

# N 813 SERIES VACUUM PUMPS



N 813.4 ANDC-B

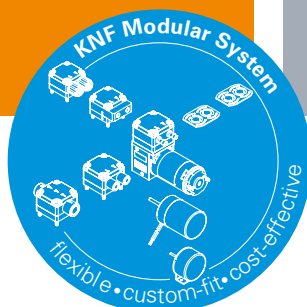
## ADVANTAGES

- High-speed evacuation of the measurement chamber thanks to exceptional suction speed
- High flow rate in deep vacuum
- Stable and deep final vacuum

## POSSIBLE AREAS OF USE

- Can be used as roughing pump for turbomolecular pumps
- Instrumental analysis
- Analytical technology – especially in the field of spectroscopy
- Used in helium leak detectors

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## PERFORMANCE DATA

Series model	N 813.3			N 813.4			N 813.5
	ANE	ANDC-B	AN.29 DC-B	ANE	ANDC-B	AN.29 DC-B	ANE
Pump head	Aluminum						
Diaphragm	EPDM						
Valve	EPDM						
Flow rate at atm. pressure (l/min)	13.0		4.2–13.0	13.0		3.5–13.0	19.0
Ultimate vacuum (mbar abs.)	3			0.5			1
Max. operating pressure (bar rel./psig)	1.0/14.5						
Permissible ambient temperature (°C)	+5 ... +40						
Permissible media temperature (°C)	+5 ... +40						
Weight (kg/lbs)	5.9/13.0	2.3/5.1		7.5/16.5	3.8/8.4		7.5/16.5

## ELECTRICAL DATA

Voltage (V)	230	24		230	24		230
Motor	Capacitor motor	Brushless DC motor		Capacitor motor	Brushless DC motor		Capacitor motor
Protection class motor	IP 44	IP 20		IP 44	IP 20		IP 44
Frequency (Hz)	50	-		50	-		50
Power P <sub>1</sub> (W)	50.0	35.0		80.0	65.0		80.0
I <sub>max</sub> (A)	0.40	1.50		0.50	2.70		0.50

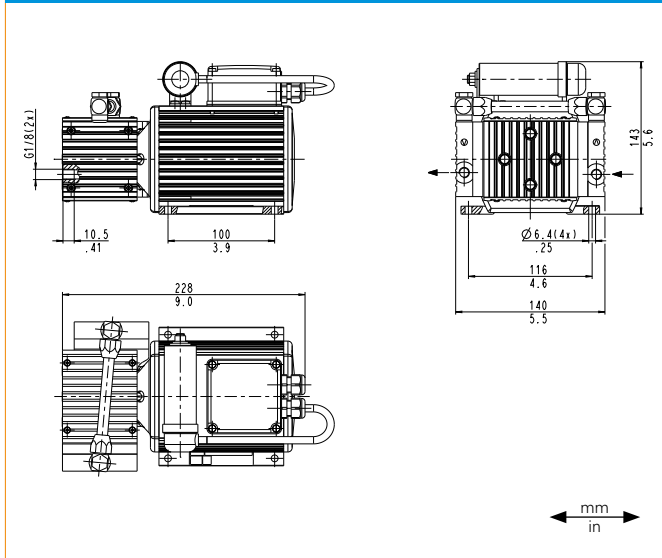
# N 813.3 ANE | ANDC-B | AN.29 DC-B

## PERFORMANCE DATA

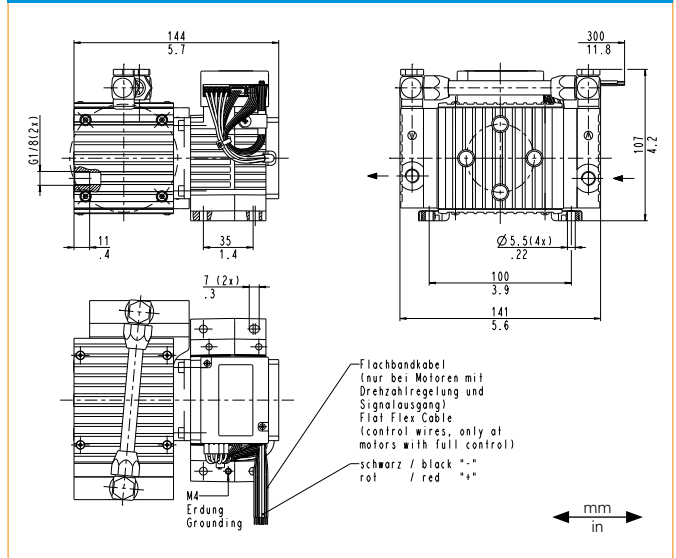
Series model	Flow rate at atm. pressure (l/min) <sup>1)</sup>	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 813.3 ANE	13.0	1.0/14.5	3
N 813.3 ANDC-B	13.0	1.0/14.5	3
N 813.3 AN.29 DC-B	4.2-13.0	1.0/14.5	3

<sup>1)</sup> Liter at STP

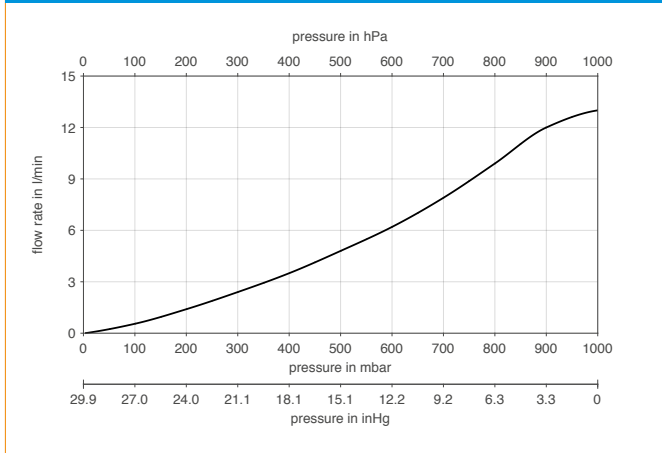
### N 813.3 ANE



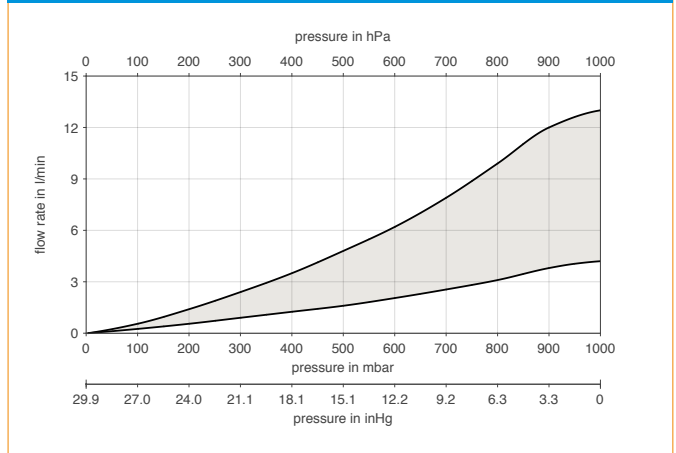
### N 813.3 ANDC-B | AN.29 DC-B



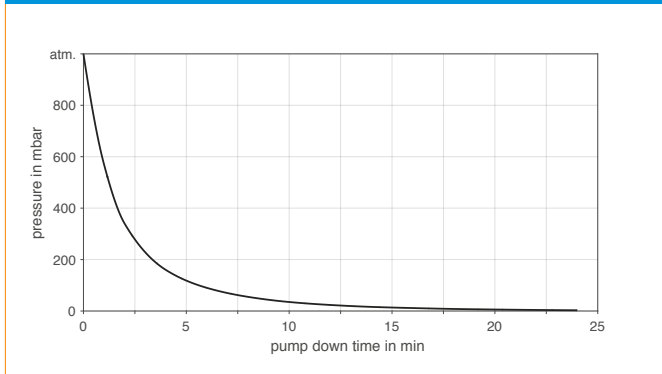
### N 813.3 ANE | ANDC-B



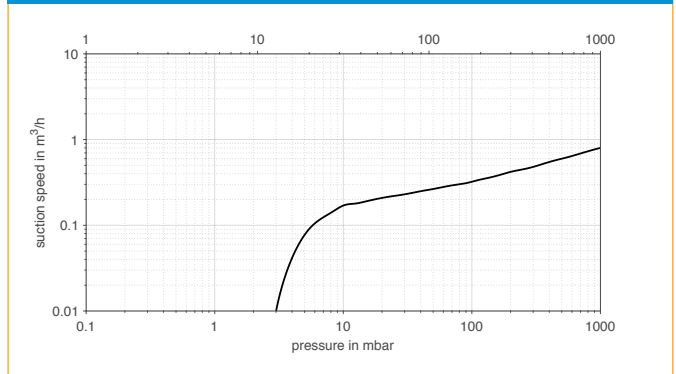
### N 813.3 AN.29 DC-B



### N 813.3 ANE | ANDC-B | AN.29 DC-B | PUMP DOWN TIME FOR 20 LITER VESSEL



### N 813.3 ANE | ANDC-B | AN.29 DC-B | SUCTION PUMPING SPEED



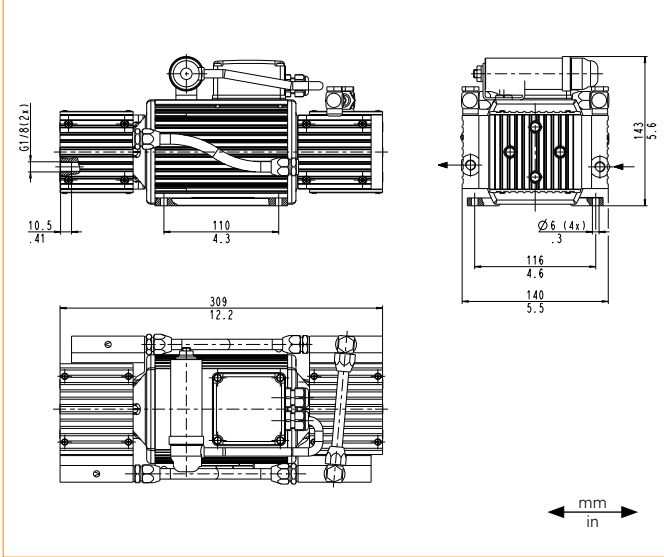
# N 813.4 ANE | ANDC-B | AN.29 DC-B

## PERFORMANCE DATA

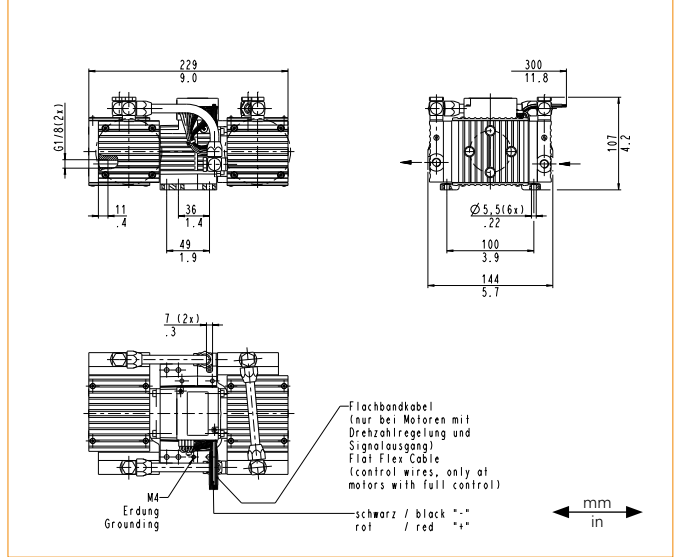
Series model	Flow rate at atm. pressure (l/min) <sup>1)</sup>	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 813.4 ANE	13.0	1.0/14.5	0.5
N 813.4 ANDC-B	13.0	1.0/14.5	0.5
N 813.4 AN.29 DC-B	3.5–13.0	1.0/14.5	0.5

<sup>1)</sup> Liter at STP

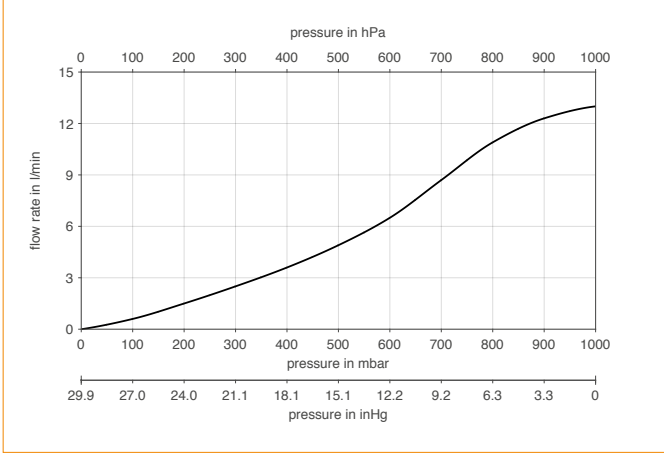
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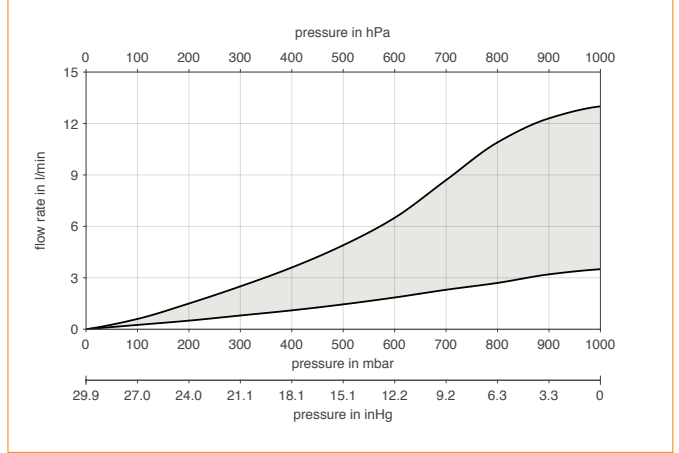
### N 813.4 ANDC-B | AN.29 DC-B



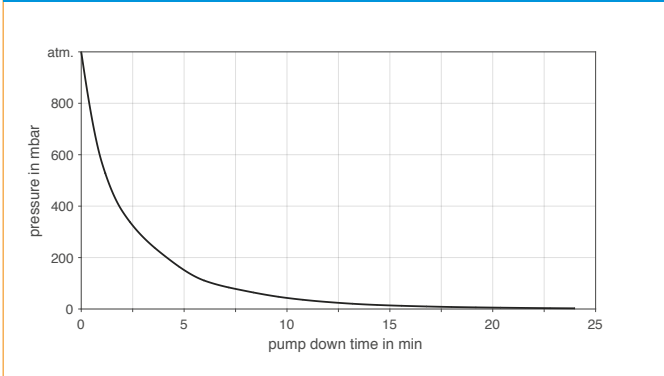
### N 813.4 ANE | ANDC-B



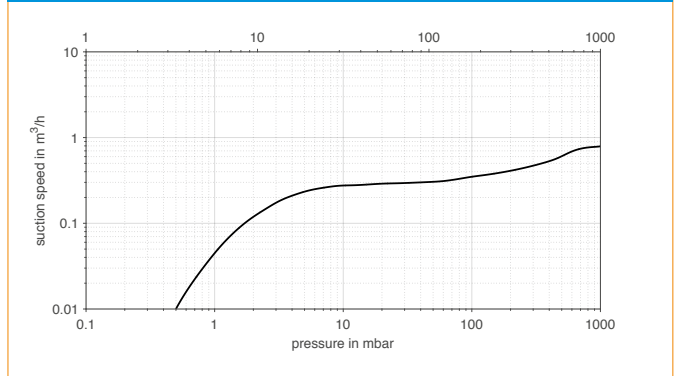
### N 813.4 AN.29 DC-B



### N 813.4 ANE | ANDC-B | AN.29 DC-B | PUMP DOWN TIME FOR 20 LITER VESSEL



### N 813.4 ANE | ANDC-B | AN.29 DC-B | SUCTION PUMPING SPEED



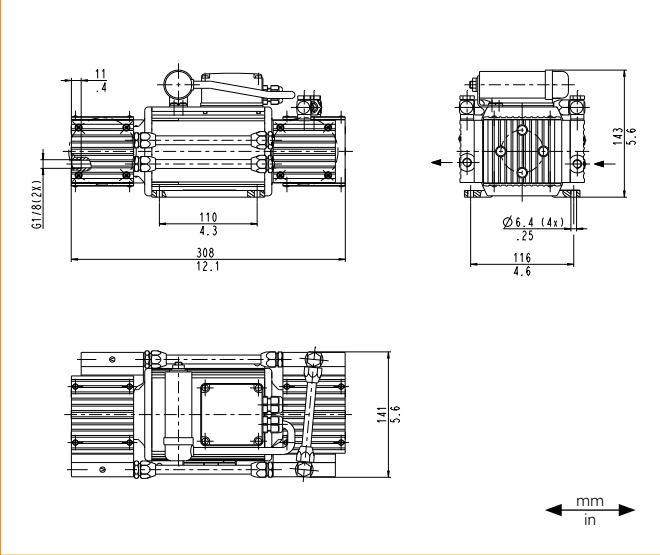
# N 813.5 ANE

## PERFORMANCE DATA

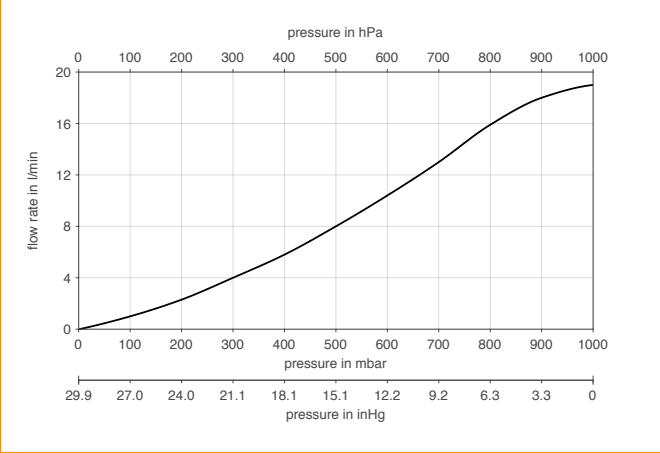
Series model	Flow rate at atm. pressure (l/min) <sup>1)</sup>	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 813.5 ANE	19.0	1.0/14.5	1

<sup>1)</sup> Liter at STP

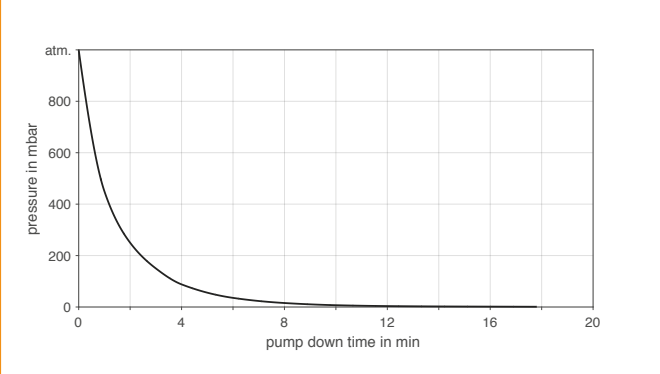
## N 813.5 ANE



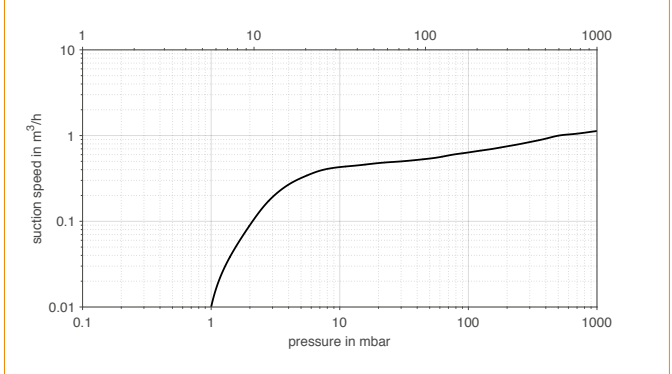
## N 813.5 ANE



## N 813.5 ANE | PUMP DOWN TIME FOR 20 LITER VESSEL



## N 813.5 ANE | SUCTION PUMPING SPEED



## ACCESSORIES

Description	Part No.	Details
Silencer	000346	G 1/8
Hose connector	005148	G 1/8
Small flange	042191	G 1/8, DN 10
Gasket	026906	for G 1/8

## SPARE PARTS

Description	Part No.	Details
Intermediate plate	024567	
Cover plate	026311	
Valve plate	024597	
Sealing ring	024598	
Diaphragm	044402	
Diaphragm spacer	057379	
Pneumatic connection .3	024723	
Pneumatic connection .4	024722	
Pneumatic connection .5	027394	

The performance values for the series models shown on this data sheet were determined under test conditions. The actual performance values may differ and depend in particular on the usage conditions and therefore on the specific application, on the parameters of the components involved in the user's system and on any technical modifications carried out which deviate from the standard configuration or the as delivered condition.

If individual designs have been created for specific customers on the basis of series models, other technical performance data may apply.

Before operation begins, the relevant operating instructions and/or assembly or installation instructions should be read and the safety information contained in these instructions should be noted.

KNF reserves the right to make changes to the product and the associated documentation without prior notice to the customer.



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