

Sampling Pump Specification Sheet



Flow (SCFM) vs. Vacuum (“HG) Comparison


Measured at 115V/60HZ

Back Pressure “HG	
0	1.00
5	.83
10	.64
15	.46
20	.29
25	.10
Maximum Vacuum	27.0 “ HG

Compressor Manufacturer	
Oil-less, Non-lube Unitary Piston Design	✓
Permanently Lubricated Ball Bearings	✓
Stainless Steel Valves and Valve Retainers	✓
E-Coated Wetted Parts	✓
UL Recognized Motor/Thermal Protector	✓
Oversized Fan	✓
Robust 4.4” Diameter Electric Motor	✓
Long Life PTFE Piston Seal	✓
Lightweight Die-cast Aluminum Construction	✓
Field Serviceable with common tools	✓
Thin wall Hard Coat Anodized Cylinder	✓
Balanced - low vibration and sound	✓



Performance Data


Model Number	
Head Configuration	Vacuum
Free Air Flow	1 SCFM
Max Vacuum	27" Hg
Max Ambient Air Temp	104° F
Min Ambient Start Temp	10° F
Motor Voltage/Frequency	115V/60Hz
Motor Type	Shaded Pole
Current at Rated Load	3.7 Amps
Power at Rated Load	204 Watts
Starting Current (Locked Rotor)	5.2 Amps
Min Full Load Speed	1610 RPM
Thermal Protector	Yes
Net Weight	7.5 lb



Features and Benefits of the

- 1.) Proven Unitary Technology Piston Seal Material for both “Dry” and “Wet” (High Humidity) environments.
 - a. The Unitary Piston Technology is capable of achieving deeper vacuum levels as compared to diaphragm technologies. The benefit to the end user is superior flow at mid-to-upper vacuum levels and significantly improved flow in high altitude cities such as Denver, CO and the like.
 - b. Multiple units were successfully tested at Marquette University’s Tech Center in a state-of-the-art Environmental Chamber. Extreme high humidity conditions were simulated. All units functioned properly for three months of continuous operation.
- 2.) A robust 4.4” diameter electric motor, greater starting and running torque. The benefit is greater starting confidence, especially in low voltage “Brown Out” conditions.
- 3.) An oversized front end located 9-blade fan yields cooler overall operation. Cooler motor coils as well as cooler key pump components improve overall reliability and extend service free operation.
- 4.) Weight is only 7.5 lbs. as compared to competitive models weighing 11 lbs. The compactness of the unitary piston design offer smaller overall dimensions and weight while providing superior flow performance.
- 5.) Sound level is 65 dB(A) as measured from a distance of three feet. This is attributed to the smooth running piston seal materials and cylinder which is void of any “Slapping” noise which is common with diaphragm technologies.



- 6.) The  is designed, machined, assembled and tested in the **USA**.