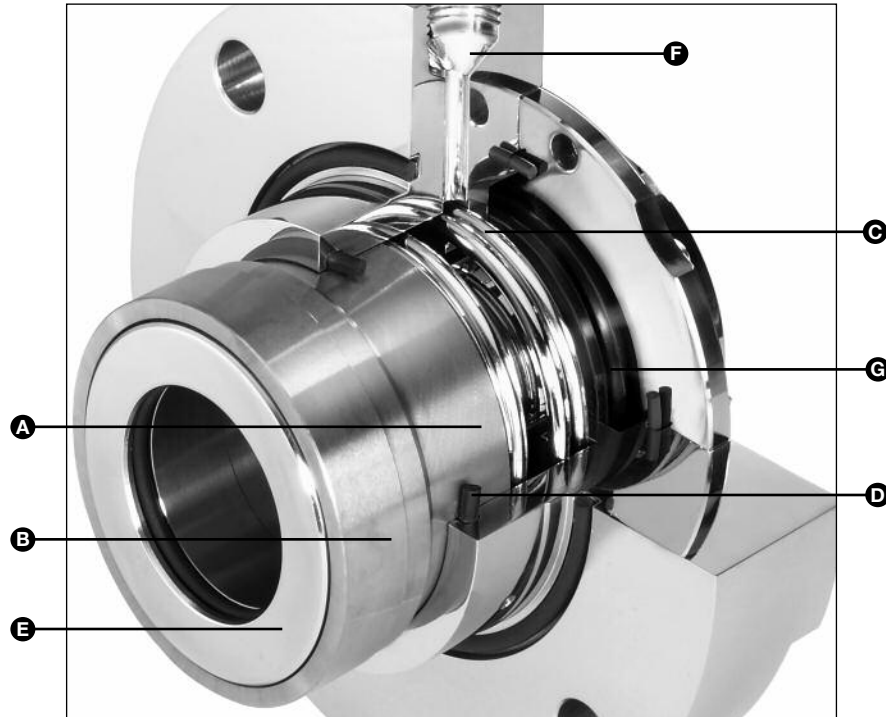


- A – Face/Primary Ring
- B – Seat/Mating Ring
- C – Spring
- D – Dynamic O-ring
- E – Sleeve
- F – Quench/Drain Ports
- G – V-ring



Goulds Pumps TaperBore™ PLUS
Seal Chamber Patented: No. 5,336,048



Product Description

The Type 5870 Flushless Seal is designed to operate unsupported in all paper stock consistencies and light slurry applications in Goulds Pumps' TaperBore™ PLUS with Vane Particle Ejector (VPE) seal chambers. John Crane's Type 5870 open-profile, abrasive-resistant sealing faces positioned near the impeller, allows cool running and clog-free performance.

- Goulds Pumps' TaperBore PLUS VPE seal chambers allow operation in up to 6% paper stock and light slurries up to 20% by weight without typical flush water seal support.
- Seal lubrication and cooling are supplied from the pumped fluids.

Design Features

- No support required — smooth, open-profile seal faces resist clogging and receive cooling and lubrication from the pumped liquid, eliminating flush water seal support.
- TaperBore PLUS seal chamber — VPE ring efficiently removes fibers, solids and vapors from pumped liquid, extending Type 5870 seal reliability.
- Cartridge design — factory preassembled into a complete package and tested to ensure fast, easy installation and trouble-free startup.

TaperBore PLUS is a trademark of Goulds Pumps.

Performance Capabilities

- Temperatures: up to 150°C/300°F
- Pressures: up to 21 bar g/300 psig
- Particle Size: up to 5,000 micron
- Speeds: up to 11 m/s/2200 fpm
- Axial Movement: ± 2mm/0.080"

Typical Applications

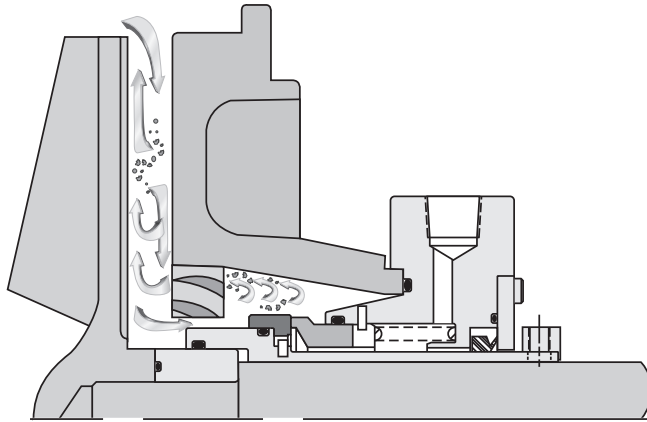
- Services: up to 6% paper stock, ash slurries, corn slurries, beer wort, sugar juice, raw sewage, slurries up to 20% by weight.
- Paper stock
- Fibrous media
- General duty slurries

- Clog-resistant — large, dynamic o-ring prevents fibers or solids from causing hang-up and limiting seal life.
- Rotating mating ring — designed for maximum cool running, higher shaft speeds and more gland-to-shaft misalignment.
- Flexible — rugged, single-coil spring, located outside of the product, allows for greater shaft motion due to cavitation, pulsations and other upset operating conditions.
- Quench connection — allows grease or water to lubricate and cool atmospheric side of seal if dry-running, cavitation or air bind operation occurs.

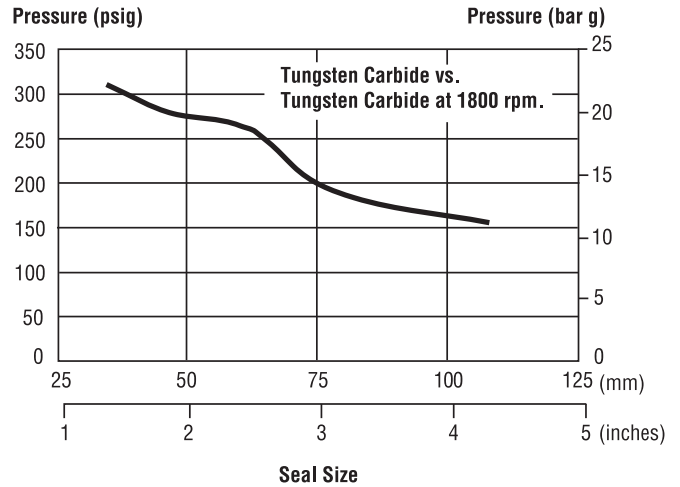
TYPE 5870

FLUSHLESS CARTRIDGE SEAL

Type 5870 Seal with TaperBore™ PLUS Seal Chamber



Pressure/Velocity Limits



Consult John Crane Engineering for higher speeds and other equipment applications.

Materials of Construction

SEAL COMPONENTS	MATERIALS	
	Standard	Options
Face/Primary Ring	Solid Tungsten Carbide	—
Seat/Mating Ring	Solid Tungsten Carbide	—
Gland Plate Assembly Sleeve Assembly Stub Sleeve Auxiliary Gland Collar Capscrews Spring	316 Stainless Steel	—
O-Rings	TFE Elastomer (Aflas®)	Ethylene Propylene Fluoroelastomer (Viton®)
V-Ring	Nitrile	—

Aflas is a registered trademark of Asahi Glass.
Viton is a registered trademark of DuPont.
Safeunit is a registered trademark of John Crane Inc.

Quench Options



Quench water usage can be optimized and controlled with a Safeunit® Grease quench can be automatically replenished with the grease feeder option. Contact John Crane about these quench supply options.



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