



MP47

Analytical Diaphragm Pump Series MP®

Versions MP47, MP47-Z, MP47.../EX

Special Features

- Corrosion-resistant
- 100 % lubricant-free
- Gas-tight
- Maintenance-free
- Diaphragm break monitoring possible
- Long service life
- ATEX certified versions for hazardous zone 1 areas

Application

This diaphragm pump MP47 is suitable for corrosive gases. It is specially designed for problems in the analytical technology.

Description

All parts of the diaphragm pump MP47 in contact with the medium are made of PTFE. The conveyed gas remains analytically pure due to the absolutely lubricant-free pump. A special diaphragm and valve system ensures maintenance-free operation and a long service life.

The MP47 is available for 230 V or 115 V power supply and in a version according to ATEX II 2G for applications in hazardous areas as well.

The standard MP47 is designed for normal applications at a maximum gas flow of 6 NI/min. In case of higher capacity requirements up to flow rates of 17 NI/min, we recommend the type MP47-Z.

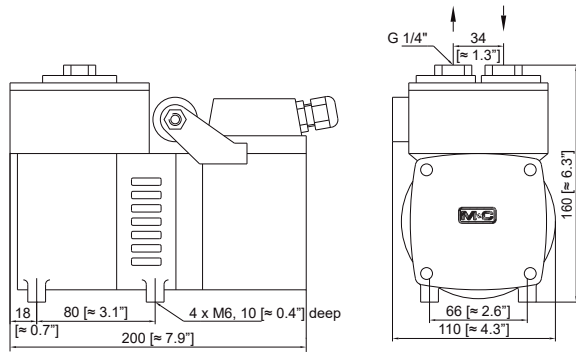
Optionally, the MP47.../R pump can be supplied with an integrated needle valve in the pump head for adjusting the flow rate.

– See data sheet "Analytical Diaphragm Pump Series MP® Versions MP47/R and MP47-Z/R" –

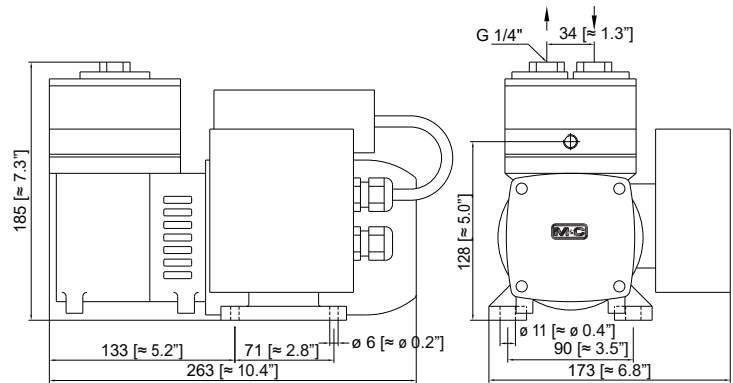
M&C provides for the series MP47 as an option a diaphragm break monitoring MP47.../D. It is equipped with a special double-diaphragm safety system.

– See data sheet "Analytical Diaphragm Pump Series MP® Version MP47.../D" –

Pump MP47/MP47-Z

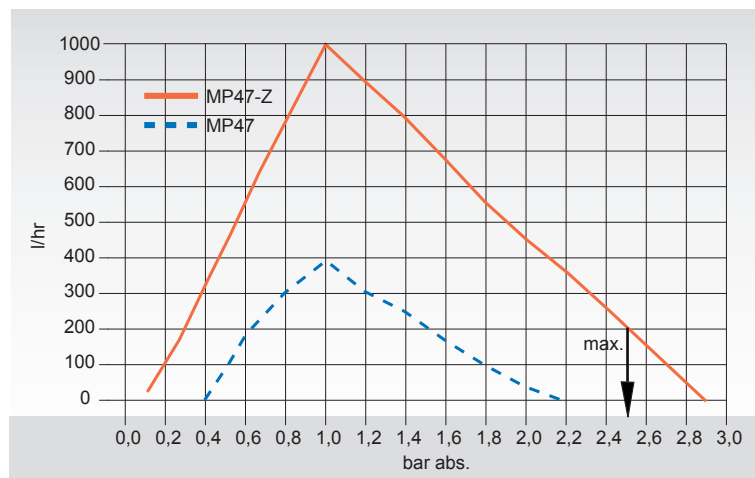


Pump MP47-EX with an Ex motor



Dimensions in mm

Performance characteristics MP47/MP47-Z



Working pressure for MP47-Z is 2.5 bar abs. max.

Technical Data

Diaphragm pump	MP47	MP47-EX	MP47-Z	MP47-Z/EX
Part number 230 V/50 Hz	02P1000	02P1200	02P1100	02P1250
Part number 115 V/60 Hz	02P1000a	02P1200a	02P1100a	02P1250a
Degree of protection Ex pump parts		II 2/2G Ex h IIB Gb		II 2/2G Ex h IIB Gb
Degree of protection Ex motor		II 2G Ex e q IIC T3 Gb Motor		II 2G Ex e q IIC T3 Gb Motor
Degree of protection housing	IP20 EN 60529	IP44 EN 60529	IP20 EN 60529	IP44 EN 60529
Capacity max.	6.0 NI/min without pressure 0.85/1.25 bar abs. on suction/pressure: 2.5 NI/min		17 NI/min without pressure	
Operating pressure	0.4 to 2.2 bar abs.		0.1 to 2.5 bar abs.	
Sample temperature	-30 to +80 °C [-22 to 176 °F]	+5 to 40 °C [41 to 104 °F]	-30 to +80 °C [-22 to 176 °F]	+5 to 40 °C [41 to 104 °F]
Ambient temperature	-10 to +40 °C [14 to 104 °F]	+5 to 40 °C [41 to 104 °F]	-10 to +40 °C [14 to 104 °F]	+5 to 40 °C [41 to 104 °F]
Storage temperature	-15 to +60 °C [5 to 140 °F]			
Power consumption	110 W	70 W	110 W	70 W
Current consumption 230 V/115 V	0.75 A/1.7 A	0.96 A/1.91 A	0.75 A/1.7 A	0.96 A/1.91 A
Gas connections	G 1/4" female DIN ISO 228/1*			
Material of sample-contacting parts	PTFE			
Operation mode	100 % continuous duty, start of the pump only without pressure			
Weight	4.4 kg [≈ 9.7 lbs]	5.5 kg [≈ 12.1 lbs]	4.4 kg [≈ 9.7 lbs]	5.5 kg [≈ 12.1 lbs]

* The dimensions and designation of the screw-in threads correspond to the respective applicable standard. The tolerances of the thread standards are matched to metal threads and cannot be applied to plastic threads.

Please note: NI/h and NI/min refer to the German standard DIN 1343 and are based on these standard conditions: 0 °C [32 °F], 1013 mbar.