



Mechanical Seal HBDFP

Operating range

Shaft diameter: $D = 32 \dots 154 \text{ mm}$ (1.26" ... 6.06")

Pressure (static and dynamic): $p = 0 \dots 120 \text{ bar}$ (1,450 PSI)

with PTFE option: $0 \dots 250 \text{ bar}$ (3,625 PSI)

Temperature: $t = -20 \text{ }^\circ\text{C} \dots +150 \text{ }^\circ\text{C}$ (-4 °F ... +302 °F)

with PTFE option: $-100 \text{ }^\circ\text{C} \dots +200 \text{ }^\circ\text{C}$ (-148 °F ... +392 °F)

Sliding velocity: $v_g = 0.6 \dots 140 \text{ m/s}$ (2 ... 459 ft/s)

Materials

- Primary seat and seal face: Silicon carbide with DiamondFace bonding
- Secondary seat and seal face: Silicon carbide with DLC coating. Optional also with DF-coating
- Secondary seals: FKM, PTFE (DF-PDGS6) or other elastomers, depending on product gas composition
- Metal parts: 1.4006 (410) and other stainless steels

Features

- DiamondFace bonded primary seal faces
- Safe cupped retainer for rotating ring
- Bi-directional
- Ready-to-fit cartridge unit
- Single, double, tandem and tandem seal with intermediate labyrinth arrangement available
- An ideal solution for Ethane, CO₂ and many other low vapor margin applications
- This type of seals can handle both liquid and gaseous phases during the operation of the pump

Advantages

- Significantly lower leakage rate compared to competition
- Longer life span
- Wear and contact free operation
- Self-cleaning 3-D gas grooves
- High gas film stiffness
- Proven, reliable and economical solution
- Can be adjusted even to extreme narrow installation space - retrofits are easy to implement

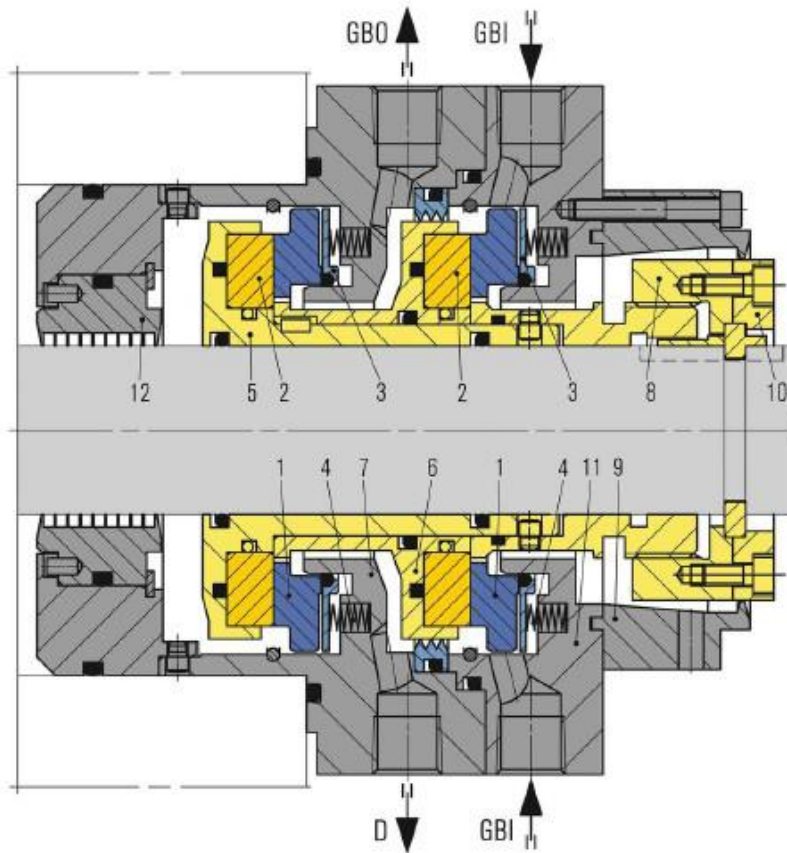
Recommended applications

- Oil and gas industry
- Refining technology
- Petrochemical industry
- Hydrocarbon applications
- CO₂ applications

HBrinker Mechanical Seal

Engineered seals

Mechanical Seal HBDFP



Item	Description
1	Primary seal face with DF-coating, stationary
2	Primary seat with DF-coating*, rotating
3	Thrust ring
4	Spring
5	Shaft sleeve and seat retainer
6	Intermediate sleeve
7	Housing (adapted in size to the installation space)
8	Adjustable" nut for axial misalignment
9	Split ring
10	Clamping ring
11	Cover
12	Process side labyrinth
GBI	Gas Buffer Inlet
GBO	Gas Buffer Outlet
D	Drain