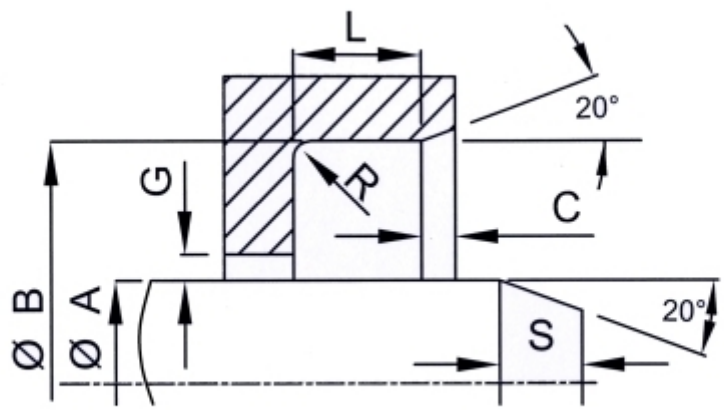
Rotary shaft seals |Rotary shaft seal RotolipÂ® reinforced lip



Rotary shaft seals RotolipÂ® 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	**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.

HD Slippers code	Composition	Color	Approvals	ΔT °C	Description
N-009	Ptfe-oxides	blue		-268 +260	All pourpose on soft surfaces
N-095	Tfm	white	FDA	-268 +260	Low creep, better strength.
N-031	Ptfe-bronze	green-blue		-268 +260	High wear resistance, hidraulic seals
N-032	Ptfe-carbon	black		-268 +260	High wear resistance, pneumatic and hydraulic seals
N-197	Ptfe-carbographite	black	NORSOK	-268 +260	High wear resistance, hydraulic and pneumatic seals
N-043	Ptfe-graphite	black	FDA	-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