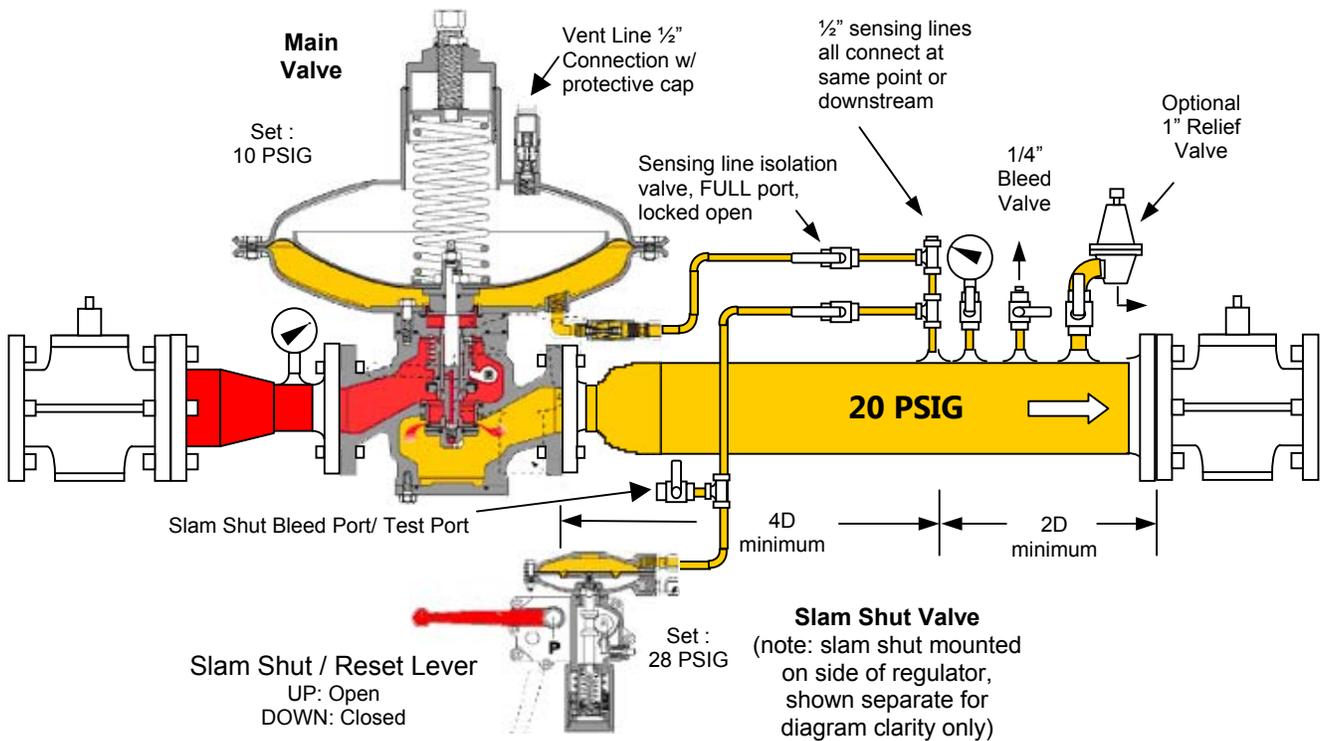


Typical NORVAL with SN/92 Slam Shut Set



Description: A regulator with integrated slam shut provides for a simple, compact set with a high level of safety. The main spring loaded regulator is set for desired outlet pressure. The Slam shut is set 20 - 40% above the set pressure of the main regulator. Under normal operating conditions the slam shut stays wide open and the main regulator opens and shuts to meet the downstream demand. Should the main regulator not be able to regulate and close bubble tight under no flow conditions, the pressure would slowly rise to the set trip point of the slam shut. At this point, the slam shut would close, thus keeping the downstream piping from over-pressurizing.

Installation Considerations:

1. Pressure gauges should be installed on inlet, and on the outlet of the regulator
2. Sensing lines should be connected in straight unobstructed section of pipe at least 4 pipe diameters downstream from the regulators, with an additional 2 pipe diameters of straight pipe after the sensing line connections. If the pipe flares up after the regulators, then sensing lines should be installed in this larger diameter pipe.
3. Isolation Shutoff valves can be installed on the sensing lines but they must be FULL port and locked in the open position during normal operation to insure they are never accidentally closed – this can cause regulator to go wide open.
4. Bleed valves can be added to the sensing lines to facilitate maintenance. They should be locked in the closed position and plugged. Bleed valves on the main sensing lines should only be used to remove pressure from the line – not to adjust set pressure. The bleed line on the slam shut can be used to test and reset the slam shut.
5. A Primary Bleed valve should be installed downstream of the set. This can be used to maintain flow while making adjustments.
6. A Token Relief Valve can be installed on the outlet side of the set to indicate monitor operation or full failure (depending on set point)
7. If installed inside the vent on the main valve, slam shut and relief valve should be independently piped to safe location

Note: All adjustments should be made with gas flowing (either downstream equipment running or using the main bleed valve. If using a small bleed valve keep in mind that it may take some time to relieve the line pack)