wear and creep resistance |
| N-102 | Ptfe-Liquid crystal polymer | **FDA - EU** | -268 +260 | Food & Pharma on soft surfaces |
| N-088 | Ptfe-poliimmide | | -268 +260 | High wear resistance. Soft surfaces |
| N-074 | PEHMW | **FDA** | -140 +80 | High wear and extrusion resistance |

**CHOOSING Neuflon-ptfe compound ACCORDING WITH FLUID AND SURFACE**

| | **SURFACES** | | | |
|---|---|---|---|---|
| | Steel HEC>=30-45<br>Temp. Mart. Inox Steel<br>Cast Iron HRB<=200<br>Steel HRC>=45<br>Cast Iron HRB>200 | Galvanic or chemical surfacing HV>=700<br>Chromium Bronze | Treated Aluminium | Aust. Inox Steel<br>Glass |
| **FLUIDS** | | **NEUFLON-ptfe compounds (standard in bold)** | | |
| Hydraulic oil<br>Transmission oil<br>Fire resistant syntetic hydraulic oil | **N-031**<br>N-032 N-060 N-077 P95-G114 | **N-031**<br>N-032 N-060 N-077 P95-G114 | **N-032** N-074 P95-G114 | **N-009**<br>N-032 N-074 P95-G114 |
| Water and oil/water emulsions | **N-032**<br>N-060 N-077 N-074 | **N-032**<br>N-060 N-077 N-074 | **N-032**<br>N-074 | **N-009**<br>N-032 N-074 |
| Drugs and food | **N-102**<br>N-043 N-060 N-074 N-088 P95-G114 | **N-009**<br>N-074 P95-G114 | **N-009**<br>N-074 P95-G114 | **N-009**<br>N-074 P95-G114 |
| Air | **N-032**<br>N-031 N-043 N-074 P95-G114 | **N-032**<br>N-043 P95-G114 | **N-032**<br>N-074 P95-G114 | **N-032**<br>N-009 N-043 N-074 P95-G114 |
| Steam | **N-032**<br>N-043 | **N-032** | | **N-032**<br>N-009 N-043 |
| Acids and Bases | **N-032**<br>N-074 | **N-032**<br>N-043 N-074 | | **N-009**<br>N-032 N-043 N-074 |