

# E-SERIES DIA-VAC®

## Diaphragm Sampling Pumps

Our most powerful pump for demanding applications  
single head

The powerful E-Series Dia-Vac® pump provides the performance you need, delivering remarkably **fast response times for fence line monitoring, emissions, and process sampling applications**. Boasting the highest flow performance per head offered by Air Dimensions, the E-Series has been designed to **maximize flow and reduce response time**, providing up to **160 liters per minute (LPM)** - the equivalent to four times the performance of our most-commonly sold sampling pump.

Designed for continuous operation, the E-Series is built from high-quality materials, including **316 Stainless Steel** wetted parts for resistance to harsh chemicals and corrosion. Additionally, this Dia-Vac® pump series utilizes a **Teflon® diaphragm** for extended durability. **Oversized bearings and motor shaft** minimize pressure on pump components and allow it to operate with **minimal vibrations and noise**.

Not only does the E-Series provide single-minded performance, but it also shows its versatility with a variety of available configurations, including a **heated head** version to maintain gas samples at their optimal temperature, preserving **sample integrity**, and preventing condensate build-up. In addition, numerous certified motor options, from general purpose to **explosion proof**, highlight the E-Series aptitude to be the heart of a gas sampling system.



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## YOUR BENEFITS



### ROBUST CONSTRUCTION

Rugged design built to withstand particularly harsh environments.



### RELIABLE

Long product lifespan and completely field serviceable.



### EXPLOSION PROOF

motor options include UL/CSA/ATEX/IECEX certifications for hazardous area applications.



### LOW TOTAL COST OF OWNERSHIP (TCO)

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



**FAST RESPONSE TIME GAS SAMPLING, ANALYSIS, AND MONITORING**



**OEM EXHAUST GAS ANALYZERS**



**GAS CHROMATOGRAPHY**



**EMISSIONS TESTING**



## HEAVY-DUTY PERFORMER

Designed for Sampling Speed and Accuracy, the E-Series offers flow of up to 160 LPM from one head, resulting in exceptionally fast sampling response times, while delivering accurate gas samples without oil or other contamination.



## RELIABLE AND HIGHLY CONFIGURABLE

The E-Series modular design allows for options such as a heated head and various motor and voltage choices.



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

The E-Series is manufactured on-site at ADI's headquarters in Florida, USA so our experts can assemble most pumps to match your application in a short amount of time - as fast as same day in emergency situations.

## INDUSTRIES SERVED



AUTOMOTIVE



CHEMICAL PROCESSING



REFINERIES/ PETROCHEMICAL

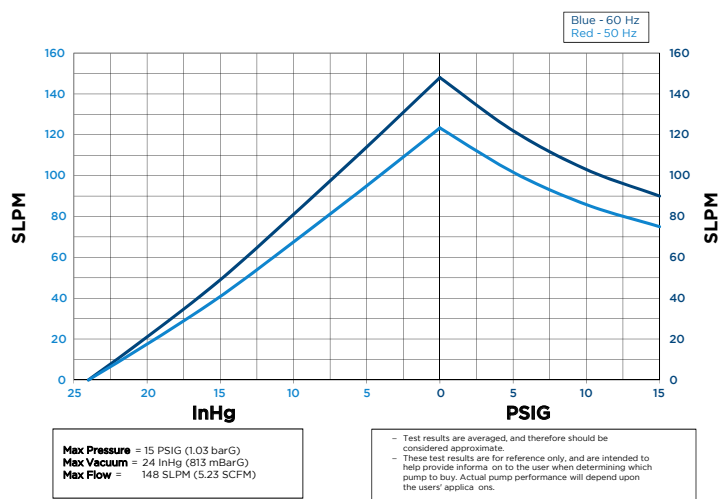


ENVIRONMENTAL



GENERAL MANUFACTURING

# 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.

## E-SERIES DIA-VAC® PERFORMANCE

| Eccentric Size | PSIG | bar | InHg | mbar | CFM  | LPM |
|----------------|------|-----|------|------|------|-----|
| 0.250          | NA   | NA  | 23   | 779  | 5,35 | 152 |

Test Results are approximate.

Tests performed with 316 stainless steel head, Teflon®/EPDM diaphragm, 3/8 in. diameter hose x 5 ft. line at 75°F, using a std. 1725 rpm motor at 60Hz.

These test results are for reference only, and are intended to help provide information to the user when determining which pump to buy. Actual pump performance will depend upon the user's application.

## HOW TO ORDER

How to specify and order pumps from Air Dimensions.

| CAPACITY   |      |       | WETTED MATERIALS |                   | POWER            |       |          | OPTIONAL                    |
|------------|------|-------|------------------|-------------------|------------------|-------|----------|-----------------------------|
| STYLE      | ECC. | HEADS | HEAD             | DIAPHRAGM         | TYPE             | VOLTS | Hz       | OPTIONS                     |
| E=E-Series | 25   | 1     | F=316ss          | P=All Teflon      | A=Gen. Purpose   | A=115 | 1=60 1Ph | • M=Heated w/K Thermocouple |
|            |      |       |                  | L=Silconert®316ss | Q=ATEX IIC       | B=230 | 2=50 1Ph |                             |
|            |      |       |                  |                   | N=XP Div.1 Gr CD |       |          |                             |

### Example:

E251-FP-AA1 = Single Head E-Series Dia-Vac® pump, 316 ss wetted parts, Teflon® diaphragm, 115v/60Hz motor

Note that ADI will always attempt to accommodate any custom application that you may have. Please contact the factory for more information.



### 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.