

DIAPHRAGM VACUUM PUMPS FOR STERILIZATION AND DRYING

SECTION 74.52



N836API basic model

Concept

The single and two-stage 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 medium is transferred using automatic valves.

The pumps are equipped with the patented stress-optimized structured diaphragm, resulting in a high pneumatic performance, a durable product and compact size. Special valves ensure that the product can cope easily with vapor and condensation.

Thanks to the KNF modular system, the parts used to transfer the gases can be made from materials with varying degrees of durability. Various AC motors are available for pump drive.



N836.3AP.40I with magnetic valve

Features

Uncontaminated flow
No pollution of the media

Maintenance-free

Patented pump system for autoclaves

Various technical options:

- The low-cost model
- The model with integrated magnetic valve for automatic drying
- As above, however with additional cooling of the pump heads for vapor condensation
- Connection for water cooling, please contact us for more details.

Very high vapor and condensation compatibility

High level of gas tightness

Long product life

Negligible current loss



N836.3AP.41I with magnetic valve and air-cooled heads

Areas of use

The diaphragm vacuum pumps, with their high level of performance despite their compact size, combined with patented technology and an excellent price to performance ratio, are used especially in autoclave systems (vacuum sterilization) and dry cabinets (vacuum drying).

The pumps suck out air, gases and vapors and in so doing evacuate for example containers or chambers of autoclave system.

PERFORMANCE DATA

Type	Delivery (l/min)	Vacuum (Torr)	atm. Press.	Pressure (psig)	Weight (kg)
N 836 API	31	60		7	4.85
N 836 AP .40 I	31	60		7	4.95
N 836 AP .41 I	31	60		7	5.45
N 836.3 API	31	7.5		7	7.1
N 836.3 AP .40 I	31	7.5		7	7.2
N 836.3 AP .41 I	31	7.5		7	8.3

N836API

Standard model

PERFORMANCE DATA

Type and Order No. ³⁾	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (psig)	Ultimate vacuum (Torr)
N 836 API	31	7	60

¹⁾ Litre at STP

¹⁾ Litre at STP

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	80		
Operating current (A)	0.9		

MODEL CODES AND MATERIALS

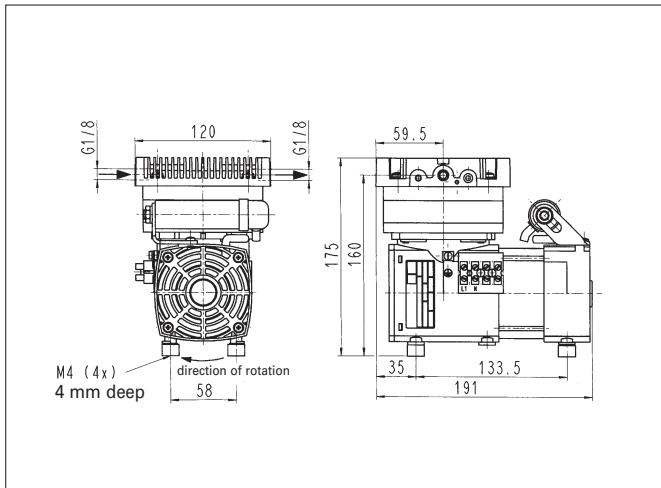
Type and Order No. ³⁾	Pump head ⁵⁾	Diaphragm	Valves
N 836 API	Aluminium/Ryton ⁴⁾	EPDM	EPDM

⁵⁾ Oxidised on the outside and coated on the inside

⁴⁾ Phillips Petroleum registered trade mark

³⁾ See also „MODEL CODES FOR EASY ORDERING“

Dimensions ⁶⁾ (mm)



⁶⁾ All dimensional tolerances conform to DIN ISO 2768-1, Tolerance Class V

N836AP.40I

Model with automatic rinsing

PERFORMANCE DATA

Type and Order No. ³⁾	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (psig)	Ultimate vacuum (Torr)
N 836 AP .40 I	31	7	60

¹⁾ Litre at STP

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	80		
Operating current (A)	0.9		

MODEL CODES AND MATERIALS

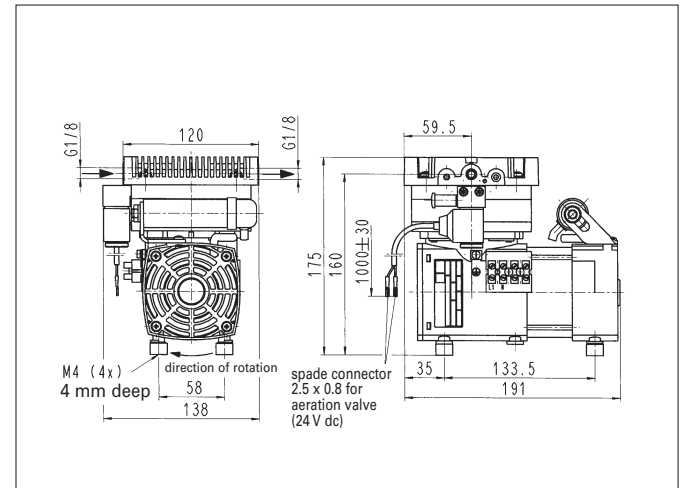
Type and Order No. ³⁾	Pump head ⁵⁾	Diaphragm	Valves
N 836 API	Aluminium/Ryton ⁴⁾	EPDM	EPDM

⁵⁾ Oxidised on the outside and coated on the inside

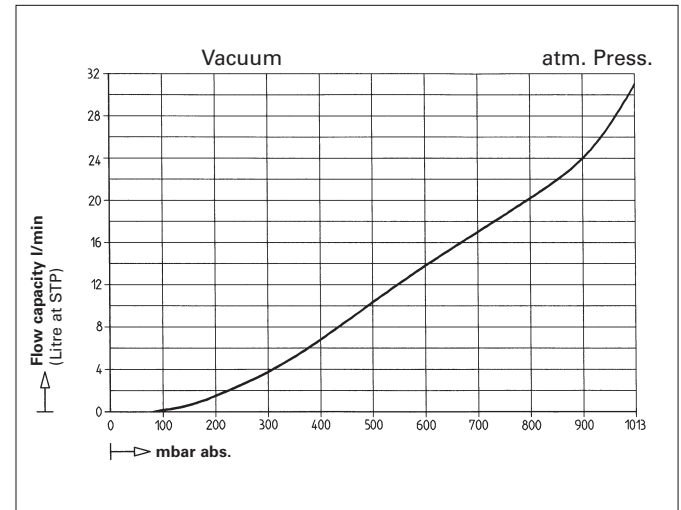
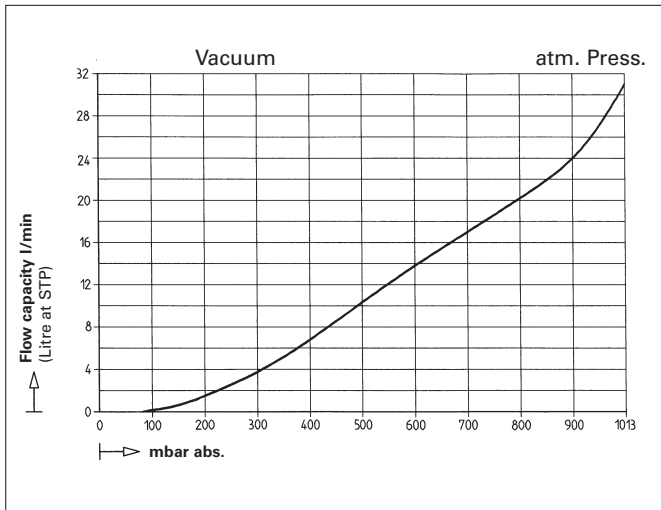
⁴⁾ Phillips Petroleum registered trade mark

³⁾ See also „MODEL CODES FOR EASY ORDERING“

Dimensions ⁶⁾ (mm)



⁶⁾ All dimensional tolerances conform to DIN ISO 2768-1, Tolerance Class V



N836AP.41I

Model with automatic rinsing and air cooling (water cooling on request)

PERFORMANACE DATA

Type and Order No. ³⁾	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (psig)	Ultimate vacuum (Torr)
N 836 AP .41 I	31	7	60

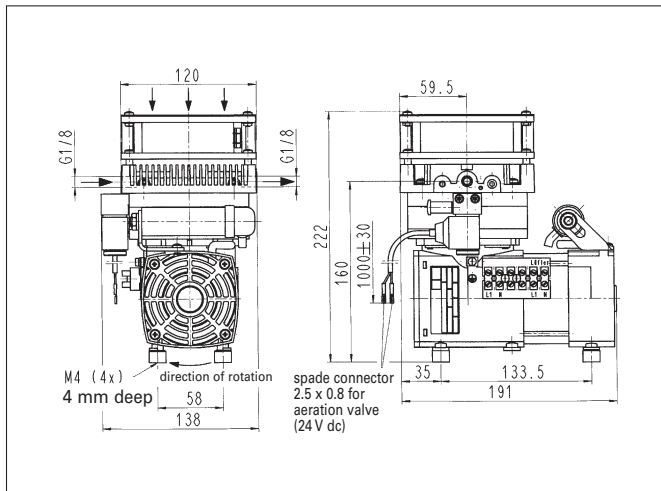
¹⁾ Litre at STP

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	100		
Operating current (A)	1.2		

MODEL CODES AND MATERIALS

Type and Order No. ³⁾	Pump head ⁵⁾	Diaphragm	Valves
N 836 API	Aluminium/Ryton ⁶⁾	EPDM	EPDM



N836.3API

PERFORMANACE DATA

Type and Order No. ³⁾	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (psig)	Ultimate vacuum (Torr)
N 836.3 API	31	7	7.5

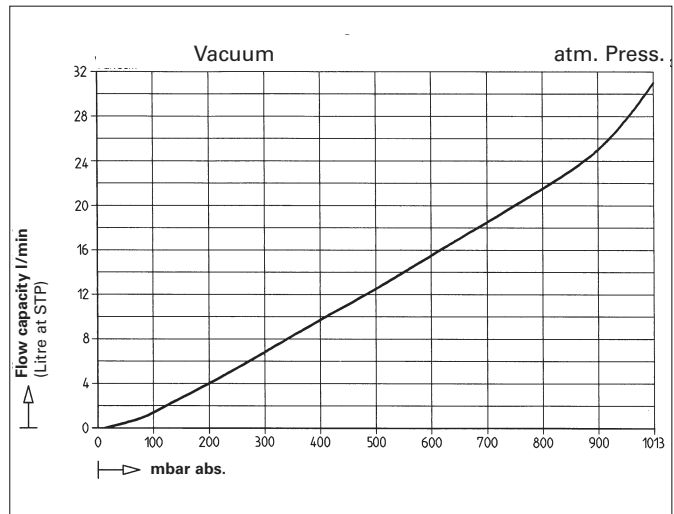
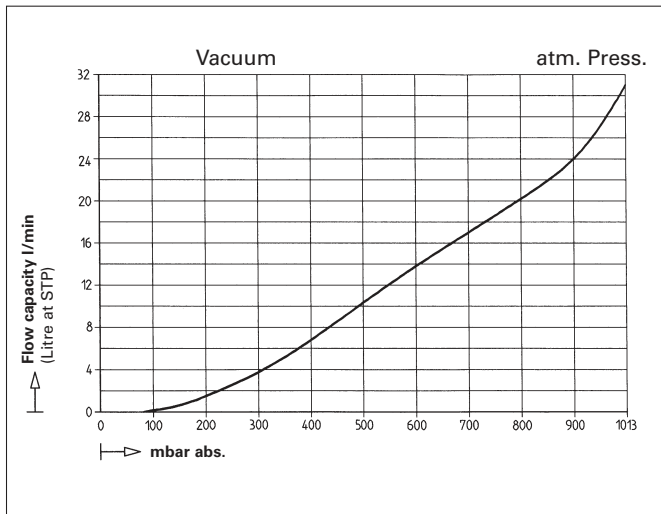
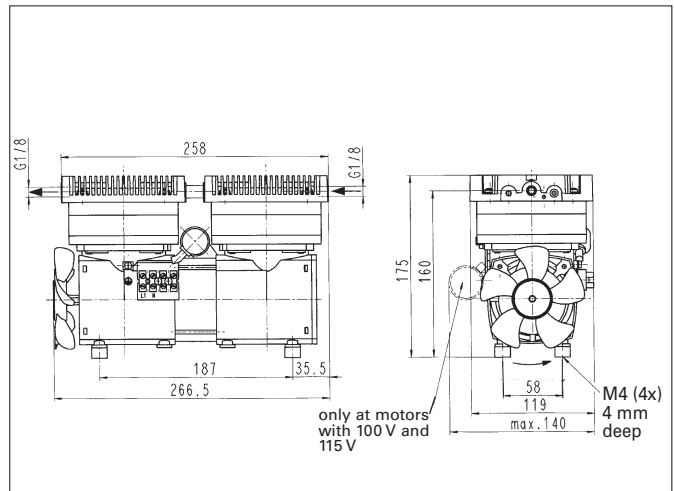
¹⁾ Litre at STP

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	100		
Operating current (A)	1.2		

MODEL CODES AND MATERIALS

Type and Order No. ³⁾	Pump head ⁵⁾	Diaphragm	Valves
N 836 API	Aluminium/Ryton ⁶⁾	EPDM	EPDM



N836.3AP.40I

Model with automatic rinsing

PERFORMANCE DATA

Type and Order No. ³⁾	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (psig)	Ultimate vacuum (Torr)
N 836.3 AP .40 I	31	7	10

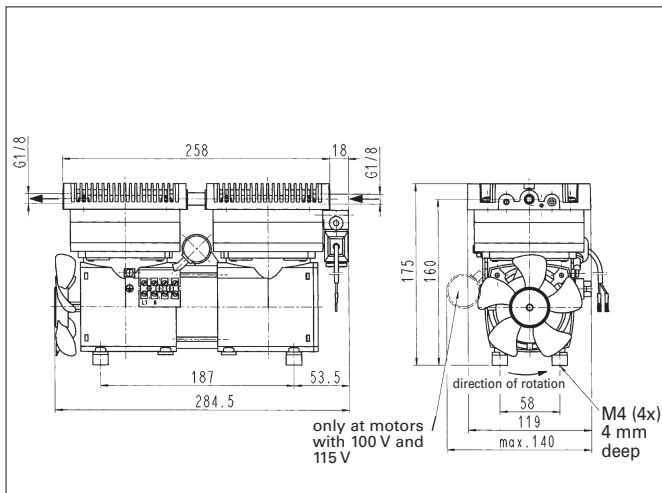
¹⁾ Litre at STP

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	100		
Operating current (A)	0.6		

MODEL CODES AND MATERIALS

Type and Order No. ³⁾	Pump head ⁵⁾	Diaphragm	Valves
N 836 API	Aluminium/Ryton ⁶⁾	EPDM	EPDM



N836.3AP.40I

Model with automatic rinsing and air cooling (water cooling on request)

PERFORMANCE DATA

Type and Order No. ³⁾	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (psig)	Ultimate vacuum (Torr)
N 836.3 AP .41 I	31	7	10

¹⁾ Litre at STP

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	135		
Operating current (A)	0.9		

MODEL CODES AND MATERIALS

Type and Order No. ³⁾	Pump head ⁵⁾	Diaphragm	Valves
N 836 API	Aluminium/Ryton ⁶⁾	EPDM	EPDM

