

SECTION 50.25

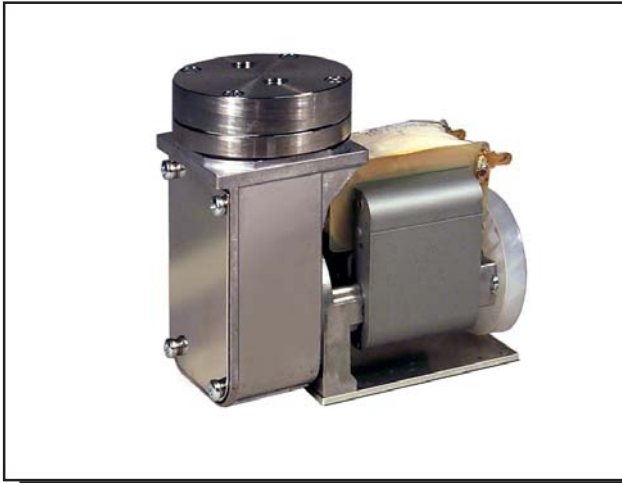
## Type: N010

# Diaphragm Vacuum Pump and Compressor

### Single Stage OEM Installation Model with AC, DC or Brushless DC Motor



Free-Flow Capacity: 13.3 liters/minute (0.47 SCFM)  
Maximum End Vacuum: 240 mbar abs. (22.8 in. Hg)  
Maximum Continuous Pressure: 1.9 bar (28 psig)



Model N010STI shown with AC motor

### Description

The N010 diaphragm pump is one of KNF's most versatile air and gas designs. A variety of materials and motors are available as standard product. Your input into KNF's "OEM Project Pump" program can result in modifications to this pump that better fit your performance and cost requirements. Standard pumps are recognized under the Component Program of Underwriters Laboratories, Inc. Contact our applications specialists for details.

### Pump Features

- **Ideal OEM Pump** – KNF's "OEM Project Pump" program makes a wide variety of inexpensive modifications available. This pump is easily optimized to fit your design rather than force a compromise with a standard product. For example, we routinely reposition component parts, add special base plates or change mounting methods. We can also alter standard performance limits. Perhaps other materials of construction may be more suitable or economical for your specific application.
- **Oil-Free, Contamination-Free Transfer** retains pumped medium purity and increases system reliability, as there are no sliding seals to wear away. Mount this pump in any position within your equipment without affecting performance.
- **We Build-In Quality Details** such as oversized, long life, permanently lubricated bearings and other heavy-duty components. Quiet, reliable operation is assured.
- **Variety of Options** – Many motor types are available for use with this pump, including economical DC types, brushless DC, and other AC and DC voltages. A heated-head model is available to prevent condensate formation in stack gas sample lines and a heat-resistant model handles high temperature gases. These pump heads can be equipped with an insulating jacket for personnel safety and heating efficiency. A UL listed bench-top laboratory model, complete with housing and power cord, is also available.
- **Variety of Accessories** includes hose connectors, noise & dust filters and shock mounts.

### Applications

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

## KNF Performance Specifications

Model Number	N010KNI (AC)			N010KNI (DC)
Maximum Flow*	13.3 lit/min. (0.47 SCFM)*			13.3 lit/min. (0.47 SCFM)*
Maximum Vacuum	240 mbar (22.8 in. Hg)			240 mbar (22.8 in. Hg)
Maximum Continuous Pressure	1.9 bar (28 psig)			1.9 bar (28 psig)

## Electrical

Motor Voltage & Hz	115V (50-60 Hz)	115V (60 Hz)	230V (50 Hz)	6 / 12 / 24 VDC
Full Load Motor Current	2.1 Amps	1.25 Amps	0.65 Amps	4 / 2 / 1 Amps
Motor Type	Shaded Pole AC (D)	Shaded Pole AC (K)	Shaded Pole AC (K)	Permanent Magnet Brush Type DC
Motor Protection	Thermal Reset	Thermal Reset	Thermal Reset	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 (KN Materials)	2.0 kg (4.4 lb.)	1.7 kg (3.7 lb.)

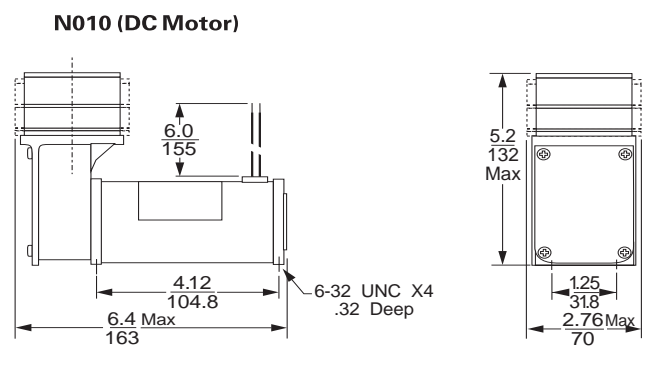
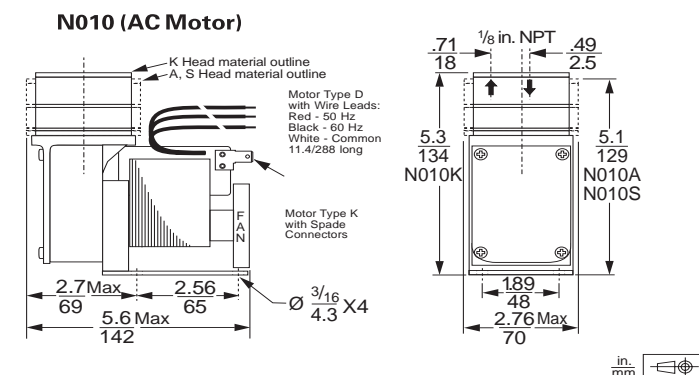
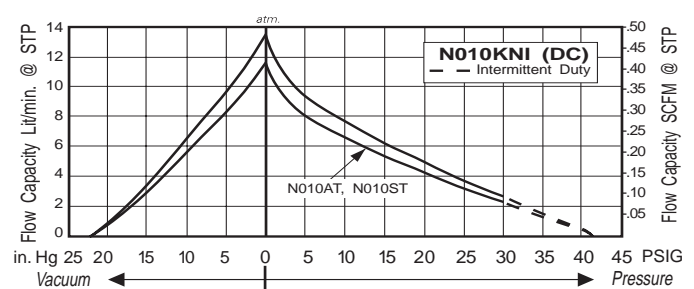
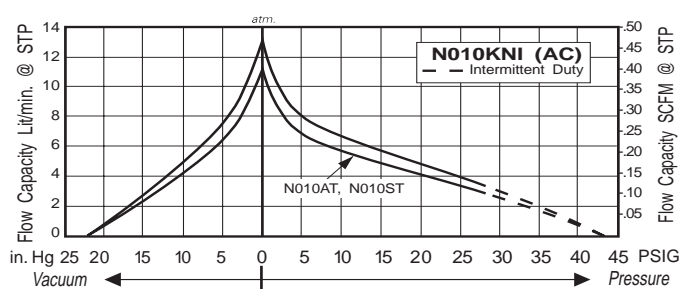
## Materials of Construction

Standard Model Number	Head	Diaphragm	Valves	Clamping Disk
N010KNI	Hostalen® (PP)	Neoprene	Viton®	Aluminum
N010KVI	Hostalen® (PP)	Viton®	Viton®	316 Stainless Steel
N010ANI	Aluminum	Neoprene	Viton®	Aluminum
N010ATI*	Aluminum	Teflon®-Coated Neoprene	Solid Teflon®	Aluminum
N010AVI	Aluminum	Viton®	Viton®	Aluminum
N010SNI	316 Stainless Steel	Neoprene	Viton®	316 Stainless Steel
N010STI*	316 Stainless Steel	Teflon®-Coated Neoprene	Solid Teflon®	316 Stainless Steel
N010SVI	316 Stainless Steel	Viton®	Viton®	316 Stainless Steel

**Notes:** \*Flow capacity reduced by 15% for Teflon models. 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, heated-head models, cost efficient OEM modifications, a wide variety of motor options and different materials of construction are available. Teflon® is a registered trademark of DuPont. Viton® is a registered trademark of DuPont Dow. Hostalen® is a registered trademark of Hoechst. Specifications subject to change without notice.

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

## Performance Characteristics/Outline Dimensions:



## KNF NEUBERGER, INC.

Two Black Forest Road  
 Trenton, New Jersey 08691-1810  
 Phone: 609-890-8600 · Fax: 609-890-8323  
 Web: <http://www.knf.com>