



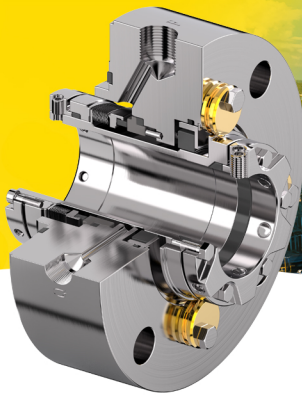
APOG-CRFL

SINGLE CARTRIDGE SEAL

CATEGORY 2/3

TYPE C

1CW-FL



TECHNICAL FEATURES

- Primarily utilized to suit the requirements of the Oil and gas industry application defined by API682.
- The sealing configuration is 1CW-FL, Contacting single wet seal with a floating throttle bushing.
- The combination of rotating bellows and flexible graphite can effectively cope with various high-temperature or low-temperature working conditions.
- The sealing adopts distributed flushing, which can evenly cool the friction surface.
- Equipped with Quench and Drain environmental ports.
- Narrow seal face width leads to low heat genera on and power consump on .
- Extended seal life.

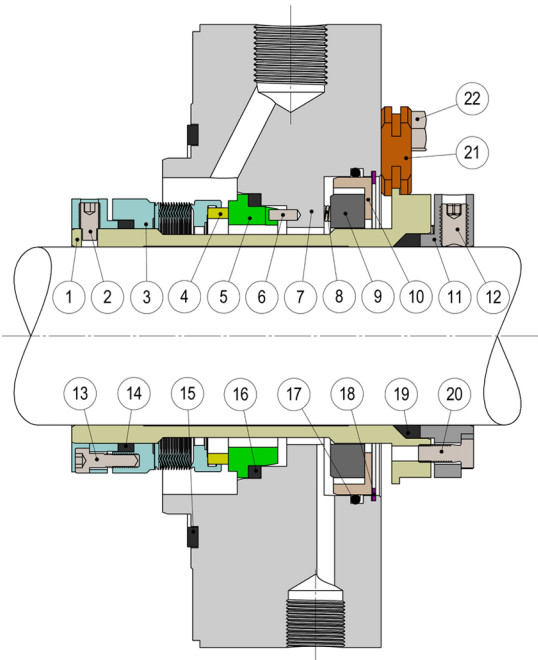
RECOMMENDED PIPING PLANS

Process side	01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 32, 41
Atmospheric side	61, 62, 65A, 65B

PERFORMANCE CAPABILITIES

Shaft diameter	20 ~110 mm (0.79" ~ 4.33")
Pressure	≤ 16 bar
Temperature	-40 ° C ~ +400 ° C
Sliding velocity	≤ 25 m/s

PRODUCT STRUCTURE DIAGRAM



PRODUCT DESCRIPTION

- API 682 Category 2/3, Type C, Arrangement 1
- Single seal configuration
- Balanced design
- Independent of direction of rotation
- Cartridge Construction
- Rotary metal bellows design

TYPICAL INDUSTRIAL APPLICATIONS

- API 610/ISO 13709 pumps
- Refining technology
- Oil and gas industry
- Petrochemical industry
- Chemical industry
- Power plant technology
- LPG plants
- Process pumps

THE COMPARISON CHART OF STANDARD MATERIAL

NO.	Name	Material
1	Sleeve	316SS/Hast.C/D2205/D2507/904L
2	Drive Screw	A2-70
3	Metallic Bellows	AM350/Hast.276.Hast.718
4	Rotary Face	Carbon/SIC/TC
5	Stationary Face	Carbon/SIC/TC
6	Pin	316SS
7	Gland	316SS/Hast.C/D2205/D2507/904L
8	Spring	Hast.C
9	Bush Ring	Carbon
10	Bush Ring Seat	316SS
11	Clamp Ring	316SS
12	Drive Screw	A2-70
13	Clip Screws	A2-70
14	Graphite Gasket	Graphite
15	Graphite Gasket	Graphite
16	Graphite Gasket	Graphite
17	O-Ring	FKM/EPDM/Aflas/Kalrez
18	Circlip	316SS
19	Graphite Gasket	Graphite
20	Clip Screws	A2-70
21	Setting Clips	304SS
22	Setting Screw	A2-70

