

ROD SEALS



The task of rod seals is to seal the piston rod as it moves in and out in order to prevent the pressurized media from passing out of the cylinder. The seal material and the profile of the rod seal must be selected to suit the application and conditions of use.

DIMENSIONS

The currently available dimensions can be found on our website [dichtomatik.fst.com](https://www.dichtomatik.fst.com) or on our online ordering platform **EASY**.

SEALING MATERIALS

NBR (acrylonitrile butadiene rubber)

Due to their good mechanical properties and their resistance to lubricating oils and greases based on mineral oils, seals made of NBR are suited to a broad range of hydraulic applications.

TPU (Thermoplastic polyurethane)

TPU stands out for its mechanical strength and resistance to ozone and aging. TPU is only hydrolysis-resistant up to +50°C.

PTFE (Polytetrafluoroethylene)

PTFE has very good slide characteristics and can be used in a wide range of temperatures. In addition, PTFE exhibits nearly unlimited resistance to chemicals, ozone and aging. Fillers such as bronze, graphite and coal influence the characteristics of the material in line with the requirements.

MEDIA RESISTANCE

Acrylonitrile butadiene rubber (NBR), thermoplastic polyurethane (TPU) and polytetrafluoroethylene (PTFE) are resistant to

- Hydraulic oils in accordance with DIN 51524 Part 1 - 3
- Lubricating oils and greases based on mineral oil
- Fire-resistant hydraulic fluids: HFA, HFB, HFC in accordance with VDMA 24317

APPLICATIONS

Due to the wide range of rod seal geometries, these products can be used in diverse ways, such as in

- Agricultural machinery
- Construction machinery
- Truck-loading cranes
- Injection-molding machines
- Handling devices
- Industrial trucks
- Standard cylinders
- Presses
- Switch valves
- and many more

Rod seals

Profile	Type	Material	Hardness (Shore A)	Temperature (°C)	Max. Glide speed (m/s)	Max. Pressure in Mpa (bar)
	N21	NBR	90	-30 to +100	0,5	16 (160)
	SNI24	NBR	90	-30 to +100	0,5	16 (160)
	N05	NBR	80	-30 to +100	0,5	20 (200)
	SNI07	NBR	80	-30 to +100	0,5	40 (400)
	SDS01 3/2	NBR/NBR F*	90	-30 to +100	0,5	40 (400)
	SDS01 1/0	NBR F*	90	-30 to +100	0,5	40 (400)
	N25	TPU	95	-40 to +100	0,5	30 (300)
	SNI30	TPU	95	-40 to +100	0,5	40 (400)
	SNI39	TPU	95	-40 to +100	0,5	40 (400)
	N36	TPU	95	-40 to +100	0,5	40 (400)
	S72	TPU	95	-30 to +100	0,5	40 (400)
	SNI35	TPU	95	-40 to +100	0,5	40 (400)
	SPOR30	PTFE-Bronze	-	-30 to +100	15	40 (400)
	SPOR130	PTFE-Bronze	-	-30 to +100	15	40 (400)

*F: fabric (fabric-reinforced material)

Rod seals

Profile	Type	Material	Hardness (Shore A)	Temperature (°C)	Max. Glide speed (m/s)	Max. Pressure in Mpa (bar)
	SPOR131	PTFE-Bronze		-30 to +100	15	40 (400)
	SPOR31	PTFE-Bronze	-	-30 to +100	15	40 (400)
	SPOR06	PTFE-Bronze	-	-30 to +100	2,0	15 (160)
	SNI43	PTFE Kohle + Grafit	-	-150 to +250	15	35 (350)

Note: The values indicated here are maximum values. All of them must not be achieved simultaneously.

The information contained herein is considered to be reliable, but no assurances, warrants or guarantees whatsoever, of any kind, are provided with regard to their correctness or suitability for any purpose. The information reproduced herein is based on the current state of the technology and is not necessarily indicative of the performance of the end product. Complete testing and the performance of the end product are the user's responsibility.

www.fst.com | dichtomatik.fst.com