

RELY ON EXCELLENCE

## DF-SA DiamondFace

Mechanical Seals | Mechanical seals for pumps | Engineered Seals



### Features

- Cartridge design
- Single seal
- Balanced
- Integrated pumping device
- Stationary spring loaded unit
- **Inserted seal ring**
- **Rotating mating ring (DiamondFace coated)**

### Advantages

- **Resistant to electrochemical corrosion.**
- **Extremely long service life (>40,000 h).**
- **No dosing system, no cooling circuit conditioning required.**
- **Diamond coating provides very low friction, thus reduced power consumption.**
- Deformation-optimized for high sliding velocities and medium pressures.
- Economical due to standardized components.
- High flexibility due to adaptation of the connection parts to the pump seal chamber.
- Optimum heat dissipation due to integrated pumping device and optimized seat / seal face design.

### Operating range

Shaft diameter:  
 $d1^* = 120 \dots 250 \text{ mm (4.72" ... 9.84")}$   
 Pressure:  $p_1 = 70 \text{ bar (1,015 PSI)}$   
 Temperature:  $t = 300 \text{ °C (572 °F)}$   
 Sliding velocity:  $v_g = 70 \text{ m/s (330 ft/s)}$   
 Axial movement:  $\pm 3 \text{ mm}$

\* Other sizes on request

### Materials

Seal face: Composite carbon  
 Seat: SiC DiamondFace coated  
 Secondary seals: EPDM (E), FFKM (K)  
 Springs: CrNiMo steel (G)  
 Metal parts: CrNiMo steel (G)

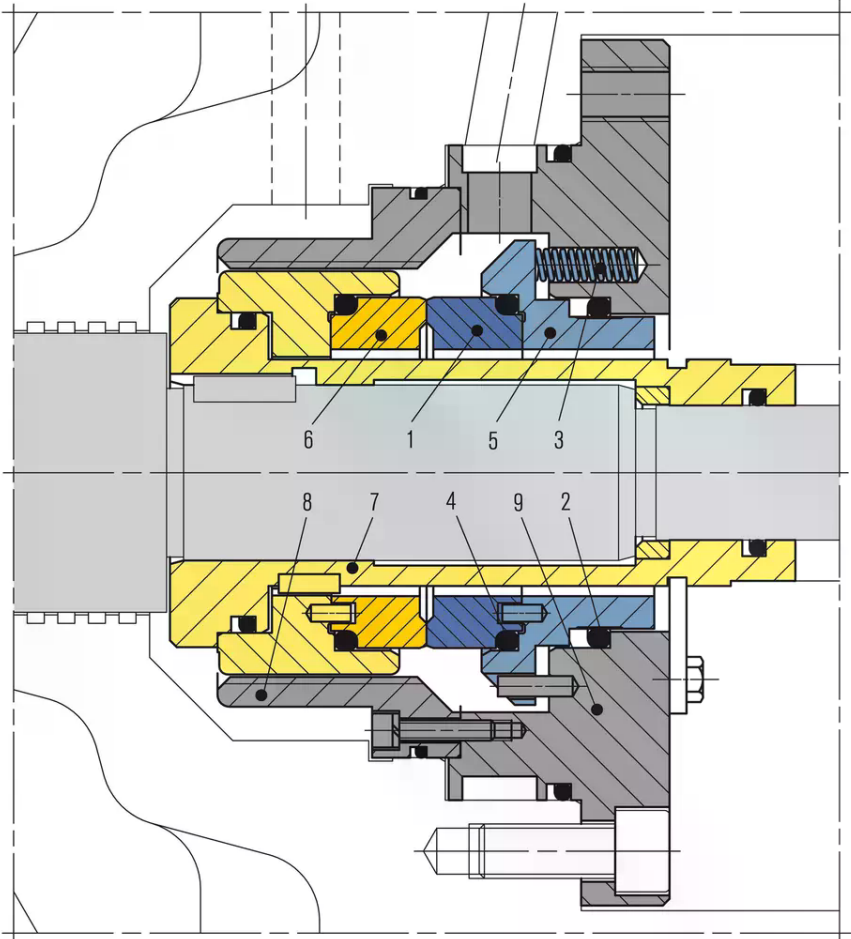
### Recommended applications

- Power plant technology
- Power generation
- Nuclear power technology
- Boiler feed pumps

### Recommended piping plans

API Plan 02 + 23 (with jacket cooling)

## RELY ON EXCELLENCE



Item	Description
1	Seal ring
2	O-Ring
3	Spring
4	O-Ring
5	Seat collar
6	Mating ring (DiamondFace coated)
7	Shaft sleeve
8	Pumping sleeve
9	Cover