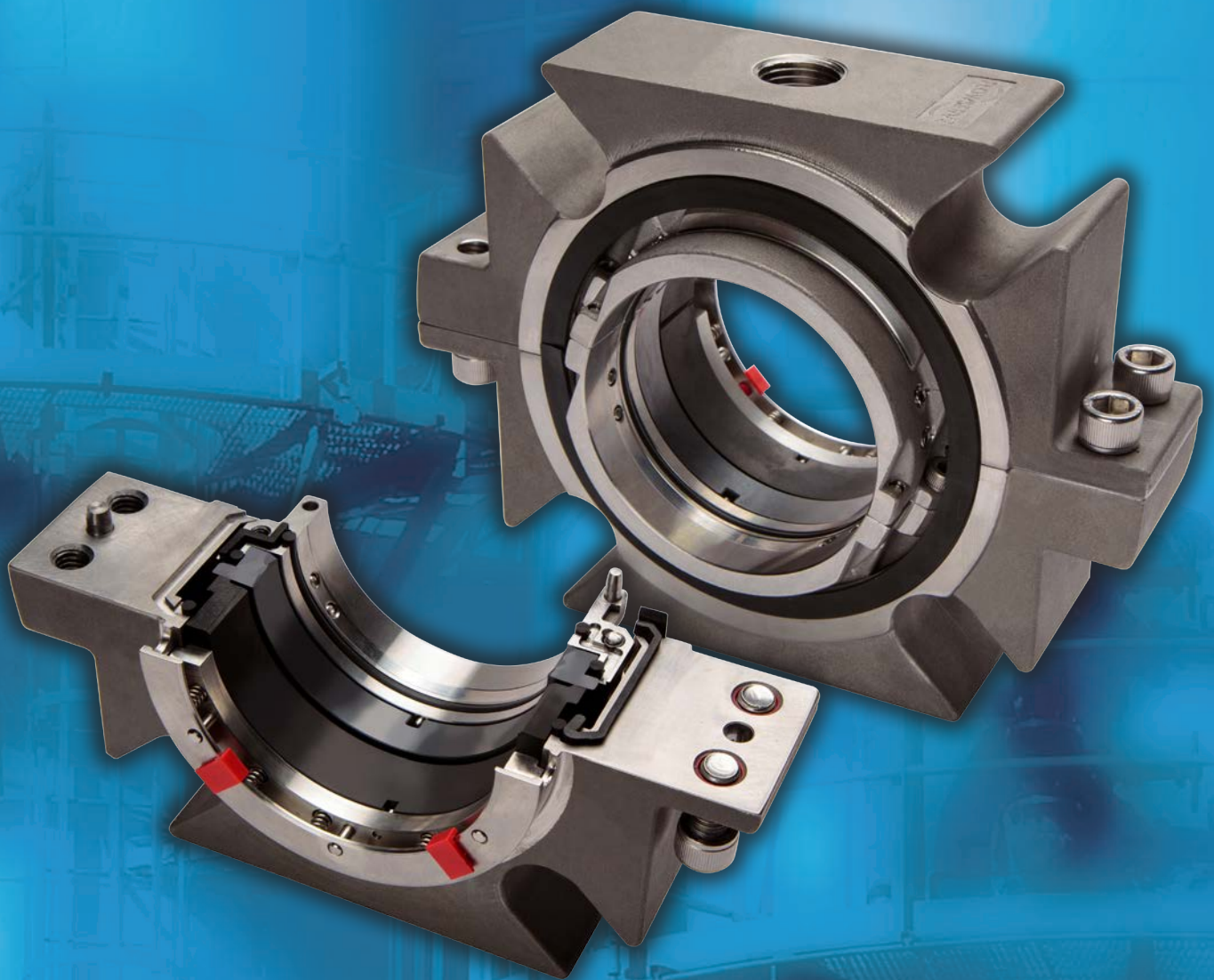




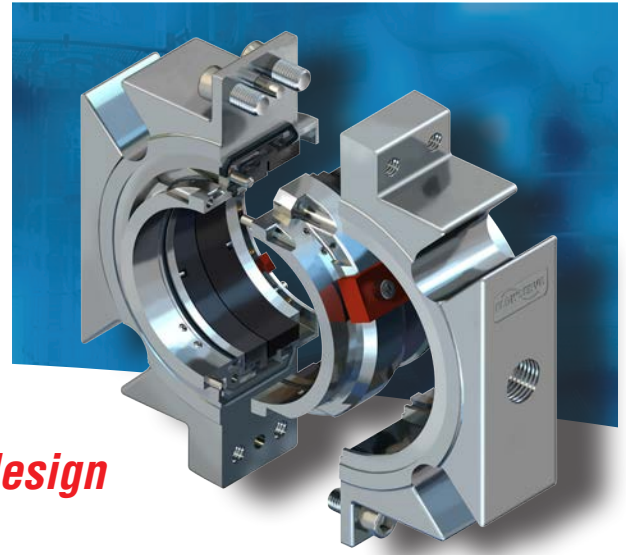
# **PSS 4** **Split Seal**

Intrinsic joint alignment technology



*Experience In Motion*

*The PSS 4 split seal provides the easiest and most successful installation routine to make reduced equipment downtime and increased reliability.....routine.*



## Simple installation and versatile design

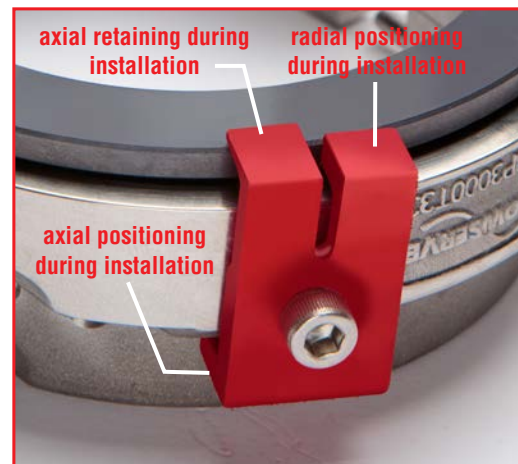
With only two major components, the PSS 4 split seal makes installation quick and easy without requiring equipment tear down. The pre-assembled semi-cartridge rotating and stationary halves eliminate equipment measurements and handling of small intricate components, including seal faces and gaskets. This innovative design with enhanced pressure capability makes the PSS 4 ideal for nearly all industries including pulp and paper, waste water treatment, power generation and light chemical.

### The PSS 4 difference

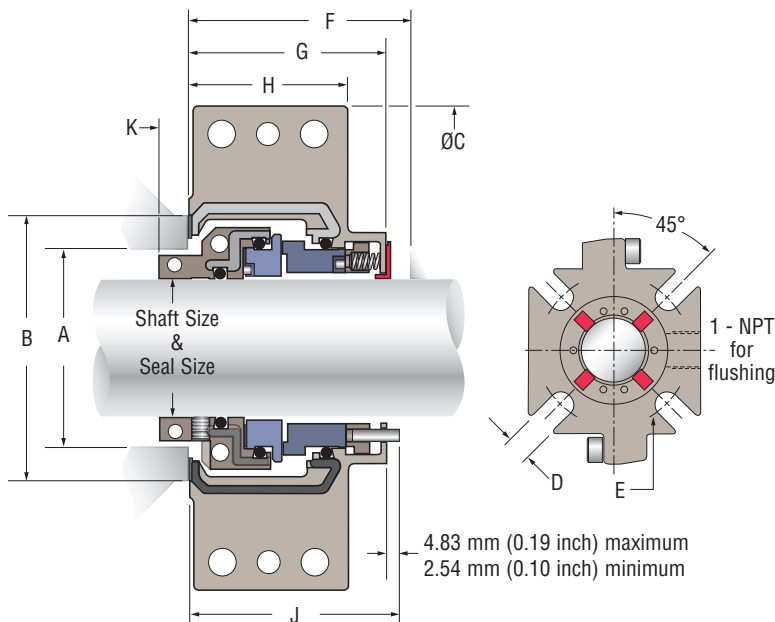
- Fully split design installs around the shaft, outside of the seal chamber, eliminating the need to dismantle the equipment for seal installation.
- Easy installation made even easier with fully pre-assembled, unitized component, semi-cartridge segments.
- All internal gaskets are mechanically held in place, eliminating the need for adhesives.
- Exclusive 3D Key technology assures optimum seal face alignment in both axial and radial directions, reducing joint leakage and installation time.



- Setting tabs position the rotating face for optimal joint reunion while properly locating the rotor assembly without measuring or marking, further assuring first time/every time installation success.



- The positive drive rotor is held firmly in place by eight set screws enabling use in higher pressures and fluid viscosities.
- Sealing faces are driven by direct drive pins, significantly increasing viscous fluid sealing capability over friction driven faces.
- Easily handles mixer equipment runout up to 1.5 mm (0.060 inch) TIR radial shaft movement, accommodating demanding mixer characteristics.
- All springs and pins are outside of the process fluid, reducing chance of clogging or corrosion.
- Standardized NPT port enables direct flush line installation with standard fittings and wrenches.



### Materials of Construction

- Stator Face:** Carbon, Silicon Carbide
- Rotor Face:** Silicon Carbide, Aluminum Oxide
- Metal Parts:** 316 Stainless Steel
- Springs:** Alloy C-276
- Secondary Seals:** FKM, EPDM

### Standard Operating Limits

- Pressure:** Full vacuum to 30 bar (450 psi)
- Temperature:** -18 to 121°C (0 to 250°F)
- Speed:** 19.3 m/s (3800 fpm)
- Sizes:** 38 mm - 152 mm (1.500 - 6.000 inch)  
for larger sizes use the **PSSL**

### PSS 4 Dimensional Data in inches

Shaft & Seal Size +0.001" -0.002"	A Seal Chamber Bore	B Min.	C	D Max. Bolt Size	E Min. Bolt Circle	E Max. Bolt Circle	F Min. DFO	G	H	J Max.	K
1.500	2.12 to 2.50	2.75	5.25	0.500	3.50	4.33	2.50	2.12	1.71	2.31	0.33
1.625	2.25 to 2.62	2.88	5.50	0.500	3.62	4.75	2.50	2.12	1.71	2.31	0.33
1.750	2.38 to 2.75	3.00	5.41	0.500	3.75	4.36	2.50	2.12	1.71	2.31	0.33
1.875	2.50 to 2.88	3.12	5.53	0.500	3.88	4.67	2.50	2.12	1.71	2.31	0.33
2.000	2.62 to 3.00	3.25	5.75	0.500	4.03	5.06	2.50	2.12	1.71	2.31	0.33
2.125	2.75 to 3.25	3.50	5.69	0.625	4.44	5.38	2.72	2.34	1.84	2.53	0.39
2.250	2.88 to 3.38	3.62	5.81	0.625	4.56	5.64	2.72	2.34	1.84	2.53	0.39
2.375	3.00 to 3.50	3.75	5.94	0.625	4.69	5.06	2.72	2.34	1.84	2.53	0.39
2.500	3.12 to 3.75	3.88	6.88	0.625	5.00	6.20	2.72	2.34	1.84	2.53	0.39
2.625	3.25 to 3.75	4.00	6.19	0.625	4.94	6.00	2.72	2.34	1.84	2.53	0.39
2.750	3.38 to 3.88	4.12	6.75	0.625	5.06	6.17	2.72	2.34	1.84	2.53	0.39
2.875	3.50 to 4.00	4.25	6.44	0.625	5.19	5.94	2.72	2.34	1.84	2.53	0.39
3.000	3.62 to 4.12	4.38	7.62	0.750	5.56	6.63	2.72	2.34	1.84	2.53	0.39
3.125	3.75 to 4.25	4.50	7.06	0.750	5.56	6.44	2.72	2.34	1.84	2.53	0.39
3.250	3.88 to 4.38	4.62	7.19	0.750	5.69	6.63	2.72	2.34	1.84	2.53	0.39
3.375	4.00 to 4.50	4.75	7.31	0.750	5.81	6.69	2.72	2.34	1.84	2.53	0.39
3.500	4.25 to 5.00	5.25	8.50	0.750	6.38	7.45	3.06	2.69	2.19	2.88	0.51
3.625	4.38 to 5.13	5.38	8.00	0.750	6.50	7.37	3.06	2.69	2.19	2.88	0.51
3.750	4.50 to 5.25	5.50	8.75	0.750	6.63	7.83	3.06	2.69	2.19	2.88	0.51
3.875	4.63 to 5.38	5.63	8.25	0.750	6.75	7.63	3.06	2.69	2.19	2.88	0.51
4.000	4.75 to 5.50	5.75	9.00	0.875	7.00	7.92	3.06	2.69	2.19	2.88	0.51
4.125	4.88 to 5.63	5.88	8.88	0.875	7.13	8.13	3.06	2.69	2.19	2.88	0.53
4.250	5.00 to 5.75	6.00	9.00	0.875	7.25	8.25	3.06	2.69	2.19	2.88	0.57
4.375	5.13 to 5.88	6.13	9.13	0.875	7.38	8.38	3.06	2.69	2.19	2.88	0.60
4.500	5.25 to 6.00	6.25	9.25	0.875	7.50	8.50	3.06	2.69	2.19	2.88	0.64
4.625	5.38 to 6.13	6.38	9.38	0.875	7.63	8.63	3.06	2.69	2.19	2.88	0.68
4.750	5.50 to 6.25	6.50	9.26	0.875	7.75	8.51	3.06	2.69	2.19	2.88	0.72
4.875	5.63 to 6.38	6.63	9.63	0.875	7.88	8.88	3.06	2.69	2.19	2.88	0.75
5.000	5.75 to 7.00	7.25	10.65	0.875	8.50	10.00	3.06	2.69	2.19	2.88	0.79
5.125	5.88 to 7.13	7.38	10.38	0.875	8.63	9.63	3.06	2.69	2.19	2.88	0.83
5.250	6.00 to 7.25	7.50	10.50	0.875	8.75	9.75	3.06	2.69	2.19	2.88	0.87
5.375	6.13 to 7.38	7.63	10.63	0.875	8.88	9.88	3.06	2.69	2.19	2.88	0.90
5.500	6.25 to 7.50	7.75	11.50	0.875	9.00	10.75	3.06	2.69	2.19	2.88	0.94
5.625	6.38 to 7.63	7.88	10.88	0.875	9.13	10.13	3.06	2.69	2.19	2.88	0.98
5.750	6.50 to 7.75	8.00	11.00	0.875	9.25	10.25	3.06	2.69	2.19	2.88	1.02
5.875	6.63 to 7.88	8.13	11.13	0.875	9.38	10.38	3.06	2.69	2.19	2.88	1.05
6.000	6.75 to 8.00	8.25	11.25	0.875	9.50	11.25	3.06	2.69	2.19	2.88	1.09

Other sizes available on request. Contact Flowserve Engineering.



### Seal Gard™

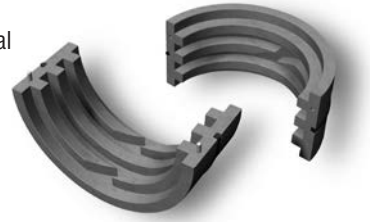
Dependable flow control saves water costs and reduces seal water. Seal Gard flowmeters are effective at controlling the environment around single and dual mechanical seals.

Clear-view flowmeter has a vertical, tapered, acrylic flow tube that resists fouling. Various sizes and features are available to properly establish the correct seal flush flow rate. In paper stock service, the Seal Gard is the ideal sealing system for a PSS 4 split seal and split flow reducer or SEB. For more information on the Seal Gard, see FSD154.



### SEB (Solids Excluder Bushing)

The SEB reduces the amount of flush required and clears solids from the seal chamber. This provides a cleaner operating environment that helps reduce operating costs and improves Mean Time Between Planned Maintenance (MTBPM). For more information on the SEB, see FSD211.



### Split Flow Reducer

An engineered, close clearance device that lowers seal water flush (Plan 32) requirements when used with a Flowserve seal. Split axially for easy installation and constructed of glass-filled PTFE for corrosion and abrasion resistance.



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#### USA and Canada

Kalamazoo, Michigan USA  
Telephone: 1 269 381 2650  
Telefax: 1 269 382 8726

#### Europe, Middle East, Africa

Roosendaal, The Netherlands  
Telephone: 31 165 581400  
Telefax: 31 165 554590

#### Asia Pacific

Singapore  
Telephone: 65 6544 6800  
Telefax: 65 6214 0541

#### Latin America

Mexico City  
Telephone: 52 55 5567 7170