



Model NMP08L shown with brush-type DC motor.

## Type: NMP08

### Micro-Diaphragm Pump and Compressor

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

Free-Flow Capacity: 850 mliters/minute  
Maximum Continuous Vacuum: 860 mbar (4.5 in. Hg)  
Maximum Continuous Pressure: 150mbar (2.2 psig)

#### Description

KNF's NMP08 miniature diaphragm pump is capable of transferring the largest volume of air or gases in this size range with high efficiency and contamination-free operation. It is ideal for use in portable, battery operated equipment where performance, power consumption, minimal weight, and size are important. KNF's "OEM Project Pump" program provides a variety of cost reductions and affordable modifications that will optimize our product to match your design's performance requirement.

#### Pump Features

- **Oil-Free, Contamination-Free Transfer** retains pumped medium purity and increases system reliability as they are maintenance-free and have no sliding seals to wear away.
- **Patented, Multi-Port Valves** - KNF's multi-port valve system maximize flow rate for high efficiency. An integral sealing-ridge reduces back flow to negligible levels.
- **Fits Into The Smallest Devices** - KNF's engineers combined high performance with precision miniature packaging to produce an efficient, compact unit. Portable instruments can be made smaller and lighter, and run longer between recharges. A brushless DC model is available as standard product for high reliability and continuous-duty applications.
- **Excellent Mechanical Stability and Chemical Resistance** - Ryton® heads exhibit consistent performance throughout the life of the pump. Ryton® also has excellent chemical resistance. Other diaphragm and valve materials are available.
- **Flexible Mounting Options** - Optimally placed mounting holes in the compressor housing enable you to mount this pump in any position.
- **Low Noise Level** - An enclosed compressor housing minimizes noise transmission and keeps dirt away from critical components.

#### Applications

- Asbestos Particle Counters
- Gas or Odor Leak Detectors
- Gas Chromatography
- Blood Pressure Monitors
- Respiration Monitors
- Portable Dosimeters
- Air Quality Sampling Monitors
- Portable Analytical Instruments
- Medical Diagnostic Equipment
- Pick & Place Tools for IC Wafers

## KNF Performance Specifications

Model Number	NMP08B	NMP08L	NMP08S
Nominal Free-Flow	850 mlit./min.	850 mlit./min.	850 mlit./min.
Maximum Continuous Vacuum	860 mbar (4.5 in. Hg)	860 mbar (4.5 in. Hg)	860 mbar (4.5 in. Hg)
Maximum Intermittent Vacuum	560 mbar (13.4 in. Hg)	560 mbar (13.4 in. Hg)	670 mbar (10 in. Hg)
Maximum Continuous Pressure	150 mbar (2.2 psig)	150 mbar (2.2 psig)	150 mbar (2.2 psig)
Maximum Intermittent Pressure	600 mbar (8.7 psig)	600 mbar (8.7 psig)	300 mbar (4 psig)

## Electrical

Motor Voltage	6 VDC	12 VDC	24 VDC	6 VDC
Motor Current @ Free-Flow	85 mA	40 mA	20 mA	175 ma
Motor Type	Brushless DC/Integrated driver		Brush-type DC	Brush-type DC

## Environmental

Maximum Ambient Temperature	40°C (105°F)
Maximum Medium Temperature	40°C (105°F)
Net Weight	55 grams

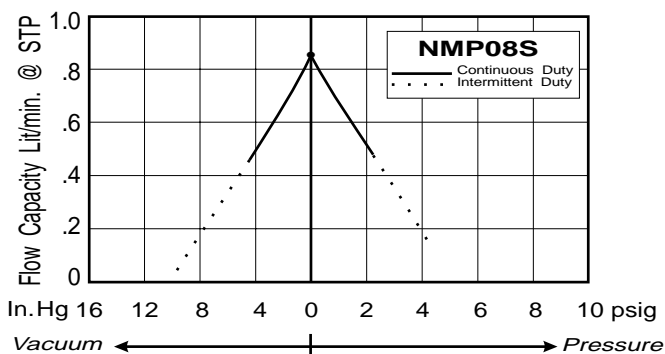
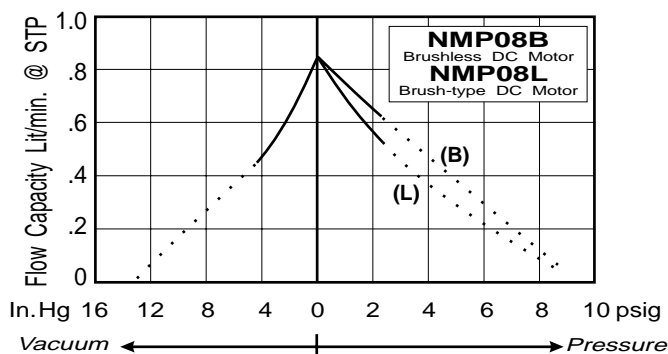
## Materials of Construction

	Head	Diaphragm	Valves	Valve Gasket	Clamping Disk/Screw
All Models	Ryton® (PPS)	Neoprene (CR)	Perbunan (NBR)	Viton®	Grilon® PV5H/Stainless Steel

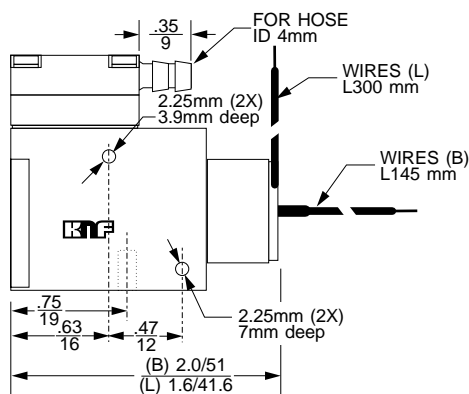
**Notes:** Standard continuous performance ratings at sea level with an ambient temperature of 70° F (21° C) and nominal electrical supply are listed above. Dimensions and performance characteristics given are for reference only. Higher performance models, cost efficient OEM modifications, a wide variety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

**Accessories:** Hose Connectors, Noise & Dust Filters, Shock Mounts, Pressure Control Valves (FDV)

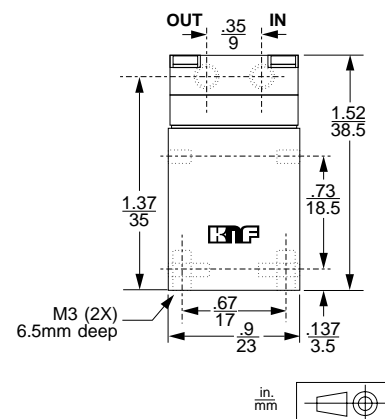
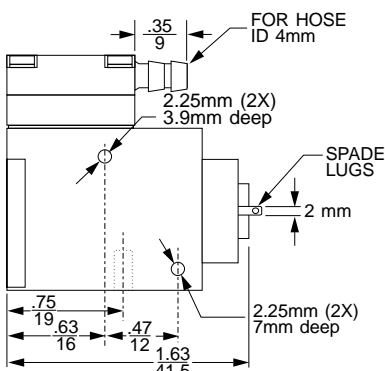
## Performance Characteristics/Outline Dimensions



NMP08B, NMP08L



NMP08S



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