

# KMG THERMAL MASS FLOWMETER

KOBOLD's KMG flowmeter line offers thermal mass flow metering technology at break-through pricing. Available with or without display, the KMG is suitable for both remote and local flow rate measuring applications. The sensor may be calibrated for any dry gas compatible with its wetted parts.

For remote sensing applications, the KMG provides a 0-5 VDC output as standard equipment. Should a 4-20 mA output be desired, it can be provided instead.

Unlike most mass flow sensors, KOBOLD's KMG may be installed in any orientation imaginable without loss of accuracy. A two second response time ensures that changes in flow rate are captured quickly by the flowmeter operator. Its small, compact size allows the KMG to fit into spaces typically inaccessible to mass flow technology.

With this many things going for it, why not contact your KOBOLD representative to discuss how the KMG can help provide a first class solution to your gas measuring problems, on an economy class budget?



**KOBOLD KMG Thermal Mass Flowmeter & Flow Sensor**

## Specifications

### Accuracy

**Units to 500 sccm:** ± 2.0% of full scale  
**Above 500 sccm:** ± 2.5% of full scale

**NOTE:** accuracy specs include linearity errors and are valid for 10:1 turn-down

**Repeatability:** ± 0.5% of full scale

### Linearity

**Units to 500 sccm:** ± 0.5% of full scale  
**Above 500 sccm:** ± 1.0% of full scale

### Turn-Down

**Max. Accuracy:** 10:1  
**Max. Sensitivity:** 50:1

### Drift Coefficients

**Temperature:** ±0.1%/°F  
**Pressure:** ±0.02%/PSI

**Applicable Media:** Clean, dry gases

**Filtration:** 20 micron filter recommended

**Temperature Range:** 50 to 120°F

**Max. Pressure:** 150 PSIG

**w/ Option C1 or C2:** 500 PSIG

**Leak Integrity:** 1 x 10<sup>-4</sup> scc/sec. He

**Installation:** Orientation independent

### Wetted Parts

**Fittings:** Acetal Compression  
**Optional:** Brass or SS Compression

**Flow Path:** Aluminum, Viton®, 304/316 SS, epoxy

### Electrical Specifications

#### Input Power

**KMG-1000:** 12-15 VDC, 100 mA

**KMG-2000:** 12-15 VDC, 120 mA

**With 4-20 mA:** 24 VDC, 150 mA

**Response Time:** 2 sec to ± 2% flow

**Output Signal:** 0-5 VDC  
 into 2500 ohms min

**Optional:** 4-20 mA

### Display:

#### Hook-Up:

into 500 ohms max  
 3½ digit LCD  
 via supplied 24" cable

### Dimensions

**Width:** 1.87 inches

**Depth:** 1.03 inches

#### Height

**With Display:** 5.0 inches

**No Display:** 3.55 inches

## KMG Ordering Information

### Air Ranges

Range SCCM	Pressure Drop (inches H <sub>2</sub> O)	Fittings (tube)	Model Number	
			Without Display	With Display
0 - 20	0.8	1/8"	KMG-1002	KMG-2002
0 - 50	1.0	1/8"	KMG-1003	KMG-2003
0 - 100	1.0	1/8"	KMG-1004	KMG-2004
0 - 200	1.0	1/8"	KMG-1005	KMG-2005
0 - 500	1.0	1/8"	KMG-1006	KMG-2006
0 - 1,000	1.0	1/8"	KMG-1007	KMG-2007
0 - 2,000	1.0	1/8"	KMG-1008	KMG-2008
0 - 5,000	1.3	1/8"	KMG-1009	KMG-2009
0-10,000	1.8	1/4"	KMG-1010	KMG-2010
Options			Model Number Suffix	
Brass Compression Fittings			C1	
Stainless Steel Compression Fittings			C2	