



N828KNDC model shown with DC motor.

Type: N828

Diaphragm Vacuum Pump & Compressor



Single Stage OEM Installation Model with AC or DC Motor

Free-Flow Capacity: 30 liters/minute (1 SCFM)
Maximum End Vacuum: 100 mbar (27 in. Hg)
Maximum Continuous Pressure: 1 bar (15 psig)

Description

Representing a new generation of diaphragm pumps from KNF, this pump is optimized for durability and the highest efficiency in its size class using CAD/FEA methods. It features our exclusive, patented, structured diaphragm and multi-port valve system that improves performance and reliability, resulting in a smaller, more powerful package.

Pump Features

- **Advanced Multi-Port Valve System** - This pump features KNF's patented multi-port valves. The tough, circular valve disk spans several smaller holes instead of one large hole, and can withstand punishment caused by pumping liquid droplets. The resulting flow and efficiency are increased along with improved reliability.
- **Patented, Structural Molded Diaphragm** - A unique structure is molded into the diaphragm that spreads stress over a wider area. This precision control of flexibility improves efficiency, performance and lifetime. Also, there is no metal clamping disk, which can be a source of leaks and corrosion with traditional diaphragm pumps.
- **Flexible Design** - KNF's engineers combine high performance with a small physical package to produce an efficient, compact standard unit. In addition, with KNF's Project Pump program, we can suggest a variety of inexpensive modifications to meet your OEM design requirements. This pump is available in a variety of motor types including brushless DC.
- **Oil-Free, Contamination-Free Transfer** retains pumped medium purity and increases system reliability, as there are no sliding seals to wear away.
- **Low Noise Level** - The enclosed compressor housing reduces noise transmission and keeps dirt away from critical components. The pump is extremely quiet and smooth running. The heavy-duty motor is equipped with ball bearings to assure quiet, trouble-free operation.
- **Variety of Accessories** - Available accessories include noise & dust filters, hose connectors and shock mounts.

Applications

- Pneumatic Air Supply
- Medical Therapeutic Devices
- Automatic Sampling Systems
- Air/Gas Samplers
- Medical Diagnostic Equipment
- Portable Analytical Instruments
- Pick & Place Devices
- Gas Chromatography
- Organic Vapor Analyzers
- Sample Probe Wash Applications
- Air Quality Monitors
- Residual Gas Analyzers

KNF Performance Specifications

Model Number	N828ANI	N828KNI	N828ANDC	N828KNDC
Maximum Flow	30 lit./min. (1 SCFM)		27 lit./min. (.95 SCFM)	
Maximum Vacuum	100 mbar (27 in. Hg)		100 mbar (27 in. Hg)	
Maximum Continuous Pressure	1 bar (15 psig)		1 bar (15 psig)	

Electrical

Motor Voltage & Frequency	115V (60 Hz)	230V (50 Hz)	12 / 24 VDC
Full Load Motor Current	0.5 Amps	0.65 Amps	3.2 / 1.7 Amps
Motor Type	Permanent Split-Capacitor AC		Permanent Magnet Brush Type DC
Motor Protection	Thermal Reset (IP 00)		None

Environmental

Maximum Ambient Temperature	40°C / 105°F	40°C / 105°F
Maximum Medium Temperature	40°C / 105°F	40°C / 105°F
Net Weight	2.4 kg / 5.3 lbs.	2.3 kg / 5.1 lbs.

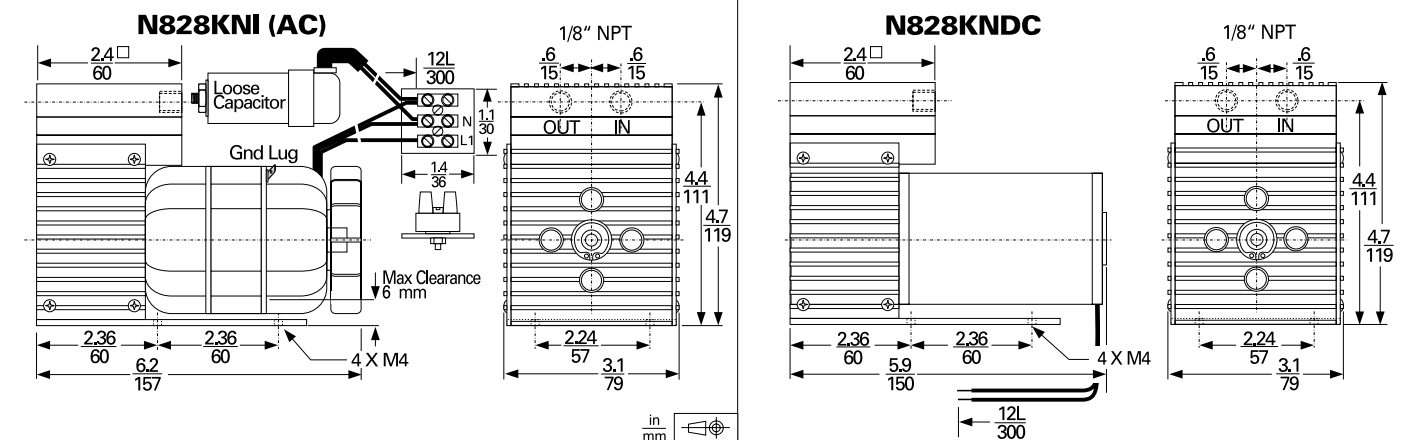
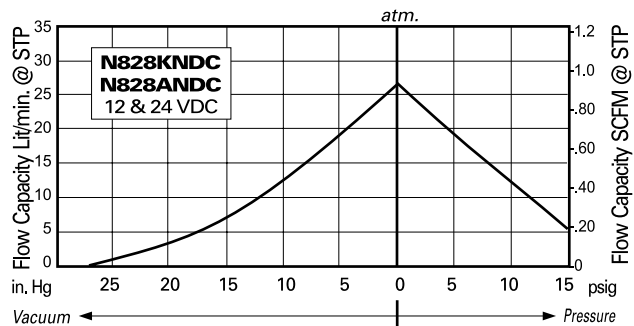
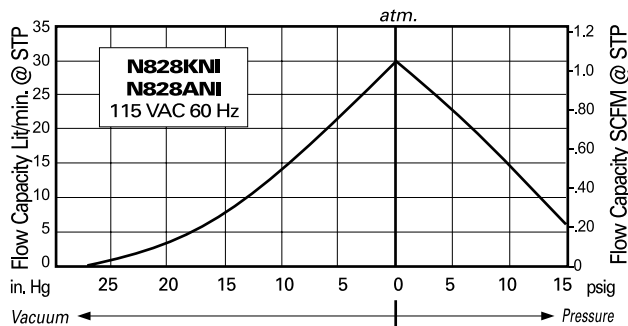
Materials of Construction

Type	Head	Diaphragm	Valves
N828KN	Ryton®	EPDM	Viton®
N828AN	Aluminum	EPDM	Viton®

Notes: Standard continuous performance ratings are based on technical data and test results of nominal units at sea level with an ambient temperature of 70° F (21° C) and nominal electrical supply are listed above. Dimensions and performance characteristics given are for reference only. Higher performance models, cost efficient OEM modifications, a wide variety of motor options and different materials of construction are available. Viton® is a registered trademarks of DuPont Dow Elastomers, L.L.C. Ryton® is a registered trademark of the Phillips 66 Company. Specifications subject to change without notice.

Accessories: Hose Connectors, Noise & Dust Filters, Shock Mounts

Performance Characteristics/Outline Dimensions:



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