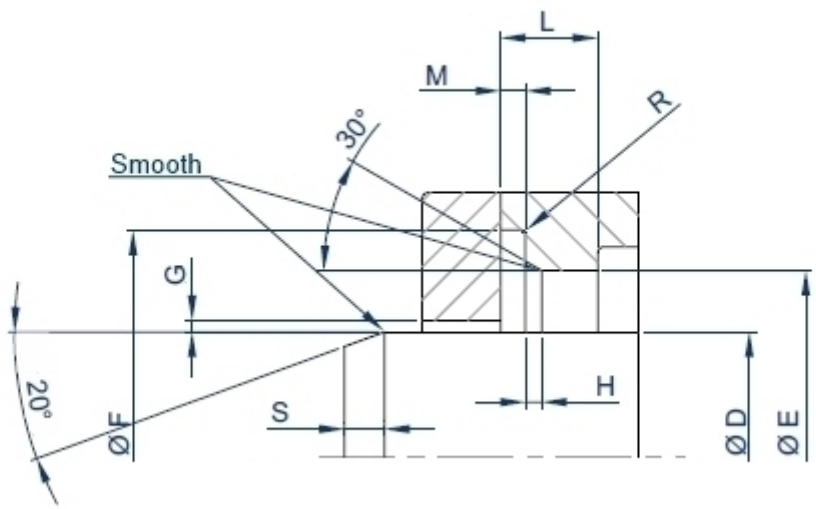
EnersealÂ® Spring Energized Seals |Energized Rotary Seals V



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	**Shaft hardness**	**Surface treating deep**
Ra 0.2 - 0.3 micron max. Rz 1.0 - 2.5 micron max. R max. < 4 micron	55 HRC min. for pressure up to 5 bar 60 HRC min. for pressure > di 5 bar 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 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
FLUIDS	**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