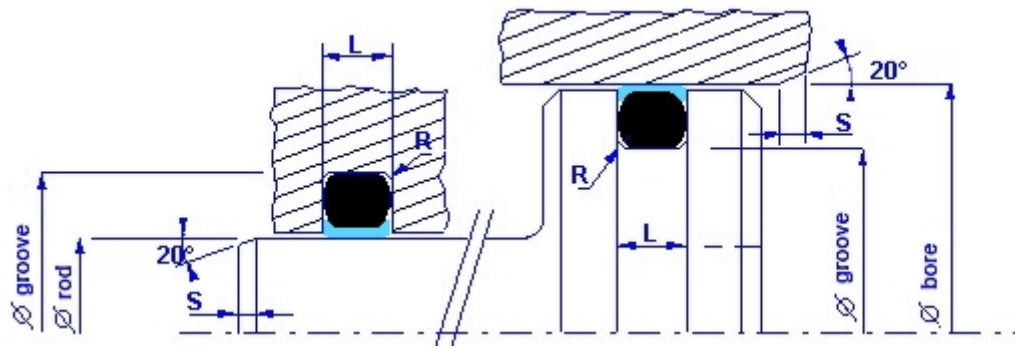


## Slipper ptfе Composite seals |UltraLight Slipper



Slipper composite seals, ultra light for piston and rod application

**Little encumbrance Slipper composite seals to fit O-Ring grooves**

**Groove dimensions could match with your pre-existent grooves (subject to approval)**

fit in O-Rings grooves

static and dynamic applications (dynamic only in non demanding applications)

extrusion resistance

low friction

low wear

closed grooves

high temperature withstanding

allows the dynamic use of rubber compounds

originally suitable for static applications only



## SEAT

### Slipper Ultra Light - Piston sealing: Standard Groove Dimensions

Housing Class	O-Ring cross section	A bore diameter		F groove diameter	L groove	R	S min	G* max. radial gap
		suggested range	possible range					
		H7						
ULP1	1,78	8-13	8-100	A - 2,9	2,4	0,4	1,2	0,15
ULP2	2,62	15-24	15-250	A - 4,5	3,6	0,6	2,2	0,2
ULP3	3,53	25-45	20-400	A - 6,2	4,8	0,8	2,6	0,2
ULP4	5,33	46-120	30-400	A - 9,4	7,1	1	5,6	0,25
ULP5	6,99	121-400	121-400	A - 12,2	9,5	1,5	8,2	0,3

#### Coding example

profile code: UltraLight  
bore 100  
housing class ULP4  
materials: Neuflon 031 O-Ring NBR

**Slipper UltraLight 100 ULP4 N-031 NBR**

### Slipper Ultra Light - Rod sealing: Standard Groove Dimensions

Housing Class	O-Ring cross section	A rod diameter		F groove diameter	L groove	R	S min	G* max. radial gap
		suggested range	possible range					
		f7						
ULC1	1,78	4-8	4-100	A + 2,9	2,4	0,4	1,2	0,15
ULC2	2,62	9-18	8-250	A + 4,5	3,6	0,6	2,2	0,2
ULC3	3,53	19-36	10-400	A + 6,2	4,8	0,8	2,6	0,2
ULC4	5,33	37-115	38-400	A + 9,4	7,1	1	5,6	0,25
ULC5	6,99	116-400	116-400	A + 12,2	9,5	1,5	8,2	0,3

#### Coding example

profile code UltraLight  
rod 50  
housing class ULC4  
materials: Neuflon 031 O-Ring NBR

**Slipper UltraLight 050 ULC4 N-031 NBR**

## MATERIALS

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

HD Slippers code	Composition	Color	Approvals	ΔT °C	Description
<a href="#">N-020</a>	Virgin PTFE	white	<b>FDA</b> <b>NORSOK</b>	-268 +260	All purpose, low friction coefficient, extrusion withstanding.
<a href="#">N-009</a>	Ptfe-oxides	blue	<b>FDA</b>	-268 +260	All purpose on soft surfaces
<a href="#">N-031</a>	Ptfe-bronze	green-blue		-268 +260	High wear resistance, hidraulic seals
<a href="#">N-032</a>	Ptfe-carbon	black		-268 +260	High wear resistance, pneumatic and hydraulic seals
<a href="#">N-059</a>	Ptfe-carbographite	black		-268 +260	High wear resistance, hydraulic and pneumatic seals, hard surfaces
<a href="#">N-197</a>	Ptfe-carbographite	black	<b>NORSOK</b>	-268 +260	High wear resistance, hydraulic and pneumatic seals
<a href="#">N-043</a>	Ptfe-graphite	black	<b>FDA</b>	-268 +260	High wear resistance, low friction coefficient.
<a href="#">N-103</a>	Ptfe-carbon fibre	black	<b>FDA</b>	-268 +260	High wear resistance, low friction coefficient, hard surfaces.
<a href="#">N-077</a>	Ptfe-glass fibre-MoS <sub>2</sub>	gray		-268 +260	Of general use, in lubricated applications, rotary seals
<a href="#">N-060</a>	Ptfe-glass fibre	blue	<b>FDA</b>	-268 +260	All purpose on hard surfaces
<a href="#">N-067</a>	Ptfe-glass fibre	white	<b>FDA</b> <b>NORSOK</b>	-268 +260	High wear and creep resistance
<a href="#">N-102</a>	Ptfe-Liquid crystal polymer	beige	<b>FDA - EU</b>	-268 +260	Food & Pharma, soft surfaces
<a href="#">N-088</a>	Ptfe-poliimide	yellow		-268 +260	High wear resistance. Soft surfaces
<a href="#">N-074</a>	PEHMW	white	<b>FDA</b>	-140 +80	High wear and extrusion resistance
<a href="#">P95-A252</a>	Polyurethane	blue	<b>FDA</b>	-50 +105	Extrusion and wear withstanding, low friction coefficient
<a href="#">P95-VI251</a>	Polyurethane	violet	<b>FDA</b>	-30 +115	CIP (clean in place) fluids compatible
<a href="#">P95-R198</a>	Polyurethane	red		-30 +125	Extrusion and wear withstanding, low friction coefficient, high temperatures
<a href="#">P95-AR255</a>	Polyurethane	orange		-30 +135	Extrusion and wear withstanding, low friction coefficient, higher temperatures
<a href="#">P95-G253</a>	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

#### NEUFロン-ptfe compounds (standard in bold)

Hydraulic oil  
Transmission oil  
Fire resistant syntetic  
hydraulic oil

**N-031**  
N-032 N-060 N-077 P95-A112

**N-031**  
N-032 N-060 N-077 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

**N-032**

**N-032**

**N-009**

**N-032**

**N-009**



emulsions	N-060 N-077 N-074	N-060 N-077 N-074	N-043 N-074	N-074	N-032 N-074
Drugs and food	<b>N-009</b> N-102 N-020 N-043 N-060 N-074 N-088 P95-B113	<b>N-009</b> N-074 P95-B113	<b>N-102</b> N-009 P95-B113	<b>N-009</b> N-074 P95-B113	<b>N-009</b> N-074 P95-B113
Air	<b>N-032</b> N-031 N-043 N-074 P95-A112	<b>N-032</b> N-043 P95-A112	<b>N-032</b> N-009 N-043 N-074 P95-A112	<b>N-032</b> N-074 P95-A112	<b>N-032</b> N-009 N-043 N-074 P95-A112
Steam	<b>N-032</b> N-043	<b>N-032</b>	<b>N-009</b> N-032 N-043		<b>N-032</b> N-009 N-043
Acids and Bases	<b>N-032</b> N-059 N-074	<b>N-032</b> N-043 N-074			<b>N-009</b> N-032 N-043 N-074

#### ELASTOMER ACCORDING WITH FLUID

FLUID	ELASTOMER
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