

# Chemistry diaphragm pump MZ 1C

[Link to the website](#)

## Product description

Chemistry-design diaphragm pumps are an excellent solution for continuous, oil-free pumping of corrosive gases and vapors. The two-stage construction provides the advantageous combination of high pumping speed and low ultimate vacuum. All major parts in contact with pumped media are made of chemically resistant fluoroplastics. Well-proven PTFE-sandwich diaphragms increase reliability and extend operating life. The MZ 1C pump is equipped with a gas ballast valve for continuous condensate purge increasing the pumping capability of condensable vapors. It features slim design for space-saving installation and good vacuum performance. A manual vacuum regulator valve with dial gauge for adjustment of pumping speed and ultimate vacuum is available as accessory.

## Performance features

- outstanding chemical resistance and superior vapor tolerance
- convenient, quick and simple to use due to the top mounted power switch
- optimized vacuum even with gas ballast for continuous purge
- whisper quiet and very low vibration
- maintenance-free drive system and proven long diaphragm life

## Ordering data

| Product name | Nominal mains voltage   mains frequency | Plug type | Articleno. |
|--------------|-----------------------------------------|-----------|------------|
| MZ 1C        | 220-230 V   50-60 Hz                    | CEE       | 20724100   |
| MZ 1C        | 220-230 V   50-60 Hz                    | UK, IN    | 20724102   |
| MZ 1C        | 100-115 V   50-60 Hz<br>120 V   60 Hz   | US        | 20724103   |
| MZ 1C        | 220-230 V   50-60 Hz                    | CN        | 20724106   |

## Items supplied

Pump completely mounted, ready for use, with manual.

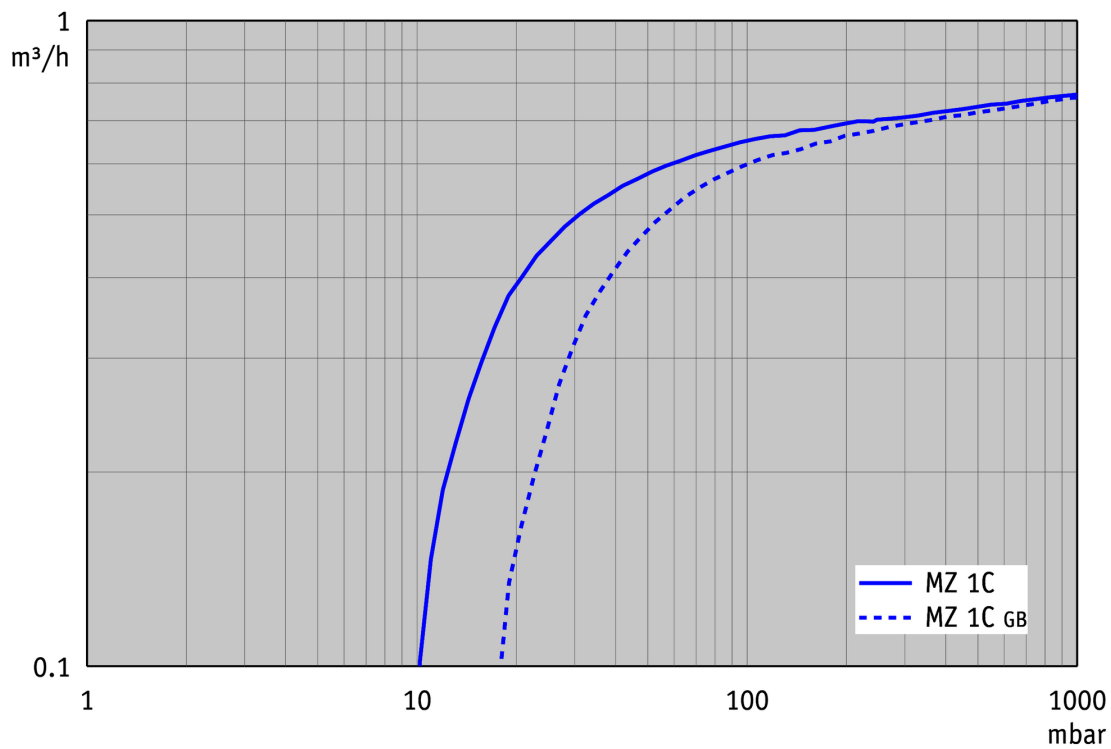
## Accessories

- Set of diaphragms and valves MZ 1C (20696876)
- Silencer with hose 5cm DN 8-10mm (20636588)
- Vacuum tubing transparent DN 8 mm (20686061)

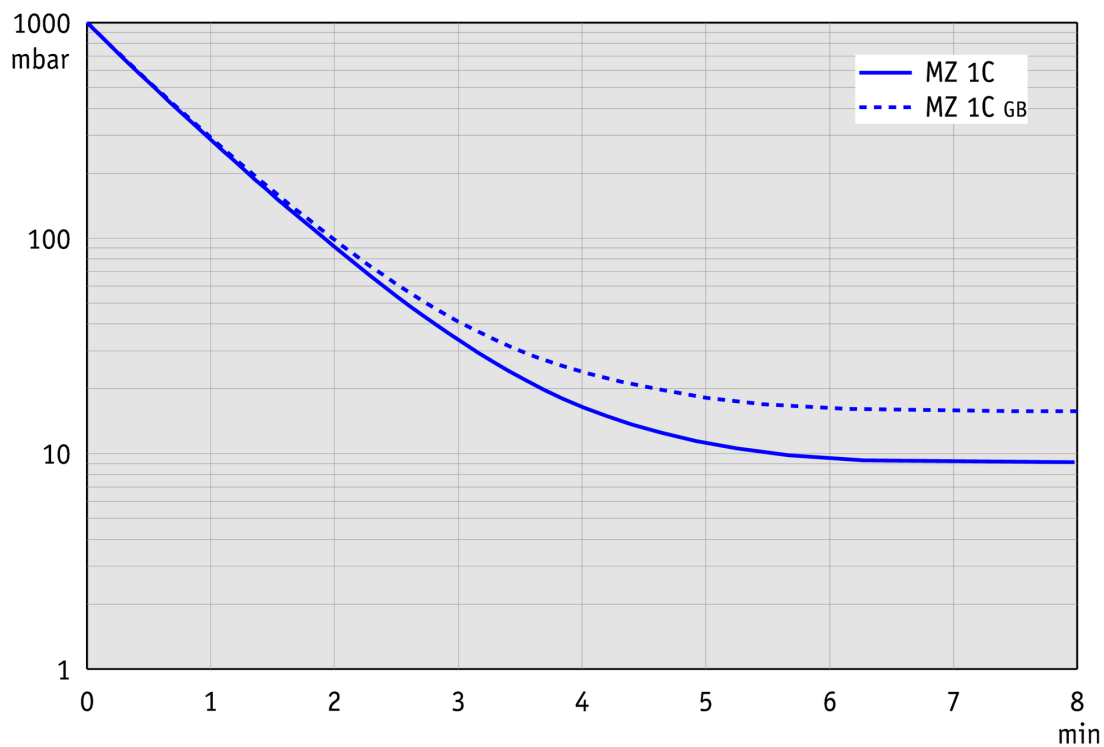
## Technical data

| Max. pumping speed 50 Hz (m³/h)                                                                                  | 0.75 m³/h                                    |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Max. pumping speed 60 Hz (cfm)                                                                                   | 0.5 cfm                                      |
| Ultimate vacuum                                                                                                  | 12 mbar / 9 torr                             |
| Ultimate vacuum with gas ballast                                                                                 | 20 mbar / 15 torr                            |
| Number of heads                                                                                                  | 2                                            |
| Number of stages                                                                                                 | 2                                            |
| 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 8-10 mm                       |
| Outlet connection                                                                                                | Hose nozzle DN 8-10 mm                       |
| Rated motor power                                                                                                | 0.06 kW                                      |
| Rated speed 50/60 Hz                                                                                             | 1500/1800 min <sup>-1</sup>                  |
| Protection class IEC 60529                                                                                       | IP 40                                        |
| Dimensions (L x W x H)                                                                                           | 312 mm x 121 mm x 170 mm                     |
| Weight                                                                                                           | 6.7 kg                                       |
| Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU·PURE®) | 45 dBA                                       |
| ATEX conformity                                                                                                  | II 3/- G Ex h IIC T3 Gc X Internal Atm. only |
| NRTL certification                                                                                               | Yes                                          |

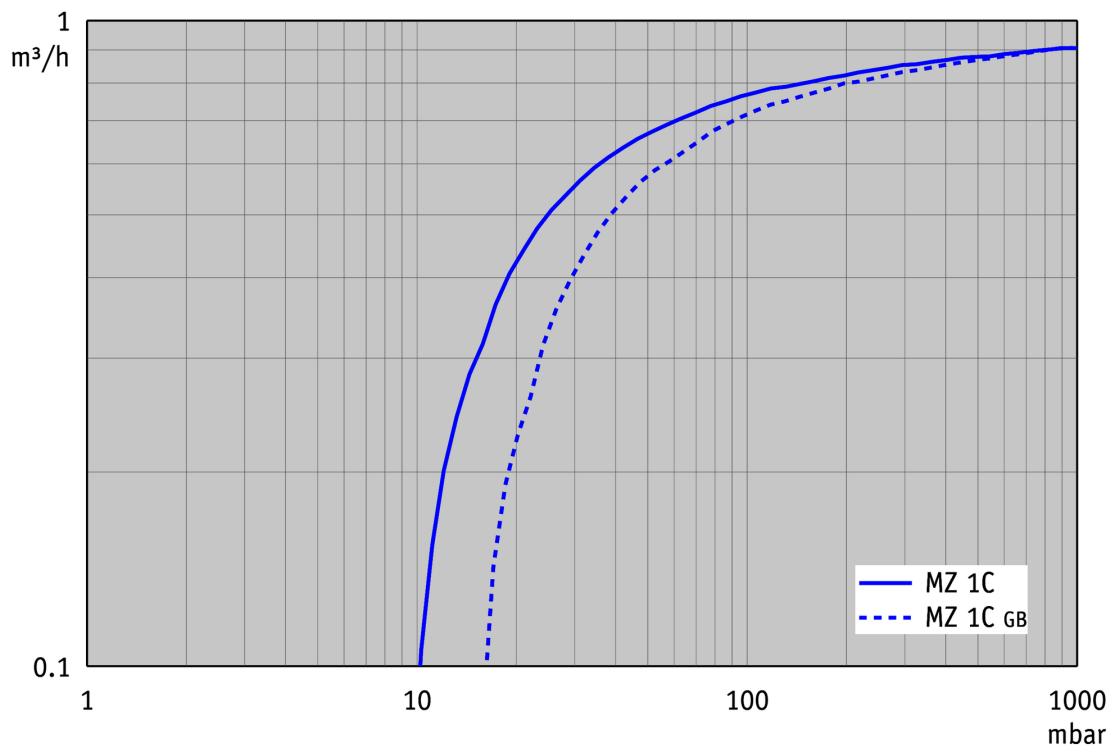
## Pumping speed graph at 50 Hz



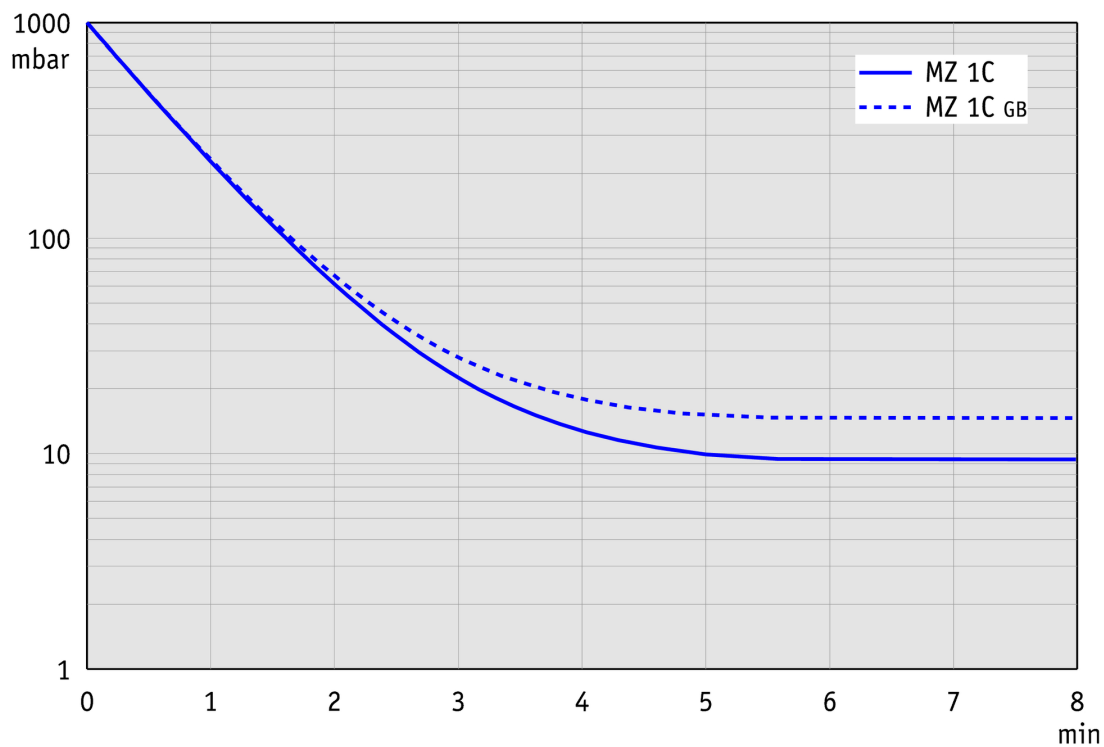
## Pump down graph at 50 Hz (10 l volume)



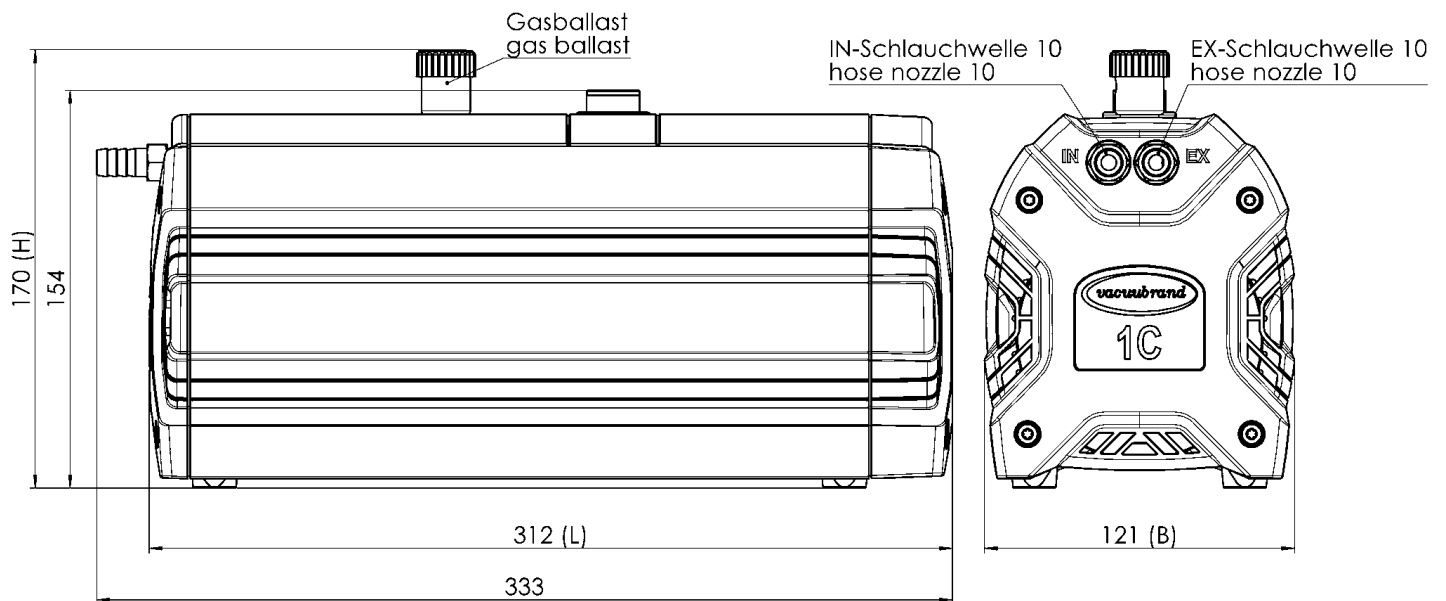
## Pumping speed graph at 60 Hz



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



## Dimension sheet



Gewicht / weight 230V : 6,7 kg  
Alle Maße / all dimensions (mm)

VACUUBRAND MZ 1C  
Version 2011/03/08

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