Diaphragm Pumps for Air, Gases and Vapours

INNOVATIVE
TECHNOLOGY
WORLDWIDE

KNF NEUBERGER

LABOPORT®
Mini Diaphragm Vacuum Pumps

Technical features:

- 100% oil-free transfer
- Pure transfer, evacuation and compression
- Version for slightly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- High level of gas tightness.

Series LABOPORT®
N 816.1.2 K_.18 Pumps

Series N 816.1.2 diaphragm pumps are 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.
The pumps are available in various versions differing in the materials which contact the media.

Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N 816.1.2 KN.18	PPS	EPDM	EPDM
N 816.1.2 KN.45.18	PPS	EPDM	EPDM
N 816.1.2 KT.18	PPS	PTFE-coated	FFPM
N 816.1.2 KT.45.18	PPS	PTFE-coated	FFPM

.45 = Pump with fine control valve and vacuum gauge

Technical data:	N 816.1.2 KN.18 N 816.1.2 KN.45.18	N 816.1.2 KT.18 N 816.1.2 KT.45.18
Delivery (l/min)[1]	30	30
Ultimate vacuum (mbar abs.)	100	160
Operating pressure (bar g)	0.5	0.5
Connectors for tube (mm)	ID 6	ID 6
Permissible gas and ambient temperature	+5...+40 °C	+5...+40 °C
Mains	230V/50Hz	230V/50Hz
Motor protection	IP 20	IP 20
Power P_1	100 W	100 W
Operating current	0.6 A	0.6 A
Weight	3.95 kg	3.95 kg
Dimensions L x H x W (mm)	361/141/102	361/141/102
With thermal switch and power fuse		

Motors with other voltages and frequencies on request.

[1] at atm. pressure

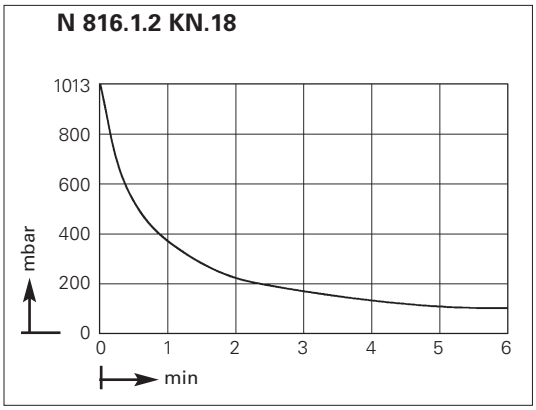
Accessories and spare parts

Description	Details	Order No.
Fine control valve with vacuum gauge	suction side	056547
Spares kit	for N 816.1.2 KN	056315
Spares kit	for N 816.1.2 KT	056316

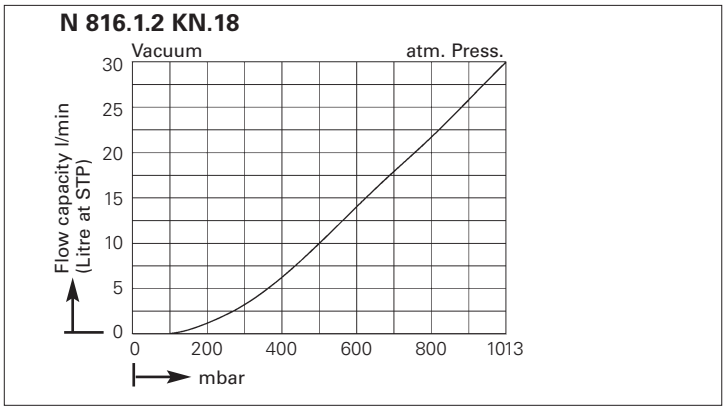
Diaphragm Pumps for Air, Gases and Vapours

Dimensions and performance characteristics

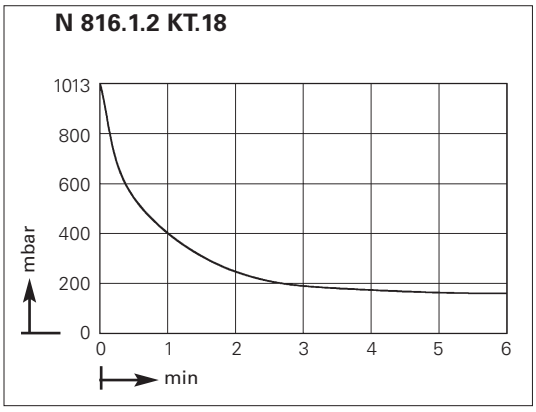
Pump down time for 20 l receiver



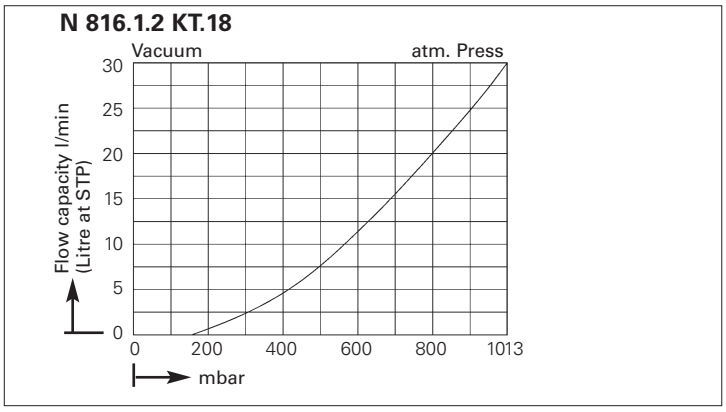
Performance



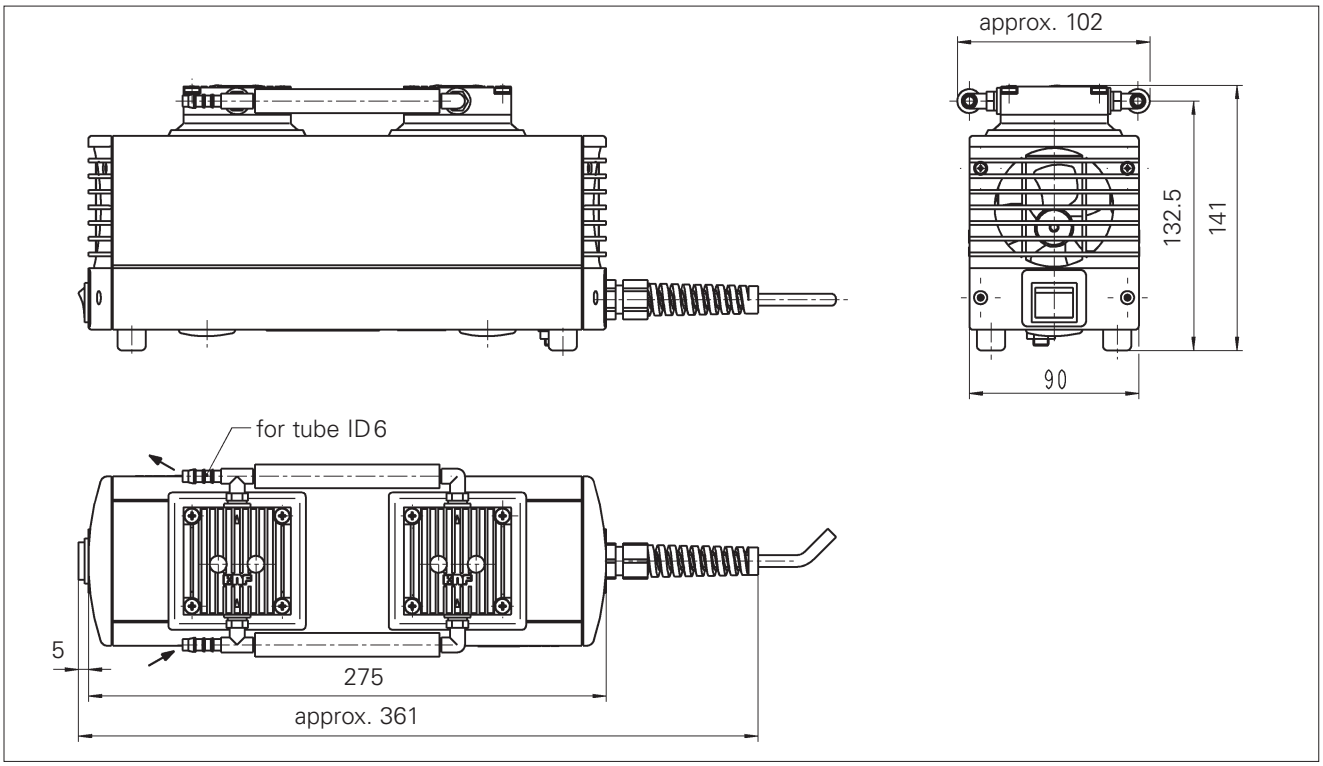
Pump down time for 20 l receiver



Performance



Dimensions (mm)



KNF Neuberger GmbH, Alter Weg 3, D-79112 Freiburg, Tel. ++49(0)7664/5909-0, Fax ++49(0)7664/5909-99, www.knf.de, E-Mail: info@knf.de

KNF 3/2009 Produced in Germany

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- Maintenance-free
- Environmentally friendly
- High level of gas tightness.

Series LABOPORT®
N 816.3 K_.18 Pumps

Series N 816.3 diaphragm pumps are 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.
The pumps are available in various versions differing in the materials which contact the media.

Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N 816.3 KN.18	PPS	EPDM	EPDM
N 816.3 KN.45.18	PPS	EPDM	EPDM
N 816.3 KT.18	PPS	PTFE-coated	FFPM
N 816.3 KT.45.18	PPS	PTFE-coated	FFPM

.45 = Pump with fine control valve and vacuum gauge

Technical data:	N 816.3 KN.18 N 816.3 KN.45.18	N 816.3 KT.18 N 816.3 KT.45.18
Delivery (l/min)[1]	16	16
Ultimate vacuum (mbar abs.)	15	20
Operating pressure (bar g)	0.5	0.5
Connectors for tube (mm)	ID 6	ID 6
Permissible gas and ambient temperature	+5...+40 °C	+5...+40 °C
Mains	230V/50Hz	230V/50Hz
Motor protection	IP 20	IP 20
Power P_1	100 W	100 W
Operating current	0.6 A	0.6 A
Weight	3.95 kg	3.95 kg
Dimensions L x H x W (mm)	361/141/90	361/141/90

With thermal switch and power fuse

Motors with other voltages and frequencies on request.

[1] at atm. pressure

Accessories and spare parts

Description	Details	Order No.
Silencer	G 1/8	000345
Hose connector	G 1/8, PVDF, AD 6 mm	014052
Fine control valve with vacuum gauge	suction side	056547
Spares kit	for N 816 KN	056315
Spares kit	for N 816 KT	056316

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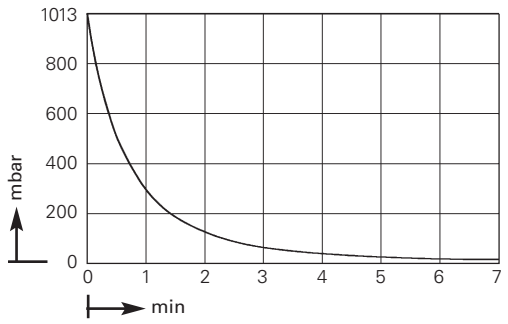
Dimensions and performance characteristics

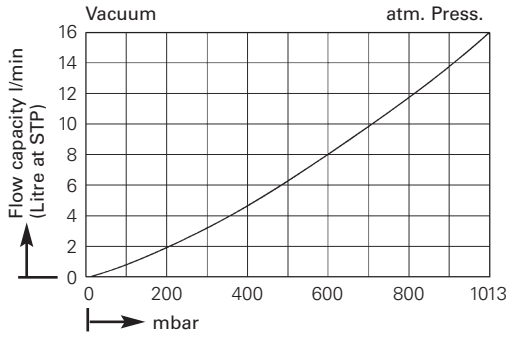
Pump down time for 10 l receiver

N 816.3 KN.18



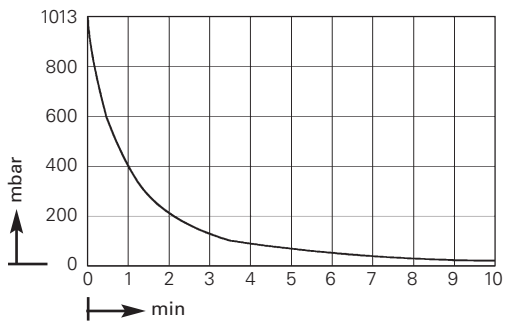
Performance characteristics

N 816.3 KN.18



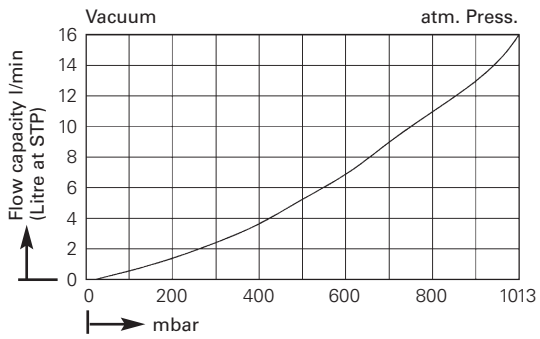
Pump down time for 10 l receiver

N 816.3 KT.18

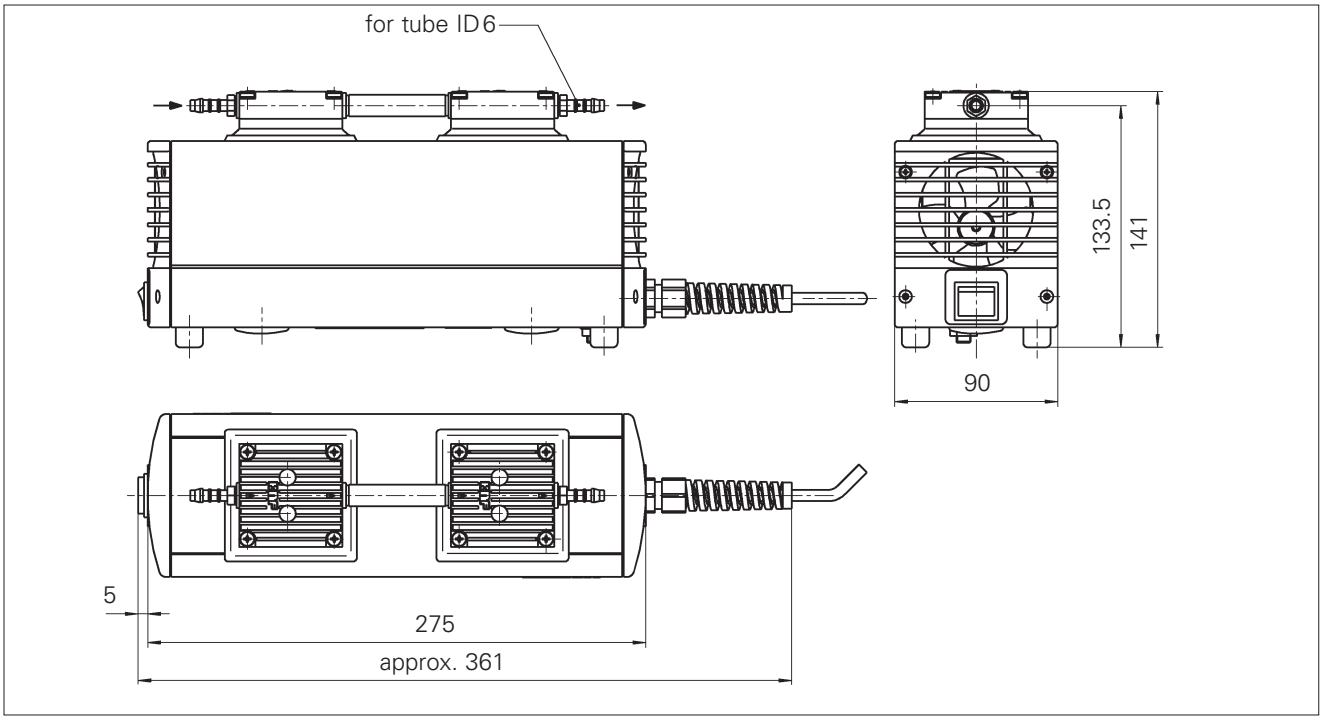


Performance characteristics

N 816.3 KT.18



Dimensions (mm)



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