

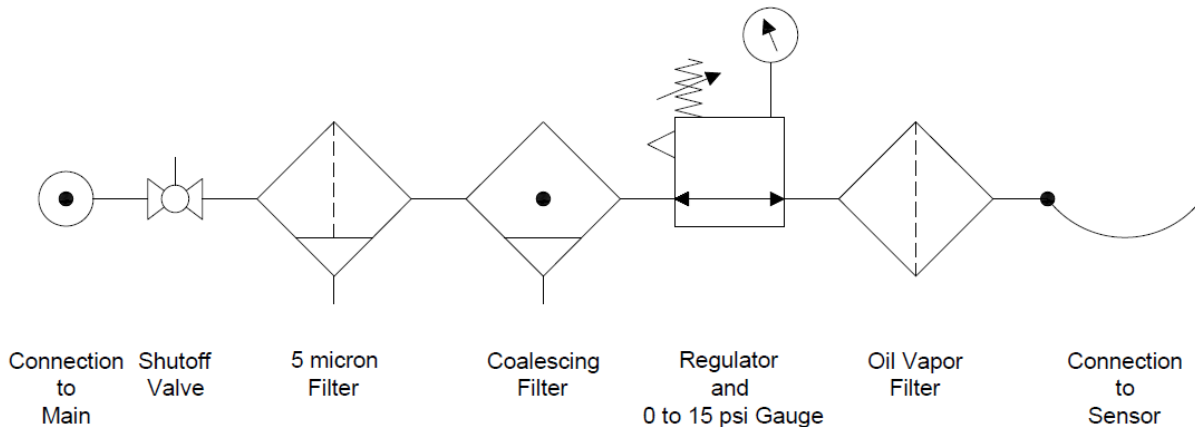
Compressed Air Filtration for Sensors

Compressed air filtration is critical for purge air used with Simco-Ion static sensors. Purge air is recommended to keep the static sensing element free of dirt and debris. The purge air itself must not contribute contamination.



Static Sensor Operated with Contaminated Purge Air

Proper compressed air filtration consists of a number of stages. Each stage addresses a different aspect of compressed air cleanliness; particulate, moisture droplets, and oil vapor, all contaminants typically found in compressed air.



Compressed Air Filtration for Simco-Ion Static Sensor Purge

This compressed air filtration can easily be assembled with the proper off-the-shelf components.

In the example, Wilkerson filtration and regulation components are shown:

5 micron Filter + Coalescing Filter
Wilkerson FM08-02-BK00B

Regulator
Wilkerson FM08-02-F000B

Oil vapor Filter
Wilkerson M08-02-DK008



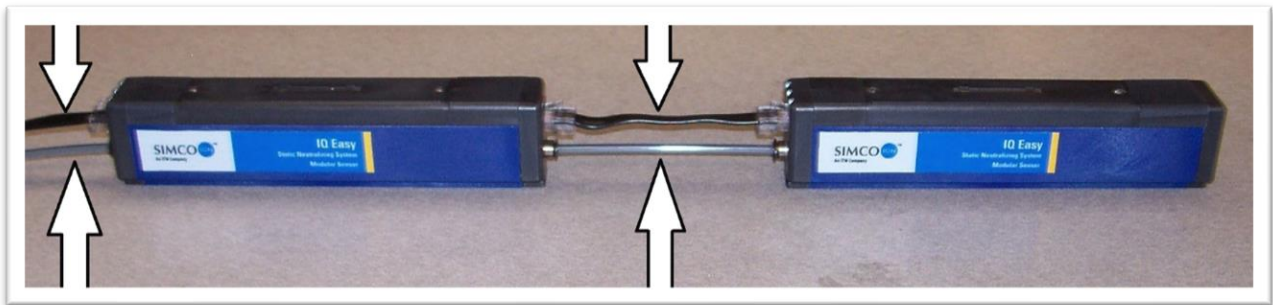
Example Compressed Air Filtration

Full Parts List with Distributors:

Description	Distributor	Distributor P.N.
1/4" tubing quick connect	McMaster-Carr	7880T125
1/4" inlet shutoff valve	McMaster-Carr	33325K31
5 micron filter + coalescing filter	McMaster-Carr	8075T1
pressure regulator	Grainger	55CR30
0-15 psi gauge	McMaster-Carr	3847K72
oil vapor filter	McMaster-Carr	7402K11
5/32" (4mm) tubing quick connect	McMaster-Carr	7880T118
joiner clamps (used to connect regulator to filters)	McMaster-Carr	60115K21 (2 required)

To connect the filtered compressed air to Simco-Ion Modular Sensors a quality 5/32" or 4mm OD tubing is recommended. A recommended polyurethane tubing would be McMaster-Carr P.N. 5648K68.

RJ-45 cables, typically supplied by Simco-Ion.



5/32" (4mm) tubing supplied by customer.

Typical Simco-Ion Modular Sensor Connection



NOTE! – Set regulator to minimum pressure before connecting sensor. Raise compressed air pressure to sensor slowly to avoid damage to sensor.

Purging the static sensing element only requires a low flow of clean, dry air. Reduce the air pressure regulator setting before connection. An air pressure of 1 to 2.5 psi is recommended for purge. Where the regulator has a lock ring, lock the regulator after setting the pressure.

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