

# UNIQUE DESIGN FOR LAB LIFE LABOPORT® VACUUM PUMPS AND SYSTEMS



AN EYE FOR DETAIL

# RETHINKING EVERYDAY LAB PRACTICE

What aspects do you believe are key when using vacuum pumps in everyday lab practice? What does it take to create simple, economical processes that are reliable day in, day out? And what makes work enjoyable?

These are the questions we used as a guide when redesigning our successful laboratory pump series LABOPORT®. We became involved in daily lab work, asking users what they wished for, enlisting experts to perform tests and incorporating their suggestions.

The result? Clever, elegant design with clear benefits in terms of handling and functionality.



#### WE KNOW WHAT COUNTS

# UNIQUE DESIGN, EASE OF USE

#### 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.

Speed-controlled

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

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



### Integrated gas ballast valve This valve supports short processing times even with solvents with a high boiling point, which (1) protects the pump head. Portable The fold-out handle makes the device easy to transport and (1) store. 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 (1) LABOPORT® Vakuum-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. Blue: in operation Green: stand-by Red: error

PERFECT FIT VACUUM SYSTEM

MODULAR AND EXPANDABLE



The new laboratory vacuum pump system guarantees maximum performance and safety in the laboratory, tailored to your individual needs:

The powerful basic pump can be easily modified to an even higher environmentally friendly system. Various system components such as a separator, high-performance condenser and the new vacuum controller, allows the systems to be used for a wide range of laboratory applications.

#### Simple, safe, precise

- Automatic, accurate recognition and monitoring of the boiling point using the integrated ramp function
- No solvent library needed
- High recovery rates even with low boiling point
- ATEX-compliant in accordance with (Ex) II 2/-G IIB+H2 T3 internal atmosphere only



LABOPORT® Vacuum-Controller System for Vacuum Pump System SC 820 G and SC 840 G



HELLO, NEW LABOPORT SYSTEMS!

LABOPORT® N 820 G



LABOPORT® SR 820 G

#### **Environmentally friendly technology**

- Safe recovery of solvents
- Protection against aggressive chemicals
- High energy efficiency

■ High energy

#### SIMPLE AND INTUITIVE

## **SMART CONTROLLED**

More efficient, more convenient and much safer in the laboratory: With our new laboratory vacuum pump systems you have your vacuum under control at all times.

The new highlight: The vacuum controller for the pump systems SC 820 G and SC 840 G. The controller provides intuitive handling and maximum operating comfort. Its newly developed touchscreen display with high-precision vacuum control provides full process control, and thanks to the large user interface, you always have an overview.

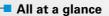
All functions are clearly displayed on one level – at a glance and without any complicated sub menus. The new Vacuum Controller stands for absolute precision, safety and functionality – for almost all common laboratory applications... simply the way you need it.

#### Wide range of use

Four operating modes for almost all common laboratory applications. PRESS CONTROL

#### Safe to use

Wireless remote control for safe operation outside for closed fume cupboards.



Simple, intuitive operation thanks to touch-screen display and precise rotary knob control.



# AN ALL-ROUNDER IN THE LAB





LABOPORT® N 820 G (Ex)



		LABOPORT® N 96	LABOPORT® N 820 G	LABOPORT® N 840 G	
	Filtration	x	internal atmosphere only	internal atmosphere	
	Vacuum Oven	^	X	X	
	SPE	X	^	^	
_	Degassing	^	X	X	
APPLICATION	Fluid aspiration	X	X	X	
ICA	Destillation	X	Α	X	
PPL	Gel drying				
1			X		
	Rotary evaporation Centrifugal concentration		X	X	
	-			Х	
	Multi-user vacuum systems	0.4	4.0	0.04	
	Flow rate (m³/h) at atm. pressure	0.4	1. 2	2.04	
	Ultimate vacuum (mbar abs.)	<130	6	6	
¥	Operating pressure (bar)	2.5	0.1	0.1	
DA	Hose connections (mm)	NPT 1/8 – ID6, PP	ID 9.5-8, PVDF	ID 9.5-8, PVDF	
TECHNICAL DATA	Permissible media and ambient temperature	+5 + 40°C	+5+40°C	+5 + 40°C	
Ī	Integrated gas ballast valve	No	Yes	Yes	
TEC	Integrated rotational speed control	Yes	Yes	Yes	
	Weight (kg)	1.3	8.8	11.3	
	Dimensions W x H x D (mm)	156 x 119 x 75	163 x 220 x 259	177 x 240 x 289	
MATERIAL	Pump head	PPS	PTFE	PTFE	
	Diaphragm	PTFE-coated	PTFE-coated	PTFE-coated	
Ž	Valves	FKM	FFPM	FFPM	
ACCESSORIES	Column fixture	Order No. 323484			

#### 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						
	Т1	T2	Т3				
	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® SR 840 G	LABOPORT® SH 820 G	LABOPORT® SH 840 G	LABOPORT® SC 820 G with Vacuum-Controller	LABOPORT® SC 840 G with Vacuum-Controller		
х	х						
х	х			X	X		
	x						
х							
		х	Х	Х	Х		
		Х	Х	Х	Х		
Х	Х						
		Х	Х	Х	Х		
1.2	2.04	1.2	2.04	1.2	2.04		
6							
0,1							
ID 9.5-8, PVDF							
+5 + 40 °C							
Yes							
Yes							
10,7	13.1	11.7	14.1	13.35	15.75		
282 x 234 x 260	299 x 250 x 274	323 x 416 x 260	340 x 416 x 274		Vacuum Pump System: 366 x 416 x 274		
	Controller: 162 x 96 x 51, Docking station controller: 96 x 88 x 101						
PTFE							
PTFE-coated							
FFPM							

#### ZUBEHÖR

	LABOPORT® SR 820 G	LABOPORT® SR 840 G	LABOPORT® SH 820 G	LABOPORT® SH 840 G	LABOPORT® SC 820 G	LABOPORT® SC 840 G
Separator flask	Order No. 047729	on olo c	011 020 0	on old d	000200	000100
High performance condenser with pressure relief valve	-		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					
Hose connector PP (for hose ID8)	Order No. 025981					
Screw connection cap red, GL14 (for hose connector ID 025981)	Order No. 025982					
Key for hose connector	Order No. 316279					
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 Separator (1x for SC 820/840 G)	-				Order No. 329998	
Hose-BGR High performance condenser (1x for SC 820/840 G)	-				Order No. 317157	
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					
Docking station controller	-				Order No. 336784	
Battery pack controller	-				Order No. 339004	