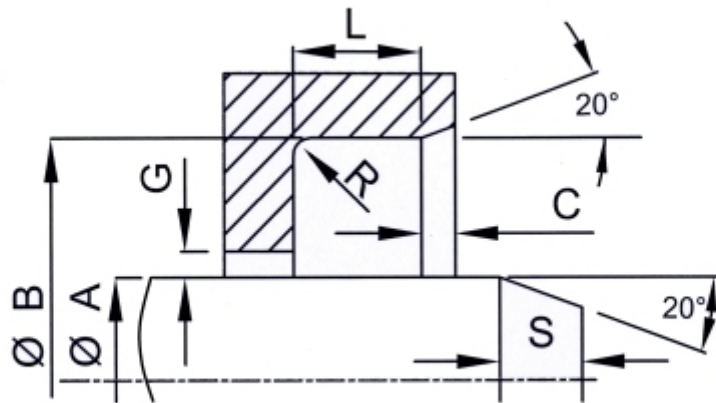


Rotary shaft seals | Rotary shaft seal Rotolip® reinforced lip



Rotary shaft seals Rotolip® reinforced lip

[Rotolip® Lip Seals for Rotating Shafts](#)

Operating Conditions:

- Temp. -60 +250 °C
- Speed max 10m/sec and up to 25m/sec lubricated conditions
- Pressure max 4 bar (up to 10 bar with backup)
- Maximum pressure and maximum speed cannot be achieved simultaneously
- Eccentricity 0.15 max.
- Type R05 and R055 without collar: shaft 100mm max.

[Homepage](#)
[Rotary Shaft](#)
[Seals](#)



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.

HD Slippers code	Composition	Color	Approvals	ΔT °C	Description
N-009	Ptfe-oxides	blue	FDA	-268 +260	All pourpose on soft surfaces
N-095	Tfm	white		-268 +260	Low creep, better strength.
N-031	Ptfe-bronze	green-blue		-268 +260	High wear resistance, hidraulic seals
N-032	Ptfe-carbon	black	NORSOK	-268 +260	High wear resistance, pneumatic and hydraulic seals
N-197	Ptfe-carbographite	black		-268 +260	High wear resistance, hydraulic and pneumatic seals
N-043	Ptfe-graphite	black		-268 +260	High wear resistance, low friction coefficient.
N-060	Ptfe-glass fibre	blue	FDA	-268 +260	All pourpose on hard surfaces
N-067	Ptfe-glass fibre	white	FDA NORSOK	-268 +260	High wear and creep resistance
N-033	Ptfe-glass fibre MoS2	gray	FDA	-268 +260	Fit for hard surfaces
N-103	Ptfe-Carbon fibre	black		-268 +260	Fit for hard surfaces
N-102	Ptfe-Liquid crystal polymer	beige	FDA - EU	-268 +260	Food & Pharma, fit for soft surfaces
N-088	Ptfe-polyimide	yellow		-268 +260	Fit for soft surfaces
N-074	PEHMW	white	FDA	-140 +80	High wear and extrusion resistance
N-155	PVDF	white	FDA	-30 +140	High modulus
P95-A252	Polyurethane	blue	FDA	-50 +105	Extrusion and wear withstanding, low friction coefficient
P95-VI251	Polyurethane	violet	FDA	-30 +115	CIP (clean in place) fluids compatible
P95-R198	Polyurethane	red		-30 +125	Extrusion and wear withstanding, low friction coefficient, high temperatures
P95-AR255	Polyurethane	orange		-30 +135	Extrusion and wear withstanding, low friction coefficient, higher temperatures
P95-G253	Polyurethane MoS	gray		-30 +105	Extrusion and wear withstanding, lower friction coefficient

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

Bronze
Brass

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 P95-A112

N-031
N-032 N-060 P95-A112

N-009
N-043 N-032 P95-A112

N-032 N-074
P95-A112

N-009
N-032 N-074 P95-A112

Water and oil/water
emulsions

N-032
N-060 N-074

N-032
N-060 N-074

N-009
N-043 N-074

N-032
N-074

N-009
N-032 N-074

Drugs and food

N-074
N-102 N-043 N-060 N-095
P95-B113

N-009
N-074 P95-B113

N-102
N-009 P95-B113

N-009
N-074 P95-B113

N-009
N-074 P95-B113

Air

N-032

N-032

N-032

N-032

N-032



	N-031 N-043 N-074 P95-A112	N-043 P95-A112	N-009 N-043 N-074 P95-A112	N-074 P95-A112	N-009 N-043 N-074 P95-A112
Steam	N-032 N-043	N-032	N-009 N-032 N-043		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

ELASTOMER ACCORDING WITH FLUID

FLUIDS	ELASTOMERS
HYDRAULIC OIL - TRANSMISSION OIL	NBR
FIRE RESISTANT SYNTETIC HYDRAULIC OIL	EPDM
WATER AND WATER/OIL EMULSIONS	NBR
FOOD AND DRUG	MVQ
AIR	NBR
STEAM	EPDM - FFKM
ACIDS AND BASES	FKM - FFKM



SEAT

Housing Class	A shaft	B	L	G max. radial gap	R max.	S* min.	C min.
	f7	H9	H12				
R1	6 - 19,9	A+12	6,0	0.3	0.1	3	0,3
R2	20 - 39,9	A+14	6.5	0.5	0.2	4	0,6
R3	40 - 99,9	A+18	8,0	0.8	0.2	5	0,9
R4	100 - 219,9	A+22	10,0	0.8	0.2	6	1,2
R5	220 - 500	A+26	11,0	0,8	0,2	6	1,2

* Double chamfer length **S** if rod is inserted against the direction of the sealing-lip
these dimensions are a suggestion only, we can design the Rotolip according with your existing grooves

Coding example

housing class R3
 profile code R050
 shaft 60
 materials: jacket Neuflon 032 O-Ring NBR

Rotolip R3 R050 060 N-032 NBR