

RELY ON EXCELLENCE

LP-S

Mechanical seals | Mechanical seals for pumps | Engineered seals



Features

- Integrated seal for Sulzer A pumps
- Single + Plan 11 flush
- Semi cartridge unit
- Balanced
- Independent of direction of rotation
- Static springs
- No dynamic O-Ring on shaft
- Rugged design
- Shrink-fitted seal faces
- Seal faces have a large clearance to the shaft
- Wear part cost minimized

Advantages

- Individually integrated to equipment for best sealing result
- Straightforward and easy installation
- Static springs reduces influence of misalignment
- No damage of the shaft by dynamically loaded O-Ring
- Extended service life due to rugged design
- No brittle parts in contact with torque transmission pins
- Seal faces protected by strong steel parts and a large radial clearance
- The double, quench and single seals have the same wear parts on product side
- Reduces stock holding costs

Operating range

Temperature:
 $t = -20\text{ °C} \dots +140\text{ °C} (-4\text{ °F} \dots +284\text{ °F})$
 Pressure: $p_1 \dots 25\text{ bar (363 PSI)}$
 Sliding velocity: $v_g \dots 20\text{ m/s (66 ft/s)}$
 Stock content: $\dots 4\%$

Materials

Seal face: Silicon carbide (Q12), Carbon (A)
 Secondary seals:
 FKM (V), EPDM (E), FFKM (K)
 Metal parts: CrNiMo steel (G),
 Grade 5A (4T), SMO 654 (4U)

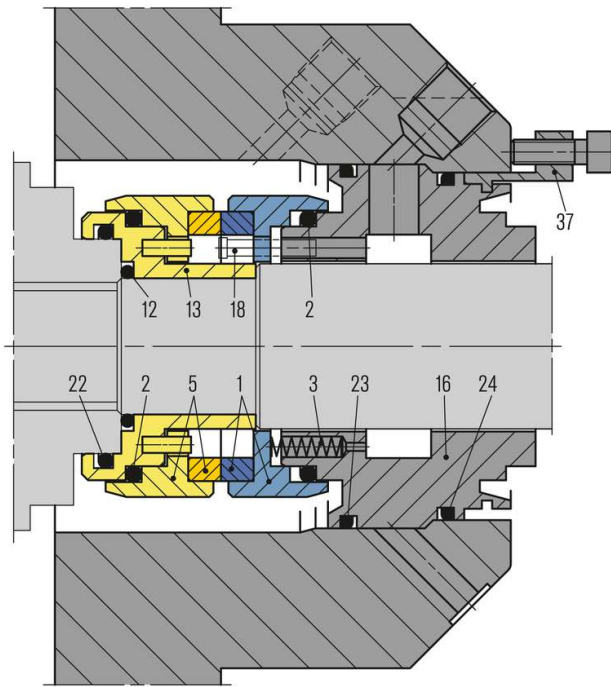
Recommended applications

- Pulp and paper industry
- Chemical industry
- All clean none abrasive media
- Sulzer Ahlstar APP and APT centrifugal pumps

All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications, however, means that they can serve only as guide values.

We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. This is subject to change.

RELY ON EXCELLENCE



Item	Description
1, 5	Seal face
2, 12, 22, 23, 24	O-Ring
3	Spring
13	Sleeve
16	Housing
18	Pin
37	Locking fixture

LP-S-UP Single seal
 Ready-fitted for Ahlstar UP A MS21 range of pumps,
 bearing unit A1-A6

All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications, however, means that they can serve only as guide values.

We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. This is subject to change.

RELY ON EXCELLENCE

Product variants

LP-S-UPF

Single seals for API Plan 11 with throttle acc. Sulzer design request, adapted for Sulzer A pump series.

LP-G-UP

Single seal for operation with unpressurised grease quench. Identically equal design to LP-S-UP however with quench housing at atmospheric side.

LP-S-S32-E10

Single seal adapted for Sulzer APP/APT Pumps.

LP-S-S32-F10

Single seal adapted for Sulzer APP/APT Pumps, for API Plan 11 with throttle acc. Sulzer design request.

LP-Q-S32-E20

Single seal for operation with unpressurised quench. Identical design with LP-S however with outboard lip seal at atmospheric side (installation length longer), adapted for Sulzer APP/APT Pumps.

LP-G-S32-E30

Single seal for operation with unpressurised grease quench. Identically equal design to LP-S-S32 however with quench housing at atmospheric side.

LP-S-SL

Single seal, adapted for Sulzer SL Mixers.

Further designs

available to fit in numerous other equipment from notable manufacturers for the Pulp- and Paper Industry e.g., Metso conical refiners, Andritz pressure screens and stock pumps.