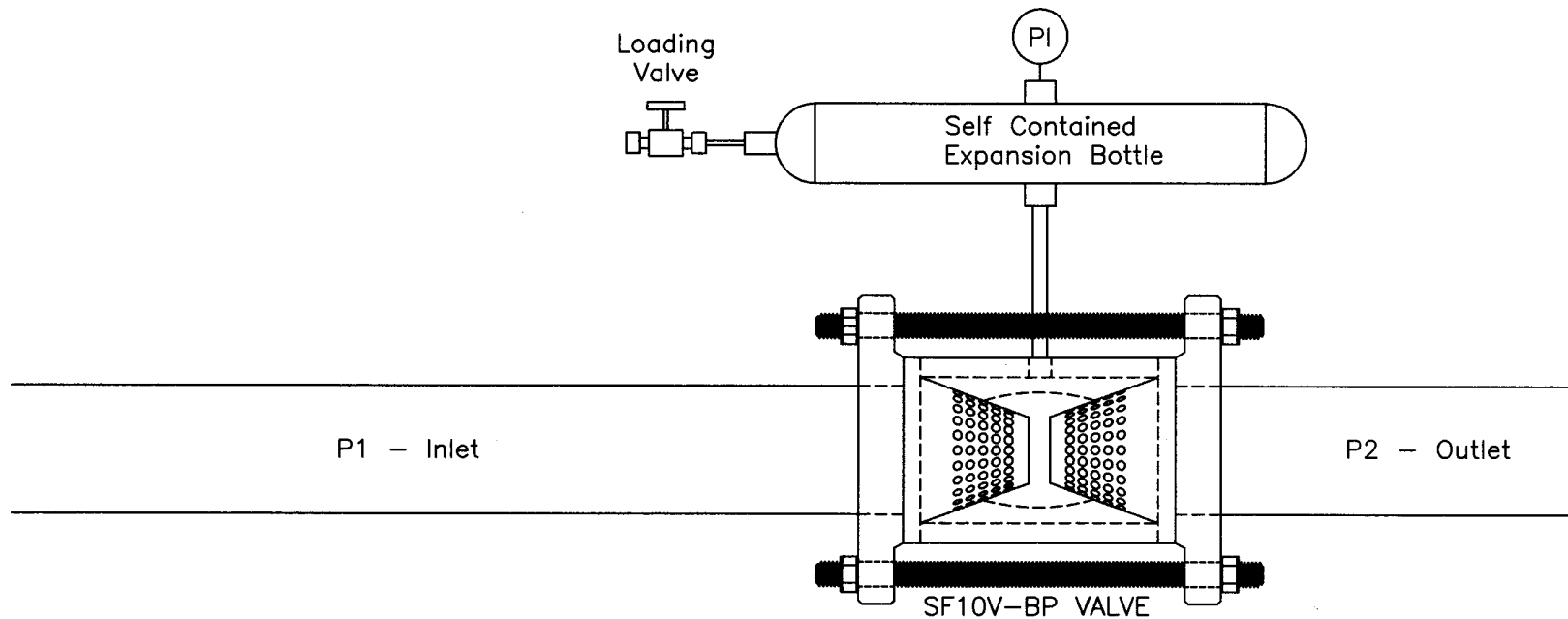


Principle Of Operation:

To commission the valve to operate as a back pressure valve (or pressure relief valve), simply precharge the expansion bottle (with either nitrogen or field gas), through the loading valve, to the desired back pressure. Caution must be taken to ensure the expansion bottle is charged to the desired set pressure before any flow is allowed through the valve. This will ensure that no damage is incurred to the sleeve. The valve can also be charged using the P1 pressure. This is accomplished by taking a slip line from the P1 line to the load valve of the expansion bottle. As the P1 builds pressure, it will pressure our expansion bottle at the same rate. This locks our valve up 100 % bubble tight until you reach your desired operating pressure. Close the needle valve into the expansion bottle once you have reached your operating pressure. The SF10V Valve will now operate and open once your vessel exceeds the valves new set pressure.

Note: Optional independent supplied pressure must be equal to or greater than back pressure to be maintained.

Expansion bottle is independently mounted using a tube line to attach it to the housing charge chamber. It is recommended not to attach the expansion bottle to a building wall (fluctuating wall temperature may affect set pressure slightly).



TOLERANCES UNLESS OTHERWISE STATED
 .X ±0.100"
 .XX ±0.030"
 .XXX ±0.015"
 SURFACE FINISH 63 Ra
 ALL DIMENSIONS ARE IN INCHES
 BREAK ALL SHARP EDGES

REV	DESCRIPTION

MATERIAL:

SUR-FLO METERS & CONTROLS LTD
 CALGARY, ALBERTA

SCALE NPS	APPD.	TITLE: Back Pressure Schematic	
DATE 01-11-00	DRN. D.N	DWG. NO SF10V BP VALVE	REV. 0