



Flo-Miser

The Economical Flow Regulator...

Something Simple from the Experts in Flow Control



w. A.  kates® company
Just Set it and Forget it!



Flo-Miser

Specifications

Materials of Construction:	316 Stainless Steel
Body Seals:	Teflon®
Maximum Working Pressure:	1440 psi
Maximum Working Temperature:	400 F
Process Connections:	FNPT
Accuracy:	± 5%
Repeatability:	± 1%
Rangeability:	10:1 turndown
Response Time:	1-2 seconds

Teflon® is a registered trademark of DuPont Corporation

Line	Part #	Flow Range
Size		
3/8"	FM38	0.3 to 3 gpm (11 lpm)
1/2"	FM50	1 to 10 gpm (38 lpm)
3/4"	FM75	3 to 20 gpm (75 lpm)

W.A. Kates Company Limited Product Warranty

The W.A. KATES COMPANY guarantees every piece of equipment manufactured by it to be inspected and tested, and free from defects in workmanship or material when shipped from its factory. No warranty of corrosion resistance of any parts or assembly is expressed or implied.

This guarantee is valid for one year from date of shipment from its plant. Within that time the W.A. KATES COMPANY will replace, free of charge, any equipment returned, with shipping charges prepaid, found to have been defective at time of shipment.

This warranty does not apply to: (a) damage resulting from misuse or inadequate handling; (b) damage resulting from continued use after defect is apparent; (c) any other damage, loss or liability; or (d) any piece of equipment that is changed modified or altered in any way after it leaves the factory.

The liability of the W.A. KATES COMPANY shall be limited to the replacement, f.o.b. our factory, of any equipment found to have been defective at time of shipment, with duplicate or similar equipment of equal performance rating, but such liability shall in no event exceed the contract price for said equipment.

w. a. kates® company

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Recommended Protection for Kates Flow Controllers

For long lasting maintenance free operation, we recommend that a strainer or filter be installed immediately upstream of the Kates Flow Rate Controller.

Strainer/ Controller Size	Filter/ Mesh	Micron
3/8"	10 Micron Sintered	10
1/2"	10 Micron Sintered	10
3/4"	200	75

The recommendation of screen size is a matter of judgement comprised of:

- Operability. Removal of all particles will insure continuous operation at all times.
- The tolerable interval between cleaning. Removal of all particles may require a screen so fine that required cleaning may be too costly.
- Allowable pressure drop.

The screen sizes listed are recommendations resulting from service experience. We cannot make operating guarantees because of the variety of fluid characteristics and the infinite number of combinations of particle size and nature encountered in practice. To obtain satisfactory results with a Kates Flow Rate Controller, the particles must be nonabrasive, non-fibrous, and must not adhere or coat on the controller internal parts, nor have a tendency to settle out of solution.

Check out our Web Site Today at:

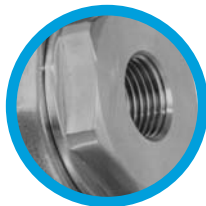
 www.wakates.com

Distributed by:

Flo-Miser



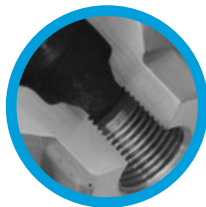
Economical
Flow Regulator



Inline
Connections



Simple
Adjustment



3/8", 1/2", 3/4"
Line Sizes



Accurate Flow
Rate Controller



W. A. Kates[®] company

For more than 50 years, the W.A. Kates Company has been producing high quality, low maintenance, purely mechanical flow rate controllers. These products have been applied successfully throughout industry for a wide variety of liquid and gas applications. Our motto is **“To serve our customers as we desire our suppliers to serve us”**. This motto exemplifies our commitment to quality and service.

The New **Flo-Miser** is an economical, lighter duty version of our standard flow rate controllers. It offers many of the same flow characteristics of our high performance Kates Flow Rate Controllers at a substantially lower cost.

Easily adjust your flow set point by turning the micrometer-like needle valve adjustment. Once set, the **Flo-Miser** will control your flow accurately, regardless of changes in your process.

The **Flo-Miser** combines a characteristic needle valve with an internal differential pressure regulating valve. By controlling the pressure drop across the adjustable orifice, flow rate will always remain constant. Since the control portion is immersed in fluid, response time due to pressure variations is immediate. Hunting and oscillation is eliminated.

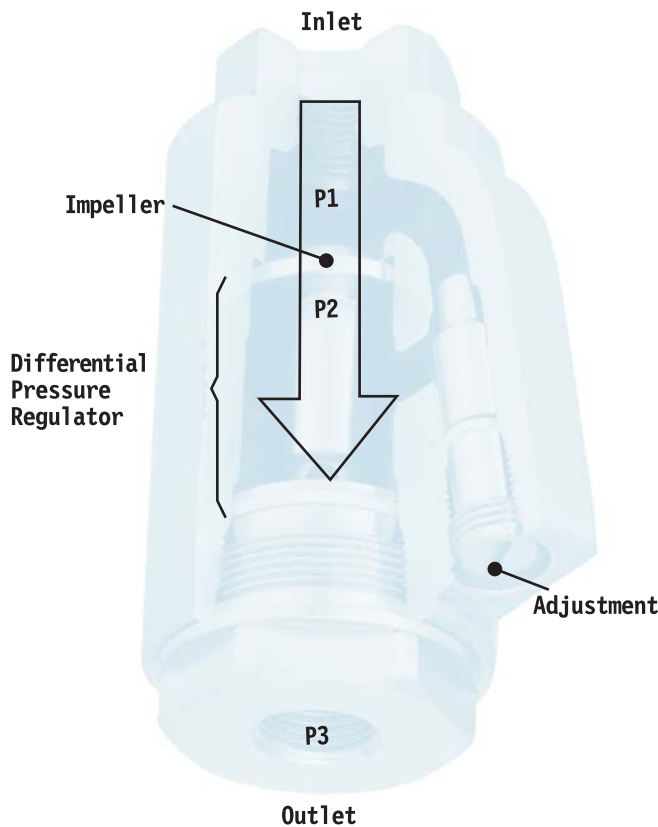
The Kates **Flo-Miser**...for high quality, low cost flow rate control...

“Just set it and forget it”!

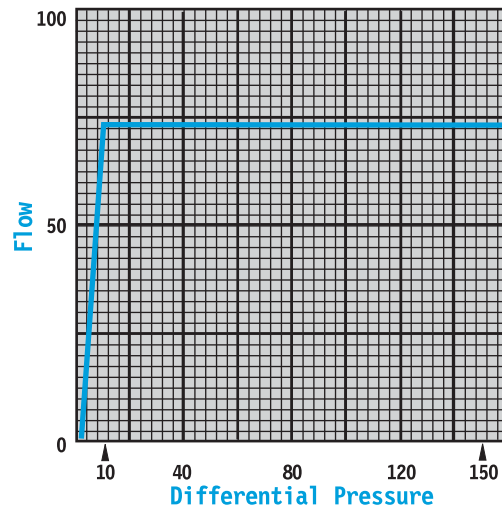
How the Flo-Miser Works

$$P1 = P2 + \text{Spring Force}$$

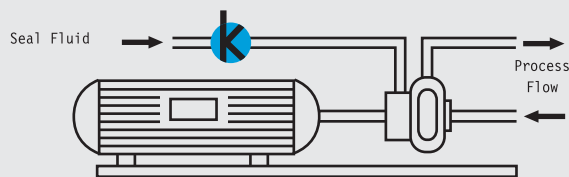
If supply pressure (P1) increases, the resulting momentary pressure imbalance immediately moves the impeller downward. This action restricts the valve ports thus increasing orifice backpressure (P2), restoring differential pressure and the flow rate to the original setting. The Flo-Miser will respond equally well to an upset in outlet pressure (P3).



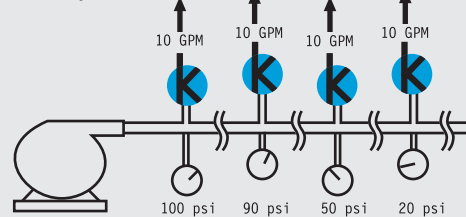
Flow Characteristics



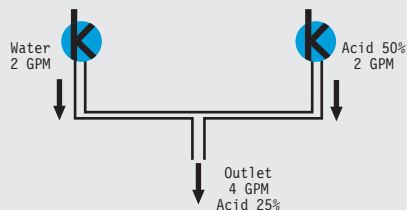
Rotating Seals



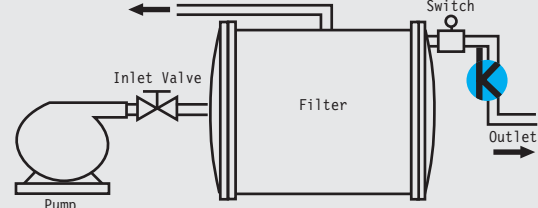
Header Systems



Blending Systems



Filtration



Typical Applications

Deionized Water • Rotating Seals • Additives/Blending • Nitrogen Blanketing • Liquid Ring Vacuum Pumps • Oil Well Water Flooding • Natural Gas • Bleaching Systems • Reverse Osmosis • Dynamometers • Ratio Blending • Humidity Control • Heat Exchangers • Cooling Water • Dust Suppression • Aircraft Deicing • Test Cells • Caustics • Acids • Analytical Fast Loops...and hundreds more!