

## HSE1

'AHLSTAR™ - SINGLE SEAL'

## SPECIFICATION SHEET



- Safeseal SE1 Replacement
- Single Seal, Balanced
- Semi-Cartridge Design
- Suits Sulzer AHLSTAR™ Pumps
- For Gland Packing Chambers

HSE1 is a single mechanical seal in a semi-cartridge, stationary-based, single-spring design. It is a direct replacement for pumps fitted with John Crane Safematic® Safeseal Type SE1. Seal faces are lubricated by the pumped product.

It is suitable for Sulzer AHLSTAR™ APP and APT pumps fitted with the standard gland packing casing covers / seal chambers.

The bolting plate is adaptable for use with 2, 3 or 4-bolt stud mounts

#### ► Operating conditions<sup>1</sup>

Temperature: -30°C to +121°C  
 Pressure: < 15 bar, 220 psi, 1.5 MPa  
 Speed: < 20m/s, 4000 fpm  
 rpm < 1200000/(3.14 x D1)

<sup>1</sup> Guide-values only (due to diversity of possible applications). Enquire for specific-use cases. Maximum values of each parameter cannot be applied together.

#### ► Materials

Rotary Face: (SiC)  
 Stationary Face: (SiC) or (CAB)  
 Elastomers: Viton®  
 Metal Parts: 316S.S

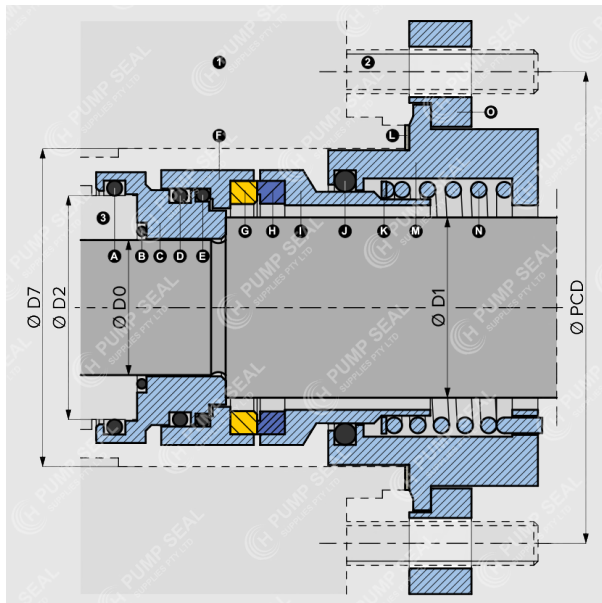
(\_) refers to shrink-fitted

#### PARTS

- 1 Gland Packing Chamber
  - 2 Mounting Studs
  - 3 Impeller
- A Spacer Sleeve O-ring
  - B Spacer Sleeve O-ring
  - C Spacer Sleeve
  - D Spacer Sleeve O-ring
  - E Rotary O-ring
  - F Rotary Holder
  - G Rotary Face
  - H Stationary Face
  - I Stationary Holder
  - J Seal Holder O-ring
  - K Seal Holder Thrust Ring
  - L Seal Holder Gasket
  - M Seal Holder
  - N Seal Holder Spring
  - O Seal Holder Bolting Plate

#### EQUIVALENT

Sulzer TB1  
 Safeseal SE1  
 LP-S-S32-E10



#### INSTALLATION & OPERATION

##### Operation:

The sliding faces get their lubrication from the pumped product. Do not run the seal dry.

##### Installation:

1. With the shaft removed, slide the rotary and spacer sleeve assembly (parts A - G) onto shaft shoulder.
2. Re-install the shaft and tighten with the impeller (3)
3. Slide the stationary assembly (parts H - N) along with the bolting plate (O) onto the mounting studs (2) on the rear of the standard gland packing chamber casing cover (1) and bolt.

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