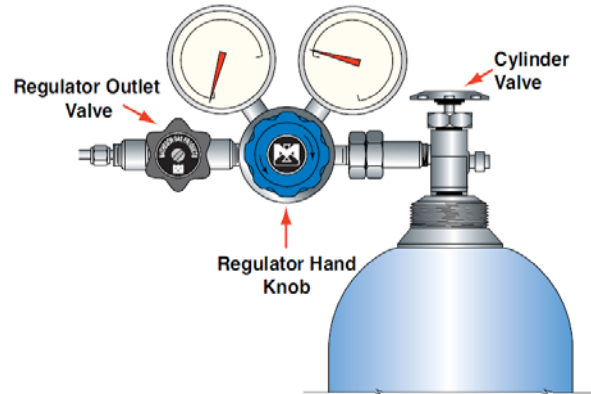


How to use a gas regulator



Connecting the Regulator to the Cylinder:

1. Check that the gasket is good.
2. Close the regulator by rotating the hand knob in a counterclockwise direction.
3. Close the regulator outlet valve by rotating the valve knob in a clockwise direction.
4. Connect the regulator to the cylinder. The regulator should be attached to the cylinder without forcing the threads. If the inlet of the regulator does not fit the cylinder outlet, it is likely that the regulator is not intended for the gas service.
5. Slowly open the gas cylinder valve. Check the inlet pressure gauge to ensure that it registers the expected value. Low cylinder pressure may indicate a leaking valve, which can be a serious safety issue.
6. Check all high-pressure connections for leaks using an approved soap solution or leak detection device.

Setting the Delivery Pressure and Gas Flow:

6. Open the cylinder valve completely.
7. Adjust the regulator hand knob to raise the delivery pressure to the desired value. Do not exceed the maximum delivery pressure indicated by the model number label on the regulator.
8. Open the outlet valve on the regulator to establish gas flow to the system. This valve is used to control the gas flow. **The regulator itself should not be used as a flow controller by adjusting the pressure to obtain different flow rates. This practice defeats the purpose of the pressure regulator, and may result in a pressure setting that is in excess of the design pressure of the system.**

9. After flow is established, the set delivery pressure may decrease slightly. Check to see that the delivery pressure is as desired and make any necessary adjustments.

Shutting Down the Gas Flow:

For temporary shutdown (less than 30-minute duration), simply close the regulator outlet valve.

For extended shutdown (beyond 30-minute duration) follow these steps:

1. Shut off the gas cylinder valve completely.
2. Shut down any additional gas supplies that may be supplying gas to the system.
3. Open the regulator and the outlet valve to drain the contents of the regulator through the system in use. Both regulator gauges should descend to zero.
4. When using a toxic or other hazardous gas, purge the regulator and system with an inert gas.
5. Close the regulator by rotating the hand knob counterclockwise. Close the outlet valve by rotating the valve knob clockwise.

Removing the Regulator from the Cylinder:

6. Disconnect the regulator from the system or downstream equipment.
7. Disassemble the regulator from the cylinder by slowly loosening the cylinder connection. Listen for gas seepage. If leakage is evident, re-tighten the cylinder connection immediately, and check the cylinder valve for proper closure. If leakage occurs when the cylinder valve is closed, and the regulator has been drained of all gases, contact the gas supplier immediately.
8. Replace the plug into the cylinder valve outlet (where applicable). Replace the cap on the cylinder over the valve. Remove the cylinder from the work place and put the cylinder into a safe storage area. Replace the empty cylinder with a new one and re-install the regulator.