

Diaphragm Sample Gas Pump

PSP87

Application

The diaphragm sample gas pump **PSP87** is used for continuous extractive gas analytics. It mainly serves for unadulterated sucking and pumping of highly aggressive and corrosive sample gas from sample point to the analyzer house resp. analyzer. Typical applications are emission measurements e.g. in waste incinerations and process measurements e.g. in chemical, petro-chemical, steel-, glass- or cement-industry.

Technology

The **PSP87** is a reliable diaphragm pump with compact dimensions that guarantee an optimum integration in systems and devices. It has a highly gas tight PVDF-pump head whose components have been developed especially for pumping of aggressive and corrosive gases. Special valves made of FFPM ensure a high tolerance to vapor and condensate. The patented PTFE-coated diaphragm was optimized using the finite-element-method. The results are an extremely long lifetime of the diaphragm and a high pneumatic performance of the pump. The pump is operating absolutely oil-free and ensures therefore an unadulterated pumping, evacuating and compressing of gases. The pump is ready for mounting and can operate in any position.

Functions

Core of the **PSP87** is the elastic diaphragm which is moved up and down in its center by an eccentric. In this way gas is pumped through self-opening and-closing valves.

Due to the IP54 housing the pump is protected perfectly against spray water, dust and dirt.

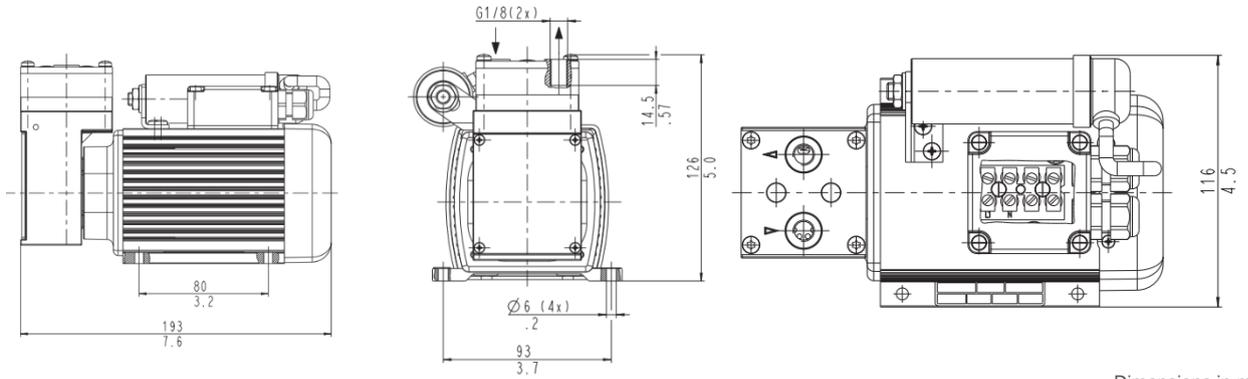


- ✓ Unadulterated pumping of sample gas
- ✓ Particularly corrosion resistant sample gas wetted components made of PTFE, PVDF and FFPM
- ✓ Pump capacity 7,5l/min without pressure
- ✓ Tension optimized long-lasting PTFE-diaphragm
- ✓ Long lifetime
- ✓ Maintenance free operation
- ✓ IP54 housing
- ✓ Simple mounting and integration
- ✓ Operation in any position

Technical Data

PSP87			
Part No.		92100003	92100610
Pump capacity pressureless	l/min	7,5	7,5
End vacuum	mbar	200	
Pump start	mbar abs.	500	atmospheric pressure
Max. operating excess pressure	bar ü	1,5	
Ambient temperature	°C	+5...+40	
Media temperature	°C	+5...+40	
Design data			
Dimensions (W x H x D)	mm	193 x 126 x 116	
Weight	kg	3,1	3,3
Media wetted materials		PTFE (membrane), FFPM (valves), PVDF (pump head)	
Connections		2 x G 1/8"i DIN ISO 228/1	
Electrical data			
Operating voltage ± 10%	V	230V AC 50Hz	115V AC 60Hz
Protection rate		IP54 EN 60529	
Electrical connection		connection box	
Operating current	A	0,5	0,7
Power	W	70	
Overload protection		thermo switch	

Dimensions



Dimensions in mm

Performance diagram

