

### Series LABOPORT® SD N 820.3 FT.40.18 Vacuum Pump

- Pure transferring and evacuation
- Highly compatible with vapours and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive
- Gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6 x 10<sup>-3</sup> mbar x l/s, not tested in serial production.



## • Description

The chemically-resistant series N 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 blown 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.

## • Technical data

Code	Description
Delivery (l/min) <sup>1</sup>	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
Mains	230V/50Hz
Motor protection	IP 44
Power P1	120 W
Operating current	0.7 A
Weight	9.6 kg
Dimensions L x H x W	312 x 220 x 177mm
With thermal switch and power fuse	

## • Ordering codes

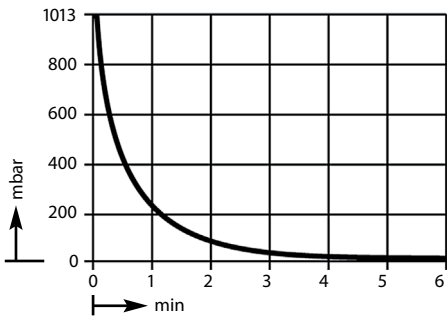
Code	Pump head	Diaphragm	Valves
KNF_8203FT4018	N 820.3 FT.40.18	PTFE	PTFE-coated FFPM

### Spare parts

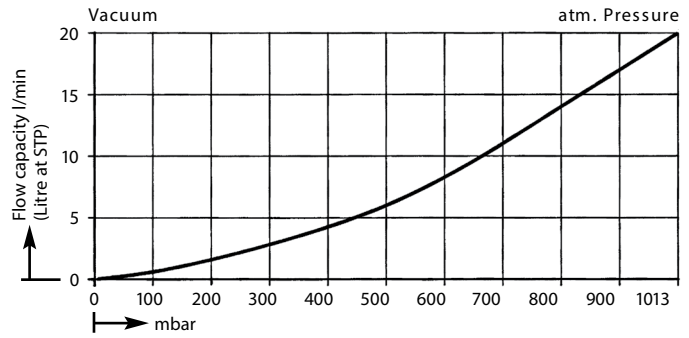
Code	Description
KNF_8203_SP	057358 Spares kit

● Dimensions and performance characteristics

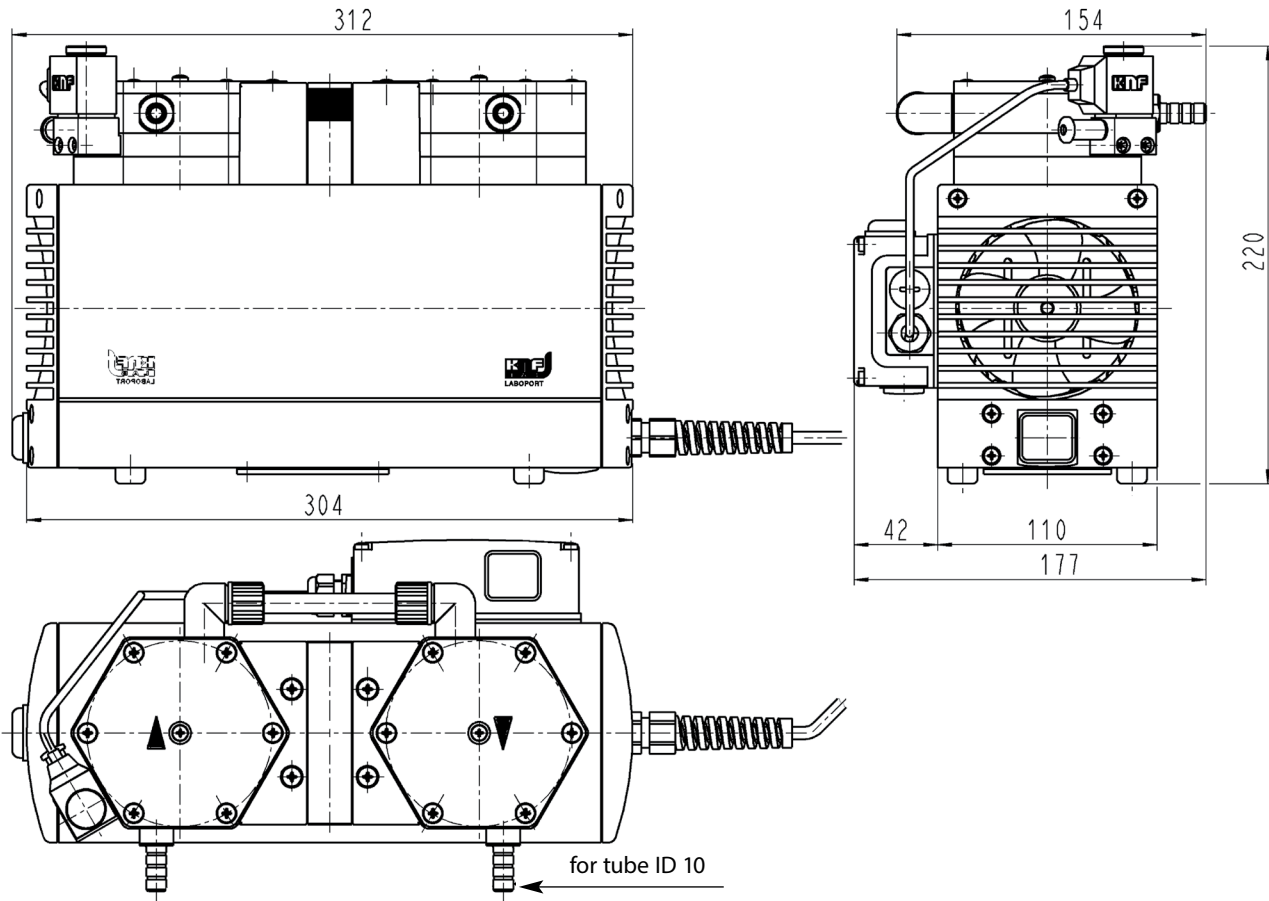
**Pump down time for 10 l receiver**



**Performance characteristics**



**Dimensions (mm)**



## Diaphragm Pumps for Air, Gases and Vapours Series LABOPORT® N 820 FT.18, N 820.3 FT.18 Pumps

- 100% oil-free transfer
- Pure transferring and evacuation of gases
- Highly compatible with vapours and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6 x 10<sup>-3</sup> mbar x l/s, not tested in serial production.



## Description

The chemically-resistant series N 820 and N 820.3 diaphragm pumps are single- and double-head, dry-running devices used in a wide range of laboratory applications. They transfer and pump down without contamination.

The heart of these very compact pumps is a KNF structured diaphragm. This patented diaphragm was 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.

## Technical data

Code	N 820 FT.18	N 820.3 FT.18
Delivery (l/min)1)	20	20
Ultimate vacuum (mbar abs.)	100	8
Operating pressure (bar g)	1	1
Connectors for tube (mm)	ID 10	ID 10
Permissible gas and ambient temperature	+5...+40 °C	+5...+40 °C
Mains	230V/50Hz	230V/50Hz
Motor protection	IP 44	IP 44
Power P1	130 W	120 W
Operating current	0.9 A	0.7 A
Weight	7.1 kg	9.3 kg
Dimensions L x H x W	268 x 207 x 159 mm	312 x 207 x 154 mm
With thermal switch and power fuse		
Motors with other voltages and frequencies on request. 1) at atm. pressure		

## Ordering codes

Code	Pump head	Diaphragm	Valves
KNF_820FT18	N 820 FT.18	PTFE	PTFE-coated
KNF_8203FT18	N 820.3 FT.18	PTFE	PTFE-coated

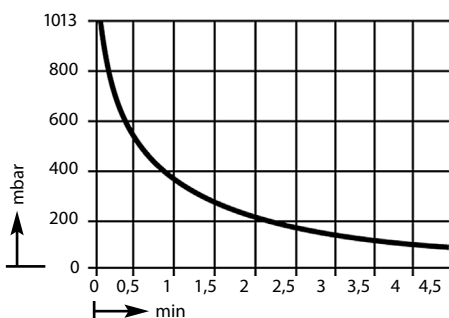
## Spare parts

Code	Description	Details
KNF_820_SP 058078	Spares kit	for N 820 FT.18
KNF_8203_SP 057358	Spares kit	for N 820.3 FT.18

## Dimensions and performance characteristics

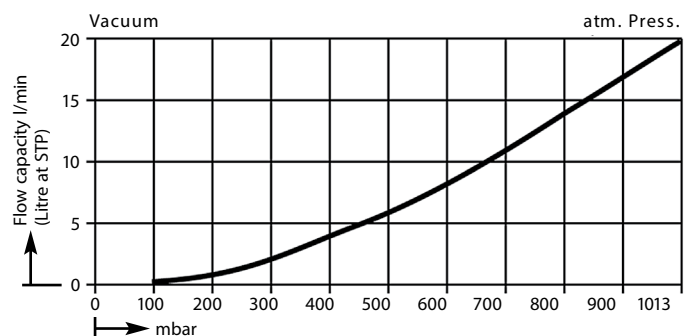
### Pump down time for 10 l receiver

N 820 FT.18



### Performance characteristics

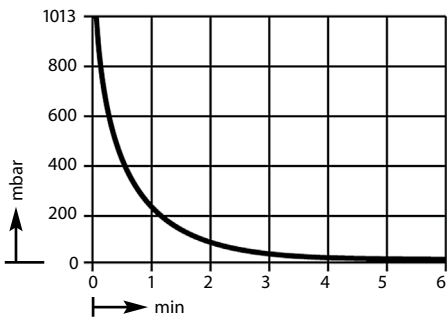
N 820 FT.18



● Dimensions and performance characteristics

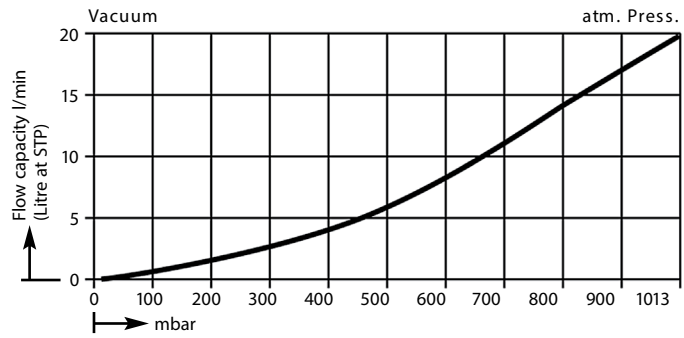
**Pump down time for 10 l receiver**

N 820.3 FT.18



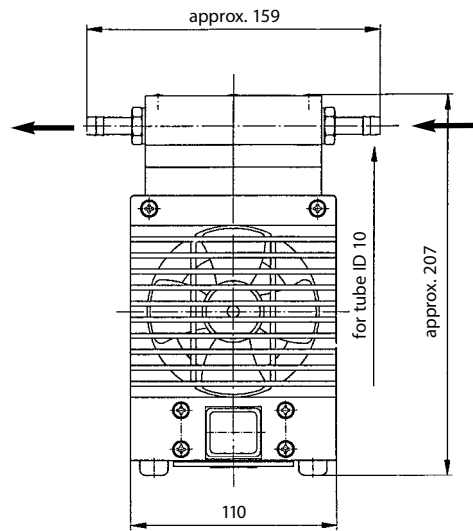
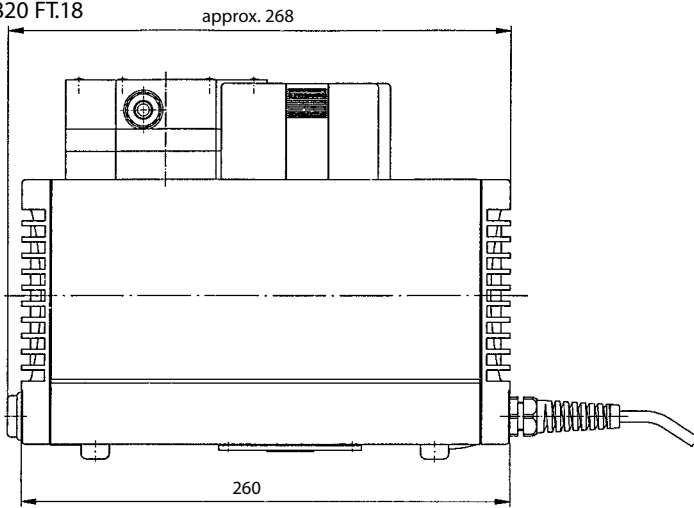
**Performance characteristics**

N 820.3 FT.18



**Dimensions (mm)**

N 820 FT.18



N 820.3 FT.18

