



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 in the use of solid PTFE materials for its vacuum pumps over 45 years ago. Our products are legendary for their low-maintenance, robust 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.

Pump Selection Chart

Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Configuration	Wt. kg	List Price
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Distillation of high BP solvents (>110°C)

Chlorobenzene, DMF, DMSO, isoamyl alcohol, xylene

N842.3FTP	34	1.5 (29.86)	two-stage	12.2	Call
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Reflux reactions/distillation of high BP solvents (80-110°C)

Water, heptane, isobutyl alcohol, toluene

N842.3FTP	34	1.5 (29.86)	two-stage	12.2	Call
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N840.3FTP	34	6 (29.7)	two-stage	12.2	Call
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Distillation of medium BP solvents (60-80°C)

Acetonitrile, benzene, chloroform, ethanol, ethyl acetate, hexane, methanol

N840.3FTP	34	6 (29.7)	two-stage	12.2	Call
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N820.3FTP	20	6 (29.7)	two-stage	9.5	Call
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Distillation of low BP solvents (35-60°C)

Acetone, methylene chloride, pentane

N840.3FTP	34	6 (29.7)	two-stage	12.2	Call
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N820.3FTP	20	6 (29.7)	two-stage	9.5	Call
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N810.3FTP	10	6 (29.7)	two-stage	7.2	Call
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Complete Pump Summary

Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Config.	Wt. kg	List Price
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N810FTP	10	75(27)	single-stage	7.2	Call
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N820FTP	20	75(27)	single-stage	9.5	Call
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N840FTP	34	75(27)	single-stage	12.2	Call
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N840.1.2FTP	65	68(27.3)	single-stage	12.2	Call
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N860.1.2FTP	110	75(27)	single-stage	14.8	Call
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- 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 Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Configuration	Wt. kg	List Price
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Large scale evaporation *Vessels >10 Liters*

N860.3FTP	60	1.5 (29.8)	two-stage	14.8	Call
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N840.1.2FTP	60	68 (27.3)	single-stage	12.2	Call
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Large vacuum ovens *Chamber capacity >30 Lit/min*

N860.3FTP	60	1.5 (29.8)	two-stage	14.8	Call
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Medium vacuum ovens *Chamber capacity 15-30 Liters*

N842.3FTP	34	1.5 (29.8)	two-stage	13.7	Call
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N840.3FTP	34	6 (29.6)	two-stage	12.9	Call
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Small vacuum ovens *Chamber capacity <15 Liters*

N842.3FTP	34	1.5(29.8)	two-stage	13.7	Call
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N820.3FTP	20	6 (29.6)	two-stage	9.6	Call
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Large scale vacuum concentration

N860.3FTP	60	1.5 (29.8)	two-stage	14.8	Call
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Vacuum concentration

N842.3FTP	34	1.5 (29.8)	two-stage	13.7	Call
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N840.3FTP	34	6 (29.6)	two-stage	12.9	Call
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Gel drying

N820.3FTP	20	6 (29.6)	two-stage	9.5	Call
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Pump Model No.	Flow Rate Lit/min	Vacuum Torr ("Hg)	Head Config.	Wt. kg	List Price
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N810.3FTP	10	6(29.6)	two-stage	7.2	Call
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N820.3FTP	20	6(29.6)	two-stage	9.5	Call
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N840.3FTP	34	6(29.6)	two-stage	12.2	Call
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N842.3FTP	34	1.5(29.8)	two-stage	12.2	Call
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N860.3FTP	60	1.5(29.8)	two-stage	14.8	Call
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Use PowerDry® for pumping saturated vapors - The 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. Visit KNFLab.com for details.

Physical Specifications

Ambient Temperature Range +5°C to +40°C

Medium Temp Range +5°C to +40°C

Hose Size N860 1/2" ID, all others 3/8" ID

N810 dimensions LxWxH 28x14x19 cm Heads Solid PTFE

N820 dimensions LxWxH 32x16x20 cm Valves FFPM

N840, N842 dimensions LxWxH 33x17x22 cm Diaphragms PTFE

N860 dimensions LxWxH 33x29x28 cm

*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 are available. Visit www.knflab.com for details and a list of distributors.



USC820 Vacuum System

KNF LABOPORT® pumps are available from your favorite lab equipment distributor.

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