



first class pumps for first class science

Corrosion-Resistant Vacuum Pumps for the Laboratory

LABOPORT® Oil-Free Diaphragm Pumps

for rotary evaporators, vacuum ovens, concentrators

compatible with all brands of rotary evaporators

corrosion-resistant PTFE wetted parts

maintenance-free, no oil or water needed

flow range from 10 to 110 Lit/min

clean, oil-free vacuum to 1.5 Torr

compact, quiet, reliable



LABOPORT® Vacuum Pumps

The clean, reliable oil-free pump for rotary evaporators, vacuum ovens

These portable, oil-free vacuum pumps are ideal for use with all brands of rotary evaporators, concentrators, vacuum ovens and filtration devices. Features include corrosion-resistant PTFE heads, tough multi-port FFPM valves, and durable PTFE-bonded diaphragms.

• **Built to last** - KNF pioneered the use of solid PTFE materials for its vacuum pumps over 45 years ago. Our products are legendary for their low-maintenance, quality design.

• **Easy to use and maintain** - Lightweight and portable, they enable you to move them to wherever and whenever you need vacuum. Connect the pump to your system with a vacuum hose and setup is complete.

- tolerates wet vapors without damage
- premium, corrosion-resistant wetted parts
- clean, oil-free vacuum performance
- reliable, maintenance-free design

• **Handles the most aggressive vapors** without damage to the pump, and tolerates abuse found in busy labs. There are no metal parts in contact with the gas stream, thus eliminating corrosion and reducing overall maintenance costs.

Pump Selection Chart

Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Configuration	Wt. kg
Distillation of high BP solvents (>110°C)				
<i>Chlorobenzene, DMF, DMSO, isoamyl alcohol, xylene</i>				
N842.3FTP	34	1.5 (29.9)	two-stage	13.3
Reflux reactions/distillation of high BP solvents (80-110°C)				
<i>Water, heptane, isobutyl alcohol, toluene</i>				
N842.3FTP	34	1.5 (29.9)	two-stage	13.3
N840.3FTP	34	6 (29.7)	two-stage	12.6
Distillation of medium BP solvents (60-80°C)				
<i>Acetonitrile, benzene, chloroform, ethanol, ethyl acetate, hexane, methanol</i>				
N840.3FTP	34	6 (29.7)	two-stage	12.6
N820.3FTP	20	6 (29.7)	two-stage	9.5
Distillation of low BP solvents (35-60°C)				
<i>Acetone, methylene chloride, pentane</i>				
N840.3FTP	34	6 (29.7)	two-stage	12.6
N820.3FTP	20	6 (29.7)	two-stage	9.5
N810.3FTP	10	6 (29.7)	two-stage	7.2

Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Configuration	Wt. kg
Large scale evaporation <i>Vessels >10 Liters</i>				
N860.3FTP	60	1.5 (29.9)	two-stage	14.8
N840.1.2FTP	65	68 (27.3)	single-stage	12.6
Large vacuum ovens <i>Chamber capacity >30 Lit/min</i>				
N860.3FTP	60	1.5 (29.9)	two-stage	14.8
Medium vacuum ovens <i>Chamber capacity 15-30 Liters</i>				
N842.3FTP	34	1.5 (29.9)	two-stage	13.3
N840.3FTP	34	6 (29.7)	two-stage	12.6
Small vacuum ovens <i>Chamber capacity <15 Liters</i>				
N842.3FTP	34	1.5 (29.9)	two-stage	13.3
N820.3FTP	20	6 (29.7)	two-stage	9.5
Large scale vacuum concentration				
N860.3FTP	60	1.5 (29.9)	two-stage	14.8
Vacuum concentration				
N842.3FTP	34	1.5 (29.9)	two-stage	13.3
N840.3FTP	34	6 (29.7)	two-stage	12.6
Gel drying				
N820.3FTP	20	6 (29.7)	two-stage	9.5

Complete Pump Summary

Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Config.	Wt. kg	List Price
N810FTP	10	75(27)	single-stage	7.2	Call
N820FTP	20	75(27)	single-stage	9.5	Call
N840FTP	34	75(27)	single-stage	10.3	Call
N840.1.2FTP	65	68(27.3)	single-stage	12.6	Call
N860.1.2FTP	110	75(27)	single-stage	14.8	Call

Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Config.	Wt. kg	List Price
N810.3FTP	10	6(29.7)	two-stage	7.2	Call
N820.3FTP	20	6(29.7)	two-stage	9.5	Call
N840.3FTP	34	6(29.7)	two-stage	12.6	Call
N842.3FTP	34	1.5(29.9)	two-stage	13.3	Call
N860.3FTP	60	1.5(29.9)	two-stage	14.8	Call

Use PowerDry® for pumping saturated vapors - KNF's PowerDry® system automatically injects a burst of ambient air into the pump heads, clearing any trapped liquids from the pump without disturbing system vacuum levels. Call us or visit KNFLab.com for details.

Physical Specifications

Ambient Temperature Range	+5°C to +40°C	N810 dimensions LxWxH	28x14x19 cm	Heads	Solid PTFE
Medium Temp Range	+5°C to +40°C	N820 dimensions LxWxH	32x16x20 cm	Valves	FFPM
Hose Size	N860 1/2"ID, all others 3/8"ID	N840, N842 dimensions LxWxH	33x17x22 cm	Diaphragms	PTFE
		N860 dimensions LxWxH	33x29x28 cm	Power	115V/60Hz

*You should always check corrosion-resistance charts for compatibility with the chemicals used in your laboratory. KNFLab, LABOPORT, and PowerDry are registered trademarks of KNF Neuberger. Specifications subject to change without notice. Other LABOPORT pump models at 230V/50Hz are available. Visit www.knflab.com for details and a list of distributors.



SC840 Vacuum System

To buy, call KNF at 609-890-8600 or your favorite lab equipment distributor.

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