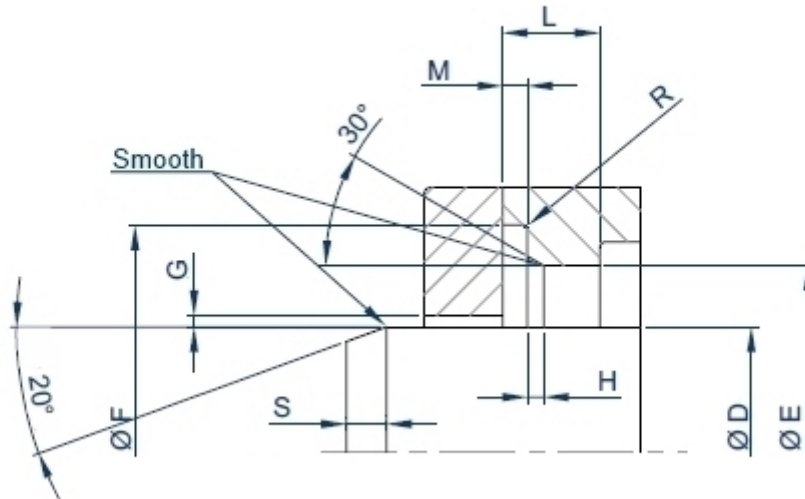


Enerseal® Spring Energized Seals | Energized Rotary Seals V



Spring Energized Rotary Seals Enerseal®, custom and standard dimensions available. Jacket in PTFE compound, PEEK, UHMW-PE, PU 54Sh.D. Jackets and electro-welded springs are designed and realized within the company, so that HD has the complete control of the production process. Spring are available in Aisi301, Elgiloy, Hastelloy and **NACE approved Inconel X750**.
An optional EU-FDA approved Silicone filling is available.

[Spring
Energized
Seals
Homepage](#)



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

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