

1 Introduction

1.1 Intended use

Sample gas pumps are intended for installation in gas analysis systems for industrial applications.

The sample gas pump is only intended to convey gaseous media. It is not suitable for liquids.

Please note the additional information in chapters "Product Description" and "Operation and Control" along with the information on specific intended use, existing material combinations, as well as pressure and temperature limits in the data sheets.

DANGER**Potentially explosive atmosphere**

Explosion hazard if used in hazardous areas.

The device is not suitable for operation in hazardous areas with potentially explosive atmospheres.

Do not expose the device to combustible or explosive gas mixtures.

When installed outdoors, ensure adequate protection from the weather, see chapter [Requirements for the set-up location](#) [[> page 8](#)]

1.2 Product key

The device is delivered with different configurations. The part number given on the type plate informs you about the specific configuration of your device.

On the type plate you will find the order number as well as the 13-digit product key. This number is a code where each digit (x) describes a certain feature:

42	xx	x	x	x	x	x	9	0	00	Product characteristic	
										Base model	
	56									P2.3 400 L/h (direct operation without intermediate flange)	
	57									P2.4 400 L/h (with intermediate flange)	
	63									P2.83 800 L/h (direct operation without intermediate flange)	
	64									P2.84 800 L/h (with intermediate flange)	
										Motor voltage	
	1									230 V 50/60 Hz; 0,78/0,86 A	
	2									115 V 50/60 Hz; 1,56/1,72 A	
	5									400 V 50 Hz; 0,52 A	
										Pump head position	
	1									Normal position vertical	
	2									turned by 180° *	
										Pump head material	
	1									PTFE	
	2									Stainless steel 1.4571	
	3									PTFE with bypass valve *	
	4									Stainless steel 1.4571 with bypass valve *	
										Valve material	
	1									up to 100 °C; PTFE / PVDF **	
	2									up to 160 °C; PTFE / PEEK	
										Screw-in connections (for 230 V and 400 V voltage)	
										PTFE Pump body	Stainless steel pump body
	9									DN 4/6 (Standard)	6 mm (Standard)
	1									DN 6/8	8 mm
	2									3/8"-1/4"	3/8"
	3									1/4"-1/8"	
	4									1/4"-1/6"	1/4"
									Screw-in connections (for 115 V voltage)		
									PTFE Pump body	Stainless steel pump body	
9									1/4"-1/6" (Standard)	1/4" (Standard)	
1									DN 6/8	8 mm	
2									3/8"-1/4"	3/8"	
3									1/4"-1/8"		
5									DN 4/6	6 mm	
									Mounting accessories		
9									incl. mounting bracket and bumper *		

* not for P2.4 & P2.84

** not for P2.4, P2.83 & P2.84

If there are special instructions for a pump type, they are marked in the manual.

Take care of the limits of the pump. When ordering spare parts chose for the type matching part numbers (e.g. valves).

1.3 Scope of delivery

P2.3, P2.83	P2.4, P2.84
1 x Sample gas pump with motor	1 x Pump body with intermediate flange
4 x Rubber-metal bumpers	1 x Motor
1 x Mounting bracket	1 x Coupling flange
Product documentation	1 x Coupling
	1 x Mounting ring
	Product Documentation

1.4 Product description

The sample gas pumps are only intended to convey gaseous media. They are not suitable for liquids.

Please note the specifications in the appendix to this manual on the specific intended use, existing material combinations, as well as pressure- and temperature limits. In addition, please also note the specifications and markings on the nameplates.

The pump head and the drive motor on the P2.4/P2.84 sample gas pump are isolated for use in hot applications. The sample gas pump has a split adapter which can be mounted with one half inside a heated cabinet while the other half mounted on the outside supports the drive motor. In doing so, wall thicknesses of up to 30 mm can be bridged without additional modifications.

Applications where sample gas is still moist, can result in condensation in the lines and the pump body. In these cases the pump head must be suspended (see item [Alteration of hanging pump bodies](#) [> page 10]).