



**SIL Insertion Series Models / Specifications**

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<b>Models</b>		
<b>Your Pipe Size</b>	<b>Insertion Models<sup>1</sup></b>	<b>Max Full Scale (SCFM)<sup>2, 3</sup></b>
<b>1"</b>	<b>SIL-05-12</b>	<b>200</b>
<b>1-1/4"</b>	<b>SIL-05-12</b>	<b>300</b>
<b>1-1/2"</b>	<b>SIL-05-12</b>	<b>470</b>
<b>2"</b>	<b>SIL-05-15</b>	<b>820</b>
<b>2-1/2"</b>	<b>SIL-05-15</b>	<b>1000</b>
<b>3"</b>	<b>SIL-05-15</b>	<b>1750</b>
<b>4"</b>	<b>SIL-05-15</b>	<b>3150</b>
<b>6"-14"</b>	<b>SIL-05-18</b>	<b>33,000</b>
<b>16"-24"</b>	<b>SIL-05-24</b>	<b>100,000</b>
<b>26"-36"</b>	<b>SIL-05-30</b>	<b>250,000</b>
<b>&gt;36"</b>	<b>Consult Factory</b>	<b>Consult Factory</b>

**1** - "05" refers to probe diameter of 1/2". Optionally, 3/4" probes are available ("07"). The length of probe is typically 15 inches ("15") or 18 inches ("18")

**2** - Max Full Scale available for many gases, such as pressurized Air or Nitrogen. Some gases such as Hydrogen may be limited. Contact Sage for details

**3** - SCFM = Standard Cubic Feet Per Minute. 1 SCFM = 1.7 NCMH. Sage standard conditions for calibration are 70°F and 29.92" Hg. Note, Max Full Scale is based on a maximum Velocity of 35,000 Standard Feet Per Minute (SFPM)

## Specifications

General	
<b>Function</b>	Microprocessor-based Insertion Mass Flow Meters for gases
<b>Flow Element</b>	Constant Temperature Thermal Mass Flow Element consists of two 316 SS clad platinum-wound RTDs
<b>Flow Rate Output Signal</b>	4-20 ma isolated output linearly proportional to mass flow rate
<b>Temperature Output Signal</b>	0-5 VDC linear temperature signal from 40°F to 200°F (i.e. this product has both a flow and temperature output)
<b>Power</b>	24 VDC with current dissipation of less than 250 ma, or 115VAC/230 VAC
<b>Communication</b>	RS232 Communication and Menuing Software (optional)
<b>Sensor Drive Circuit</b>	Proprietary Sensor Drive Circuit provides enhanced flow signal stability and insensitivity to process temperature changes
<b>Display / Keypad</b>	SIL Model is a blind format (no Display or Keypad)
<b>Menu Navigation</b>	RS232 Communication and Menuing Software (available) upon request
Flow Range / Sizes	
<b>Units of Measurement</b>	Flow—SCFM, SCFH, SCFD, SCCM, NCMM, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH; Velocity— SFPM, SFPS, NMPM, NMPS, NMPH (other combinations available); Temperature—°C and °F
<b>Insertion Meters</b>	Full Scale depends on pipe size. For example up to 1000 SCFM in a 2 1/2" pipe, but up to 100,000 SCFM in a 24" pipe
Performance	
<b>Standard Flow Accuracy</b>	+/-1% of Reading + 0.5% of Full Scale
<b>Repeatability</b>	0.2% of Full Scale
<b>Turndown</b>	Up to 1000: 1
<b>Calibration</b>	Sage Metering's National Institute of Standards Traceable (NIST) calibration facility
<b>Gas Temperature</b>	Std.: -40°F to 200°F (-40°C to 93°C ); HT01: 200°F to 350°F (93°C to 177°C )
<b>Integral Enclosure Temperature</b>	0° to 150°F (-18°C to 65°C ). Contact Sage for lower temperature ranges
<b>Pressure Rating</b>	500 psig (1000 psig optional)
<b>Response Time</b>	1 second (each time constant) for flow change
<b>Pulsed Outputs</b>	Configurable for Pulsed Outputs of Totalized Flow (in lieu of Flow Rate and Temperature)
<b>Wetted Parts</b>	316L Stainless Steel for Flow Bodies, Sensor Flow Elements and Flow Conditioners. Hastelloy (recommended for Chlorine Gas) and other materials optional
<b>Limited Warranty</b>	Sage Metering's Series of Thermal Mass Flow Meters are warranted against faulty materials or workmanship for one year from the date of delivery to the buyer. After issuance of a Return Meter Authorization (RMA) by Sage, and upon receipt of the defective meter, Sage will either repair or replace the defective meter at its sole option and at no cost to the purchaser

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