



MP48/R and MP48/R EX

# Analytical Diaphragm Pump Series MP®



Versions MP48/R, MP48/R EX

## Special Features

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

## Application

This diaphragm pump MP48 is suitable for corrosive gases. It is specially designed for problems in the analytical technology.

## Description

All parts of the diaphragm pump MP48 in contact with the medium are made of PTFE or FFKM. 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.

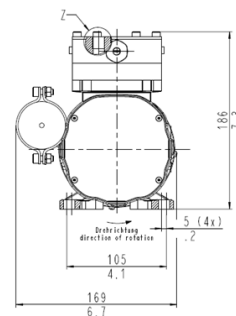
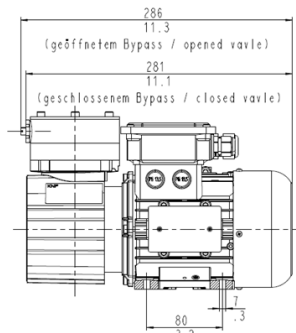
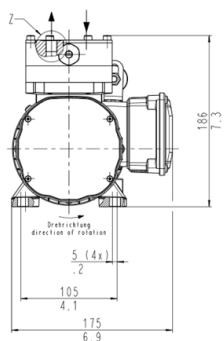
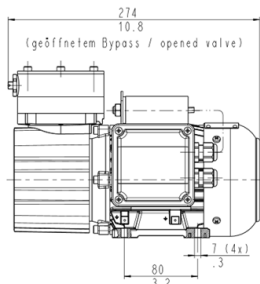
The pump is available for 230 V or 115 V power supply and in a version according to ATEX  II 2 G for applications in hazardous areas as well.

With a flow rate of 16 NI/min the MP48 is optimally designed for applications with higher power requirements.

The pumps MP48/R and MP48/R EX are supplied as standard with an integrated needle valve in the pump head for flow adjustment.

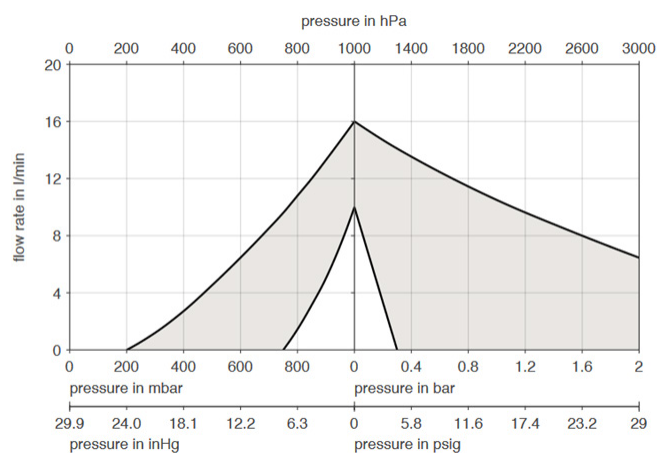
Pump MP48/R

Pump MP48/R EX with an Ex motor



Dimensions in mm/Inches

Performance characteristics MP48/R and MP48/R EX



Flow rate determined at 20 °C, 1013 mbar abs. (pressure range 0 to 1013 mbar abs. according to ISO 21360-1/2)

Technical Data

Diaphragm pump	MP48/R		MP48/R EX*	
Part No.	02P4800	02P4800A	02P4850	02P4850A
Voltage	230 V	115 V	230 V	115 V
Degree of protection: motor	IP55 EN 60529		IP66 EN 60529	
Degree of protection: pump	IP54 EN 60529		IP54 EN 60529	
Ex marking	None		II 2G Ex h IIB+H2 T3 Gb for the pump II 2G Ex de IIC T4 for the motor	
Capacity max.	10 to 16 NI/min ±10 % at atmospheric pressure			
Operating pressure max.	3 bar abs.			
Ambient temperature	+5 to 60 °C [41 to 140 °F], 0 °C [32 °F] if non-condensing (frost-free)		+5 to 50 °C [41 to 122 °F]	
Sample temperature	0 to +60 °C [32 to 140 °F]		+5 to 50 °C [41 to 122 °F]	
Storage temperature	+5 to 40 °C [41 to 104 °F]			
Transport temperature	-10 to +60 °C [14 to 140 °F]			
Permitted humidity (non-condensing)	30 to 85 %			
Frequency	50 to 60 Hz		50 to 60 Hz	
Current consumption 50 Hz	1.35 A	2.7 A	1.09 A	2.18 A
Current consumption 60 Hz	0.8 A	1.7 A	1.06 A	2.12 A
Power P2 at the motor shaft	-	-	120 W	120 W
Power consumption P1	185 W	195 W	-	-
Gas connections	G 1/4" female, DIN ISO 228/1			
Material of sample-contacting parts	PTFE modified, PTFE, FFPM			
Operation mode	100 % continuous duty, start of the pump only without pressure			
Weight	7.3 kg [≈ 16.1 lbs]	7.3 kg [≈ 16.1 lbs]	7.2 kg [≈ 15.9 lbs]	7.4 kg [≈ 16.3 lbs]

\* The pumps are intended for conveying air as well as gases, vapors and mists in explosion groups II A and II B, temperature class T4

Ex e II T3 Motor 115 V/60 Hz or 230 V/50 Hz standard

Ex e II T4 Motor 230/380 V/50 Hz on request

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.