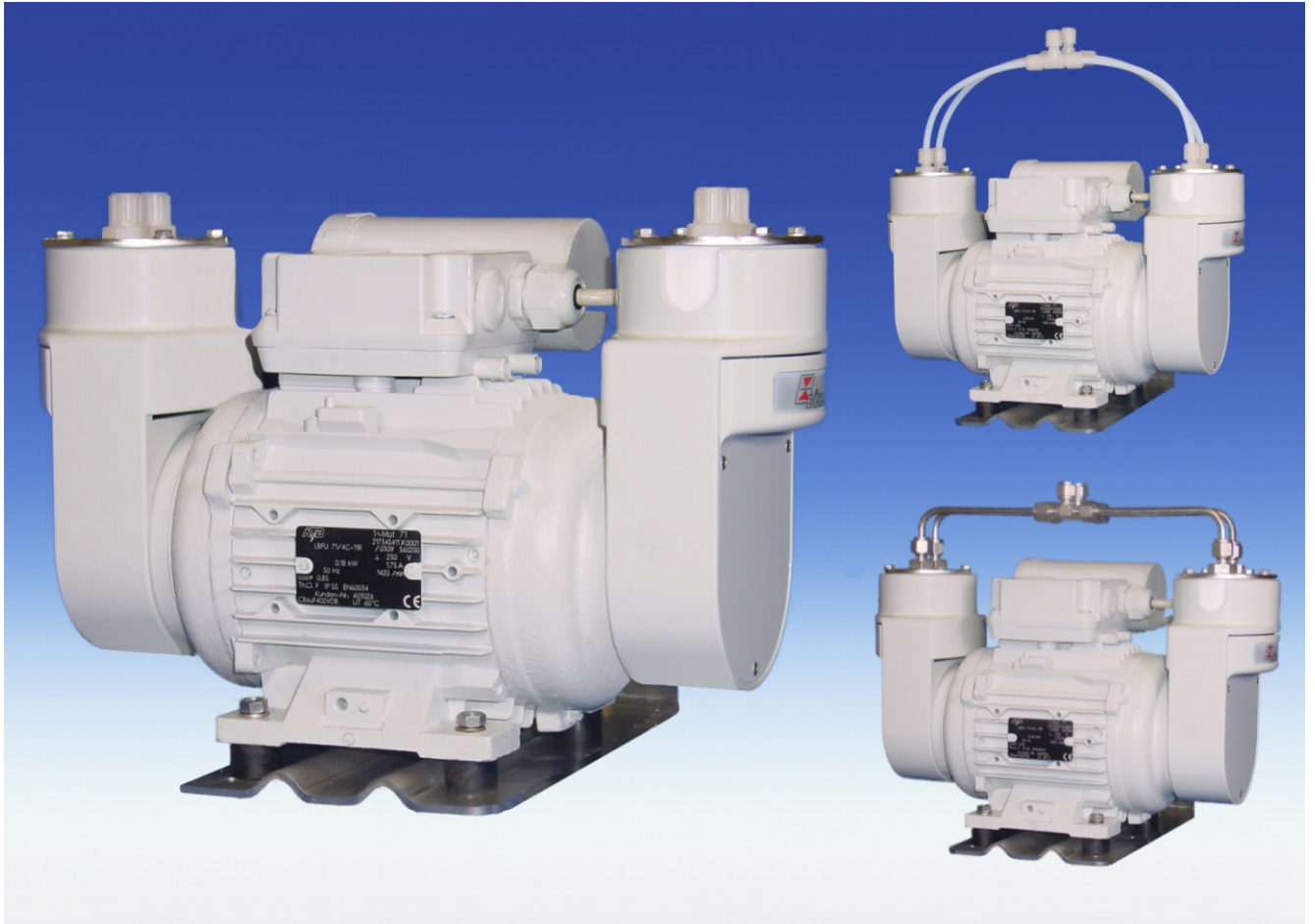


Sample Gas Pump

P 4.3; P 4.83



The transportation of sample gas in sample conditioning systems requires reliable sample pumps. The corrosive nature of the gas and the potential of condensate formation are the real challenges for any pump.

These sample pumps are equipped with a bellow made from solid PTFE. This design has demonstrated the highest reliability and long lifetime in numerous applications. Designed specifically for harsh gas applications that have entrained liquids present or where condensate is expected to form, it is recommended that the pump head be pointed downwards to accommodate draining of these liquids

The arrangement of two identical pump heads attached to a double shaft motor provides an economic solution for analyser systems with two independent gas streams to be drawn from the process.

For applications which require fast response times, the flow rate of P4.83 could be increased by combining the two parallel streams.

- **Robust and reliable design**
- **Easy to replace valves**
- **Adjustable bypass valve (optional)**
- **Bellow made of one solid piece**
- **Pumps gases with entrained liquid**
- **Long life**
- **Low noise**
- **115 V - models with FM C-US approval**
- **Fixing console vibration dampers as standard**

Pump types P4.3 and P4.83

For easy installation of the P4.3 and P4.83 pumps, a support console with vibration dampers is included. The pump head can be ordered optionally with adjustable bypass valves (not applicable for parallel operation).

The difference between the P4.3 and P4.83 pump exists in their flow rate. The P4.3 pump is quoted with 2 x 400 l/h free flow and the P4.83 pump with 2 x 800 l/h free flow.

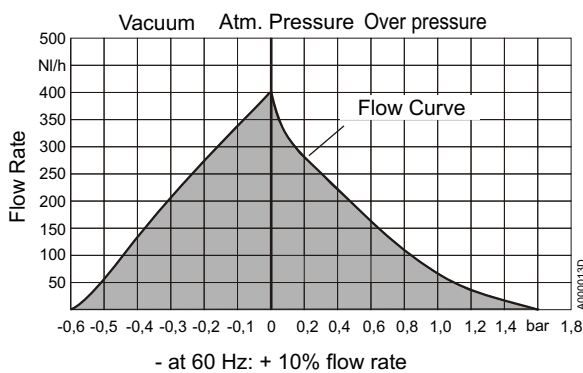
The P4.3 and P4.83 pumps are **not** dedicated for an operation in hazardous areas.

A remarkable increase of the flow rate is reached using the tubing or piping sets (option) combining both gas paths for parallel operation.

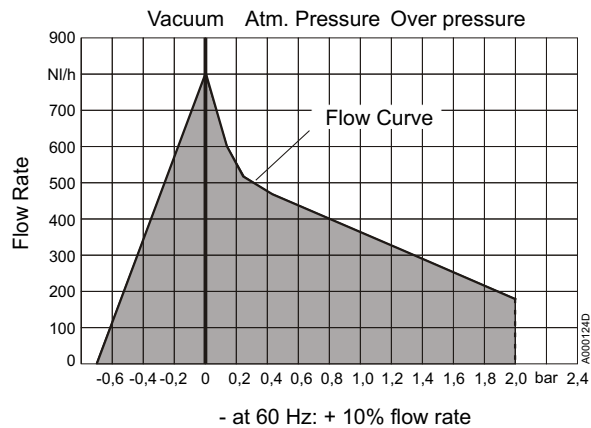
Technical Data

Nominal voltage	See order advices	Media temperature	100 °C Valves: PTFE / PVDF
Nominal current	See order advices		160 °C Valves: PTFE / PEEK
Protection class	electrical IP55	Ambient temperature	max. 60 °C
	mechanical IP20	FM C-US (115 V only)	FM File-No.
Weight	12,5 kg		3038101 / 3038101C
Dead volume	2 x 8,5 ml		

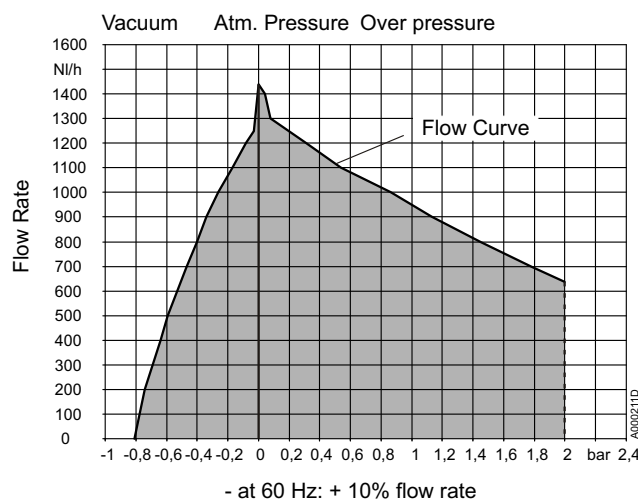
Flow Curve P4.3 (per pump head)



Flow Curve P4.83 (per pump head)

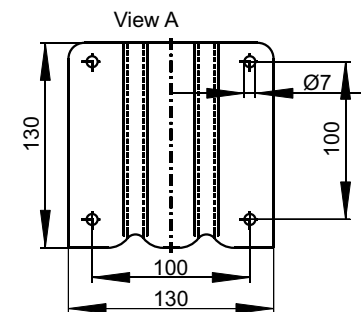
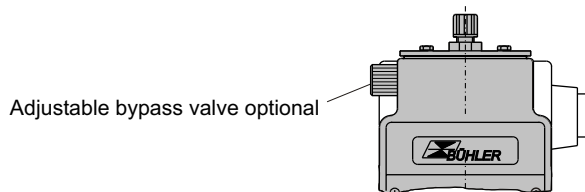
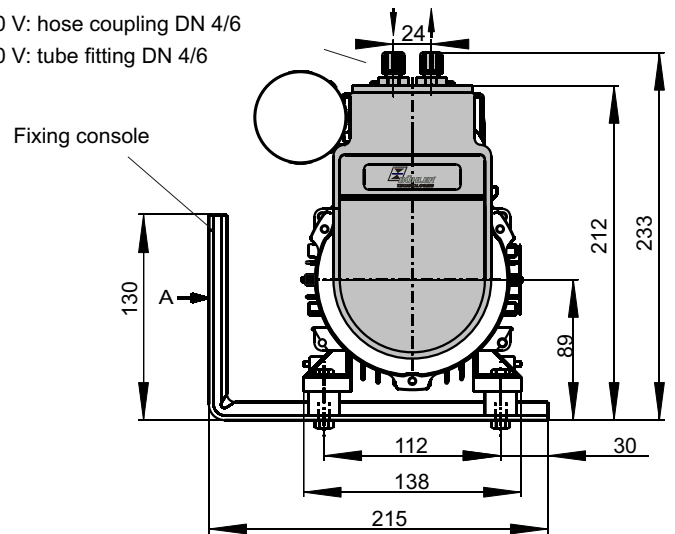
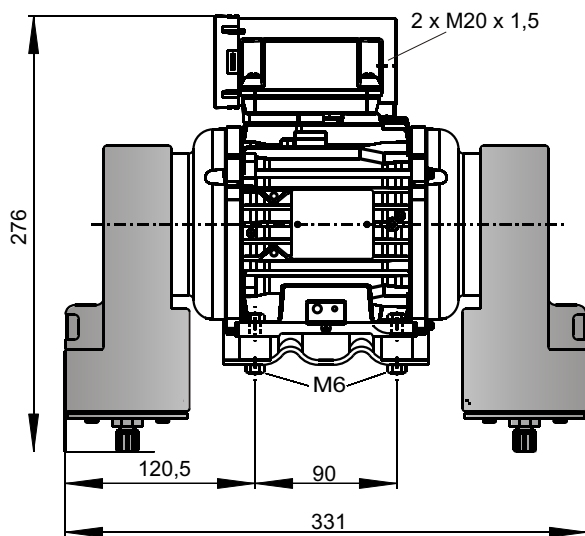


Flow Curve P4.83 in parallel Operation



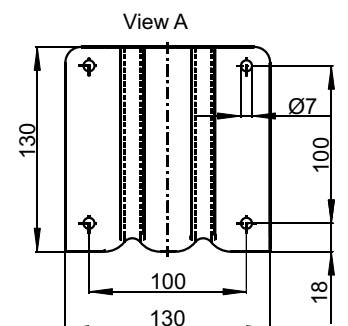
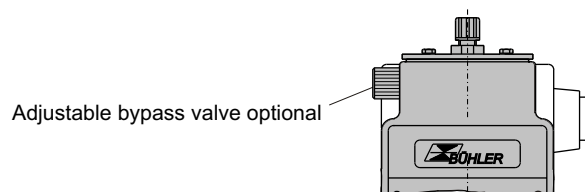
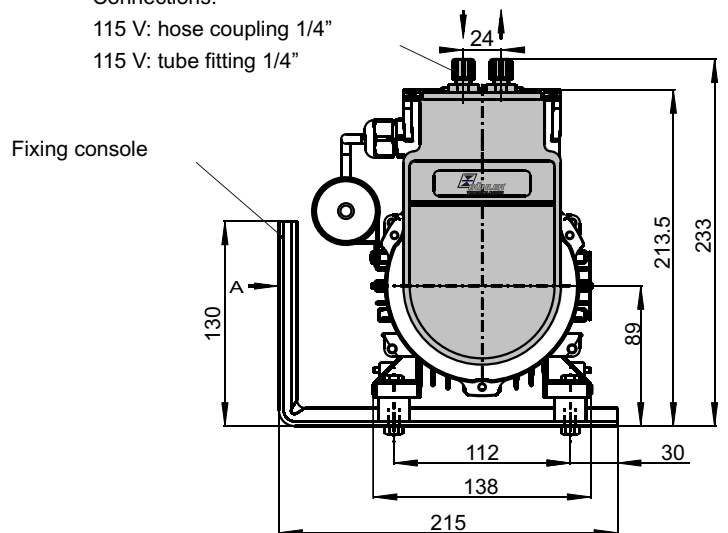
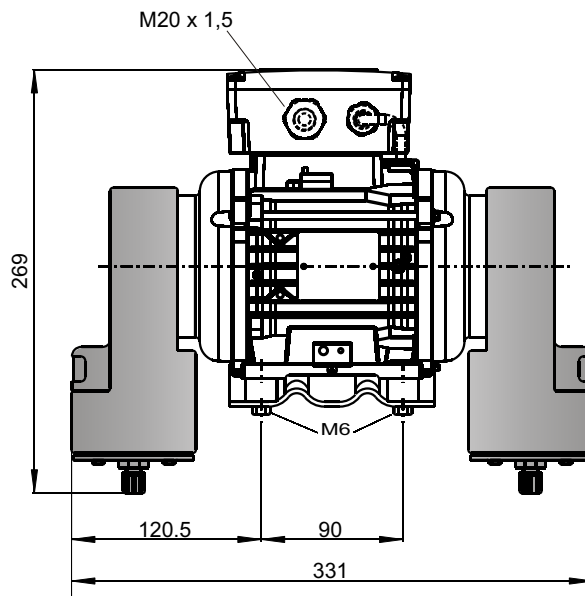
Dimensions (mm) P4.3 and P4.83 pumps 230 V

Connections:
 230 V: hose coupling DN 4/6
 230 V: tube fitting DN 4/6



Dimensions (mm) P4.3 and P4.83 pumps 115 V

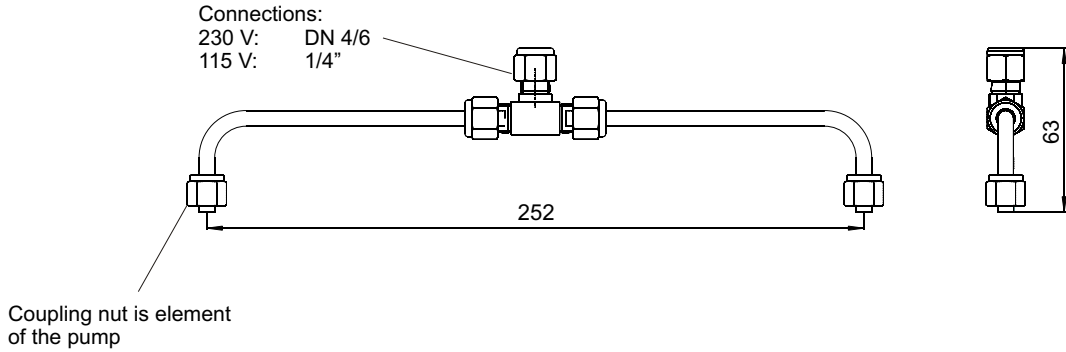
Connections:
 115 V: hose coupling 1/4"
 115 V: tube fitting 1/4"



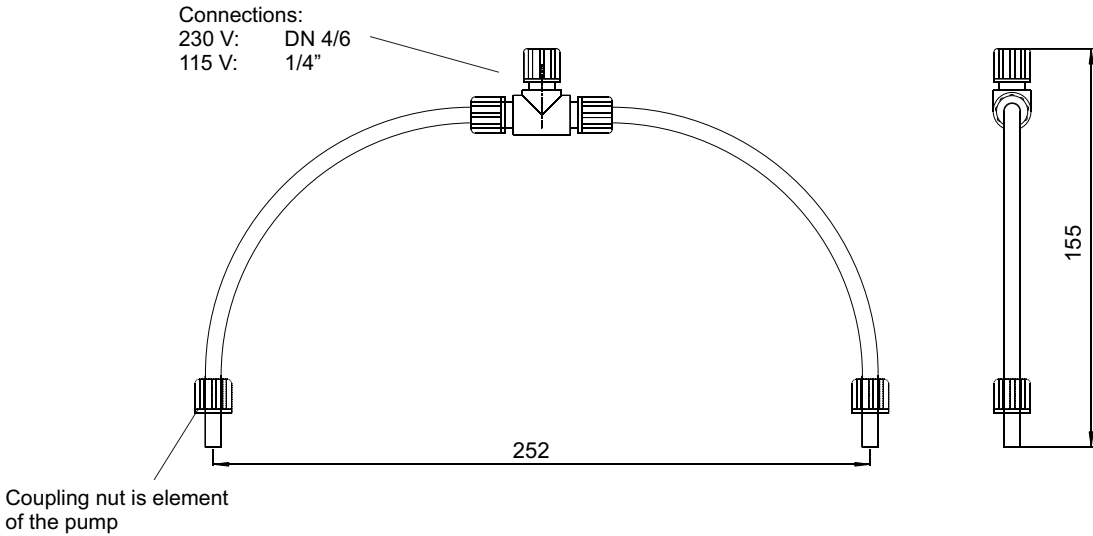
Installation advice:

- 1) The pump should be mounted horizontally.
- 2) The pump heads can be mounted upwards or downwards during installation. If the gas carries condensate, the inlet/outlet connections must point downwards

Dimensions (mm) tubing set for P4.83 in parallel operation



Dimensions (mm) piping set for P4.83 in parallel operation



Order advice

The correct order number of your determined type proceeds of the following type code.
The pump P4.83 is only available with PTFE / PEEK-valves for media temperatures till 160 °C.

Part No.

4	2	x	x	x	x	x	x	x	x	x									Pump P4.3, 2 x 400 l/h Pump P4.83, 2 x 800 l/h
		8	0																Motors
				1															230 V / 50/60 Hz, 1,75 / 1,45 A
				2															115 V / 50/60 Hz, 3,5 / 2,9 A
																			Position of pump head
					1														pointing upwards (standard)
					2														pointing downwards (rotated by 180°)
																			Material of pump head
					1														PTFE
					2														Stainless steel
					3														PTFE with bypass valve (not for parallel operation)
																			Material of valves
						1													up to 100 °C PTFE / PVDF (P4.3 only)
						2													up to 160 °C PTFE / PEEK
																			Screwed connections
							1												metric
							2												imperial
																			Connection set for parallel operation
								0											without
								1											Piping PVDF / PTFE (P4.83 only)
								2											Tubing stainless steel 1.4571 / 1.4401 (P4.83 only)
																			9 Fixing console included

Order example:

Part No. 42 801122109
42
80 2 x 400 Liter pump P4.3
1 230 V / 50/60 Hz motor
1 pump head normal position
2 pump head of stainless steel
2 160 °C valves
1 metric connections
0 without connection set
9 fixing console included