

MD 4	3.3 m³/h	2 mbar
MD 4C	3.0 m³/h	2 mbar

VACUUBRAND diaphragm pumps type MD 4 are totally oil free, mechanical three stage vacuum pumps. A special geometry of displacement and head space provides a low ultimate vacuum around 2 mbar and a high volume flow rate of approx. 3 m³/h. Optimized kinetics for minimum work and wear of the diaphragm result in high reliability, low scuffing, long life and low noise level. Only selected resistant materials FPM (e.g. Viton®) and aluminium, perfluorelastomer (e.g. Kalrez®, Simriz®) or PTFE - depending on the version - are used for the gas and vapour contacted parts.

The choice between the two versions depends on the application:

Standard version MD 4:

The materials used - aluminium, FPM (e.g. Viton®) and polyamide - make possible a multitude of applications of vacuum generation in laboratories and process plants, such as vacuum filtration, vacuum degassing and vacuum impregnation.

High pumping speed and low ultimate vacuum for powerful oilfree backing of modern wide range turbo pumps.

Chemistry version MD 4C:

All parts of the chemistry version coming into contact with gases and vapours are made of chemically resistant fluorinated plastic materials. Typical applications are vacuum drying chambers, vacuum concentrators, distillation, gel dryers and transfer of aggressive gases and vapours.

The particular advantages:

- continuous oil free pumping
- selected chemically resistant materials
- no water consumption, no drained water
- long lifetime, easy to change diaphragms and valves
- low noise level
- compact design
- gas ballast valve for working with condensables as standard (C-version only)

Technical data (for 50 Hz, if not stated otherwise)

		MD 4	MD 4C
Max. volume flow rate 50/60 Hz	m³/h	3.3 / 3.8	3.0 / 3.5
Max. volume flow rate 60 Hz	cfm	2.2	2.1
No. of cylinders		4	4
Ultimate vacuum (absolute)	mbar	2	2
	Torr	~ 1.5	~ 1.5
Ultimate vacuum with gas ballast	mbar	-	4
	Torr	-	~ 3
Max. pressure outlet (abs.)	bar	1.1	1.1
Connection inlet side		small flange NW 16 (G1/4") with silencer	for hoses 10 mm I.D. (NPT 1/8-27) for hoses NW 10
Connection outlet side			
Motor power	kW	0.2	0.2
Motor rev. (nominal) 50/60 Hz	min⁻¹	1500 / 1800	1500 / 1800
Water / dust protection		IP 20	IP 20
Dimensions (L x W x H)	mm	315 x 235 x 176	315 x 241 x 176
Mass	kg	15.5	16.2

Items supplied:

Pumps are supplied completely with one phase motor, on/off switch, cable with plug and instructions for use.

Ordering details:

Diaphragm pump

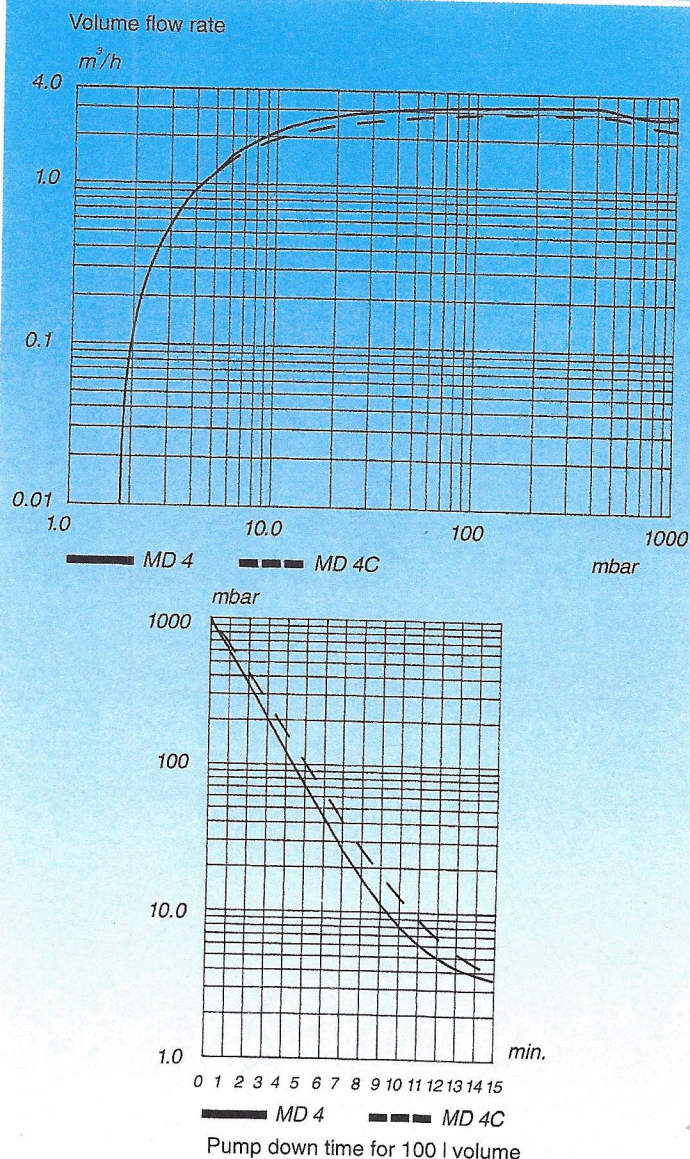
				Cat.-No.
MD 4	230 V~ 50-60 Hz	CEE plug		69 62 90
	230 V~ 50-60 Hz	UK plug		69 63 74
	120 V~ 60 Hz	US plug		69 62 91
	100 V~ 50-60 Hz	US plug		69 62 95
MD 4C	230 V~ 50-60 Hz	CEE plug		69 62 92
	230 V~ 50-60 Hz	UK plug		69 63 78
	120 V~ 60 Hz	US plug		69 62 93
	100 V~ 50-60 Hz	US plug		69 62 94

MD 4

vacuubrand



MD 4C



(Chemistry-) diaphragm pumps MD 4 VARIO and MD 4C VARIO with automatic vacuum control see page 41.