



Function

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

Features

- ⇒ Asymmetrical, single acting rod seal, combined with pressure ring and support ring.
- ⇒ By adjusting the number of packings friction and leakage characteristics can be influenced.
- ⇒ Excellent dynamic and good static sealing performance.
- ⇒ Excellent performance in high pressure conditions.
- ⇒ Especially used for long stroke lengths.
- ⇒ Low friction due to flexible lip design.

Application

Reciprocating rods in hydraulic cylinders, plungers, cylinders with very long strokes etc. as a replacement of fabric reinforced rubber seals.
 Used in heavy duty applications (presses) with return stroke by equipment weight.
 Max. pressure 500 bar, max. speed 0.5 m/s.

Installation

Installation normally in open housings.
 At closed housings the parts need to be split. In this case the seal must be done slightly larger (approx. 1% in diameter)

Seal housing recommendation

Tolerances	[mm]	
L < 10mm	+ 0.2	
L ≥ 10mm	+ 0.3	
∅ NA	H10	
∅ NI	f8	
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

Rod Seal
RS31-33