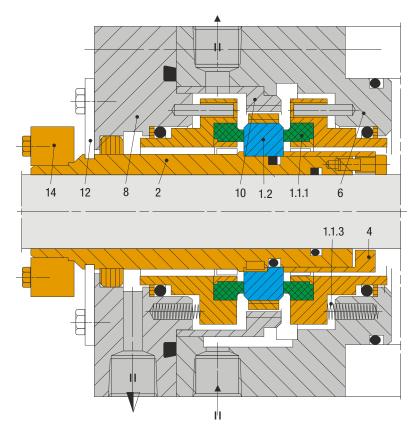


# Serie BB10HD-PVD / BB10HD-FVD





## **Product Description**

- 1. Balanced
- 2. Cartridge design
- 3. Dual seal
- 4. Integrated pumping device
- 5. Multiple springs arrangement
- 6. Shrink-fitted seal face
- 7. Single robust stationary seat
- 8. Stationary spring loaded unit

### **Technical Features**

- 1. Accommodates shaft deflections due to stationary design
- 2. Cost effective due to standardized inner components
- 3. High flexibility due to adaption of the connection parts to the pump seal chamber
- 4. Optimum heat dissipation due to integrated pumping device and optimized seat design
- 5. Pre-assembled unit for quick and easy installation
- 6. Reliable operation due to single robust seat with bandage
- 7. Suitable for high sliding velocities and medium pressures
- 8. Suitable for use in complicance with API 682, type ES
- 9. Versatile application for OEM or retrofits of boiler feed water pumps
- 10. Version with loose-fitted seal face available, for extreme applications

#### **Typical Industrial Applications**

Chemical industry Crude oil Crude oil feed pumps Injection pumps Multi-phase pumps Oil and gas industry Process water Refining technology

Volatile and non-volatile hydrocarbons

#### **Performance Capabilities**

Sizes: d1\* = Upto 250 mm (Upto 10.000") Pressure: p3 = 150 bar (2,175 PSI) Temperature: t = 200°C (392°F) Speed = 60 m/s (197 ft/s)

#### **Standards**

API 682 / ISO 21049

#### **Materials**

Seal face: SiC-C-Si silicon impregnated carbon (Q3), Carbon graphite antimony impregnated (A)

Seat: Silicon carbide (Q)

Secondary seals: FKM (V), EPDM (E), FFKM (K)

Springs: Hastelloy® C-4 (M)

Metal parts: CrNiMo steel (G), Duplex (G1),

Super Duplex (G4), Titanium (T2), Hastelloy® C-4 (M)

#### **Design Variations**

BB10HHD-PVD / BB10HHD-FVD Same design as BB10HD-PVD / BB10HD-FVD but with loosely inserted seal face for extreme applications. Presssure: p1 = 200 bar (2900 PSI)

Serie BB10HD-PVD / BB10HD-