

UN 813 SERIES VACUUM PUMPS



UN 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



Please visit our website
www.knf.com
to get more information

PERFORMANCE DATA

Series model	UN 813.3			UN 813.4		
	ANI	ANDC-B	AN.29 DC-B	ANI	ANDC-B	AN.29 DC-B
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
Ultimate vacuum (mbar abs./inHg)	3/29.8			0.5/29.9		
Max. operating pressure (bar g/psig)	1.0/14.5					
Permissible ambient temperature (°C/°F)	5° C to 40° C / 41° F to 104° F					
Permissible media temperature (°C/°F)	5° C to 40° C / 41° F to 104° F					
Weight (kg/lbs)	5.9/13.0		2.3/5.1		7.5/16.5	

ELECTRICAL DATA

Voltage (V)	120	24	120	24
Motor	Capacitor motor	Brushless DC motor	Capacitor motor	Brushless DC motor
Protection class motor	IP 44	IP 20	IP 44	IP 20
Frequency (Hz)	60	-	60	-
Power P ₁ (W)	50.0	35.0	80.0	65.0
I _{max} (A)	0.77	1.50	0..95	2.70

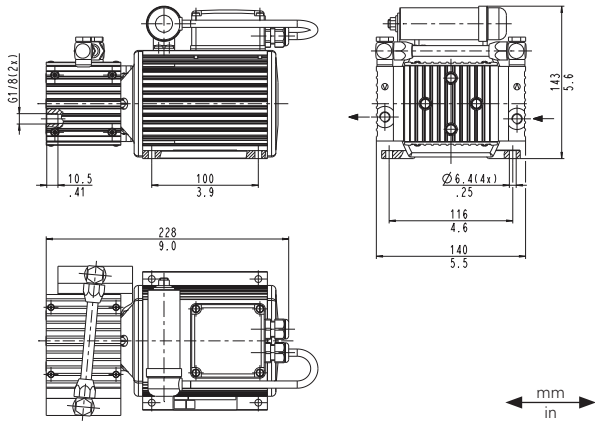
UN 813.3 ANI | ANDC-B | AN.29 DC-B

PERFORMANCE DATA

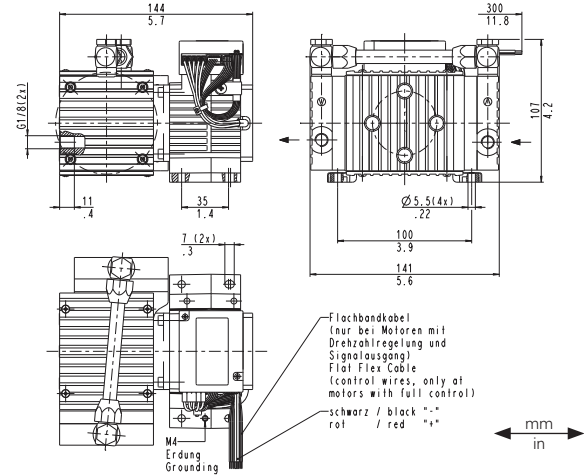
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
UN 813.3 ANI	13.0	1.0/14.5	3/29.8
UN 813.3 ANDC-B	13.0	1.0/14.5	3/29.8
UN 813.3 AN.29 DC-B	4.2–13.0	1.0/14.5	3/29.8

¹⁾ Liter at STP

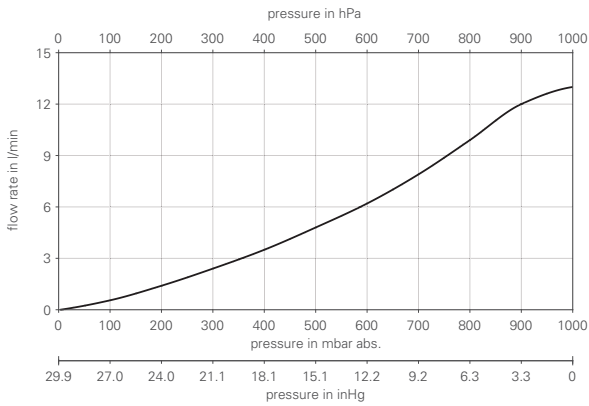
UN 813.3 ANI



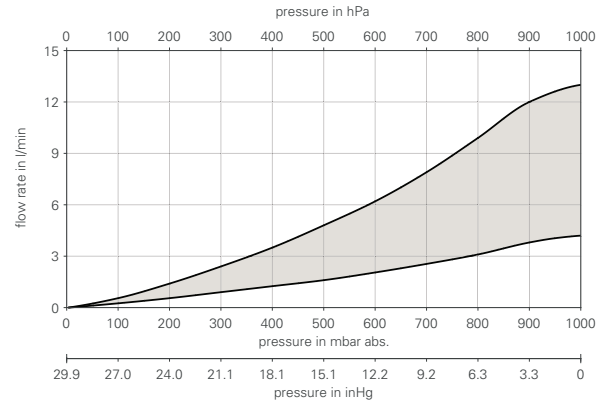
UN 813.3 ANDC-B | AN.29 DC-B



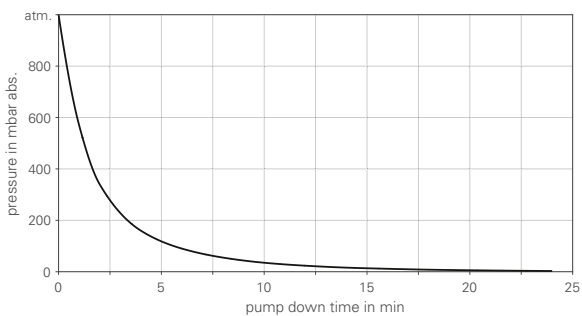
UN 813.3 ANI | ANDC-B



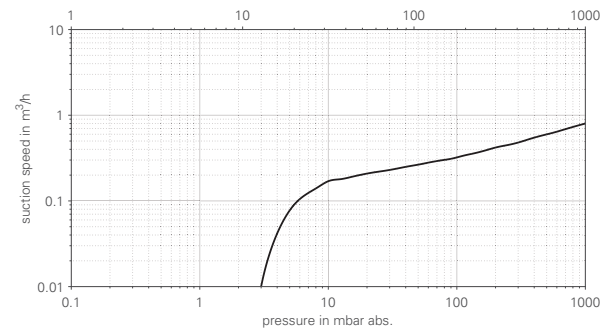
UN 813.3 AN.29 DC-B



UN 813.3 ANI | ANDC-B | AN.29 DC-B | PUMP DOWN TIME FOR 20 LITER VESSEL



UN 813.3 ANI | ANDC-B | AN.29 DC-B | SUCTION PUMPING SPEED



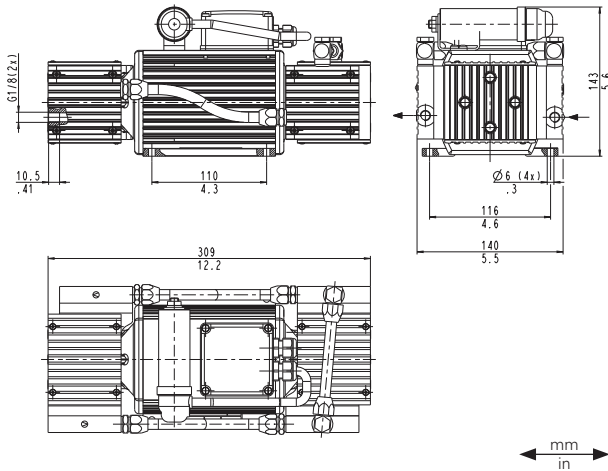
UN 813.4 ANI | ANDC-B | AN.29 DC-B

PERFORMANCE DATA

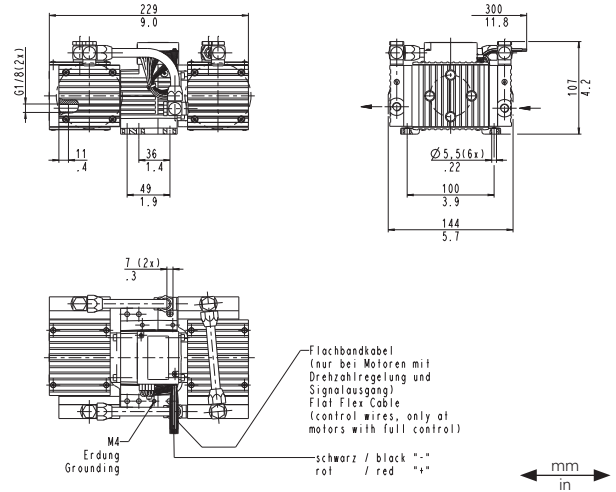
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
UN 813.4 ANI	13.0	1.0/14.5	0.5/29.9
UN 813.4 ANDC-B	13.0	1.0/14.5	0.5/29.9
UN 813.4 AN.29 DC-B	3.5–13.0	1.0/14.5	0.5/29.9

¹⁾ Liter at STP

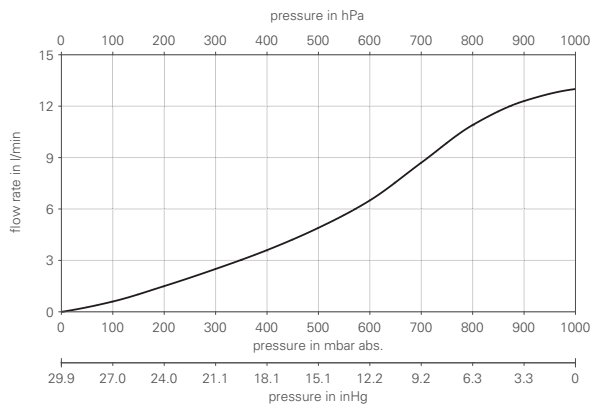
UN 813.4 ANI



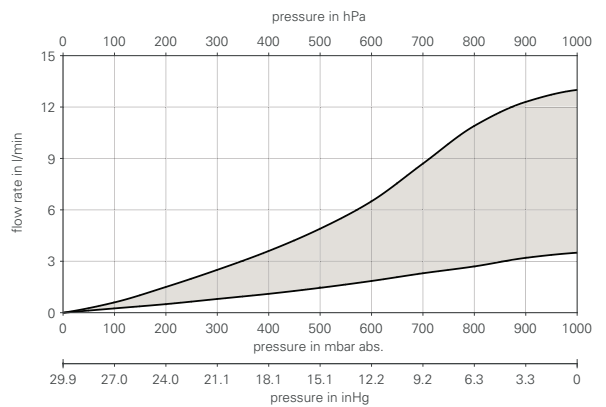
UN 813.4 ANDC-B | AN.29 DC-B



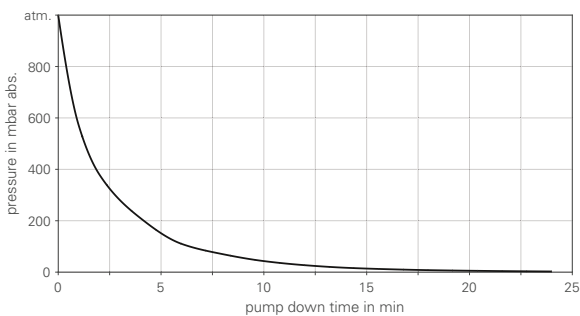
UN 813.4 ANI | ANDC-B



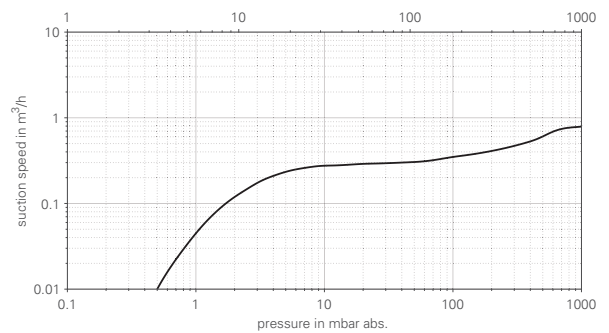
UN 813.4 AN.29 DC-B



UN 813.4 ANI | ANDC-B | AN.29 DC-B | PUMP DOWNTIME FOR 20 LITER VESSEL



UN 813.4 ANI | ANDC-B | AN.29 DC-B | SUCTION PUMPING SPEED



OPTIONS

Description	Illustration	Part No.	Details
Electric Connections			KNF offers many different electric terminations

ACCESSORIES

Description	Illustration	Part No.	Details
Silencer		000346	1/8" G (Male). Good for particle filtration
Hose connector		005148	1/8" G Male to 1/4" Barb. CuZn Copper Zinc Alloy Fitting. Recommended Accessory: Gasket: 026906
Gasket		026906	for G 1/8 CuZn with Santoprene seal
Shock mounts		215270	M4 Thread Male and Female. 5/8" x 5/8" elastomer size. Natural rubber (Durometer 50A). 4 required per pump.
Tubing			Various diameters and materials

SPARE PARTS

Description	Part No.	Details
Spare parts kit	073348	1pc EPDM diaphragm. 2pcs EPDM valve plate. 2pcs EPDM sealing ring. Kits Required: 2 Kits for UN813.3 4 Kits for UN813.4

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.



www.knf.com