

Diaphragm Sample Gas Pump

PSP86

Application

The diaphragm sample gas pump **PSP86** is used for continuous extractive gas analytics. It mainly serves for unadulterated sucking and pumping of sample gas from sample point to the analyzer house resp. analyzer. Typical applications are emission measurements e.g. in power plants or waste incinerations and process measurements e.g. in chemical, petro-chemical, steel-, glass- or cement-industry.

Technology

The **PSP86** is a reliable diaphragm pump with IP20-housing, that guarantees an optimum integration in systems and devices. It has a highly gas tight pump head whose components have been developed especially for pumping of aggressive and corrosive gases. Special valves ensure a high tolerance to vapor and condensate. The patented 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 can operate in any position.

Functions

Core of the **PSP86** 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 compact design and excellent features **PSG** integrates the **PSP86** also in their sample gas coolers and conditioning systems.

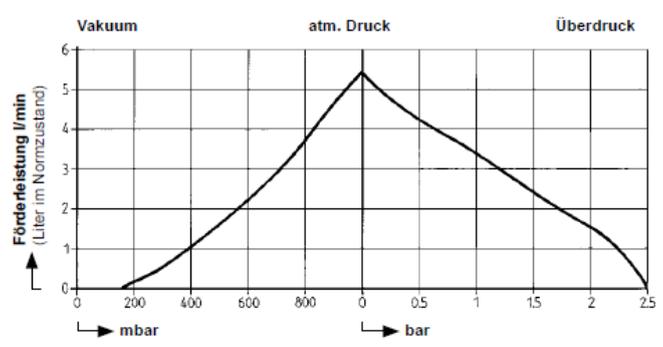
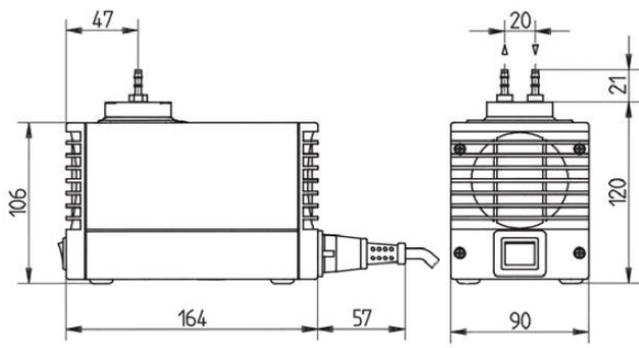


- ✓ Unadulterated pumping of sample gas
- ✓ Corrosion resistant sample gas wetted components
- ✓ Start up also against vacuum pressure
- ✓ Tension optimized long-lasting PTFE-diaphragm
- ✓ Maintenance free operation
- ✓ Compact IP20-housing with On/Off-switch
- ✓ Low weight
- ✓ Simple mounting and integration
- ✓ Operation in any position
- ✓ Completely ready for mounting

Technical Data

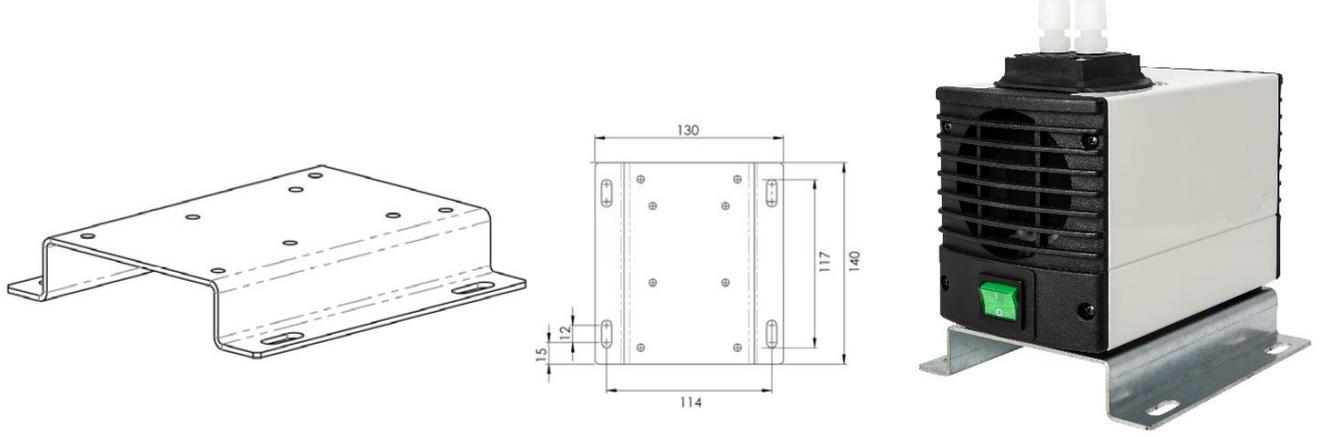
PSP86					
Part No.		92300220	92300222	92300221	92300223
Mounting set (1x mounting plate / 4x vibration dampers / 2x PVDF-fittings DN4/6)		no	no	yes	yes
Pump capacity pressureless	l/min	5,5			
End vacuum	mbar	190			
Pump start	mbar	> 700 mbar abs.			
Max. operating excess pressure	bar ü	2,5			
Ambient temperature Umgebungstemperatur	°C	+5...+40			
Media temperature	°C	+5...+40			
Design data					
Dimensions (W x H x D)	mm	90 x 120 x 164		130 x 145 x 164	
Weight	kg	1,9		2,1	
Media wetted materials		PTFE (membrane), FFPM (valves), PPS (pump head)			
Connections		2 x G 1/8"i DIN ISO 228/1		DN 4/6 PVDF	
Electrical data					
Operating voltage ± 10%	V	230V AC 50Hz	115V AC 60Hz	230V AC 50Hz	115V AC 60Hz
Protection rate		IP20 EN 60529			
Electrical connection		2 x 0,5 mm ² single wires, length 900 mm			
Start up current	A	0,65	1,1	0,65	1,1
Power consumption	W	60	55	60	55

Dimensions **Performance**



Dimensions in mm

Mounting set



The pump with mounting set is delivered with a mounting plate, two PVDF-fittings G1/8"i – DN4/6 and four vibration dampers with screws.

State 07 / 2022 | Subject to change