



ANKERSMID Diaphragm pump

AMP 057 Series

Application

Ankersmid Mini Diaphragm Pumps are used for the transportation of sample gas in sample conditioning systems in the chemical industry, for environmental applications, and in production technology; some application examples are sampling gases from the ambient environment, exhaust gases and smoke analysis. The **AMP 057** is easy to install and can be adapted to a variety of process conditions.

Description

The new range of **AMP 057 / AMP 057Ex** pumps are equipped with the patented stress-optimized structured diaphragm, resulting in a durable product of high pneumatic performance and compact size. Special valves ensure minimum resistance to flow.

The pumps can be operated by either standard 230VAC, or for ex-proof applications, with a motor with various options on voltages and frequencies.

Principle

The basic construction of the AMP diaphragm gas sampling pumps is simple. An elastic diaphragm is moved up and down by an eccentric (see illustration). On the down-stroke it draws the air or gas being handled through the inlet valve. On the up-stroke the diaphragm forces the medium through the exhaust valve and out of the head. The compression chamber is hermetically separated from the drive mechanism by the diaphragm. The pumps transfer, evacuate and compress completely oil-free.



* Picture may vary

- **No contamination of the media due to oil-free operation**
- **Low maintenance**
- **High performance because of structured diaphragm**
- **High level of gas tightness**
- **Long product life thanks to structured diaphragm**
- **Very quiet and little vibration**
- **Copes well with vapour and condensation**
- **Cool running motor even when in constant use**
- **Can operate in any installed position**
- **Explosion proof version according to ATEX for Zone 1**



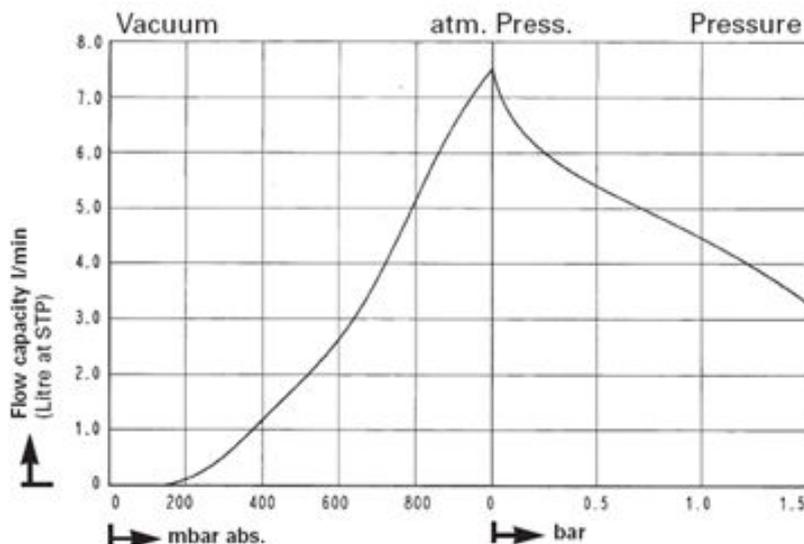
ANKERSMID Diaphragm pump
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Technical data

Model AMP	AMP 057	AMP 057Ex
Capacity	7,0 l/min without pressure 0,9 / 2,0 bar abs. on suction / pressure side: 5 l/min	
Max. operating pressure (bar g)	0,2 to 2,5 bar abs.	
Sample gas inlet/outlet	G1/8" f	
Ultimate vacuum (mbar abs.)	140	
Materials		
Pump head	PVDF	
Diaphragm	PTFE-coated	
Valves	FFPM/Kalrez®	
Sample and ambient temperature	+5°C to 40°C	
Power consumption	70W	65W (115V/60Hz: 60W)
Protection class	IP54	Ⓔ II2G EEx de, q IIB T4 IP 54 EN 60529
Operating current	0,45A (115VAC: 0,7A)	0,3A (115VAC: 0,45A)
Operation mode	100% continuous duty, start of the pump only without pressure	
Weight	3,1Kg	3,3Kg
Power supply	230V/50Hz 115V/60Hz	230V/50Hz 115V/60Hz

PTFE = Polytetrafluoroethylene (Teflon®)
 PVDF = Polyvinylidene difluoride
 FFPM = Perfluorinated Elastomer (Kalrez®)

Performance characteristics

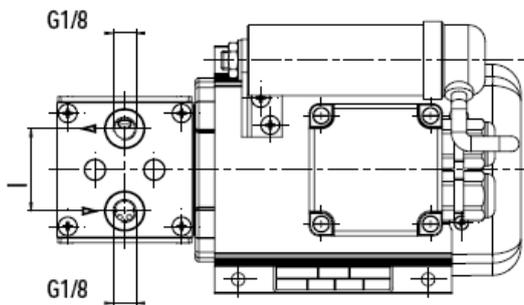
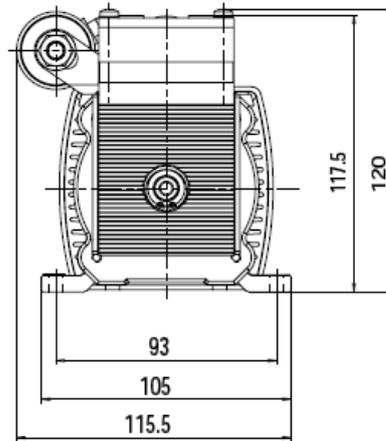
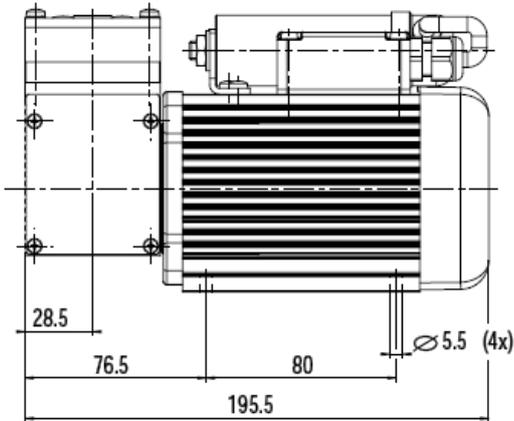




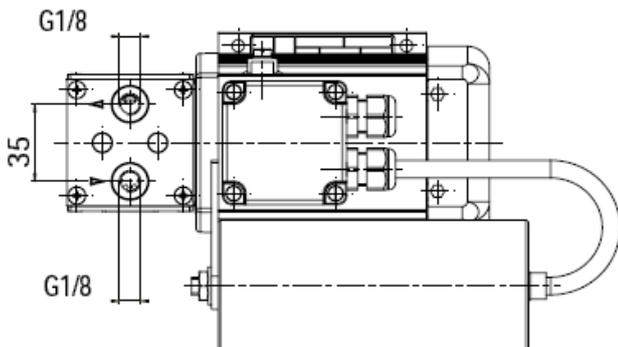
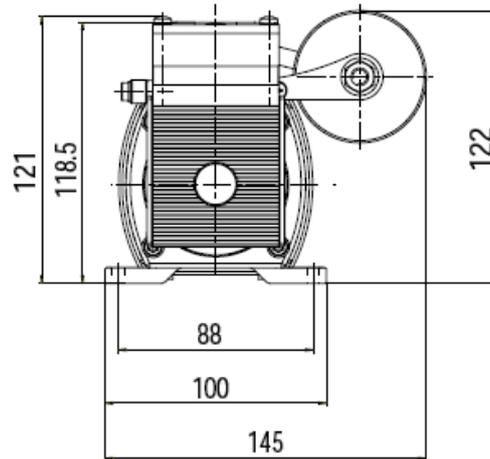
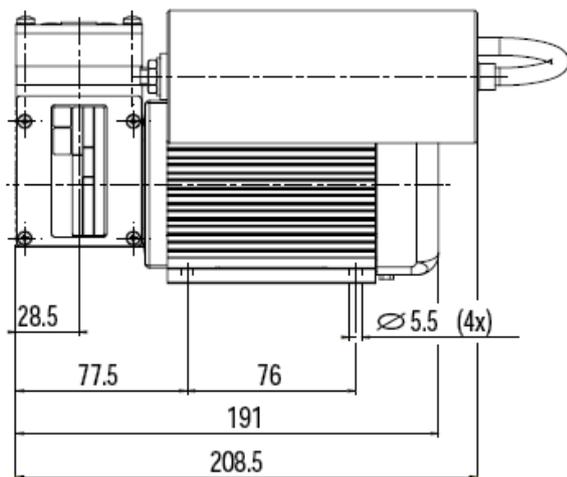
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Dimensions

AMP 057



AMP 057Ex



All dimensions in mm