

Disogrin PI Piston Seal

[sizes](#)

Features

The PI Piston Seal provides superb sealing performance and very long service life. The single acting design can be used separately for single acting cylinders, or in back-to-back tandems for double acting cylinders. The asymmetrical design assures the highest performance by preventing tipping and twisting in the housing, thus assuring low leakage performance. The knife-cut lips on both the dynamic and static sides assures maximum sealing force to provide maximum motion control while preventing drift.

- no adhesion effect on sliding surface, even after a long standstill
- superior performance over a wide range of temperatures and hydraulic fluids

Applications



- bulldozers
- forklifts
- agricultural equipment
- injection molding machines
- mobile arm trucks
- presses
- standard hydraulic cylinders

Operating Limits

The operating limits of this seal are highly dependant on the application. Combinations of pressure, temperature, fluid medium and other factors, all greatly effect the performance and longevity of the seal.

Temperature (Typ.)	-54°C/149°C / -65°F to 300°F
Pressure	6000 Psi / 40 MPa
Speed	1.5 ft/s / 0.5 m/s

Installation

For complete Installation Instructions, [click here](#).

Materials

Sealing Element	
Material:	Polyurethane 9250
Hardness:	92 Shore A

Design Reference

Surface Finish

For more information on surface finish and conditions, [click here](#).

Roughness Depth	R_{max}	R_a
Sliding surface	$\leq 100 \mu$	$\leq 12 \mu$
Bottom of groove	$\leq 252 \mu$	$\leq 64 \mu$
Sides of groove	$\leq 600 \mu$	$\leq 120 \mu$

Tolerances

Dimension	Range	Tolerance
d	<3"	+0.000 -0.003
	$\geq 3"$ and < 7"	+0.000 -0.004
	$\geq 7"$ and < 10"	+0.000 -0.005
	$\geq 10"$ and < 15"	+0.000 -0.006
D	<1.5"	+0.005 -0.000
	$\geq 1.5"$ and < 2"	+0.007 -0.000

	$\geq 2''$ and $< 3.25''$	+0.008 -0.000
	$\geq 3.25''$ and $< 5''$	+0.009 -0.000
	$\geq 5''$ and $< 7''$	+0.010 -0.000
	$\geq 7''$ and $< 9''$	+0.011 -0.000
	$\geq 9''$ and $< 15''$	+0.012 -0.000
L	$\leq 1''$	+0.015 -0.000