

# Model 470-002 Vacuum Flow Booster



470-002



470-002SHF

## APPLICATION

The Model 470-002 is a precision, high-flow capacity vacuum flow booster which installs in series between the volume being controlled and the vacuum pump or vacuum supply source. This regulator device is vacuum pilot operated and is used in applications that require higher a vacuum flow rate than can be provided by a model 487 regulator alone. The vacuum output is the same as the pilot vacuum supplied to the device.

Three different port size and flow capacity designs are available to fit a wide range of vacuum flow requirements. Multiple units can be combined in parallel and controlled from a single vacuum pilot source for even larger flow requirements. Any number of units can be connected to a single pump or vacuum source, since the design throttles the flow between the supply and regulated vacuum outlet, thereby allowing different vacuum levels to be set at each device by adjusting the pilot vacuum supplied to each.

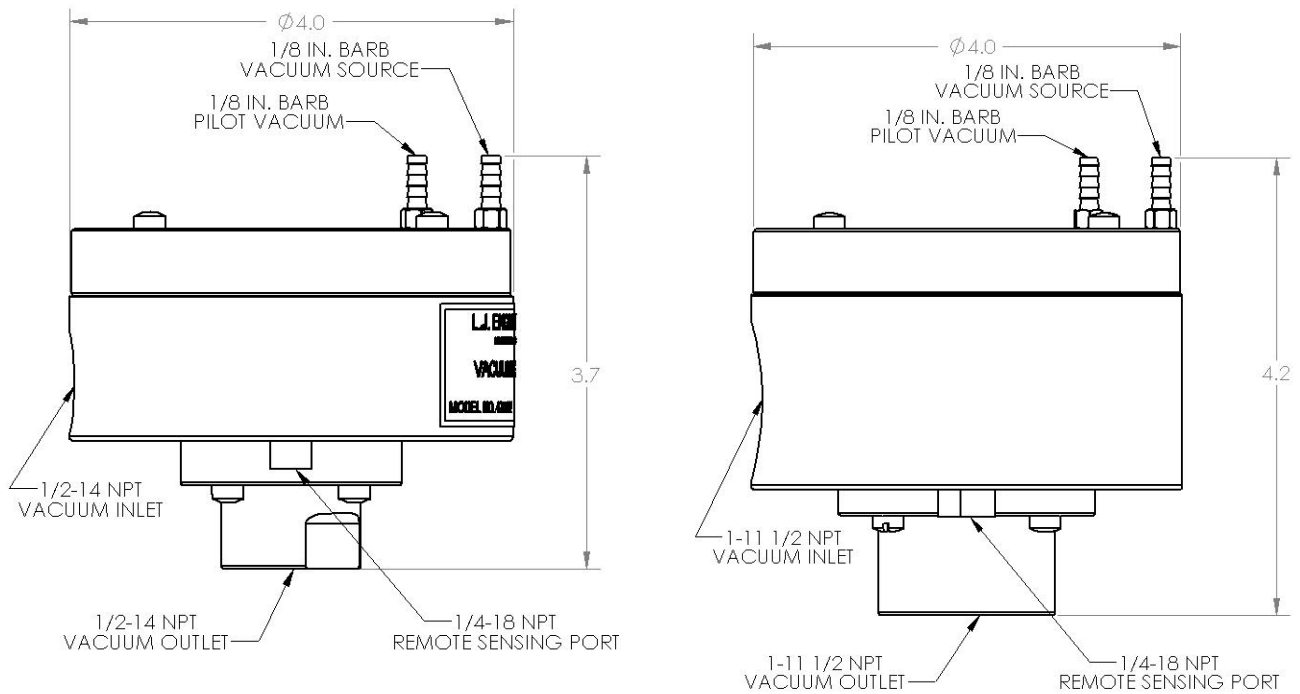
## FEATURES

Large flow path area and diaphragm diameter provide minimal pressure drop and low hysteresis operation.

Hard anodized machined aluminum body for long service life. Silicone rubber, brass and stainless steel materials used throughout the unit's construction.

All models of 470-002 are non-relieving designs, which means when the pilot or control vacuum is reduced from a higher to a lower vacuum setting the vacuum down stream of the flow booster will be trapped if no leakage is present in the system. An atmospheric vent source must be introduced to allow the downstream vacuum to be vented when reducing vacuum.

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The Remote Sensing Port is used to minimize the effect of pressure drop in piping downstream of the regulator as a result of high flow installations. When connected, it allows the regulator to sense the vacuum at the point of interest instead of at the regulator outlet.

Model Number	Flow Capacity SCFM (@1 psi drop)	C <sub>v</sub>	Port Size	Weight
470-002	12.5	3.4	1/2-in female NPT	2.5 lb (1.13 kg)
470-002HF	27	9.3	3/4-in female NPT	2.5 lb (1.13 kg)
470-002SHF	44	12.2	1-in female NPT	2.8 lb (1.27 kg)