

# B-Series Dia-Vac® Diaphragm Pumps

Single and Double  
Head Diaphragm Pumps  
and Compressors



B-Series Dia-Vac® gaseous diaphragm sampling pumps are completely self contained and may be used for either built-in or portable applications. These economical oil-free, contamination-free and leak-free Dia-Vac® pumps may be used for flow and/or pressure/vacuum applications and are CE approved.

B-Series Dia-Vac® pumps are exceptionally quiet and are available in either single or double head configurations with the option of heated and/or elevated heads (up to 400° F). They are an ideal choice for OEM customers as it has dual voltage 115v/230v, dual cycle 50/60 Hz AC motors. These rugged pumps are also available with brushless 12-24 V DC motors, a choice of corrosion resistant wetted materials and can withstand ambient temperatures up to 104° F (40° C).

## Some of the outstanding quality engineered features of the B-Series Dia-Vac® include:

- CE approved
- Shipments within 1 week
- Complete field serviceability
- Continuous operation
- Corrosion resistant options provided
- Pump head and diaphragms made of chemically inert material to prevent sample contamination
- Optional eccentric sizing for greater flexibility to system performance requirements
- 12-24 volt brush and brushless DC motors available
- Oversized bearings and motor shaft
- Exceptionally quiet with minimal vibration
- Low maintenance
- No risk of damage even when inlet/outlet becomes blocked
- Will operate in any position if motor is properly supported



**B-Series Dia-Vac® Pump**



**Double Head B-Series  
Dia-Vac® Pump**



**Elevated B-Series  
Dia-Vac® Pump**



**Heated Head B-Series  
Dia-Vac® Pump**

## B-Series Dia-Vac® Performance

ADI's Dia-Vac® Pumps can ***Pass Your Gas at the Speed of Need!*** Due to an increased interest in reducing the pressure, vacuum, and/or flow on the Dia-Vac® pumps our engineers designed modified eccentric options which allow you to customize your Dia-Vac® pump to meet your specific application requirements while at the same time increasing the life of the diaphragm and bearings. Please see **"How to Specify and Order Pumps at ADI"** (below) or call the factory direct at **954-428-7333** or **800-423-6464** for more information.

### B-Series Dia-Vac® Flow Averages

Eccentric Size	PSIG	bar	InHg	mbar	CFM	LPM
.080	8.5	0.59	14.9	505	0.138	3.9
.100	12.9	0.89	17.4	589	0.155	4.4
.120	18.1	1.25	20.2	684	0.20	5.7
.140	23.4	1.61	21.4	725	0.24	6.8
.160	29.2	2.01	23.0	778	0.268	7.6
Double (.160) *	34.3	2.36	22.2 / 28.0	752 / 948	.45 / .23	12.6 / 6.43

- Test results are approximate
- Tests performed with 316 stainless steel wetted parts, All-Teflon® diaphragm, 1/4 diameter hose x 5 ft. line at 75°F, using a standard 3500 rpm motor at 60 Hz. For 50 Hz operation, reduce flow by 17%.
- These tests 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 users application.
- Please visit the ADI website @ [www.airdimensions.com](http://www.airdimensions.com) for complete performance curves
- \* Parallel / Series

## How to Specify and Order Pumps from Air Dimensions Incorporated

CAPACITY			WETTED MATERIALS		POWER			OPTIONAL
STYLE	ECC.	HEADS	HEAD	DIAPHRAGM	TYPE	VOLTS	Hz	OPTIONS
B=B-Series	16	1	A=Alum	E=Tef/EPDM**	A=Gen. Pur.	A=115	0=N/A	L=Elevated Head
	14	2	B=Alum (TefCo)	P=All Teflon	H=BLDC* (CE)	B=230	1=60 1Ph	M=Heated-K Thermocouple
	12		F=316ss		J=24v Brush DC*	H=12	2=50 1Ph	Z=Rotate Housing 180°
	10		G=316ss (TefCo)		K=Brushless DC*	J=24		
	08		L=Silconert®					
			T=Solid Teflon					

\*\* Solid Teflon Only

\*Single Hd. Only

#### Example:

B161-FP-AA1—Single Head B-Series Dia-Vac® pump, 316 ss wetted parts, All-Teflon diaphragm, 115v/60Hz General Purpose motor

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



***"We Pass Your Gas"***