



ESI

Technologies Group

Process Equipment Specialists



Setting the pressure on a Tescom Pressure-Regulating Valve

Step-by-step guide



This is a typical clean air user point in a Clean Room

It consists of a ***manual isolation valve***, a ***pressure regulating valve*** and a ***tri-clamp blank*** and ***clamp*** at the end of the pipe.

Pressure Regulating Valve (PRV)

The Pressure Regulating Valve sets the pressure in the pipe (and the equipment connected to the pipe).

It is important to note that the pressure should be set to ***static***.





Setting the PRV to the set pressure

Step One

Close the manual isolation valve.



Setting the PRV to the set pressure

Step Two

Remove the tri-clamp blank to purge the air out of the pipe.



Setting the PRV to the set pressure

Step Three

- Turn the handle of the Tescom PRV in the direction of low pressure.
- In this case, it is ***anti-clockwise***.



Setting the PRV to the set pressure

Step Four

- Put the tri-clamp blank and clamp back on the pipe.
- Open the manual valve.
- The pressure gauge on the PRV should read **zero**.
- Leave this set-up as it is for a few minutes and observe the pressure gauge. The pressure should remain at zero during this time.
- If the pressure begins to increase, there is a problem with the PRV and it needs to be examined and probably repaired.



Setting the PRV to the set pressure

Step Five

- Slowly turn the handle of the PRV in the direction of high pressure.
- In this case, that is ***clockwise***.



Setting the PRV to the set pressure

Step Six

- The pressure gauge on the PRV displays the set pressure.
- When the pressure increases to the set pressure stop turning the handle of the PRV.
- The set point should not be altered beyond this point.
- Observe the set pressure for a few minutes and ensure it does not move from the set point pressure. If the pressure increases the PRV needs to be examined and probably repaired.



Setting the PRV to the set pressure

Step Seven

- If you exceed the set point pressure you will not be able to reduce it by simply turning the handle of the PRV anti-clockwise. *It is important to remember this point!*
- You must repeat steps one and two to purge out the air and then turn the handle of the PRV anti-clockwise to reduce the setting of the PRV.
- Then follow steps five and six again.