

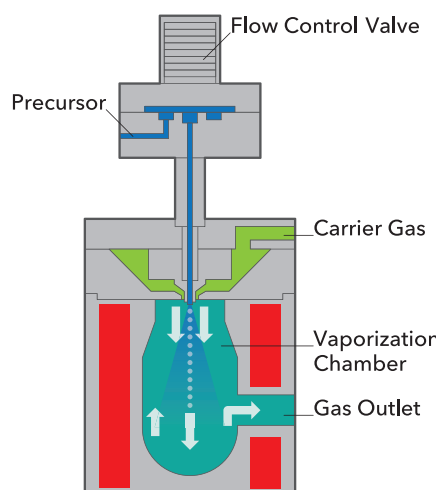
# LIQUID | Products For Liquid Applications

Products For  
Liquid Applications

LIQUID VAPORIZER UNIT

Liquid Vaporizer with Solenoid Actuator

## VU-450 Series



### Outlines

- VU-450 Series: Vaporizer unit with Solenoid actuator
- Efficient liquid vaporization control when used with LM-3000L Series

### Features

- High precision liquid vaporization system control with solenoid actuator
- This apparatus has larger vaporizing capacity than VU-430A and is most suitable for high flow rate vaporization of precursors with low vapor pressure, e.g. low-k, high-k materials and various metals
- Rapid vaporization by spraying liquid through double orifice nozzle into vaporization chamber
- Long-term leak tightness ensured using metal seal

### RoHS

Model		VU-0450N	VU-0550N
Maximum vaporization rate	TEOS	20g/min	
	H <sub>2</sub> O	5g/min	
Flow rate control range		10 ~ 100% F.S.	
Carrier gas flow rate	01	0.8-1.5SLM	
	02	1.5-3SLM	
	03	3-6SLM	
	04	6-10SLM	
	05	10-14SLM	
	06	14-20SLM	
	07	20-40SLM	
	08	40-80SLM	
	09	80-130SLM	
	Operating differential pressure		50 ~ 300kPa
Withstand pressure		1MPa(G)	
Valve operation mode		Normally closed	
Maximum power consumption	L1	120V, 800W	
	L2	240V, 800W	
Thermocouple		K Type 1pc	
Recommended temperature control method		PID	
Maximum operating temperature		200°C	300°C
Thermal switch		230°C ±10°C Open	350°C ±9°C Open
Leak integrity		1×10 <sup>-11</sup> Pa · m <sup>3</sup> / sec He	
Wetted materials		SUS316L, Ni-Co, Polyimide	
Seal materials		Au	
Control valve actuator		Solenoid actuator	
Mounting position		Vertically upward for actuator	
Weight		6kg	