

# STANDARD PUMPS FOR THE LABORATORY APPLICATIONS

for air, gases  
and vapours



**KNF**  
LAB

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The first class pumps for first class science



# LABOPORT® Mini Diaphragm Vacuum Pumps and Compressors

## Type: N 86 N 811

### Applications:

- Vacuum filtration
- Alternative for water jet pumps

### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
6.0	100	2.4	<b>KN</b>	Standard (PPS/EPDM)	ID 4	1.9	<b>N 86 KN.18</b>
11.5	240	2.0	<b>KN</b>		ID 6	2.5	<b>N 811 KN.18</b>
5.5	160	2.5	<b>KT</b>	nearly chemically resistant, PPS / PTFE	ID 4	1.9	<b>N 86 KT.18</b>
11.5	290	2.0	<b>KT</b>		ID 6	2.5	<b>N 811 KT.18</b>

<sup>1)</sup> at atm. pressure

**KN** = Pump head in PPS, diaphragm EPDM, valves in FPM  
**KT** = Pump head in PPS, diaphragm PTFE- coated, valves in FFPM

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- High level of gas tightness,

- With thermal switch and power fuse.
- Voltage/frequencies: 230V/50Hz  
(motors with other voltages and frequencies on request).



# LABOPORT® Mini Diaphragm Vacuum Pumps and Compressors

## Type: N 816

### Applications:

- Vacuum filtration
- Alternative for water jet pumps

### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
16.0	15	0.5	<b>KN</b>	Standard (PPS/EPDM)	ID 6	3.95	<b>N 816.3 KN.18</b>
30.0	100	0.5	<b>KN</b>		ID 6	3.95	<b>N 816.1.2 KN.18</b>
16.0	20	0.5	<b>KT</b>	nearly chemically resistant, PPS / PTFE	ID 6	3.95	<b>N 816.3 KT.18</b>
30.0	160	0.5	<b>KT</b>		ID 6	3.95	<b>N 816.1.2 KT.18</b>

<sup>1)</sup> at atm. pressure

**KN** = Pump head in PPS, diaphragm EPDM, valves in EPDM  
**KT** = Pump head in PPS, diaphragm PTFE- coated, valves in FFPM

**(.45) = Diaphragm pump with fine control valve and vacuum gauge on request.**

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- High level of gas tightness,

- With thermal switch and power fuse.
- Voltage/frequencies: 230V/50Hz  
(motors with other voltages and frequencies on request).



With fine control valve and vacuum gauge (.45)

# LABOPORT® Mini Diaphragm Vacuum Pumps

**NEW**

## Type: N 838

### Applications:

- Vacuum filtration, desiccation, gel drying etc.
- Alternative for water jet pumps

### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
22	12	0.5	KN	Standard (PPS/EPDM)	ID 10	6.8	<b>N 838.3 KN.18</b>
37	100	0.5	KN		ID 10	6.8	<b>N 838.1.2 KN.18</b>
22	15	0.5	KT	nearly chemically (PPS / PTFE)	ID 10	6.8	<b>N 838.3 KT.18</b>
37	150	0.5	KT		ID 10	6.8	<b>N 838.1.2 KT.18</b>

<sup>1)</sup> at atm. pressure

KN = Pump head in PPS, diaphragm EPDM, valves in FPM

KT = Pump head in PPS, diaphragm PTFE-coated, valves in FFPM

**(.45) = Diaphragm pump with fine control valve and vacuum gauge on request.**

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- High level of gas tightness,

- With thermal switch and power fuse.
- Voltage/frequencies: 230V/50Hz (motors with other voltages and frequencies on request).



# Diaphragm Vacuum Pumps

**NEW**

with adjustable delivery

## Type: N 920

### Applications:

- Vacuum filtration, desiccation, gel drying etc.
- Alternative for water jet pumps
- Roughing pump for turbo-molecular pumps

### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	Connections (mm)	Weight	Order No.
21	1.5	0.5	AP	Standard (Aluminium/EPDM)	for tube ID 9	10.5 kg	<b>N 920 AP.29.18</b>

<sup>1)</sup> at atm. pressure

AP = Pump head in Aluminium, diaphragm EPDM, valves in EPDM

#### Technical features:

- Uncontaminated transfer and evacuation,
- Flow rate set over motor rotary speed (.29),
- KNF stabilization system for high suction speed, also for low absolute pressures,

- For aggressive or corrosive gases
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),
- With thermal switch and power fuse.
- Multi-voltage power supply input.



## Diaphragm Vacuum Pumps and Compressors

with excellent price/performance ratio

### Type: N 022

#### Applications:

- General vacuum and pressure application in the laboratory
- Pressure filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
13	100	4	AT	nearly chemically resistant Aluminium / PTFE	ID 6	4	N 022 AT.18
15	100	4	AN	Standard Aluminium / CR	ID 6	4	N 022 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel  
 AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



Diaphragm Vacuum Pumps with excellent price/performance ratio

### Type: N 026.3

#### Applications:

- General vacuum and pressure application in the laboratory
- Vacuum filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
18	25	-	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	5.8	N 026.3 AT.18
22	20	-	AN	Standard (Aluminium / CR)	ID 9	5.8	N 026.3 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel  
 AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



## Diaphragm Vacuum Pumps

with excellent price/performance ratio

### Type: N 035.3

#### Applications:

- General vacuum and pressure application in the laboratory
- Vacuum filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
27	20	-	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	11.6	N 035.3 AT.18
30	13	-	AN	Standard (Aluminium / CR)	ID 9	11.6	N 035.3 AN.18

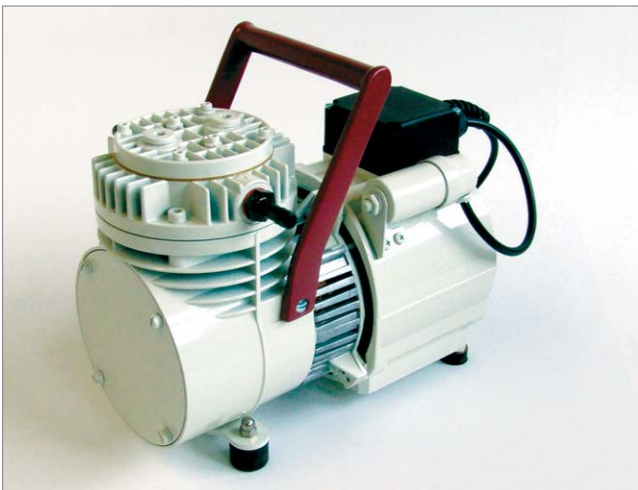
<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel  
 AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



## Diaphragm Vacuum Pumps and Compressors

with excellent price/performance ratio

### Type: N 035

#### Applications:

- General vacuum and pressure application in the laboratory
- Pressure filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
27	100	4	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	8.2	N 035 AT.18
30	100	4	AN	Standard (Aluminium / CR)	ID 9	8.2	N 035 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel  
 AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



## Diaphragm Vacuum Pumps and Compressors

with excellent price/performance ratio

### Type: N 145

#### Applications:

- General vacuum and pressure application in the laboratory
- Pressure filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
27	100	7	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	12.0	N 145 AT.18
30	100	7	AN	Standard (Aluminium / CR)	ID 9	12.0	N 145 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel  
 AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



## Diaphragm Vacuum Pumps and Compressors

with excellent price/performance ratio

### Type: N 026.1.2

#### Applications:

- General vacuum and pressure application in the laboratory
- Pressure filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
31	100	2	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	5.8	N 026.1.2 AT.18
39	100	2	AN	Standard (Aluminium / CR)	ID 9	5.8	N 026.1.2 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel  
 AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



## Diaphragm Vacuum Pumps and Compressors

with excellent price/performance ratio

### Type: N 035.1.2

#### Applications:

- General for vacuum and pressure application in the laboratory
- Pressure filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
50	100	4	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	11.6	N 035.1.2 AT.18
55	100	4	AN	Standard (Aluminium / CR)	ID 9	11.6	N 035.1.2 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel

AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).



## Diaphragm Vacuum Pumps and Compressors

with excellent price/performance ratio

### Type: N 145.1.2

#### Applications:

- General vacuum and pressure application in the laboratory
- Pressure filtration

#### Specifications:

Delivery (l/min) <sup>1)</sup>	Ultimate vacuum (mbar abs.)	Pressure (bar g)	Version	Resistance	For tube (mm)	Weight (kg)	Order No.
50	100	7	AT	nearly chemically resistant (Aluminium / PTFE)	ID 9	15.0	N 145.1.2 AT.18
55	100	7	AN	Standard (Aluminium / CR)	ID 9	15.0	N 145.1.2 AN.18

<sup>1)</sup> at atm. pressure

AT = Pump head in Aluminium, diaphragm PTFE coated, valves in stainless steel

AN = Pump head in Aluminium, diaphragm CR, valves in stainless steel

#### Technical features:

- Uncontaminated transfer, evacuation and compression,
- For slightly aggressive or corrosive gases and vapours,
- Environmentally friendly,
- Gas-tight (leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production),

- With thermal switch.
- Voltage/frequencies: 230V/50Hz (motors with other voltages, frequencies and types of protection on request).

You find the delivery range in the KNF laboratory catalogue

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PUMPS AND  
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