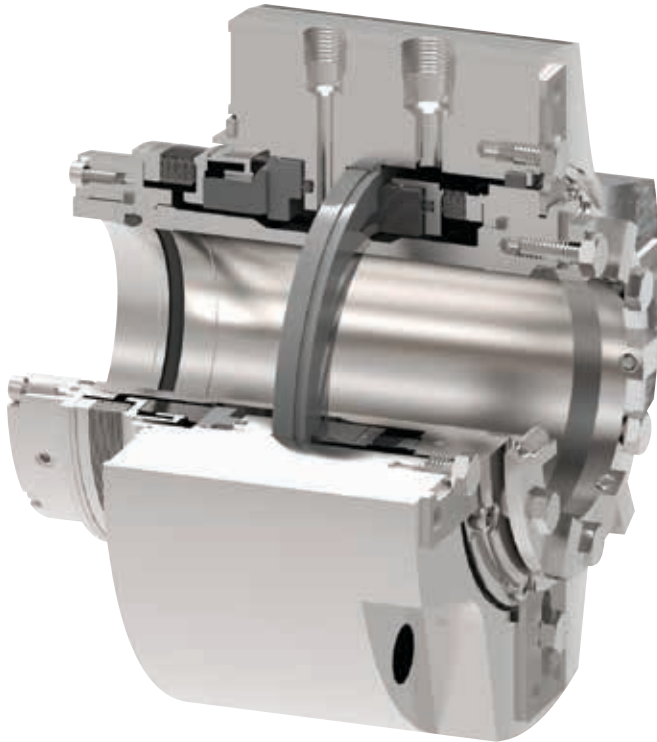


OUTWARD-PUMPING
METAL BELLOWS
DUAL-PRESSURIZED
NON-CONTACTING
SEAL FOR PUMPS



DESIGN BENEFITS

- Proven performance; API 682-qualified
- HTC technology for reliable operation in extreme temperature and corrosive environments
- Spiral groove, non-contacting technology enables zero emissions and reduced support system costs
- Full reverse pressure containment capability

PRODUCT DESCRIPTION

Reliably sealing high-temperature process fluids up to 425°C (800°F), the Type 2874HTC incorporates HTC (high-temperature, corrosion-resistant) technology and edge-welded metal bellows to provide superior stability and reliable operation at both elevated and low temperatures. Unique outward-pumping, spiral groove technology creates a highly effective, non-contacting seal across all operating ranges.

OUTWARD-PUMPING METAL BELLOWS DUAL-PRESSURIZED NON-CONTACTING SEAL FOR PUMPS

An innovative alternative to conventional, dual-contacting mechanical seals and seal support systems, the Type 2874HTC combines HTC and non-contacting technology for applications with corrosive fluids at both elevated and low temperatures.

HTC Temperature and Corrosion resistance

Using all-Inconel® metallurgy and unique face seal technology provides process assurance across a wide range of pressure/temperature conditions. The Type 2874 HTC incorporates a pressure-compensating seal face and thermally compliant components that ensure exceptional stability to resist compromising effects from temperature and pressure. Such exceptional face stability results in reduced barrier gas leakage (consumption) and longer seal life.

Additionally, this rugged seal has full reverse pressure containment capability.

Zero emission and energy saving technology

The advantages of non-contacting, gas-lubricated technology can be used for reliable operation with a nitrogen or steam barrier achieving zero fugitive emissions and increased safety when sealing hazardous

fluids. In addition to eliminating the need for cooling water and barrier fluids, non-contacting seals operate friction free and result in minimal power losses and significant energy savings when compared to conventional, contacting mechanical seals.

Support Systems

John Crane provides your complete system requirements for effective operation of the Type 2874HTC. These support systems, coupled with non-contacting seal technology, significantly reduce life cycle costs as compared to wet seal barrier fluid systems and eliminate problems associated with conventional support systems in hot applications such as coking barrier fluids and fouled heat exchangers. An API Plan 74 panel for nitrogen or argon barrier gas, as well as steam barrier gas support systems are available.

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PERFORMANCE CAPABILITIES

Temperature	Pressure	Speed	Axial movement	Runout
-75° to 425°C/ -100° to 800°F	Process fluid: N/Ar barrier: Vacuum to 16 barg/230 psig Steam barrier: Vacuum to 14 barg/200 psig Barrier: N/Ar barrier: Vacuum to 18 barg/260 psig Steam barrier: Vacuum to 16 barg/230 psig	1,450 rpm min./3,600 rpm max. (Outside this range contact John Crane Engineering)	Sizes <40 mm/1.57": ±0.76 mm/0.030" Sizes >40 mm/1.57": ±1.02 mm/0.040"	0.05 mm/0.002" FIM MAX

Differential barrier gas pressure: Minimum 2 bar/30 psi > maximum seal chamber pressure

Together, we will work with you to keep your mission-critical operations up and running with support and guidance from our experienced team.



North America	Europe	Latin America	Middle East & Africa	Asia Pacific
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If the products featured will be used in a potentially dangerous and/or hazardous process, your John Crane representative should be consulted prior to their selection and use. In the interest of continuous development, John Crane Companies reserve the right to alter designs and specifications without prior notice. It is dangerous to smoke while handling products made from PTFE. Old and new PTFE products must not be incinerated. ISO 9001 and ISO14001 Certified, details available on request.