

API 682 Mechanical Seal (High-Integrity Sealing for Critical Equipment)

TYPE : API 682

Face Materials :

- Carbon / Silicon Carbide / Tungsten Carbide

Secondary Seals :

- NBR (Nitrile) / FKM (Viton) / EPDM / Aflas / PTFE /

Hardware :

- SS 316 / SS 316L / Hastelloy C-276 / Alloy 20 / Titanium / Carpenter

Bellow Material :

- AM-350 / Alloy 20 / Hastelloy C / Inconel 625 / Titanium

Operating Limits :

Size: 20.0 mm to 300.0 mm (0.750" to 12.0")

Speed: 3600 rpm

Pressure: 40 bars (580 psi)

Temperature: -130 °C to +400 °C (-202 °F +752 °F)

Application :

- LPG Plant
- Biochemistry
- Hydrocarbons
- Hazardous Liquid
- Oil & Gas Industry
- Chemical Industry
- High Temperature
- Refining Technology
- Petrochemical Industry
- Power Plant Technology
- API Standard Pumps Etc.



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Key Advantages :

- **Global Compatibility:** Offered in both **metric and imperial (inch) sizes**, suitable for a wide range of international equipment specifications.
- **Hydraulically Balanced Seal Faces:** Reduces axial face load to minimize wear, lower heat generation, and extend operational seal life.
- **Quick Installation & Maintenance Access:** Simplified installation and removal design reduces equipment downtime and maintenance labour requirements.
- **Rotary & Stationary Metal Bellows Options:** Engineered for **durability under high temperature and corrosive conditions**, offering flexibility based on application needs.
- **Non-Directional Operation:** Capable of operating in **both clockwise and counterclockwise shaft rotations**, allowing easy installation without concern for rotation direction.
- **Factory Assembled & Performance Tested:** Delivered pre-assembled and tested for pressure integrity and compliance with **API 682** standards, ensuring immediate field reliability.
- **Integrated Flush and Quench Connections:** Fully compatible with API 682 **pipng plans** (e.g., Plan 11, 32, 52, 53) for improved cooling, cleaning, and environmental control.
- **Single and Dual Seal Arrangements:** Available in **Arrangement 1 (single), 2 (tandem), and 3 (double pressurized)** configurations to meet a range of containment and safety requirements.
- **Flexible Spring Configurations:** Includes **rotary, stationary, and multiple spring designs** to accommodate shaft movement, pressure variation, and ensure even face loading for consistent sealing.
- **API 682 Category 1, 2 & 3 – Type A, B, and C Designs:** Compliant with all API 682 categories and types for deployment in **light, moderate, and severe service conditions** across critical industrial applications.

➤ **DIMENSIONS FOR HIGHER SIZES AVAILABLE ON REQUEST**