

KNF LABORATORY EQUIPMENT KNOWING WHAT COUNTS





LABOPORT®



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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
- 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
- High suction speed, particularly in the low vacuum range

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

LABOPORT®



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

LABOPORT®



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

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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
- High suction speed, particularly in the low vacuum range

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

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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
- High suction speed, particularly in the low vacuum range

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®

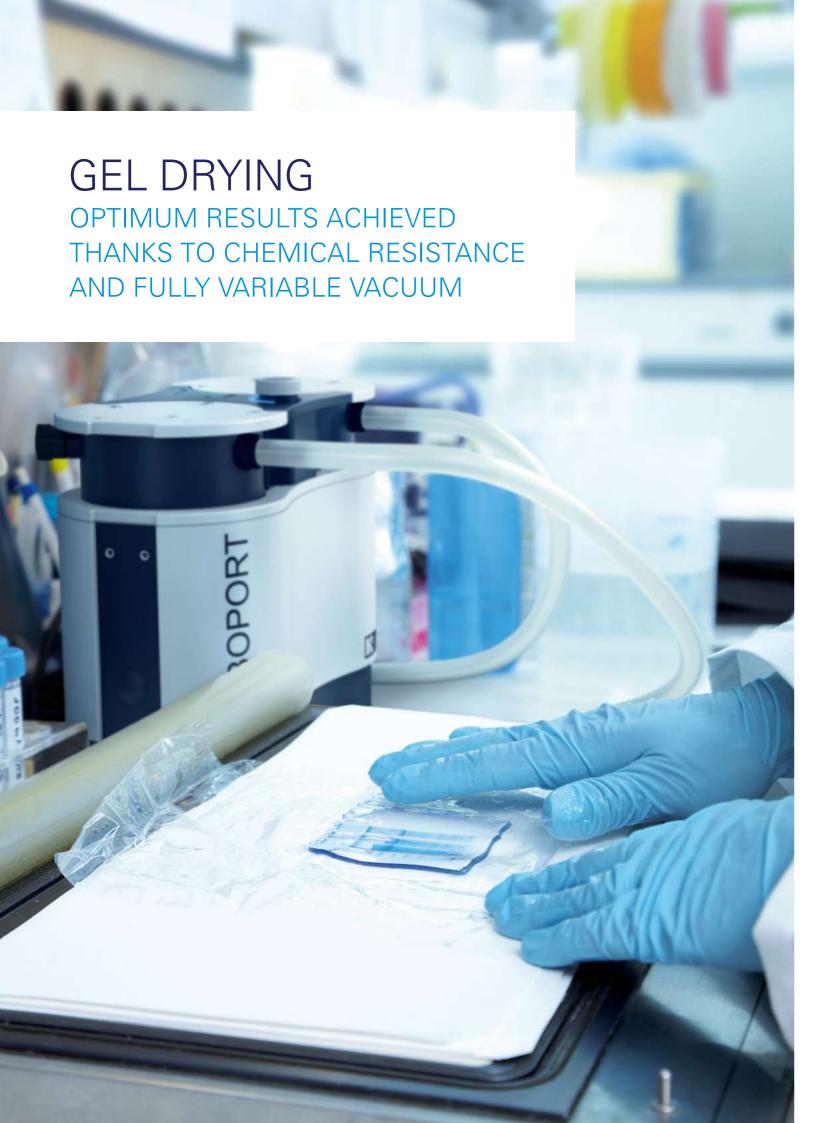




PRECISE

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 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
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- High suction speed, particularly in the low vacuum range

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.



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
- ATEX-compliant in accordance with ② II 2/-G IIB+H2 T3 internal atmosphere only
- Integrated gas ballast valve
- 3-color status display for in operation / stand-by / error
- High suction speed, particularly in the low vacuum range

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.

N 860.3 FT

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

LABOPORT®



SR 820 G

CHEMICALLY RESISTANT AND CONDENSATE COMPATIBILITY

SR 820 G and SR 840 G Vacuum System

- Flow rate up to 2.04 m³/h / Ultimate vacuum 6 mbar abs.
- Vacuum system comprising chemically resistant diaphragm vacuum pump, base plate and two separator flasks on suction and pressure side
- Integrated gas ballast valve

Possible combinations

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.





MULTI-USER VACUUM SYSTEMS

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





SC 920 G

QUIET

SC 920 G Vacuum Pump System

- Flow rate up to 1,26 m³/h / Ultimate vacuum 2 mbar abs.
- Quiet operation
- 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

LABOPORT®



SH 840 G

CHEMICALLY RESISTANT AND CONDENSATE COMPATIBILITY

SH 840 G Vacuum System

- Flow rate up to 2.04 m³/h / Ultimate vacuum 6 mbar abs.
- Vacuum system comprising chemically resistant diaphragm vacuum pump, base plate, condenser and separator
- Integrated gas ballast valve

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
- Easy to use



		LABOPORT®	LABOPORT®	LABOPORT®	LABOPORT®	
	mate	N 96	N 816.3 KT.18	N 816.1.2 KT.18	N 938.50 KT.18	N 920 G
	Filtration	Х	Х	Х	Х	
	SPE .	Х	Х			
	Degassing		Х		Х	Х
Z	Fluid aspiration	Х	X		Х	
ATIC	Gel drying					Х
APPLICATION	Rotary evaporation					х
API	Distillation					Х
	Vacuum oven					Х
	Multi-user vacuum systems					
	Centrifugal concentration					х
	Metering/Transferring liquids					
	Flow rate (m³/h) at atm. pressure	0.4	0.96	1.8	1.8	1.26
	Ultimate vacuum (mbar abs.)	<130	20	160	15	2
_	Operating pressure (bar)	2.5	0.5	0.5	0.5	0.5
TECHNICAL DATA	Hose connections (mm)	NPT 1/8 – ID6, PP	ID 6	ID 6	ID 10	ID 10
TECHNI	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
	Weight (kg)	1.3	3.95	3.95	6.8	8.5
	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
IAL	Pump head	PPS	PPS	PPS	PPS	PPS
MATERIAL	Diaphragm	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated
X	Valves	FKM	FFPM	FFPM	FFPM	FFPM
	Silencer		Order no. 000345		Order no. 007006	Order no. 007006
ACCESSORIES	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				
3CC	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					
	Connection cable to N 820 G/N 840 G interface					

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
Х				
Х	Х	Х	х	Х
Х			Х	Х
Х	Х	Х	Х	Х
			Х	Х
			Х	
2.04	1.2	2.04	3.6	
2	10	10	4	
1	1	1	1	
ID 10	ID 10	ID 10	ID 12	pneumatic: ID 10 coolants: ID 10 inert gas: ID 4
+5 +40 °C	+5 +40 °C	+5 +40 °C	+5 +40 °C	+10 +40 °C
13.4	9.6	12.9	14.8	1.2
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
PTFE	PTFE	PTFE	PTFE	
PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated	
FFPM	FFPM	FFPM	FFPM	
				Order no. 307757 (2 m) Order no. 307758 (5 m)
				Order no. 323829 (2 m)

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		LABOPORT® N 820 G In 2/-G IIB+H2 T3 Internal atmosphere only	LABOPORT® N 840 G Label II 2/-G IIB+H2 T3 internal atmosphere only
	Filtration		Х
	SPE		
	Degassing	Х	Х
_	Fluid aspiration	Х	Х
	Gel drying	Х	
APPLICATION	Rotary evaporation	Х	Х
\PP	Distillation		
	Vacuum oven	X	Х
	Multi-user vacuum systems		
	Centrifugal concentration		Х
	Metering/Transferring liquids		
	Flow rate (m³/h) at atm. pressure	1.2	2.04
¥	Ultimate vacuum (mbar abs.)	6	6
L D/	Operating pressure (bar)	0.1	0.1
TECHNICAL DATA	Hose connections (mm)	ID 9.5-8, PVDF	ID 9.5-8, PVDF
H	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
IAL	Pump head	PTFE	PTFE
MATERIAL	Diaphragm	PTFE-coated	PTFE-coated
Ž	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		•	

		LABOPORT® SR 820 G	LABOPORT® SH 820 G	LABOPORT® SR 840 G	LABOPORT® SH 840 G
APPLICATION	Filtration	х		х	
	Vacuum Oven	х		x	
	Degassing			х	
IICA	Fluid aspiration	х			
APP	Destillation		х		Х
	Rotary evaporation		Х		Х
	Centrifugal concentration	Х		Х	
	Flow rate (m³/h) at atm. pressure	1. 2		2.04	
	Ultimate vacuum (mbar abs.)	6			
ΔTA	Operating pressure (bar)	0.1			
L D	Hose connections (mm)	ID 9.5-8, PVDF			
TECHNICAL DATA	Permissible media and ambient temperature	+5+40°C			
동	Integrated gas ballast valve	Yes			
F	Integrated rotational speed control	Yes	1	1	1
	Weight (kg)	10.7	11.7	13.1	14.1
	Dimensions W x H x D (mm)	282 x 234 x 260	323 x 416 x 260	299 x 250 x 274	340 x 416 x 274
Ι	Pump head	PTFE			
MATERIAL	Diaphragm	PTFE-coated			
M	Valves	FFPM			
	Separator flask	Order No. 047729			
	High performance condenser with pressure relief valve	-	Order No. 114855	-	Order No. 114855
	Hose connector with O-ring (FPM)	Order No. 323609			
	Hose connector PP (for hose ID10)	Order No. 026237			
	Screw connection cap red, GL18 (for hose connector ID 026237)	Order No. 025980			
ES	Hose connector PP (for hose ID8)	Order No. 025981			
ACCESSORIES	Screw connection cap red, GL14 (for hose connector ID 025981)	Order No. 025982			
CCE	Key for hose connector	Order No. 316279			
4	Connection cable (for combination with VC 900) 2 m	Order No. 323829			
	Connecting cable (for combination with VC 900) 5 m	Order No. 323830			
	Hose-BGR for Separator flask (1x for SH 840 G)	Order No. 323095			
	Hose BGR for high performance condenser (1x for SH 840 G)	Order No. 317157			
	Hose connector Y-piece - ID10	Order No. 026432			

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

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		SIMDOS® 02 FEM 1.02	SIMDOS® 10 FEM 1.10	LIQUIPORT® NF 100	LIQUIPORT® NF 300
	Filtration				
	SPE				
	Degassing				
_	Fluid aspiration				
APPLICATION	Gel drying				
CA	Rotary evaporation				
PPL	Distillation				
•	Vacuum oven				
	Multi-user vacuum systems				
	Centrifugal concentration				
	Metering/Transferring liquids	х	х	х	х
	Flow rate (ml/min) with water at 20 °C and zero pressure head	0.03 – 20	1 – 100		
	Flow rate (I/min) with water at 20 °C and zero pressure head			0.2 – 1.3	0.5 – 3.0
TECHNICAL DATA	Operating pressure (bar)	6	6	1 (4 with LIQUIPORT® NF 1.100)	1 (4 with LIQUIPORT® NF 1.300)
SAL	Suction head (mWg)	2	3	3	3
Ĭ	Hose connections (mm)	ID 1.6/OD 3.2	ID 4/0D 6	ID 8	ID 12
TEC	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
ATE	Diaphragm	FFKM or PTFE-coated	PTFE-coated	PTFE-coated	PTFE-coated
Σ	Valves	FFKM	FFKM	FFKM	FFKM
	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
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		

		RC 600	C 900
APPLICATION	Rotary evaporation	х	х
	Heating bath: Heating bath temperature (°C)	20 – 180	
	Working temperature range (°C)		-10 - +40
	Coolant supply parameters (condenser): - Permissible pressure (bar) - Permissible temperature (°C) - Coolant-coated surface (cm²)	3 -15 – +20 1230	
	Cooling capacity (W)		250
TECHNICAL DATA	Parameters of evaporation flask: - Size of evaporation flask (ml) - Rotational speed of evporation flask (1/min) - Length of stroke (mm) - Lifting speed (mm/s)	50 – 3000 25 – 280 150 38	
TEC	Temperature stability (°C)		± 0,5
	Filling volume (I)		1.7 – 2.6
	Cooling agent		R134a
	Temperature control		PID temperature control
	Weight (kg)	9.1	27
	Dimensions W x H x D (mm) - without glass (footprint) - with glass	- 431 x 464 x 453 487 x 823 x 453	235 x 520 x 400 - -
ES	Protective cover heating bath	Order no. 127204	
ACCESSORIES	Refill valve	Order no. 300639	
CES	Coolant valve		
AC	Vacuum seal	Order no. 113046	







Foot switch







In-line filters FS 25



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