



Function

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

Features

- ⇒ friction optimized asymmetrical, single acting rod seal, combined with pressure ring and support ring.
- ⇒ special vee design to assure a sufficient lubrication for the whole packing. Additional groove on the dynamic lip to reduce the contact surface and also working as a grease depot.
- ⇒ By adjusting the number of vee's friction characteristics can be influenced - recommendation max. 4 vee's.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Useable for short and long stroke lengths.
- ⇒ High wear resistance.

Application

Reciprocating rods in hydraulic cylinders, plungers etc.
Used in heavy duty applications (presses) with return stroke by equipment weight.
Max. pressure 400 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 (rod groove)	H10	
∅ NI (rod diam.)	f8	
∅ NA (cylinder diam.)	H9	
∅ NI (piston groove)	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

Rod Seal
RS10_12B