ELDRIDGE PRODUCTS, INC

Master-Touch™

Series 8800MPHT

SERIES
8800MPHT

A leading manufacturer of Thermal Mass Flow Meters Since 1988.

Eldridge Products, Inc. has pursued innovation and excellence in thermal dispersion mass flow measurements since 1988. Thermal Mass Flow Meters offer simple, low cost operating for accurate, economical and reliable gas flow measurements for various applications - Compressed Air, Biogas, Natural Gas, Aeration,Digesters, Landfill, Wet Gas, HVAC systems - virtually any gas flow application. Master-Touch flow meters can solve your gas measurement challenges.

Master-Touch Series 8800MPHT Flow Meters are for use in hazardous area locations (Flame proof locations) with the ability to perform at high temperatures.

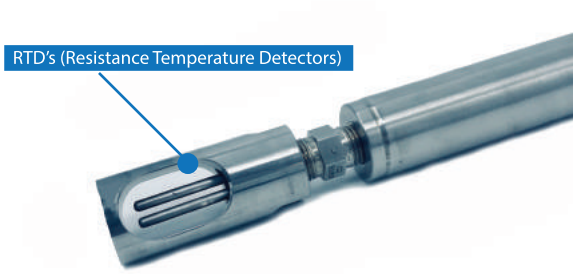
Insertion Style Thermal Mass Flow Meters *include a sensor & probe assembly that is inserted into the process gas flow conduit to allow the process gas to flow across the flow sensing element. Our insertion style flow meters are available with 3/4", or 1" OD probes. Optional mounting items- Tube fittings,flange, ball valve retractor. The probe length is determined by the size of the process pipe. Large ducts or stacks may require multiple flow meters with a grand average output to achieve the very best accuracy. For problematic or unique installations, please consult our factory.*

Integral style thermal mass flow meters *all of the components and connections are located within the enclosure. The enclosure is Explosion proof (Flame proof) rated for use in hazardous are locations. The enclosure is mounted directly to the insertion probe assembly. The enclosure contains the electrical connections, signal processing electronics and the LCD display, with programming keypad.*

THERMAL GAS MASS FLOW MEASUREMENT APPLICATIONS-

- Compressed Air Monitoring
- Ventilation Hood Alarms
- Bio / Digester Gas production
- Boiler Combustion Efficiency
- Pharmaceutical Clean Rooms
- Food Processing
- Pulp & Paper Mills
- and many more.....
- Natural Gas Consumption
- Water &Waste Aeration
- Landfill Gas Recovery
- Stack / Flue Gases
- Semiconductor Fabrication
- Nitrogen Purging

Master-Touch™



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Thermal mass flow meters generally follow King's Law, and use the principle of convective heat transfer to directly measure mass flow. EPI's proprietary thermal mass flow sensors use two precisely matched, reference-grade platinum Resistance Temperature Detectors (RTDs). The sensor elements are hermetically sealed in 316L Stainless Steel (or optional Hastelloy C276) thin wall sheaths. Our microcontroller operated smart sensor technology preferentially heats one RTD; the other RTD acts as the temperature reference. The process gas flow dissipates heat from the first RTD, causing an increase in the power required to maintain a balance between the RTDs. This increase is directly related to the molecular gas flow rate.Our sensors are temperature compensated for a wide process gas temperature range and insensitive to pressure changes, therefore the flow meter output is a direct mass flow rate value.

Specifications

Linear signal output	0–5 Vdc & 4–20 mA (Flow and Temperature)
Event Relays (Two)	1 Amp @ 30 Vdc event selectable functions (see Manual)
Communication Protocols	RS232 & RS485 Modbus RTU. Optional HART; Profibus DP or BACnet;
Display LCD 2-line 16-characte	Rate, Total, milliwatts, Temperature, Event
Accuracy including linearity (Ref.: 21°C)*	±(1% of Reading + 0.5% of Full Scale + GTC)
Repeatability	±0.2% of Full Scale
Sensor response time	1 second to 63% of final value
Turn down ratio	100:1; 10 SFPM (0.05 NMPS) Minimum Reading
Withstands Ambient temperature (electronics)	-40° to 158°F (-40° to 70°C)
Suitable Process Gas temperature range**	-40° to 977°F (-40° to 525°C)
Gas temperature coefficient (GTC)	0.02% Full Scale/°C
Gas pressure effect	Negligible over ± 50% of factory calibration pressure
Pressure rating maximum	500 PSI Std.
Input power requirement	6 Watts
	24 Vdc @ 250mA
	120 Vac 50/60 Hz optional
	240 Vac 50/60 Hz optional
Flow Meter power requirements	5 watts maximum
Date/Time RAM Back-up	Lithium Button Cell, ten-year life, quantity 1
Wetted materials	316L Stainless Steel (Optional Hastelloy C276)
Standard temperature & pressure (STP)	70°F & 29.92" Hg (Air 0.075 lb./cubic foot)
	Optional 0°C & 1.0132 BarA (Air 0.081 lb./cubic foot)
	Or user specified STP at time of order
NIST traceable calibration	Yes

* EPI is not responsible for measurement errors due to flow profile irregularities caused by installation, piping configurations, surface corrosion or scale, valve placement, etc.
** Specify average process operating temperature, with high & low limits.
NOTE: Specifications subject to change without notice. Consult our web site, www.epiflow.com, at time of order.
NOTE: Eldridge Terms & Conditions for sales available on our web site, www.epiflow.com.

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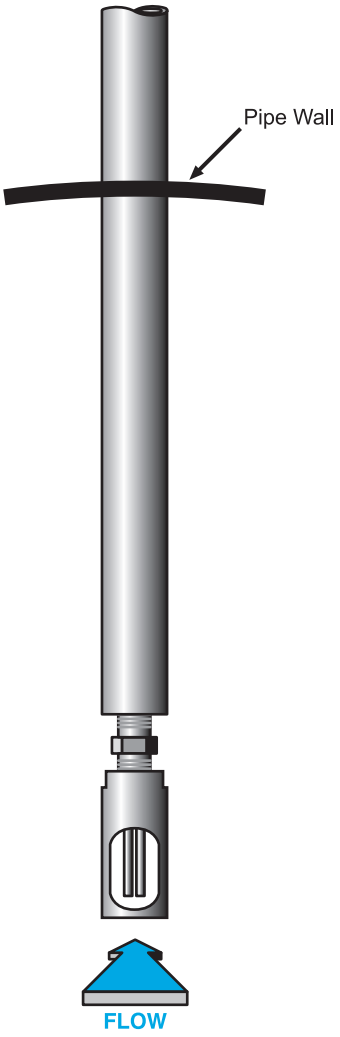
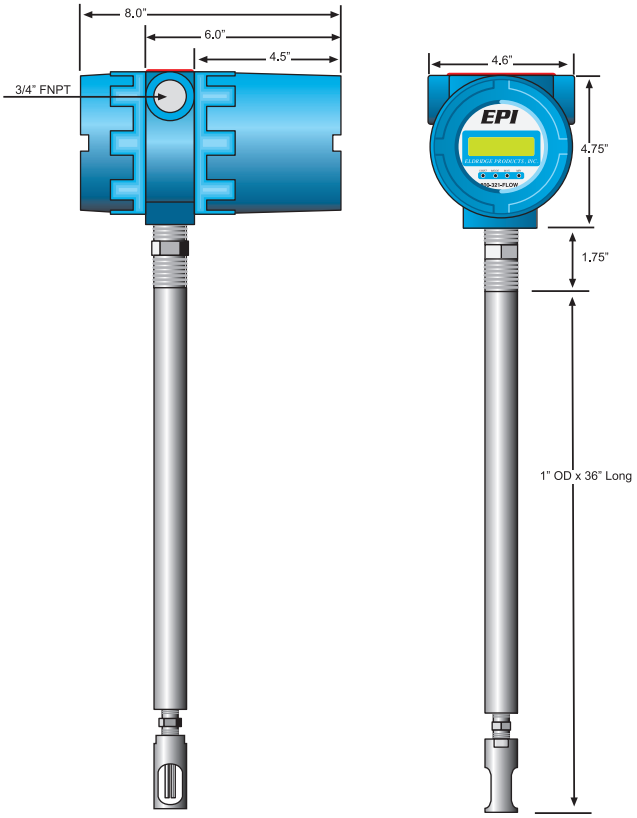
Dimensional Specifications

Model Shown: 8880MPHT



Model 8880MPHT



Eldridge Products, Inc. offers the -**SSH*** option for high temperature applications. The rugged, stainless steel sensor comes in 1" OD probe standard or 3/4" OD optional. This construction provides consistent and accurate flow measurement at temperatures up to 977°F/525°C.

Certification Choices

No agency certificates
**** Manufactor rated as flame proof Ex and Type 4x, IP66***

Model Numbers

	Model Number	OD"	Length
Standard	8880MPHT	"1"	6" up to 84"
Optional	8860MPHT	3/4"	6" up to 60"

ELDRIDGE PRODUCTS, INC

ORDER YOURS TODAY

Series 8800MPHT

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To place an order, email:
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