

Metal Bellow Mechanical Seal (Double Cartridge Design (In-board & Out-board Bellow Configuration))

TYPE : BD740

Face Materials :

- Carbon / Silicon Carbide / Tungsten Carbide

Secondary Seal :

- FKM (Viton) / EPDM / FFKM (Kalrez) / Graphite`

Hardware :

- SS 316 / SS 316L / Hastelloy C-276 / Alloy 20 / Duplex

Bellow Material :

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

Operating Limits :

Size : 20.0 mm to 200.0 mm (0.750" to 8.000")

Speed : 3600 RPM

Pressure : 25 bars (362 PSI)

Temperature : -40 °C to +400 °C (-40 °F +752 °F)

Application :

- Fatty Acid
- LPG Plants
- Biochemistry
- Thermic Fluid
- Hazardous Liquid
- Oil & Gas Industry
- Chemical Industry
- High Temperature
- Refining Technology
- Petrochemical Industry
- Hydrocarbon Processing
- Solvent Recovery System
- Acidic and Caustic Media Handling,
- Thermal and Nuclear Power Plant Etc.



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Features :

- **High Reliability:** in handling volatile, abrasive, or environmentally hazardous media.
- Ideal for **vacuum to high-pressure services**, aggressive media, and high-viscosity fluids.
- **Axial flexibility** and superior pressure-handling capability support wide operating windows.
- **Industry Standardisation:** Designed for compliance with stringent industry **standards including API, ANSI, and ISO.**
- **Double-seal arrangement:** supports both pressurized (Plan 53) and unpressurized (Plan 52) barrier/buffer systems.
- **Non-Dependent on Shaft Rotation Direction:** Suitable for both clockwise and counter-clockwise rotating equipment, offering operational flexibility.
- **Available in Metric and Inch Sizes:** Compatible with a wide range of global equipment standards, facilitating seamless integration into new or existing systems.
- **Dual metal bellow elements** eliminate the need for dynamic elastomers, reducing the risk of degradation or failure due to thermal shock, chemical attack, or swelling.
- **Integrated Cooling Arrangement Connections:** Built-in ports for cooling enhance heat dissipation around the seal faces, extending seal life in high-temperature services.
- **Quick Installation and Easy Removal:** Cartridge design supports tool-free, fast installation and removal, minimizing maintenance time and maximizing plant uptime.
- **Double Cartridge Design:** Fully integrated, pre-assembled unit ensures precise alignment, simplifies installation, and reduces equipment downtime and human error.
- **Factory Assembled and Pressure Tested:** Every seal undergoes rigorous quality checks and pressure testing to ensure leak-free performance and compliance with industry standards.
- **Double Seal Configuration:** Provides primary and secondary sealing for enhanced safety, ideal for hazardous or high-pressure applications requiring containment or barrier fluid systems.
- **Typical Application:** This seal represents a **state-of-the-art solution** for operators seeking **leak-free performance, extended MTBF (Mean Time Between Failures), and reduced Total Cost of Ownership (TCO)** in mission-critical equipment.
- **In-board & Out-board Metal Bellow Design:** Utilizes dual metal bellows on both primary (in-board) and secondary (out-board) seals, offering superior thermal stability, enhanced sealing integrity, and excellent resistance to shaft misalignment, pressure fluctuations, and aggressive media—ideal for demanding high-temperature and hazardous applications.