

KNF LABORATORY EQUIPMENT KNOWING WHAT COUNTS





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.



LABOPORT® REDESIGNED

UNIQUE DESIGN, EASE OF USE



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.

$\langle \epsilon_x \rangle$

■ Integrated gas ballast valve

Expandable

system.

Separators and/or condensers

can be purchased individually at any time and easily fitted, enabling users to build their

own customized vacuum

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

Portable The fold out

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.

ROTARY EVAPORATION / DISTILLATION ROTARY EVAPORATION / DISTILLATION



DESIGNED FOR ACADEMIA LABS

RC 600 Rotary Evaporator

- Operating unit with all functions operated centrally via a membrane keypad providing exeptional 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

SC 920 G

SC 950



QUIET

SC 920 G and SC 950 Vacuum Pump System

- Flow rate up to 3 m³/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

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.







LABOPORT®



ROBUST

SC 820 and SC 840 Vacuum System

- Flow rate up to 2.04 m³/h / Ultimate vacuum 8 mbar abs.
- Vacuum system comprising chemically resistant diaphragm vacuum pump, base plate, condenser, separator and vacuum control unit

ROTARY EVAPORATION / DISTILLATION

ROTARY EVAPORATION / DISTILLATION

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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 ⟨ □ 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.

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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



- 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
- Compact design, small footprint
- Splash-proof membrane keypad
- Easy to fill



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HIGH-PERFORMANCE

N 816.3 KT.18 Diaphragm Vacuum Pump

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

FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- Flow rate 1.8 m³/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

CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- Flow rate 1.2 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
- 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 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.





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SMALL AND FOR (ALMOST) ANY USE

N 96 Mini Diaphragm Vacuum Pump

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

HIGH-PERFORMANCE

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

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

FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- Flow rate 1.8 m³/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

CHEMICALLY RESISTANT

N 840 G Diaphragm Vacuum Pump

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

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HIGH-PERFORMANCE

N 816.3 KT.18 Diaphragm Vacuum Pump

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

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FAST

N 938.50 KT.18 Diaphragm Vacuum Pump

- Flow rate 1.8 m³/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 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 🐼 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)

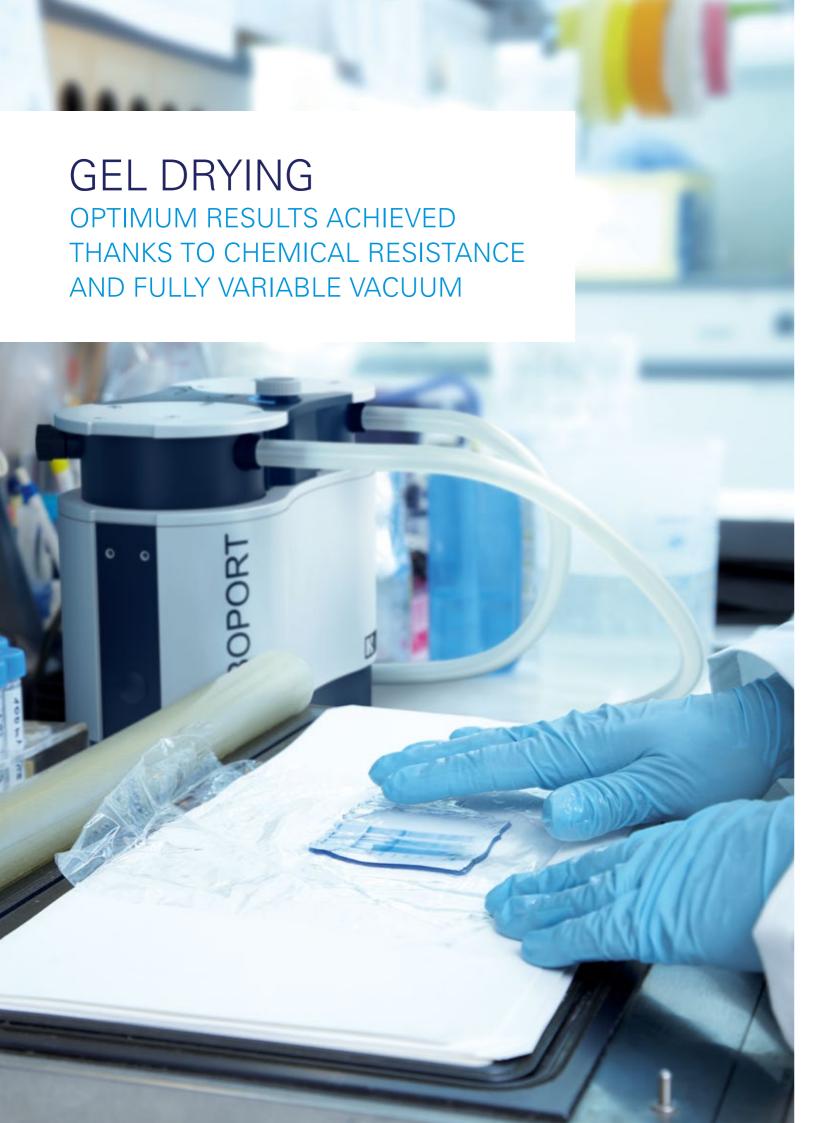
SIMDOS®



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



LABOPORT®



CHEMICALLY RESISTANT

N 820 G Diaphragm Vacuum Pump

- Flow rate 1.2 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.



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.



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



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.

LABOPORT®



CHEMICALLY RESISTANT

N 840 G Diaphragm Vacuum Pump

- Flow rate 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
- 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 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 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 m³/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 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

MULTI-USER VACUUM SYSTEMS

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





SC 950 Vacuum Pump System

- Flow rate 3 m³/h / Ultimate vacuum 2 mbar abs.
- Remote-controlled operation for safety when mounted in laboratory furniture
- Automatated, 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 |
|----------------|---|-------------------|---|------------------------------|------------------------------------|--|----------------------------|----------------------------------|----------------------------------|------------------|--|
| NO | Filtration | х | Х | х | х | | | | | | |
| APPLICATION | SPE | х | Х | | х | | | | | | |
| | Degassing | | X | | х | х | | | | | |
| AP | Fluid aspiration | Х | X | | х | | | | | | |
| | Gel drying | | | | | х | | | | | |
| | Rotary evaporation | | | | | Х | Х | | | х | Х |
| | Distillation | | | | | Х | Х | | | Х | Х |
| | Vacuum oven | | | | | | | х | х | х | |
| | Multi-user vacuum systems | | | | | | | | | | Х |
| | Centrifugal concentration | | | | | Х | | | | х | |
| | Metering/Transferring liquids | | | | | | | | | | |
| 4TA | 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 | |
| L D | Ultimate vacuum (mbar abs.) | <130 | 20 | 160 | 15 | 2 | 2 | 10 | 10 | 4 | |
| IICA | Operating pressure (bar) | 2.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | 1 | 1 | 1 | |
| TECHNICAL DATA | 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 |
| IAL | Pump head | PPS | PPS | PPS | PPS | PPS | PTFE | PTFE | PTFE | PTFE | |
| MATERIAL | Diaphragm | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated | |
| Σ | Valves | FKM | FFPM | FFPM | FFPM | FFPM | FFPM | FFPM | FFPM | FFPM | |
| ES | 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 Displication in the state of the state | LABOPORT® N 840 G Lagran Street Stre | |
|----------------|---|--|--|--|
| NO | Filtration | | Х | |
| APPLICATION | SPE | | | |
| PLIC | Degassing | X | | |
| AP | Fluid aspiration | X | | |
| | Gel drying | X | | |
| | Rotary evaporation | X | X | |
| | Distillation | | | |
| | Vacuum oven | | | |
| | Multi-user vacuum systems | | | |
| | Centrifugal concentration | | Х | |
| | Metering/Transferring liquids | | | |
| 4TA | Flow rate (m³/h) at atm. pressure | 1.2 | 2.04 | |
| L D/ | Ultimate vacuum (mbar abs.) | 6 | 6 | |
| TECHNICAL DATA | Operating pressure (bar) | 0.1 | 0.1 | |
| E | Hose connections (mm) | ID 9.5-8, PVDF | ID 9.5-8, PVDF | |
| ۳ | 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 | |
| SIAL | Pump head | PTFE | PTFE | |
| MATERIAL | Diaphragm | PTFE-coated | PTFE-coated | |
| Σ | 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 | | | | | |
|-----|---|--|--|--|--|--|
| | T1 | T2 | T3 | | | |
| | methane | | | | | |
| 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 | | - | | | |

| | | SC 920 G | SC 950 | LABOPORT® SC 820 | LABOPORT® SC 840 |
|----------------|---|---|---|---------------------------------|------------------------------------|
| NO | Filtration | | | | |
| ATI | SPE | | | | |
| APPLICATION | Degassing | | | | |
| AP | Fluid aspiration | | | | |
| | Gel drying | | | | |
| | Rotary evaporation | X | х | х | х |
| | Distillation | Х | Х | Х | Х |
| | Vacuum oven | | | | |
| | Multi-user vacuum systems | | х | | |
| | Centrifugal concentration | | | | |
| | Metering/Transferring liquids | | | | |
| ATA | Flow rate (m³/h) at atm. pressure | 1.26 | 3 | 1.2 | 2.04 |
| /L D | Ultimate vacuum (mbar abs.) | 2 | 2 | 8 | 8 |
| /JI | Operating pressure (bar) | | | 1 | 1 |
| TECHNICAL DATA | 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 |
| IAL | Pump head | PPS | PPS | PTFE | PTFE |
| MATERIAL | Diaphragm | PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated |
| Σ | Valves | FFPM | FFPM | FFPM | FFPM |
| IES | Coolant valve – G 1/2, ID 8 | Order no. 117121 | Order no. 117121 | Order no. 045075 | Order no. 045075 |
| ACCESSORIES | Column fixture | for remote control Order no. 120132 | for remote control Order no. 120132 | | |
| ACC | 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 |
|----------------|---|--|--|--|--|
| ON | Filtration | | | | |
| APPLICATION | SPE | | | | |
| PLIC | Degassing | | | | |
| AP | Fluid aspiration | | | | |
| | Gel drying | | | | |
| | Rotary evaporation | | | | |
| | Distillation | | | | |
| | Vacuum oven | | | | |
| | Multi-user vacuum systems | | | | |
| | Centrifugal concentration | | | | |
| | Metering/Transferring liquids | Х | х | X | х |
| DATA | Flow rate (ml/min) with water at 20 °C and zero pressure head | 0.03 – 20 | 1 – 100 | | |
| TECHNICAL DATA | Flow rate (I/min) with water at 20 $^{\circ}\text{C}$ and zero pressure head | | | 0.2 – 1.3 | 0.5 – 3.0 |
| TECH | 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 1.6/0D 3.2 | ID 4/0D 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 |
| AAT | Diaphragm | FFKM or PTFE-coated | PTFE-coated | PTFE-coated | PTFE-coated |
| _ | Valves | FFKM | FFKM | FFKM | FFKM |
| ES | Column fixture | Order no. 160474 | Order no. 160474 | Order no. 160474 | Order no. 160474 |
| SOR | Wall fixture | Order no. 160473 | Order no. 160473 | Order no. 160473 | Order no. 160473 |
| ACCESSORIES | 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 | | |



Column fixture











Wall fixture Foot switch In-line filters FS 60

| Heating Working Coolant s - Permiss - Coolant Cooling of Parameter | traporation bath: Heating bath temperature (°C) temperature range (°C) supply parameters (condenser): sible pressure (bar) sible temperature (°C) t-coated surface (cm²) | x 20 – 180 3 -15 – +20 | x 20 – 180 | -10 - +40 |
|--|--|---|------------------------------------|---------------------------|
| Working Coolants - Permiss - Permiss - Coolant Cooling Paramete | temperature range (°C) supply parameters (condenser): sible pressure (bar) sible temperature (°C)coated surface (cm²) | 3 -15 – +20 | 20 110 | -10 — +40 |
| Cooling of | supply parameters (condenser): sible pressure (bar) sible temperature (°C) t-coated surface (cm²) | -15 — +20 | 2 | -10 - +40 |
| Cooling of | sible pressure (bar) sible temperature (°C) t-coated surface (cm²) | -15 — +20 | 2 | |
| Paramete | · (14/) | 1230 | -15 – +20 1230 | |
| | capacity (VV) | | | 250 |
| - Rotatio - Length | ers of evaporation flask: evaporation flask (ml) nal speed of evporation flask (1/min) of stroke (mm) speed (mm/s) | 50 – 3000 25 – 250 150 38 | 50 – 3000 25 – 280 150 38 | |
| Tempera | ture stability (°C) | | | ± 0,5 |
| Filling vo | olume (I) | | | 1.7 – 2.6 |
| Cooling a | agent | | | R134a |
| Tempera | ture control | | | PID temperature control |
| Weight (| kg) | 9.1 | 9.1 | 27 |
| | ons W x H x D (mm) t glass (footprint) ass | - 431 x 464 x 447 487 x 823 x 447 | 431 x 464 x 453 487 x 823 x 453 | 235 x 520 x 400 - - |
| Protectiv | e cover heating bath | Order no. 127204 | Order no. 127204 | |
| Refill val | ve | Order no. 300639 | Order no. 300639 | |
| Refill val | valve | Order no. 300853 | | |
| Vacuum: | seal | Order no. 113046 | Order no. 113046 | |

RC 600

C 900

eserves the right to make technical changes without notice. Errors and omissions excepted. KNF 02/2020

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