



UNPK018 pump shown with DC and AC motors,

Preliminary SECTION 300.30

Type: NPK018

**Swing Piston Compressor
and Vacuum Pump**

**OEM Single Stage
Vacuum or Pressure Models
with AC or DC Motor**

Free-Flow Range (DC):	18 lit./min. (0.6 SCFM)
Max. End Vacuum:	100 mbar (27 in. Hg)
Max. Continuous Pressure:	1.5 bar (22 psig)
Max. Intermittent Pressure:	3.0 bar (43.5 psig)

Description

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

Separate swing piston compressors and vacuum pumps were developed for optimum performance without compromise. OEM designers use these in medical equipment such as nebulizers, surgical suction apparatus, oxygen concentrators, and other duties. A special lip-type piston seal enables 100% dry operation, something not present in other piston systems. 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

- **Oil-Free, Contamination-Free Transfer** retains pumped medium purity and increases system reliability.
- **We Build-In Quality Details** such as 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

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

KNF Performance Specifications

Model	NPK018I Vacuum	NPK018I Pressure	NPK018DC Vacuum	NPK018DC Pressure
Maximum Flow	18 lit./min. (0.6 SCFM)	18 lit./min. (0.6 SCFM)	18 lit./min. (0.6 SCFM)	18 lit./min. (0.6 SCFM)
Max. Pressure		1.5 bar (22 psig)		1.5 bar (22 psig)
Max. Vacuum	100 mbar (27 in. Hg)		100 mbar (27 in. Hg)	

Electrical & Mechanical

Motor Voltage (50 Hz avail)	115 V (60 Hz)	12 VDC / 24 VDC
Power Requirements	130 W	6 Amps / 3 Amps
Motor Type	Shaded Pole AC	Permanent Magnet Brush-Type
Motor Protection	IP 00 Thermal Reset	None
Net Weight	1.8 kg (4 lbs)	1.6 kg (3.5 lbs)

Environmental

Max. Ambient Temp.	40°C (105°F)	40°C (105°F)
Max. Media Temp.	40°C (105°F)	40°C (105°F)

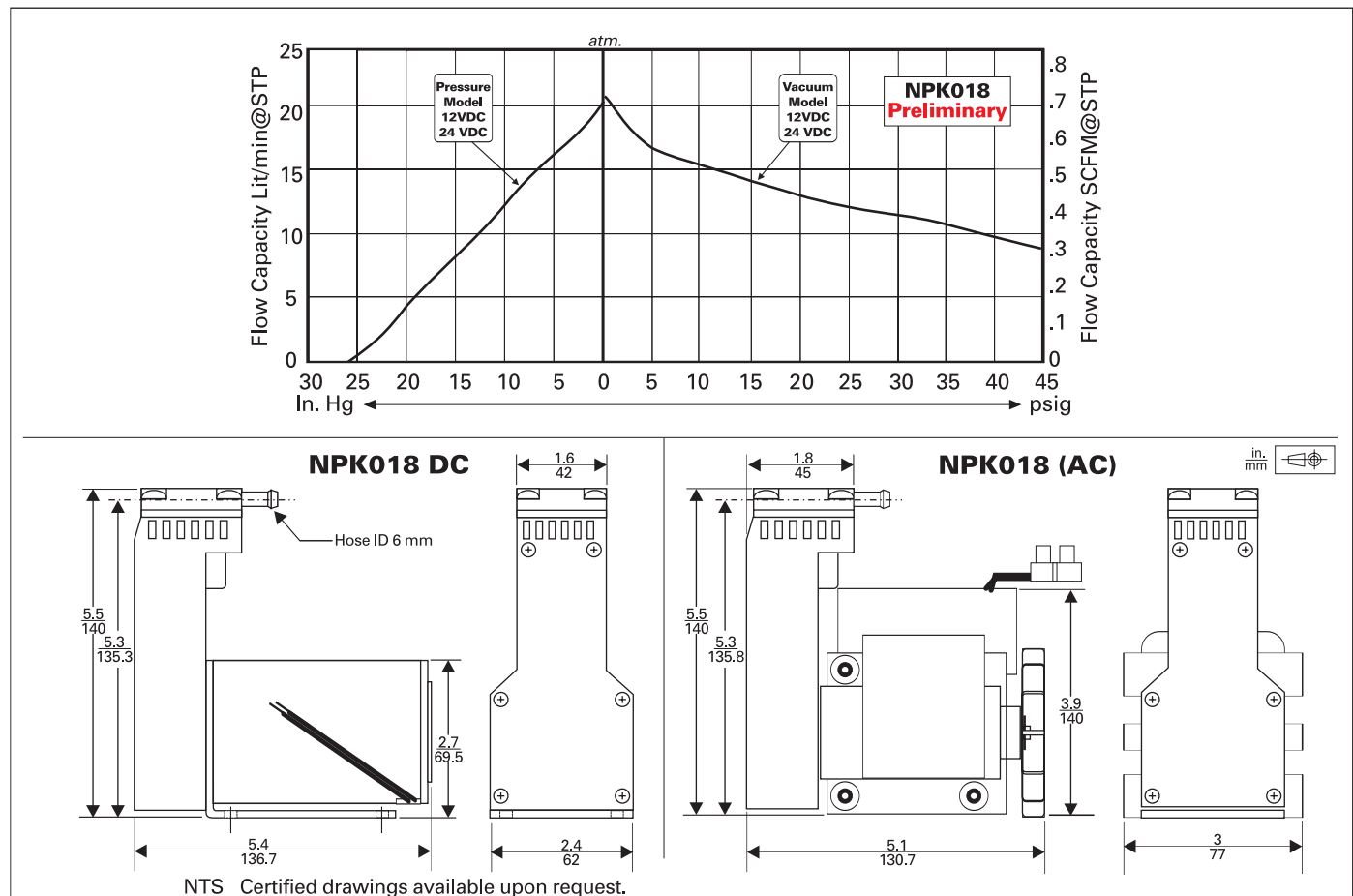
Materials of Construction

	Cylinder	Piston	Valve Plate	Piston Lip Seal
All Models	Plastic	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. Preliminary datasheet specifications subject to change without notice.

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

Performance Characteristics/Outline Dimensions:



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