



Function

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

Features

- ⇒ Asymmetrical, double acting compact piston seal, optimized sealing edge and groove design to reduce and optimize the stress/strain in operation.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Excellent performance in low pressure conditions.
- ⇒ For rotary applications the interference on the ID has to be increased (better static fit to reduce the danger of the seal rotating in the housing), the preload has to be reduced (lower friction).

Application

Reciprocating pistons in hydraulic cylinders, plungers.
 Static and dynamic seals in hydraulic systems, replacement for O-Rings (no twisting or pumping), alternative design for composite piston seals (PTFE + O-Ring energizer).
 Max. pressure 400 bar, max. speed 0.4 m/s.

Installation

Snap-in installation.

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

Piston Seal
PS35A