An Alicat Dual Valve Pressure Controller with External Pressure Port (PCD3-100PSIG-D) is used to control the process pressure in a closed chamber.

Because the flow rate into the chamber can be quite high, a significant flow induced pressure drop may occur in the process line.

If an internal pressure sensor were to be used, this would cause the indicated and actual chamber pressures to be noticeably different.

The use of a separate pressure sense line directly connected to the process chamber eliminates this source of error.