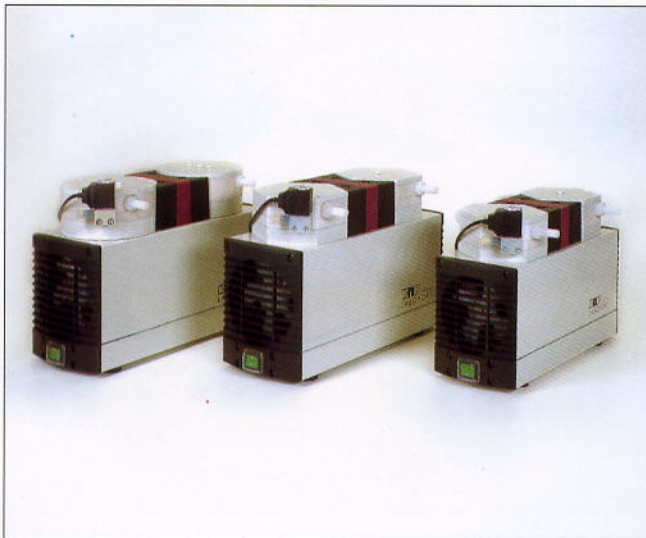


Vacuum Pumps for moist Gases

4



Product Range: LABOPORT® SD Self-drying Vacuum Pumps for moist Gases

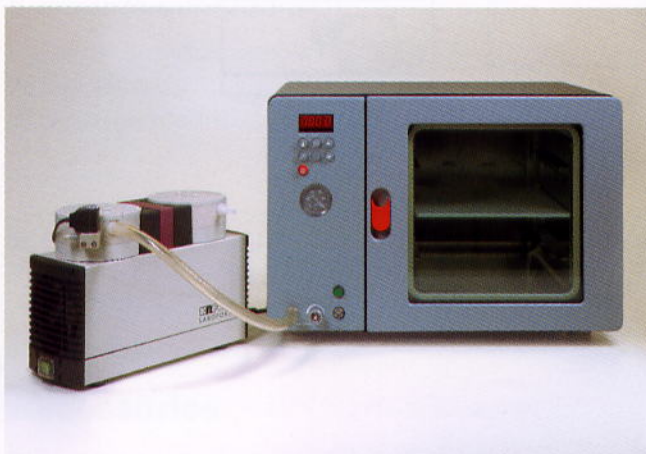
Technical features:

- Maintenance-free
- Silent
- With KNF drying system
- Better vacuum and faster pumping down
- Simple connection to the line power (power plug) and to the pneumatic system
- Environmentally friendly, because no water is consumed and no waste water is contaminated

Delivery (l/min) ¹⁾	Ultimate vacuum (mbar abs.)	Operating pressure (bar g)	Motor ~230V/50Hz operating current (A)/ power P ₁ (W)	Protection class	Pneumatic connections for tube ID	Weight (kg)	Pump type Order No.	Page
20	10	1	0.7/120	IP 44	10 mm	9.6	N 820.3 FT.40.18	4.2
34	10	1	1.8/245	IP 44	10 mm	12.9	N 840.3 FT.40.18	4.4
34	4	1	1.8/245	IP 44	10 mm	13.7	N 842.3 FT.40.18	4.6
60	4	1	1.9/270	IP 54	12 mm	14.8	N 860.3 FT.40.18	4.8

¹⁾ at atm. pressure

For vacuum drying systems



N 842.3 FT.40.18 connected to a vacuum drying chamber

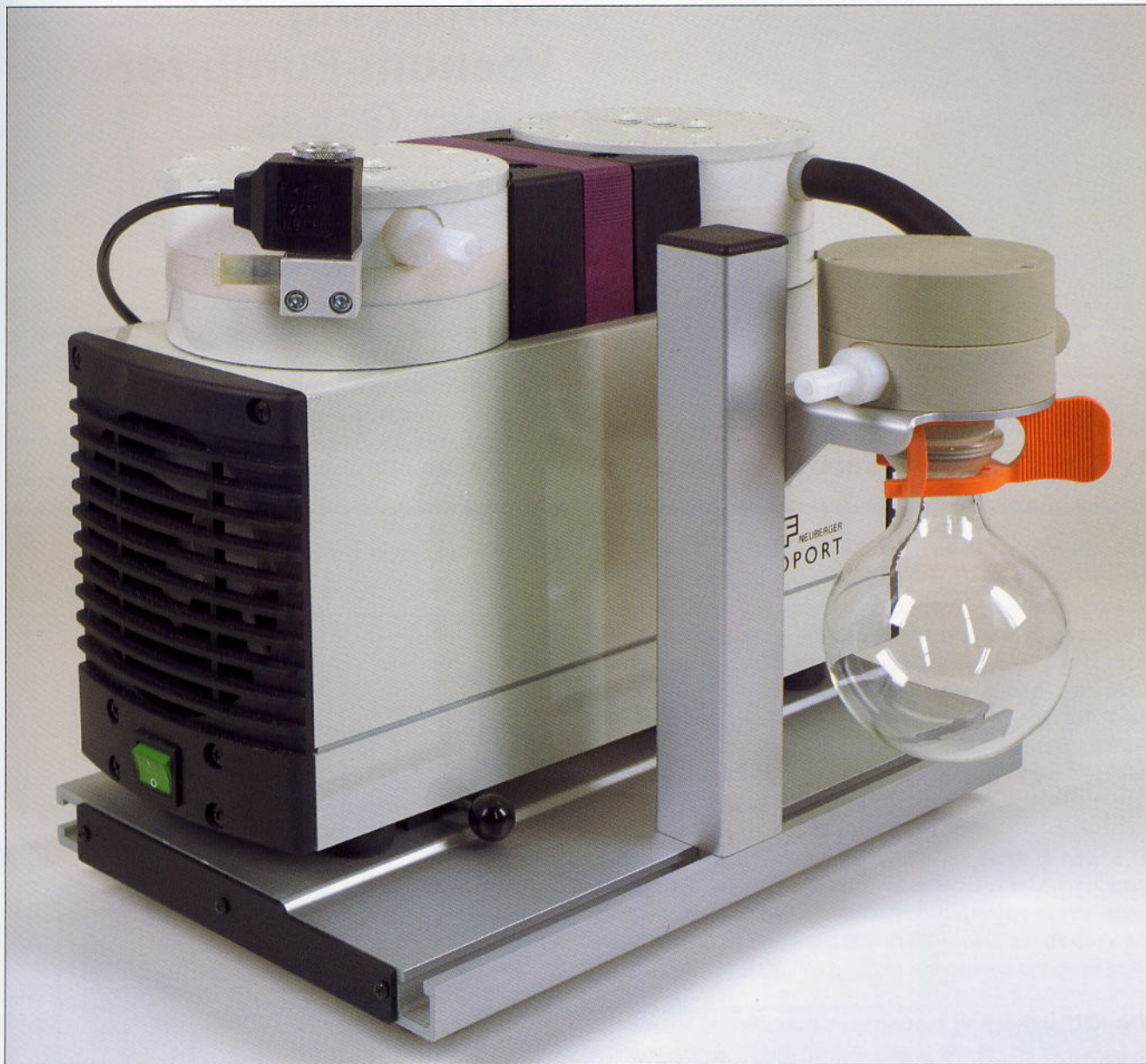
LABOPORT SD vacuum pumps are dry-running displacement pumps for neutral, highly aggressive or corrosive gases and vapors and constant vacuum. Process gases are transferred without contamination - and this is less expensive and more environmentally friendly than water jet pumps.

The KNF self-drying system allows condensed liquid to be blown out of the pump heads at high speed during evacuation. The vacuum in the equipment remains constant.

The drying cycle can be adjusted to the requirements of the individual process using three variables. After drying, the pump reaches a better vacuum and is able to evacuate significantly faster compared with pumps without a drying system.

Vacuum Pumps for moist Gases

LABOPORT SD expanded to a SR system

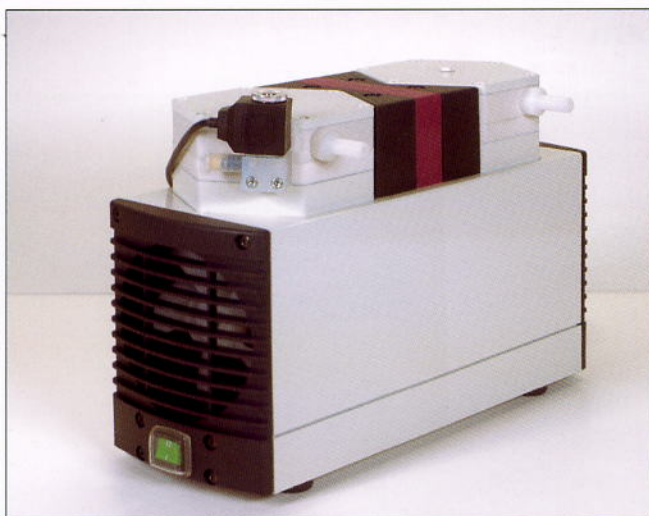


LABOPORT SD vacuum pumps with modular accessory

A practical, complete system, with a base plate as well as a filter and separator component. You can order this accessory and retrofit it to your KNF LABOPORT SD vacuum pump or you can order the complete system assembled at the factory.

Please contact us!

Vacuum Pumps for moist Gases



LABOPORT® SD Self-drying Vacuum Pump for moist Gases

Technical features:

- Pure transfer and evacuation
- Highly compatible with vapors and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6×10^{-3} mbar x l/s, not tested in serial production.

4

Series LABOPORT® SD N 820.3 FT.40.18 Vacuum Pump

The chemically-resistant series ND 820.3 FT.40.18 diaphragm pump is a twin-head unit with an integrated KNF self-drying system. There is a wide range of applications for this pump in laboratories, especially whenever clean vacuum is required and moist gases must be pumped down. Examples include vacuum-drying of vacuum drying chambers (for drying or heat-treating substances and components) or steam sterilizers for sterilizing instruments, vessels, filters and textiles. Due to its high resistance to aggressive media, this pump can be used universally.

The heart of these very compact pumps are KNF structured diaphragms (PTFE-coated). These patented diaphragms were stress-optimized using the Finite Elements method. As a result, we were able to make the pumps smaller while increasing the service life of the diaphragm.

The KNF self-drying system allows condensed liquid to be blow out of the pump heads at high speed during evacuation. The vacuum in the recipient remains constant.

The drying cycle can be adjusted to the requirements of the individual process using three variables. After drying, the pump reaches a better vacuum and is able to evacuate significantly faster compared with pumps without a drying system.

Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N 820.3 FT.40.18	PTFE	PTFE-coated	FFPM

Technical data:

	N 820.3 FT.40.18
Delivery (l/min) ¹⁾	20
Ultimate vacuum (mbar abs.)	10
Operating pressure (bar g)	1
Connectors for tube (mm)	ID 10
Permissible gas and ambient temperature	+5...+40 °C
Voltage/Frequencies	230V/50Hz
Motor protection	IP 44
Power P ₁	120 W
Operating current	0.7 A
Weight	9.6 kg
Dimensions	
LxHxW (mm)	312/220/177
With thermal switch and power fuse	

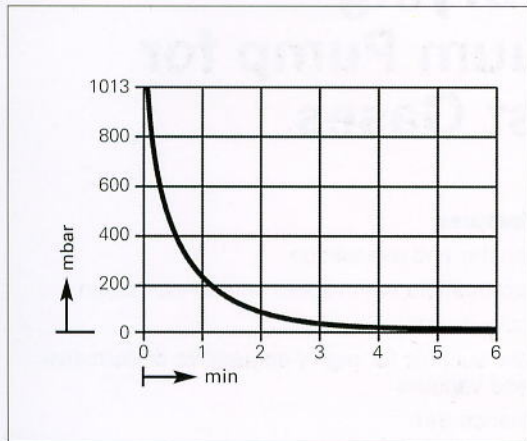
Motors with other voltages and frequencies on request.

¹⁾ at atm. pressure

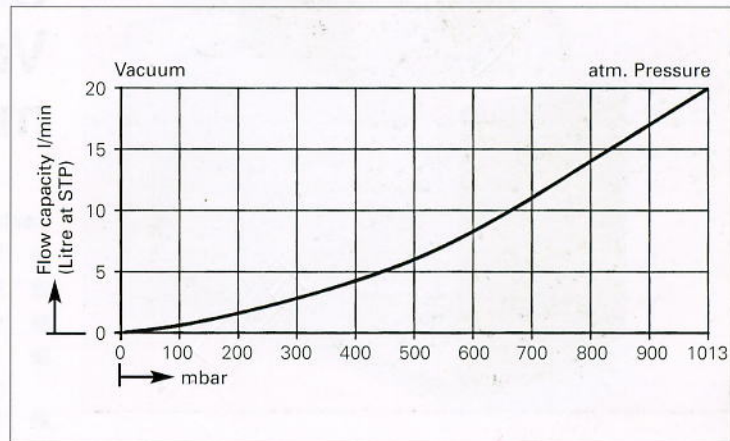
Vacuum Pumps for moist Gases

Dimensions and performance characteristics

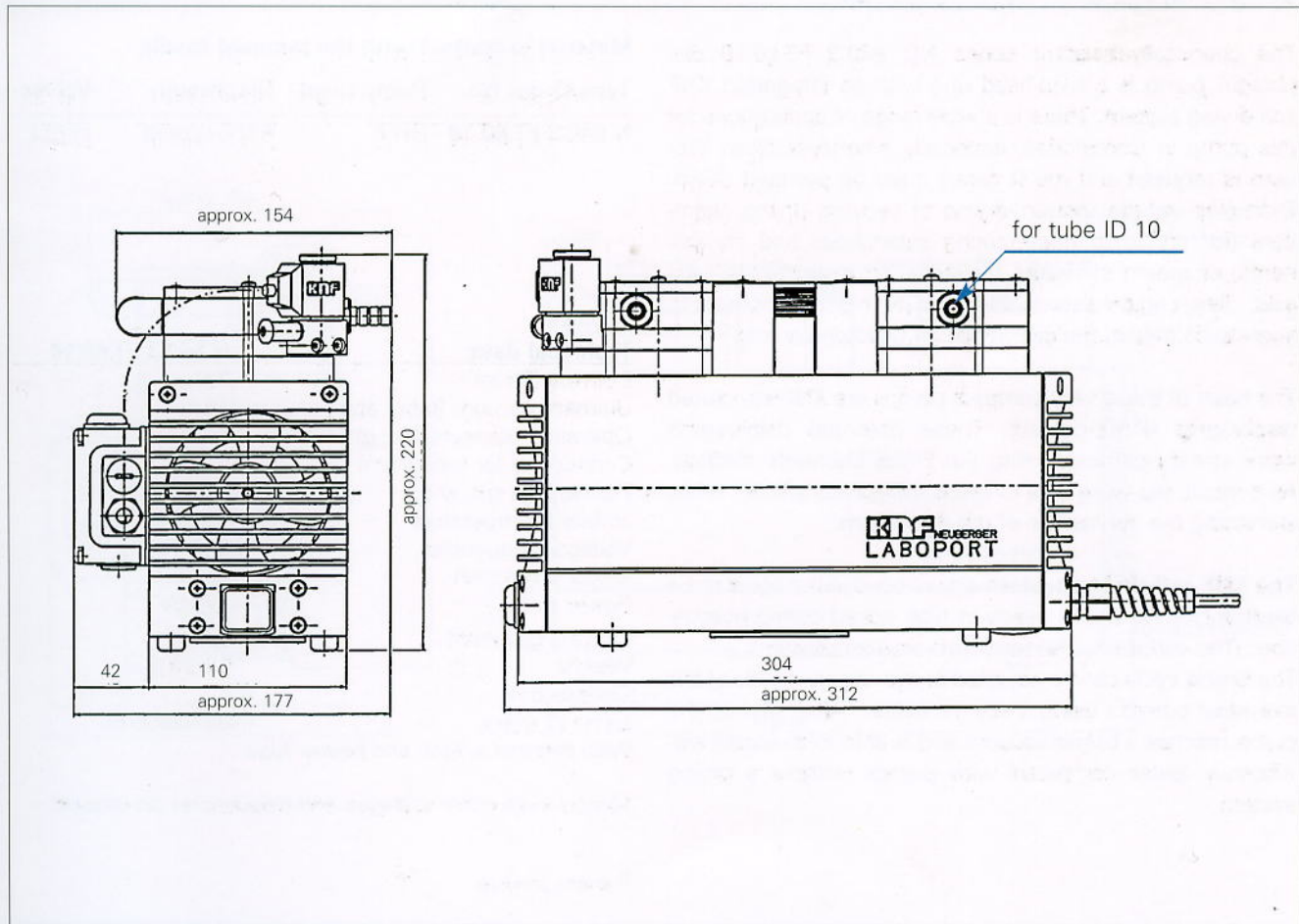
Pump down time for 10 l receiver



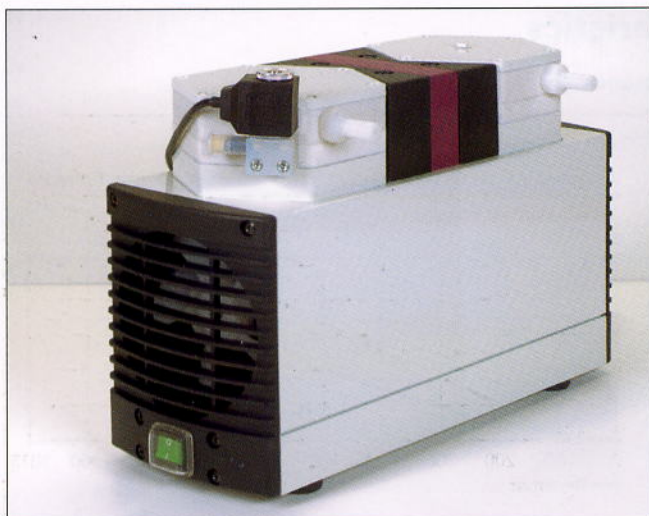
Performance characteristics



Dimensions (mm)



Vacuum Pumps for moist Gases



LABOPORT® SD Self-drying Vacuum Pump for moist Gases

Technical features:

- Pure transfer and evacuation
- Highly compatible with vapors and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6×10^{-3} mbar x l/s, not tested in serial production.

Series LABOPORT® SD N 840.3 FT.40.18 Vacuum Pump

The chemically-resistant series ND 840.3 FT.40.18 diaphragm pump is a twin-head unit with an integrated KNF self-drying system. There is a wide range of applications for this pump in laboratories, especially whenever clean vacuum is required and moist gases must be pumped down. Examples include vacuum-drying of vacuum drying chambers (for drying or heat-treating substances and components) or steam sterilizers for sterilizing instruments, vessels, filters and textiles. Due to its high resistance to aggressive media, this pump can be used universally.

The heart of these very compact pumps are KNF structured diaphragms (PTFE-coated). These patented diaphragms were stress-optimized using the Finite Elements method. As a result, we were able to make the pumps smaller while increasing the service life of the diaphragm.

The KNF self-drying system allows condensed liquid to be blow out of the pump heads at high speed during evacuation. The vacuum in the recipient remains constant. The drying cycle can be adjusted to the requirements of the individual process using three variables. After drying, the pump reaches a better vacuum and is able to evacuate significantly faster compared with pumps without a drying system.

Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N 840.3 FT.40.18	PTFE	PTFE-coated	FFPM

Technical data:

	N 840.3 FT.40.18
Delivery (l/min) ¹⁾	34
Ultimate vacuum (mbar abs.)	10
Operating pressure (bar g)	1
Connectors for tube (mm)	ID 10
Permissible gas and ambient temperature	+5...+40 °C
Voltage/Frequencies	230V/50Hz
Motor protection	IP 44
Power P ₁	245 W
Operating current	1.8 A
Weight	12.9 kg
Dimensions	
LxHxW (mm)	341/239/189
With thermal switch and power fuse	

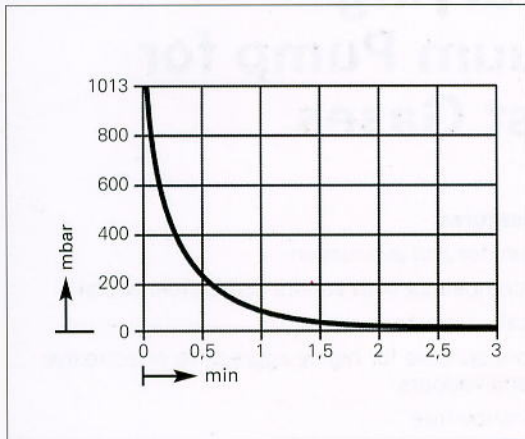
Motors with other voltages and frequencies on request.

¹⁾ at atm. pressure

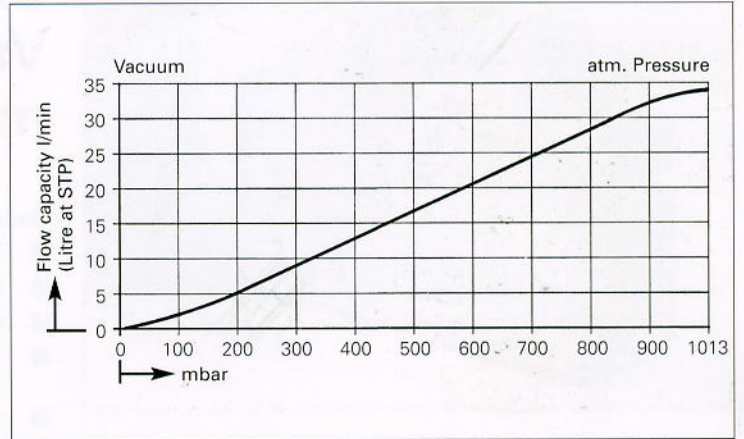
Vacuum Pumps for moist Gases

Dimensions and performance characteristics

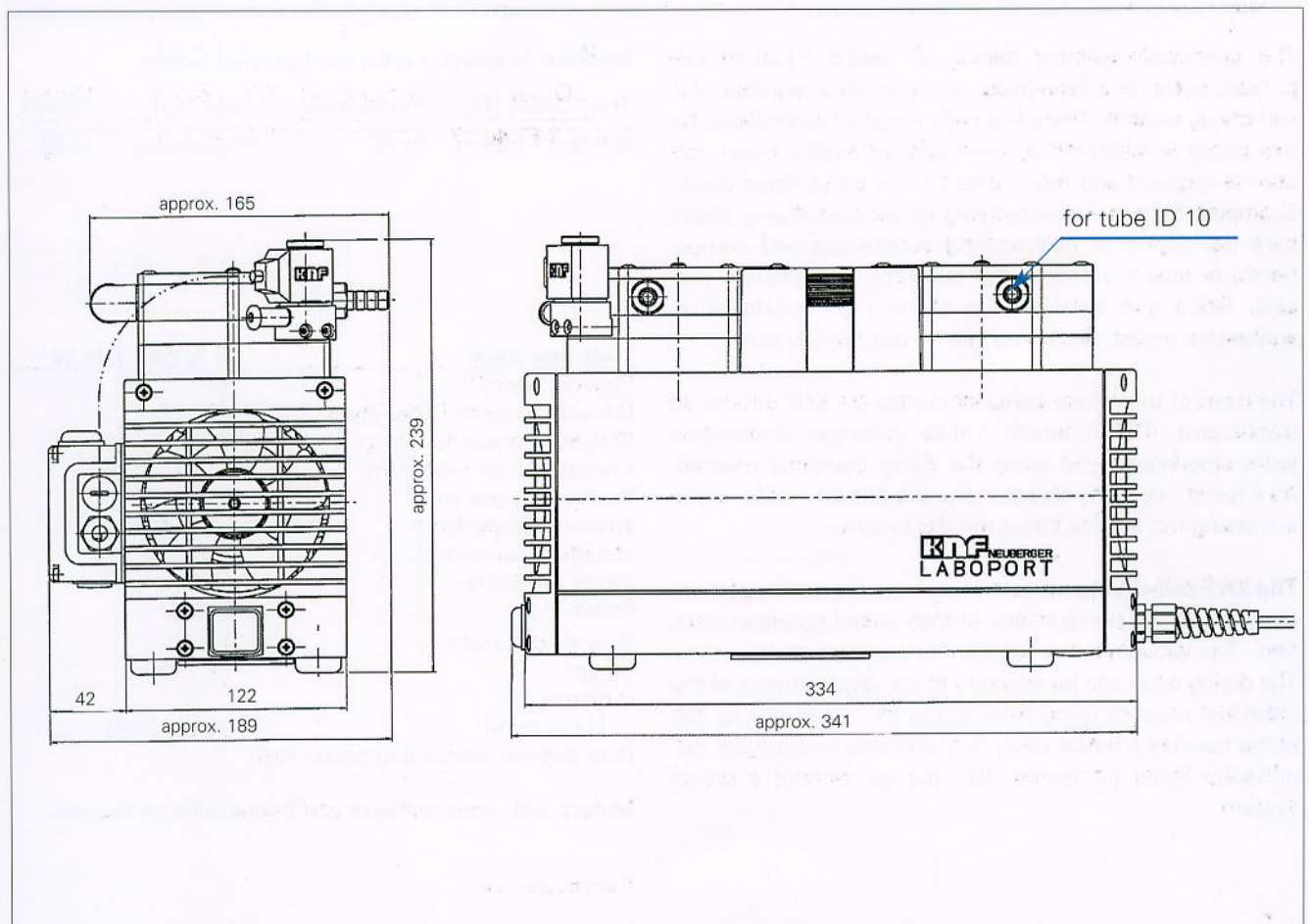
Pump down time for 10 l receiver



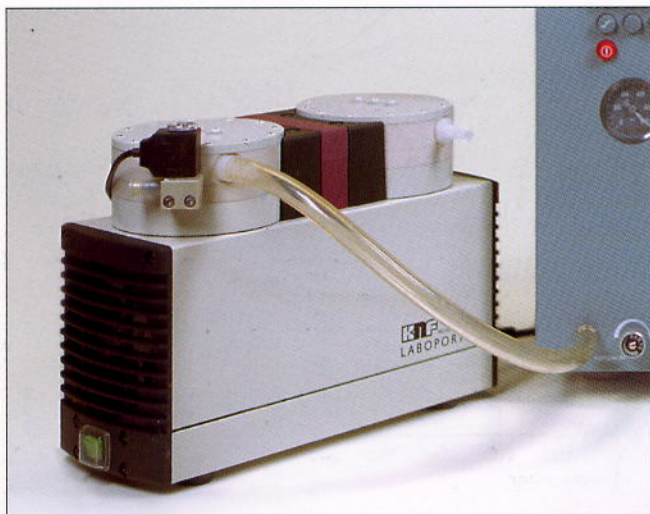
Performance characteristics



Dimensions (mm)



Vacuum Pumps for moist Gases



LABOPORT® SD Self-drying Vacuum Pump for moist Gases

Technical features:

- Pure transfer and evacuation
- Highly compatible with vapors and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6×10^{-3} mbar x l/s, not tested in serial production.

Series LABOPORT® SD N 842.3 FT.40.18 Vacuum Pump

The chemically-resistant series ND 842.3 FT.40.18 diaphragm pump is a twin-head unit with an integrated KNF self-drying system. There is a wide range of applications for this pump in laboratories, especially whenever clean vacuum is required and moist gases must be pumped down. Examples include vacuum-drying of vacuum drying chambers (for drying or heat-treating substances and components) or steam sterilizers for sterilizing instruments, vessels, filters and textiles. Due to its high resistance to aggressive media, this pump can be used universally.

The heart of these very compact pumps are KNF structured diaphragms (PTFE-coated). These patented diaphragms were stress-optimized using the Finite Elements method. As a result, we were able to make the pumps smaller while increasing the service life of the diaphragm.

The KNF self-drying system allows condensed liquid to be blow out of the pump heads at high speed during evacuation. The vacuum in the recipient remains constant. The drying cycle can be adjusted to the requirements of the individual process using three variables. After drying, the pump reaches a better vacuum and is able to evacuate significantly faster compared with pumps without a drying system.

Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N 842.3 FT.40.18	PTFE	PTFE-coated	FFPM

Technical data:

	N 842.3 FT.40.18
Delivery (l/min) ¹⁾	34
Ultimate vacuum (mbar abs.)	4
Operating pressure (bar g)	1
Connectors for tube (mm)	ID 10
Permissible gas and ambient temperature	+5...+40 °C
Voltage/Frequencies	230V/50Hz
Motor protection	IP 44
Power P ₁	245 W
Operating current	1.8 A
Weight	13.7 kg
Dimensions	
L x H x W (mm)	341/242/189
With thermal switch and power fuse	

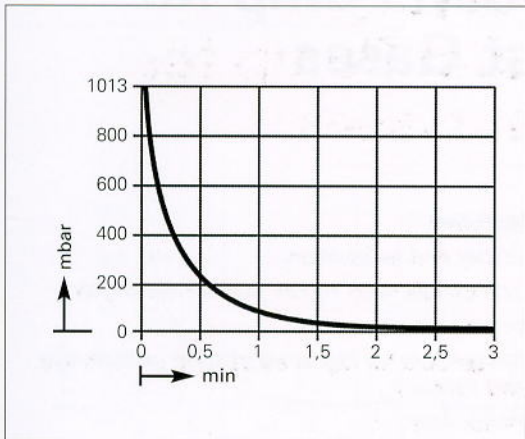
Motors with other voltages and frequencies on request.

¹⁾ at atm. pressure

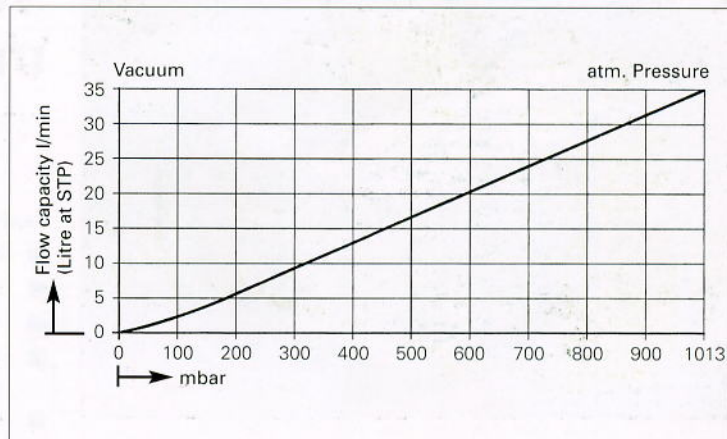
Vacuum Pumps for moist Gases

Dimensions and performance characteristics

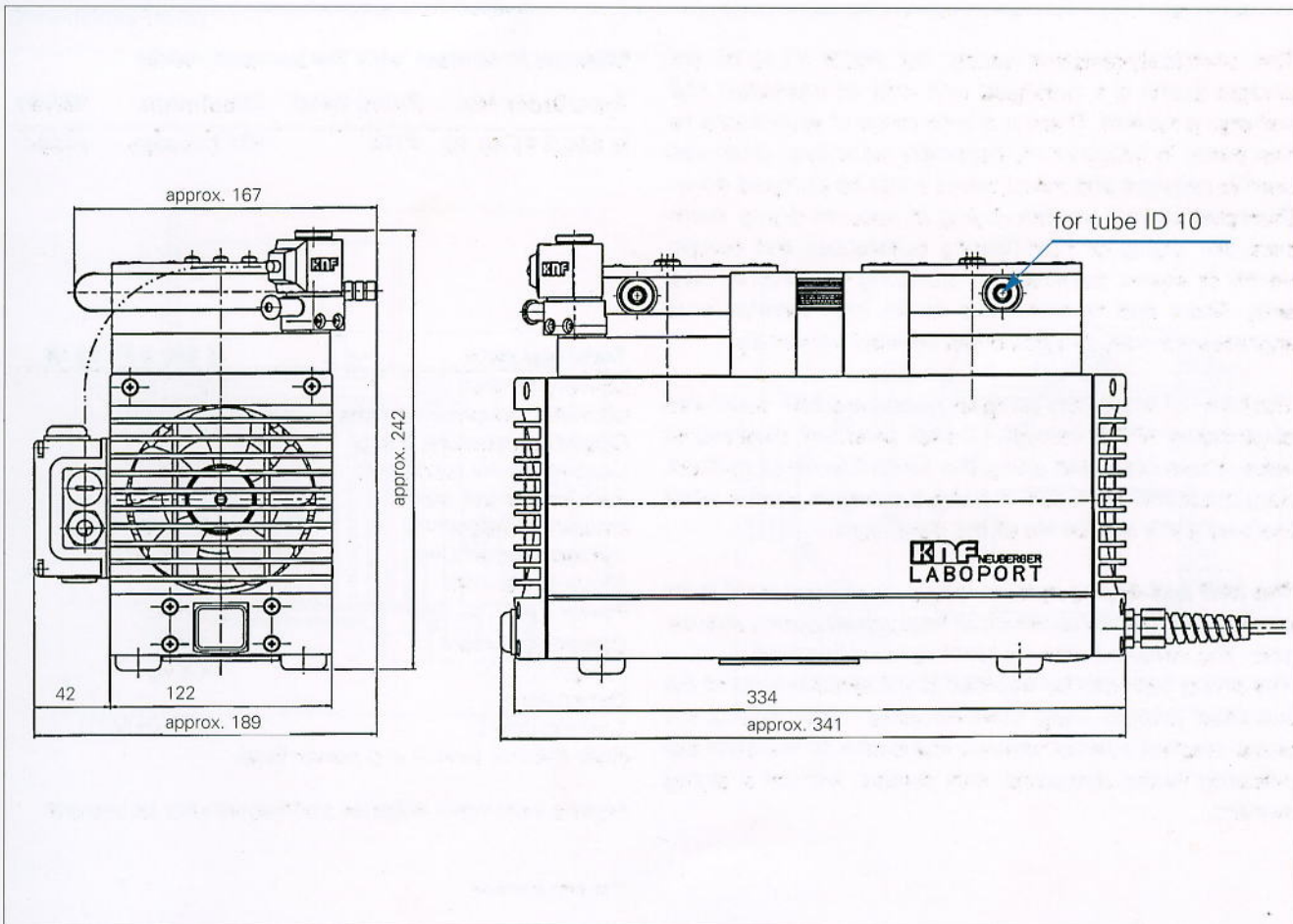
Pump down time for 10 l receiver



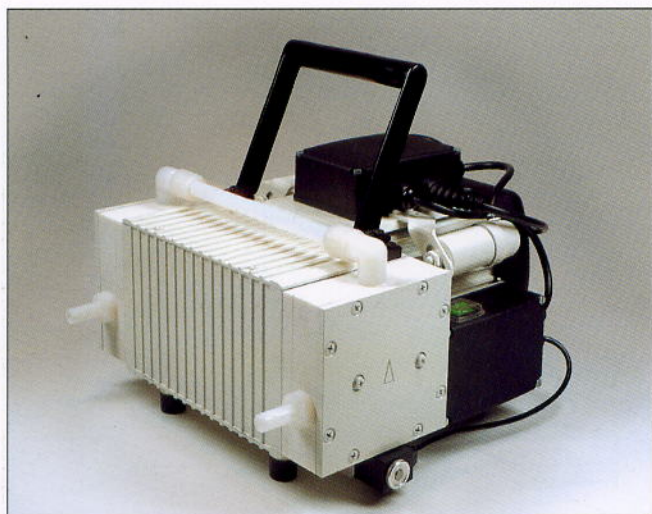
Performance characteristics



Dimensions (mm)



Vacuum Pumps for moist Gases



Self drying Vacuum Pump for moist Gases

Technical features:

- Pure transfer and evacuation
- Highly compatible with vapors and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6×10^{-3} mbar x l/s, not tested in serial production.

4

Series N 860.3 FT.40.18 Vacuum Pump

The chemically-resistant series ND 860.3 FT.40.18 diaphragm pump is a twin-head unit with an integrated KNF self-drying system. There is a wide range of applications for this pump in laboratories, especially whenever clean vacuum is required and moist gases must be pumped down. Examples include vacuum-drying of vacuum drying chambers (for drying or heat-treating substances and components) or steam sterilizers for sterilizing instruments, vessels, filters and textiles. Due to its high resistance to aggressive media, this pump can be used universally.

The heart of these very compact pumps are KNF structured diaphragms (PTFE-coated). These patented diaphragms were stress-optimized using the Finite Elements method. As a result, we were able to make the pumps smaller while increasing the service life of the diaphragm.

The KNF self-drying system allows condensed liquid to be blow out of the pump heads at high speed during evacuation. The vacuum in the recipient remains constant.

The drying cycle can be adjusted to the requirements of the individual process using three variables. After drying, the pump reaches a better vacuum and is able to evacuate significantly faster compared with pumps without a drying system.

Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N 860.3 FT.40.18	PTFE	PTFE-coated	FFPM

Technical data:

	N 860.3 FT.40.18
Delivery (l/min) ¹⁾	60
Ultimate vacuum (mbar abs.)	4
Operating pressure (bar g)	1
Connectors for tube (mm)	ID 12
Permissible gas and ambient temperature	+5...+40 °C
Voltage/Frequencies	230V/50Hz
Motor protection	IP 54
Power P ₁	270 W
Operating current	1.9 A
Weight	14.8 kg
Dimensions	
LxHxW (mm)	331/278.5/291
With thermal switch and power fuse	

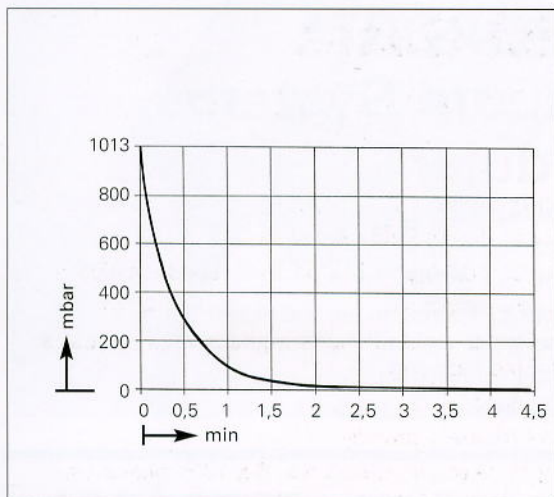
Motors with other voltages and frequencies on request.

¹⁾ at atm. pressure

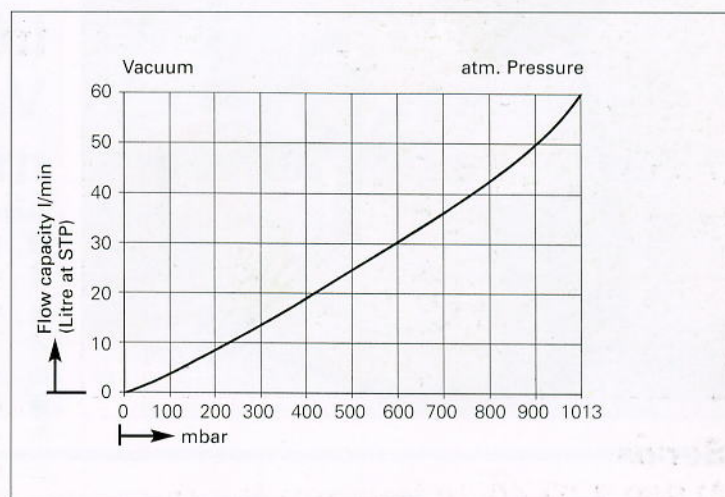
Vacuum Pumps for moist Gases

Dimensions and performance characteristics

Pump down time for 20 l receiver



Performance characteristics



Dimensions (mm)

