



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, designed with interference on the ID which provides a good static fit in the groove.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Excellent performance in low pressure conditions.
- ⇒ Negligible tendency to “stick-slip” effect.
- ⇒ High break-away load after long standstills.
- ⇒ Activated back-up rings reduce gap extrusion and prevent twisting of the seal in the groove.

Application

Reciprocating pistons in hydraulic cylinders, plungers.

Static and dynamic seals in hydraulic systems, replacement for O-Rings (no twisting or pumping).

Max. pressure 700 bar, max. speed 0.5 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
PS20