



Function

Rod seals are designed to seal the pressurized hydraulic fluid against the atmosphere, preventing leakage and pollution of the environment.

Features

- ⇒ Asymmetrical, single acting rod seal, designed with interference on the OD which provides a good static fit in the groove.
- ⇒ Dynamic sealing lip shorter than static lip to avoid drag pressure.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Useable for long stroke lengths.
- ⇒ Negligible tendency to “stick-slip” effect above a speed of 0.15 m/s.
For lower speeds the dynamic lip should be redesigned (shorter, stiffer).

Application

Reciprocation rods in hydraulic cylinders, plungers.

Universal rod seal for small extrusion gaps and minor load impacts.

Also used as secondary seal in combination with RS09 (PTFE + O-Ring energizer).

Max. pressure 400 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	H10	
∅ NI	f 8	
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
RS01***