



FM40

Special Features

- High chemical resistance
- Compact, flat design
- With fine-control needle valve
- With integrated tube connections DN 4/6

Float-Type Flow Meter Series FM®

Version FM40 for front-panel mounting

Application

The compact, flat, corrosion-resistant FM40 flow meter for front-panel mounting is used for flow control of gas media in analysis devices and systems.

Description

The FM40 float-type flow meter consists of an upright glass tube conically widening inside towards the top, in which a floating ball can move freely up and down, and of the head and bottom parts with an integrated PVDF needle valve. The basic body for fixing the head and foot sections is the max. 4 mm deep "front panel" with two corresponding mounting holes.

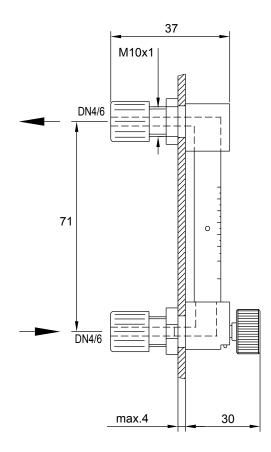
The medium flows from the bottom to the top through the tube and lifts the floating ball until there is a ring-shaped gap between the tube wall and the floating ball so that the forces acting on the body are in equilibrium. Each position of the floating ball (depending on the measuring range either made of glass or Hastelloy[®] C) corresponds to a certain flow rate which is then visible on a calibrated scale.

The measuring tube is sealed with O-rings in the head and foot sections, as is the finecontrol needle valve.

The parts in contact with the medium are made of PVDF, FPM and glass. The flow meter is equipped with a fine-control valve at the inlet for precise flow rate adjustment. In addition, the FA1bi optical monitoring unit is used for automatic flow monitoringt. – See separate data sheets "Optical Bi-Stable Flow Alarm Sensors Series FA®" and "Electronic Controller Series FA®" –

Dimensions

Flow meter FM40



Dimensions in mm

Technical Data

Flow Meter	FM 40
Measuring range calibrated at 1 bar abs., 20 °C [68 °F]	7-70 Nl/h air, Part No. 09F4000 15-150 Nl/h air, Part No. 09F4005 25-250 Nl/h air, Part No. 09F4010 50-500 Nl/h air, Part No. 09F4015
Scale of measurement	10:1
Accuracy class	6 %
Scale	Calibrated in NI/h
Scale length	Approx. 30 mm
Pressure max.	3 bar abs.
Temperature max.	60 °C [140 °F]
Connections	Tube connectors DN 4/6
Material used for parts in contact with medium	PVDF, glass, Hastelloy [®] C4, FPM

Hastelloy[®] is a registered brand name of Haynes International Inc., USA.

Please note: NI/h and NI/min refer to the German standard DIN 1343 and are based on these standard conditions: 0 °C [32 °F] and 1013 mbar.

