

Model N05ANI with AC Motor

Type: N05

Diaphragm Vacuum Pump and Compressor

Single Stage OEM Installation Model with AC or DC Motor



Free-Flow Capacity: 6.0 liters/minute (0.21 SCFM)
Maximum End Vacuum: 255 mbar abs. (22.4 in. Hg)
Maximum Continuous Pressure: 3 bar (43 psig) (AC motor)

Description

The N05 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 one of our applications specialists for details.

Pump Features

- **Self-Protecting Output Pressure** – Standard AC models are capable of running continuously at full pressure and zero flow—without the need for pressure relief valves.
- **Ideal OEM Pump** – KNF's Project Pump program makes a wide variety of inexpensive modifications available. We can easily optimize this pump to 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 alter standard performance limits. Perhaps other materials of construction are more suitable or economical for your application.
- **Quiet, Reliable Operations is Assured** over the life of your application because we build in quality details such as oversized, long life, permanently lubricated bearings and other heavy-duty components. Mount this pump in any position within your equipment without affecting performance.
- **Oil-Free, Contamination-Free Transfer** retains pumped medium purity and increases system reliability, as there are no sliding seals to wear away.
- **Variety of Options and Accessories** – Many motor types are available for use with this pump, including economical DC types, brushless DC, and other voltages. Available accessories include hose connectors, noise & dust filters and shock mounts. This pump is also available as a UL listed bench-top laboratory model, complete with housing and power cord.

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	N05ANI (AC)	N05ANI (DC)
Maximum Flow*	6.0 lit/min. (0.21 SCFM)*	5.5 lit/min. (0.19 SCFM)*
Maximum Vacuum	255 mbar (22.4 in. Hg)	255 mbar (22.4 in. Hg)
Maximum Continuous Pressure	3.0 bar (43 psig)	2.1 bar (30 psig)

Electrical

Motor Voltage & Frequency	115 V (60 Hz)	230 V (50 Hz)	6 / 12 / 24 VDC
Full Load Motor Current	1.1 Amps	0.6 Amps	4 / 2 / 1 Amps
Motor Type	Shaded Pole AC	Shaded Pole AC	Permanent Magnet Brush Type DC
Motor Protection	Thermal Reset	Thermal Reset	None

Environmental

Maximum Ambient Temperature	40°C (105°F)
Maximum Medium Temperature	40°C (105°F)
Net Weight (KN Materials)	1.1 kg (2.4 lb.)

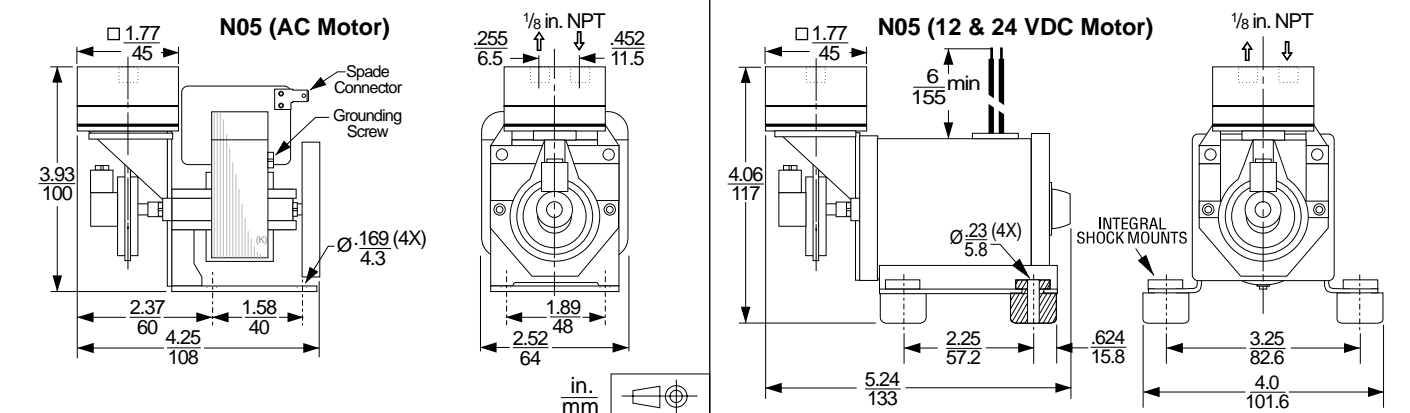
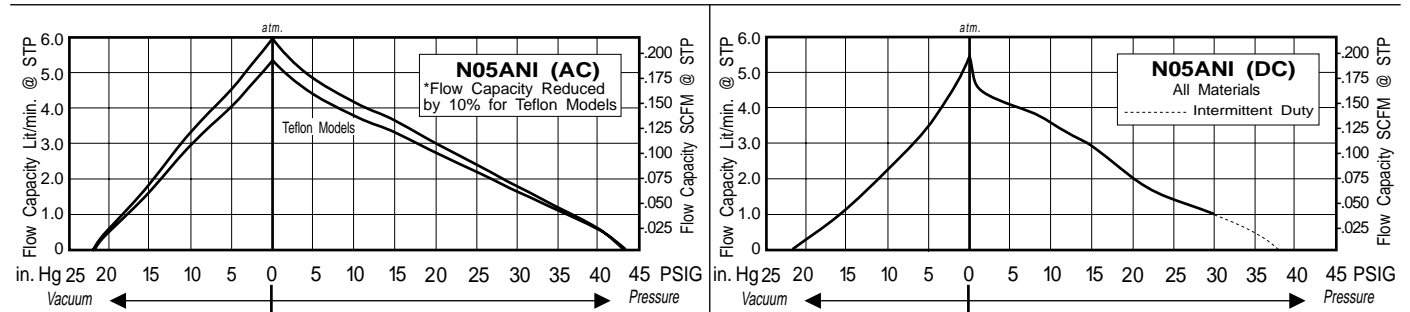
Materials of Construction

Standard Model Number	Head/Clamping Disk	Diaphragm	Valves
N05ANI	Aluminum	Neoprene	Neoprene
N05ATI*	Aluminum	Teflon®-coated Neoprene	Solid Teflon®
N05AVI	Aluminum	Viton®	Viton®
N05SNI	316 Stainless Steel	Neoprene	Neoprene
N05STI*	316 Stainless Steel	Teflon®-coated Neoprene	Solid Teflon®
N05SVI	316 Stainless Steel	Viton®	Viton®

Notes: *Flow capacity reduced by 10% 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, 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. Specifications subject to change without notice.

Accessories: Hose Connectors, Noise & Dust Filters, Shock Mounts, Pressure Control Valves

Performance Characteristics/Outline Dimensions:



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