

Rod Seal XSR01

Function:

Rod seals are designed to seal the pressurized hydraulic fluid against the atmosphere, preventing leakage and pollution of the environment.

Features:

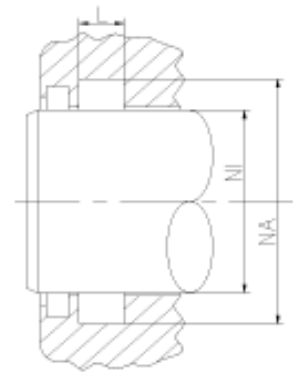
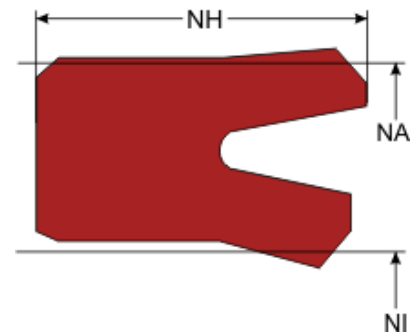
- Asymmetrical, single acting rod seal, designed with interference on the OD which provides a good static fit in the groove.
- Dynamic sealing lip shorter than static lip to avoid drag pressure.
- Excellent static and dynamic sealing performance.
- Useable for long stroke lengths.
- Negligible tendency to “stick-slip” effect above a speed of 0.15 m/s.
- For lower speeds the dynamic lip should be redesigned (shorter, stiffer).

Application:

Reciprocation rods in hydraulic cylinders, plungers.

Universal rod seal for small extrusion gaps and minor load impacts.

Also used as secondary seal in combination with RS09 (PTFE + O-Ring energizer).



max. speed	max. pressure	material
0.5 m/s	400 bar (40 MPa)	all HPU typen
0.7 m/s	400 bar (40 MPa)	HPU94 GM
0.5 m/s	160 bar (16 MPa)	all Elastomer types

For higher speed or pressure please ask our technical department.

Seal housing recommendation:

Tolerances	[mm]	
L < 10mm	+0.2	
L ≥ 10mm	+0.3	
Ø NA	H10	
Ø NI	f 8	

Surface roughness	Rtmax [µ]	Ra [µ]
Bottom of groove	≤ 6.3	≤ 1.6
Face of groove	≤ 15	≤ 3

Sliding surface	Rtmax [µ]	Ra [µ]
PU, elastomeres	≤ 2.5	≤ 0.1 - 0.5
PTFE	≤ 2	≤ 0.05 - 0.3

Installation:

Snap-in installation.