

VARIO®-SP diaphragm pump

MD 1 VARIO-SP

[Link to the website](#)

Product description

The three-stage MD 1 VARIO-SP diaphragm pump, with its variable speed drive system, attains significantly higher pumping speed and a better ultimate vacuum than the corresponding fixed speed pump. The brushless 24V DC motor (maintenance-free) enables easy integration of the pump into other equipment, and operation independent of line voltage. The pump is extraordinarily silent and vibration-free, with an extended lifetime for its diaphragms.

Performance features

- contamination-free pumping and evacuation
- high flow rate even near ultimate vacuum
- variable speed: Fast pump down at high motor speed, with reduced speeds to maintain vacuum
- very powerful and extremely compact; whisper quiet and ultra-low vibration, especially at low speed
- customized versions available

Ordering data

Product name	Nominal mains voltage mains frequency	Plug type	Articleno.
MD 1 VARIO-SP	24 V DC	Open wires	20696101

Items supplied

Pump completely mounted, ready for use, with 2 m cable without plug and with manual

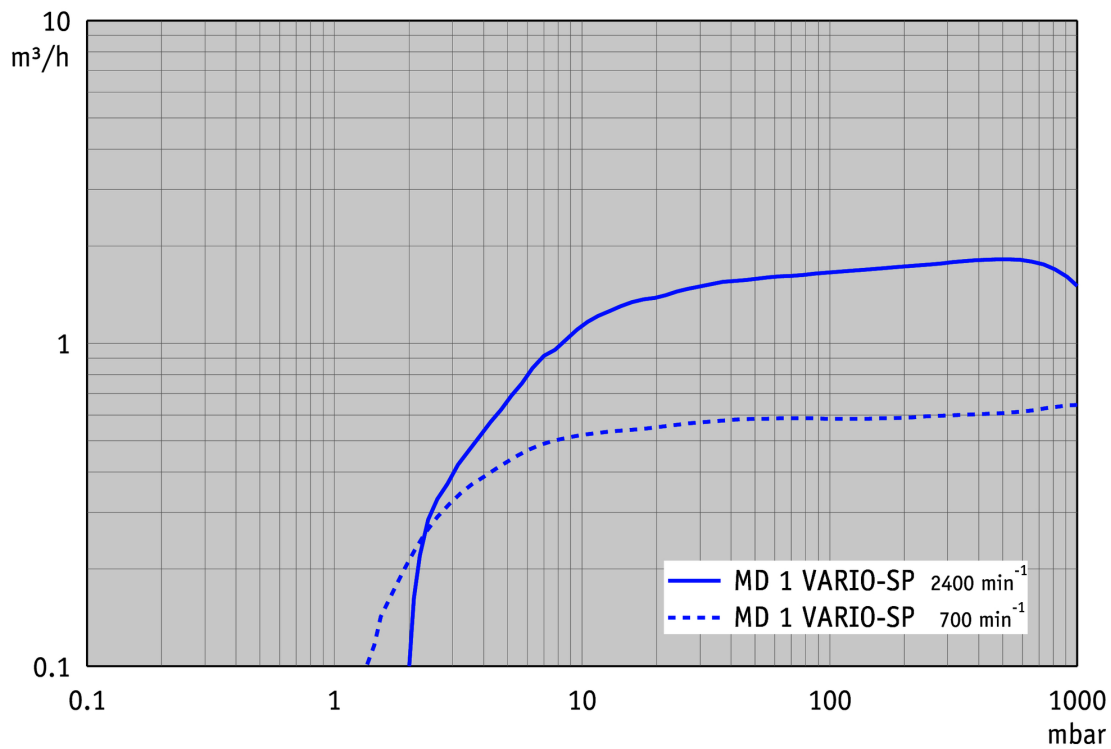
Accessories

- Rubber vacuum tubing DN 6 mm (20686000)
- Screw-in flange, stainless steel KF DN 16 / G1/8" (20637425)
- Set of diaphragms and valves MD 1, MV 0.5 (20696824)

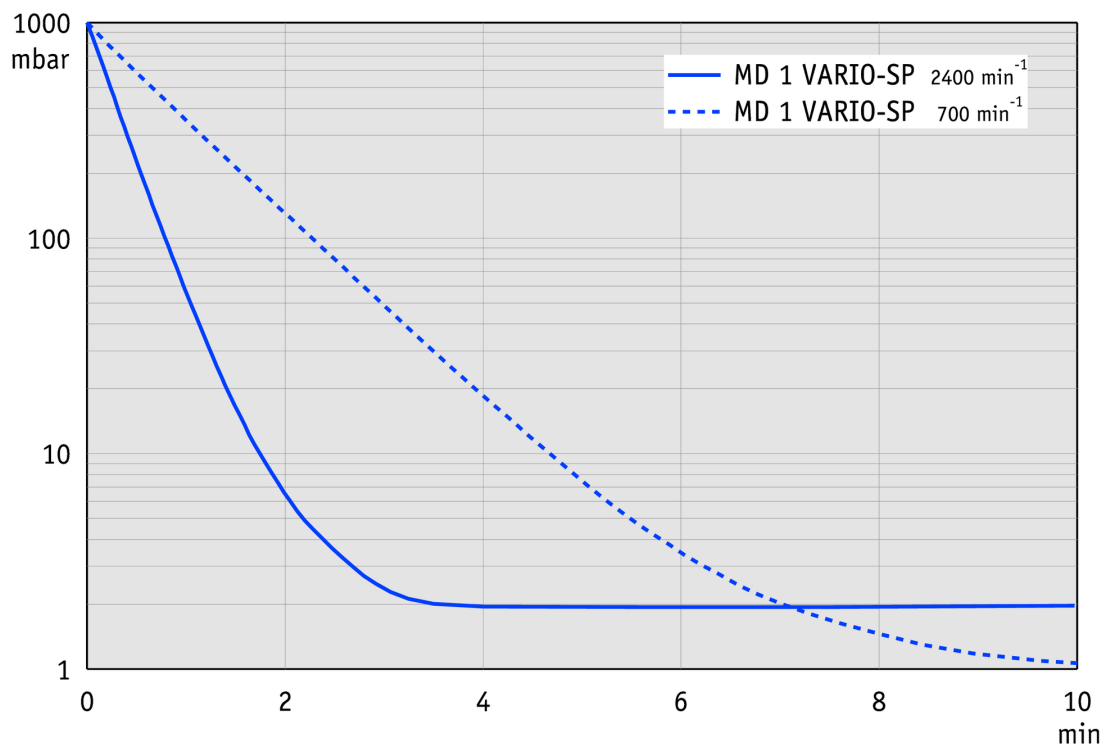
Technical data

Max. pumping speed 50 Hz (mbar)	1.8 m ³ /h
Max. pumping speed 60 Hz (cfm)	1.06 cfm
Ultimate vacuum	1 mbar / 0.75 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	0.064 kW
Motor speed range	200 - 2400 min ⁻¹
Protection class IEC 60529	IP 20
Dimensions (L x W x H)	223 mm x 143 mm x 163 mm
Weight	4.1 kg
Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU·PURE®)	37 dBA
ATEX conformity	II 3/- G Ex h IIC T3 Gc X Internal Atm. only
NRTL certification	Yes

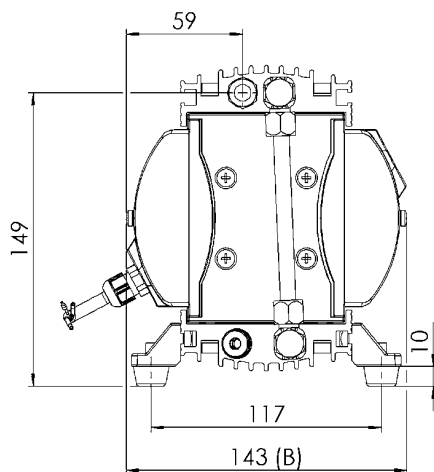
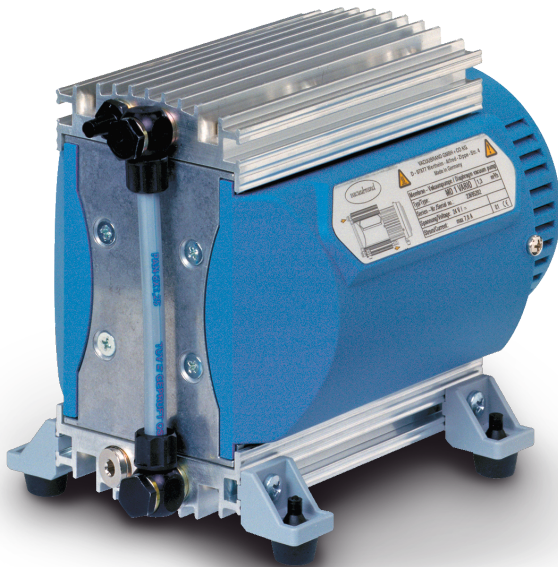
Pumping speed graph at 50 Hz



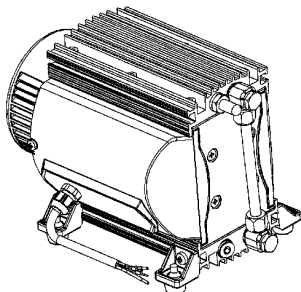
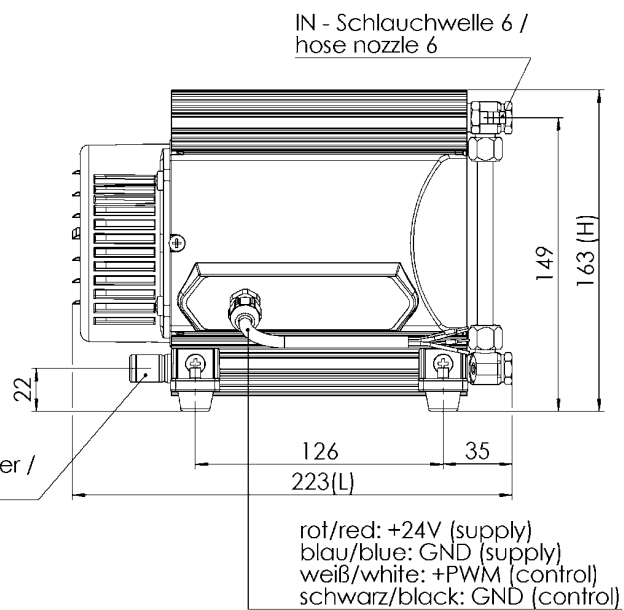
Pump down graph at 50 Hz (10 l volume)



Dimension sheet



EX - Schalldämpfer /
silencer



Alle Maße / all dimensions (mm)

VACUUBRAND MD 1 V-SP
Version 2013/07/24

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