



UNPK09 pump shown with optional BLDC motor

Types: UNPK09

Swing Piston Compressor and Vacuum Pump

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

Free-Flow Range:	15 lit./min. (0.53 SCFM)
Max. End Vacuum:	100 mbar (26.96 in. Hg)
Max. Cont. Pressure (NPK09):	7 bar (103 psig)

Description

The NPK swing-piston pumps offer a higher flow rate for a given size than the corresponding diaphragm system. The applications of KNF pumps range from installation in plants and equipment for industry, chemical and medical technology, to precise and reliable operation in environmental protection and research.

Swing piston compressors and vacuum pumps were developed for OEM use in medical equipment as nebulizers, suction apparatus and other duties. A special lip-type piston seal enables 100% dry operation, something not always present in other piston systems. Pumped vapors are uncontaminated, and special valves minimize restriction to flow.

All KNF piston compressors and vacuum pumps produce 100% oil-free air and absolutely clean vacuum. The exacting sample purity demands of medical, food and environmental industries make uncontaminated pumping essential. Contact our applications specialists for details.

Pump Features

- **Ideal OEM Pump** – KNF's 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 alter standard performance limits. These pumps are supplied fully assembled and ready to install. A brushless DC motor (BLDC) is available for this pump, offering long life and low EMI/RFI for portable applications.
- **Oil-Free, Contamination-Free Transfer** retains pumped medium purity and increases system reliability.
- **We Build-In Quality Details** such as oversized, long life, permanently lubricated bearings and other heavy-duty components. Reliable operation is assured over the life of the pump.
- **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	UNPK09I (AC)	UNPK09 DC
Maximum Flow	12 lit./min (0.42 SCFM)	15 lit./min (0.53 SCFM)
Maximum Continuous Pressure	7 bar (103 psig)	7 bar (103 psig)
Maximum Intermittent Pressure	12 bar (176 psig)	7 bar (103 psig)
Maximum Vacuum	100 mbar (26.96 in. Hg)	100 mbar (26.96 in. Hg)

Electrical & Mechanical

Motor Voltage	115 V (60 Hz) or 230 V (50 Hz)	12 VDC / 24 VDC
Power Requirements	100 Watts	5.2 A / 2.6 A
Motor Type	Shaded Pole AC	PM Brush-Type (BLDC optional)
Motor Protection	IP 00 Thermal Reset	None
Net Weight	1.8 kg (4 lbs)	1.6 kg (3.5 lbs)

Environmental

Maximum Ambient Temperature	40°C (105°F)	40°C (105°F)
Maximum Medium Temperature	40°C (105°F)	40°C (105°F)

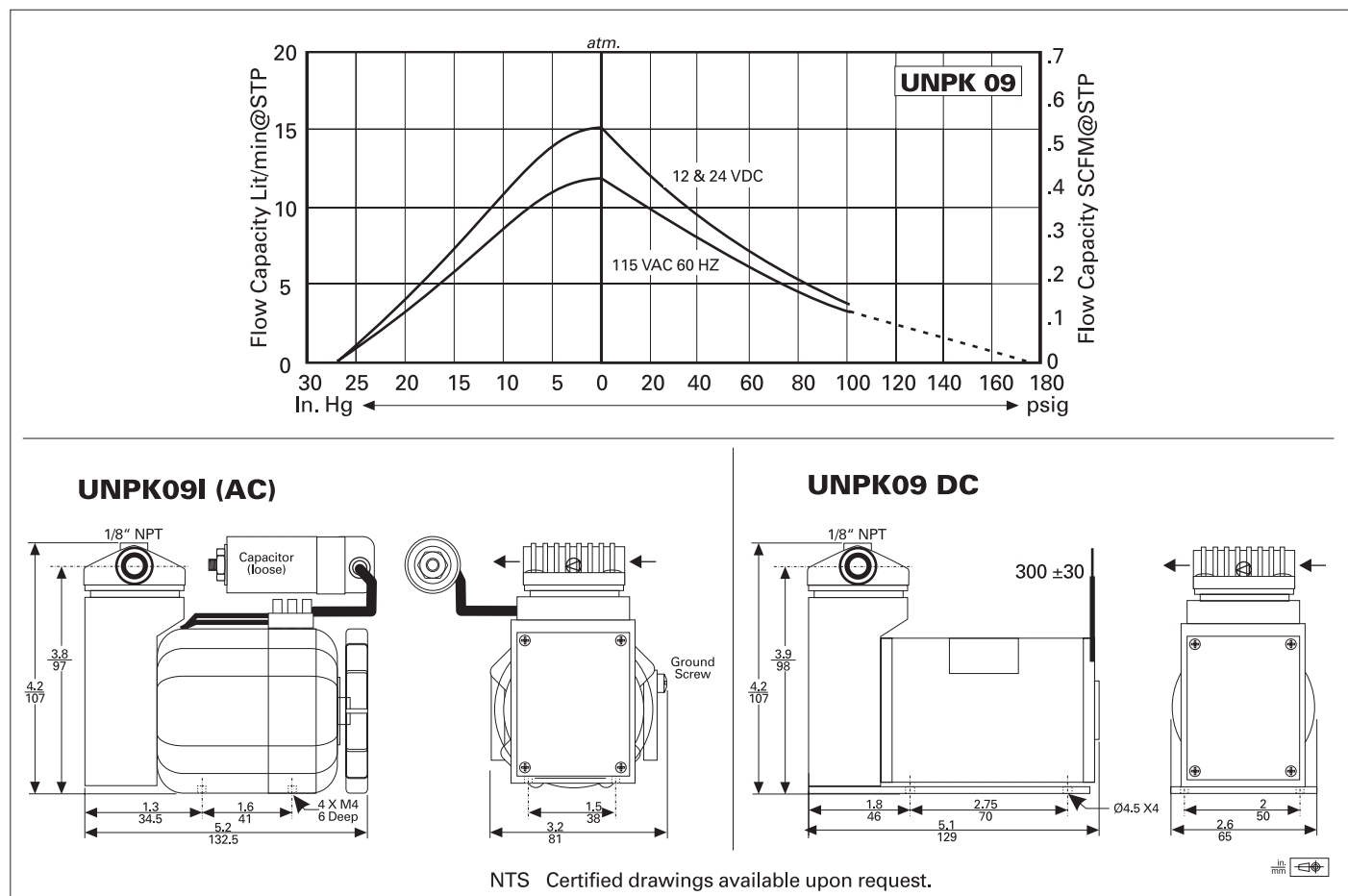
Materials of Construction

All Models	Head	Piston	Valve Plate	Piston Lip Seal
	Aluminum	Aluminum	Superflex®	Rulon® J

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, including brushless DC, and different materials of construction may be available. Contact KNF applications department for details. Specifications subject to change without notice.

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

Performance Characteristics/Outline Dimensions:



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