

# H-SERIES DIA-VAC®

## Diaphragm Sampling Pumps



An Ingersoll Rand Business

The high-performance H-Series Dia-Vac® diaphragm sampling pumps are designed for demanding applications that require exceptional flow performance for a **fast response time**. Used widely in gas process analysis and emissions monitoring applications where fast response time and the **integrity of the sample** is of utmost importance, the H-Series is durable and features a wide range of options to suit your specific requirements.

The H-Series offer a **wide selection of motor options**, including a general purpose **Safe Area** motor, an IP54rated **Totally Enclosed Fan-Cooled (TEFC)** motor for durability, as well as an ATEX/IECEX/NEC certified, Zone 1 Explosion Proof motor, among others.

Manufactured using 316 stainless steel, and Teflon wetted parts for **corrosion and chemical resistance** and **contaminant-free gas sampling**; the H-Series is designed to operate for **extended periods**, requiring **very low maintenance**.



## YOUR BENEFITS



### LOW MAINTENANCE AND RELIABLE

Long product lifespan and easily field-serviceable. The diaphragm can be easily and quickly changed using standard tools.



### LOW TOTAL COST OF OWNERSHIP (TCO)

compared to industry standards due to low maintenance requirements, long-life high-quality components, and reasonably priced service kits.

\* Diaphragms are not covered under warranty and diaphragm lifetime will vary depending on operating conditions.

## APPLICATIONS



### GENERAL GAS SAMPLING



### PROCESS ANALYSIS AND MONITORING SYSTEMS



## DESIGNED FOR SAMPLING SPEED AND ACCURACY

Offers flow of up to 84 LPM (in parallel) for a fast sampling response time, while delivering leak-free gas samples without oil or other contamination.



## HIGHLY CONFIGURABLE

The H-Series can be combined in a series or parallel configuration for maximum performance or efficiency depending on your application. Adjustable heads (in double head version) for flexible piping configurations.



## MADE IN THE USA AND AVAILABLE FOR QUICK DELIVERY!

Manufactured on-site at ADI's headquarters in Florida, USA so our experts can assemble pumps to match your application in a short amount of time.

## INDUSTRIES SERVED



REFINERIES/  
PETROCHEMICAL



CHEMICAL



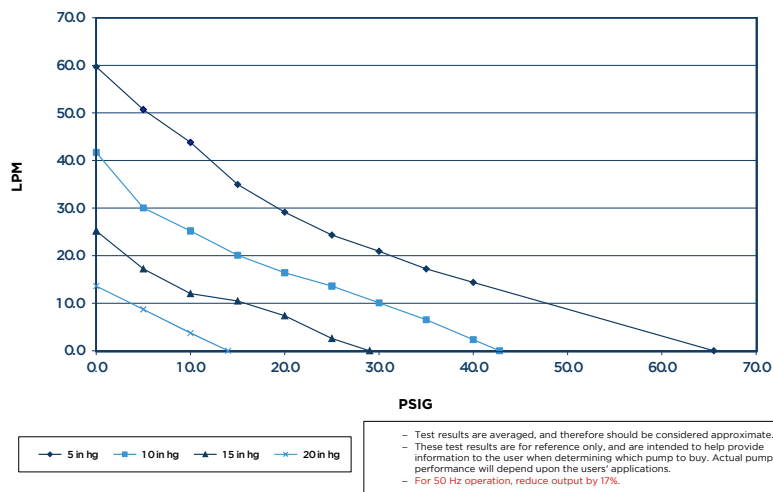
ENVIRONMENTAL



GENERAL INDUSTRY  
AND MANUFACTURING

[www.airdimensions.com](http://www.airdimensions.com)

# COMBINATION CURVE



One of the key benefits of the Dia-Vac® pump is its ability to act as a vacuum pump, compressor, or both depending on the application.

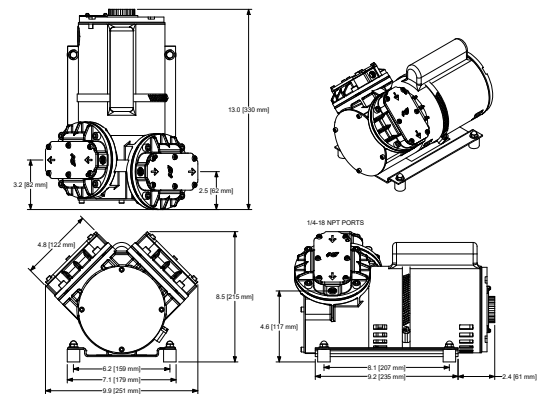
Instead of showing a traditional performance curve, that only shows the unit as a vacuum pump OR a compressor, the combination curve illustrates the relationship between (inlet) vacuum, (outlet) pressure, and flow rate. The primary benefit compared to a traditional performance curve is that it covers applications where the pump is providing both vacuum and pressure at a given flow rate instead of just pressure OR vacuum at a given flow rate.

## H-SERIES DIA-VAC® PERFORMANCE

Model	Eccentric	PSIG	bar	InHg	mbar	CFM	LPM
H301	0.300	60*	4.14*	26.0	904	1.41	40
H302 (series/parallel)	0.300	60* / 60	4.14* / 4.14	27.0 / 29.5	914 / 982	2.93 / 1.50	84 / 43

- \*Continuous pressure in excess of 50 PSI should be avoided due to decreased diaphragm and bearing life.
- Test results are approximate. These test results are for reference only, and are intended to help provide information to the user when determining which pump to buy.
- Reduce flow 17% for 50 Hz.

ADI's High Performance Dia-Vac® Pump was designed to offer exceptional flow for applications requiring fast response time. The eccentric size on the HP is .300. Please contact the factory at 954-428-7333 or visit our website [www.airdimensions.com](http://www.airdimensions.com) for more information on how the HP Dia-Vac® can help improve the efficiency of your application.



## HOW TO ORDER

How to specify and order pumps from Air Dimensions.

CAPACITY		
STYLE	ECC.	HEADS
H=H-Series	30	1
		2

WETTED MATERIALS	
HEAD	DIAPHRAGM
F=316ss	T= Teflon/EPDM
	P= All Teflon

POWER		
TYPE	VOLTS	Hz
A= General Purpose	A=115	1=60 1Ph
C= TEFC	B=230	2=50 1 Ph
Q= XP/ATEX/IIC		
Y= XP/ATEX/IIC		
N= XP (Grp CD UL)		
R= XP (Grp BCD UL)*		
*H301 only.		

OPTIONAL	
OPTIONS	
•	L= Elevated Head (1 Hd. Only)
•	M= Heated Hd. w/ Thermocouple
•	M2= 65°C Thermostat
•	M3= 100°C Thermostat
•	M4= 140°C Thermostat
•	M5= 163°C Thermostat
•	M6= 200°C Thermostat

### Example:

H302-FT-AA1. Double Head High Performance Dia-Vac® pump, 316 ss wetted parts, Teflon®/EPDM diaphragm, 115v/60Hz GP mtr



### OVER 50 YEARS OF EXCEEDING INDUSTRY STANDARDS

Built to exceed industry standards, ADI's pumps have long been known as premium quality products designed to stand up to the rigorous demands of gas sampling and monitoring even in the harshest environments. Whatever the application, our range of products and manufacturing capabilities allow us to meet your exact requirements.