

Function

Symmetrical piston/rod seals are designed to seal the pressurized hydraulic fluid against the atmosphere or between two pressurized spaces.

Features

- ⇒ Symmetrical, single acting piston/rod seal, no interference on the ID or OD.
- ⇒ Axial stabilisation of the seal by means of an additional land.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Excellent performance in low pressure conditions.
- ⇒ Useable for long stroke lengths.
- ⇒ Negligible tendency to "stick-slip" effect above a speed of 0.15 m/s.

Application

Reciprocating pistons/rods in hydraulic cylinders, plungers etc.

Replacement for rubber fabric seals of older machineries.

Max. pressure 400 bar, max. speed 0.5 m/s.

Installation

Snap-in installation.

We recommend to maintain a nominal width/seal height ration (CS/NH) above 1/1,25.

Seal housing recommendation

Tolerances	[mm]	
L < 10mm	+ 0.2	
L ≥10mm	+ 0.3	
Ø NA (rod groove)	H10	
Ø NI (rod diam.)	f8	
Ø NA (cylinder diam.)	H9	
Ø NI (piston groove)	h10	
Surface roughness	Rtmax [µ]	Ra [μ]
Surface roughness Bottom of groove	Rtmax [µ] ≤ 6.3	Ra [μ] ≤ 1.6
Bottom of groove	≤ 6.3	≤ 1.6
Bottom of groove	≤ 6.3	≤ 1.6
Bottom of groove Face of groove	≤ 6.3 ≤ 15	≤ 1.6 ≤ 3
Bottom of groove Face of groove Sliding surface	≤ 6.3 ≤ 15 Rtmax [μ]	≤ 1.6 ≤ 3 Ra [μ]

Profile description

Piston-/Rod Seal PRS06E

03.July 2008