VACUUBRAND®

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

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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 120 V | 60 Hz	CH, CN	20696081

Items supplied

Pump completely mounted, ready for use, with manual.

Accessories

- Rubber vacuum tubing DN 8 mm (20686001)
- Set of diaphragms and valves MD 1, MV 0.5 (20696824)

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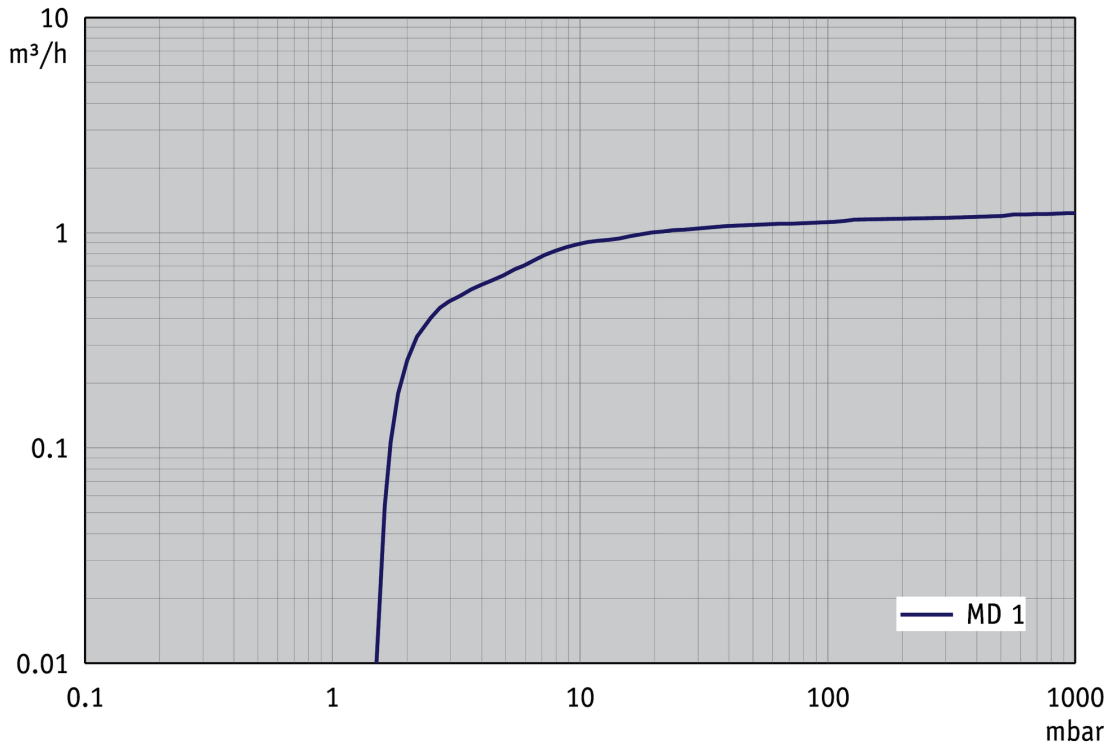
Technical data

Max. pumping speed 50 Hz (m^3/h)	1.2 m^3/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^{-1}
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

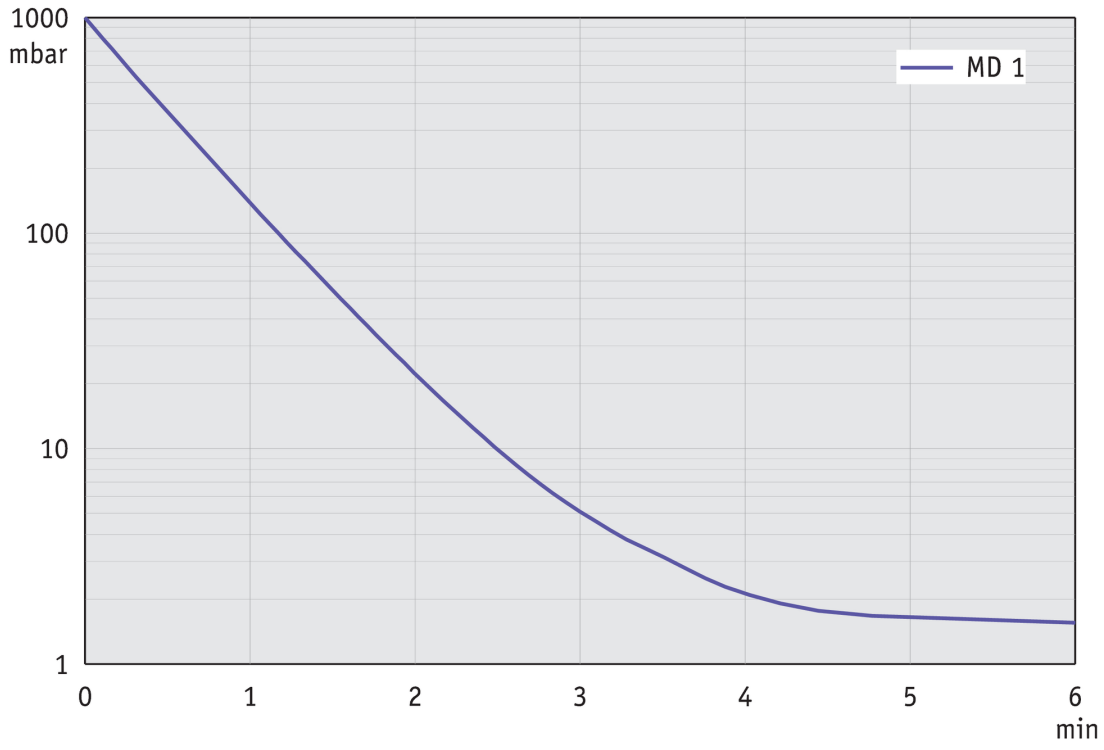
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Pumping speed graph at 50 Hz



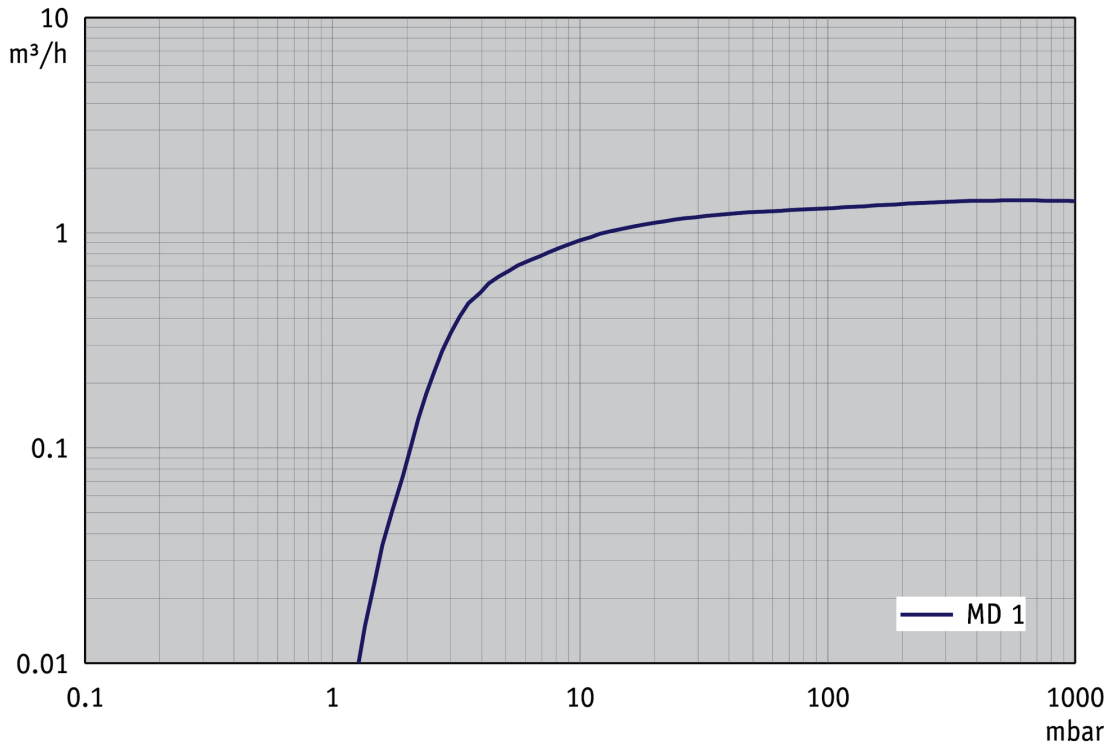
Pump down graph at 50 Hz (10 l volume)



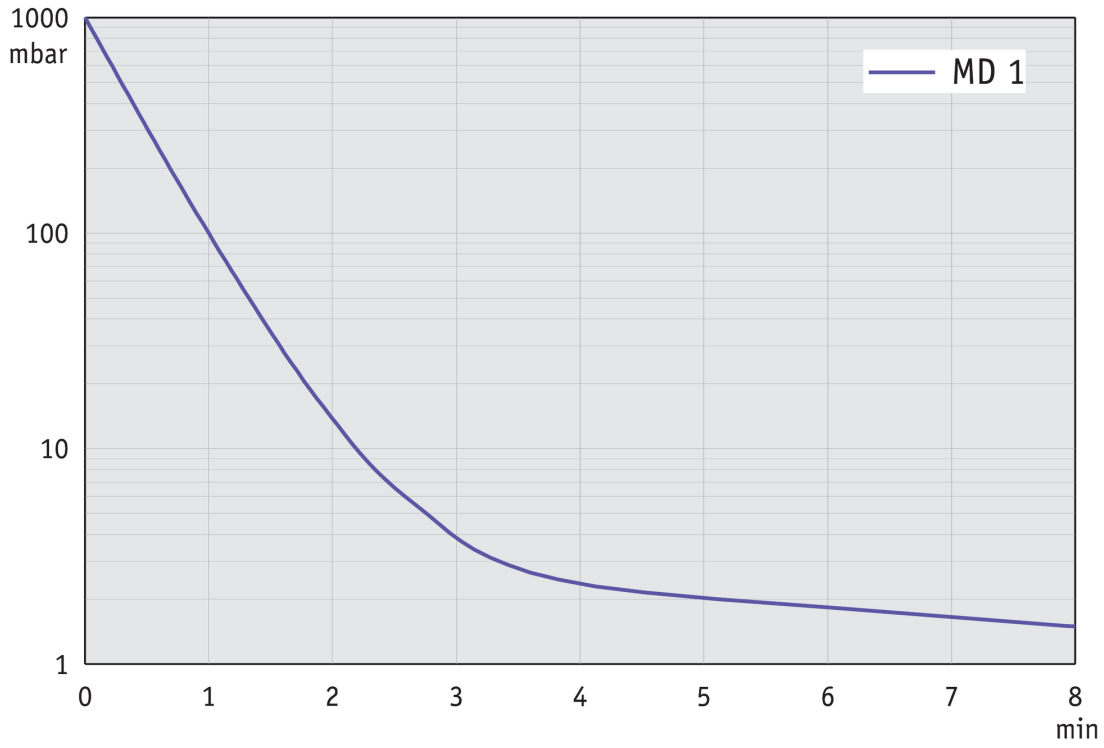
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Pumping speed graph at 60 Hz



Pump down graph at 60 Hz (10 l volume)

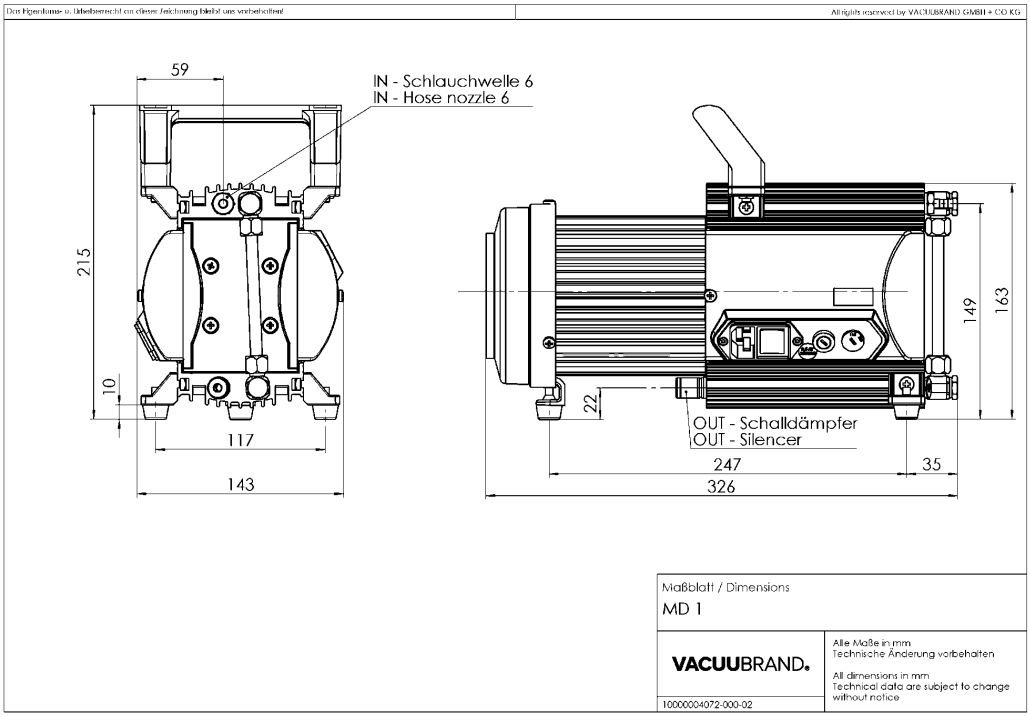


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Dimension sheet





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VACUUBRAND

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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:
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