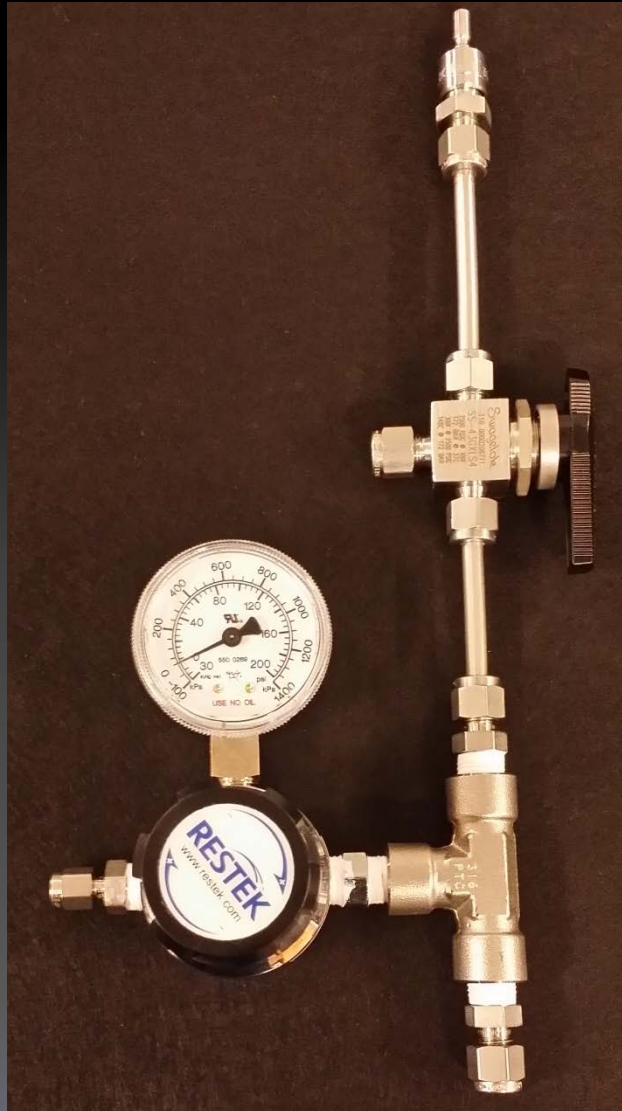
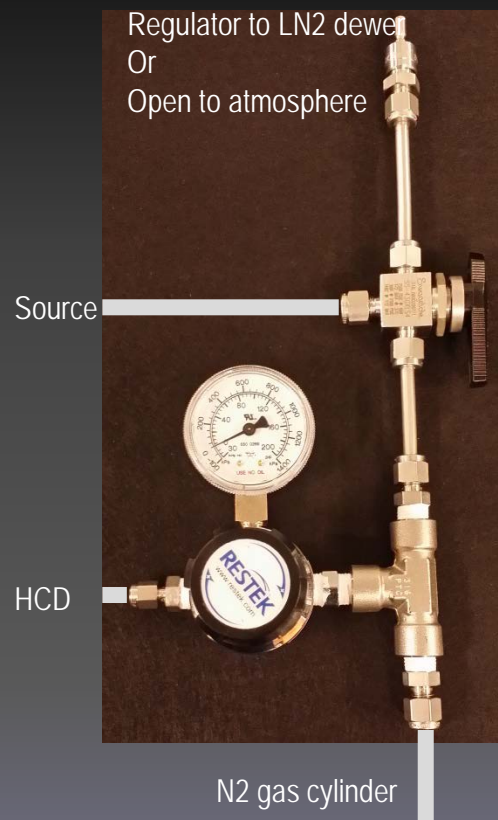
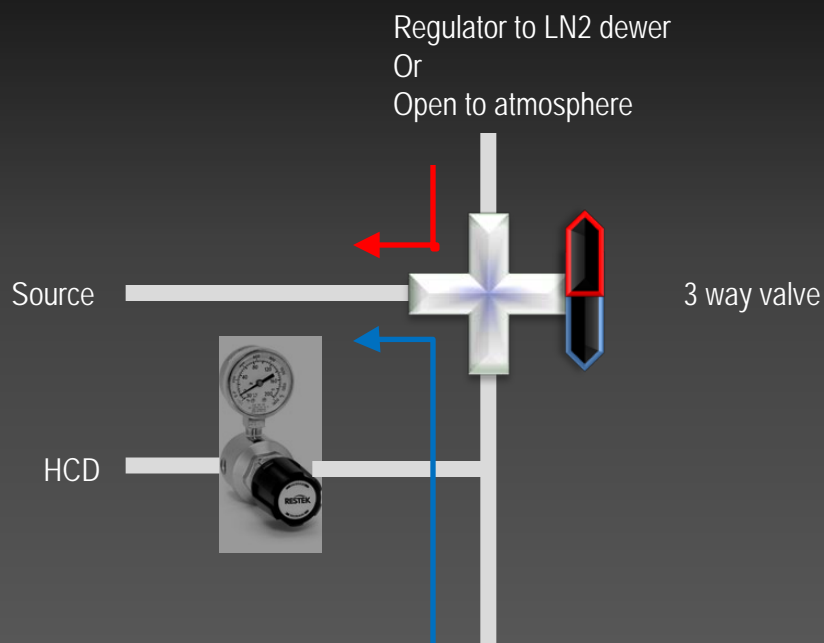


N2 gas switch for Fusion/Quantiva



N2 gas switch for Fusion/Quantiva

- The Fusion and Quantiva use a lot of N2 gas for the HESI source, in standby the system will use a cylinder/day
- Since we are using the NSI source we don't that much N2 gas. So we developed a switch valve to be able to switch from an LN2 dewer (or atmosphere) to N2 cylinders, below is a design we use on our Fusion



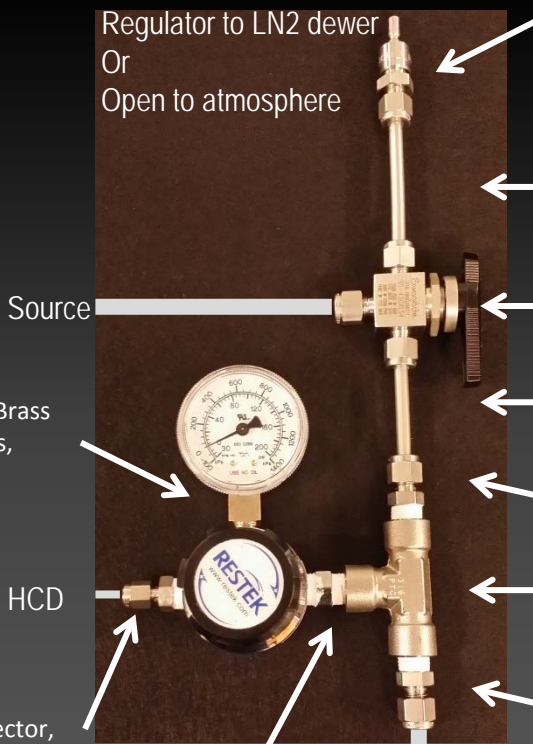
N2 gas switch for Fusion/Quantiva

- Parts:

All parts are from Swagelok
Except regulator

Connect to the LN2 dewer via a regulator,
we use quick connects:

- SS-QC4-S-400 SS Instrumentation Quick-Connect Stem w/o Valve, 0.3 Cv, 1/4 in. Swagelok Tube Fitting
- SS-QC4-B-400 SS Instrumentation Quick-Connect Body, 0.2 Cv, 1/4 in. Swagelok Tube Fitting



22452 Ultra-High Purity Chrome-Plated Brass Line Gas Regulator, 1/4" female NPT ports, 0 to 150 psig (Restek)

Source

HCD

SS-200-1-4
SS Swagelok Tube Fitting, Male Connector, 1/8 in. Tube OD x 1/4 in. Male NPT

SS-4-HN
Stainless Steel Pipe Fitting, Hex Nipple, 1/4 in. Male NPT

N2 gas cylinder

Regulator to LN2 dewer
Or
Open to atmosphere

1/4" ss tubing

SS-43GXL4 SS 1-Piece 40G Series 3-Way Ball Valve, 0.90 Cv, 1/4 in. Swagelok Tube Fittings, L Flow Path

1/4" ss tubing

SS-400-1-4 SS Swagelok Tube Fitting, Male Connector, 1/4 in. Tube OD x 1/4 in. Male NPT

SS-4-T Stainless Steel Pipe Fitting, Tee, 1/4 in. Female NPT

SS-400-1-4 SS Swagelok Tube Fitting, Male Connector, 1/4 in. Tube OD x 1/4 in. Male NPT