



KNF LABORATORY  
EQUIPMENT  
KNOWING WHAT  
COUNTS

# KNF LABORATORY EQUIPMENT

COMPELLING ADVANTAGES

**KNF permanently strives** to counter the challenges of daily lab work with easy handling. Devices from KNF are therefore intuitive and compact, and offer clear advantages when it comes to intelligent functions: quiet operation, powerful and totally reliable.

**Discover lab technology that supports you.**

- 4 – 5 HELLO, NEW LABOPORT!
- 7 ROTARY EVAPORATION /  
DISTILLATION
- 13 DEGASSING
- 15 FILTRATION/SPE
- 17 FLUID ASPIRATION
- 19 METERING / TRANSFERRING  
LIQUIDS
- 21 GEL DRYING
- 23 CENTRIFUGAL CONCENTRATION
- 25 VACUUM OVEN
- 27 MULTI-USER VACUUM  
SYSTEMS
- 28 – 35 TECHNICAL DATA



# LABOPORT® REDESIGNED

UNIQUE DESIGN,  
EASE OF USE

HELLO,  
NEW  
LABOPORT!



LABOPORT®  
N 96



LABOPORT® N 820 G



LABOPORT® N 840 G



## ■ Exceptionally space saving

The impressively compact device takes up little space.

## ■ Easy to clean

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

## ■ ATEX-compliant and chemically resistant for very aggressive/corrosive gases

The inner, wetted area has been equipped to transfer explosive atmospheres.



## ■ 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

This valve supports short processing times even with solvents with a high boiling point, which protects the pump head.

## ■ Portable

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



## ■ Speed-controlled

The speed can be controlled by simply manually adjusting the vacuum power using the control knob or via an interface by connecting the pump to KNF's VC 900 controller. Ideal for combining with all common vacuum controllers with valve control.

## ■ 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



## SUPERIOR PERFORMANCE SYSTEM

### RC 900 Rotary Evaporator

- Central remote control for all relevant parameters for distillation and for the heating bath – easy operation by touching and turning
- Memory function – simply press the memory button to save the flask's current immersion depth and rotation speed for easy and reliable process repeatability
- Cordless heating bath with diode to indicate heat level and a pour spout for safe, spillfree emptying
- Convenient, fully adjustable flask angle set via a control knob
- Uncomplicated flask exchange – flask simply locks into place – and can be done with one hand
- Cooling condenser is straight forward to detach by turning the clamping nut. The cooling condenser is also extremely easy to clean
- Tube guide inside the tower – tidy and safe, with tubes no longer an obstruction



## SUCCESSFULLY COMBINED

**Joining forces** to create a precisely balanced system, we present the RC 900 rotary evaporator combined with the SC 920 G vacuum pump system and the C 900 chiller, which together form an effective, efficient system.





DESIGNED FOR ACADEMIA LABS

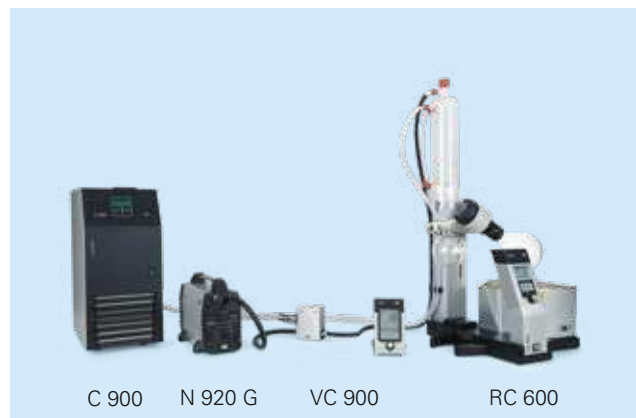


**RC 600 Rotary Evaporator**

- Operating unit with all functions operated centrally via a membrane keypad providing exceptional ease of use
- Control knob to adjust set points for heating bath temperature and flask rotation speed
- Memory function – simply press the memory button to save the flask’s current immersion depth and rotation speed for easy and reliable process repeatability
- Cordless heating bath with a diode to indicate heat level and a pour spout for safe, spill-free emptying
- Uncomplicated flask exchange – flask simply locks into place – and can be done with one hand
- Coated cooling condenser for more safety
- Cooling condenser is straight forward to detach by turning the clamping nut. The cooling condenser is also extremely easy to clean
- Fixed tube guide

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.



QUIET

**SC 920 G and SC 950 Vacuum Pump System**

- Flow rate up to 3 m<sup>3</sup>/h / Ultimate vacuum 2 mbar abs.
- 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 head combined with PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve
- Speed-controlled



SC 920 G



SC 950

LABOPORT®

ROBUST

**SC 820 and SC 840 Vacuum System**

- Flow rate up to 2.04 m<sup>3</sup>/h / Ultimate vacuum 8 mbar abs.
- 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 Pump**

- Flow rate up to 2.04 m³/h / Ultimate vacuum 6 mbar abs.
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- ATEX-compliant in accordance with **Ex II 2/-G IIB+H2 T3 internal atmosphere only**
- 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 combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process. Ideal for combining with all common vacuum controllers with valve control.

LABOPORT®



ROBUST

**N 842.3 FT.18 Diaphragm Vacuum Pump**

- Flow rate 2.04 m³/h / Ultimate vacuum 2 mbar abs.
- High level of vapor and condensate compatibility
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors

SPEED-CONTROLLED

**N 920 G Diaphragm Vacuum Pump**

- Flow rate 1.26 m³/h / Ultimate vacuum 2 mbar abs.
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump head combined with PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

**Tip:** When combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process.



A POWERFUL PACKAGE

**N 860.3 FT.40.18 Diaphragm Vacuum Pump**

- Flow rate 3.6 m³/h / Ultimate vacuum 4 mbar abs.
- 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 preserves the pump heads.
- Chemically resistant and thus ideal for use with extremely aggressive/corrosive gases and vapors



VACUUM CONTROL

**VC 900 Vacuum Control Unit**

- 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



ECONOMICAL

**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



LABOPORT®



HIGH-PERFORMANCE

**N 816.3 KT.18 Diaphragm Vacuum Pump**

- Flow rate 0.96 m<sup>3</sup>/h / Ultimate vacuum 20 mbar abs.
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



FAST

**N 938.50 KT.18 Diaphragm Vacuum Pump**


- Flow rate 1.8 m<sup>3</sup>/h / Ultimate vacuum 15 mbar abs.
- Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



CHEMICALLY RESISTANT

**N 820 G Diaphragm Vacuum Pump**

- Flow rate 1.2 m<sup>3</sup>/h / Ultimate vacuum 6 mbar abs.
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- ATEX-compliant in accordance with  **II 2/-G IIB+H2 T3 internal atmosphere only**
- 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 combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process. Ideal for combining with all common vacuum controllers with valve control.

SPEED-CONTROLLED

**N 920 G Diaphragm Vacuum Pump**

- Flow rate 1.26 m<sup>3</sup>/h / Ultimate vacuum 2 mbar abs.
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump head combined with PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

**Tip:** When combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process.



FILTRATION/SPE  
 RELIABLE VACUUM FOR CLEAN  
 RESULTS.  
 COMPACT, POWERFUL, FAST.

LABOPORT®



SMALL AND FOR (ALMOST) ANY USE

**N 96 Mini Diaphragm Vacuum Pump**

- Flow rate 0.4 m<sup>3</sup>/h / Ultimate vacuum < 130 mbar abs.
- Extremely low footprint
- Integrated rotational speed control
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



HIGH-PERFORMANCE

**N 816.3 KT.18 and N 816.1.2 KT.18 Diaphragm Vacuum Pump**

- Flow rate up to 1.8 m<sup>3</sup>/h / Ultimate vacuum up to 20 mbar abs.
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



FAST

**N 938.50 KT.18 Diaphragm Vacuum Pump**

- Flow rate 1.8 m<sup>3</sup>/h / Ultimate vacuum 15 mbar abs.
- Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



CHEMICALLY RESISTANT

**N 840 G Diaphragm Vacuum Pump**

- Flow rate 2.04 m<sup>3</sup>/h / Ultimate vacuum 6 mbar abs.
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- ATEX-compliant in accordance with **Ex II 2/-G IIB+H2 T3 internal atmosphere only**
- 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 combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process. Ideal for combining with all common vacuum controllers with valve control.



# FLUID ASPIRATION

## RELIABLE VACUUM WITH PROCESS-SPECIFIC FLOW RATES



LABOPORT®



SMALL AND FOR (ALMOST) ANY USE

**N 96 Mini Diaphragm Vacuum Pump**

- Flow rate 0.4 m<sup>3</sup>/h / Ultimate vacuum < 130 mbar abs.
- Extremely low footprint
- Integrated rotational speed control
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



HIGH-PERFORMANCE

**N 816.3 KT.18 Diaphragm Vacuum Pump**

- Flow rate 0.96 m<sup>3</sup>/h / Ultimate vacuum 20 mbar abs.
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



FAST

**N 938.50 KT.18 Diaphragm Vacuum Pump**

- Flow rate 1.8 m<sup>3</sup>/h / Ultimate vacuum 15 mbar abs.
- Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



CHEMICALLY RESISTANT

**N 820 G Diaphragm Vacuum Pump**

- Flow rate 1.2 m<sup>3</sup>/h / Ultimate vacuum 6 mbar abs.
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- ATEX-compliant in accordance with **Ex II 2/-G IIB+H2 T3 internal atmosphere only**
- 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 combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process. Ideal for combining with all common vacuum controllers with valve control.



# METERING AND TRANSFERRING LIQUIDS

PRECISE, SAFE AND CLEAN HANDLING  
OF NEUTRAL AND AGGRESSIVE LIQUIDS

## LIQUIPORT®



## RELIABLE

### NF 100 and NF 300 Chemically-resistant Diaphragm Liquid Pump

- Flow rate from 0.2 up to 3 l/min / Pressure head 10 mWg, suction head 3 mWg
- Self priming, dry running
- Pump heads available in your choice of PP, PVDF or PTFE – diaphragms available in PTFE, valves in FFKM
- Pressure head also available for 40 mWg on request
- Flow rate can either be set manually (Version S) or both manually and via an external control device (Version RC)

## SIMDOS®



## PRECISE

### SIMDOS® 02 and SIMDOS® 10 Chemically-resistant Diaphragm Liquid Pump

- Flow rate from 0.03 up to 100 ml/min / Pressure head max. 6 bar, suction head 2 mWg and 3 mWg respectively
- Pump heads available in your choice of PP, PVDF, PTFE or stainless steel – diaphragms available in FFKM or PTFE-coated respectively PTFE-coated only (SIMDOS 10), valves in FFKM
- Flow rate can either be set manually (Version S) or both manually and via an external control device as well as with interface RS 232 (Version RCP)
- Additional safety diaphragm for maximum security
- Easy exchange of the transfer diaphragm by activating the maintenance command in the operating program



# GEL DRYING

OPTIMUM RESULTS ACHIEVED  
THANKS TO CHEMICAL RESISTANCE  
AND FULLY VARIABLE VACUUM




LABOPORT®



## CHEMICALLY RESISTANT

### N 820 G Diaphragm Vacuum Pump

- Flow rate 1.2 m<sup>3</sup>/h / Ultimate vacuum 6 mbar abs.
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- ATEX-compliant in accordance with  II 2/-G IIB+H2 T3 **internal atmosphere only**
- 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 combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process. Ideal for combining with all common vacuum controllers with valve control.

## SPEED-CONTROLLED

### N 920 G Diaphragm Vacuum Pump

- Flow rate 1.26 m<sup>3</sup>/h / Ultimate vacuum 2 mbar abs.
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump head combined with PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

**Tip:** When combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process.



# CENTRIFUGAL CONCENTRATION

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

## SPEED-CONTROLLED

### N 920 G Diaphragm Vacuum Pump

- Flow rate 1.26 m<sup>3</sup>/h / Ultimate vacuum 2 mbar abs.
- High suction speed, particularly in the low vacuum range
- Integrated rotational speed control
- PPS pump head combined with PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapors
- Integrated gas ballast valve

**Tip:** When combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process.



## LABOPORT®

## CHEMICALLY RESISTANT

### N 840 G Diaphragm Vacuum Pump

- Flow rate 2.04 m<sup>3</sup>/h / Ultimate vacuum 6 mbar abs.
- High level of vapor and condensate compatibility
- Integrated rotational speed control
- PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- ATEX-compliant in accordance with **Ex II 2/-G IIB+H2 T3 internal atmosphere only**
- 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 combined with the VC 900 vacuum control unit and the connection cable, the rotational speed is controlled in accordance with the requirements of the process. Ideal for combining with all common vacuum controllers with valve control.



## A POWERFUL PACKAGE

### N 860.3 FT.40.18 Diaphragm Vacuum Pump

- Flow rate 3.6 m<sup>3</sup>/h / Ultimate vacuum 4 mbar abs.
- 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 preserves the pump heads.
- Chemically resistant and thus 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® SD



### TRIED AND TESTED

#### **N 820.3 FT.40.18 and N 840.3 FT.40.18 Diaphragm Vacuum Pump**

- Flow rate up to 2.04 m<sup>3</sup>/h / Ultimate vacuum 10 mbar abs.
- 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 preserves the pump heads.
- Chemically resistant and thus ideal for use with extremely aggressive/corrosive gases and vapors

### A POWERFUL PACKAGE

#### **N 860.3 FT.40.18 Diaphragm Vacuum Pump**

- Flow rate 3.6 m<sup>3</sup>/h / Ultimate vacuum 4 mbar abs.
- 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 preserves the pump heads.
- Chemically resistant and thus ideal for use with extremely aggressive/corrosive gases and vapors



# MULTI-USER VACUUM SYSTEMS

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



## QUIET

### SC 950 Vacuum Pump System

- Flow rate 3 m<sup>3</sup>/h / Ultimate vacuum 2 mbar abs.
- Remote-controlled operation for safety when mounted in laboratory furniture
- Automated, precise boiling point recognition and control
- Speed-controlled
- Integrated gas ballast valve

## VACUUM CONTROL

### VC 900 Vacuum Control Unit

- 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® N 816.3 KT.18	LABOPORT® N 816.1.2 KT.18	LABOPORT® N 938.50 KT.18	N 920 G		LABOPORT® N 842.3 FT.18	LABOPORT® SD N 820.3 FT.40.18	LABOPORT® SD N 840.3 FT.40.18	N 860.3 FT.40.18	VC 900
<b>APPLICATION</b>	Filtration	x	x	x	x						
	SPE	x	x		x						
	Degassing		x		x	x					
	Fluid aspiration	x	x		x						
	Gel drying					x					
	Rotary evaporation					x	x			x	x
	Distillation					x	x			x	x
	Vacuum oven							x	x	x	
	Multi-user vacuum systems										x
	Centrifugal concentration					x				x	
Metering/Transferring liquids											
<b>TECHNICAL DATA</b>	Flow rate (m³/h) at atm. pressure	0.4	0.96	1.8	1.8	1.26	2.04	1.2	2.04	3.6	
	Ultimate vacuum (mbar abs.)	<130	20	160	15	2	2	10	10	4	
	Operating pressure (bar)	2.5	0.5	0.5	0.5	0.5	1	1	1	1	
	Hose connections (mm)	NPT 1/8 – ID6, PP	ID 6	ID 6	ID 10	ID 10	ID 10	ID 10	ID 10	ID 12	pneumatic: ID 10 coolants: ID 10 inert gas: ID 4
	Permissible media and ambient temperature	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	Media temp.: + 5 ... +40 °C Ambient temp.: +10 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	+10 ... +40 °C
	Weight (kg)	1.3	3.95	3.95	6.8	8.5	13.4	9.6	12.9	14.8	1.2
Dimensions W x H x D (mm)	156 x 119 x 75	90 x 141 x 361	102 x 141 x 361	110 x 212 x 317	158 x 226 x 324	167 x 228 x 341	177 x 220 x 312	189 x 239 x 341	291 x 278 x 331	101 x 181 x 67	
<b>MATERIAL</b>	Pump head	PPS	PPS	PPS	PPS		PTFE	PTFE	PTFE	PTFE	
	Diaphragm	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	
	Valves	FKM	FFPM	FFPM	FFPM	FFPM	FFPM	FFPM	FFPM	FFPM	
<b>ACCESSORIES</b>	Silencer		Order no. 000345		Order no. 007006	Order no. 007006					
	Hose connector		G1/8 ID6 PVDF Order no. 123363 G1/8 ID6 PA Order no. 000360 G1/8 ID8 PA Order no. 004975		G1/8 ID10 PVDF Order no. 112004						
	Column fixture	Order no. 323484									
	Fine control valve with vacuum gauge		Order no. 057830		Order no. 112432	Order no. 112432					
	Small flange, stainless steel					Order no. 046625					
	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)

	LABOPORT® N 820 G II 2/-G IIB+H2 T3 internal atmosphere only	LABOPORT® N 840 G II 2/-G IIB+H2 T3 internal atmosphere only
<b>APPLICATION</b>	Filtration	x
	SPE	
	Degassing	x
	Fluid aspiration	x
	Gel drying	x
	Rotary evaporation	x
	Distillation	
	Vacuum oven	
	Multi-user vacuum systems	
	Centrifugal concentration	
Metering/Transferring liquids		
<b>TECHNICAL DATA</b>	Flow rate (m³/h) at atm. pressure	1.2
	Ultimate vacuum (mbar abs.)	6
	Operating pressure (bar)	0.1
	Hose connections (mm)	ID 9.5-8, PVDF
	Permissible media and ambient temperature	+5 ... +40 °C
	Weight (kg)	8.8
Dimensions W x H x D (mm)	163 x 220 x 259	
<b>MATERIAL</b>	Pump head	PTFE
	Diaphragm	PTFE-coated
	Valves	FFPM

**ATEX key for LABOPORT® N 820 G and N 840 G and the transferable, explosive gases and vapors:**

II 2/-G IIB+H2 T3 INTERNAL ATMOSPHERE ONLY			
	T1	T2	T3
	methane		
<b>IIA</b>	acetone, ammonia, benzene (pure), acetic acid, ethane, ethyl acetate, carbon oxide, methanol, propane, toluene	ethyl alcohol, n-butane, n-butyl alcohol	gasolines, diesel fuel, aviation fuel, fuel oils, n-hexane
<b>IIB</b>	town gas	ethene	
<b>IIC</b>	hydrogen		



	SC 920 G	SC 950	LABOPORT® SC 820	LABOPORT® SC 840	
<b>APPLICATION</b>	<b>Filtration</b>				
	<b>SPE</b>				
	<b>Degassing</b>				
	<b>Fluid aspiration</b>				
	<b>Gel drying</b>				
	<b>Rotary evaporation</b>	x	x	x	x
	<b>Distillation</b>	x	x	x	x
	<b>Vacuum oven</b>				
	<b>Multi-user vacuum systems</b>		x		
	<b>Centrifugal concentration</b>				
<b>Metering/Transferring liquids</b>					
<b>TECHNICAL DATA</b>	<b>Flow rate (m³/h) at atm. pressure</b>	1.26	3	1.2	2.04
	<b>Ultimate vacuum (mbar abs.)</b>	2	2	8	8
	<b>Operating pressure (bar)</b>			1	1
	<b>Hose connections (mm)</b>	pneumatic: ID 10 coolants: ID 8 inert gas: ID 6	pneumatic: ID 10 coolants: ID 8 inert gas: ID 4	pneumatic: ID 10 coolants: ID 8	pneumatic: ID 10 coolants: ID 8
	<b>Permissible media and ambient temperature</b>	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C
	<b>Weight (kg)</b>	15.2	14.5	16.0	19.3
<b>Dimensions W x H x D (mm)</b>	366 x 423 x 294	246 x 487 x 313	289 x 506 x 397	289 x 506 x 417	
<b>MATERIAL</b>	<b>Pump head</b>	PPS	PPS	PTFE	PTFE
	<b>Diaphragm</b>	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated
	<b>Valves</b>	FFPM	FFPM	FFPM	FFPM
<b>ACCESSORIES</b>	<b>Coolant valve – G 1/2, ID 8</b>	Order no. 117121	Order no. 117121	Order no. 045075	Order no. 045075
	<b>Column fixture</b>	for remote control Order no. 120132	for remote control Order no. 120132		
	<b>Wall fixture</b>	for remote control Order no. 120130	for remote control Order no. 120130		
	<b>Charging station</b>	Order no. 129478	Order no. 129478		

	SIMDOS® 02	SIMDOS® 10	LIQUIPORT® NF 100	LIQUIPORT® NF 300	
<b>APPLICATION</b>	Filtration				
	SPE				
	Degassing				
	Fluid aspiration				
	Gel drying				
	Rotary evaporation				
	Distillation				
	Vacuum oven				
	Multi-user vacuum systems				
	Centrifugal concentration				
Metering/Transferring liquids	x	x	x	x	
<b>TECHNICAL DATA</b>	Flow rate (ml/min) with water at 20 °C and zero pressure head	0.03 – 20	1 – 100		
	Flow rate (l/min) with water at 20 °C and zero pressure head			0.2 – 1.3	
	Operating pressure (bar)	6	6	1 (4 with LIQUIPORT® NF 1.100)	1 (4 with LIQUIPORT® NF 1.300)
	Suction head (mWg)	2	3	3	3
	Hose connections (mm)	ID 1.6/OD 3.2	ID 4/OD 6	ID 8	ID 12
	Permissible media and ambient temperature	Ambient temp.: +5 ... +40 °C Media temp.: +5 ... +80 °C	Ambient temp.: +5 ... +40 °C Media temp.: +5 ... +80 °C	Ambient temp.: +5 ... +40 °C Media temp.: +5 ... +80 °C	Ambient temp.: +5 ... +40 °C Media temp.: +5 ... +80 °C
	Weight (kg)	0.9	0.9	1.0	1.5
	Dimensions W x H x D (mm)	93 x 144 x 150	93 x 144 x 150	99 x 177 x 130	104 x 188 x 160
	<b>MATERIAL</b>	Pump head	PP, PVDF, PTFE or stainless steel	PP, PVDF, PTFE or stainless steel	PP, PVDF or PTFE
		Diaphragm	FFKM or PTFE-coated	PTFE-coated	PTFE-coated
Valves		FFKM	FFKM	FFKM	FFKM
<b>ACCESSORIES</b>	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		

	RC 900	RC 600	C 900	
<b>APPLICATION</b>	Rotary evaporation	x	x	x
<b>TECHNICAL DATA</b>	Heating bath: Heating bath temperature (°C)	20 – 180	20 – 180	
	Working temperature range (°C)			-10 – +40
	Coolant supply parameters (condenser):			
	- Permissible pressure (bar)	3	3	
	- Permissible temperature (°C)	-15 – +20	-15 – +20	
	- Coolant-coated surface (cm²)	1230	1230	
	Cooling capacity (W)			250
	Parameters of evaporation flask:			
	- Size of evaporation flask (ml)	50 – 3000	50 – 3000	
	- Rotational speed of evaporation flask (1/min)	25 – 250	25 – 280	
	- Length of stroke (mm)	150	150	
	- Lifting speed (mm/s)	38	38	
	Temperature stability (°C)			± 0,5
Filling volume (l)			1.7 – 2.6	
Cooling agent			R134a	
Temperature control			PID temperature control	
Weight (kg)	9.1	9.1	27	
Dimensions W x H x D (mm)			235 x 520 x 400	
- without glass (footprint)	431 x 464 x 447	431 x 464 x 453	-	
- with glass	487 x 823 x 447	487 x 823 x 453	-	
<b>ACCESSORIES</b>	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	



Column fixture



Wall fixture



Foot switch



In-line filters FS 60



In-line filters FS 25