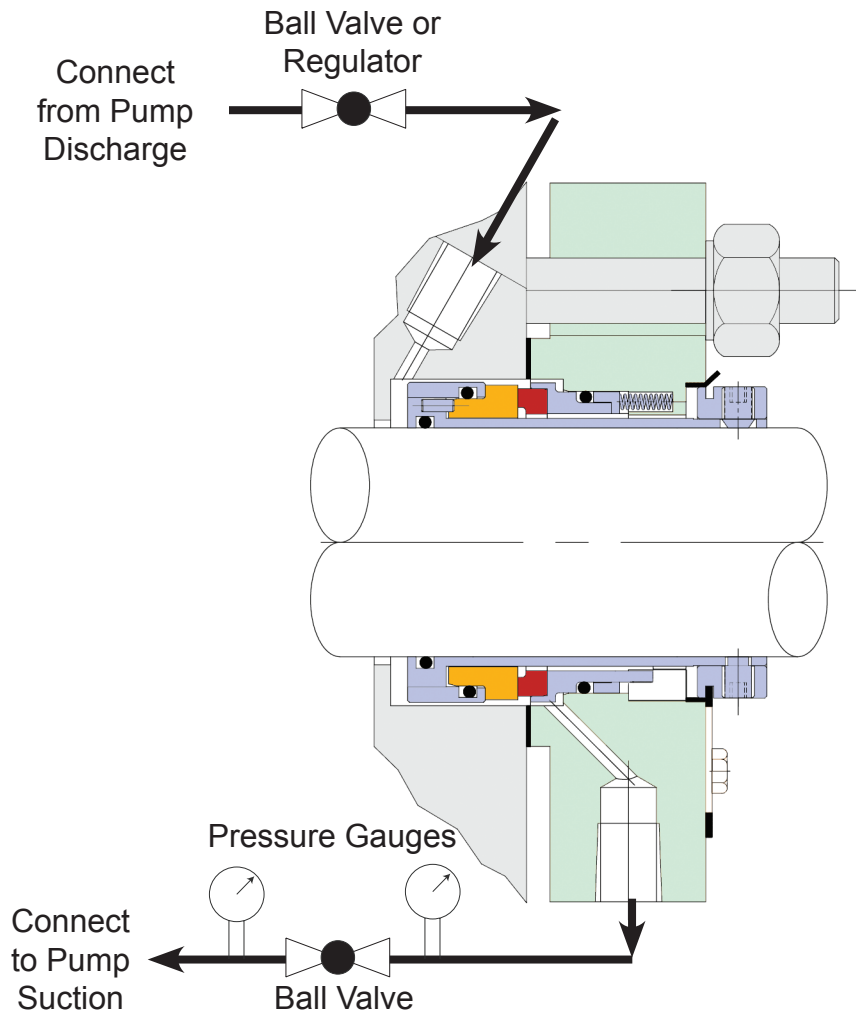


## SINGLE CARTRIDGE SEALS DISCHARGE/SUCTION BY-PASS A3327A

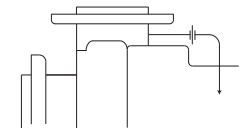
### INSTALLATION, SET-UP AND MAINTENANCE OF SINGLE SEALS USING DISCHARGE/SUCTION BY-PASS FLUSHES



1. Carefully follow installation instructions as suggested by SEPCO<sup>®</sup> for the seal being installed. Care should be taken to insure the flush connections in the stuffing box and seal gland are orientated for easily connecting the by-pass lines. It is normally preferred to use 3/8" tubing for the discharge by-pass and 1/4" tubing for the suction by-pass.
2. Discharge / Suction by-pass flushes are recommended in conjunction with single seals installed on vertical in-line pumps as well as horizontal-mounted ANSI pumps moving liquids that contain abrasive solids. The pumped product is employed to vent trapped air and provide cooling. It is essential for the pumped product to have adequate lubricating properties and be relatively clean.
3. After the pump is installed on line and the seal gland has been fastened to the stuffing box, connect the flush lines as shown. Start the pump with both ball valves in the closed position. Record the suction pressure as indicated by the gauge located between the ball valve and pump suction and the stuffing box pressure indicated by the pressure gauge installed between the seal gland and the ball valve on the suction by-pass piping. Open both ball valves and regulate the stuffing box pressure 15 psig higher than the suction pressure

#### API Plan 11

Recirculation from Pump Case  
through Orifice to Seal



#### API Plan 13

Recirculation from Seal Chamber through  
Orifice and Back to Pump Suction

