

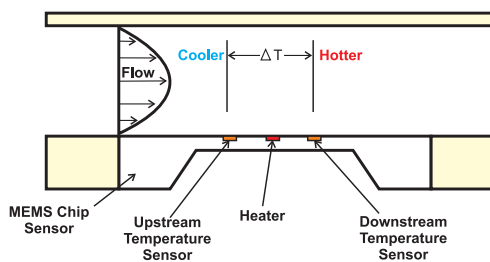
# Introducing The Ultra-Fast Responding 4800 Series Mass Flow Meters And Controllers



# The fast response time and compact size of the new 4800 Series are perfect for many applications.

The Brooks 4800 Series of mass flow meters and controllers is an excellent choice for measurement and control of many common gases including air, N<sub>2</sub>, O<sub>2</sub>, Ar, He, H<sub>2</sub>, CO<sub>2</sub>, CO, N<sub>2</sub>O, CH<sub>4</sub>, C<sub>3</sub>H<sub>6</sub>, and C<sub>3</sub>H<sub>8</sub>. It offers a broad flow range, fast response time, compact size, and many other benefits for a variety of applications.

**The 4800 Series MEMS-based sensor provides lightning fast response times.** The 4800 Series utilizes a Micro Electro Mechanical System (MEMS) based thermal sensor. Similar to typical thermal sensors, it measures a change in temperature to determine mass flow rate. The difference is that gas flows directly across the sensor, achieving extremely fast response times.



**Fast settling times come standard with the 4850 controller.** The 4850 MFC version uses a proprietary PID algorithm to optimize the control valve response to ensure rapid settling times. The 4850 can be counted on to quickly match actual mass flow to any changes in setpoint.

**Good things come in small packages.** The MEMS sensor enables a dramatic reduction in size compared

to traditional thermal mass flow devices. In fact the compact size of the 4800 Series is significantly less in height and volume than that of typical thermal mass flow controllers.

**The 4800 Series is ideal for OEMs.** The broad flow range, fast response time, and compact size make for a perfect fit into any OEM system where gas flow needs to be measured or controlled. Additionally, the 4800 Series has a highly modular construction for quick assembly in order to meet short delivery dates.

**Brooks is your ideal mass flow partner.** At Brooks, we combine unmatched product innovation with extensive application experience to deliver the best solution for your application. All Brooks products are unsurpassed in reliability and quality. Our worldwide network of sales experts, unequalled post-sale technical support and a strong financial foundation make Brooks the perfect long-term partner for our customers.

## Specification highlights

- Models available: 4850 MFC or 4860 MFM
- Flow measurement and control from: 1 mln/min to 40 ln/min (1 sccm to 40 slpm)
- Accuracy options:  $\pm 1\%$  of full scale or  $\pm 3\%$  of full scale
- Repeatability:  $\pm 0.15\%$
- Response time: <300 msec
- Settling time: <750 msec (typical <500 msec)
- Dimensions: 76.2 x 25.4 x 101.4mm (3" x 1" x 3.99")

**Contact your local representative for more information.**

**Ask about the Digital Display/Local Operator Interface option!**

## Brooks Instrument

- **North, South And Central America**  
1-215-362-3700 Toll-Free: 888-554-FLOW  
Email: BrooksAm@EmersonProcess.com
- **Europe, Middle East, and Africa**  
+31-318-549-300  
Email: BrooksEu@EmersonProcess.com
- **Asia Pacific**  
011-81-3-5633-7105  
Email: BrooksAs@EmersonProcess.com  
www.BrooksInstrument.com

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