KNF LABORATORY EQUIPMENT KNOWING WHAT COUNTS

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KNF LABORATORY EQUIPMENT COMPELLING ADVANTAGES

KNF is dedicated to countering the challenges of daily lab routines. Our products offer clear advantages: unparalleled performance, ease of use, quiet and intuitive operation, small footprint, and utmost reliability.

Discover lab technology that supports you.

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LABOPORT® REDESIGNED

UNIQUE DESIGN, EASE OF USE

HELLO, NEW LABOPORT!

LABOPORT® N 96

LABOPORT® N 840 G

LABOPORT® N 820 G

Exceptionally small footprint
This impressively compact pump provides the user with increased bench space.

Easy to clean
The smooth surfaces without any ribs or hard edges are easy to keep clean.

Chemically resistant
All wetted materials are suited for use with aggressive/ corrosive gases.

Expandable
Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system.

Integrated gas ballast valve
The valve protects the pump head and shortens processing times – even with high boiling point solvents.

Portable
The fold-out handle makes the device easy to transport and store.

Speed-controlled
Manually adjust the pump speed via the control knob or automatically by connecting to KNF's VC 900 vacuum controller.

3-color status display
The changing color display allows the operational status to be ascertained at a glance.

ROTARY EVAPORATION/ DISTILLATION

REPRODUCIBLE RESULTS WITH SHORT PROCESSING TIMES

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SUPERIOR PERFORMANCE SYSTEM

RC 900 Rotary Evaporator

- Electric lift for automatic raising and lowering of the evaporation flask
- Central remote control of all relevant distillation parameters, including rotation speed, bath temperature, and flask depth. Bluetooth enabled – control the RC 900 from outside a closed fume hood.
- Memory function saves the flask's current immersion depth and rotation speed for easy and reliable process reliability
- Cordless heating bath with heat-indicating diode and integrated pour spout for safe, spill-free emptying
- Convenient, fully adjustable flask angle set via a control knob
- Uncomplicated flask exchange — flask simply locks in place — and can be done with one hand
- Efficient, easy-to-clean recirculating condenser and seal attach with secure clamping nut. A dry ice condenser is also available in place of the recirculating condenser.
- Tube guide inside the tower keeps the benchtop tidy and safe

RC 900 SC 920 G C 900

SUCCESSFULLY COMBINED

Joining forces, the RC 900 rotary evaporator combined with the SC 920G vacuum pump system and C 900 chiller offers a complete, effective, and efficient system.

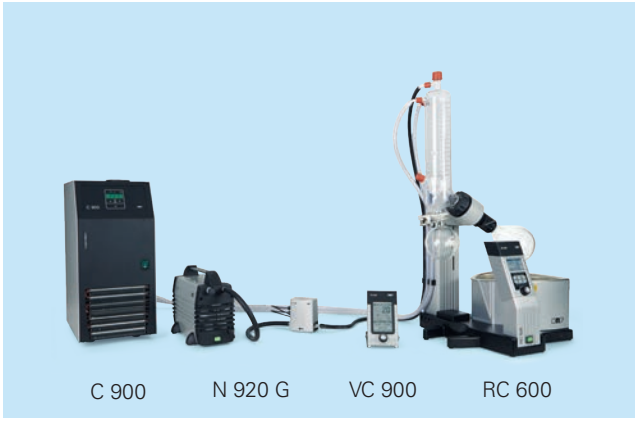
DESIGNED FOR ACADEMIA LABS

RC 600 Rotary Evaporator

- Electric lift for automatic raising and lowering of the evaporation flask
- Central control of all relevant distillation parameters, including rotation speed, bath temperature, and flask depth
- Memory function saves the flask's current immersion depth and rotation speed for easy and reliable process reliability
- Cordless heating bath with heat-indicating diode and integrated pour spout for safe, spill-free emptying
- Convenient, fully adjustable flask angle set via a control knob
- Uncomplicated flask exchange — flask simply locks in place — and can be done with one hand
- Efficient, easy-to-clean recirculating condenser and seal attach with secure clamping nut. A dry ice condenser is also available in place of the recirculating condenser.
- External tube guide keeps the benchtop tidy and safe

A VERSATILE SYSTEM COMPONENT

Set for flexibility: Several system packages to suit different budget conditions are available. The VC 900 vacuum control unit can also be used to precisely control vacuum pumps from other manufacturers.



SC 920 G

SC 950

ADAPTIVE CONTROL

SC 920 G and SC 950 Vacuum Pump Systems

- SC 920 G flow rate up to 21 l/min, 1.5 torr ultimate vacuum
- SC 950 flow rate up to 50 l/min flow, 1.5 torr ultimate vacuum
- Quiet operation
- Remote-controlled for safe operation from outside closed fume hoods
- Automatic, accurate recognition and monitoring of the boiling point using the integrated ramp function
- High recovery rates even with low boiling point solvents
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast
- Speed-controlled

LABOPORT®

SC 820

TWO-POINT CONTROL

SC 820 and SC 840 Vacuum System

- SC 820 flow rate 20 l/min, 6 torr ultimate vacuum
- SC 840 flow rate 34 l/min, 6 torr ultimate vacuum
- Vacuum system comprising chemically resistant diaphragm vacuum pump, base plate, condenser, separator, and vacuum control unit

LABOPORT®

N 820 G

N 840 G

CHEMICALLY RESISTANT

N 820 G and N 840 G Diaphragm Vacuum Pumps

- N 820 G flow rate up to 20 l/min, 4.5 torr ultimate vacuum
- N 840 G flow rate up to 34 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

LABOPORT®

ROBUST

UN 842.3 FTP Diaphragm Vacuum Pump

- Flow rate 34 l/min, 1.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors

SPEED-CONTROLLED

N 920 G Diaphragm Vacuum Pump

- Flow rate up to 21 l/min flow, 1.5 torr ultimate vacuum
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

HIGH FLOW

N 860.3 FT.40.18 Diaphragm Vacuum Pump

- Flow rate 60 l/min, 3 torr ultimate vacuum
- Integrated KNF self-drying system ensures that condensate is quickly removed from the pump heads without the vacuum being altered. This significantly reduces process time and protects the pump heads in high-moisture applications.
- Chemically resistant flowpath ideal for use with extremely aggressive/corrosive gases and vapors

VACUUM CONTROL

VC 900 Vacuum Control Unit

- Four operating modes ensure versatility and ease-of-use
- Control of the vacuum application
- Separate control unit with pressure sensors and two-step controlled valve to be placed independently from the operating unit
- Easy to use

RECIRCULATING CHILLER

C 900 Chiller

- Operating temperature range -10 to +40 °C, cooling capacity 250 W
- Compact design, small footprint
- Splash-proof membrane keypad
- Easy to fill

DEGASSING

CONSTANT VACUUM FOR CLEAR RESULTS

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HIGH-PERFORMANCE

UN 816.3 KTP

- Flow rate 16 l/min, 15 torr ultimate vacuum
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Optional model (.45) with vacuum gauge and regulator

LABOPORT®

FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- Flow rate 30 l/min, 11 torr ultimate vacuum
- Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors

LABOPORT®

CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- Flow rate up to 20 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

SPEED-CONTROLLED

N 920 G Diaphragm Vacuum Pump

- Flow rate up to 21 l/min, 1.5 torr ultimate vacuum
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

FILTRATION/SPE

RELIABLE VACUUM
FOR CLEAN RESULTS.
COMPACT, POWERFUL, FAST.

LABOPORT®

SMALL AND VERSATILE

N 96 Mini Diaphragm Vacuum Pump

- Flow rate up to 7 l/min, 97.5 ultimate vacuum
- Extremely small footprint
- Integrated rotational speed control
- PPS pump head combined with PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®

UN 811 KVP

UN 816.3 KT.18.

HIGH-PERFORMANCE

UN 811 KVP, UN 816.3 KTP and UN 816.1.2 KTP Diaphragm Vacuum Pumps

- UN 811 KVP flow rate 13 l/min, 75 torr ultimate vacuum
- UN 816.3 KTP flow rate 16 l/min, 15 torr ultimate vacuum
- UN 816.1.2 KTP flow rate 30 l/min, 120 torr ultimate vacuum
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Optional model (.45) with vacuum gauge and regulator

LABOPORT®

FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- Flow rate 30 l/min, 11 torr ultimate vacuum
- Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors

LABOPORT®

CHEMICALLY RESISTANT

N 840 G Diaphragm Vacuum Pump

- Flow rate up to 34 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific

FLUID ASPIRATION

RELIABLE VACUUM WITH PROCESS-SPECIFIC FLOW RATES

LABOPORT®

N 96

UN 811 KVP

SMALL AND VERSATILE

N 96 Mini Diaphragm Vacuum Pump

- N 96 flow rate up to 7 l/min, 97.5 torr ultimate vacuum
- Extremely small footprint
- Integrated rotational speed control
- PPS pump head combined with PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

UN 811 KVP Mini Diaphragm Vacuum Pump

- Flow rate 13 l/min, 75 torr ultimate vacuum
- Small footprint
- PPS pump head combined with PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors
- Optional model (.45) with vacuum gauge and regulator

LABOPORT®

HIGH-PERFORMANCE

UN 816.3 KTP Diaphragm Vacuum Pump

- Flow rate 16 l/min, 15 torr ultimate vacuum
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Optional model (.45) with vacuum gauge and regulator

LABOPORT®

FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- Flow rate 30 l/min, 11 torr ultimate vacuum
- Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors

LABOPORT®

CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- Flow rate up to 20 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

METERING AND TRANSFERRING LIQUIDS

PRECISE, SAFE AND CLEAN HANDLING OF NEUTRAL AND AGGRESSIVE LIQUIDS

LIQUIPORT®

RELIABLE LIQUID TRANSFER

NF 100 and NF 300 Chemically-resistant Diaphragm Liquid Pumps

- NF 100 flow rate from 0.2 to 1.3 l/min; pressure head 15 psig; suction head 9.8 ft. H_2O
- NF 300 flow rate from 0.5 to 3 l/min; pressure head 15 psig; suction head 9.8 ft. H_2O
- NF 1.100 & NF 1.300 models pressure head 58 psig
- Self priming, dry running
- Pump heads available in your choice of PP, PVDF or PTFE
- PTFE-coated diaphragms, FFKM valves
- Flow rate can be set manually (S Version) or via an external analog control device (RC Version)

SIMDOS®

PRECISE LIQUID METERING

SIMDOS® 02 and SIMDOS® 10 Chemically-resistant Diaphragm Liquid Pumps

- SIMDOS 02 flow rate from 0.03 to 100 ml/min; pressure head 85 psig; suction head 6.6 ft. H_2O
- SIMDOS 10 flow rate from 1 to 100 ml/min; pressure head 85 psig; suction head 9.8 ft. H_2O
- Self priming, dry running
- Pump heads available in your choice of PP, PVDF, PTFE or Stainless Steel
- PTFE-coated diaphragms* FFKM valves
- Flow rate and dose volume can be set manually (S Version) or externally by either an analog or RS 232 control device (RCP Version)

* FFKM diaphragm standard for SIMDOS PTFE head model

GEL DRYING

OPTIMUM RESULTS ACHIEVED THANKS TO CHEMICAL RESISTANCE AND FULLY VARIABLE VACUUM

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CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- Flow rate up to 20 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

SPEED-CONTROLLED

N 920 G Diaphragm Vacuum Pump

- Flow rate up to 21 l/min, 1.5 torr ultimate vacuum
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

CENTRIFUGAL CONCENTRATION

PRECISE, HIGH-PERFORMANCE VACUUM FOR RAPID, GENTLE TREATMENT OF SAMPLES

SPEED-CONTROLLED

N 920 G Diaphragm Vacuum Pump

- Flow rate up to 21 l/min, 1.5 torr ultimate vacuum
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump heads combined with PTFE-coated diaphragms are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

LABOPORT®

CHEMICALLY RESISTANT

N 840 G Diaphragm Vacuum Pump

- Flow rate up to 34 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

HIGH FLOW

N 860.3 FT.40.18 Diaphragm Vacuum Pump

- Flow rate 60 l/min, 3 torr ultimate vacuum
- Integrated KNF self-drying system ensures that condensate is quickly removed from the pump heads without the vacuum being altered. This significantly reduces process time and protects the pump heads in high-moisture applications.
- Chemically resistant flowpath ideal for use with extremely aggressive/corrosive gases and vapors

VACUUM OVEN

OUTSTANDING CHEMICAL AND CONDENSATE COMPATIBILITY WITH FAST EVACUATION OF LARGE VAPOR QUANTITIES

LABOPORT®

N 820 G

N 840 G

CHEMICALLY RESISTANT

N 820 G and N 840 G Diaphragm Vacuum Pumps

- N 820 G flow rate up to 20 l/min, 4.5 torr ultimate vacuum
- N 840 G flow rate up to 34 l/min, 4.5 torr ultimate vacuum
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump heads combined with PTFE-coated diaphragms are ideal for extremely aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- Expandable: Separators and/or condensers can be purchased individually at any time and easily fitted, enabling users to build their own customized vacuum system

Tip: When connected to the VC 900 vacuum controller the pump speed can be optimized for your specific application requirements.

LABOPORT®

FOR EXTREMELY WET VAPORS

UN 820.3 FT.40P and UN 840.3 FT.40P Diaphragm Vacuum Pumps

- UN 820.3 FT.40P flow rate 20 l/min, 8 torr ultimate vacuum
- UN 840.3 FT.40P flow rate 34 l/min, 8 torr ultimate vacuum
- Integrated KNF self-drying system ensures that condensate is quickly removed from the pump heads without the vacuum being altered. This significantly reduces process time and protects the pump heads in high-moisture applications.
- Chemically resistant flowpath ideal for use with extremely aggressive/corrosive gases and vapors

HIGH FLOW

N 860.3 FT.40.18 Diaphragm Vacuum Pump

- Flow rate 60 l/min, 3 torr ultimate vacuum
- Integrated KNF self-drying system ensures that condensate is quickly removed from the pump heads without the vacuum being altered. This significantly reduces process time and protects the pump heads in high-moisture applications.
- Chemically resistant flowpath ideal for use with extremely aggressive/corrosive gases and vapors

MULTI-USER VACUUM SYSTEMS

INEXPENSIVE, SPACE-SAVING SOLUTIONS FOR SUPPLYING VACUUM TO DIFFERENT APPLICATIONS

SPEED CONTROL

SC 950 Vacuum Pump System

- Flow rate 50 l/min, 1.5 torr ultimate vacuum
- Remote-controlled operation for safety when mounted in laboratory furniture
- Automated, precise boiling point recognition and control

LABOBASE®

SBC 860.40

TWO-POINT CONTROL

SBC 840.40 and SBC 860.40 Vacuum System

- Flow rate up to 60 l/min, 3 torr ultimate vacuum
- For up to ten users
- Fully-automated vacuum generation system comprised of chemically resistant diaphragm vacuum pump, base plate, high-performance condenser, separator, vacuum control device, valves and control unit

VACUUM CONTROL

VC 900 Vacuum Control Unit

- Connect to any vacuum source
- Control of the vacuum application
- Separate control unit with pressure sensors and two-step controlled valve to be placed independently from the operating unit
- Easy to use

		LABOPORT® N 96	LABOPORT® UN 811 KVP	LABOPORT® UN 816.3 KTP	LABOPORT® N 816.1.2 KTP	LABOPORT® N 938.50 KT.18
APPLICATION	Rotary evaporation					
	Distillation					
	Degassing			x		x
	Filtration	x	x	x	x	x
	SPE	x	x	x		x
	Fluid aspiration	x	x	x		x
	Metering/Transferring liquids					
	Gel drying					
	Centrifugal concentration					
	Vacuum oven					
	Multi-user vacuum systems					
TECHNICAL DATA	Flow rate at atm. pressure – l/min (m³/h)	7 (0.4)	13 (0.78)	16 (0.96)	30 (1.8)	30 (1.8)
	Ultimate vacuum – torr (mbar abs.)	97.5 (130)	75 (100)	15 (20)	120 (160)	11 (15)
	Operating pressure – psig (bar)	36.26 (2.5)	7.4 (0.5)	7.4 (0.5)	7.4 (0.5)	7.4 (0.5)
	Connectors for tube – in.	ID 1/4	ID 1/4	ID 1/4	ID 1/4	ID 3/8
	Permissible media and ambient temperature	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)
	Weight - lbs. (kg)	2.9 (1.3)	5.5 (2.5)	8.7 (3.95)	8.7 (3.95)	15.0 (6.8)
	Dimensions W x H x D – in. (mm)	6.1 x 4.7 x 3.0 (156 x 119 x 75)	3.5 x 7.4 x 6.2 (90 x 187 x 157)	3.5 x 5.6 x 14.2 (90 x 141 x 361)	4.0 x 5.6 x 14.2 (102 x 141 x 361)	4.3 x 8.3 x 12.5 (110 x 212 x 317)
MATERIAL	Pump head	PPS	PPS	PPS	PPS	PPS
	Diaphragm	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated
	Valves	FPM	FFPM	FFPM	FFPM	FFPM
ACCESSORIES	Silencer		Order no. 007005	Order no. 000345		Order no. 007006
	Column fixture	Order no. 323484				
	Fine control valve with vacuum gauge		UN 811 KV.45P	UN 816.3 KT.45P	UN 816.1.2 KT.45P	Order no. 112432
	Connection cable to N 920 G interface					
	Connection cable to N 820 G/N 840 G interface					
	400 ml Dry ice trap	UST 800	UST 800	UST 800	UST 800	UST 800
	500 ml Woulfe bottle	Order no. 057953	Order no. 057953	Order no. 057953	Order no. 057953	Order no. 057953
	1000 ml Woulfe bottle	Order no. 057954	Order no. 057954	Order no. 057954	Order no. 057954	Order no. 057954

		N 920 G	LABOPORT® UN 842.3 FTP	LABOPORT® SD UN 820.3 FT.40P	LABOPORT® SD UN 840.3 FT.40P	N 860.3 FT.40.18	VC 900
APPLICATION	**Rotary evaporation**	x	x			x	x
	Distillation	x	x			x	x
	Degassing	x					
	Filtration						
	SPE						
	Fluid aspiration						
	Metering/Transferring liquids						
	Gel drying	x					
	Centrifugal concentration	x				x	
	Vacuum oven			x	x	x	
	Multi-user vacuum systems						x
TECHNICAL DATA	**Flow rate at atm. pressure – l/min (m³/h)**	21 (1.26)	34 (2.04)	20 (1.2)	34 (2.04)	60 (3.6)	
	Ultimate vacuum – torr (mbar abs.)	1.5 (2)	1.5 (2)	8 (10)	8 (10)	3 (4)	
	Operating pressure – psig (bar)	7.4 (0.5)	14.5 (1)	14.5 (1)	14.5 (1)	14.5 (1)	
	Connectors for tube – in.	ID 3/8	ID 3/8	ID 3/8	ID 3/8	ID 1/2	pneumatic: ID 3/8 coolants: ID 3/8 inert gas: ID 3/16
	Permissible media and ambient temperature	Media temp.: 5 to 40 °C (41 to 104 °F) Ambient temp.: 10 to 40 °C (50 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)
	Weight - lbs. (kg)	18.7 (8.5)	29.5 (13.4)	21.1 (9.6)	28.4 (12.9)	32.6 (14.8)	2.6 (1.2)
	Dimensions W x H x D – in. (mm)	6.2 x 8.9 x 12.8 (158 x 226 x 324)	6.6 x 9.0 x 13.4 (167 x 228 x 341)	7.0 x 8.7 x 12.3 (177 x 220 x 312)	7.4 x 9.4 x 13.4 (189 x 239 x 341)	11.4 x 10.9 x 13.0 (291 x 278 x 331)	4.0 x 7.1 x 2.6 (101 x 181 x 67)
MATERIAL	**Pump head**	PPS	PTFE	PTFE	PTFE	PTFE	
	Diaphragm	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	
	Valves	FFPM	FFPM	FFPM	FFPM	FFPM	
ACCESSORIES	**Silencer**	Order no. 007006					
	Column fixture						
	Fine control valve with vacuum gauge	Order no. 112432					
	Connection cable to N 920 G interface						Order no. 307757 (2 m) Order no. 307758 (5 m)
	Connection cable to N 820 G/N 840 G interface						Order no. 323829 (2 m)
	400 ml Dry ice trap	UST 800	UST 800	UST 800	UST 800	UST 800	
	500 ml Woulfe bottle	Order no. 057953	Order no. 057953	Order no. 057953	Order no. 057953	Order no. 057953	
	1000 ml Woulfe bottle	Order no. 057954	Order no. 057954	Order no. 057954	Order no. 057954	Order no. 057954	

		LABOPORT® N 820 G	LABOPORT® N 840 G
APPLICATION	Rotary evaporation	x	x
	Distillation		
	Degassing	x	
	Filtration		x
	SPE		
	Fluid aspiration	x	
	Metering/Transferring liquids		
	Gel drying	x	
	Centrifugal concentration		x
	Vacuum oven	x	x
	Multi-user vacuum systems		
TECHNICAL DATA	Flow rate at atm. pressure – l/min (m³/h)	20 (1.2)	34 (2.04)
	Ultimate vacuum – torr (mbar abs.)	4.5 (6)	4.5 (6)
	Operating pressure – psig (bar)	1.45 (0.1)	1.45 (0.1)
	Connectors for tube – in.	ID 3/8	ID 3/8
	Permissible media and ambient temperature	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)
	Weight – lbs. (kg)	19.4 (8.8)	24.9 (11.3)
	Dimensions W x H x D – in. (mm)	6.4 x 8.7 x 10.2 (163 x 220 x 259)	7.0 x 9.4 x 11.4 (177 x 240 x 289)
MATERIAL	Pump head	PTFE	PTFE
	Diaphragm	PTFE-coated	PTFE-coated
	Valves	FFPM	FFPM

		SC 920 G	SC 950	LABOPORT® SC 820	LABOPORT® SC 840
APPLICATION	Rotary evaporation	x	x	x	x
	Distillation	x	x	x	x
	Degassing				
	Filtration				
	SPE				
	Fluid aspiration				
	Metering/Transferring liquids				
	Gel drying				
	Centrifugal concentration				
	Vacuum oven				
	Multi-user vacuum systems		x		
TECHNICAL DATA	Flow rate at atm. pressure – l/min (m³/h)	21 (1.26)	50 (3)	20 (1.2)	34 (2.04)
	Ultimate vacuum – torr (mbar abs.)	1.5 (2)	1.5 (2)	6 (8)	6 (8)
	Operating pressure – psig (bar)			14.5 (1)	14.5 (1)
	Connectors for tube – in.	pneumatic: ID 3/8 coolants: ID 5/16 inert gas: ID 1/4	pneumatic: ID 3/8 coolants: ID 5/16 inert gas: ID 3/16	pneumatic: ID 3/8 coolants: ID 5/16	pneumatic: ID 3/8 coolants: ID 5/16
	Permissible media and ambient temperature	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)	5 to 40 °C (41 to 104 °F)
	Weight – lbs. (kg)	33.5 (15.2)	32.0 (14.5)	35.3 (16.0)	42.5 (19.3)
	Dimensions W x H x D – in. (mm)	14.4 x 16.6 x 11.6 (366 x 423 x 294)	9.7 x 19.2 x 12.3 (246 x 487 x 313)	11.4 x 19.9 x 15.6 (289 x 506 x 397)	11.4 x 19.9 x 16.4 (289 x 506 x 417)
MATERIAL	Pump head	PPS	PPS	PTFE	PTFE
	Diaphragm	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated
	Valves	FFPM	FFPM	FFPM	FFPM
ACCESSORIES	Coolant valve – G 1/2, ID 5/6 in.	Order no. 117121	Order no. 117121	Order no. 045075	Order no. 045075
	Column fixture	for remote control Order no. 120132	for remote control Order no. 120132		
	Wall fixture	for remote control Order no. 120130	for remote control Order no. 120130		
	Charging station	Order no. 129478	Order no. 129478		

		SIMDOS® 02	SIMDOS® 10	LIQUIPORT® NF 100	LIQUIPORT® NF 300
APPLICATION	Rotary evaporation				
	Distillation				
	Degassing				
	Filtration				
	SPE				
	Fluid aspiration				
	Metering/Transferring liquids	x	x	x	x
	Gel drying				
	Centrifugal concentration				
	Vacuum oven				
	Multi-user vacuum systems				
TECHNICAL DATA	Flow rate with water at 20 °C and zero pressure head – ml/min	0.03 – 20	1 – 100		
	Flow rate with water at 20 °C and zero pressure head – l/min			0.2 – 1.3	0.5 – 3.0
	Operating pressure – psig (bar)	85 (6)	85 (6)	15 (1) [58 (4) for LIQUIPORT® NF 1.100]	15 (1) [58 (4) for LIQUIPORT® NF 1.300]
	Suction head – ft. water (mWg)	6.6 (2)	9.8 (3)	9.8 (3)	9.8 (3)
	Connectors for tube – in. (mm)	ID 1/16, OD 1/8	ID 1/8, OD 1/4	ID 5/16	ID 15/32
	Permissible media and ambient temperature	Ambient temp.: 5 to 40 °C (40 to 104 °F) Media temp.: 5 to 80 °C (40 to 176 °F)	Ambient temp.: 5 to 40 °C (40 to 104 °F) Media temp.: 5 to 80 °C (40 to 176 °F)	Ambient temp.: 5 to 40 °C (40 to 104 °F) Media temp.: 5 to 80 °C (40 to 176 °F)	Ambient temp.: 5 to 40 °C (40 to 104 °F) Media temp.: 5 to 80 °C (40 to 176 °F)
	Weight – lbs. (kg)	2.0 (0.9)	2.0 (0.9)	2.2 (1.0)	3.3 (1.5)
	Dimensions W x H x D – in. (mm)	3.7 x 5.7 x 5.9 (93 x 144 x 150)	3.7 x 5.7 x 5.9 (93 x 144 x 150)	3.9 x 7.0 x 5.1 (99 x 177 x 130)	4.1 x 7.4 x 6.3 (104 x 188 x 160)
MATERIAL	Pump head	PP, PVDF, PTFE or stainless steel	PP, PVDF, PTFE or stainless steel	PP, PVDF or PTFE	PP, PVDF or PTFE
	Diaphragm	FFKM or PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated
	Valves	FFKM	FFKM	FFKM	FFKM
ACCESSORIES	Column fixture	Order no. 160474	Order no. 160474	Order no. 160474	Order no. 160474
	Wall fixture	Order no. 160473	Order no. 160473	Order no. 160473	Order no. 160473
	Foot switch for version RC (RC = flow rate can be set both manually and via an external control device)	Order no. 155872	Order no. 155872	Order no. 155872	Order no. 155872
	In-line filters	FS 60 T PVDF Mesh opening 70 µm Order no. 165210 FS 60 X PEEK Mesh opening 35 µm Order no. 165212	FS 25 T PVDF Mesh opening 70 µm Order no. 165211 FS 25 X PEEK Mesh opening 35 µm Order no. 165213		

ACCESSORIES

Column fixture

Wall fixture

Foot switch

In-line filters FS 60

In-line filters FS 25

		RC 900	RC 600	C 900
APPLICATION	**Rotary evaporation**	x	x	x
TECHNICAL DATA	**Heating bath: Heating bath temperature**	20 to 180 °C (68 to 356 °F)	20 to 180 °C (68 to 356 °F)	
	Working temperature range			-10 to 40 °C (14 to 104 °F)
	Coolant supply parameters (condenser): **- Permissible pressure – psig (bar)** **- Permissible temperature** **- Coolant-coated surface – cm2**	 43.5 (3) -15 to 20 °C (5 to 68 °F) 1230	 43.5 (3) -15 to 20 °C (5 to 68 °F) 1230	
	Cooling capacity – W			250
	Parameters of evaporation flask: **- Size of evaporation flask – ml** **- Rotational speed of evaporation flask – l/min** **- Length of stroke – mm** **- Lifting speed – mm/s**	 50 – 3000 25 – 250 150 38	 50 – 3000 25 – 280 150 38	
	Temperature stability			± 0.5 °C
	Filling volume – l			1.7 – 2.6
	Cooling agent			R134a
	Temperature control			PID temperature control
	Weight – lbs. (kg)	20.1 (9.1)	20.1 (9.1)	59.5 (27)
	Dimensions W x H x D – in. (mm) **- without glass (footprint)** **- with glass**	17.0 x 18.3 x 17.6 (431 x 464 x 447) 19.2 x 32.4 x 17.6 (487 x 823 x 447)	17.0 x 18.3 x 17.8 (431 x 464 x 453) 19.2 x 32.4 x 17.8 (487 x 823 x 453)	9.2 x 20.5 x 15.7 (235 x 520 x 400) -
ACCESSORIES	**Protective cover heating bath**	Order no. 127204	Order no. 127204	
	Refill valve	Order no. 300639	Order no. 300639	
	Coolant valve	Order no. 300853		
	Vacuum seal	Order no. 113046	Order no. 113046	
	Vapor tube NS 24/400	Order no. 128762	Order no. 128762	
	Integrated vapor tube/foam break	Order no. 302145	Order no. 302145	
	Foam break NS 24/40	Order no. 301115	Order no. 301115	
	Retort stand mount	Order no. 305540		
	Column-mount bracket	Order no. 306221	Order no. 306221	
	Dry ice cold finger	Order no. 301696	Order no. 301696	
	Recirculating condenser	Order no. 128160	Order no. 128160	

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