

VARIO® diaphragm pump MD 4 VARIO select

[Link to the website](#)

Product description

This three-stage diaphragm pump is an excellent solution for continuous, oil-free pumping of non-corrosive gases to a vacuum level as deep as 1 mbar. All wetted parts are made of aluminum, stainless steel and carefully selected plastics suitable for a wide range of applications with non-corrosive gases. The MD 4 VARIO select continuously adapts its motor speed to hold the desired vacuum level. That means the pump is whisper-quiet and generates ultra-low vibrations, and has high leak tightness. The highly flexible fabric-reinforced double FKM diaphragm is ideal for extended operating life. The VARIO design includes the variable speed pump and the VACUU-SELECT vacuum controller with external gauge head. The demand-responsive motor speed control on VARIO models further extends the already long lifetimes of diaphragms and valves.

Performance features

- VACUU-SELECT vacuum controller with graphical user interface and predefined applications simplifies work in the laboratory
- extraordinary diaphragm life for minimum operational and servicing costs
- contamination-free pumping and evacuation
- excellent ultimate vacuum and TURBO-MODE for use as backing pump for turbo pumps

Ordering data

Product name	Nominal mains voltage mains frequency	Plug type	Articleno.
MD 4 VARIO select	200-230 V 50-60 Hz	CEE	20736350
MD 4 VARIO select	200-230 V 50-60 Hz	CH	20736351
MD 4 VARIO select	100-120 V 50-60 Hz	US	20736353

Items supplied

Pump completely mounted, ready for use, with manual.

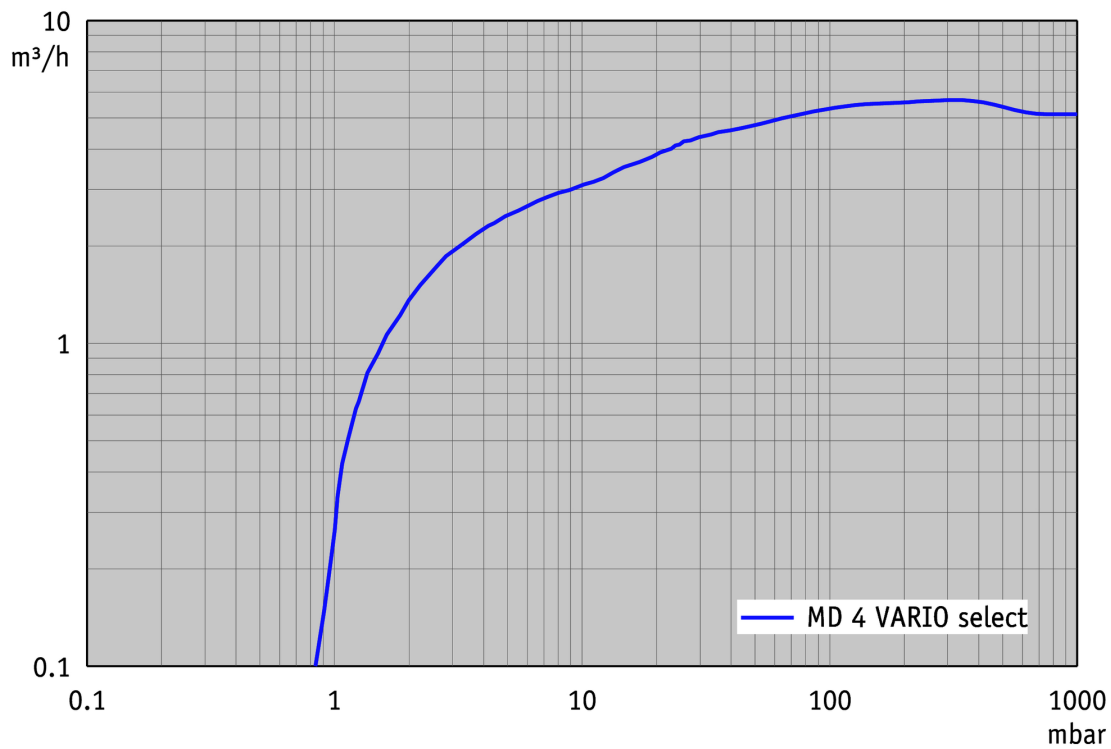
Accessories

- Function extension for VACUU·SELECT controller VACUU·SELECT User Management (20700900)
- Vacuum tubing transparent DN 8 mm (20686061)
- Clamping ring for small flange KF DN 10/16 (20660000)
- External centring ring for small flange KF DN 10/16 (20660190)
- Small flange with hose nozzle KF DN 16 / DN 10 mm (20662806)
- Air admittance valve VB M-B (20674217)
- Set of diaphragms and valves MD 4 NT / MV 2 NT / MD 4 NT VARIO / MV 2 NT VARIO (20696861)

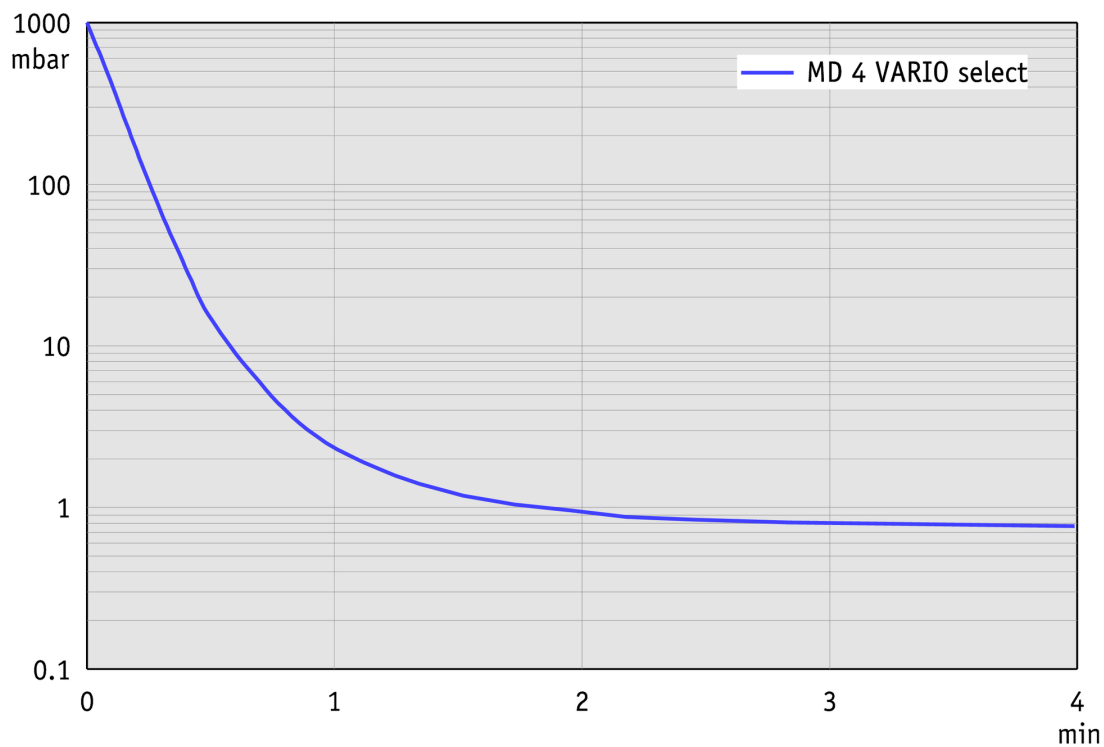
Technical data

Max. pumping speed 50 Hz (m³/h)	5.7 m³/h
Max. pumping speed 60 Hz (cfm)	3.4 cfm
Ultimate vacuum	1 mbar / 0.75 torr
Number of heads	4
Number of stages	3
Vacuum controller	VACUU-SELECT
Permissible ambient temperature range (operation)	10 - 40 °C
Permissible ambient temperature range (storage)	-10 - 60 °C
Max. outlet pressure (abs.)	1.1 bar
Inlet connection	small flange KF DN 16
Outlet connection	Silencer / G1/4"
Rated motor power	0.53 kW
Motor speed range	30 - 2400 min ⁻¹
Protection class IEC 60529	IP 20
Dimensions (L x W x H)	325 mm x 235 mm x 245 mm
Weight	19.1 kg
Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU-PURE®)	45 dBA
ATEX conformity	II 3/- G Ex h IIC T3 Gc X Internal Atm. only
NRTL certification	No
Interface	Ethernet (RJ45): Modbus TCP / USB (Type A): Data transfer, software update, RS-232 (additional adapter required)

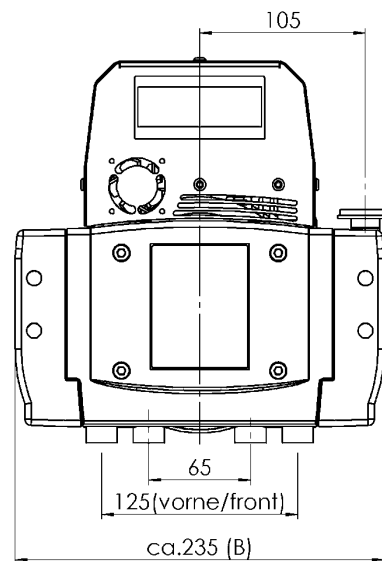
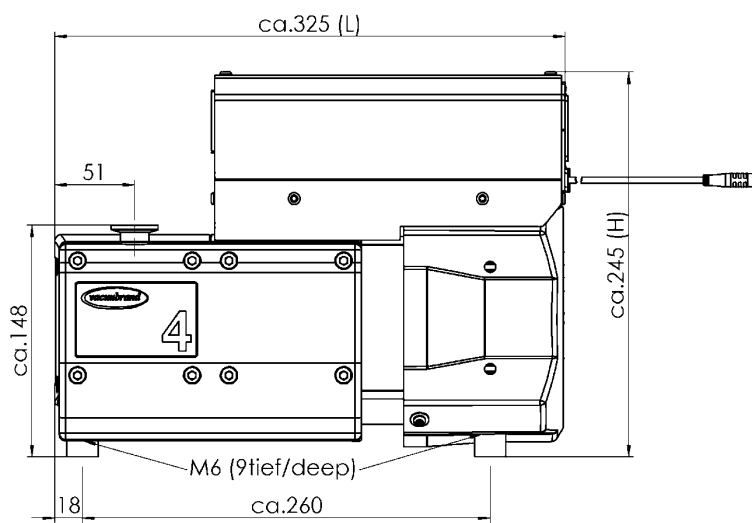
Pumping speed graph at 50 Hz



Pump down graph at 50 Hz (10 l volume)

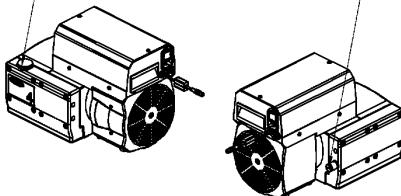


Dimension sheet



IN - Kleinflansch DN16
small flange 1/6

EX - Schalldämpfer
silencer



VACUUBRAND MD 4 NT VARIO
Version 2013/07/29

VACUUBRAND GMBH + CO KG
P.O. Box 1664
97877 Wertheim
T +49 9342 808 5550
F +49 9342 808 5555

info@vacuubrand.com
www.vacuubrand.com

VACUUBRAND®

VACUUBRAND is part of the Brand group, a manufacturer of high-quality and innovative laboratory equipment and vacuum technology with a global team of approx. 1,000 employees.

With highly motivated and qualified employees, we manufacture the world's most comprehensive product family for vacuum generation, measurement and control for the rough and fine vacuum range in the laboratory.

All with one goal:

Enabling our customers to run reliable, safe and efficient processes. This is why we commit ourselves to continuous innovation, first-class performance, and outstanding quality.

Engineering excellence is central to our ability to deliver products and solutions renowned for their quality, durability, and reliability. Innovative technology, high quality materials and extensive testing deliver unmatched performance - engineered and manufactured in Germany.

Together with you, our experts will find the best solution for your application and provide you with first-class service along the way.

© VACUUBRAND GMBH + CO KG

BRAND (Shanghai) Trading Co., Ltd.
Shanghai, China

T +86 21 6422 2318
info@brand.com.cn
china.brand.com.cn

BRAND Scientific Equipment Pvt. Ltd.
Mumbai, India

T +91 22 42957790
customersupport@brand.co.in
www.brand.co.in

BRANDTECH® Scientific, Inc.
Essex, CT. United States of America

T +1 860 767 2562
info@brandtech.com
www.brandtech.com