

N 1200 SERIES

PROCESS VACUUM PUMPS AND COMPRESSORS



N 1200 SP.9 E

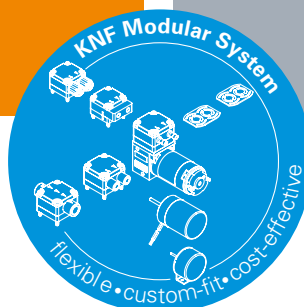
ADVANTAGES

- Twofold safety: The combination of a working diaphragm and an additional safety diaphragm prevents gas from escaping in the event of a fracture (.12)
- The robust design will hold up to challenging operating conditions
- High pressure up to 6 bar rel./87 psig
- High level of gas tightness
Following leakage rates are available:
.9 \triangleq < 6×10^{-3} mbar l/s
SP.13 \triangleq < 6×10^{-6} mbar l/s
ST.13 \triangleq < 1×10^{-5} mbar l/s
SP.12 \triangleq < 6×10^{-6} mbar l/s

POSSIBLE AREAS OF USE

- Energy technology – especially in nuclear facilities
- Chemical industry
- Process industry
- Research and development

Please visit our website
www.knf.com
to get more information



PERFORMANCE DATA

Series model	N 1200				
Material design	SP.9 E	SP.13 E	ST.13 E	ST.9 E	SP.12 E
Pump head	Stainless steel				
Diaphragm	EPDM		PTFE-coated		EPDM
Valves	Stainless steel				
Flow rate at atm. pressure (l/min)	130.0 \pm 10 %		120.0 \pm 10 %		130.0 \pm 10 %
Ultimate vacuum (mbar abs.)	150				
Max. operating pressure (bar rel./psig)	6.0/87.0				3.0/43.5
Permissible ambient temperature (°C)	+5 ... +40				
Permissible media temperature (°C)	+5 ... +40				
Weight (kg/lbs)	57.0/125.7				60.0/132.3

ELECTRICAL DATA

Voltage (V)	230/400
Motor	Three-phase motor
Protection class motor	IP 55
Frequency (Hz)	50
Power P ₁ (W)	900
I _{max} (A)	7.80/4.50

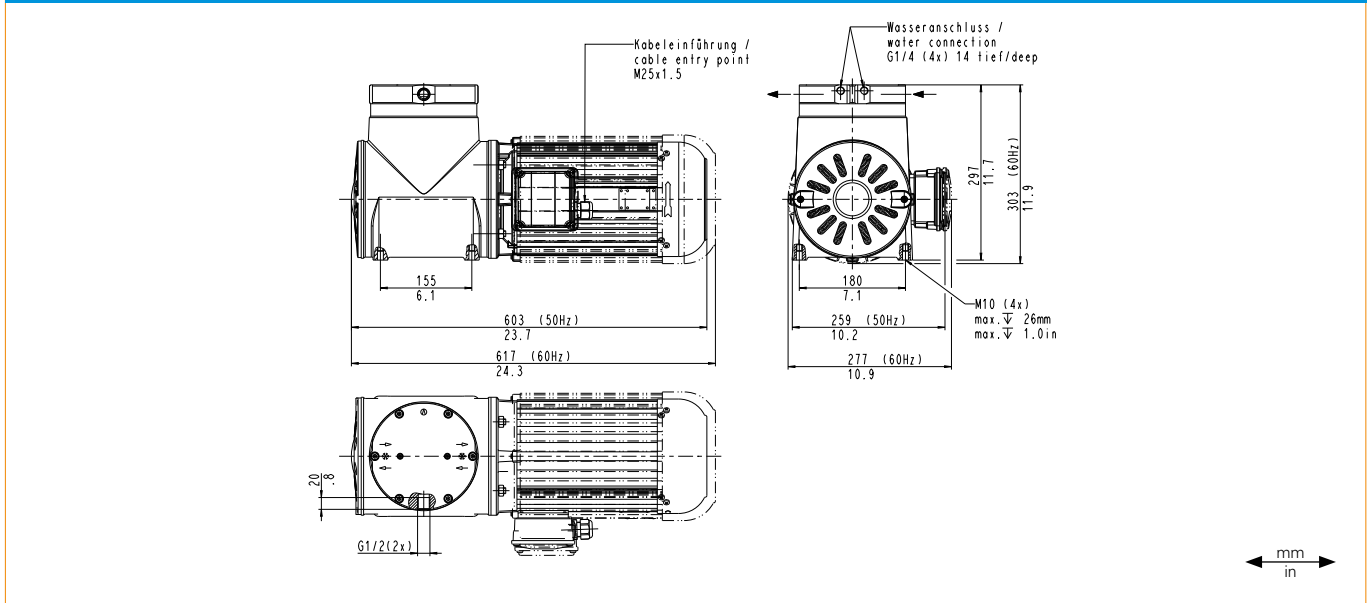
N 1200 SP.9 E | SP.13 E | ST.9 E | ST.13 E

PERFORMANCE DATA

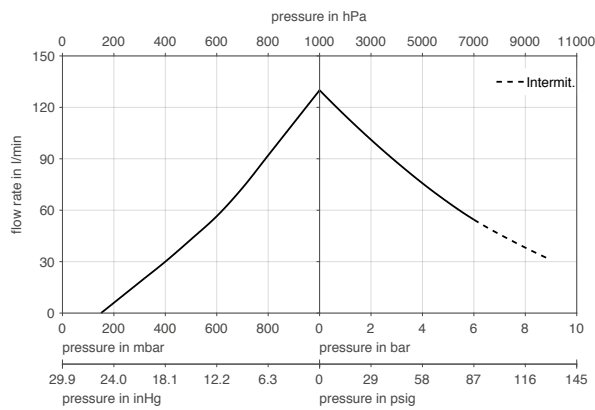
Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 1200 SP.9 E	130.0 ± 10 %	6.0/87.0	150
N 1200 SP.13 E	130.0 ± 10 %	6.0/87.0	150
N 1200 ST.9 E	120.0 ± 10 %	6.0/87.0	150
N 1200 ST.13 E	120.0 ± 10 %	6.0/87.0	150

Flow rate determined at 20 °C, 1013 mbar abs.
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 1200 S_.9 E | S_.13 E

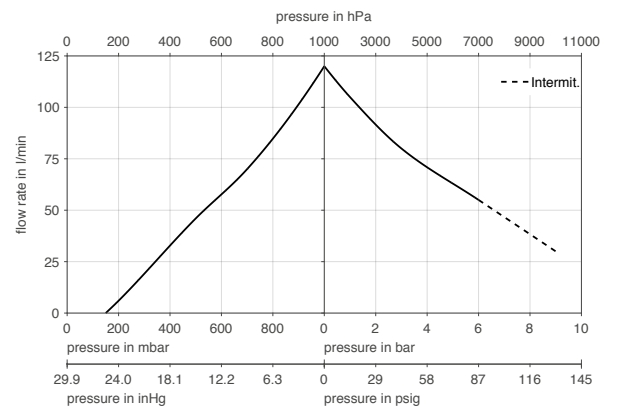


N 1200 SP.9 E | SP.13 E



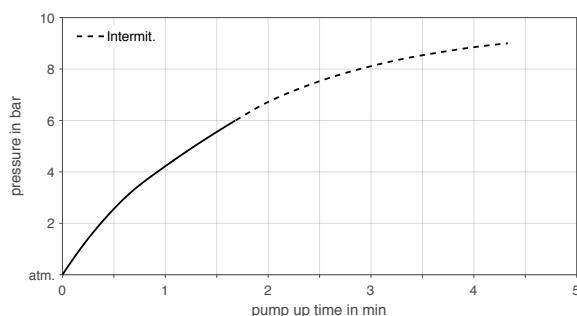
Flow rate determined at 20 °C, 1013 mbar abs.
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 1200 ST.9 E | ST.13 E



Flow rate determined at 20 °C, 1013 mbar abs.
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 1200 S_.9 E | S_.13 E | PUMP UP TIME FOR 20 LITER VESSEL



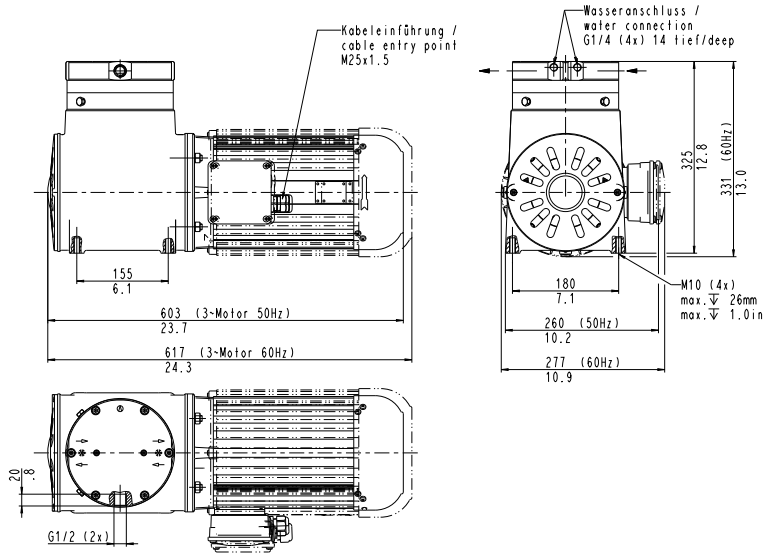
N 1200 SP.12 E

PERFORMANCE DATA

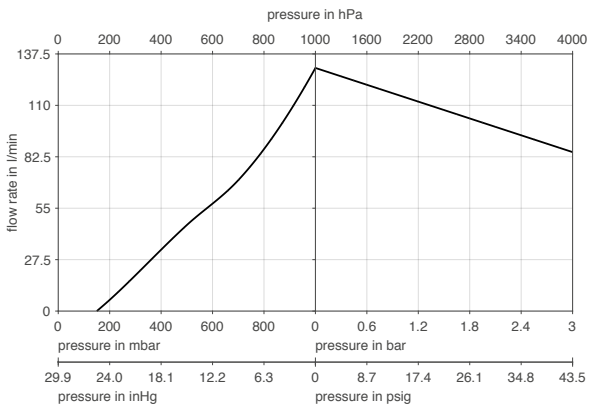
Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 1200 SP.12 E	130.0 ± 10 %	3.0/43.5	150

Flow rate determined at 20 °C, 1013 mbar abs.
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 1200 SP.12 E

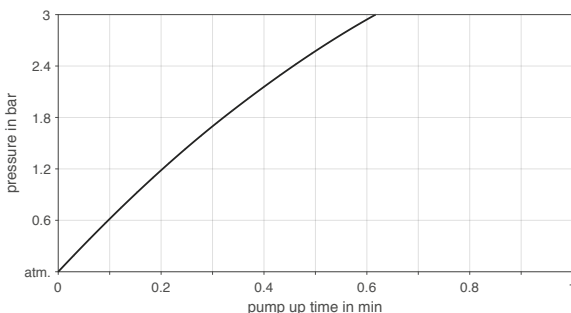


N 1200 SP.12 E



Flow rate determined at 20 °C, 1013 mbar abs.
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 1200 SP.12 E | PUMP UP TIME FOR 20 LITER VESSEL



ACCESSORIES

Description	Part No.
Base plate with rubber-bonded metals	304440
Connection water cooling S_.9 S_.13 SP.12	305998
O-ring for screw plug	026056
Wrench for retainer plate	018816

SPARE PARTS

Description	Part No.
N 1200 SP.9 E SP.13 E	
Diaphragm	027252
Reed valve	003475
O-ring D55x3.0 EPDM	047016
O-ring (.13 only) D150x3.0 EPDM	047372
O-ring (.13 only) D34x3.0 EPDM	047373
N 1200 ST.9 E ST.13 E	
Diaphragm	118095
Reed valve	003475
O-ring D55x3.0 FPM	002458
O-ring (.13 only) D150x3.0 FPM	002461
O-ring (.13 only) D34x3.0 FPM	045499
N 1200 SP.12 E	
Working diaphragm	027252
Safety diaphragm	047379
Reed valve	003475
O-ring D55x3.0 EPDM	047016
O-ring D150x3.0 EPDM	047372
O-ring D34x3.0 EPDM	047373

The performance values for the series models shown on this data sheet were determined under test conditions. The actual performance values may differ and depend in particular on the usage conditions and therefore on the specific application, on the parameters of the components involved in the user's system and on any technical modifications carried out which deviate from the standard configuration or the as delivered condition.

If individual designs have been created for specific customers on the basis of series models, other technical performance data may apply.

Before operation begins, the relevant operating instructions and/or assembly or installation instructions should be read and the safety information contained in these instructions should be noted.

KNF reserves the right to make changes to the product and the associated documentation without prior notice to the customer.



www.knf.com

YOUR LOCAL PARTNER AROUND THE WORLD

KNF SALES ORGANIZATION

Australia KNF Regional Office
Moreland West VIC 3055
Tel. +61 3 9386 4959
info@knf.com.au
www.knf.com.au

Benelux Netherlands KNF Verder B.V.
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.
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 KNF Neuberger SAS
68128 Village-Neuf
Tel. +33 389 70 35 00
info@knf.fr
www.knf.fr

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

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

Italy KNF Italia S.r.l.
20063 Cernusco s. Naviglio (MI)
Tel. +39 02 929 04 91
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

Latin America KNF Regional Office
Tel. +1 609 649 1010
gb@knf.com
www.knf.com/es

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

Singapore KNF Regional Office
Tel. +65 9722 1994
info@knf.com.sg
www.knf.com.sg

Sweden, Finland, Denmark, Norway
KNF Neuberger AB
117 43 Stockholm
Tel. +46 8 744 51 13
info@knf.se
www.knf.se

Switzerland KNF Neuberger AG
8362 Balzerswil
Tel. +41 71 973 99 30
knf@knf.ch
www.knf.ch

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

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

KNF PRODUCT CENTERS

Gas Pumps KNF Neuberger GmbH
DE-79112 Freiburg
info@knf.de
www.knf.de

Micro Gas Pumps KNF Micro AG
CH-6260 Reiden
info@knf-micro.ch
www.knf-micro.ch

Liquid Pumps KNF Flodos AG
CH-6210 Sursee
info@knf-flodos.ch
www.knf-flodos.ch