

# Boiler Feed Water Seal

## Single Acting, Dependent of Direction of Rotation

### Mechanical Seal

### Series 800HB2/CG

#### Standard Style

##### Face Materials:

Carbon / Silicon Carbide

##### Metal Parts:

SS 316, SS 304

##### Secondary Seal:

Elastomers

#### Applications:

- Boiler feed water Pumps
- HSD Pumps
- Booster Pumps
- Drip Pumps
- Condensate Pumps
- Fuel Oil Pumps

#### Seal Characteristics:

- Single acting
- Balanced
- Inside mounted
- Dependent of direction of rotation

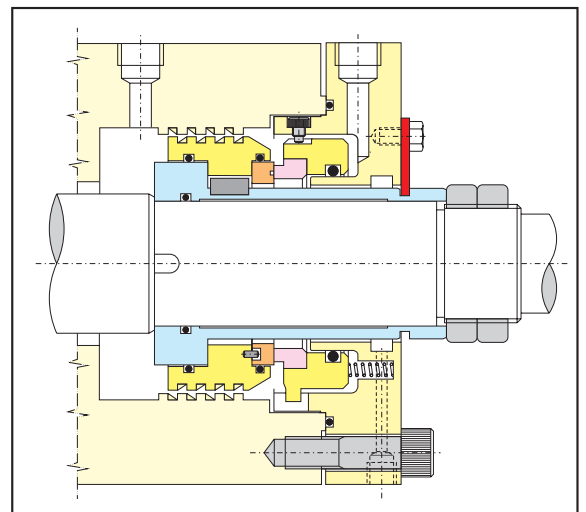
#### Operating Limits:

Shaft diameter  $d_1$  : 65 ... 150 mm

Pressure  $p$  : 50 ... 140 bar (max)

Temperature  $t$  :  $-20 \dots +250^{\circ}\text{C}$  (API plan 23)

Velocity  $v$  :  $< 50$  m/sec



This is a unique seal developed to meet stringent technical requirements of Boiler feed water pumps. Rotating mating ring design makes it suitable for high speed application & avoids critical requirements of stuffing box face squareness. Both the faces are having strong positive drive & locking arrangement which make seal very strong and sturdy.

Thermodynamic circulation grooves inscribed on the rotating faces boost the cooling of the sliding faces by reducing the coefficient of friction and protecting the seal against thermal over loading. Increased coolant flow effected by the pumping screws & the fluid guiding channel combine to force the cold water into the gap between seal ring and mating ring, blowing out gas bubbles and dirt particles and picking up frictional heat.

In view of risk of dynamic distortion because of high sliding velocity of over 25 m/sec the springs are located in the stationary part. For this seal 20,000 hours of continuous running may be viewed as normal. Attainment of over 79000 hours is possible.