

Symmetrical Seals

XSPRS06

Function:

Symmetrical piston/rod seals are designed to seal the pressurized hydraulic fluid against the atmosphere or between two pressurized spaces.

Features:

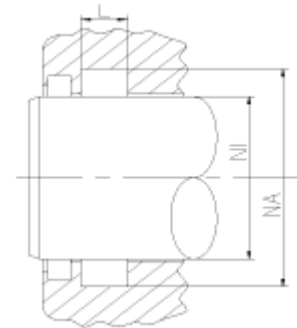
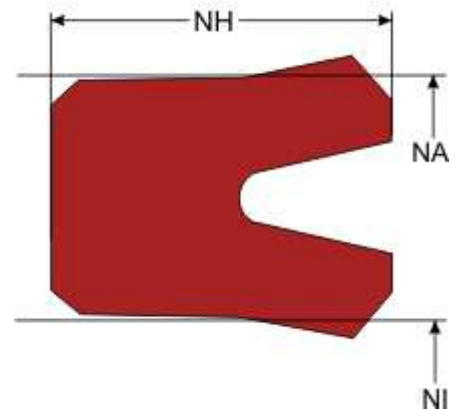
- Symmetrical, single acting piston/rod seal, no interference on the ID or OD.
- Special design with wider groove for large cross sections.
- Excellent static and dynamic sealing performance.
- Excellent performance in low pressure conditions.
- Useable for long stroke lengths.
- Negligible tendency to “stick-slip” effect above a speed of 0.15 m/s.

Application:

Reciprocating pistons/rods in hydraulic cylinders, plungers etc.
Universal piston / rod seal for small extrusion gaps and minor work loads.

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 < 10 mm	+ 0,2	
L ≥ 10 mm	+ 0,3	
Ø NA (rod groove)	H 10	
Ø NI (rod diam.)	f 8	
Ø NA (cylinder diam.)	H 9	
Ø NI (piston groove)	h 10	

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.