

BT Mechanical Seal

Model BT400



The **MB400** seal is specifically designed for the most demanding of High and Low temperature services as well

The **stationary configuration**, in which the flexible bellows element is fixed into the equipment casing, eliminates damaging "swashing" motion due to casing distortion or shaft deflection. It also insulates the flexible element from direct shaft vibration and promotes more positive sealing while significantly extending seal life .

The **core of the seal** is an edge welded bellows unit with a design proven over more than 20 years experience in many tens of thousands of applications to give many years of trouble free service.

The bellows is precision manufactured in Inconel 718 material and is subject to the very highest levels of quality control to ensure consistent and reliable operating performance.

The **pressure capability of the standard MB400** can be increased through the use of a double ply (laminated bellows plates) version. This design allows a low spring rate, providing face loads close to initial design values, as face wear occurs or shaft expansion reduces operating lengths.

■ Face Material

Stationary Side : Carbon or SIC

Rotary Side : SIC

■ Metal Components

INCONEL 718 Bellows with Alloy 42 Retainer

SUS 316 for other Metal Parts

■ Packing : Grafoil

■ Performance Capabilities

Pressure: Single ply : Vacuum to 2 MPa
(20kgf/cm²G, 285 psi)

Pressure: Double ply : Vacuum to 3.5MPa
(35kgf/cm²G, 498 psi)

Temperature : -240°C to 425°C (-400°F to 800°F)

Shaft Speed : to 50 m/s

Viscosity : to 1 Pa·s (1000cP)

