

Setup flushing gas pressure reducer

Flushing gas type and target outlet gas pressure:

- NG: Krypton 5.0 @ 800 mbar
- CO2: Helium 5.0 @ 800 mbar

Procedure:

1. Isolate the system against atmosphere:
 - NG: attach an empty sample container (re-use a copper seal), open the lid valve
 - CO2: attach an empty, closed glass jar with the glass valve open(For both, you can also attach the container lid with the lid/glass valve closed; this will simply require more pumping steps at the beginning.)
2. Make sure the flushing gas bottle is open
3. Make sure the flushing gas bottle outlet valve is open
4. Turn the pressure adjustment knob on the pressure reducer counter-clockwise (all the way out; it will not fall off).
5. Switch to [PUMP] until the indicated pressure on the manometer is much lower than the target pressure.
6. Switch to [FLUSH] → the outlet pressure should drop
7. Repeat switching between [PUMP] and [FLUSH] until the outlet pressure is more than 100 mbar below the target pressure.
8. With the 3-way valve set to [FLUSH], rotate the pressure adjustment knob clockwise (while tapping the gauge with a finger) until the outlet pressure is ~50 mbar below the target pressure
9. Wait for at least 15 seconds, before very slowly (over ca 15-30 seconds) increase the outlet pressure to the target value by turning the pressure adjustment knob clockwise while continuously tapping the gauge with one finger.
10. Check the indicated pressure on the manometer: this should be about 40-80 mbar lower than the outlet pressure you set (this is due to the backflow preventer valve having a threshold pressure of about 60 mbar)

Now your outlet pressure is set; as long as the knob is not turned it should not change. The outlet pressure gauge may show a slightly increased pressure when the system is not set to [FLUSH], though this should jump back to the set value immediately when flushing.

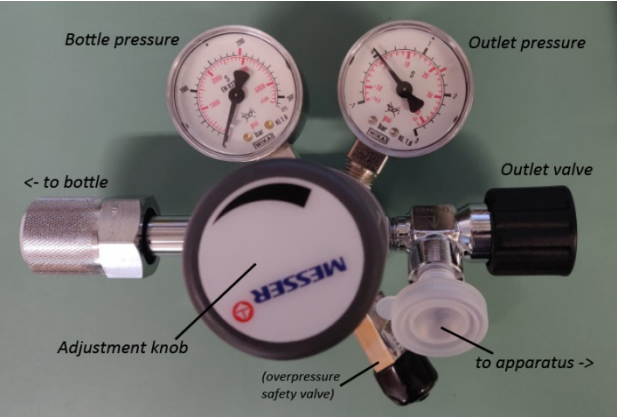


Fig. F-1: Flushing gas pressure reducer

