

# Diaphragm pump MD 1



Link to the website

#### **Product description**

The MD 1 diaphragm pump is an excellent choice for oil-free evacuation and pumping of non-corrosive gases down to 1.5 mbar ultimate vacuum. The three-stage design with precisely guided flat diaphragms provides outstanding pumping speed even close to the ultimate vacuum, especially when compared with similarly rated two-stage diaphragm pumps. The MD 1 is an ultra-low vibration pump with very long diaphragm lilfetime and stable ultimate vacuum documented with years of testing. With a flow path consisting of aluminum and selected plastics (diaphragms and valves made of PTFE/FKM and FKM, respectively) the pumps are suitable for a wide range of applications with non-corrosive gases.

#### **Performance features**

- contamination-free pumping and evacuation
- high flow rate even near ultimate vacuum
- excellent ultimate vacuum
- whisper quiet and ultra-low vibration
- proven long diaphragm life, maintenance-free drive system



### **Ordering data**

Product name	Nominal mains voltage   mains frequency	Plug type	Articleno.
MD 1	220-230 V   50-60 Hz 100-115 V   50-60 Hz	US	20696083

### **Items supplied**

Pump completely mounted, ready for use, with manual.

#### Accessories

• Rubber vacuum tubing DN 8 mm (20686001)

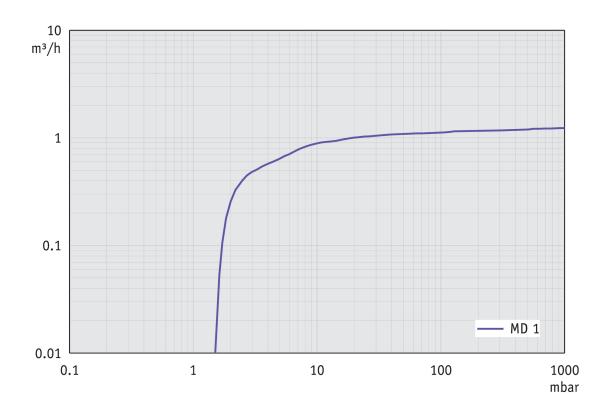


#### **Technical data**

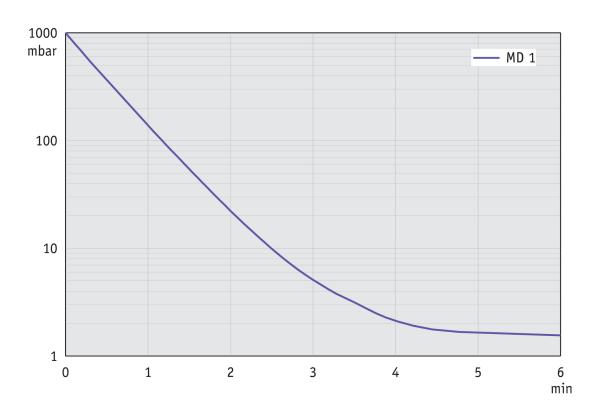
Max. pumping speed 50 Hz (mbar)	1.2 m <sup>3</sup> /h	
Max. pumping speed 60 Hz (cfm)	0.82 cfm	
Ultimate vacuum	1.5 mbar / 1.1 torr	
Number of heads	4	
Number of stages	3	
Permissible ambient temperature range (operation)	10 - 40 °C	
Permissible ambient temperature range (storage)	-10 - 60 °C	
Max. outlet pressure (abs.)	1.1 bar	
Inlet connection	Hose nozzle DN 6 mm	
Outlet connection	Silencer / G1/8"	
Rated motor power	0.08 kW	
Rated speed 50/60 Hz	1500/1800 min <sup>-1</sup>	
Protection class IEC 60529	IP 40	
Dimensions (L x W x H)	326 mm x 143 mm x 215 mm	
Weight	7.3 kg	
Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU-PURE®)	40 dBA	
ATEX conformity	II 3/- G Ex h IIC T3 Gc X Internal Atm. only	
NRTL certification	Yes	

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## Pumping speed graph at 50 Hz

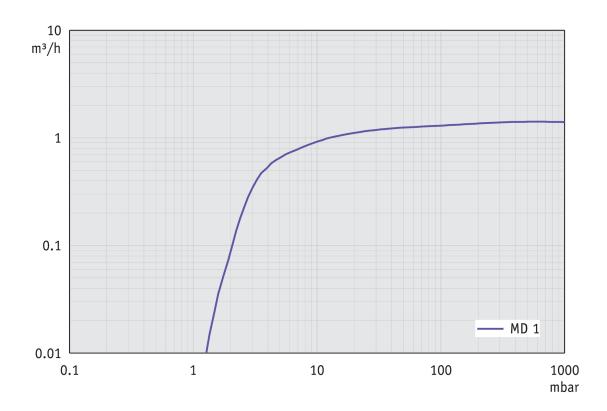


## Pump down graph at 50 Hz (10 l volume)

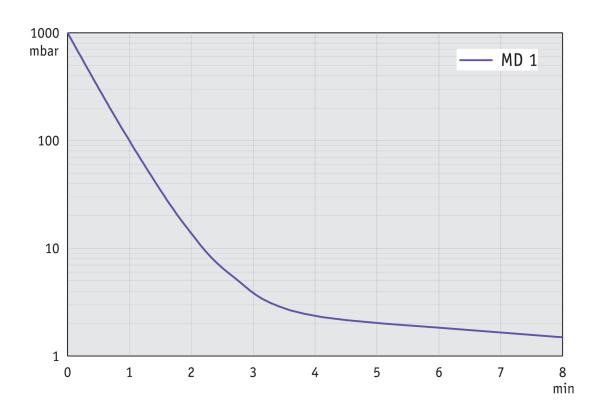


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## Pumping speed graph at 60 Hz



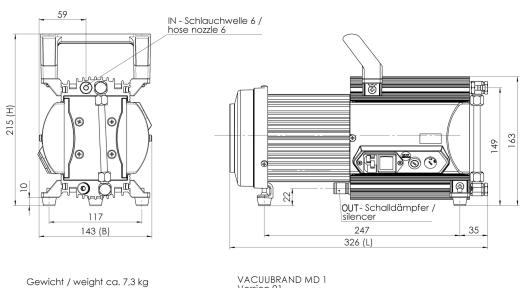
## Pump down graph at 60 Hz (10 l volume)



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#### **Dimension sheet**





Alle Maße / all dimensions [mm]

VACUUBRAND MD 1 Version 01

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