

ABB Instrumentation

Variable Area Flowmeters

ABB Rotameters – Variable Area Flowmeters

What is a Rotameter?

Rotameters, also known as variable area flowmeters, are designed to measure the flow of liquids or gases via a tapered tube and float system. They are accurate, reliable and simple to install and maintain.



Why should I Care?

Cost Effectiveness

- All ABB rotameters are low cost compared to other flow measurement devices.
- In addition they have very low installation costs; no upstream / downstream straight piping requirements.
- Plus their reliability combines for an extremely low cost of ownership.
- Long life expectancy also brings low life-cycle cost.

Reliability

- ABB rotameters are renowned for being the highest quality available.
- They last longer, with millions installed since 1937.
- Our trouble-free operation ensures years of accurate flow measurement.
- Excellent repeatability yields consistent products.

Simplicity

- They are pre-calibrated before they leave the factory.
- Once delivered they are very easy to install.
- Maintenance is very simple due to their excellent design.
- ABB rotameters have common parts, minimizing stocking requirements.

Flexibility

- Our rotameters can be used to measure a wide variety of liquids, gases and steam.
- They require no power and can be used anywhere.
- ABB rotameters are easily converted to measure different fluids & capacities.
- They are available with alarms, transmitted output and even HART communications.

*For additional information,
contact your local ABB Rotameter Distributor*

Where do I use a Rotameter?

Hundreds of applications in your plant

- **RATOSIGHT Flow Rate Indicator with Optional Alarm (Series 10A2235)**

Used for automatic shut-down of heavy equipment when bearing lubricant flow becomes too low, shut-down of electrical equipment when cooling water flow falls below a preset limit, or the actuation of auxiliary equipment such as pump motor starters or solenoid valves.

- **ARMORED PURGEMETER (Series 10A3200)**

Suitable for most low flow, high pressure and corrosive applications in municipal and industrial settings. Used for gas analyzer systems, various sampling systems, and situations where glass tubes are not appropriate for safety reasons.

- **VA MASTER FLOWRATOR® METERS (Series 10A4500)**

Used for measuring a wide variety of liquids and gases in most industrial and municipal facilities. Monitors natural gas flows into ovens and furnaces, cooling fluids to protect equipment, sampling systems in laboratories and flow rates into and out of large tanks.

- **ARMORED VA METER (Series FAM54)**

The Armored VA Meter is ideal for the all process industries. It is exceptionally successful metering aggressive or opaque fluids, or where glass tube variable area flowmeters are not appropriate for safety reasons.

ABB Rotameters Selection Guide
* G=Glass, M=Metal (316 Stainless Steel), A=Acrylic

Model Series	Tube Material	FLOW RATE		PRESSURE (PSIG)		TEMPERATURE (°F)		FUNCTIONS			
		Water (GPM)	Air (SCFM)	25	100	100	300	INDICATE	ALARM	TRANSMIT	REGULATE
		2 5 10 20 40 80	200 400 800	25 50 100 250 500 750 1000 2000 3000	100 200 300 400						
10A2235	G	2-200	200-800	25-100	100-300	100-300	400	INDICATE	ALARM	TRANSMIT	REGULATE
10A3220	M	2-200	200-800	25-100	100-300	100-300	400	INDICATE	ALARM	TRANSMIT	REGULATE
10A4500	G	2-200	200-800	25-100	100-300	100-300	400	INDICATE	ALARM	TRANSMIT	REGULATE
FAM54	M	2-200	200-800	25-100	100-300	100-300	400	INDICATE	ALARM	TRANSMIT	REGULATE
10A6130	G	2-200	200-800	25-100	100-300	100-300	400	INDICATE	ALARM	TRANSMIT	REGULATE
10B4500	G	2-200	200-800	25-100	100-300	100-300	400	INDICATE	ALARM	TRANSMIT	REGULATE

- **PURGEMASTER (Series 10A6100)**

An ideal choice for low flow rate applications, such as purging control lines and instrument enclosures. The PURGEMASTER is excellent for fluid sampling, liquid specific gravity, level measurements and many other low flow applications of liquids and gases.

- **ORI-FLOWRATOR™ METER (Series 10B4500)**

Provides low-cost measurement of large liquid or gas flows in many industries such as oil, gas, petrochemical, water & wastewater. The ABB Ori-Flowrator meter is a glass tube variable area flowmeter used in conjunction with a primary orifice plate.