

# SPI-M50

ROTEN Type5 mechanical seal  
Replacement  
Technical Data Sheet



## Features

Spring-Loaded Mechanism: Ensures consistent contact pressure for reliable sealing.  
Modular Construction: Simplifies installation and maintenance.  
Unbalanced Seal  
Rotating conical spring  
Dependent on direction of rotation  
TO EN 12756.ISO 3069

Conical spring and O-ring pusher construction mechanical seals SPI-M50 is designed for large batch production. With reliable performance, wide range of applications and easy installation features. Used in the different media conditions due to extend material options. It is ideal for use in paper industry, sugar industry, chemical and petroleum, food processing, sewage treatment industry .

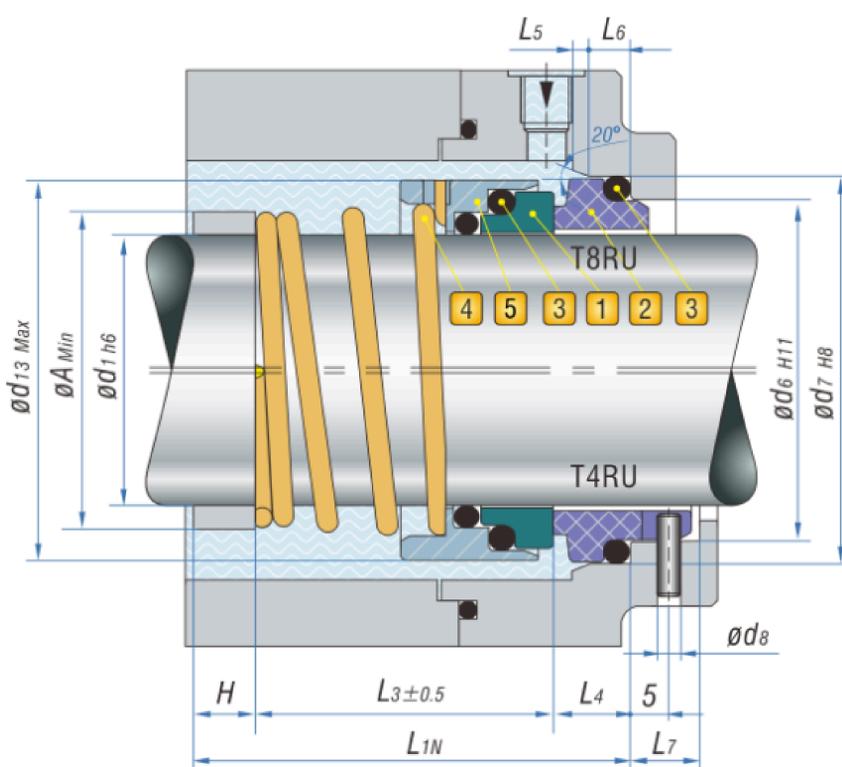
## Recommended Applications

Paper and sugar industry, Food Processing, waste water technology  
Low solids content or viscous media  
Sewage pumps, chemical pumps, screw pumps, process pumps  
Other Rotating Equipment.  
Chemical Processing  
Food & Beverage

## Operating range

**Shaft diameter:**  $d_1=10...100$  mm  
**Pressure:**  $p=0...1.5$ Mpa (217.5psi)  
**Temperature:**  $t = -40^{\circ}\text{C} .. 200^{\circ}\text{C}$ (-40°F to 392°F)  
**Sliding velocity:**  $V_g \leq 15$ m/s (49.2ft/s)  
**Notes:** The range of pressure, temperature and sliding velocity is depend on seals combination materials

## Product Structure



## Combination Materials

### 1. Rotary Face

- Reaction Bonded Sic RBSIC O
- Sintered Silicon Carbide SSIC O<sub>1</sub>
- Tungsten Carbide.Ni-binder W

### 2. Stationary Seat

- Reaction Bonded Sic RBSIC O
- Sintered Silicon Carbide SSIC O<sub>1</sub>
- Tungsten Carbide.Ni-binder W
- Carbon graphite, resin impreg A<sub>k</sub>
- Carbon graphite, antimony impreg A<sub>D</sub>

### 3. Auxiliary Seal

- Encapsulated O-ring
- Elastomers O-ring
- FEP Jacketed FKM M<sub>1</sub>
- FKM V
- FEP Jacketed VMQ M<sub>3</sub>
- EPDM E
- PFA Jacketed FKM M<sub>5</sub>
- VMQ S

### 5. Metal Parts

- GrNi-Steel (AIS1304) F
- GrNiMo-Steel (AIS1316) G

### 4. Spring

- GrNi-Steel (AIS1304) F
- GrNiMo-Steel (AIS1316) G