



# SERV' INSTRUMENTATION

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The **Master-Touch Flow Averaging Tubes (FAT™)** give a stable flow signal in applications where the flow profile is less than ideal, such as downstream of a bend, valve, tee or obstruction. The flow averaging tube has a number of large diameter (0.125") inlet ports along the length of the upstream impact surface. The impact pressure at each inlet port is averaged inside the tube to create the axial flow through the tube and across our flow sensor. The gas flow then passes back into the main flow stream through the gas return ports located near the flow sensing elements. Multiple tubes can be used with a Model 9601MP System Control Panel (not agency approved) for an averaged output.

## Series 9800MP

Series 9800MP flow averaging tubes are designed for installation in hazardous surrounding environments. Series 9800MP instruments have all of the electronics located in a double-sided enclosure mounted on the averaging tube assembly.

U. S. Patent No. 6,883,389 Other U.S. & foreign patents pending.

## Specifications

Linear signal output .....	0–5 VDC & 4–20 mA
Signal Interface .....	RS232 & RS485
Accuracy, including linearity (Ref.: 21°C)* .....	±[1.0% of Reading + (0.5% + 0.02%/°C of Full Scale)]
Repeatability .....	±0.2% of Full Scale
Sensor response time .....	1 second
Turn down ratio .....	100:1 minimum
Electronics temperature range.....	0°–50°C (32°–122°F), extended temperature optional
Gas temperature range* .....	-40°–200°C (-40°–392°F), extended range available
Gas pressure effect.....	Negligible over ± 20% of absolute calibration pressure
Pressure rating maximum .....	500 PSI Std., > 500 PSI special
Input power requirement .....	24VDC @ 250mA 115 VAC 50/60 Hz optional 230 VAC 50/60 Hz optional
Flow Transmitter power requirements .....	5 watts maximum
Wetted materials .....	316 Stainless Steel (Hastelloy and Monel optional)
Standard temperature & pressure (STP) .....	70°F & 29.92" Hg (Air .075 lb./cubic foot)
NIST traceable calibration .....	Standard

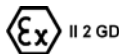
### Flow Transmitter enclosure:

Class I Division 1 Groups B, C and D; Class II E, F and G; Class III; Type 4X, 7; Ex d IIC; AEx d IIC, IP66; EEx d IIC, IP66; T2 (consult factory for T3 or T4).

Certified to US requirements; Certified to Canadian requirements



Certified to European ATEX requirements

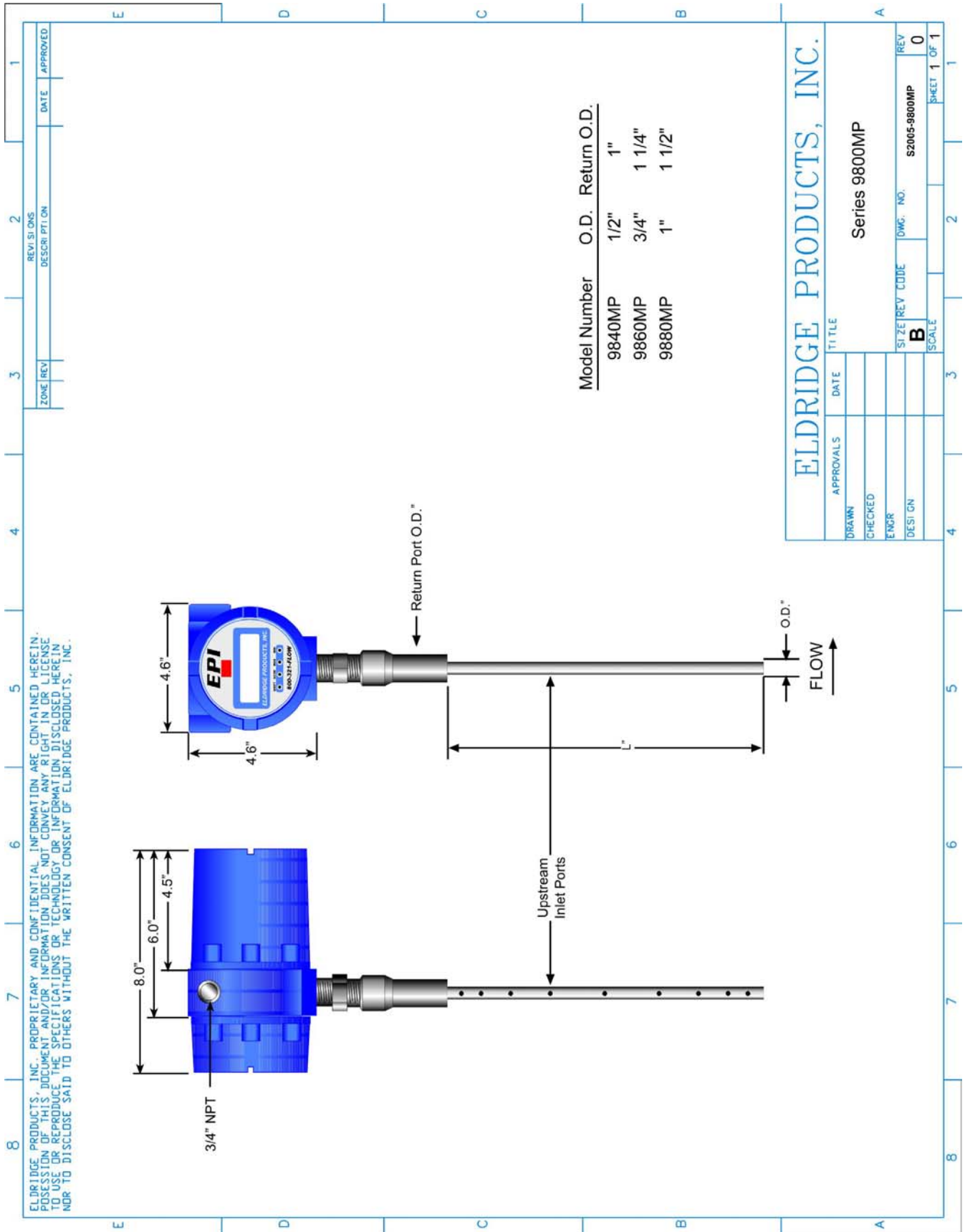


KEMA 04 ATEX 2276

\* The accuracy specification applies to the instrument only. EPI is not responsible for measurement errors due to flow profile irregularities caused by installation piping configurations, corrosion on inner pipe surfaces, valve placement, etc.

\*\*SSM option required for 100°–200°C (212°–392°F)

Specifications subject to change without notice.



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APPROVALS		TITLE	
DRAWN	DATE	ELDRIDGE PRODUCTS, INC.	
CHECKED		Series 9800MP	
ENGR		SIZE	REV
DESIGN		B	0
		DWG. NO.	SHEET 1 OF 1
		S2005-9800MP	0
		SCALE	