

# Piston Seal XSPS01A

## Function:

Piston seals are designed to seal the pressurized hydraulic fluid against the atmosphere or between two pressurized spaces.

## Features:

- Asymmetrical, single acting piston seal, designed with interference on the ID which provides a good static fit in the groove.
- Dynamic sealing lip shorter than static lip to avoid drag pressure.
- Wider groove and softer lips compared to PS01.
- 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.

## Application:

Reciprocating pistons in hydraulic cylinders, plungers where low friction is required.

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

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	H9	
Ø NI	h10	

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.

