

# VARIO<sup>®</sup> diaphragm pump MD 12 NT VARIO select



Link to the website

#### **Product description**

This three-stage diaphragm pump is an powerful solution for continuous, oil-free pumping of non-corrosive gases to a vacuum level as deep as 1.5 mbar. With its high pumping speed, this pump is an excellent option for higher gas load applications or rapid pump down of vacuum chambers. 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 12 NT VARIO select automatically adapts its motor speed to hold the desired vacuum level. That also 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 an external gauge head. The demand-responsive motor speed control on VARIO models further extends the already long lifetimes of diaphragms and valves. And oil-free operation means that there is no risk of contamination from backstreaming.

#### 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
- high pumping speed and 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 12 NT VARIO select	200-230 V   50-60 Hz	CEE	25743150

#### **Items supplied**

Pump completely mounted, ready for use, silencer, with manual.

#### Accessories

- Function extension for VACUU·SELECT controller VACUU·SELECT User Management (20700900)
- Clamping ring for small flange KF DN 20/25 (20660001)
- External centring ring for small flange KF DN 20/25 (20660196)
- Vacuum tubing PVC with internal stainless steel spiral, with small flanges KF DN 25 (20686021)
- Small flange with hose nozzle KF DN 25 / DN 10 mm (20662807)
- Rubber vacuum tubing DN 10 mm (20686002)
- Air admittance valve VB M-B (20674217)

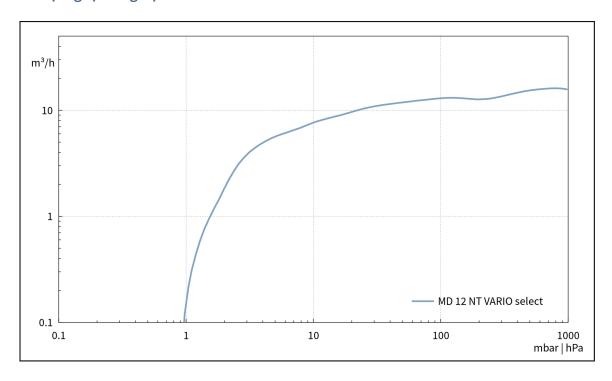


#### **Technical data**

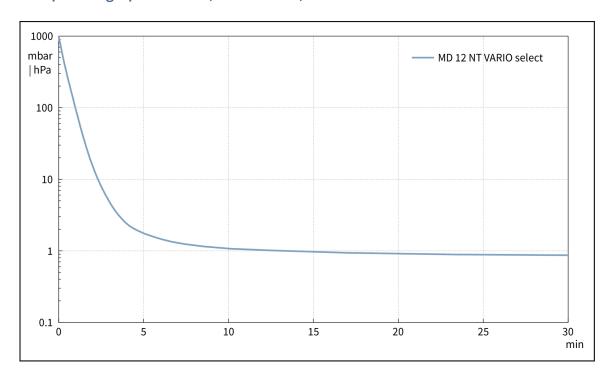
Max. pumping speed 50 Hz (mbar)	13.4 m <sup>3</sup> /h	
Max. pumping speed 60 Hz (cfm)	7.9 cfm	
Ultimate vacuum	1.5 mbar / 1.1 torr	
Number of heads	8	
Number of stages	3	
Vacuum controller	VACUU-SELECT	
Permissible ambient temperature range (operation)	10 - 40 °C	
Permissible ambient temperature range (storage)	-10 - 60 °C	
Max. outlet pressure (abs.)	1.1 bar	
Inlet connection	small flange KF DN 25	
Outlet connection	G1/2"	
Rated motor power	0.53 kW	
Motor speed range	30 - 2400 min <sup>-1</sup>	
Protection class IEC 60529	IP 40	
Dimensions (L x W x H)	552 mm x 260 mm x 450 mm	
Weight	31.6 kg	
Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU-PURE®)	50 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)	

# **VACUUBRAND®**

## Pumping speed graph at 50 Hz

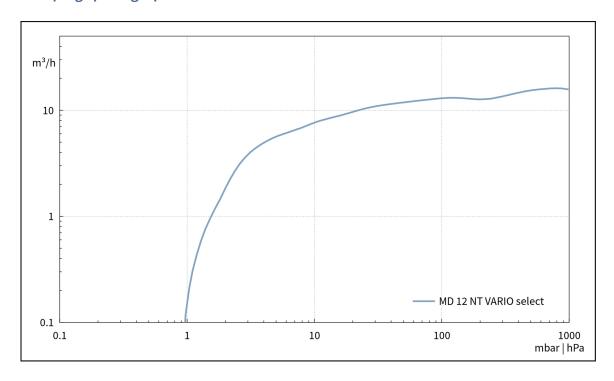


## Pump down graph at 50 Hz (100 l volume)

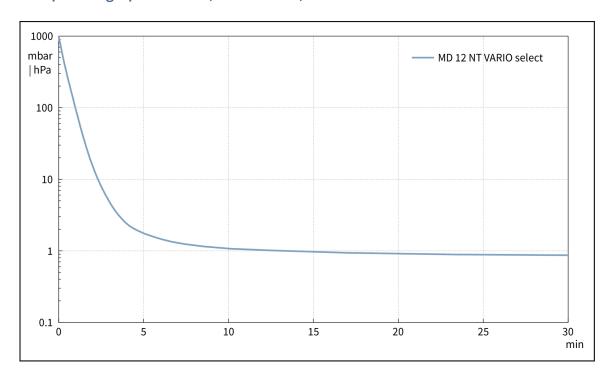


# **VACUUBRAND®**

## Pumping speed graph at 60 Hz



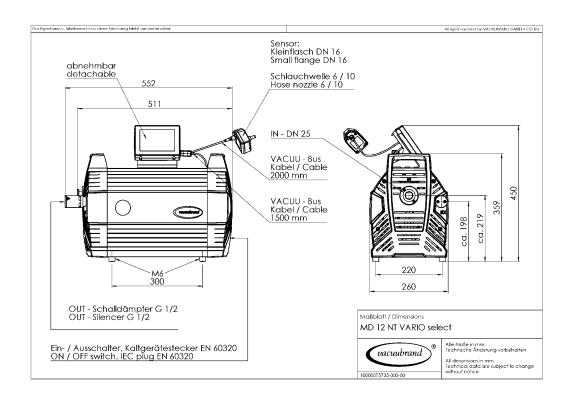
## Pump down graph at 60 Hz (100 l volume)



# **VACUUBRAND®**

#### **Dimension sheet**





© VACUUBRAND GMBH + CO KG

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

**VACUU**BRAND®

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.

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

