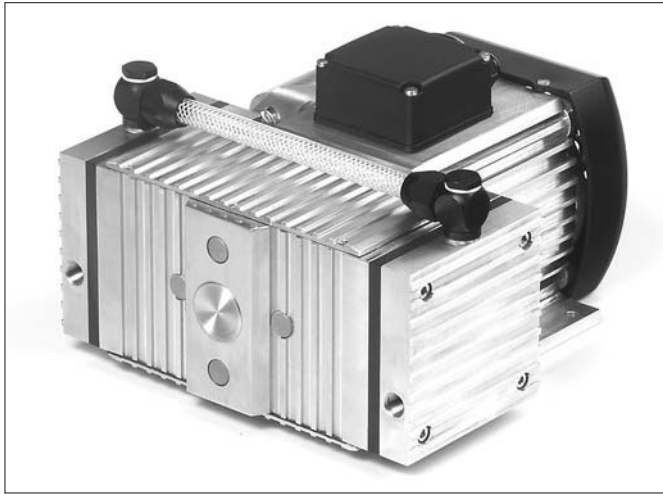


# Diaphragm Vacuum Pump



## Series N843.3 Pumps

### TECHNICAL FEATURES:

- Uncontaminated flow
- No contamination of the media due to oil-free operation
- Quiet and little vibration
- Maintenance-free
- High pneumatic performance because of structured diaphragm
- Low aerodynamic loss by means of a new valve system
- High level of gas tightness thanks to the closed diaphragm surface and special sealing system
- Can operate in any installed position

### CONCEPT

The Diaphragm Vacuum Pumps from KNF are based on a simple principal - an elastic diaphragm, fixed on its edge, moves up and down its central point by means of an eccentric. In this way the substance is transferred using automatic valves.

The pumps are equipped with the patented stress-optimised structured diaphragm, resulting in a high pneumatic performance, long product life and compact size. Multi-port valves ensure that the product can tolerate vapors and condensate without damage.

Thanks to the KNF modular system, the parts used to transfer the gases can be made from materials with varying degrees of resistance. The customer has a choice of pump drives ranging from a selection of motors. Please contact us for further details.

### AREAS OF USE

The Diaphragm Vacuum Pumps offer a high level of performance despite their small size, as well as an excellent price performance ratio. They are required especially in the fields of analysis, medicine and production technology, e.g. as roughing pump for turbomolecular pumps.

The pumps are used for sucking air and gases, taking samples (even liquids in a vacuum) and evacuating vessels and systems.

### DYNAMIC MASS BALANCING SYSTEM

For applications that demand especially smooth running throughout the whole working range of the pump, KNF has developed, and applied for patent protection on, a dynamic mass balancing. It automatically damps out the out-of-balance resulting from gas forces. Pumps with dynamic mass balancing have the suffix ".22" in the model code.

### PERFORMANCE DATA

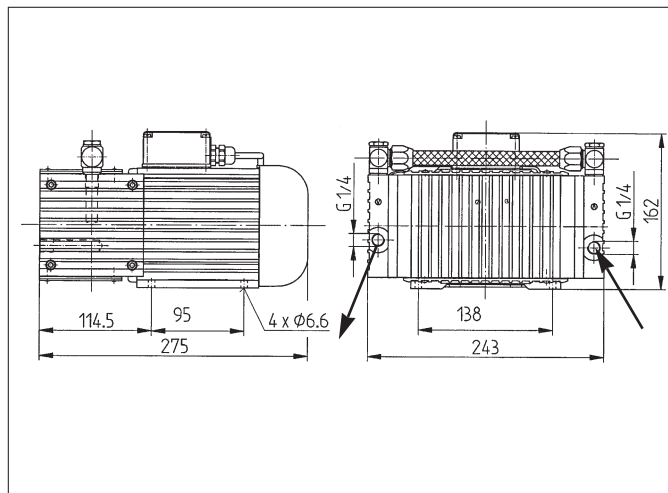
Type	Delivery (l/min)	Vacuum (mbar absolute)	atm. Press.	Pressure (bar g)	Weight (kg)
N 843.3 ANE	43	3		1	12.9
N 843.3 AN.22E	43	3		1	13.1

E = OEM pump with ac motor      .22 = with dynamic mass balancing option.

## N843.3 ANE

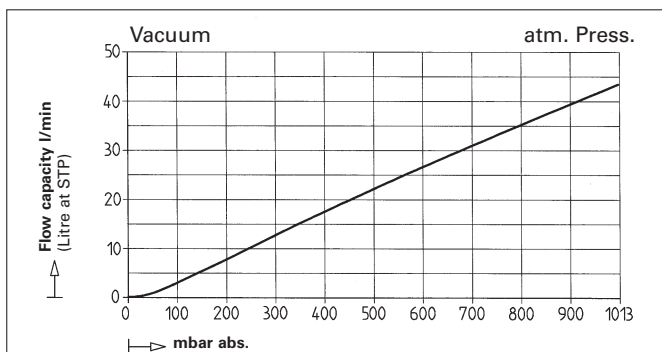
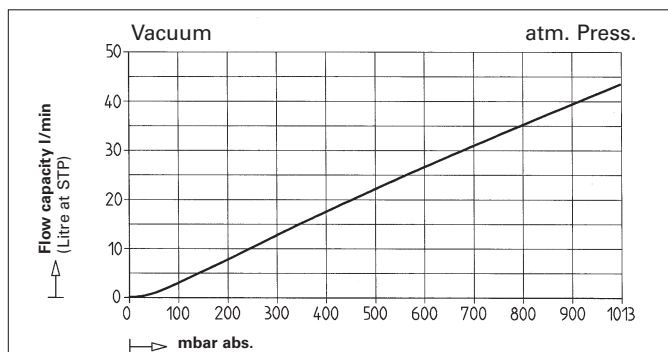
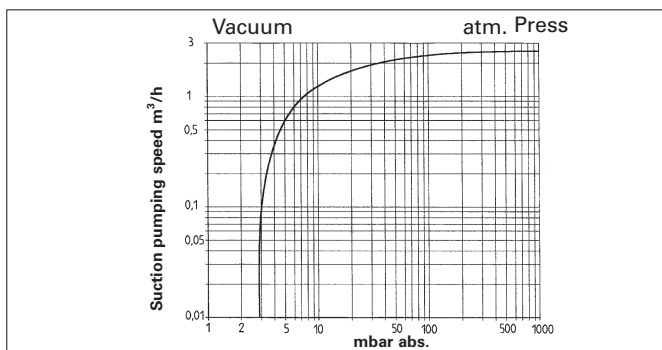
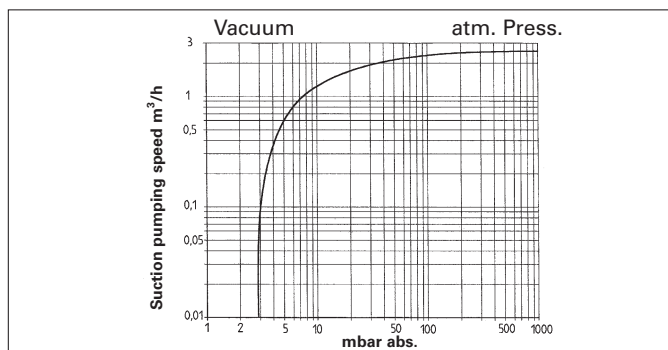
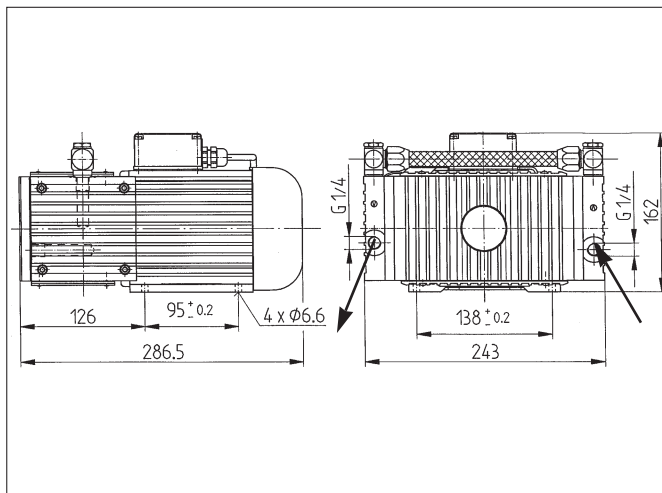
Dimensions in mm

(All dimensional tolerances conform to DIN ISO 2768-1, Tolerance Class V)



## N 843.3 AN.22E

Pump with dynamic mass balancing  
for smooth running operation.



### PERFORMANCE DATA

Type and Order No.	Delivery at atm. pressure (l/min)	Max. operating pressure (bar g)	Ultimate vacuum (mbar abs.)
N 843.3 ANE	43	1	≤ 3

Litre at STP

### MOTOR DATA

Protection class	IP 54		
Voltage/Frequencies (V/Hz)	115/60		
Power P <sub>1</sub> (W)	300		
Operating current (A)	.8		

### MODEL CODES AND MATERIALS

Type and Order No.	Pump head	Diaphragm	Valves
N 843.3 ANE	Aluminium	EPDM	CR

### PERFORMANCE DATA

Type and Order No.	Delivery at atm. pressure (l/min)	Max. operating pressure (bar g)	Ultimate vacuum (mbar abs.)
N 843.3 AN.22E	43	1	≤ 3

Litre at STP

### MOTOR DATA

Protection class	IP 54		
Voltage/Frequencies (V/Hz)	115/60		
Power P <sub>1</sub> (W)	300		
Operating current (A)	.8		

### MODEL CODES AND MATERIALS

Type and Order No.	Pump head	Diaphragm	Valves
N 843.3 AN.22E	Aluminium	EPDM	CR

above with dynamic mass balancing option