



Indicate meter position & flow direction

Installation

Factory Name: _____
 Factory Address: _____
 Your Company: _____

Your Name: _____
 Email: _____
 Phone: _____

General Requirements

Description: _____ Line Size: _____ Wall Thickness: _____
 Gas or Gas Mix: _____

Standard Temperature & Pressure: 70°F and 29.92" Hg - or -
 Normal Temperature & Pressure: 0°C and 1.013 BARA

Line Material Stainless Copper
 Carbon Steel Other _____

Flow Parameters

Parameters	Minimum	Usual	Maximum	Eng. Units
Flow Rate				
Gas Temp.				<input type="checkbox"/> °F <input type="checkbox"/> °C
Gas Pressure				
Ambient Temp.				<input type="checkbox"/> °F <input type="checkbox"/> °C

Normalized Actual
 Gauge Absolute

Meter Specifications

PRODUCT CLASS¹: Single Point² Flow Averaging Tube Multipoint In-Line³

TRANSMITTER: Integral Remote

INPUT POWER: 24 VDC 115 VAC 230 VAC Other _____

DISPLAY/KEYPAD: Include Exclude

STANDARD OUTPUT: 4-20mA, 0-5V, OR 0-10V (FLOW)⁴ 4-20mA, 0-5V, OR 0-10V (TEMP.)⁴ RS485 Modbus RTU RS232

OPTIONAL OUTPUT: HART⁵ BACnet MS/TP Profibus DP⁵ Other _____

INLINE: MNPT Butt End ANSI RF Flange Other _____

CONNECTION: Compression Fitting Ball Valve Retractor ANSI RF Flange Other _____

EX-PROOF: ATEX CSA/CUS IECEX Kosha

MP SERIES

ORDINARY US/CAN: CSA/CUS **ENCLOSURE EX-PROOF & CE MARK:** **CE MARK:**

MPNH SERIES **500 & 540 SERIES** **400 & 440 SERIES**

¹ EPI will assure the quoted product is suitable for the application.
² Single Point insertion flow meter suitable for ≥ 2 line size.
³ In-Line flow meters are suitable for 1/4 - 4 inch line sizes.
⁴ TEMP. output not standard with MPNH Series; Please specify at time of order.
⁵ HART and Profibus DP available ONLY in the MP & MPNH Series.
⁶ EPI will assure the quoted mounting hardware is suitable for the application.

Specifying Flow Conditions for Your Thermal Mass Flowmeter

When providing the details of your flow conditions, you must be sure to include certain parameters for the flowmeter to be properly matched to your application. The category descriptions below will help you specify the proper flowmeter:

Gas Composition — This is simple if you are flowing air or a pure gas such as hydrogen, nitrogen, etc. Gas mixtures should be provided with each gas listed as a percent of the total, with the sum equal to 100%. Whenever possible, we calibrate your thermal mass flow meter with the actual gas. When this is not possible, we use a gas or gas mixture with equivalent heat transfer characteristics.

Full Scale Flow Rate — Although you may not know your exact maximum flow rate (Full Scale), you must provide an estimate for the calibration. If the Full Scale is not known, it is best to over-estimate a flow. This information can be in units of mass/volume flow (SCFM, Lbs/Hr, NCMH, etc.) or velocity (SFPM, MPS, etc.).

Line Size — Whether you are interested in an inline style or an insertion style thermal mass flowmeter, we need to know your process line size.

Process Gas Pressure and Temperature — We calibrate your thermal mass flowmeter under conditions as close to your process environment as possible.

Electronics Temperature — This refers to the ambient temperature of the environment surrounding the flowmeter's electronics. We can provide options for a wide range of conditions.

Input Power Requirements — You must specify whether the thermal mass flowmeter will be powered by 24 VDC, 115 VAC, 230 VAC or an optional power source such as 12 VDC or solar panel.

Configuration — EPI manufactures both inline and insertion style. We can supply inline style flowmeters for line sizes from 1/4" to 4" with a number of installation options such as MNPT ends, ANSI or DIN flanges, etc. Insertion style flowmeters can be used in line sizes of 2" or greater and can be mounted with ball valve retractor assemblies, compression fittings, pipe nipples, etc.

EPI also manufactures flowmeters with either Integral or Remote Style. The integral configuration is generally less expensive, but the remote style allows easy access to the electronics even when the actual process line installation is in an otherwise inconvenient location.

Master-Touch™ Flow Meter Approvals

MP Series Transmitter - For use in hazardous area locations by CSA/CUS (default except for EU), ATEX (default for EU), IECEx and KOSHA (customer must specify)

MP Series Remote Enclosure - For use in Ordinary (Non-Hazardous) area locations; Type 4X, IP66 (OPTIONAL - I hazardous area locations enclosure)

MPNH Series - For use in Ordinary (Non-Hazardous) area locations; Type 4X, IP66



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