

RELY ON EXCELLENCE

## H75A4-C

API 682 4th edition product range | Mechanical seals | Balanced pusher seals



### Features

- API 682 Category 2 and 3, Type A, Arrangement 2 seal
- Dual seal in face-to-back arrangement
- Non-contact outer seal (containment seal)
- Balanced
- Cartridge unit
- Rotating multiple springs

### Advantages

- Universally applicable both for retrofits or original equipment
- Efficient stock keeping due to standardized components
- Extended selection of materials
- Metal parts also in special materials available
- Safe operation due to metal torque transmission at the rotating carbon seal rings

### Operating range

Shaft diameter:  
 $d_1 = 20 \dots 110 \text{ mm} (0,79" \dots 4,33")$   
 Pressure:  $p_1 \dots 42 \text{ bar} (609 \text{ PSI})$   
 Temperature:  
 $t = -40 \text{ °C} \dots +176 \text{ °C} (-40 \text{ °F} \dots +350 \text{ °F})$   
 Sliding velocity:  $v_g = 23 \text{ m/s} (76 \text{ ft/s})$   
 Axial movement:  $\pm 1.0 \text{ mm}$

### Materials

Seal rings: Blister resistant carbon, Silicon carbide SSiC (Q1), RBSiC (Q2)  
 Mating rings:  
 Silicon carbide SSiC (Q1), RBSiC (Q2)  
 Secondary seals:  
 EPDM (E), NBR (P), FKM (V), FFKM (K)  
 Springs: Hastelloy® C-276 (M5)  
 Metal parts: CrNiMo steel 316 (G) or equivalent, optional materials on request. Dimensions on request.

### Standards and approvals

- API 682 / ISO 21049
- API 682 4th ed. Cat. 2/3 - 2CW-CS

### Recommended applications

- Media with gaseous leakage
- Refining technology
- Petrochemical industry
- Oil and gas industry
- CCUS
- Hydrogen
- Sustainable plastics production
- Alternative fuels production
- API 610 / ISO 13709 pumps
- Process pumps

### Recommended piping plans

#### Process side:

API Plan 01  
 API Plan 02  
 API Plan 03  
 API Plan 11  
 API Plan 12  
 API Plan 13  
 API Plan 14  
 API Plan 21  
 API Plan 22  
 API Plan 23  
 API Plan 31  
 API Plan 32  
 API Plan 41

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**Between seals:**

- API Plan 71
- API Plan 72
- API Plan 75
- API Plan 76

| Item                   | Description    |
|------------------------|----------------|
| 1.1.1, 2.1.1           | Seal ring      |
| 1.1.2, 2.1.2           | Driver         |
| 1.1.3, 2.1.3           | Thrust ring    |
| 1.1.4, 1.3, 2.1.4, 2.3 | O-Ring         |
| 1.1.5, 2.1.5           | Spring         |
| 1.1.6, 12              | Set screw      |
| 1.2, 2.2               | Mating ring    |
| 2.1.6                  | Key            |
| 3                      | Seal sleeve    |
| 4                      | Gland plate    |
| 6                      | Insert         |
| 8                      | Fixing ring    |
| 9                      | Setting device |
| 10                     | Hexagon bolt   |
| 11                     | Set ring       |

F Flush  
 CSV Containment seal vent  
 CSD Containment seal drain  
 GBI Gas buffer IN

