



MATE Provided Compressors

MATE will provide compressors and run compressed air to every mission station. The connection to compressed air will be a ¼-inch brass female connection at the end of an airline hose.



Links to ¼-inch brass female connection on end of hose:

[Husky 1/4 in. x 1/4 in. NPT Female Industrial Coupler HDB20100AV - The Home Depot](#)

[Estwing 1/4 in. x 50 ft. PVC / Rubber Hybrid Air Hose with Brass 1/4 in. NPT Industrial Fitting and Universal Coupler E1450PVCR - The Home Depot](#)

Note, this hose may be located on one side of the mission station table. MATE recommends having sufficient length in your pneumatic system to reach this connector wherever it is located on the mission station table.

Companies MUST provide the following equipment to connect to the MATE supplied compressed air:

- ¼-inch brass male connector
- Shut off valve
- Pressure Regulator
- Manual pressure release
- Tee

¼-inch brass male connector:

Companies must connect to the MATE supplied compressed air with a ¼-inch brass male connector. This allows for a quick connect/disconnect from the MATE supplied air.



Links to the 1/4-inch brass male connector:

[Husky 1/4 in. x 1/4 in. NPT Male Industrial Brass Plug HDB21700AV - The Home Depot](#)

Or

[Amazon.com : Seihao 1Pcs Propane Quick Connect Fitting Adapter 1/4 Inch Male NPT Thread with Full Flow Male Plug 100% Brass](#)

Shut off valve:

Companies must incorporate a shut off valve to isolate their air system from the MATE compressed air system if an issue occurs.



Links to shut off valve:

[Husky 1/4 in. Full Port Ball Valve HDA70100AV - The Home Depot](#)

Or

[Amazon.com: WYNNsky 1/4" Heavy Duty Air Compressor Brass Ball Valve Shut Off Switch, 1/4 Inch Male And Female NPT Thread Pipe Fitting : Industrial & Scientific](#)

Pressure regulator:

Companies must provide their own pressure regulator and reduce pressure to the allowed 40 PSI. The company's pressure regulator should include a readout so the station judge can confirm that the pressure is regulated to 40 psi or less.



Links for the Pressure Regulator

[150 PSI Air Compressor Regulator Kit with Dial Gauge \(harborfreight.com\)](https://www.harborfreight.com/150-PSI-Air-Compressor-Regulator-Kit-with-Dial-Gauge/p/150-PSI-Air-Compressor-Regulator-Kit-with-Dial-Gauge.html)

or

[TAILONZ PNEUMATIC 5-in-1 1/4 Inch NPT AR2000 Mini Pressure Regulator Kit for Compressed Air Systems, Adjust 0 to 140 Psi: Amazon.com: Industrial & Scientific](https://www.amazon.com/TAILONZ-PNEUMATIC-5-in-1-1-4-Inch-NPT-AR2000-Mini-Pressure-Regulator-Kit-for-Compressed-Air-Systems-Adjust-0-to-140-Psi/dp/B07K111111)

Manual Pressure Release:

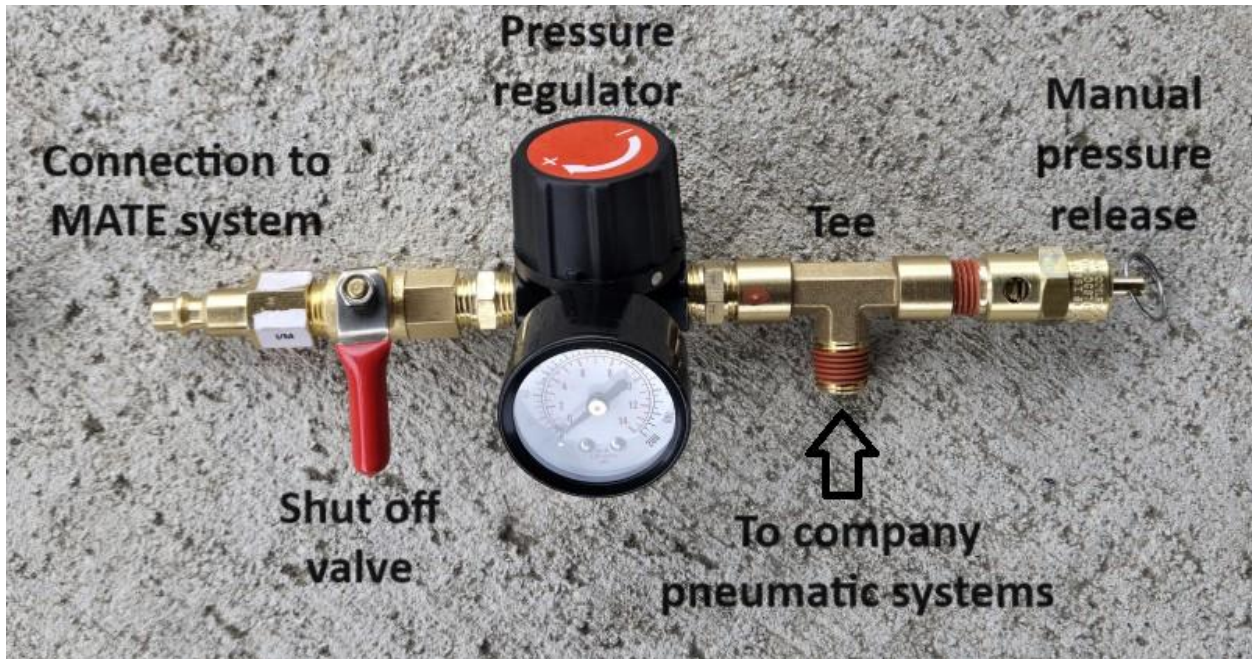
Companies must incorporate a manual pressure release device into their system. If an issue occurs, companies can shut off air to their system via the shut off valve, and manually vent any pressure remaining in their system.



Links to manual pressure release:

[Control Devices-ST25-1A ST Series Brass ASME Safety Valve, 60 psi Set Pressure, 1/4" Male NPT: Industrial Relief Valves: Amazon.com: Industrial & Scientific](#)

Companies will need to supply and [tees](#) / connectors to incorporate all of these components into their system.



An example of the company's system.



Connection to the MATE compressor.

Notes: The links provided in this document are suggestions. Companies may use other similar products available to them.