

Diaphragm Sample Gas Pump

PSP87 EX

Application

The diaphragm sample gas pump **PSP87 EX** is used for continuous extractive gas analytics in explosion zones. 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 EX** is a reliable diaphragm pump with compact dimensions that guarantees 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 EX** 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 IP66 housing the pump is protected perfectly against spray water, dust and dirt.

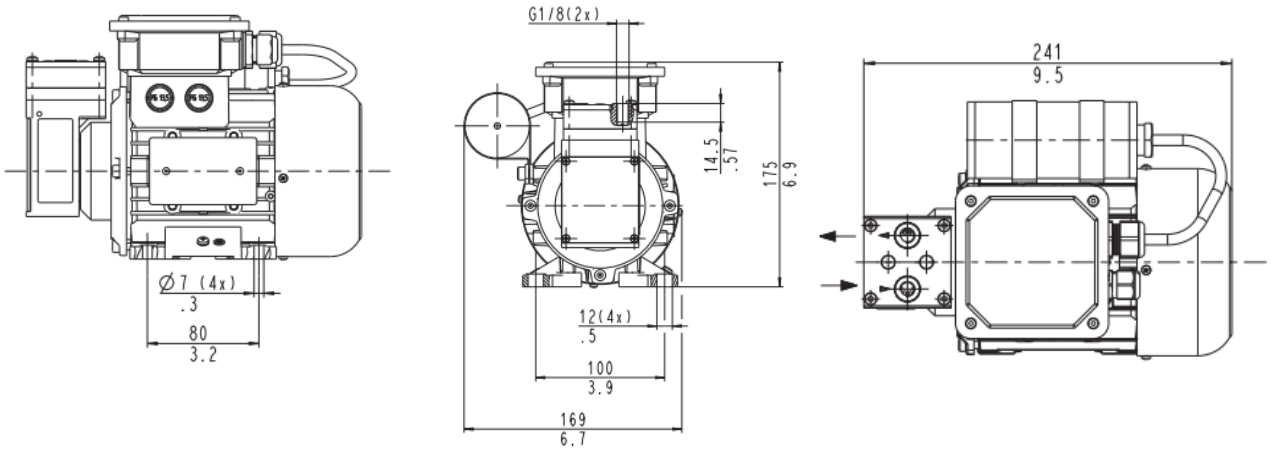


- ✓ Applicable in Ex-zone 1 and 2
- ✓ Unadulterated pumping of sample gas
- ✓ Especially corrosion resistant sample gas wetted components made of PTFE, PVDF and FFPM
- ✓ Pump capacity 7,5l/min without pressure
- ✓ Tension optimized long-lasting PTFE-diaphragm
- ✓ Long lifetime
- ✓ Maintenance free operation
- ✓ IP66 housing
- ✓ Simple mounting and integration
- ✓ Operation in any position

Technical Data

PSP87 EX			
Part No.		92300733	92300734
Pump capacity pressureless	l/min		7,5
End vacuum	mbar		140
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	169 x 175 x 241	
Weight	kg	6,7	
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 50/60Hz	115V AC 50/60Hz
Protection rate		Motor: IP 66 Pump: IP 55	
Ex protection		Pump parts:  II 2G Ex h IIB+H2 T4 Gb Motor:  II 2G Ex dbeb IIC T4	
Electrical connection		connection box	
Operating current 50/60 Hz	A	0,6/0,7	2,18/2,12
Power 50/60Hz	W	166/158	162/155

Dimensions



Dimensions in mm

Performance diagram

