



FM10

Flowmeter series FM®

Version FM1, FM10

Special Features

- High chemical resistance
- For gases and liquids available
- Easy dismantling and cleaning
- Also with high precision needle valve
- Also for high temperatures

Application

The M&C flowmeters – type FM1 and FM10 – which are corrosion-resistant are used for controlling the flow in case of aggressive gases and liquids. The flow tube is delivered according to your specific data, e.g. medium, temperature, pressure.

Description

The M&C flowmeters FM1 and FM10 consist of a glass tube (the inside is conical and becomes enlarged in the upper sector) in which the floating ball can move.

The substance flows through the tube from the below part to the upper part so that the floating ball is raised. It arises a gap between the tube wall and the substance and creates an equilibrium. Each level of the floating ball corresponds to a certain flow rate which is shown on the scale.

The sealing and connecting parts are constructively reduced and consist only of in- and outlet connection. All medium contacted parts are made out of PTFE and glass. The flowmeter is configured in such a way that it can easily be dismantled and cleaned.

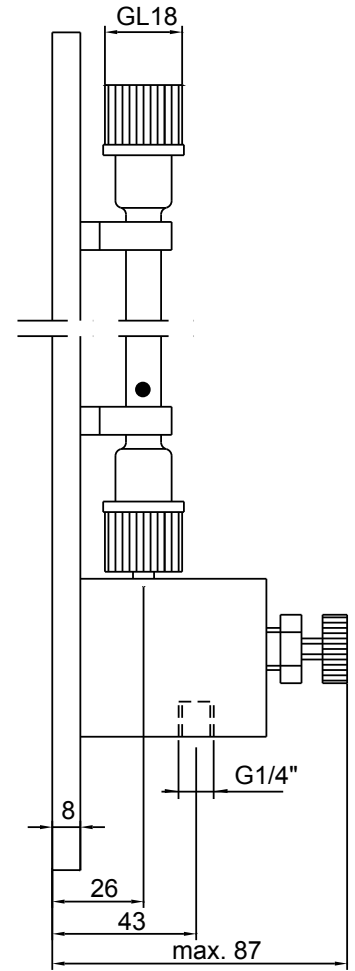
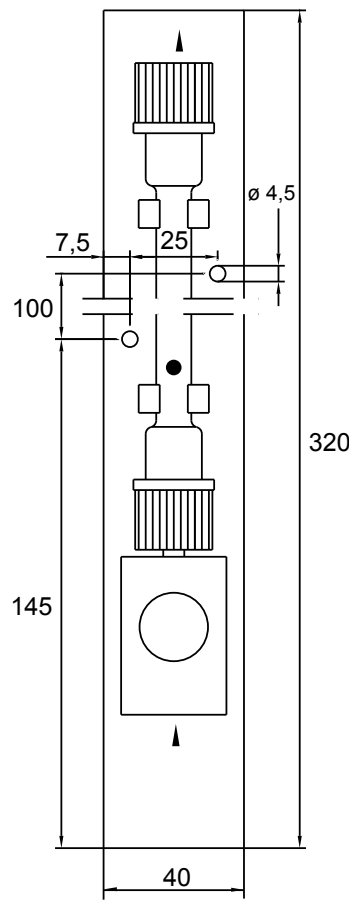
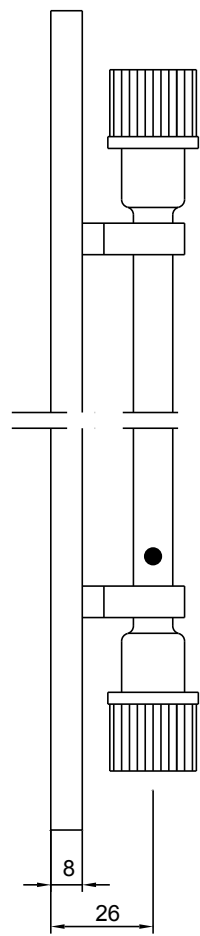
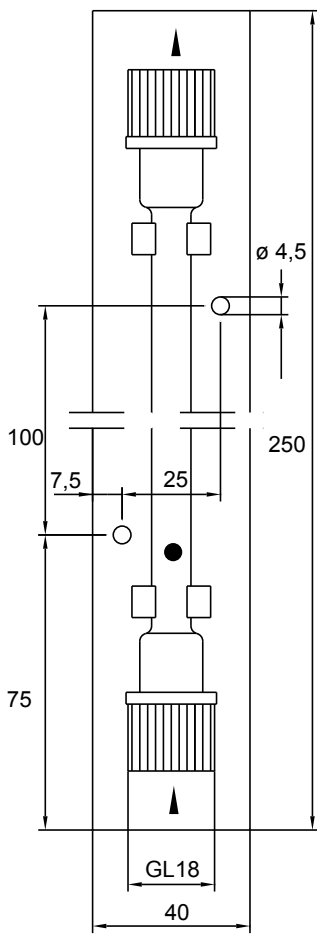
The flowmeter FM10 is equipped with a needle valve in the inlet which enables you to adjust the flow rate with high precision.

- For automatic flow control the control unit types FA... are used. Please see separate data sheets 9.4 / 9.5 / 9.6
- For connecting the tubes, a special programme is available. Please see separate data sheet 11.5

Dimensions

Flowmeter FM 1

Flowmeter with needle valve in the inlet FM 10



Dimensions in mm

Technical Data

Flowmeter	FM1	FM1-H	FM10	FM10-H
Needle valve in the inlet	NO		YES	
Standard- maximum measures adjusted on 1,2 bar; 20 °C ..l/hr air: ..l/hr water:	types on stock = ____ 16 40 60 <u>100</u> 250 500 800 2,5 5 12 25 40 60 100**			
Measuresl/h air at 20 °C; 1,2 bar	min. 0,8-8 l/hr; max. 120-1200 l/hr is possible			
Scale of measurement	10 : 1			
Status of precision	2,5 %			
Scale	Length of the scale 100 mm, adjusted in l/hr			
Pressure	max. 4 bar g			
Sample temperature, max.	+80 °C	+150 °C	+80 °C	+150 °C
Ambient temperature, max.	+60 °C	+150 °C	+60 °C	+150 °C
Storage temperature	-25 °C to +80 °C			
Connections, INLET	GL18-ø6* (ø8, ø10)		G1/4"i DIN ISO 228/1	
Connections, OUTLET	GL18-ø6* (ø8, ø10)		GL18-ø6* (ø8, ø10)	
Method and position of mounting	Wall mounting / vertical			
Materials of sample contacting parts	Borosilicate glass, PTFE		Borosilicate glass, PTFE, PEEK	
Dimensions, h x w x d	250 x 40 x 40 mm		320 x 40 x 84 mm	
Weight	130 g	280 g	300 g	440 g

* Standard (alternatively)

** Floating ball out of Hastelloy C

Part Number of the types on stock

Measuring range	FM1	FM1-H	FM10	FM10-H
Flowmeter types on stock	Part No.	Part No.	Part No.	Part No.
10 - 100 l/h Luft	09F1000	09F1100	09F1500	09F1550
25 - 250 l/h Luft	09F1010		09F1510	
50 - 500 l/h Luft	09F1020		09F1520	
80 - 800 l/h Luft	09F1030		09F1530	
Option:	09F9000 for special measuring range and special calibration.			

Any other execution please order in clear: Flowmeter FM1, 6-60 l/hr air, 20 °C, 1,2 bar

Please specify with order: **measuring range:** ... l/hr;
medium: ;
pressure: ... bar;
temperature: ... °C

e.g. Flowmeter FM10; 7-70 l/hr chlorine; 20 °C; 1,2 bar