



## Diaphragm Pumps for Air, Gases and Vapours



### Diaphragm Vacuum Pumps and Compressors

#### Technical features:

- 100% oil-free transfer
- Pure transferring, evacuation and compression of gases
- Version for slightly aggressive or corrosive gases and vapours
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx.  $6 \times 10^{-3}$  mbar x l/s, not tested in serial production.

### Series N 022 A\_.18 Pumps

Series N 022 diaphragm pumps are single-head, dry-running devices used in a wide range of laboratory applications. They transfer, compress and pump down without contamination. The pumps are available in various versions differing in the materials which contact the media.

Technical data:	N 022 AN.18	N 022 AT.18
Delivery (l/min) <sup>1)</sup>	15	13
Ultimate vacuum (mbar abs.)	100	100
Operating pressure (bar g)	4	4
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	0.7 A	0.7 A
Weight	4 kg	4 kg
Dimensions LxHxW (mm)	203/194/145	203/194/145
With thermal switch		

#### Material in contact with the pumped media

Type/OrderNo.	Pump head	Diaphragm	Valves
N 022 AN.18	Aluminium	CR	Stainless steel
N 022 AT.18	Aluminium	PTFE-coated	Stainless steel

Motors with other voltages and frequencies on request.

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

### Accessories

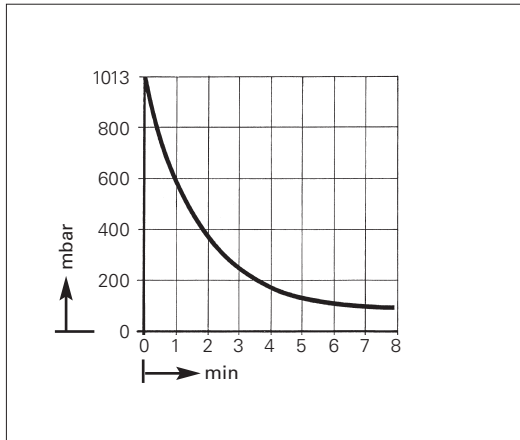
Description	Details	for Type	Order No.
Silencer/Filter	G 1/8		000346
Pressure relief valve	4 bar	N 022 AN.18	000351
Fine control valve with pressure gauge	pressure side	N 022 AN.18	000349
Fine control valve with vacuum gauge	suction side	N 022 AN.18	000350



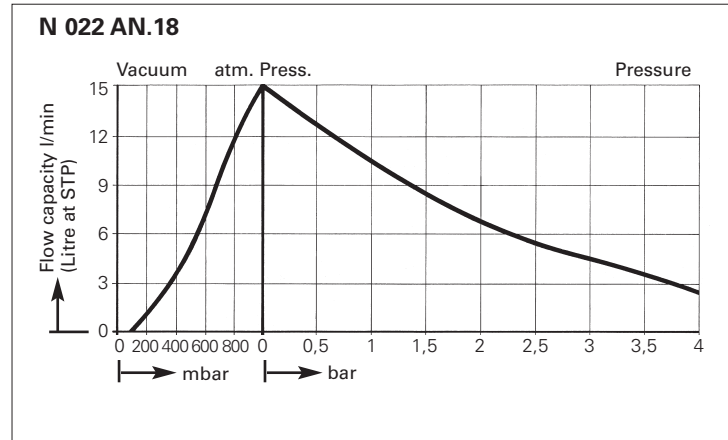
# Diaphragm Pumps for Air, Gases and Vapours

## Dimensions and performance characteristics

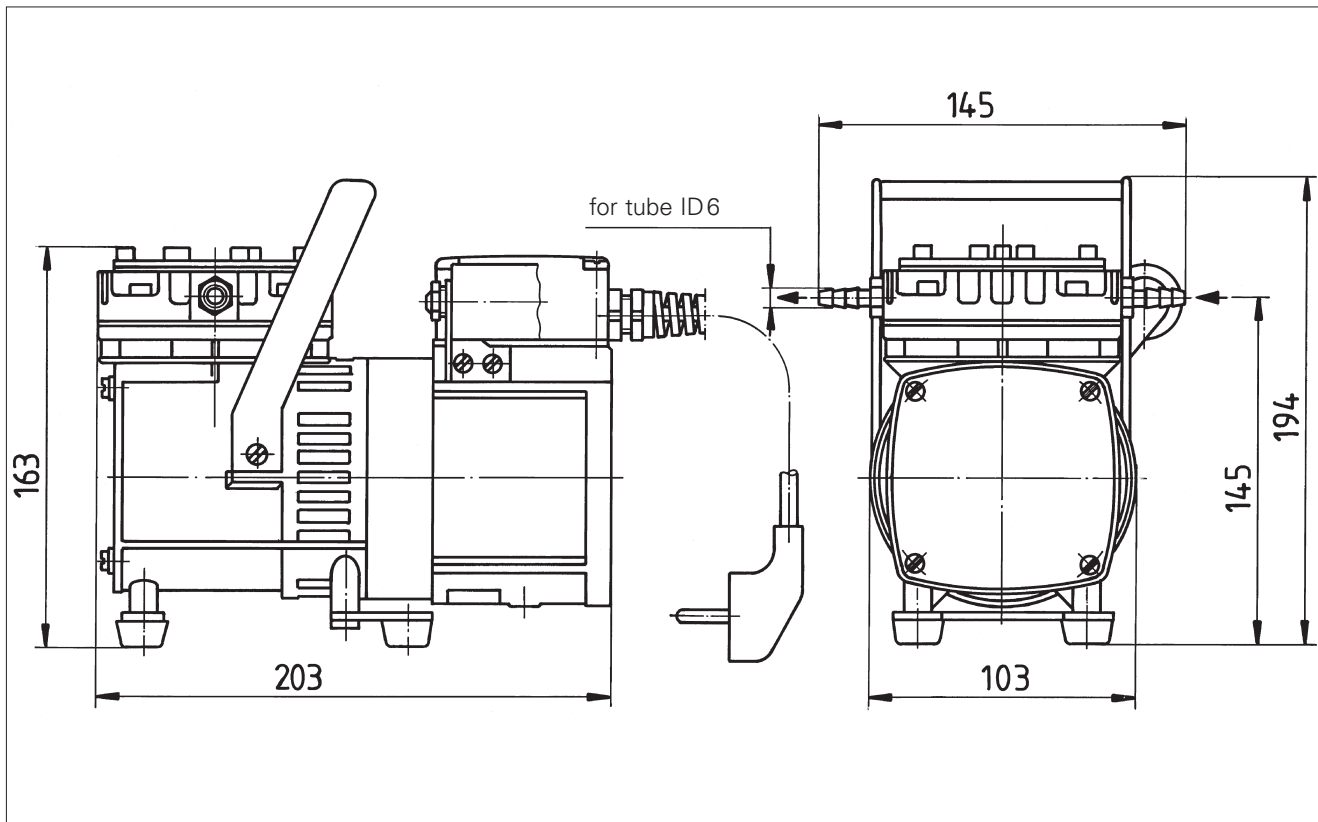
### Pump down time for 20 l receiver



### Performance characteristics



### Dimensions (mm)





## The KNF-Group worldwide

### Germany

**KNF Neuberger GmbH**  
Alter Weg 3  
D-79112 Freiburg  
Tel. +49 7664 5909 0  
Fax +49 7664 5909 99  
info@knf.de  
www.knf.de

### Benelux Netherlands

**KNF Verder B.V.**  
Utrechtseweg 4a  
NL-3451 GG Vleuten  
Tel. +31 30 677 92 40  
Fax +31 30 677 92 47  
info@knf-verder.nl  
www.knf-verder.nl

### Benelux Belgium and Luxembourg

**KNF Verder N.V.**  
Kontichsesteenweg 17  
B-2630 Aartselaar  
Tel. +32 3 871 96 24  
Fax +32 3 871 96 28  
info@knf.be  
www.knf.be

### China

**KNF Neuberger Trading**  
(Shanghai) Co., Ltd.  
No. 36 Lane 1000  
Zhang Heng Road  
Shanghai 201203  
Tel. +86 21 6859 6566  
Fax +86 21 6859 6568  
info@knf.com.cn  
www.knf.com.cn

### France,

### Marocco, Tunisia, Algeria

**KNF Neuberger S.A.**  
4, Bld. d'Alsace Z.I.  
F-68128 Village-Neuf  
Tel. +33 389 70 35 00  
Fax +33 389 69 92 52  
info@knf.fr  
www.knf.fr

### United Kingdom

**KNF Neuberger U.K., Ltd.**  
Avenue 2, Station Lane  
Industrial Estate  
Witney, Oxfordshire OX28 4FA  
Tel. +44 1993 77 83 73  
Fax +44 1993 77 51 48  
info@knf.co.uk  
www.knf.co.uk

### India

**KNF Pumps + Systems (India) Pvt. Ltd.**  
RAJIV GANDHI INFOTECH PARK,  
Phase 1,  
Ganga Estate, Survey No. 152/2/2,  
Above AXIS BANK,  
Hinjewadi, Pune 411 057  
Tel. +91 20 640 13 923  
+91 20 640 08 923  
Fax +91 20 229 33 923  
info@knfpumps.in  
www.knfpumps.in

### Italy

**KNF ITALIA S.r.l.**  
Via Flumendosa, 10  
I-20132 Milano  
Tel. +39 02 272 03 860  
Fax +39 02 272 03 848  
info@knf.it  
www.knf.it

### Japan

**KNF Japan Co.Ltd.**  
Across Shinkawa Bldg. Annex 3F,  
1-16-14 Shinkawa, Chuo-ku,  
Tokyo 104-0033  
Tel. +81 3 3551 7931  
Fax +81 3 3551 7932  
info@knf.co.jp  
www.knf.co.jp

### Korea

**KNF Neuberger Ltd.**  
Woosan Bldg.Rm#202  
336-4, Hwikyung-Dong  
Dongdaemun-Ku  
130-090, Seoul  
Tel. +82 2 959 0255  
Fax +82 2 959 0254  
knf@knfkorea.com  
www.knfkorea.com

### Sweden, Finland, Denmark, Norway

**KNF Neuberger AB**  
Mejerivägen 4  
P.O. Box 44060  
SE-10073 Stockholm  
Tel. +46 8 744 51 13  
Fax +46 8 744 51 17  
info@knf.se  
www.knf.se

### Switzerland Sales

**KNF Neuberger AG**  
Stockenstrasse 6  
CH-8362 Balterswil  
Tel. +41 71 973 99 30  
Fax +41 71 973 99 31  
knf@knf.ch  
www.knf.ch

### Switzerland

Production Liquid Pumps  
**KNF FLODOS AG**  
Wassermatte 2  
CH-6210 Sursee  
Tel. +41 41 925 00 25  
Fax +41 41 925 00 37  
info@knf-flodos.ch  
www.knf-flodos.ch

### Switzerland

Production Micro Pumps  
**KNF Micro AG**  
Zelglimatte 1b  
CH-6260 Reiden  
Tel. +41 62 787 88 88  
Fax +41 62 787 88 99  
info@knf-micro.ch  
www.knf-micro.ch

### Taiwan

**KNF Neuberger Ltd.**  
9F-2, No. 24, Lane 123, Section 6,  
Min Chuan East Road  
Neihu District  
Taipei City, 11490  
Tel. +886 2 2794 1011  
Fax +886 2 8792 1648  
knftwn@knftwn.com.tw  
www.knftwn.com.tw

### USA, Canada, South America

**KNF Neuberger, INC.**  
Two Black Forest Road  
Trenton, New Jersey 08691-1810  
Tel. +1 609 890 8600  
Fax +1 609 890 8323  
knfusa@knf.com  
www.knfusa.com  
**Latin America**  
Tel. +1 609 649 1010  
gb@knf.com

## Diaphragm Pumps + Systems



KNF Neuberger GmbH



KNF Neuberger, INC.



KNF Micro AG



KNF Neuberger S.A.



KNF FLODOS AG

## The KNF-Production worldwide

### Germany

**KNF Neuberger GmbH**  
Freiburg-Munzingen

### France

**KNF Neuberger S.A.**  
Village-Neuf

### Switzerland

**KNF FLODOS AG**  
Sursee

### Switzerland

**KNF Micro AG**  
Reiden

### USA

**KNF Neuberger, INC.**  
Trenton - New Jersey