

# MSP TURBO™ VAPORIZER MODEL 2840PE

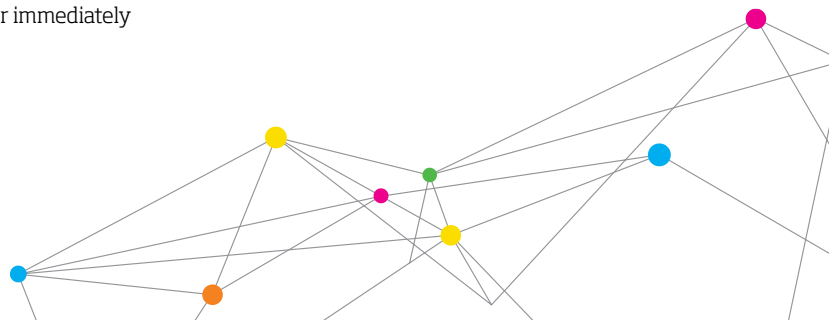


MSP Turbo™ Vaporizer 2840PE is one of our smallest vaporizers and has the state-of-the-art PE atomizer with on-board flow control. This model has been optimized for low flow applications; featuring an ultra-fast response time making it a great choice for ALD applications.

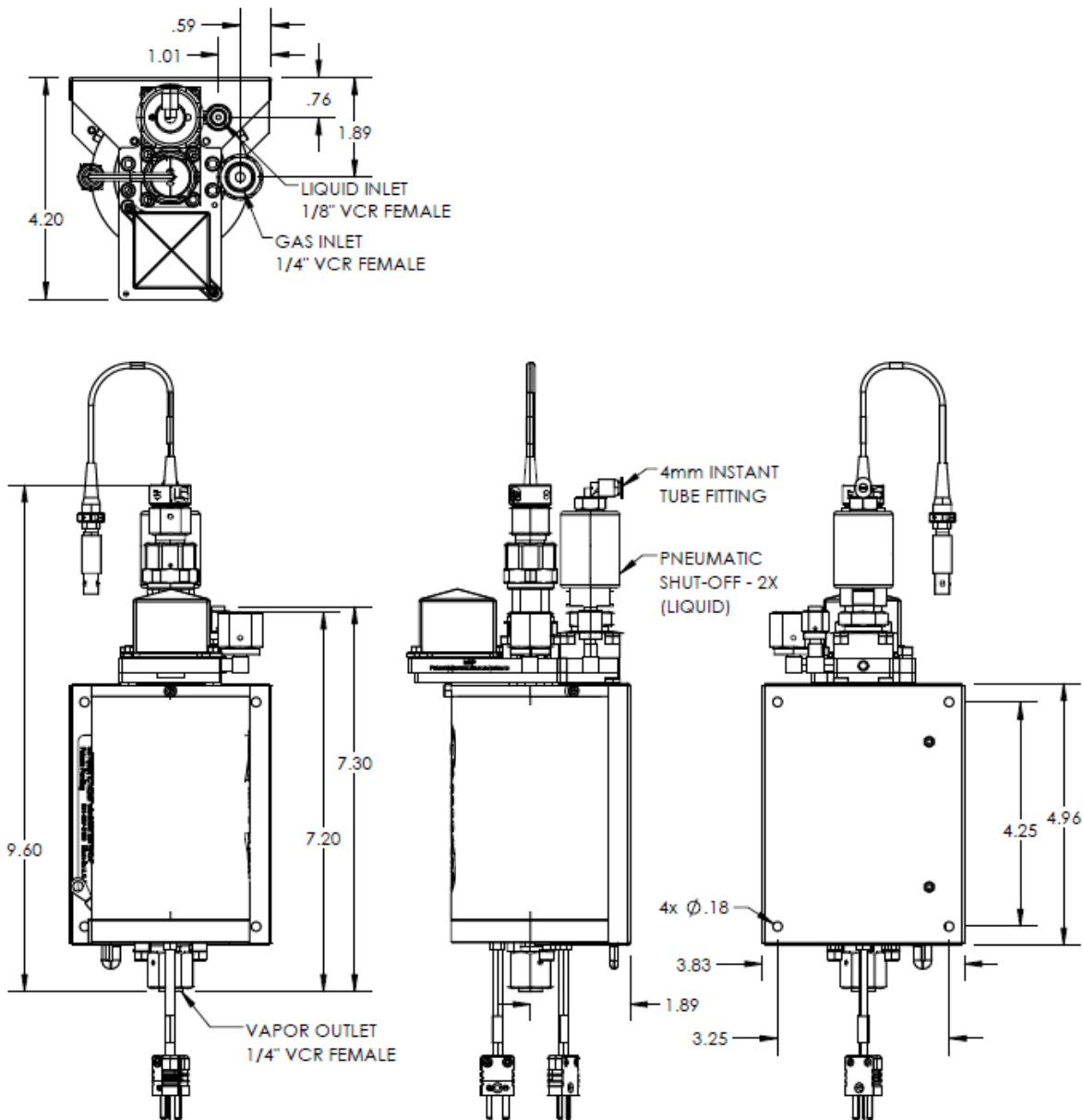
<b>Dimensions:</b>	9.6 inch x 3.8 inch x 4.2 inch (244 mm x 97 mm x 107 mm)
<b>Weight:</b>	7.2 lb (3.3 kg)
<b>Fittings (on the unit):</b>	
Carrier Gas Inlet:	1/4 inch VCR female split nut
Liquid Inlet:	1/8 inch VCR female
Vapor Outlet:	1/4 inch VCR female
Compressed Air	4 mm instant tube fitting
<b>Wetted Parts:</b>	SS 316, PEEK, PCTFE, Elgiloy®, Kalrez®, PTFE
<b>Leak Integrity:</b>	$\leq 1 \times 10^{-9}$ Pa·m <sup>3</sup> /s Helium
<b>Heater Power Requirements:</b>	110 VAC, 60 Hz, 300W
<b>Carrier Gas:</b>	Inert gas recommended
<b>Max Carrier Gas Flow<sup>1</sup>:</b>	8.5 standard liters/min N <sub>2</sub> (@70 psig inlet pressure)
<b>Max Liquid Flow<sup>2</sup>:</b>	720 g/hr. (TEOS or equivalent) 60 g/hr (H <sub>2</sub> O or equivalent)
<b>System Pressure Limit:</b>	120 psig
<b>Compressed Air:</b>	90 to 110 psig
<b>Temperature Range:</b>	40° C to 160° C, 160° C to 200° C with optional piezo cooling package
<b>Vaporizer Body:</b>	Vacuum tight chamber with multi-stage heat exchanger, SS 316 construction
<b>Temperature sensor:</b>	2 type K thermocouples

<sup>1</sup> Up to 15 standard L/min available.

<sup>2</sup> Max. liquid flow is process dependent. The spec assumes a vaporizer temperature of 180° C or higher, Ar carrier gas from 4-7 SLPM, and pressure < 50 Torr immediately downstream of the vaporizer.



# MSP TURBO™ VAPORIZER MODEL 2840PE



All specifications are subject to change without notification.

MSP Turbo Vaporizer is a trademark, and MSP, the MSP logo and TSI are registered trademarks of TSI Incorporated.



**MSP** - Visit our website [www.tsi.com/msp](http://www.tsi.com/msp) for more information.

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