





Laboratory Pumps and Systems

Popular Pump Applications



ROTARY EVAPORATION gently and effectively removes solvents from samples. A KNF oil-free, corrosion resistant vacuum pump will reduce the pressure in the evaporation flask, lowering the solvent's boiling point, eliminating the need for excessive heating and optimizing the process.



VACCUM OVENS are used for the analysis, testing and treatment of materials across a wide range of disciplines, including pharma, chemistry, food, and biotech. A KNF oil-free, corrosion resistant vacuum pump allows for a controlled atmosphere in the oven, enhancing the heating process.



CENTRIFUGAL CONCENTRATION enables simultaneous evaporation of solvents from multiple samples. A KNF oil-free, corrosion resistant vacuum pump will reduce the pressure in the centrifuge tubes, lowering the solvent's boiling point, eliminating the need for excessive heating and optimizing the process.



GEL DRYING is the drying of gel matrices used in the electrophoretic separation of DNA, RNA, or protein molecules. Faster drying times and increased productivity will be realized by the utilization of a KNF oil-free, corrosion resistant vacuum pump.



DESICCATION is a process for drying and maintaining moisture-sensitive materials. A KNF oil-free, corrosion resistant vacuum pump will evacuate the desiccator and help maintain an air-tight seal.



SOLID PHASE EXTRACTION separates compounds according to their physical and chemical properties. Whether the samples are processed individually or in a manifold, a KNF oil-free, corrosion resistant vacuum pump will draw the solution through the SPE tube at a controlled flow, enhancing the sample preparation process.



FILTRATION is used to separate solids from fluids via a filter medium through which only certain size particles can pass. KNF oil-free, corrosion resistant vacuum pumps optimize the process by creating a pressure gradient to force the liquid through the filter.

Need help finding the right pump?

Go to **vwr.com** or call **1.800.932.5000**

Oil-free and corrosion resistant, KNF pumps and systems are ideal for a wide range of laboratory applications.











ROTARY EVAPORATION

Stand-Alone Pumps

LOW boiling point solvents (35°C to 60°C). Ex. Acetone, methylene chloride, pentane

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	For Vessel Sizes	Shipping Wt. (lbs)
N810FTP	14224-122	10	75	<0.5L	13.9
N820FTP	26678-000	20	75	0.5 to 2L	15.6
N840FTP	26678-004	34	75	2 to 5L	22.7
N840.1.2FTP	26678-024	65	68	>5L	27.7

MEDIUM boiling point solvents (60°C to 80°C). Ex. Acetonitrile, benzene, chloroform, ethanol, hexane, methanol

KNF Model 1	No. VWR Cat. No.	Flow (L/min.)	Vac (Torr)	For Vessel Sizes	Shipping Wt. (lbs)
N820.3FTF	26678-012	20	6	0.5 to 2L	20.5
N840.3FTF	26678-016	34	6	2 to 5L	27.7

HIGH boiling point solvents (80°C and higher). Ex. DMF, DMSO, heptane, isoamyl alcohol, isobutyl alcohol, toluene

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	For Vessel Sizes	Shipping Wt. (lbs)
N810.3FTP	26678-008	10	6	<0.5L	15.2
N820.3FTP	26678-012	20	6	0.5 to 2L	20.5
N840.3FTP	26678-016	34	6	2 to 5L	27.7
N842.3FTP	26678-020	34	1.5	2 to 5L	29.5
N860.3FTP	89209-762	60	1.5	>5L	31.9
N920G	97014-794	21	1.5	0.5 to 2L	21

Pump Systems

(Includes vacuum pump, vacuum controller, inlet separator, liquid-cooled condenser)

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	For Vessel Sizes	Shipping Wt. (lbs)
SC810	89209-766	10	6	<0.5L	29.9
SC820	89209-768	20	6	0.5 to 2L	35.2
SC840	89209-770	34	6	2 to 5L	42.5
SC842	89209-772	34	1.5	2 to 5L	44.2
SC920G	97014-790	20	1.5	0.5 to 2L	33
SC950	89220-172	50	1.5	>5L	32



VACUUM OVENS

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Chamber Capacity	Shipping Wt. (lbs)
N820.3FTP	26678-012	20	6	<1 cu. ft.	20.5
N840.3FTP	26678-016	34	6	<2 cu. ft.	27.7
N860.3FTP	89209-762	60	1.5	>2 cu. ft.	31.9



CENTRIFUGAL CONCENTRATION

LOW boiling point solvents (35°C to 80°C)

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Chamber Diameter	Shipping Wt. (lbs)
N840.3FTP	26678-016	34	6	<14"	27.7
N860.3FTP	89209-762	60	1.5	>14"	31.9

HIGH boiling point solvents (80°C to 110°C and higher)

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Chamber Diameter	Shipping Wt. (lbs)
N842.3FTP	26678-020	34	1.5	<14"	29.5
N860.3FTP	89209-762	60	1.5	>14"	31.9



GEL DRYING

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Approx. Gel Drying Area	Shipping Wt. (lbs)
N820.3FTP	26678-012	20	6	<1 sq. ft.	15.6
N840.3FTP	26678-016	34	6	>1 sq. ft.	22.7





DESICCATION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Desiccator Volume	Shipping Wt. (lbs)
N816.3KTP	82004-054	16	15	<1 cu. ft.	8.8
N816.3KT.45P*	82004-040	16	15	<1 cu. ft.	8.8

^{*}Includes vacuum regulator and gauge



DEGASSING AND SOLVENT FILTERATION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Vessel Size	Shipping Wt. (lbs)
N816.3KTP	82004-054	16	15	<1L	8.8
N816.3KT.45P*	82004-040	16	15	<1L	8.8

^{*}Includes vacuum regulator and gauge



SOLID PHASE EXTRACTION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	# of SPE Devices	Shipping Wt. (lbs)
N811KVP	14224-116	13	75	1	5.5
N811KV.45P*	26678-052	13	75	1	5.5
N816.1.2KTP	82004-042	30	120	1 to 3	8.8
N816.1.2KT.45P*	82004-044	30	120	1 to 3	8.8

^{*}Includes vacuum regulator and gauge



BOTTLETOP OR DISPOSABLE FILTRATION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Capacity of Filtration Device	Shipping Wt. (lbs)
N86KTP	26678-028	5.5	120	<500 ml	4.2
N86KT.45P*	14224-118	5.5	120	<500 ml	4.2
N811KVP	14224-116	13	75	>500 ml	5.5
N811KV.45P*	26678-052	13	75	>500 ml	5.5

^{*}Includes vacuum regulator and gauge



GLASS FILTRATION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Flask Volume	Shipping Wt. (lbs)
N811KVP	14224-116	13	75	<1L	5.5
N811KV.45P*	26678-052	13	75	<1L	5.5
N816.1.2KTP	82004-042	30	120	>1L	8.8
N816.1.2KT.45P*	82004-044	30	120	>1L	8.8

^{*}Includes vacuum regulator and gauge



MANIFOLD FILTRATION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	System Volume	Shipping Wt. (lbs)
N816.1.2KTP	82004-042	30	120	<1L	8.8
N816.1.2KT.45P*	82004-044	30	120	<1L	8.8

^{*}Includes vacuum regulator and gauge



FLUID ASPIRATION

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Size of Collection Vessel	Shipping Wt. (lbs)
N811KVP	14224-116	13	75	<1L	5.5
N811KV.45P*	26678-052	13	75	<1L	5.5
N816.1.2KTP	82004-042	30	120	1L to 3L	8.8
N816.1.2KT.45P*	82004-044	30	120	1L to 3L	8.8

^{*}Includes vacuum regulator and gauge



If you find wet vapors to be a problem, the KNF PowerDry® pumps automatically inject a burst of ambient air into the pump heads, clearing any trapped liquids from the pump without disturbing vacuum levels.

KNF Model No.	VWR Cat. No.	Flow (L/min.)	Vac (Torr)	Shipping Wt. (lbs)
N820.3FT.40P	46620-630	20	8	21.1
N840.3FT.40P	46620-632	34	8	28.4
N842.3FT.40P	46620-636	34	3	30.1
N860.3FT.40P	46620-634	60	3	32.6

Many feature KNF's patented multi-port valves that increase performance and withstand occasional liquids drawn into the pump without damage.



KNF pumps and systems are distributed by VWR International, LLC

230V/50Hz models available. Other KNF pump types available.
Specifications and prices subject to change without notice.



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