



Vacuum Pumps for moist Gases



Series LABOPORT® SD N 820.3 FT.40.18 Vacuum Pump

LABOPORT® SD Self-drying Vacuum Pump for moist Gases

Technical features:

- 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. 6×10^{-3} mbar x l/s, not tested in serial production.

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.

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
Mains	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

Spare parts

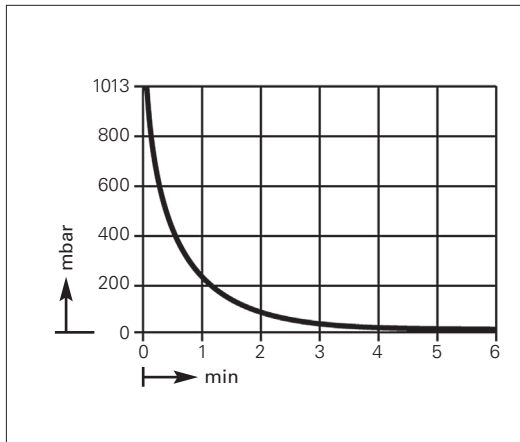
Description	Order No.
Spares kit	057358



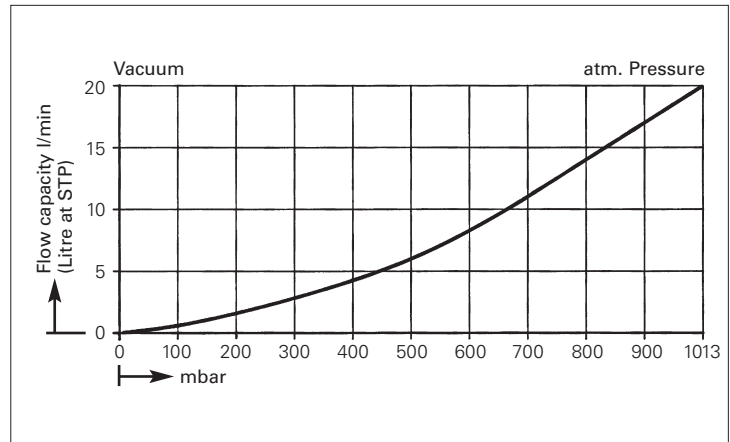
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Dimensions and performance characteristics

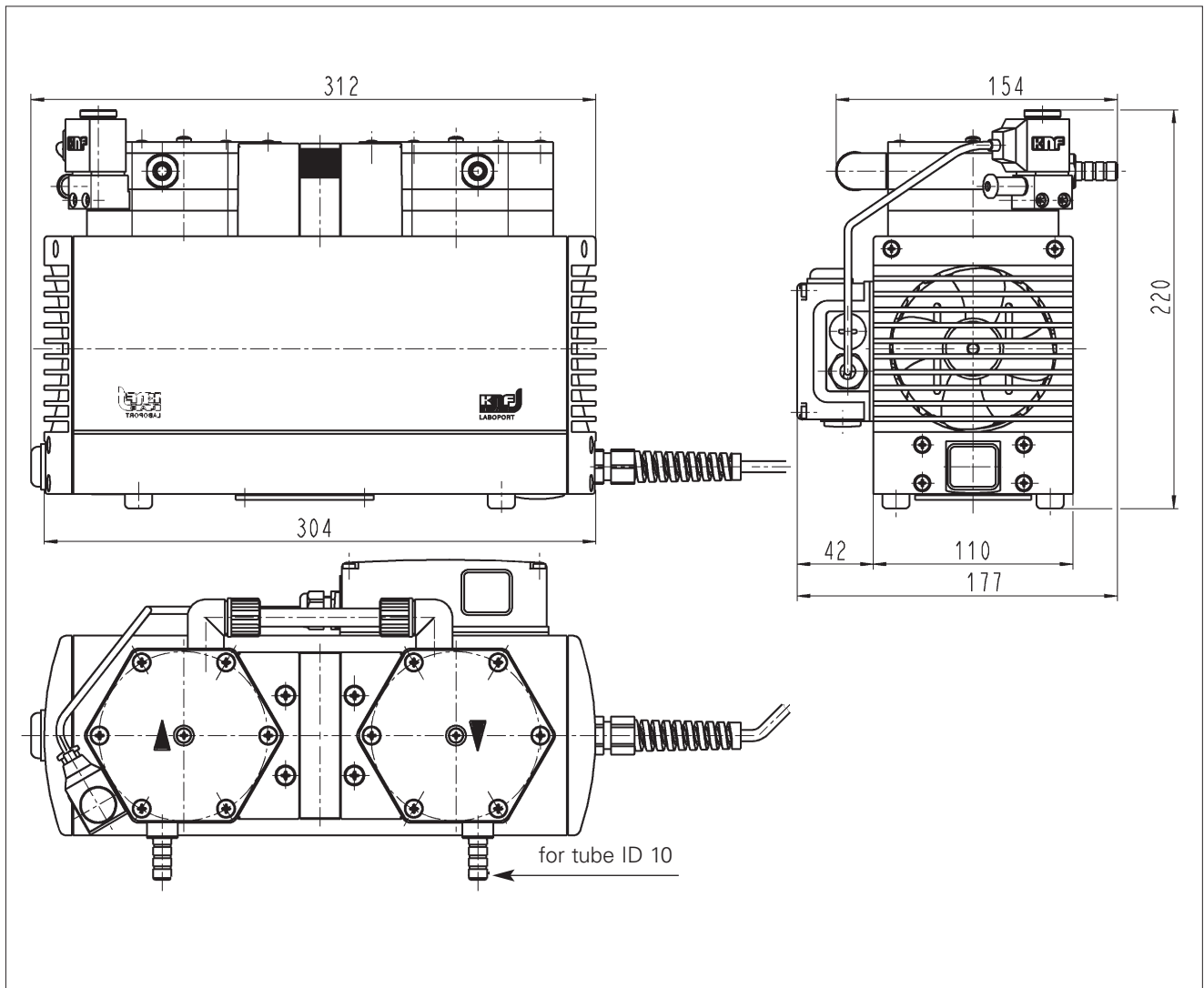
Pump down time for 10 l receiver



Performance characteristics



Dimensions (mm)



KNF offers a wide range of high-quality pumps and systems for moving both liquids and gases. Whether they are used as built-in OEM pumps, in process applications or in laboratories, KNF products offer high performance, precision, and reliability. We offer all of our customers expert and personal advice. Contact us today to discuss how we can assist you with your next project!

The KNF production sites worldwide:



KNF Neuberger GmbH, Germany



KNF Micro AG, Switzerland



KNF Flodos AG, Switzerland



KNF Neuberger SAS, France



KNF Neuberger, Inc., USA

KNF. GLOBALLY ACTIVE.

Germany

KNF Neuberger GmbH
D-79112 Freiburg
Tel. +49 7664 5909 0
info@knf.de
www.knf.de

Benelux Netherlands

KNF Verder B.V.
NL-3451 GG Vleuten
Tel. +31 30 677 92 40
info@knf-verder.nl
www.knf-verder.nl

Benelux Belgium and Luxemburg

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

China

KNF Technology (Shanghai) Co., Ltd.
Shanghai 201203
Tel. +86 21 5109 9695
info@knf.com.cn
www.knf.com.cn

France, Morocco, Tunisia, Algeria

KNF Neuberger SAS
F-68128 Village-Neuf
Tel. +33 389 70 35 00
info@knf.fr
www.knf.fr

UK

KNF Neuberger U.K., Ltd.
Witney, Oxfordshire OX28 4FA
Tel. +44 1993 77 83 73
info@knf.co.uk
www.knf.co.uk

India

KNF Pumps + Systems (India) Pvt. Ltd.
Hinjewadi, Pune 411 057
Tel. +91 20 640 13 923
+91 20 640 08 923
info@knfpumps.in
www.knfpumps.in

Italy

KNF ITALIA S.r.l.
I-20063 Cernusco s. Naviglio MI
Tel. +39 02 272 03 860
info@knf.it
www.knf.it

Japan

KNF Japan Co.Ltd.
Tokyo 104-0033
Tel. +81 3 3551 7931
info@knf.co.jp
www.knf.co.jp

Korea

KNF Neuberger Ltd.
135-502, Seoul
Tel. +82 2 959 0255
knf@knfkorea.com
www.knfkorea.com

Sweden, Finland, Denmark, Norway

KNF Neuberger AB
SE-117 43 Stockholm
Tel. +46 8 744 51 13
info@knf.se
www.knf.se

Switzerland

Sales
KNF Neuberger AG
CH-8362 Balterswil
Tel. +41 71 973 99 30
knf@knf.ch
www.knf.ch

Switzerland

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

Switzerland

Production Micro Pumps
KNF Micro AG
CH-6260 Reiden
Tel. +41 62 787 88 88
info@knf-micro.ch
www.knf-micro.ch

Taiwan

KNF Neuberger Ltd.
Taipei City, 11490
Tel. +886 2 2794 1011
info@knftwn.com.tw
www.knf.com.tw

USA, Canada, Latin America

KNF Neuberger, Inc.
Trenton, New Jersey 08691-1810
Tel. +1 609 890 8600
knfusa@knf.com
www.knfusa.com

Latin America

Tel. +1 609 649 1010
gb@knf.com
www.knf.com/es