



Function

Compact piston seal set, designed to seal the hydraulic fluid between two pressurized spaces, preventing the flow of the fluid to the other side and transforming the pressure force into the movement.

Features

- ⇒ Double acting piston seal, designed with interference on the ID which provides a good static fit in the groove.
- ⇒ Consisting of one gliding, energizing and two back-up elements.
- ⇒ Useable for short and long stroke lengths.
- ⇒ Good static and dynamic sealing performance.
- ⇒ High frictional force.
- ⇒ No drag pressure build-up.

Application

Reciprocating pistons in hydraulic cylinders.
 Universal piston seal for double-acting cylinders.
 Dynamic: Max. pressure 400 bar, max. speed 0.5 m/s.
 Static: Max. pressure 1500 bar, max. speed 0.2 m/s.*

Installation

Snap-in installation.

*) for static application the preload should be increased to 13-15% instead of 10% (dynamic)

Seal housing recommendation

Tolerances	[mm]	
L < 10mm	+ 0.2	
L > 10mm	+ 0.3	
∅ NA	H9	
∅ 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

Profile description

Mining Seal
P51