

# SPI-M400

PAC SEAL Type 21 Replacement  
Technical Data Sheet



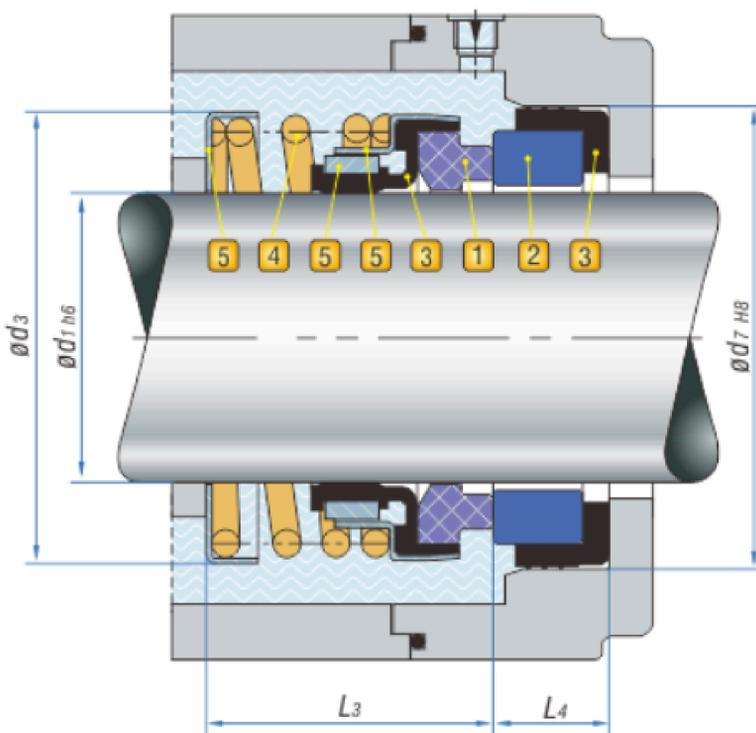
## Features

Unique design in the hexagonal torque drive eliminates stresses on the elastomer bellows  
Flexibility design in the elastomer bellows can reduce shaft play and run out  
Single seal, unbalanced, single spring  
Good interchange ability, Dimensional data conform with US standard, conform with standard  
Available in metric and inch sizes  
series can also be used as double face mechanical seals in two sets arrangement

## Recommended Applications

Water and waste water technology  
Process pumps  
Industrial pumps  
Petroleum chemical industry  
Other Rotating Equipment

## Product Structure



SPI-M400 is a parallel spring elastomer diaphragm seal with compact structure, bi-directional rotation and integrated dynamic components, which complies with the UK standard seal chamber size. It uses Hex-Drive, with reliable drive and stable sealing performance. Seal rings and auxiliary seal are available in a variety of materials to meet different application conditions. Widely used in centrifugal pumps, rotary pumps, turbines, compressors, coolers and other rotating shaft equipment.

## Operating range

**Shaft diameter:**  $d_1=10\text{...}75\text{mm}$  (0.375" ...3.000")

**Pressure:**  $p=0\text{...}1.7\text{Mpa}$  (246psi)

**Temperature:**  $t = -20\text{ }^\circ\text{C} \text{...}205\text{ }^\circ\text{C}$  (-4°F to 401°F)

**Sliding velocity:**  $V_g \leq 13\text{m/s}$  (42.6ft/m)

**Notes:** The range of pressure, temperature and sliding velocity is dependent on seal combination materials.

## Combination Materials

### 1. Rotary Face

Carbon graphite resin impregnated **Ak**  
Silicon carbide (RBSiC) **O**  
Hot-Pressing Carbon **Ac**  
Tungsten carbide **W1**

### 2. Stationary Seat

Aluminium oxide (Ceramic) **B**  
Silicon carbide (RBSiC) **O**  
Tungsten carbide **W1**

### 3. Auxiliary Seal

Nitrile-Butadiene-Rubber (NBR) **P**  
Fluorocarbon-Rubber (FKM) **V**  
Ethylene-Propylene-Diene (EPDM) **E**

### 4. Spring

Stainless Steel (SUS304) **F**  
Stainless Steel (SUS316) **G**

### 5. Metal Parts

Stainless Steel (SUS304) **F**  
Stainless Steel (SUS316) **G**