



## Contamination Prevention for Dry Gas Sealing Systems

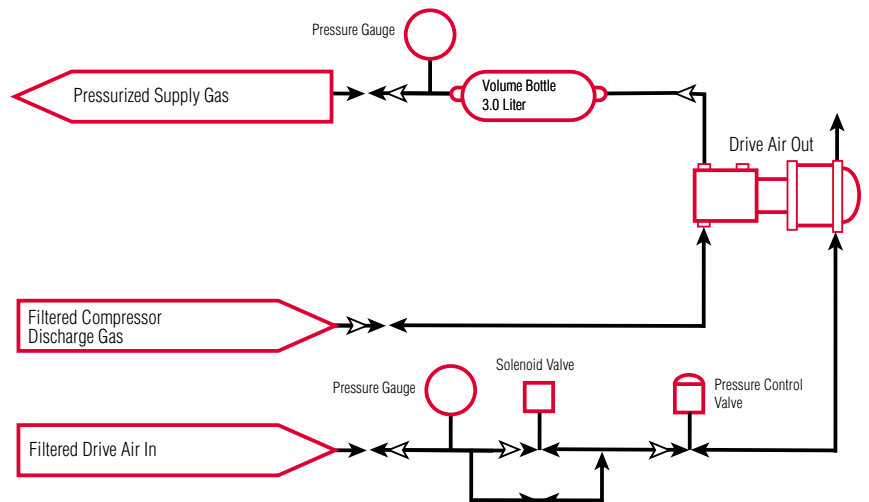
Flowserve's AMPLIFLOW™ was developed to eliminate process contamination, the number one cause of dry gas seal failures. The AMPLIFLOW™ ensures the supply of clean filtered gas to the seals by boosting supply gas pressure during periods of low compressor pressure differential.

## Configurations

- > Portable unit
- > Stand-alone panel
- > Integrated with Revolve dry gas seal control panel
- > Integrated with Revolve Pre-filter panel

## Possible Periods of Low Differential Pressure

- > Start-up
- > Idle
- > Recycle
- > Process sequence
- > Shut-down
- > Cool-down
- > Slow-roll



# Operating Characteristics

## Process Gas Boost

- AMPLIFLOW™ provides a boost in gas pressure equal to 1.5 times the drive gas pressure (e.g., if air is provided at 100 psig, the resultant seal supply gas pressure boost is 150 psig).

## Drive Gas Consumption

- Figure 1 illustrates the drive gas consumption for AMPLIFLOW™ to provide 70 SCFM of gas flow to the seal, for various seal gas supply pressures.

## Seal Gas Supply Flowrate

- Figure 2 illustrates seal supply gas flow with and without the use of AMPLIFLOW™. This graph is for a natural gas transmission compressor with suction pressure of 700 psig and discharge pressure of 880 psig.

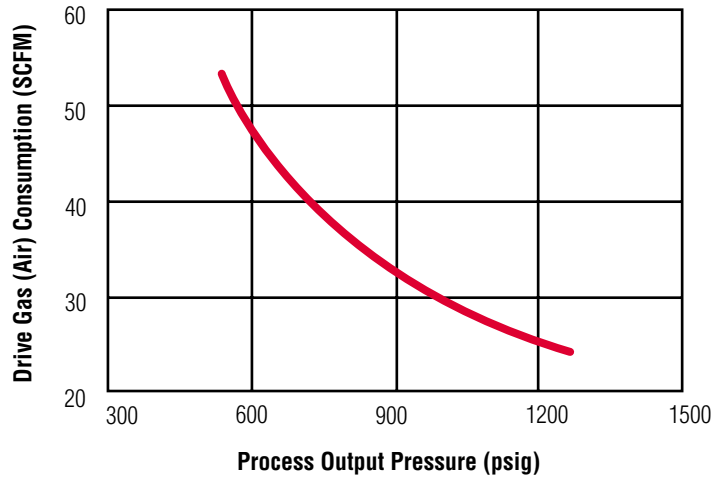
## Design Specifications

Standard AMPLIFLOW™

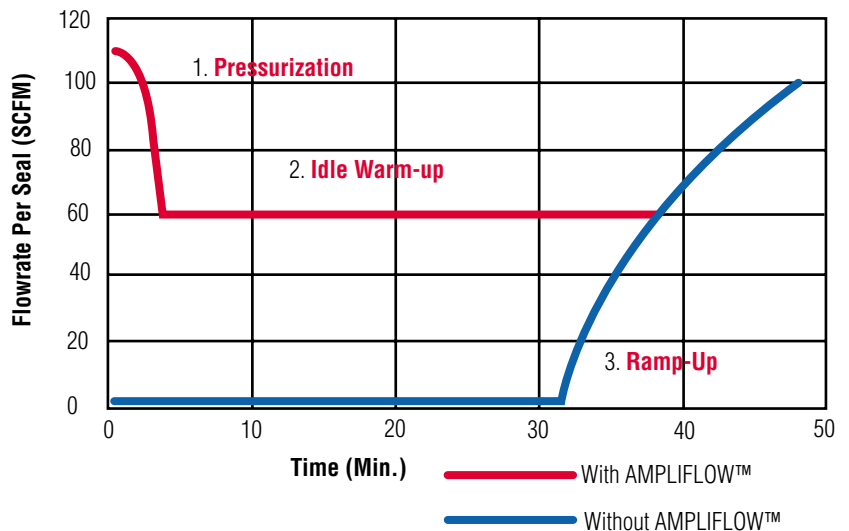
- Maximum Pressure: 1800 psig
- Maximum Flow Rate: 2.9 ACFM
- Maximum Drive Gas Consumption: 5.2 ACFM
- Design Temperature: 300°F

Higher design pressures are also available.

**Figure 1: Drive Gas Consumption Versus Output Pressure**



**Figure 2: Seal Gas Supply Flow Rate**



## Flowserve's 50K Plus™ Program

50k Plus™ is a program designed to help ensure dry gas seal reliability in excess of 50,000 hours. Flowserve works with customers to minimize risks that contribute to seal failures by reviewing the entire system and operation.



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