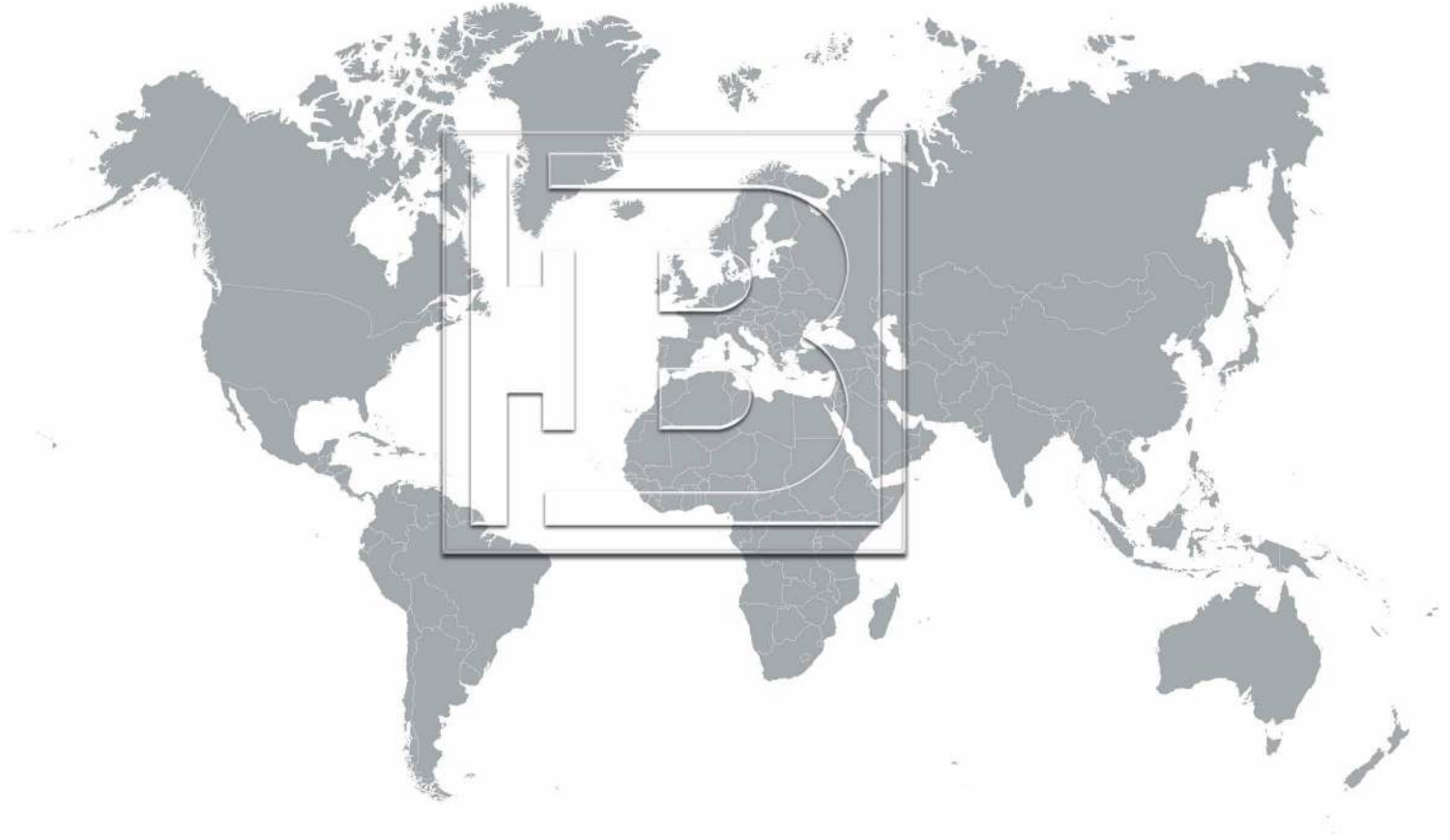


Twin Screw Pumps

Series SLW



ITT Bornemann - The Pump Pioneer



We are ITT Bornemann, the first to market German based supplier of Twin Screw Pumps and an established worldwide leader of numerous ground-breaking pump developments. We joined ITT Corporation in 2012, a diversified leader of highly engineered solutions for the energy, transportation and industrial markets.

Founded in 1853, Bornemann has achieved and secured a leading position worldwide. Aside Energy, several other industries are served, e.g. chemical, petroleum, marine as well as food & pharmaceutical applications. More than 140,000 Pumps and Systems are installed worldwide and operating successfully.

Bornemann SLW Series

Bornemann's SLW Series is a Positive Displacement Single Volute Twin Screw Pump with 10 sizes available and various materials and designs for application-optimized solutions. The SLW is working with both, external and internal bearings. It is specifically designed to serve the growing demands of hermetically sealed pumps as well as less rotating shaft seals compared to conventional Twin Screw Pumps.

Markets and Applications



Operating Principle

The conveying elements of Bornemann's SLW Series consist of two screws, forming closed chambers with the pump casing. They are not only product conveying elements, but also transmitting torque. This eliminates requirement of Timing Gears resulting in less wear parts. The rotation of the feed screws causes the pumped medium in the chambers to move continuously along the screw axis from the suction to the discharge nozzle.

User Advantages:

- Simple and robust design
- Product lubricated, internal bearings
- Single volute pump, one suction channel
- Three optional bearing designs available
- Gearless design
- Hydraulically balanced
- Nozzle configuration 'L' or 'Inline' available

SLW - Pump Features

Nozzle Arrangement/Configuration

'L' or 'Inline' Design

Bearing Design

Product lubricated

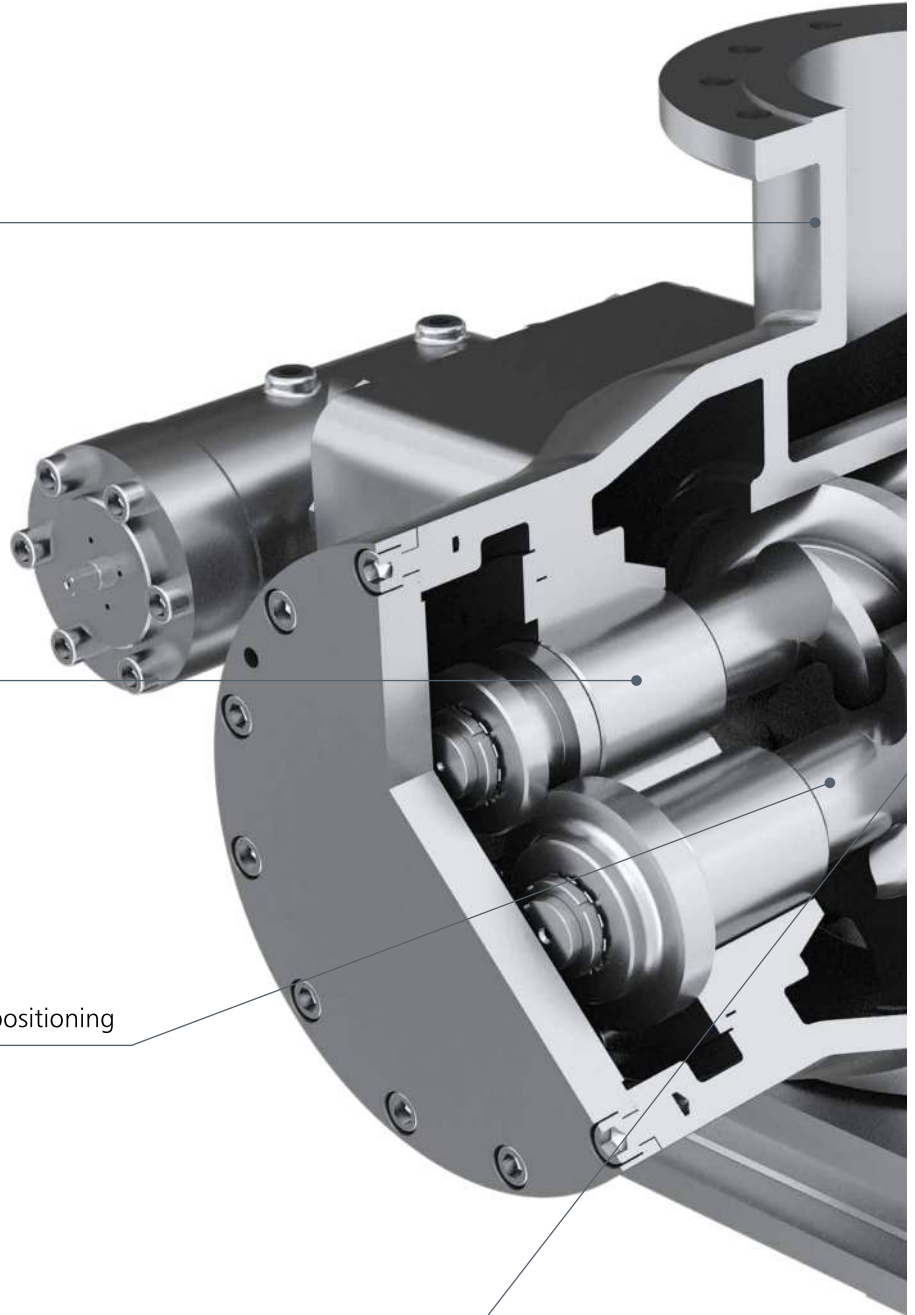
Radial Sleeve Bearings with infinitive service life

Rotors/Casing

Optimized suction capabilities by innovative Rotor positioning

Rotors

Pump hydraulic with optimized geometry and high volumetric efficiency





Bearing Design

Roller Bearing, supporting axial position of rotor set

Sealing

One mechanical seal only
or

sealless design



Materials of Construction

Wetted, pressurized parts GP240GH, 1.4408, EN-GJS-400
Rotors: surface hardened 1.7149 or 1.4571

User Advantages by Design

ATEX, Pressure Equipment
Directive (PED) and
TA Luft compliant

High Delivery Rate
and Wide Pressure Range

Low shear,
Low Noise Emission,
Low Pulsation

Fast & Easy
Maintenance

Reverse Flow
Direction possible

High MTBF -
Long Service Life

Zero Leakages,
Hermetically Sealed

High suction lift

SLW - Product Portfolio & Operating Envelope

SLW-I (Internal Bearing Design)

The bearing housing is an integral part of the pump casing, bearings are product lubricated.



Advantages

- Compact & Simple Design
- Competitive Alternative for Clean and Lubricating Products
- No External Lubrication Required

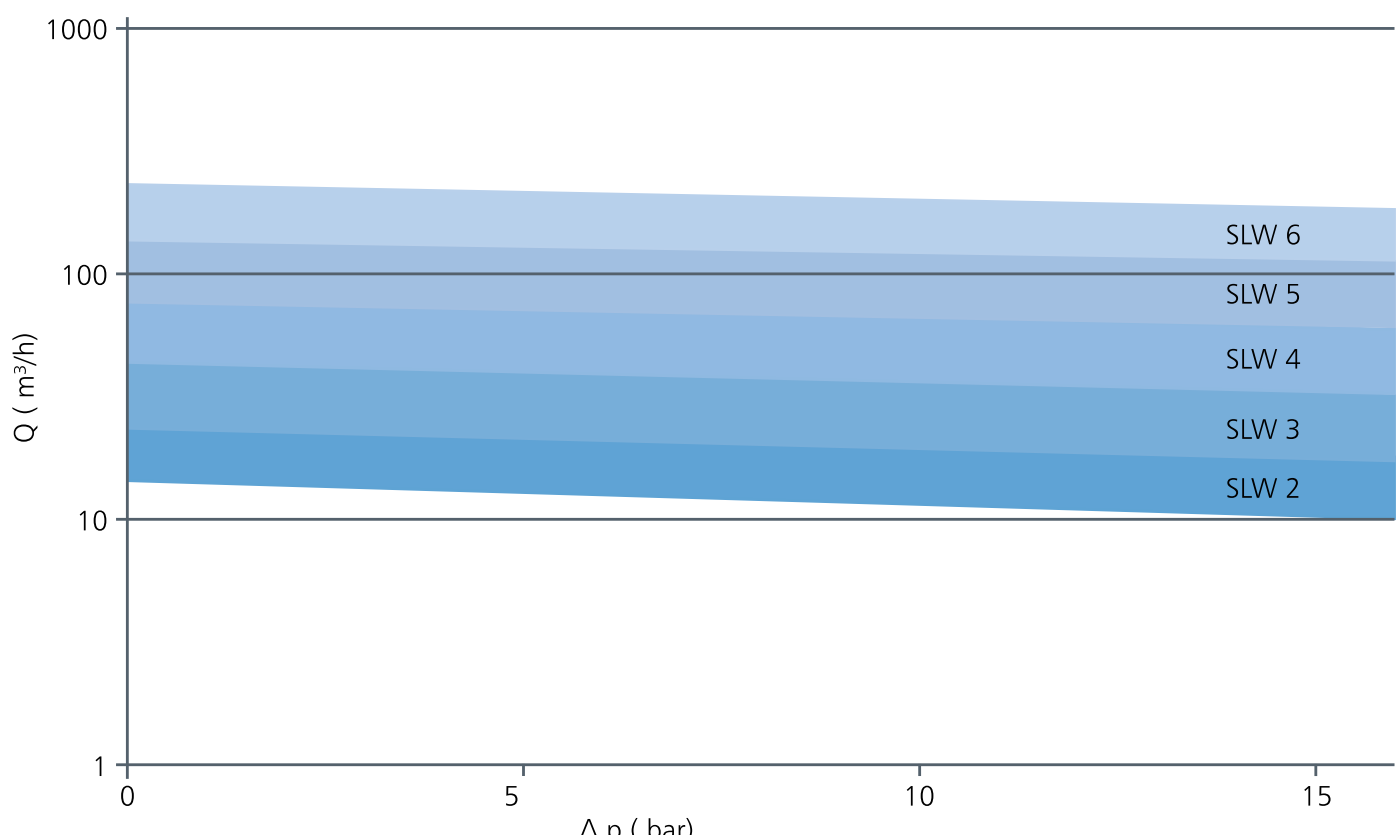
SLW-E (External Bearing Design)

The bearing is mounted externally, for high pressure and high temperature applications.



Advantages

- Robust Design for High Performances
- Product-Independent Bearing Configuration
- High Temperature Operation



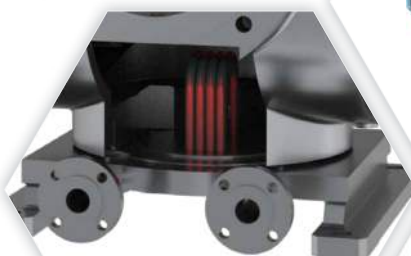
SLW-M (Magnetic Coupling Design)

A magnetic coupling serves for leakage-free operations. With this pump, Bornemann serves the market of Hermetically sealed pumps.

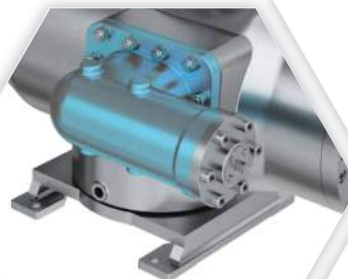


Advantages

- Environment-Friendly Hermetic Design
- Use in Hazardous Atmospheres
- Increased Safety by Closed Containment



Easy Heating / Cooling Design



Internal Bypass Valve

Safe Operation



Monitoring of Hydraulic Balance



API Compliance

Further Options

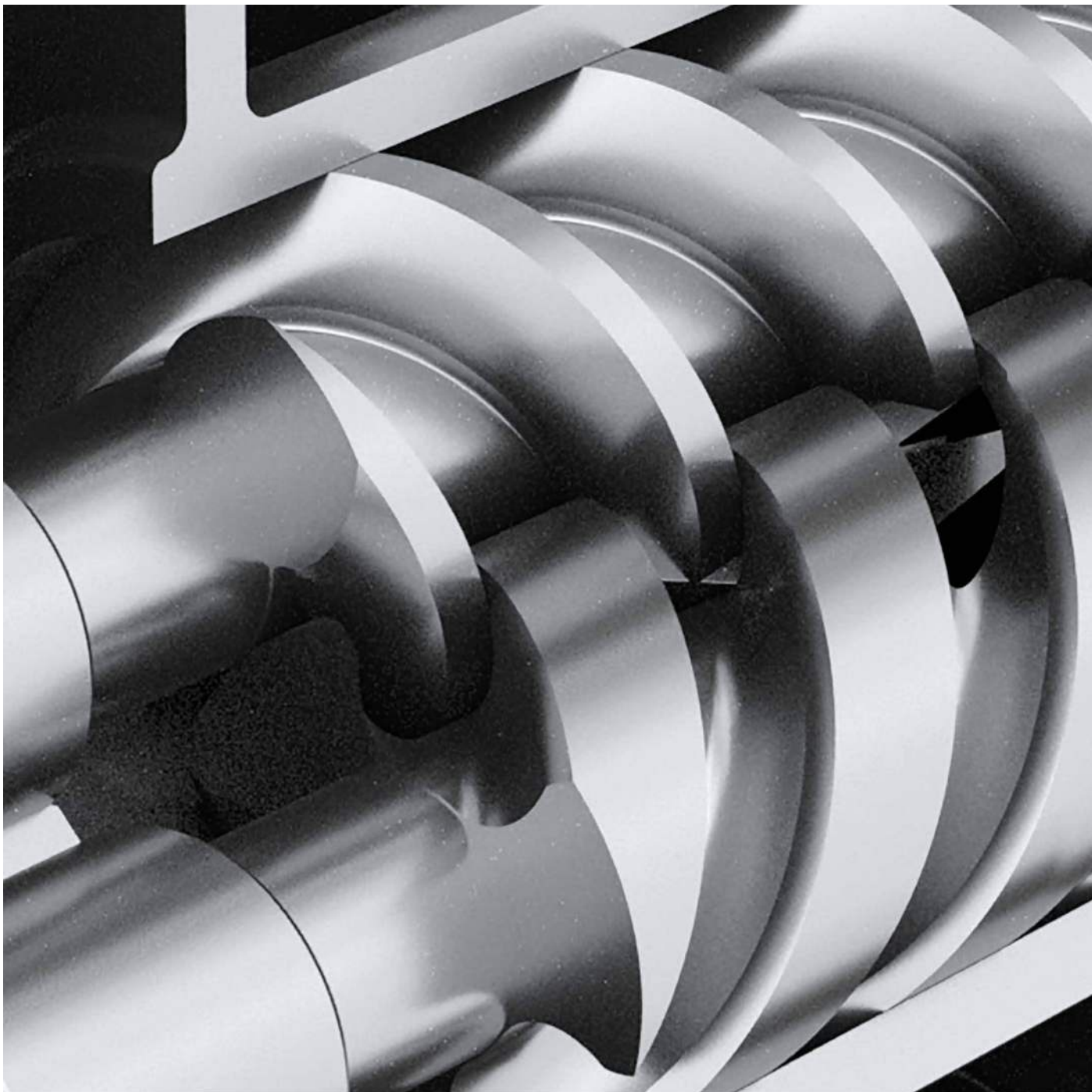


Inline Design



Full Heating Jacket

	Max. Flow		Max. Differential Pressure		Max. Viscosity		Max. Product Temperature		Max. NPSHR
	m ³ h	gpm	bar	psi	mm ² /s	cSt	°C	°F	m
SLW	300	1.320	16	232	100.000		300	572	-8,5



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Bornemann

An ITT Brand