

Mechanical Seal Styles

P/S®-II Flexible GYLON® Element Cartridge Seal

Effectively seals dense and viscous fluids

The P/S-II seal is a cartridge mounted multi-lip seal, which is designed to seal those thick, viscous, temperature sensitive products that create problems for face seals. The P/S-II seal is extremely successful sealing positive displacement and centrifugal pumps, within the published operating limits. The seal is not recommended in applications where the sealed product contains solids. Simple repair kits available.

Benefits

- ◆ GYLON® sealing elements
 - Are non-clogging/non-sticking in viscous fluids
 - Offer excellent chemical resistance and dry running capability
- ◆ Unique multi-lip cartridge design
 - Is unaffected by axial end play, intermittent operation or torque
 - Permits pump reversal
- ◆ Machined gland is very versatile; designed to fit the equipment
- ◆ Hard coated sleeve prevents damage to equipment
- ◆ Rebuild kit available for easy in-field repair
- ◆ One moving part, no springs to clog

Ideal for

- ◆ Positive displacement pumps:
 - Viking
 - Moyno
 - Blackmer
 - Roper
 - Tuthill
 - Many others
- ◆ Centrifugal pumps:
 - Durco
 - Many others
 - Goulds
- ◆ Mixers
- ◆ Conveyors
- ◆ Rotary valves



Materials

- ◆ Metal parts: 316SS (other materials available)
- ◆ Set screws: Hastelloy C*
- ◆ O-rings: Fluoroelastomer standard (other materials optional)
- ◆ Sealing elements: GYLON®
- ◆ Sleeve coating: Chrome oxide standard (other coatings optional)

*Hastelloy C is a registered trademark of Haynes International. Other materials available. Consult Garlock Klosure.

Typical Applications

- ◆ Adhesive
- ◆ AFFF
- ◆ Asphalt
- ◆ Chocolate
- ◆ Emulsions
- ◆ Fats
- ◆ Fructose
- ◆ Fuels
- ◆ Glue
- ◆ Ink
- ◆ Latex
- ◆ Molasses
- ◆ Oil
- ◆ Paints
- ◆ Paper coatings
- ◆ Polymer resins
- ◆ Sealants
- ◆ Soaps
- ◆ Starch
- ◆ Syrups
- ◆ Tallow
- ◆ Tar
- ◆ Varnish
- ◆ Wax

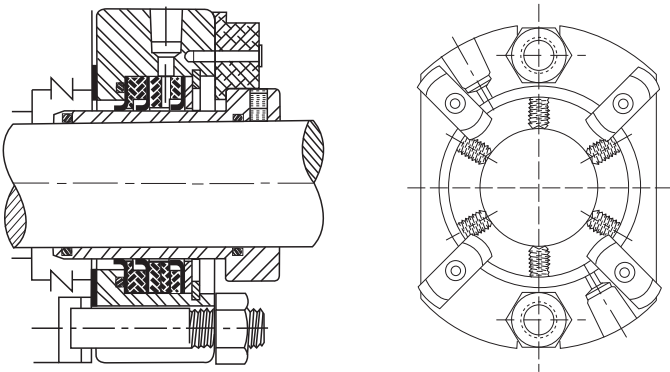
P/S® -II (continued)

Specifications

Pressure	To 150 psi (10 bar)
Vacuum:	28" (711mm) Hg with proper design
Temperature:	To 300°F (-149°C); Over 300°F, consult Garlock Klozure Mechanical Seals
Surface Speed:	To 700 fpm (3.5 m/s) dry; to 2,500 fpm (12.7 m/s) with lubrication
Runout:	Up to 0.005" (0.13 mm) TIR
Axial motion:	± 0.125" (3.2 mm)

Standard 3-lip Design with Quench Ports

Round, elliptical and other special gland configurations available



Viking Pump Model No.	Shaft Size (Inches)	Seal Code No.	Adapter Code No.	P/S®-II Seal w/ Adapter Code No.	Adapter
G125	0.750	06-012-050-	JZ-012-001-	06-012-002-	Mandatory
H-HL 124	1.125	06-018-050-	JZ-018-002-	06-018-003-	Mandatory
H-HL 125	1.125	06-018-050-	JZ-018-004-	06-018-004-	Mandatory
H-HL 225	1.125	06-018-050-	JZ-018-004-	06-018-004-	Mandatory
J32	1.125	06-018-050-	JZ-018-004-	06-018-004-	Recommended
K-KR 32	1.125	06-018-050-	JZ-018-004-	06-018-004-	Recommended
HHL724	1.125	06-018-001	N/A	N/A	N/A
UNIV.H-HL	1.125	06-018-051-	JZ-018-003-	06-018-002-	Optional
L-LL/K-KK 4124/5	1.437	06-023-050-	JZ-023-005-	06-023-028-	Mandatory
L-LL-LQ 124	1.437	06-023-050-	JZ-023-006-	06-023-003	Mandatory
L-LL-LO 724	1.437	06-023-050-	JZ-023-003-	06-023-003-	Mandatory
L-LL 125	1.437	06-023-050-	JZ-023-003-	06-023-002-	Mandatory
L-LL 225	1.437	06-023-050-	JZ-023-003-	06-023-002-	Mandatory
LL 32	1.437	06-023-050-	JZ-023-003-	06-023-002-	Recommended
L-LO 32	1.437	06-023-050-	JZ-023-003-	06-023-002-	Recommended
LO 34	1.437	06-023-050-	JZ-023-003-	06-023-002-	Recommended
L-LL UNIV.	1.437	06-023-051-	JZ-023-002-	06-023-004-	Mandatory
K-KK 124	1.437	06-023-050-	JZ-023-006-	06-023-003-	Mandatory
K-KR 125	1.437	06-023-050-	JZ-023-003-	06-023-002-	Mandatory
K-KK 225	1.437	06-023-050-	JZ-023-003-	06-023-002-	Mandatory
K-KK 724	1.437	06-023-050-	JZ-023-003-	06-023-002-	Mandatory
K-KR UNIV.	1.437	06-023-051-	JZ-023-002-	06-023-004-	Mandatory
AK-AL 125	1.437	06-023-050-	JZ-023-003-	06-023-002-	Mandatory
LS 124	1.625	06-026-050-	JZ-026-001-	06-026-001-	Mandatory
LS 125	1.625	06-026-050-	JZ-026-001-	06-026-001-	Mandatory
LS 225	1.625	06-026-050-	JZ-026-001-	06-026-001-	Mandatory
LS UNIV.	1.625	06-026-051-	JZ-026-001-	06-026-002-	Optional
Q-M 34	1.937	06-031-050-	JZ-031-001-	06-031-001-	Optional
MR 124	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
M 125	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
M 225	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
N 32	2.437	06-039-050-	JZ-039-002-	06-039-002-	Optional
N 34	2.437	06-039-050-	JZ-039-002-	06-039-002-	Optional
Q 124	2.437	06-039-010-	N/A	N/A	Piloted Gland
QR 124	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
Q 125	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
Q 4125	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
Q 225	2.437	06-039-050-	JZ-039-001-	06-039-001-	Mandatory
Q-QS UNIV.	2.437	06-039-051-	JZ-039-001-	06-039-003-	Optional
N-R 333;335;337	3.437	06-055-050-	JZ-055-002-	06-055-002-	Optional
N-R 4335	3.437	06-055-050-	JZ-055-001-	06-055-001-	Optional
P 333;335;337	4.500	06-072-050-	JZ-072-001-	06-072-001-	Optional

Ordering P/S®-II seals for Viking Pumps

1. Identify the pump model and from the table determine if a seal chamber adapter is optional or mandatory.
2. If a seal chamber is required, use the product code in the "P/S®-II seal w/Adapter Code No." column.
3. If the P/S®-II seal and seal chamber are ordered separately, use product codes in "Seal Code No." and "Adapter Code No." columns respectively.

*AFLAS is a trademark of Asahi Glass Company
 **KALREZ is a registered trademark of DuPont

Material Codes for Standard P/S®-II Seals

G060

- Black GYLON® Elements
- PTFE Spacers
- Fluoroelastomer O-rings
- 316 Stainless Steel

G061

- Black GYLON® Elements
- PTFE Spacers
- EPR O-rings
- 316 Stainless Steel

G062

- Black GYLON® Elements
- PTFE Spacers
- KALREZ** O-rings
- 316 Stainless Steel

G064

- Black GYLON® Elements
- PTFE Spacers
- AFLAS* O-rings
- 316 Stainless Steel

G936

- Black GYLON® Elements
- PTFE Spacers
- KALREZ/Fluoroelastomer O-rings
- 316 Stainless Steel

G954

- Black GYLON® Elements
- PTFE Spacers
- KALREZ/AFLAS* O-rings

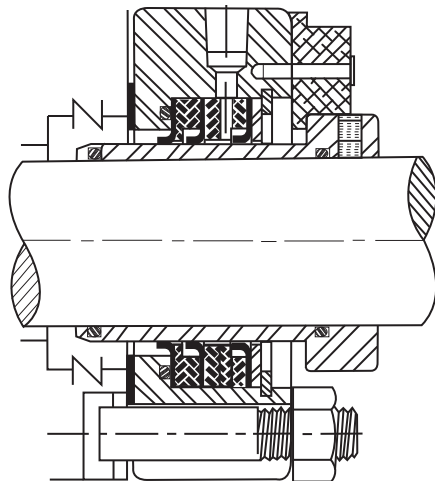
Blackmer Pump Model No.	Pump Revision	Shaft Size (Inches)	Seal Code No.	P/S®-II Seal w/ Adapter Code No.	Transition Plate Code No.
SNP 1-1/4 & 1-1/2	-	0.875/1.000	06-014-052-	-	-
SNP2	-	1.000	06-016-052-	-	-
NP 1-1/2*	-	1.062	06-017-006-	06-017-052-	6V-017-001-
NP 1-1/2*	A & B	1.062	06-017-006-	06-017-052-	GV-017-001-
NP2*	C & E	1.125	06-018-052-	-	-
SNP 2-1/2**	-	1.125/1.375	06-018009-	-	-
NP2	A & B	1.187	06-019-002-	06-019-052-	GV-019-001-
NP 2-1/2	C & E	1.375	06-022-052-	-	-
NP3	C & E	1.375	06-022-052-	-	-
SNP3	A	1.375	06-022-052-	-	-
SNP3	-	1.375	06-022-052-	-	-
NP 2-1/2*	A&B	1.437	06-023-052-	-	-
NP3	A & B	1.437	06-023-052-	-	-
MLN4**	A&B	1.750/2.164	06-028-052-	-	-
NP4	C & E	2.125	06-034-052-	-	-
NP4	A & B	2.187	06-035-052-	-	-
SLN4	-	2.250	06-036-052-	-	-

*Transition plate must be used for these pump models. Select the P/S®-II seal with transition plate in the "P/S®-II Seal w/ Adapter Code No." column.

** Shaft is stepped.

Ordering P/S®-II seals for Blackmer Pumps

1. Identify the pump model and pump revision level.
2. Select the P/S®-II product code in "Seal Code No. column."
3. Seals showing a transition plate in "P/S®-II Seal w/ Trans. Plate Code No." column must be ordered this way the first time.



Material Codes for Standard P/S®-II Seals

G060

- Black GYLON® Elements
- PTFE Spacers
- Fluoroelastomer O-rings
- 316 Stainless Steel

G061

- Black GYLON® Elements
- PTFE Spacers
- EPR O-rings
- 316 Stainless Steel

G062

- Black GYLON® Elements
- PTFE Spacers
- KALREZ† O-rings
- 316 Stainless Steel

G064

- Black GYLON® Elements
- PTFE Spacers
- AFLAS†† O-rings
- 316 Stainless Steel

G936

- Black GYLON® Elements
- PTFE Spacers
- KALREZ/Fluoroelastomer O-rings
- 316 Stainless Steel

Material Codes for Transition Plate

- S000 316 Stainless Steel
- H000 HASTELLOY C‡
- A002 Alloy 20

†KALREZ is a registered trademark of DuPont

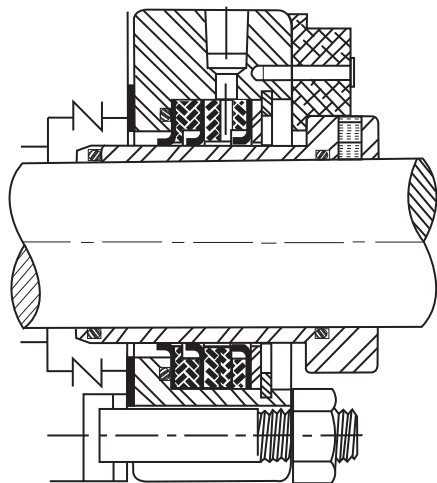
††AFLAS is a trademark of Asahi Glass Company

‡ HASTELLOY C is a registered trademark of Haynes International.

Tuthill Global Gear Pump Model No.	Shaft Size (Inches)	P/S®-II Seal Code No.
GG 015	1.125"	06-018-025-
GG 030	1.125"	06-018-025-
GG 050	1.375"	06-022-027-
GG 070	1.375"	06-022-027-
GG 080	1.375"	06-022-027-
GG 090	1.375"	06-022-027-
GG 120	1.750"	06-028-029-
GG 130	1.750"	06-028-029-
GG 200	1.750"	06-028-029-
GG 210	1.750"	06-028-029-
GG 250		
GG 500		
GG 550		

Ordering P/S®-II seals for Tuthill Pumps

1. Identify the pump model and pump revision level.
2. Select the P/S®-II product code in "Seal Code No. column."



Material Codes for Standard P/S®-II Seals

G060

- Black GYLON® Elements
- PTFE Spacers
- Fluoroelastomer O-rings
- 316 Stainless Steel

G061

- Black GYLON® Elements
- PTFE Spacers
- EPR O-rings
- 316 Stainless Steel

G062

- Black GYLON® Elements
- PTFE Spacers
- KALREZ† O-rings
- 316 Stainless Steel

G064

- Black GYLON® Elements
- PTFE Spacers
- AFLAS†† O-rings
- 316 Stainless Steel

G936

- Black GYLON® Elements
- PTFE Spacers
- KALREZ/Fluoroelastomer O-rings
- 316 Stainless Steel

Material Codes for Transition Plate

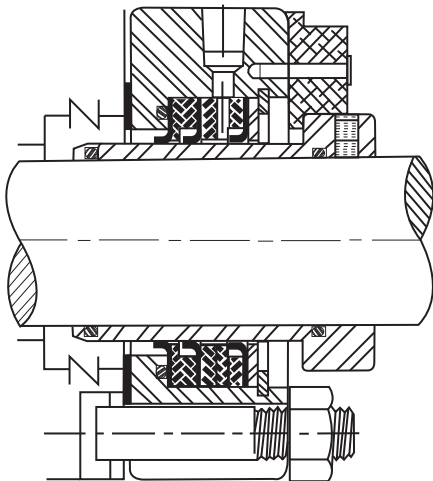
- S000 316 Stainless Steel
- H000 HASTELLOY C‡
- A002 Alloy 20

†KALREZ is a registered trademark of DuPont
 ††AFLAS is a trademark of Asahi Glass Company
 ‡ HASTELLOY C is a registered trademark of Haynes International.

Desmi-Rotan Pump Model No.	Shaft Size (Inches)	P/S®-II Seal Code No.
26	20 MM	
33	20 MM	
41	25 MM	
51	35 MM	06-535-004-
66	36 MM	06-535-004-
81	50 MM	06-550-003-
101	50 MM	06-550-003-
126	60 MM	06-560-
151	60 MM	06-560-
152	70 MM	06-570-004-
201	85 MM	06-585-002-

Ordering P/S®-II seals for Desmi-Rotan Pumps

1. Identify the pump model and pump revision level.
2. Select the P/S®-II product code in "Seal Code No. column.



Material Codes for Standard P/S®-II Seals

G060

- Black GYLON® Elements
- PTFE Spacers
- Fluoroelastomer O-rings
- 316 Stainless Steel

G061

- Black GYLON® Elements
- PTFE Spacers
- EPR O-rings
- 316 Stainless Steel

G062

- Black GYLON® Elements
- PTFE Spacers
- KALREZ† O-rings
- 316 Stainless Steel

G064

- Black GYLON® Elements
- PTFE Spacers
- AFLAS†† O-rings
- 316 Stainless Steel

G936

- Black GYLON® Elements
- PTFE Spacers
- KALREZ/Fluoroelastomer O-rings
- 316 Stainless Steel

Material Codes for Transition Plate

- S000 316 Stainless Steel
- H000 HASTELLOY C‡
- A002 Alloy 20

†KALREZ is a registered trademark of DuPont

††AFLAS is a trademark of Asahi Glass Company

‡HASTELLOY C is a registered trademark of Haynes International.