

# **Diaphragm Pumps for Air, Gases and Vapours**



# LABOPORT® Mini Diaphragm Vacuum Pumps

#### **Technical features:**

- 100% oil-free transfer
- Pure transferring and evacuation of gases
- Version for slightly aggressive or corrosive gases and vapours
- 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 KT.18
		N 816.3 KN.45.18	N 816.3 KT.45.18
	Delivery (I/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 <sub>1</sub>	100 W	100 W
	Operating current	0.6 A	0.6 A
	Weight	3.95 kg	3.95 kg
	Dimensions LxHxW		
	(mm)	361/141/90	361/141/90
With thermal switch and power fuse			

Motors with other voltages and frequencies on request.

# **Accessories and spare parts**

Description	Details	Order No.
Silencer	G 1/8	000345
Hose connector	G 1/8, PVDF, for tube ID 6 mm	014052
Fine control valve with vacuum gauge	suction side	056547
Spares kit	for N 816.3 KN	056315
Spares kit	for N 816.3 KT	056316

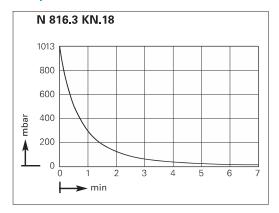
<sup>1)</sup> at atm. pressure



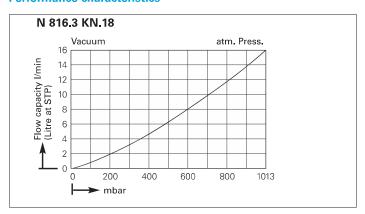
# **Diaphragm Pumps for Air, Gases and Vapours**

# **Dimensions and performance characteristics**

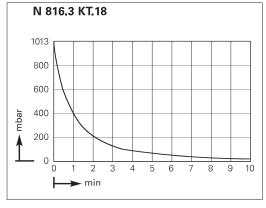
## Pump down time for 10 I receiver



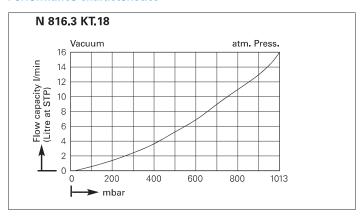
### **Performance characteristics**



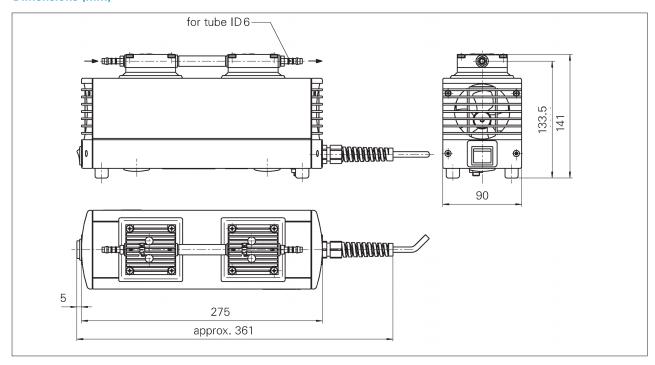
### Pump down time for 10 I receiver



#### **Performance characteristics**



## **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