Sample gas pumps P1.1, P1.1E, P1.2, P1.2E

Gas analysis is key for safe and efficient system operation in the chemical industry, petrochemistry or biochemistry. Many of the analysis processes used in these fields require sample gas extraction and conditioning.

Sample gas pumps convey the sample gas from the sampling point to the conditioning system. The main item in these pumps designed specifically for the application is the PTFE single-piece bellow. Combined with the pump head, also single-piece, this solution provides high resistance against particularly aggressive sample gas. Turning the pump head allows gas with condensate to be conveyed without a problem.

- Easy to replace valves
- Single-piece bellows
- Conveys sample gas with condensate
- Proven pump technology
- Attractive price
- Requires little space
- Mounting accessories and screw connections sold separately
- Housing version IP20
- Optionally with built-in bypass valve
- 24 V version available
- 12 V version available upon request
- FM C-US Approval (ordinary locations) optional

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Technical data

Technical data P1.1 / P1.1E	
Nominal voltage / Power input	230 V 50 Hz, 0.48 A 115 V 60 Hz, 0.84 A 12 V DC, 1,55 A 24 V DC, 0.8 A
Protection class OEM / housing & 24 V	IP 00 / IP 20
Weight (without accessories)	approx. 1.3 kg (24 V approx. 0.8 kg)
Medium temperature	70 °C
Ambient temperature	0 °C to 50 °C
Nominal output	280 L/h
Materials in contact with media vary by configuration	PTFE, PVDF, 1.4571, 1.4401, Viton

Technical Data P1.2 / P1.2E	
Nominal voltage / Power input	230 V 50 Hz, 0.48 A 115 V 60 Hz, 0.84 A
Protection class OEM / housing:	IP 00 / IP 20
Weight (without accessories):	approx. 1.3 kg
Medium temperature:	see temperature classes
Ambient temperature:	0 °C to 50 °C
Nominal output:	280 L/h
Materials in contact with media vary by configuration:	PTFE, PVDF, 1.4571, 1.4401, Viton

The gas lines are connected via screw-in connections (G1/4 thread). The respective screw-in connections as well as mounting bracket and vibration absorber are sold separately.

Temperature classes

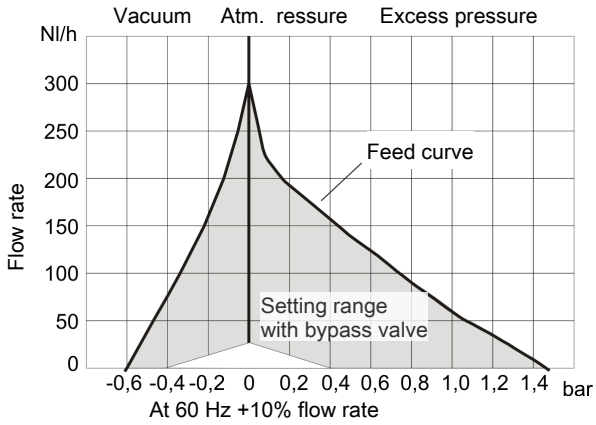
Pump models P1.2/P1.2E		Medium temperature
no flammable gasses in the gas circuit		70 °C
Flammable gasses in the gas circuit above the LEL	T3	70 °C
	T4	50 °C

Marking P1.2/P1.2E

II 3G/- c IIB T4

Note: This device is not suitable for use in explosive areas!

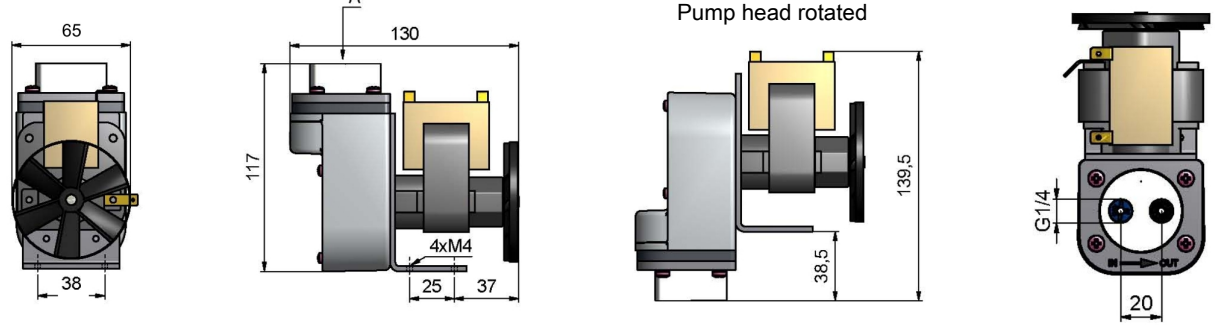
Feed curve



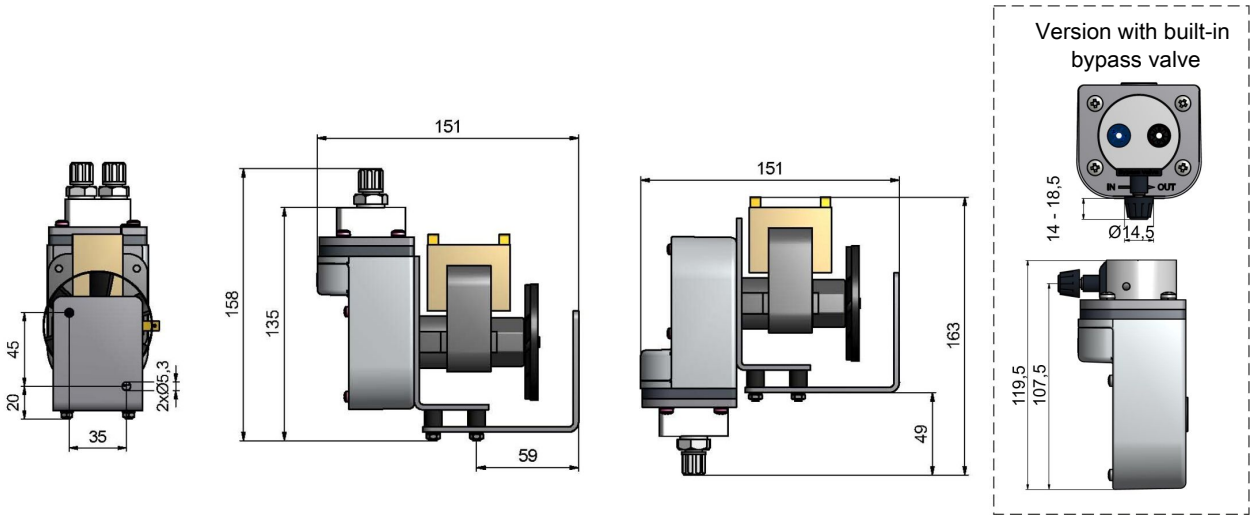
Dimensions P1.1 / P1.2 pump (115 V or 230 V)

The P1.1/P1.2 sample gas pump is connected to electricity via blade receptacles.

without accessories:

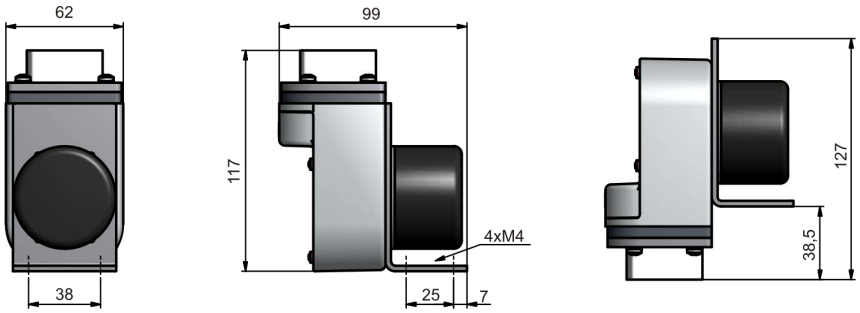


with accessories:



Dimensions P1.1 (12 V DC or 24 V DC)

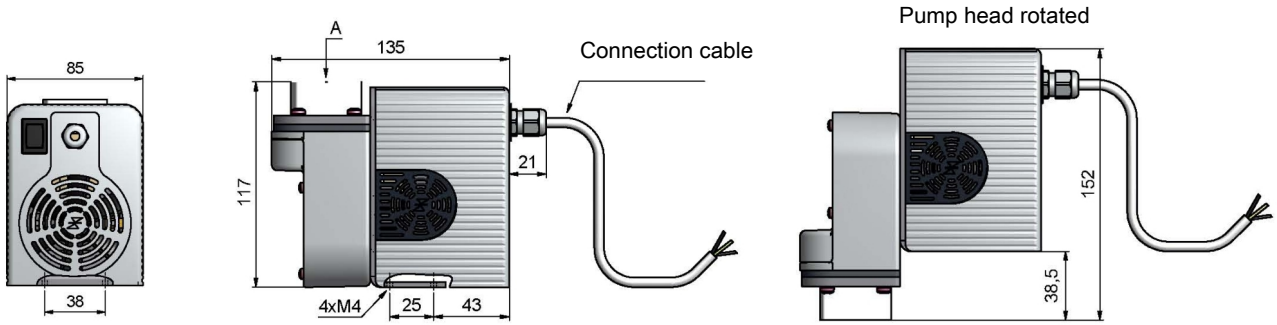
The P1.1 (24 V DC) sample gas pump may be connected by standard 3 m connecting cable.



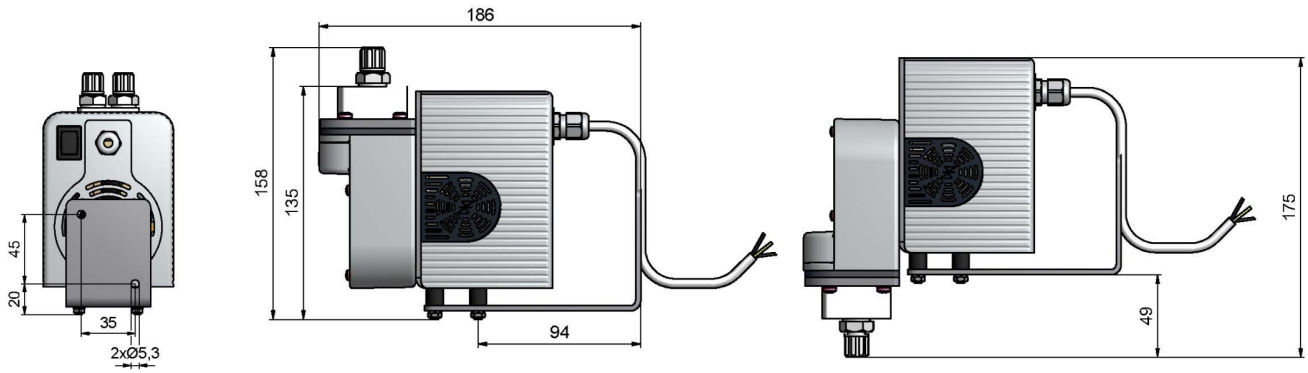
Dimensions P1.1E / P1.2E pump (115 V or 230 V)

The P1.1E/P1.2E sample gas pump may be connected by standard 3 m connecting cable.

without accessories:



with accessories:



Ordering instructions P1.1 / P1.1E

42	28	x	x	x	1	x	x	x	00	xx	Product feature
											Motor voltage
		1									230 V 50 Hz 0.48 A
		2									115 V 60 Hz 0.84 A
		3									12 V DC 1.55 A (on request)
		4									24 V DC 0.8 A
											Pump head position
			1								Normal position vertical
			2								turned by 180°
											Pump head material
				1							PTFE
				2							VA (1.4571)
				3							PVDF with bypass valve
				4							PVDF
											Valve material
					1						up to 70 °C; PTFE / PVDF
											Screw-in connections / pipe fittings
						0					without
						1					PVDF DN 4/6 *
						2					PVDF 1/4”-1/6” *
						3					PVDF 1/4"-1/8" *
						5					VA (1.4401) 6 mm **
						6					VA (1.4401) 1/4" **
											Mounting accessories
							0				without
							1				Mounting bracket and set of vibration dampers
							2				set of vibration dampers only
											Housing* **
								0			without
								1			Housing incl. 3 m connection cable
								2			Housing with on/off switch incl. 3 m connection cable
											Options
									00		without
											Approval
										--	without
										FM	FM-Approval

* PTFE or PVDF pump body only

** VA pump body only

*** not for 12 V DC/24 V DC, the motor is already protected against touching, see drawing

Ordering instructions P1.2 / P1.2E

42	29	x	x	x	1	x	x	x	00	Product characteristic
										Motor voltage
		1								230 V 50 Hz 0.48 A
		2								115 V 60 Hz 0.84 A
										Pump head position
			1							Normal position vertical
			2							turned by 180°
										Pump head material
				1						PTFE
				2						VA (1.4571)
				3						PVDF with bypass valve
				4						PVDF
										Valve material
					1					up to 70 °C; PTFE / PVDF
										Screw-in connections / pipe fittings
						0				without
						1				PVDF DN 4/6 *
						2				PVDF 1/4"-1/6" *
						3				PVDF 1/4"-1/8" *
						5				VA (1.4401) 6 mm **
						6				VA (1.4401) 1/4" **
										Mounting accessories
							0			without
							1			Mounting bracket and set of vibration dampers
							2			set of vibration dampers only
										Housing
								0		without
								1		Housing incl. 3 m connection cable
								2		Housing with on/off switch incl. 3 m connection cable

* PTFE or PVDF pump body only

** VA pump body only

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