

## MSP Turbo<sup>™</sup> Vaporizer

Model 2840PE



MSP Turbo™ Vaporizer 2840PE is one of our smallest vaporizers and has the state-of-the art PE atomizer with on-board flow control. This model has been optimized for low to mid flow applications; featuring an ultra-fast response time making it a great choice for ALD applications.

Dimensions 9.6 inch x 3.8 inch x 4.2 inch (244 mm x 97 mm x 107 mm)

Weight 7.2 lb (3.3 kg)

Fittings (on the unit)

Carrier Gas Inlet 1/4 inch VCR female split nut

Liquid Inlet1/8 inch VCR femaleVapor Outlet1/4 inch VCR femaleCompressed Air4 mm instant tube fitting

Wetted Parts SS 316, PEEK, PCTFE, Elgiloy®, FFKM, PTFE

Leak Integrity≤ 1x 10-9 Pa·m³/s (He)Heater Power Requirements110  $V_{AC}$ , 60 Hz, 300WCarrier GasInert gas recommended

Max Carrier Gas Flow<sup>1</sup> 7.0 standard liters/min N<sub>2</sub> at 80 psig

4.5 standard liters/min N<sub>2</sub> at 50 psig

Max Liquid Flow<sup>2</sup> 720 g/hr. (TEOS or equivalent)

60 g/hr (H<sub>2</sub>O or equivalent)

System Pressure Limit 150 psig

Compressed Air 90 to 110 psig
Temperature Range 40° C to 160° C

160° C to 200° C with optional piezo cooling package

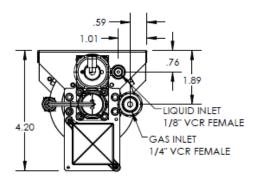
Temperature Sensor 2 type K thermocouples

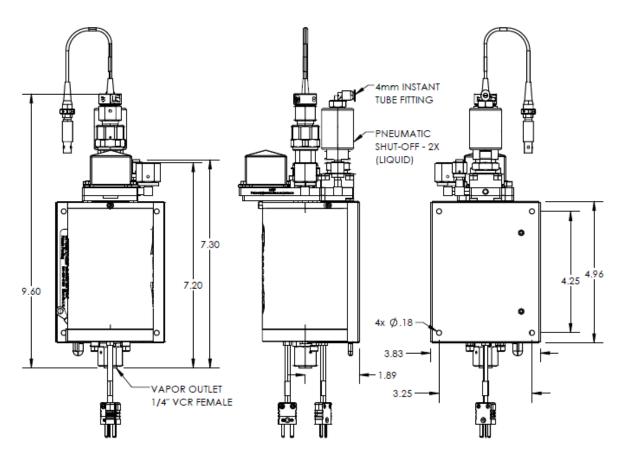
Vaporizer Body Vacuum tight chamber with multi-stage heat exchanger, SS 316 construction

<sup>&</sup>lt;sup>1</sup> Max Carrier Gas Flow Rate is adjustable; visit www.tsi.com/contact to request more information.

<sup>&</sup>lt;sup>2</sup> Max. liquid flow is process dependent. The spec assumes a vaporizer temperature of 180° C or higher, N₂ carrier gas ≥4.5 SLPM, and pressure <10 Torr immediately downstream of the vaporizer.







All specifications are subject to change without notification.

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MSP - Visit our website www.tsi.com/msp for more information.

5910 Rice Creek Parkway, Suite 300 Shoreview, Minnesota 55126, U.S.A. **Tel:** 651.287.8100