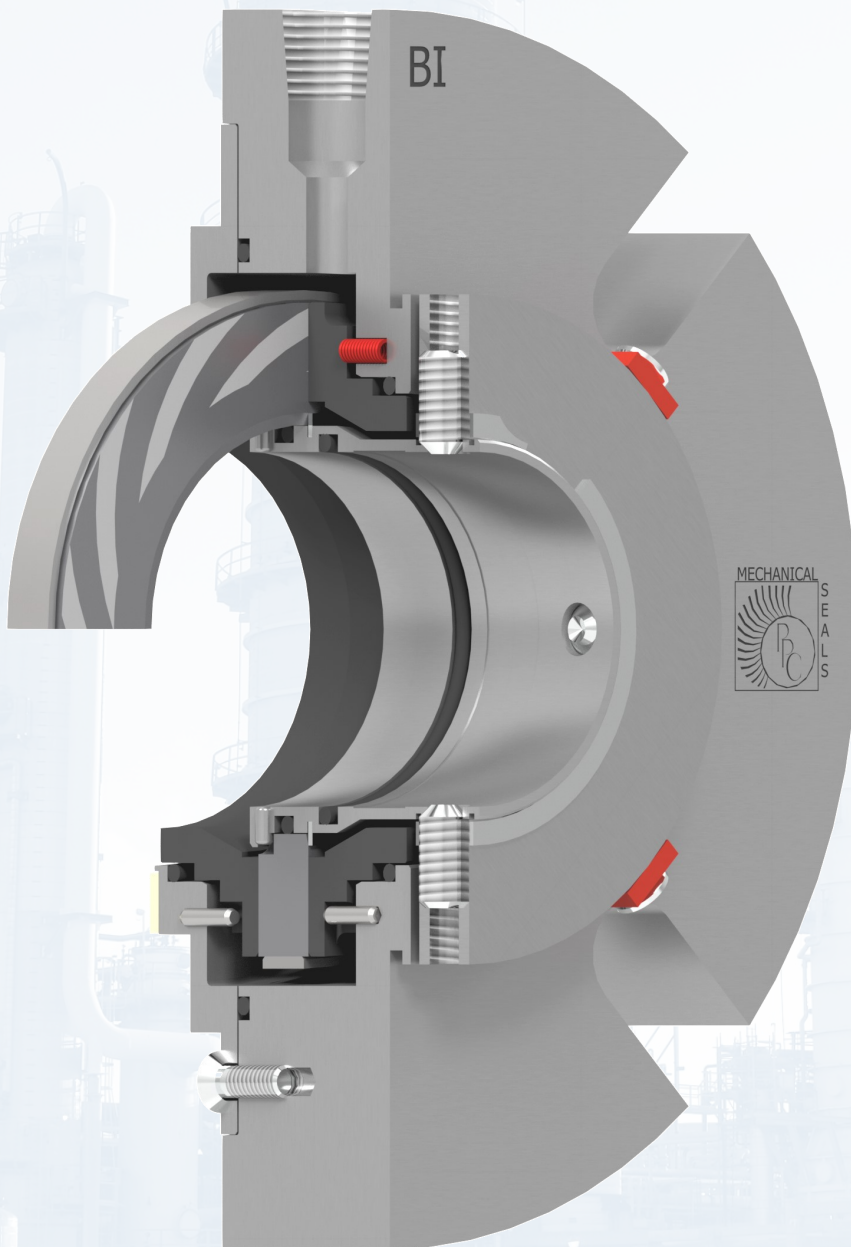




## **7000G & GB Cartridge Seals**

*Double gas lift-off pusher seals*



**CREATING SEALING SOLUTIONS THROUGH INNOVATIVE ENGINEERING**  
**MADE IN THE USA**

## DESCRIPTION

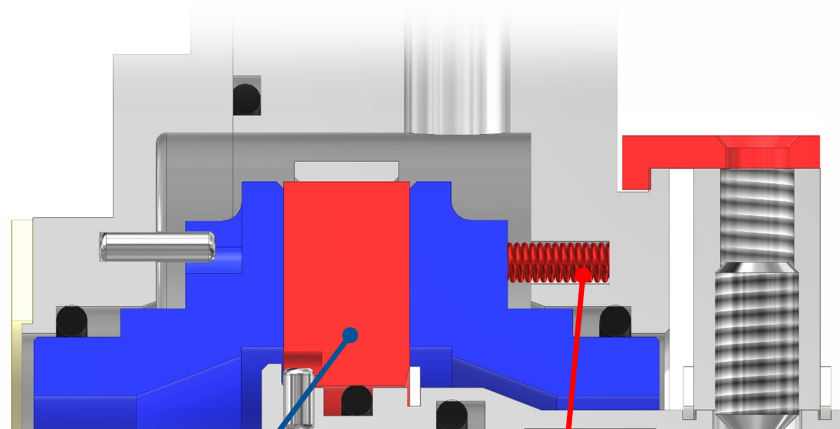
## 7000G & 7000GB

With the 7000G and 7000GB, PPC offers some of the latest in sealing technology with lift-off gas seals. These seals provide the protection of double seals while offering benefits only available with non-contacting gas designs. Product emissions are eliminated and the only seal leakage is a minimal amount of inert gas, the majority of which is directed to the atmosphere. When coupled with an external gas source and control panel, which PPC offers, long, reliable service can be expected with no liquid barrier system or seal pot to maintain. The cartridge design is compact thanks to a shared, banded rotary face. The etched pattern, essential to proper lift-off and operation, is available in a spiral groove unidirectional design (7000G) as well as a unique T-groove bidirectional design (7000GB). The pattern is optimized over the designed application parameters (surface speed, size) at each available size.

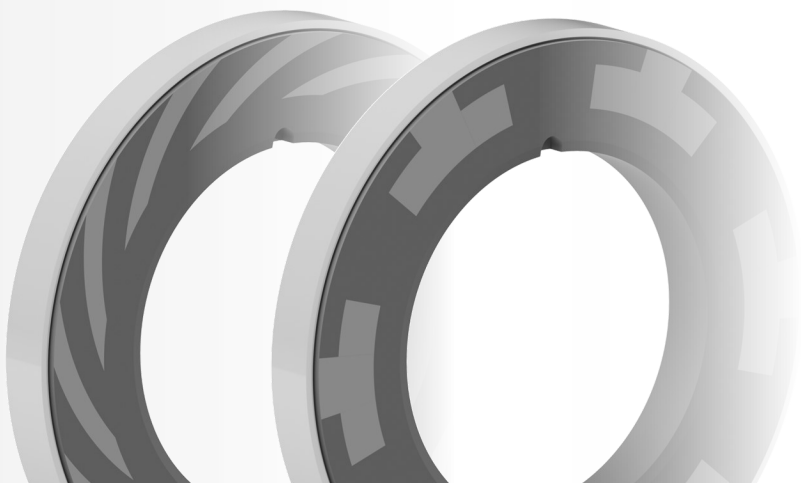
The 7000G and 7000GB are designed and available in sizes to fit most popular general-duty process pumps including ANSI standard and large bore (7000G/GB+) seal chambers. Special designs are also available to fit non-standard equipment.

## FEATURES

- **Dynamic face separation** eliminates seal face generated heat.
- **Seals off statically** to reduce barrier gas consumption.
- No face contact or drag during operation **reduces power consumption** for energy savings.
- **No external liquid barrier fluid** or system to refill or maintain.



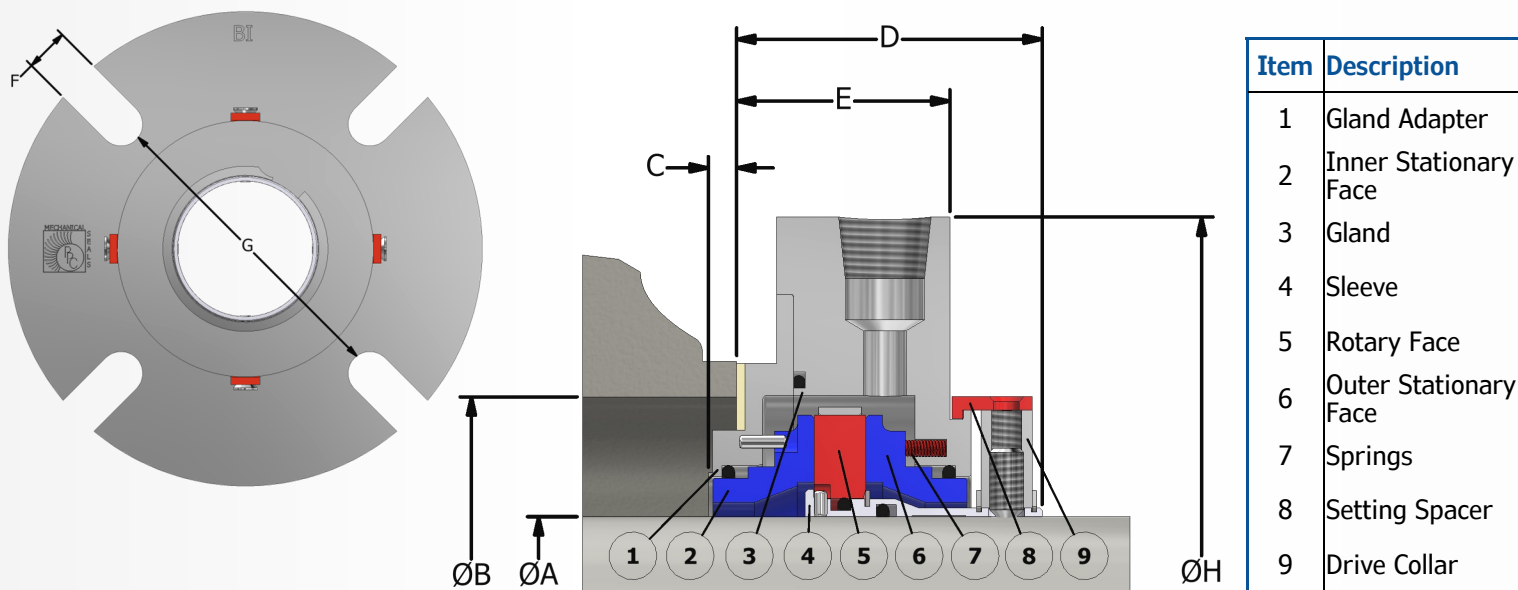
**'G' unidirectional (left) and 'GB' bidirectional (right) faces**



- **Springs are stationary and located outside the product** to resist corrosion and equipment misalignment.
- **No product contamination** from barrier fluid.
- Engineered face pattern provides reliable, **stiff gas film to resist process upsets.**
- Compact, **cartridge design allows for easy installation.**
- Able to handle **thermal-sensitive products.**

## SEAL DIMENSIONAL DATA

## 7000G & 7000GB



### 7000G/GB DIMENSIONS FOR STANDARD BORE SEAL CHAMBER

A SEAL SIZE	B (MIN)	B (MAX)	C	D	E	F	G	H
1.750	2.390	2.750	N/A	2.46	1.80	0.56	3.98	6.13
1.875	2.515	2.875	N/A	2.46	1.80	0.56	4.11	5.97
2.125	2.765	3.125	N/A	2.46	1.80	0.69	4.36	6.50
2.500	3.140	3.500	N/A	2.46	1.80	0.69	4.71	6.88
2.625	3.265	3.625	N/A	2.46	1.80	0.69	4.86	7.00
2.750	3.577	3.938	N/A	2.63	1.96	0.69	5.19	7.60

### 7000G/GB+ DIMENSIONS FOR LARGE BORE SEAL CHAMBER

A SEAL SIZE	B (MIN)	B (MAX)	C	D	E	F	G	H
1.125+	2.625	2.968	0.44	2.00	1.33	0.44	3.81	5.25
1.375+	2.875	3.218	0.44	2.00	1.33	0.44	4.06	5.31
1.750+	3.062	3.750	0.21	2.22	1.56	0.56	3.98	6.13
1.875+	3.187	3.875	0.21	2.22	1.56	0.56	4.11	5.97
2.125+	3.437	4.125	0.21	2.22	1.56	0.69	4.36	6.50
2.500+	3.812	5.187	0.21	2.22	1.56	0.69	5.62	7.88
2.625+	3.937	4.625	0.21	2.22	1.56	0.69	4.86	7.00
2.750+	4.250	4.937	0.11	2.49	1.83	0.69	5.19	7.60

Note: For complete dimensional data, request a copy of typical drawing T-4693 from a PPC Mechanical Seals representative.



## MATERIALS OF CONSTRUCTION

## 7000G & 7000GB

**Metallurgy:** 316 SS Standard  
*Other materials available, including Duplex SS, Alloy C-276 & Titanium*

<b>Seal Face Combinations:</b>	<b>Inner Stationary</b>	<b>Rotary</b>	<b>Outer Stationary</b>
	Carbon (Metal-filled)	Sint. Silicon Carbide	Carbon (Metal-filled)
	Sint. Silicon Carbide	Sint. Silicon Carbide	Carbon (Metal-filled)
	Carbon (Sp. Resin-filled)	Sint. Silicon Carbide	Carbon (Sp. Resin-filled)
	<i>Other materials available upon request</i>		

**Elastomers:** Fluoroelastomer (FKM), EPDM, AFLAS®, Perfluoroelastomer (FFKM)  
*Other materials available upon request*

**Gland Gasket:** GYLON® (Filled PTFE)

**Springs:** Alloy C-276

AFLAS® is a registered trademark of Asahi Glass Co., Ltd.  
GYLON® is a registered trademark of Garlock Sealing Technologies LLC

## OPERATING CONDITIONS

**Seal Chamber Pressure:** Vacuum to 300 psig (20 bar g)  
*Dependent on size and speed*

**Process Temperature:** -40 to 400 °F (-40 to 204 °C)  
*Dependent on application and elastomer material*  
*Contact PPC for specific applications outside these parameters*

**Surface Speed:** Up to 5000 fpm (25 m/s)

## APPLICATIONS

- Petrochemical
- Specialty Chemicals
- Refined Products
- Pharmaceutical
- Food & Beverage



## CONTACT US

www.ppcmechanicalseals.com • sales@ppcmechanicalseals.com  
PH: 1-800-731-7325 • 1-225-356-4333  
2769 Mission Drive • Baton Rouge, LA 70805

B-SEAL-3016 Rev. 04/2024  
©2024 PPC Mechanical Seals

**CREATING SEALING SOLUTIONS THROUGH INNOVATIVE ENGINEERING**  
**MADE IN THE USA**