



**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.

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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 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

- n Central remote control for all relevant parameters for distillation and for the heating bath – easy operation by touching and turning
- n Memory function – simply press the memory button to save the flask's current immersion depth and rotation speed for easy and reliable process repeatability
- n Cordless heating bath with diode to indicate heat level and a pour spout for safe, spillfree emptying
- n Convenient, fully adjustable flask angle set via a control knob
- n Uncomplicated flask exchange – flask simply locks into place – and can be done with one hand
- n Cooling condenser is straight forward to detach by turning the clamping nut. The cooling condenser is also extremely easy to clean
- n 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 SC920 G vacuum pump system and the C 900 chiller, which together form an effective, efficient system.



DESIGNED FOR ACADEMIA LABS

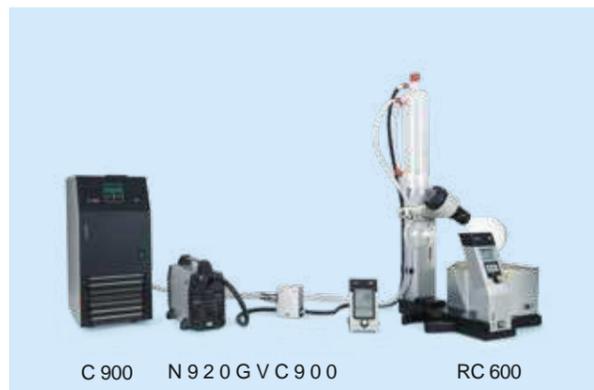


RC 600 Rotary Evaporator

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

- n Flow rate up to 3 m³/h / Ultimate vacuum 2 mbar abs.
- n Quiet operation
- n Remote-controlled for safe operation from outside closed fume hoods
- n Automatic, accurate recognition and monitoring of the boiling point using the integrated ramp function
- n High recovery rates even with low boiling point solvents
- n PPS pump head combined with PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapors
- n Integrated gas ballast valve
- n Speed-controlled



SC 920 G



SC 950

LABOPORT®

ROBUST

SC 820 and SC 840 Vacuum System

- n Flow rate up to 2.04 m³/h / Ultimate vacuum 8 mbar abs.
- n 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

- n Flow rate up to 2.04 m³/h / Ultimate vacuum 6 mbar abs.
- n High level of vapor and condensate compatibility
- n Integrated rotational speed control
- n PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- n ATEX-compliant in accordance with **Ex II 2/-G IIB+H2 T3 internal atmosphere only**
- n Integrated gas ballast valve
- n 3-color status display for in operation / stand-by / error
- n 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

- n Flow rate 2.04 m³/h / Ultimate vacuum 2 mbar abs.
- n High level of vapor and condensate compatibility
- n 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

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

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



VACUUM CONTROL

VC 900 Vacuum Control Unit

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



ECONOMICAL

C 900 Chiller

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



DEGASSING

CONSTANT VACUUM FOR CLEAR RESULTS



LABOPORT®



HIGH-PERFORMANCE

N 816.3 KT.18 Diaphragm Vacuum Pump

- n Flow rate 0.96 m³/h / Ultimate vacuum 20 mbar abs.
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- n Flow rate 1.8 m³/h / Ultimate vacuum 15 mbar abs.
- n Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- n Flow rate 1.2 m³/h / Ultimate vacuum 6 mbar abs.
- n High level of vapor and condensate compatibility
- n Integrated rotational speed control
- n PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- n ATEX-compliant in accordance with  **II 2-G IIB+H2 T3 internal atmosphere only**
- n Integrated gas ballast valve
- n 3-color status display for in operation / stand-by / error
- n 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

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

- n Flow rate 0.4 m³/h / Ultimate vacuum < 130 mbar abs.
- n Extremely low footprint
- n Integrated rotational speed control
- n 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

- n Flow rate up to 1.8 m³/h / Ultimate vacuum up to 20 mbar abs.
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- n Flow rate 1.8 m³/h / Ultimate vacuum 15 mbar abs.
- n Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



CHEMICALLY RESISTANT

N 840 G Diaphragm Vacuum Pump

- n Flow rate 2.04 m³/h / Ultimate vacuum 6 mbar abs.
- n High level of vapor and condensate compatibility
- n Integrated rotational speed control
- n PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- n ATEX-compliant in accordance with **II 2/-G IIB+H2 T3 internal atmosphere only**
- n Integrated gas ballast valve
- n 3-color status display for in operation / stand-by / error
- n 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

- n Flow rate 0.4 m³/h / Ultimate vacuum < 130 mbar abs.
- n Extremely low footprint
- n Integrated rotational speed control
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



HIGH-PERFORMANCE

N 816.3 KT.18 Diaphragm Vacuum Pump

- n Flow rate 0.96 m³/h / Ultimate vacuum 20 mbar abs.
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- n Flow rate 1.8 m³/h / Ultimate vacuum 15 mbar abs.
- n Connecting both pump heads in parallel and in series ensures exceptionally fast evacuation
- n PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapors

LABOPORT®



CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- n Flow rate 1.2 m³/h / Ultimate vacuum 6 mbar abs.
- n High level of vapor and condensate compatibility
- n Integrated rotational speed control
- n PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- n ATEX-compliant in accordance with  **II 2-G IIB+H2 T3 internal atmosphere only**
- n Integrated gas ballast valve
- n 3-color status display for in operation / stand-by / error
- n 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

- n Flow rate from 0.2 up to 3 l/min / Pressure head 10 mWg, suction head 3 mWg
- n Self priming, dry running
- n Pump heads available in your choice of PP, PVDF or PTFE – diaphragms available in PTFE, valves in FFKM
- n Pressure head also available for 40 mWg on request
- n 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

- n Flow rate from 0.03 up to 100 ml/min / Pressure head max. 6 bar, suction head 2 mWg and 3 mWg respectively
- n 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
- n 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)
- n Additional safety diaphragm for maximum security
- n 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

- n Flow rate 1.2 m³/h / Ultimate vacuum 6 mbar abs.
- n High level of vapor and condensate compatibility
- n Integrated rotational speed control
- n PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- n ATEX-compliant in accordance with  II 2-G IIB+H2 T3 **internal atmosphere only**
- n Integrated gas ballast valve
- n 3-color status display for in operation / stand-by / error
- n 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

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

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

- n Flow rate 2.04 m³/h / Ultimate vacuum 6 mbar abs.
- n High level of vapor and condensate compatibility
- n Integrated rotational speed control
- n PTFE pump head combined with PTFE-coated diaphragm are ideal for extremely aggressive/corrosive gases and vapors
- n ATEX-compliant in accordance with  II 2-G IIB+H2 T3 **internal atmosphere only**
- n Integrated gas ballast valve
- n 3-color status display for in operation / stand-by / error
- n 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

- n Flow rate 3.6 m³/h / Ultimate vacuum 4 mbar abs.
- n 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.
- n 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

- n Flow rate up to 2.04 m³/h / Ultimate vacuum 10 mbar abs.
- n 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.
- n 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

- n Flow rate 3.6 m³/h / Ultimate vacuum 4 mbar abs.
- n 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.
- n 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

- n Flow rate 3 m³/h / Ultimate vacuum 2 mbar abs.
- n Remote-controlled operation for safety when mounted in laboratory furniture
- n Automated, precise boiling point recognition and control
- n Speed-controlled
- n Integrated gas ballast valve

VACUUM CONTROL

VC 900 Vacuum Control Unit

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



TECHNICAL DATA

	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	
APPLICATION	Filtration	x	x	x	x						
	SPE	x	x		x						
	Degassing		x		x						
	Fluid aspiration	x	x		x						
	Gel drying						x				
	Rotary evaporation						x		x	x	
	Distillation						x		x	x	
	Vacuum oven							x	x		
	Multi-user vacuum systems									x	
	Centrifugal concentration									x	
Metering/Transferring liquids											
TECHNICAL DATA	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	
MATERIAL	Pump head	PPS	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			
ACCESSORIES	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	
APPLICATION	Filtration	x	
	SPE		
	Degassing	x	
	Fluid aspiration	x	
	Gel drying	x	
	Rotary evaporation	x	x
	Distillation		
	Vacuum oven		
	Multi-user vacuum systems		
	Centrifugal concentration		x
	Metering/Transferring liquids		
TECHNICAL DATA	Flow rate (m³/h) at atm. pressure	1.2	2.04
	Ultimate vacuum (mbar abs.)	6	6
	Operating pressure (bar)	0.1	0.1
	Hose connections (mm)	ID 9.5-8, PVDF	ID 9.5-8, PVDF
	Permissible media and ambient temperature	+5 ... +40 °C	+5 ... +40 °C
	Weight (kg)	8.8	11.3
Dimensions W x H x D (mm)	163 x 220 x 259	177 x 240 x 289	
MATERIAL	Pump head	PTFE	PTFE
	Diaphragm	PTFE-coated	PTFE-coated
	Valves	FFPM	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					
T	1	T	2	T	3
IIA	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
IIB	town gas		ethene		
IIC	hydrogen				

TECHNICAL DATA

	S C 9 2 0 G S C 9 5 0		LABOPORT® SC 820	LABOPORT® SC 840	
APPLICATION	Filtration				
	SPE				
	Degassing				
	Fluid aspiration				
	Gel drying				
	Rotary evaporation	x	x	x	x
	Distillation	x	x	x	x
	Vacuum oven				
	Multi-user vacuum systems		x		
	Centrifugal concentration				
Metering/Transferring liquids					
TECHNICAL DATA	Flow rate (m³/h) at atm. pressure	1.26	3	1.2	2.04
	Ultimate vacuum (mbar abs.)	2	2	8	8
	Operating pressure (bar)			1	1
	Hose connections (mm)	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
	Permissible media and ambient temperature	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C	+5 ... +40 °C
	Weight (kg)	15.2	14.5	16.0	19.3
Dimensions W x H x D (mm)	366 x 423 x 294	246 x 487 x 313	289 x 506 x 397	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 8	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 S	MIDOS® 10 LIQ	LIQUIPORT® NF 100	LIQUIPORT® NF 300
APPLICATION				
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
TECHNICAL DATA				
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	0.5 – 3.0
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
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		

	R C 9 0 0 R	C 6 0 0 C 9 0	0
APPLICATION			
Rotary evaporation	x	x	x
TECHNICAL DATA			
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	-
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	

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Column fixture



Wall fixture



Foot switch



In-line filters FS 60



In-line filters FS 25