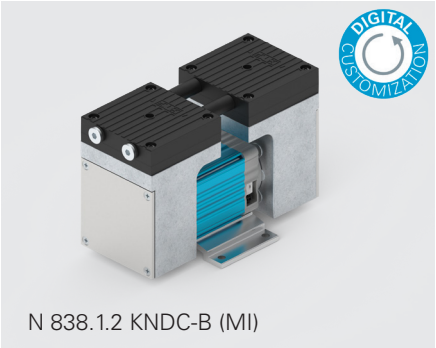
N 838.1.2 SERIES
VACUUM PUMPS



N 838.1.2 KNDC-B (MI)

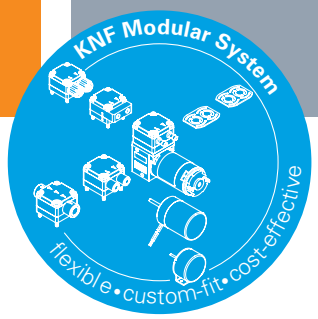
ADVANTAGES

- Excellent price/performance ratio
- High level of performance in a compact size
- Analog or digital control
- Readout of pump parameters
- Safety functions

POSSIBLE AREAS OF USE

- Instrumental analysis (i.a. degassing)
- Diagnostics – disposal of sample waste
- Vacuum technology – pick & place applications
- Medical technology – OR-suction devices

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



PERFORMANCE DATA		
Series model	**N 838.1.2**	
Material design	**KNE**	**KN.29DC-B (MI)**
Pump head	PPS	
Diaphragm	EPDM	
Valves	FPM	
Flow rate at atm. pressure (l/min)[1)3)]	42.0	12.0–60.0
Ultimate vacuum (mbar abs.)[1)]	90	100
Max. operating pressure (bar rel./psig)[1)2)]	0.5/7.3	
Permissible ambient temperature (°C/°F)[1)]	+5 °C ... +40 °C / 41 °F ... 104 °F	
Permissible media temperature (°C/°F)[1)]	+5 °C ... +40 °C / 41 °F ... 104 °F	
Weight (kg/lbs)	4.7/10.3	2.9/6.4
ELECTRICAL DATA		
Voltage (V)	230	24
Motor	Capacitor motor	Brushless DC motor, default control voltage: 0.1…5 V or PWM-signal 1…99 %
Protection class motor	IP 20	
Frequency (Hz)	50	-
Power P_1 (W)	70.0	101.0
I_{max} (A)	0.50	4.20

[1)] expanded performance available upon request
[2)] bar rel relative to 1000 hPa
[3)] Liters in the standard state based on ISO 8778 and ISO 21360-1/2 (1000 hPa, 20 °C)

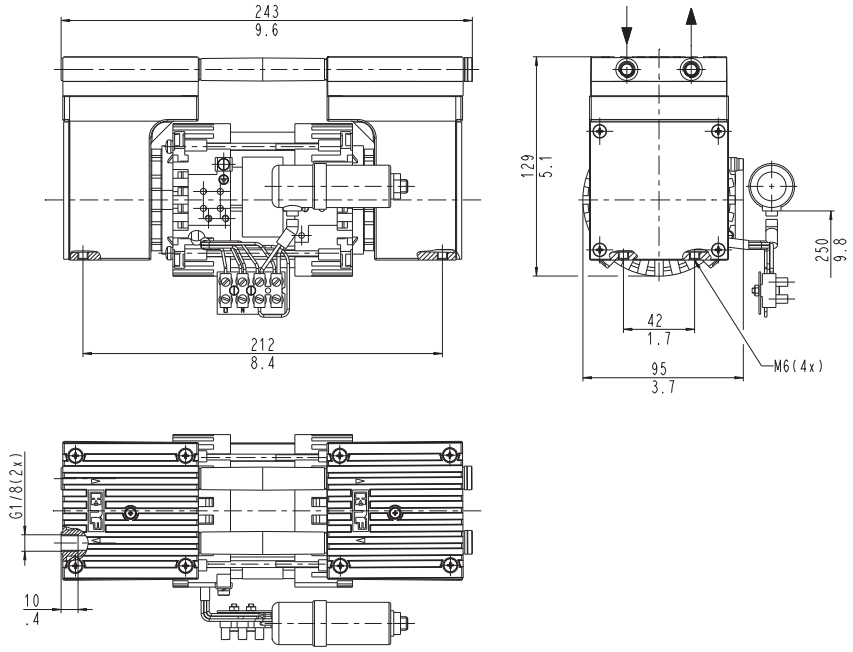
N 838.1.2 KNE

PERFORMANCE DATA

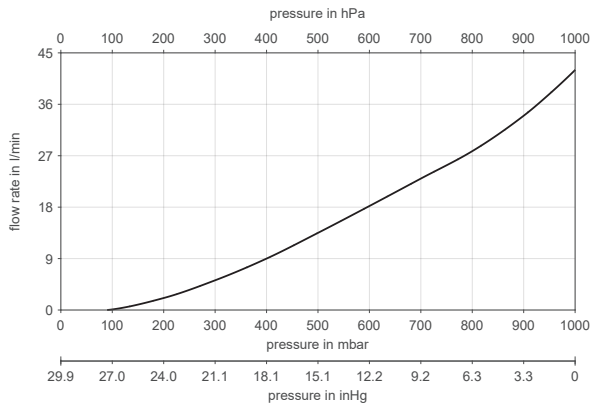
Series model	Flow rate at atm. pressure (l/min)[3]	Max. operating pressure (bar rel./psig)[2]	Ultimate vacuum (mbar abs.)
N 838.1.2 KNE	42.0	0.5/7.3	90

[2] bar rel relative to 1000 hPa
[3] Liters in the standard state based on ISO 8778 and ISO 21360-1/2 (1000 hPa, 20 °C)

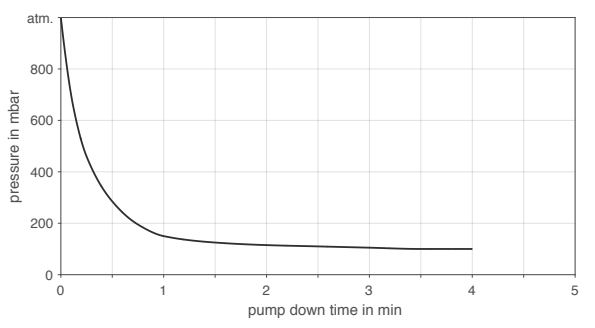
N 838.1.2 KNE



N 838.1.2 KNE



N 838.1.2 KNE | PUMP DOWN TIME FOR 10 LITER VESSEL



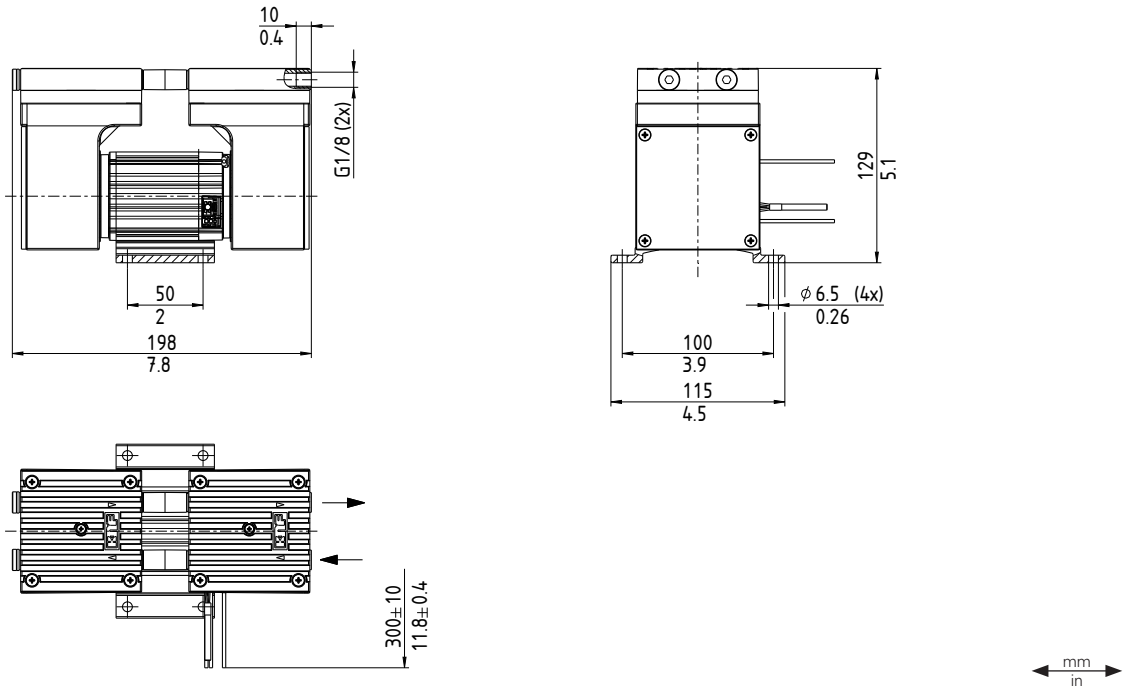
N 838.1.2 KN.29DC-B (MI)

PERFORMANCE DATA

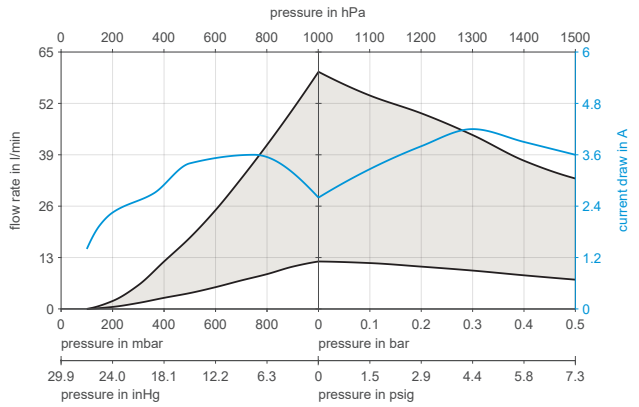
Series model	Flow rate at atm. pressure (l/min)[3]	Max. operating pressure (bar rel./psig)[2]	Ultimate vacuum (mbar abs.)
N 838.1.2 KN.29DC-B (MI)	12.0–60.0	0.5 /7.3	100

[2] bar rel relative to 1000 hPa
[3] Liters in the standard state based on ISO 8778 and ISO 21360-1/2 (1000 hPa, 20 °C)

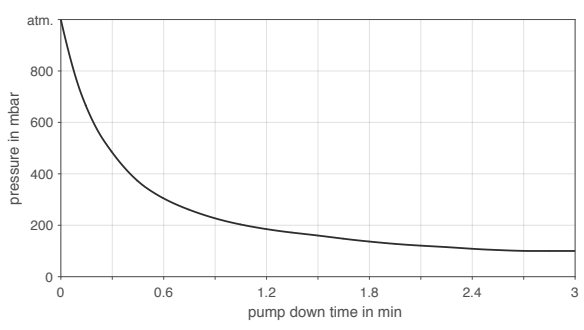
N 838.1.2 KN.29DC-B (MI)



N 838.1.2 KN.29DC-B (MI)



N 838.1.2 KN.29DC-B (MI) | PUMP DOWN TIME FOR 20 LITER VESSEL



DIGITAL CUSTOMIZATION
Thanks to digital technology, this pump can be quickly adapted to the customer's system.
This is done by parametrizing the firmware of the motor at KNF.

ACCESSORIES

Description	Illustration	Part No.	Details
Silencer/Inlet filter		007006	G 1/8
Hose connector (straight)		004975	G 1/8, PA, ID 8
Vibration damping (4 pieces necessary per pump), for use with motor mounting plate		014114	D 20x15 mm, 2x M6x10 mm outside thread
Vibration damping (4 pieces necessary per pump, use for directmounting without mounting plate)		124782	D15x15 mm, M4x6 mm outside thread/ M4x6 mm inside thread

SPARE PARTS

Description	Illustration	Part No.	Details
Spare parts kit N 838.1.2 KN		313749	Spare parts kit consists of: 2x diaphragm, 4x valve plate, 4x O-rings. This set is required to maintain the pump.

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